



Give Your Robot A Soft Hand

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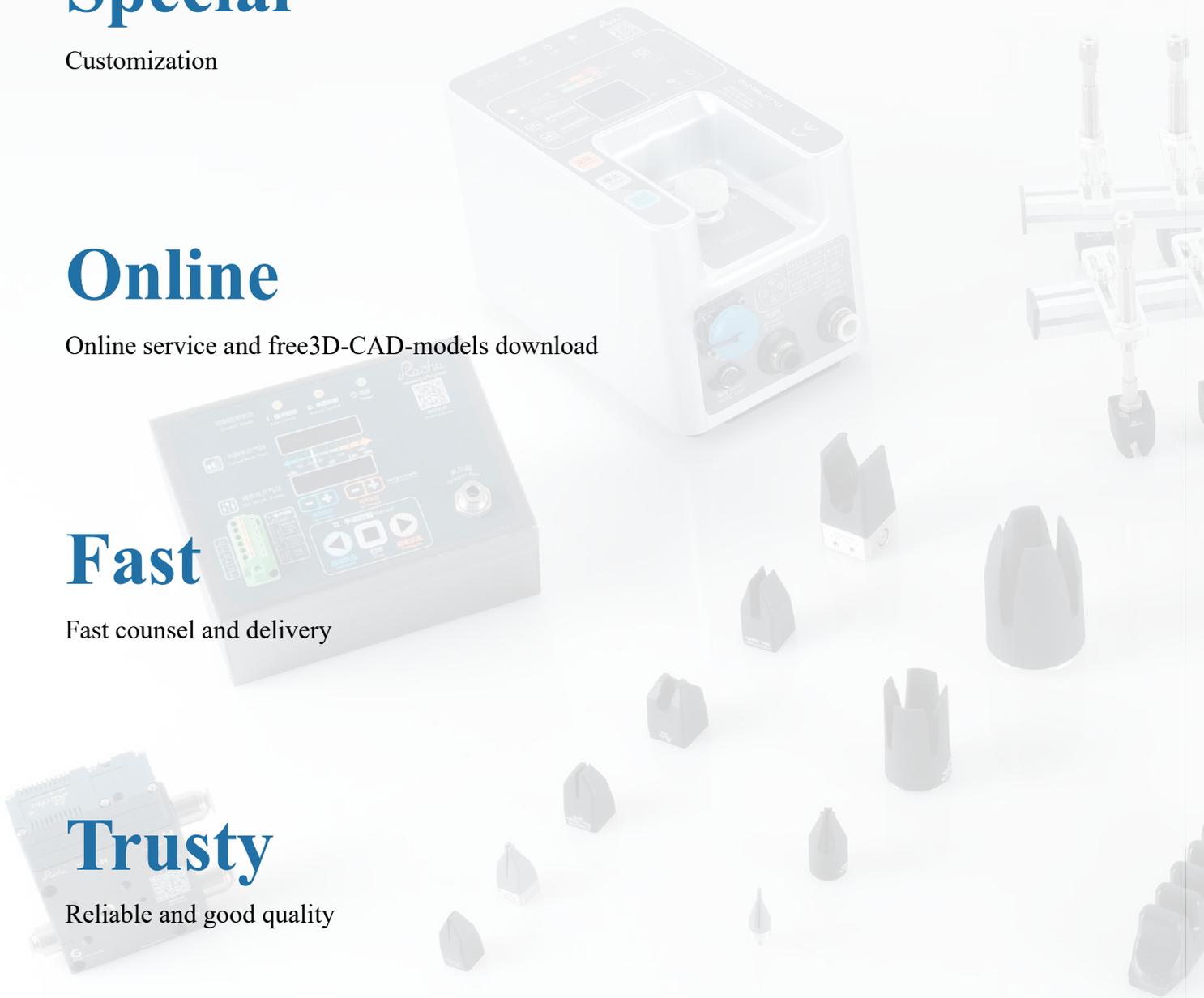
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Fast

Fast counsel and delivery

Trusty

Reliable and good quality





Abundant product model

Abundant product models

We provide a large number of soft gripper models, with modular applications, which can quickly work out your soft gripping solution.



Many ways to help you choose

Many ways to help you choose

Don't know how to choose models? Don't worry.

We have professional consultants to assist you, and we can also provide gripping tests for your samples if provided to eliminate your worries.



Save design time

You can download 3D-CAD-models at www.rochu.com, a variety of models for your choice!



Fast customizable service

Rochu's professional technical team provides you with customizable services. The average develop-time is 5 working days.



Worry-free warranty service

Where from the date of purchase of goods within one year (consumable products within 6 months), due to quality problems of non-human damage, the company to apply, the company will replace or repair the corresponding products.

Honor and qualification



EU CE Safety Certification



FDA Certification



1935/2004/EC Regulation



RoHS Certification



ISO9001



ISO14001



ISO45001



Partners



Applications

The movement of the Rochu grippers is inspired by the tentacles of the octopus, which can softly wrap the object without damaging the object or leaving scratches on its surface. The grippers can be widely used in auto parts, 3C electronics, food, medical, clothing, daily chemicals, and other industries. Soft Fingers can be used in a variety of industrial applications such as assembly, sorting, and handling, as well as in new retail industries such as vending machines. High safety, good versatility, and convenient installation make up for the vacancy that mechanical grippers and vacuum suction cups can not be applied on some occasions.

3C Electronics

Suitable for gripping and unloading of injection moulded products such as medical, daily chemicals, stationery, consumer electronics and the stuff.



Auto parts

It is used for sorting, handling, loading, and unloading automobile headlights, metal special-shaped parts, and exterior parts. Especially suitable for small batch and multi-batch soft production requirements.



Injection molded product

Suitable for medical, daily chemicals, stationery, consumer electronics and other injection molding products grab material, high temperature resistance of 200°C or more, can be matrix arrangement.



Food

Food safe materials. It has obtained FDA Certification and can directly contact the food. It is especially suitable for sorting and packaging fruits and vegetables, irregular vacuum packaged food, dairy products, dough cakes, and so on.



Fabric

It is suitable for layered grasping or multi-layer simultaneous grasping of knitted and woven fabrics. During layered grabbing, it can only grab the top layer or handle a whole stack of pieces.



Medical Supplies

It is used for grasping medical consumables such as infusion tubes, test tubes, ampoules, as well as bottled and bagged reagents, and for the process of production and disinfection of medical instruments.



Product Advantages

Soft



Bionics structure design and covering clamp enable the soft grippers to grasp the objects with centimeter-level adaptive ability.

Facing the soft production line of small-batch and multi-batch in the factory, Rochu can effectively save the switching time of the production line.

Rochu soft gripper can adapt to most industrial scenes with 300 times/min opening and closing speed, $\pm 0.05\text{mm}$ precision, millions of times service life, 5kg maximum load, good chemical and temperature resistance.

Safe



Rochu's soft gripper is made of pure soft material and possesses adjustable clamping strength, making it safe to pick and place soft and flimsy objects.

To deal with vulnerable and fragile products, Rochu's soft gripper can not only avoid damage but also avoid scratches on the surface while the safety of the operator is also guaranteed.

The material has obtained FDA Certification and can be in direct contact with food.

Easy



The standardized finger module makes the construction of soft gripper as simple as building blocks and saves design time.

Rochu Control Unit is equipped with a standard communication interface, which is seamlessly matched with all kinds of mechanical arms and PLC, as easy as using a USB flash drive.

The controller has a wireless remote control function and built-in air source (ACU configuration), which is convenient for installation and adjustment. It can also be used in the mobile working environment without an air source.

Thin, brittle and fragile



Soft and breathable



Ring



special-shaped



Different sizes



Rochu Gripper Introduction

Rochu gripper is a kind of soft fixture independently researched and developed by Rochu Robotics. Rochu's soft gripper applies the principle of bionics to imitate the action of octopus tentacles wrapping the object and grasping the object in a wrapped manner. Traditional fixtures often cannot provide a successful grasping scheme because of many limitations, such as object shape, material, grasping requirements, and so on. Rochu soft gripper is made of soft materials, which will not damage the target object. At the same time, due to its centimeter-level adaptive ability, it has high versatility. One gripper is universal and suitable for objects of different shapes. Users do not need to change the gripper frequently.

Rochu gripper fills the vacancy of the robot's end gripper and greatly expands the application scene of the industrial robot.

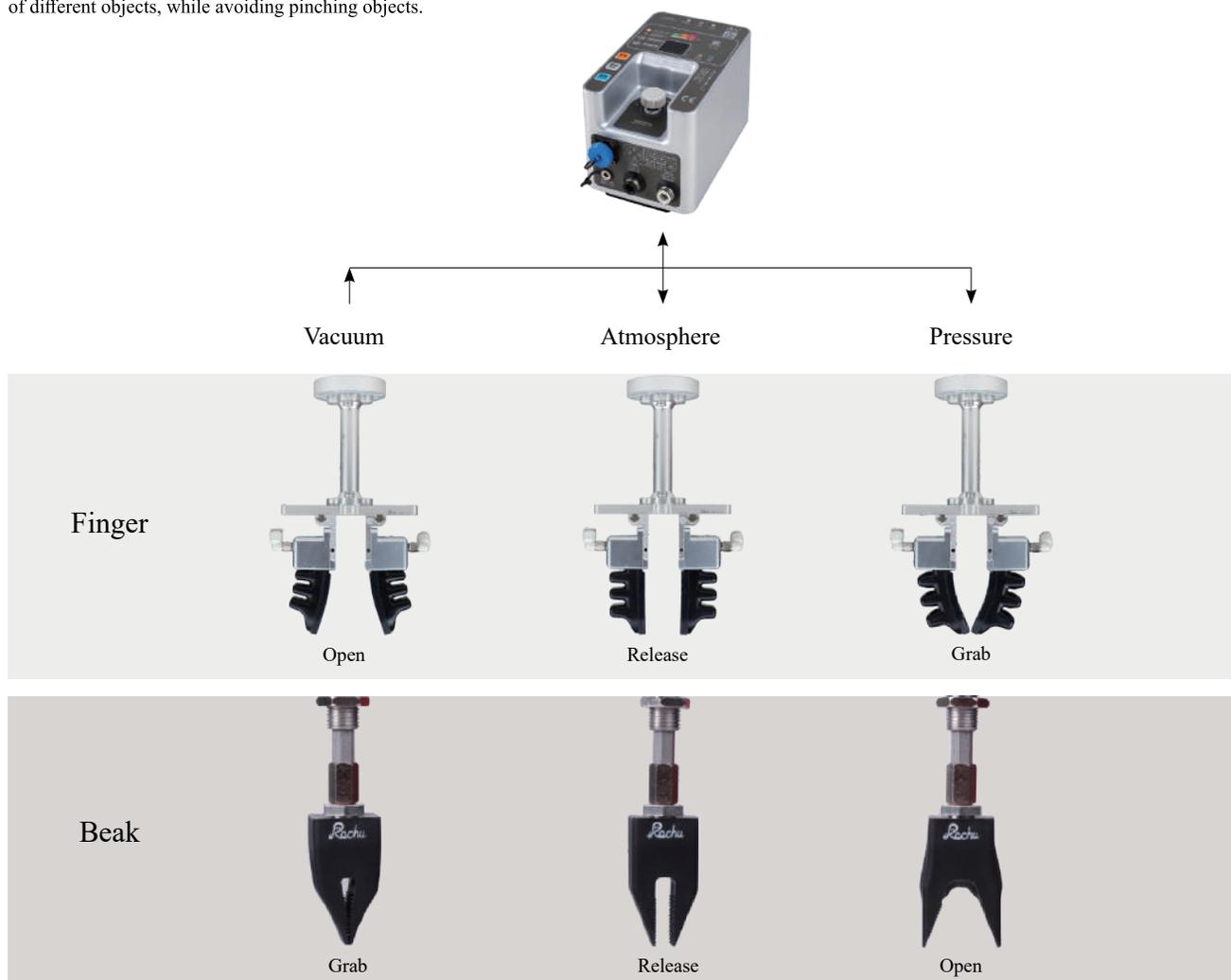


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Working principle

Rochu soft gripper adopts pneumatic drive technology. Through positive and negative pressure switching, the gripper achieves soft fingers/soft beak opening and closing action, so as to achieve grasp or outward expansion action.

At the same time, by adjusting the air pressure to control the clamping strength of the gripper or the angle of opening and closing, to achieve the flexible grasp of different objects, while avoiding pinching objects.



The air pressure must be strictly controlled within the Safe Pressure range. Overload use may cause irreversible damage to the product. It is recommended to use the original Rochu control unit to ensure the service life and stability of the product. Please refer to the product page or package identification for the air pressure of the product.

Material safety performance

Material	[P]/[H]	[LP]/[LH]	[MHB]	[NH]	
Safety  Total Migration Test of Food Contact Materials in the European Union EN 1186/2022  Testing of Food Contact Materials in Europe EC 1935/2004  Certification of Food Contact Materials by the US FDA  Directive on the Prohibition of Toxic and Hazardous Substances in the European Union (RoHS)  The EU's <Registration, Evaluation, Authorisation and Restriction of Chemicals">(REACH) MTT Cytotoxicity Test	Fit	Fit	Fail	Fail	
	Fit	Fit	Fail	Fail	
	Fit	Fit	Fail	Fail	
	Fit	Fit	Fit	Fit	
	Fit	Fit	Fit	Fit	
	Fit	Fit	Fail	Fail	
Temperature-resistant	Contacted object surface temperature	-40~220°C	-40~220°C	-50~150°C	-40~100°C
	Operating ambient temperature	-20~110°C	-20~110°C	-20~110°C	-20~110°C
Oil resistance	Vegetable oil	Moderate	Moderate	Moderate	Good
	Heavy oil (lubricating oil, gear oil, hydraulic oil, etc.)	Bad	Bad	Bad	Excellent
	Light oil (volatile oils such as gasoline, diesel oil, kerosene, emulsified oil, drawing oil, etc.)	Bad	Bad	Bad	Good
Solvent resistance	Alcohols (methanol, ethanol)	Excellent	Excellent	Moderate	Excellent
	Benzene, Toluene	Bad	Bad	Bad	Moderate
	Acetone, Ethyl acetate	Bad	Bad	Bad	Moderate
Acid and alkali resistance	Weak acid with 6 to 7 pH value (such as low-concentration phosphoric acid, oxalic acid, etc.)	Good	Good	Good	Moderate
	Weak base with 7 to 8 pH value (such as low-concentration ammonia water, etc.)	Good	Good	Excellent	Good
	Strong acids (such as hydrochloric acid, sulfuric acid, nitric acid, etc.)	Moderate	Moderate	Moderate	Bad
	Strong bases (such as sodium hydroxide, potassium hydroxide, etc.)	Bad	Bad	Excellent	Moderate
	Oxidizing strong acids (concentrated nitric acid, fuming sulfuric acid), hydrofluoric acid, etc.	Bad	Bad	Bad	Bad
Water resistance	Water vapor	Excellent	Excellent	Excellent	Moderate
	Water-based cutting fluid	Good	Good	Good	Moderate
Weather resistance	General aging resistance	Excellent	Excellent	Excellent	Moderate
	Ultraviolet rays resistance	Excellent	Excellent	Excellent	Bad
	Ozone resistance	Excellent	Excellent	Excellent	Bad
Conductivity	Execution standard	Surface resistance			
	GB/T 11210-2014	>10 ¹² Ω	10 ⁶ ~10 ⁹ Ω	>10 ¹² Ω	>10 ¹² Ω

Excellent : Can be in stable contact for a long time. **Good**: Stable for short-term contact and needs to be replaced regularly.

Moderate: Can be in intermittent contact and needs to be replaced regularly.

Bad: Not recommended for use.

General Index

WC

Workpiece and Condition



DK

Development Kit



Soft Beak Kit



Omnipotence Kit

BM / B

Beak Module / Soft Beak



Unicuspid Soft Beak



Bicuspid Soft Beak



Tricuspid Soft Beak



Quadricuspid Soft Beak



Soft Anemone



Soft Boots

FM / F

Finger Module / Finger



Finger Module A



Finger Module B



Finger Module C

CU

Control Unit



LCU-S

Light Control Unit



LCU-H

Light Control Unit



iPCU2

Integrated Passive Control Unit



ACU2-B

Active Control Unit



ACU2-H

Active Control Unit

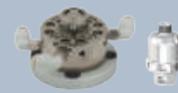


PCU2

Passive Control Unit

AF

Assembling Fittings



QCM

Quick changer Module



FCM

Flange Connection Module



RF

Robot flange



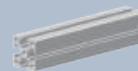
SMP

Slide Mounting Plate



CP

Connector Part



P

Profile



CM

Connection Module



SE

Sensor



PN

Pneumatic Fittings

WC

Workpiece and Condition



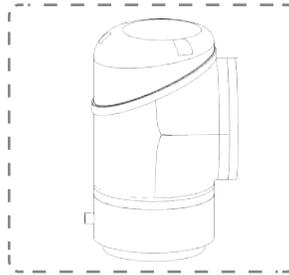


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Soft Finger Combination

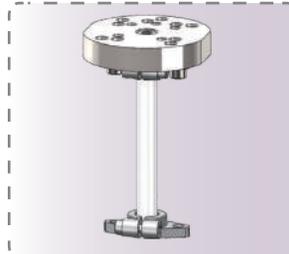
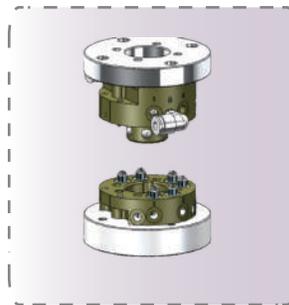
Standard Rochu Soft finger Combination [GC] is built of different modules and named in a standard way. The building of modules can be in the following steps:

1. Finger Module [FM], 2. Slide Mounting Plate [SMP], 3. Flange Connection Module [FCM], 4. Quick Changer Module [QCM] (Optional)



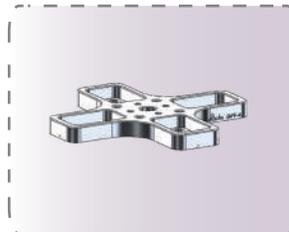
4 Quick changer module

Quick changer module [QCM] is an optional module for automatic and quick replacement of spare grippers. **Quick changer module [QCM]** is installed between the **flange connection module [FCM]** and the end of the robot arm, it can be divided into two parts, the robot side (R side, installed at the end of the robot arm) and the gripper side (G side, installed at the gripper end).



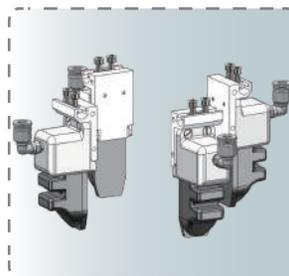
3 Flange connection module

Flange connection module [FCM] is a connector between the end of the robot arm and the **sliding mounting plate [SMP]**. It can also be connected with **quick changer module [QCM]**. There are two types of [FCM], the spring rod type (S) and the rigid rod type (R).



2 Slide Mounting Plate

The **sliding mounting plate [SMP]** is the standard mounting plate for Rochu **finger module [FM]**, and the mounting plate is equipped with a standard chute and scale mark. The installation position and posture angle of the **finger module [FM]** in the chute can be adjusted freely.



1 Finger Module

Finger module [FM] is the actuator of Rochu gripper. According to the finger load capacity, it can be divided into three series, finger A, finger B, finger C. Each module can be installed separately or combined seamlessly, which is easy to assemble and disassemble.

Soft Beak Combination

Standard Rochu beak combination [GC] can be combined in the following order:

1.Beak Module [BM] 2.Connection Module[FCM] /[CM] 3.Sliding Mounting Plate [SMP](optional).



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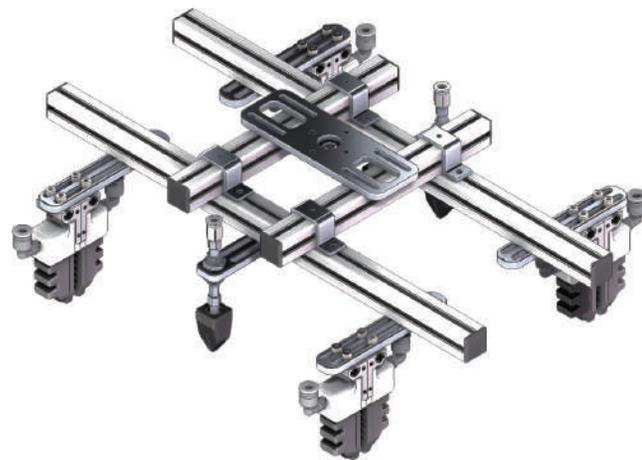
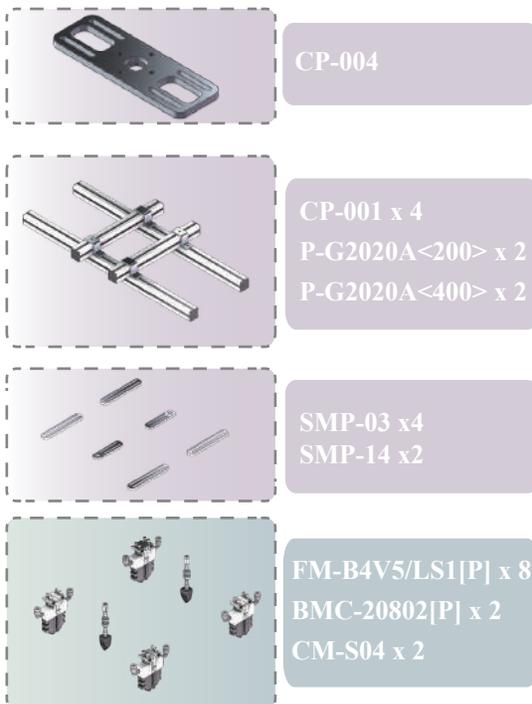


Soft Beak & Finger Combination

- Suitable for products with large volumes or irregular shapes
- Aluminum alloy profiles are used for combination and connection
- Standard Beak Module [BM] or Finger Module [FM] can be installed in any part of the bracket
- Suction cups, sensors, cylinders, or other components can also be added according to the working conditions



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Product name	Product code	Quantity
Connection Part	CP-004	1
Connection Part	CP-001	4
Profile	P-G2020A<200>	2
Profile	P-G2020A<400>	2
Slide Mounting Plate	SMP-03	4
Slide Mounting Plate	SMP-14	2
Soft Beak Module	FM-B4V5/LS1[P]	8
Soft Finger Module	BMC-20802[P]	2
Connection Module	CM-S04	2

WC-1490

Internal handling of phone lens rings



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Product name	Product code	Quantity
Beak Module	BMC-3B13[H]S	6



- 1. Multiple internal supports are arranged in rows or matrices to meet production efficiency;
- 2. Standardized products, and the grippers are easy to replace and maintain;
- 3. The clamping is stable, the dropout rate is 0, and there is no secondary damage to the product.



- 1. The inner and outer rings of mobile phone cameras are easily scratched. Before assembling the finished product, it is necessary to ensure that there is no dirt.
- 2. It involves PVD coating and loading and unloading processes for inspection. The trays are densely filled with incoming materials and multiple synchronous handling is required.
- 3. Vacuum profiling suction tools are unstable and prone to dropping parts, and the cost is high.

WC-1488

FPC detection (Flexible printed circuit board)



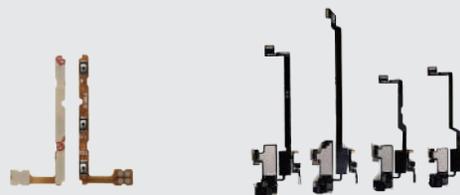
Scan to watch videos

Product name	Product code	Quantity
Beak Module	BMC-20301[LH]S	1

*For the anti-static version of LH, please consult the customer manager.



- 1. The anti-static soft claw protects the surface of the product and at the same time does not generate electrostatic accumulation and protects the components.
- 2. FPC detection is usually incoming from trays. The slender claw tip of the soft claw can reach into narrow gaps.
- 3. Simple structure, convenient installation and strong versatility.



- 1. The miniaturization of electronic products promotes the size of flexible printed circuit boards to be even smaller and the structure to be more irregular.
- 2. Manual inspection lines urgently need to be transformed into automatic inspection machines.
- 3. Suction cups and steel claws cannot suck or are easy to scratch products.

WC-1492

Handling of glass panels.



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Product name	Product code	Quantity
Finger Module	FM-C4V2/LS8[H]	4
Connect Module	SMP-01	4
Control Unit	iPCU2-HMN	1



- 1. The soft finger series features modular design, simple structure and light weight;
- 2. The clamping force is precisely controllable. With the LS8 flexible finger texture, the glass surface will not be touched during clamping, which is stable and reliable;
- 3. Combined with the sliding mounting plate, it can be compatible with various specifications of panels.



- 1. After the glass panel is laminated, the surface cannot be touched;
- 2. The structure of the non-standard profiling gripper of the cylinder is complex and the cost is high;
- 3. There are many sizes, and the end fixture is required to be universal.

WC-1437

Mobile Phone Handling



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Product name	Product code	Quantity
Beak Module	BMC-1GN4030[H]M Customized version	4



- 1. Internal-skeleton grippers offer high clamping force, 0.1N force-control accuracy, ±0.05mm repeat positioning. They meet phone - gripping needs and prevent three damages;
- 2. Soft-material, contoured gripper contacts phone from bottom, ensuring stable handling;
- 3. Standard-product replacement is convenient, doesn't impact efficiency, and requires no secondary calibration.



- 1. Mobile phone production has multiple processes. Many need inspections for semi-product yield, with no surface contact allowed;
- 2. Cylinder fixtures can't adjust clamping force precisely, have complex designs. Rubber-coating still causes three phone damages. Frequent replacements hamper production line efficiency;
- 3. Incoming material fixtures have narrow space, restricting gripper claw thickness to 4-8mm.

WC-1496 Pick and Place of VCM Motor Carriers



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Product name	Product code	Quantity
Beak Module	BMC-3B12[H]/S	6



- 1. Soft claws, available in dust-proof and anti-static versions, effectively solve material-carrying issues and achieve $\pm 0.05\text{mm}$ accuracy;
- 2. Soft claws, with strong compatibility, use flexible materials that won't damage workpieces;
- 3. Small-sized and lightweight soft claws can meet matrix - arrangement grasping needs.



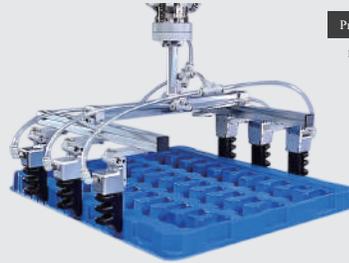
- 1. Light carriers are prone to material-carry-over during grasping, with high grasping-accuracy demands;
- 2. Workpiece inner-hole sizes vary; ordinary fixtures may scratch them;
- 3. Injection-molding blanking and tray-arranging need multiple claws to grasp synchronously, with high space requirements.

WC-2072 Handling of Blister Tray



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Product name	Product code	Quantity
Finger Module	FM-A4V5/LSI[P]	6



- 1. The soft finger module has strong adaptability and can fit the tray closely, ensuring the stability of handling.
- 2. The modular design of the soft fingers enables rapid assembly, which is suitable for multiple types of trays. Moreover, it can adapt at the centimeter level without the need for adjustment.
- 3. The soft fingers can be customized into anti-static and dust-free versions, ensuring the safety of electronic products during the transfer process and being suitable for dust-free environments.



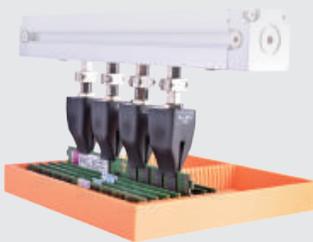
- 1. In the electronics industry, most parts are produced and transferred using blister trays (material trays) during the production process. The automatic handling, loading, and unloading of trays are crucial aspects of automation.
- 2. The handling of trays with materials requires extremely high stability to ensure the safety of the entire tray of materials. For some trays, due to the lack of a large enough suction surface, the suction cups cannot stably suck them, resulting in parts falling off.
- 3. As there is a wide variety of trays, there is a relatively high requirement for the compatibility of the fixtures.

WC-1480 Memory modules gripping

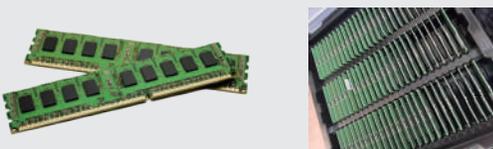


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Product name	Product code	Quantity
Beak Module	BMC-20005V[LH]	4



- 1. Pure-soft-material grippers can touch memory-module particles directly, ensuring stable clamping without damage;
- 2. Small-sized soft grippers, arrangeable in rows or matrix, fit tray gaps well, eliminating tray change and maintaining production efficiency;
- 3. Soft grippers can be made of anti-static materials to avoid electrostatic breakdown.



- 1. High-value memory modules have fragile particles. Rigid fixtures can only grip their sides (not surface), but small contact area leads to poor stability;
- 2. Memory modules are vertically and densely placed in trays, leaving little space for gripper claws. Multiple-piece synchronous gripping is needed for efficiency;
- 3. Gripper claws must be anti-static to prevent electrostatic breakdown.

WC-1041 Internal gripping of ceramic rings



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Product name	Product code	Quantity
Beak Module	BMC-20603[H]/S	4



- 1. The soft claw has a force control accuracy of 0.1N to ensure a 100% product yield;
- 2. It is small in size and can be transported simultaneously by multiple units, improving efficiency;
- 3. It is a standardized module and is convenient for replacement and maintenance.



- 1. Alumina ceramic rings are used in power battery connections. After die-casting, they need to be palletized;
- 2. The powder before sintering is fragile and easily damaged, and manual tray placement has been relied on for a long time;
- 3. There are many inner hole sizes, and a certain degree of versatility is required.

*For the control unit and other accessories, please consult the account manager.

WC-1971 Steel-shell batteries grasping

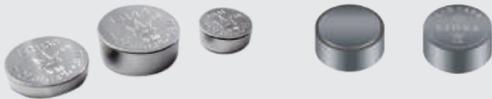


Scan to watch videos



Product name	Product code	Quantity
Beak Module	BMC-3A18(MHB)/S	16

- 1. The soft gripper can be customized with new materials such as ethylene propylene diene monomer (EPDM) rubber and fluororubber, which have corrosion resistance, ensuring stable production and avoiding parts from falling off.
- 2. The soft gripper are light in self-weight, effectively saving the load of the subsequent machine, and can be compatible with batteries of multiple specifications without the need to change the model.
- 3. The entire soft gripper does not contain copper, zinc or nickel substances. It has a simple structure, and is convenient for maintenance and replacement.



- 1. In the production environment of steel-shell batteries for consumer electronics, the corrosive electrolyte can make air cylinder malfunction, damaging products or causing parts to drop.
- 2. During the battery production process, substances such as copper, zinc, and nickel should not be in contact with the batteries. Otherwise, it will pose potential safety hazards.
- 3. To ensure efficiency, multiple synchronous gripping is required, and the size of the fixture should be as small as possible to facilitate the arrangement.

WC-1435 Stratification of lead frame.



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Product name	Product code	Quantity
Finger Module	FM-B3V3/AC1[P]	4
Connector Part	CP-ACB	4
Slide Mounting Plate	SMP-2L	2

- 1. The modular flexible finger solution has a simple structure, can quickly build a stratification solution, and has strong versatility;
- 2. The specially made AC1 flexible finger with embedded rigid skeleton has higher wear resistance, and the service life in this scenario can be increased by 2 to 3 times;
- 3. With the flexible finger rotating connection module, the success rate of single-layer splitting can reach 99.99%.



- 1. The lead frame is the chip carrier of an integrated circuit. It is stamped into an extremely thin and hollow structure. For multi-layer incoming materials, single-layer splitting needs to be done;
- 2. Suction cups can cause missed suction and dropped parts or carry materials. Rigid grippers can cause large deformation.
- 3. The extremely thin thickness of 0.2mm is a great challenge to the service life of the flexible gripper.

WC-1515 Gripping of Chips



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Product name	Product code	Quantity
Beak Module	BMC-2G2027(LH)/SN Customized version	1
Control Unit	LCU-S_A	1

- 1. Soft claws can grasp multiple chip products without model change, avoiding chip-surface contact;
- 2. Without affecting cavity structure, soft grippers' fingertips can be cut per tray clearance width for quick solution design response;
- 3. Soft grippers with added anti-static materials prevent static build-up during production, safeguarding chips.



- 1. Initially, chip-inspection loading/unloading was manual, and material trays lacked clearance for automated gripping in design;
- 2. Multiple-spec chips need end - part compatibility for equipment universality;
- 3. With untouchable chip surfaces, suction cups won't work; fixtures must be anti-static.

WC-1517 Copper carrier boards handling

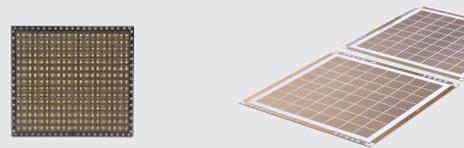


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Product name	Product code	Quantity
Beak Module	BMC-1GN4030(H)/M Customized version	6
Control Unit	iPCU2-SMN	1

- 1. Soft-material grippers won't damage product surfaces or leave marks;
- 2. Soft grippers with embedded skeletons stay soft externally, boost clamping force, and prevent product bending during stable grasping, protecting high-value items;
- 3. Small-sized soft claws are expandable. Adding a profiling block at their ends can solve non-standard fixture design issues.



- 1. In semiconductor industry, no-mark-on-product-surface rule during carrier board handling makes suction cups unsuitable.
- 2. Semiconductor - industry copper plates, being costly, must not be dropped, bent or have their surfaces damaged during handling.
- 3. Process limitations create narrow space around copper plates, making end - fixture design and manufacture tough.

WC-1493

3D printed dental models



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Product name	Product code	Quantity
Beak Module	BMC-21413[P]	1

- 1. The soft beak is made of soft material, protecting the product surface and not scratching or deforming it.
- 2. It has strong versatility. There is no need to switch fixtures when grasping dental models of the same type but different sizes.;
- 3. The material is safe and non-toxic and will not cause secondary pollution.



- 1. The application of 3D printing technology in the dental field is mature, such as dental crowns, dental bridges, retainers, etc. After production, they need to be detected.
- 2. The graspable positions of different products are different, and the end fixture needs to have strong versatility.
- 3. There are many materials for dental models and they cannot be scratched or deformed.

WC-1856

Opening and closing centrifuge tube lid



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Product name	Product code	Quantity
Beak Module	BMC-3GN51[H]/SN Customized version	1
Connect Module	CM-RG1840G18	1

- 1. Soft grippers have a simple structure, low usage cost, and are easy to maintain, not prone to malfunctions.
- 2. Soft grippers are driven by positive and negative pressure, with high opening and closing efficiency. Can adapt to a high operation frequency and work stably for a long time.
- 3. Soft grippers have a certain degree of chemical resistance. With a precise force control of 0.1N, they can effectively protect the integrity of the centrifuge tube, and are compatible with centrifuge tube caps of multiple specifications.



- 1. Centrifuge tubes are commonly in medical testing industry, opening and closing their lids is an indispensable part of automated testing equipment.
- 2. There are many specifications for centrifuge tubes, so the grippers need to have compatibility.
- 3. When handling centrifuge tubes containing biohazardous substances, toxic and harmful substances or radioactive substances, it may cause harm to the operators, and there is a high demand for automation.

WC-1813

Aluminum cap inner-supporting



Scan to watch videos



Product name	Product code	Quantity
Beak Module	B-3B08[HAS]/S	8

- 1. The soft grippers use inner support, eliminating the need to consider inner-side holes or gaskets on the workpiece.
- 2. Soft grippers, with a minimum size of 7mm, are lightweight and can be multi-arranged, enabling the use of small - load robotic arms.
- 3. Made of soft materials, soft grippers won't damage the workpiece. With options like dust-free and anti-static materials, they effectively prevent material-carrying issues.



- 1. Medical cartridge bottle caps have gaskets or small holes, making it impossible for suction cups to grasp them stably;
- 2. With hundreds of closely-arranged aluminum caps in raw-material supply, fixtures must be small and lightweight;
- 3. The aluminum cap has an extremely thin, easily-damaged inner wall. It's lightweight and likely to carry extra materials during grasping.

WC-1156

Contact lenses picking up



Scan to watch videos



Product name	Product code	Quantity
Finger Module	BMC-3B14[P]/S	1
Connect Module	CM-SNS1011B	1
Control Unit	iPCU2-4MV	1

- 1. Pure-soft-material grippers enable damage-free gripping. Positive/negative air pressure adjustment ensures flat material placement;
- 2. Soft grippers pass toxicological tests and are widely applicable in the medical field;
- 3. With a closed-structure design, soft grippers function normally when immersed in nursing solution.



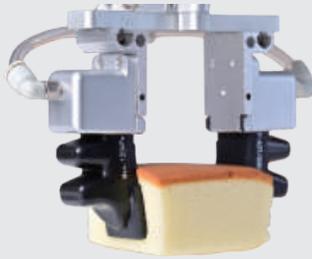
- 1. The transparent, soft nature of contact lenses makes equipping fixtures for automated inspection a tough task;
- 2. Contact lenses demand flexible, clean fixtures; no pinching damage or contamination allowed;
- 3. Nursing solution during contact lens transfer rules out the use of suction cups.

*For the control unit and other accessories, please consult the account manager.

WC-1460 Packaging cheesecakes



Scan to watch videos



Product name	Product code	Quantity
Finger Module	FM-A3V5/U30[P]	2

- 1. The material of the soft claw is soft and will not scratch the product. It is food-grade, safe and non-toxic.
- 2. The special wide finger surface will not leave marks on the cake surface, and the yield rate is 99.99%.
- 3. The cycle time is 50-60 pieces/min. It can be produced 24 hours a day, improving production and management efficiency.



- 1. In an automated cake production line, there are corresponding automatic production equipment for previous processes (such as whipping and baking). Due to the soft and easily deformed cake, the boxing process can only be completed by a large number of manual labor.
- 2. Suction cups and rigid grippers are easy to damage the product by suction or clamping, or the efficiency is too low.

WC-1390 Packaging mooncakes



Scan to watch videos



Product name	Product code	Quantity
Finger Module	FM-B3V5/LS1[P]	4

- 1. Soft food-grade material, will not scratch the product, safe and non-toxic;
- 2. Modular design for convenient maintenance;
- 3. The cycle time is 50-60 pieces/min. It can be produced 24 hours a day, improving production and management efficiency.



- 1. Mooncakes are soft and oily on the surface and are easily deformed. Picking marks on the surface are not acceptable;
- 2. The previous grasping cycle requires a high speed. The subsequent packaging has placement requirements;
- 3. Neither suction cups nor rigid grippers can meet the requirements of automated packaging.

WC-1363 Ice-cream Handling



Scan to watch videos



Product name	Product code	Quantity
Finger Module	FM-B5V5/LF1[P]	3

- 1. Food-grade elastic soft fingers disperse clamping force. Their enveloping grip avoids dents, breaks or warps from metal clamps.
- 2. Modular soft fingers suit various product specs, boosting line flexibility. Multiple ones grip together, upping line efficiency.
- 3. Soft fingers endure cold, ease cleaning/disinfection. Closed-cavity design stops air pipes sucking in debris.



- 1. During ice-cream packaging, its surface melts slightly and gets sticky. Grasping must avoid pinching, and there's damage risk even after low-temp hardening;
- 2. Ice-cream blocks can have irregular shapes from production or storage, like edge melting or shrinking;
- 3. Ice-cream production lines, with temps often below -18°C, need fixtures suitable for cold environments.

WC-1538 Biscuit Box Packaging



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Product name	Product code	Quantity
Beak Module	BMC-1GN4030[H]M Customized version	2
Control Unit	iPCU2-SMN	1

- 1. Soft-material grippers with adjustable, controllable clamping force won't crush biscuits;
- 2. Profiled soft grippers with internal skeletal structure can stably clamp multiple loose-packaged biscuits;
- 3. Soft grippers, simple-structured and lightweight, save robot's effective load. Their small size saves space.



- 1. Ensuring packaging line efficiency, multiple bagged biscuits must be vertically & synchronously boxed. Their special posture rules out suction cups.
- 2. Biscuits' fragility prohibits air cylinder use. Also, air cylinders are heavy, and multiple-set synchronous grasping needs a high-load robot.
- 3. Limited biscuit-blanking spacing leaves little room for grippers.

WC-2021

Sorting of Egg Dumplings



Scan to watch videos



Product name	Product code	Quantity
Finger Module	FM-A3VS/U30[PGS]	2
Connect Module	SMP-2S	1
Control Unit	LCU-H_A	1

- 1. Rochu soft gripper is made of food-grade silicone material which can withstand high-temperature of up to 220°C without damage to the egg dumplings.
- 2. It helps customers increase production capacity, matching the highest efficiency of the machine, and at the same time protects the egg dumplings from being contaminated and damaged.
- 3. It has opened a new era of automated packaging for egg dumplings.



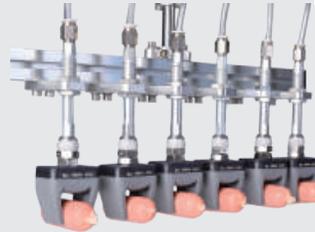
- 1. During the production of egg dumplings, pressing, sorting, and boxing need to be carried out in a high-temperature state. Manual sorting poses a risk of being scalded.
- 2. This scenario has extremely high requirements for efficiency.
- 3. Traditional suction cup cylinders will damage the integrity of the egg dumplings and are not suitable for this scenario.

WC-1645

Meat sausage grasping



Scan to watch videos



Product name	Product code	Quantity
Beak Module	BMC-2G2027[H]SN	6
Control Unit	IPCU2-HMN	1

- 1. The soft grippers are made of food-grade materials, which won't scratch the products. They are safe and non-toxic;
- 2. Small and lightweight soft grippers can be closely arranged in dozens to meet production needs;
- 3. Soft grippers feature stronger compatibility and great anti-slip properties.



- 1. Food industry requires to operate 24 hours a day, and are extremely high requirements for food safety;
- 2. When grasping multiple arranged sausages, there are requirements for the size of the fixtures;
- 3. Sausages, with diameters from 20 - 22 mm, require fixtures to be compatible. Their greasy surface makes them slip-prone during grasping.

WC-1325

Loading and unloading of cosmetic packaging materials



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Product name	Product code	Quantity
Beak Module	BMC-4G64[H]S	1

- 1. The material of the gripper is soft, effectively protecting the product surface;
- 2. With a large stroke and strong versatility, there is no need to frequently switch grippers;
- 3. Standardized module, convenient for installation and maintenance.



- 1. There are many kinds of cosmetic packaging materials with different shapes. The automatic filling line needs a certain degree of versatility;
- 2. The surface requirements are high and it cannot be scratched or secondarily polluted;
- 3. Traditional fixtures and suction tools cannot meet versatility.

WC-1369

Resin lens molds handling

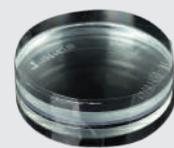


Scan to watch videos



Product name	Product code	Quantity
Finger Module	FM-BSV4LF1[H] Customized version	4
Connect Module	SMP-4S	1

- 1. Soft-material fingers prevent mold damage, with a 500 - 800 pieces/hour capacity;
- 2. Soft fingers adapt to mold shapes, grip stably, and enable automated frame collection;
- 3. Custom-material soft fingers have enhanced wear-resistance against mold-surface abrasion.



- 1. After resin lens mold is opened and de-glued, its upper and lower parts need auto-recycling;
- 2. Post-opening, separated upper and lower molds can't be suction-gripped, they're fragile;
- 3. Resin lens molds vary in curvature, edge, contour and size, demanding compatibility.

*For the control unit and other accessories, please consult the account manager.

WC-1828

Foundation casing handling



Scan to watch videos



Product name	Product code	Quantity
Beak Module	B-1GN2521[H]SN Customized version	4

- 1. Soft grippers materials are soft, dispersing contact pressure, avoiding local stress concentration, protecting air - cushion surface integrity and preventing damage.
- 2. The flexible material can self-adapt to the curved surface of the casing. It can be freely combined to adjust spacing and can have an external profiling block, showing strong compatibility.
- 3. The soft gripper has a simple, durable and replaceable structure. It suits high - speed assembly line production. Its light weight reduces vibration and impact on precision components.



- 1. The foundation casing usually has a special high-gloss coating, and rigid fixtures (such as metal clamping claws) may cause scratches or indentations upon contact.
- 2. The foundation casing may be designed with an arc shape, an irregular shape, or a thin-walled structure, making the design of irregular fixtures quite challenging.
- 3. The production line may need to handle casings of different sizes or models, which requires the fixtures to have compatibility. Moreover, due to the high requirements for the production cycle, the fixtures need to have high clamping stability.

WC-1849

E-cigarette mouthpieces feeding



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Product name	Product code	Quantity
Beak Module	BMC-21413[HW]	4

- 1. The soft gripper will not damage the e-cigarette mouthpieces, and multiple arrangements can adapt to mold's narrow space.
- 2. White soft gripper can be customized to provide a high-contrast background for dark-colored workpieces. The recognition accuracy rate is 100%, which can avoid damage to the mold.



- 1. China is important exporter of e-cigarettes, with a wide variety of designs to meet the different market demands for e-cigarettes.
- 2. Plastic mouthpieces are one of the main exterior components of e-cigarettes, which have high requirements for appearance and strict quality control during the injection molding process.
- 3. The black - gray soft gripper are similar in color to the dark - colored mouthpieces, which affects the accuracy of visual recognition and poses a risk of mold damage.

WC-2006

Loading and unloading of lipstick tubes



Scan to watch videos



Product name	Product code	Quantity
Beak Module	BMC-2G1217[HAS]SN	6
Control Unit	IPCU2-SMV	1

- 1. The opening and closing compatibility of a single type of soft gripper can reach 20-30mm. It can be compatible with multiple types of lipstick tubes without the need to adjust the air pressure.
- 2. The expandable AS material ensures that there are no scratches or marks on the appearance. Multiple arrangements can be made to improve production efficiency.
- 3. The standard soft gripper save the time for selecting and designing the gripper and also reduce the management cost.



- 1. In order to meet the more diversified market demands, lipstick products have a variety of size specifications and are becoming increasingly irregular in shape.
- 2. The production demand of small batches and multiple lots requires extremely high compatibility of the automated end-effector. Moreover, high-gloss processes such as chrome plating have high requirements for the surface.
- 3. When facing different specifications, traditional air cylinders need to replace the fixtures frequently but the design is long and the cost is high. Additionally, it generates hidden costs such as the management of the fixture library.

WC-1491

Stratification of clothing cut pieces



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Product name	Product code	Quantity
Beak Module	B-H5024[P]S	6
Connector Part	CM-S04	6
Slide Mounting Plate	SMP-14	6
Flange Connection Module	FCM-R03	1
Profile	P-G2020A-<300>	2
Profile	P-G2020A-<300>	1
Connector Part	CP-001	2
Rotary Joint	CM-RC14WS?	6

- 1. The "Soft Boot" gripper can achieve precise stratification through pneumatic adjustment, has no requirements for environmental temperature and humidity, and does not damage the fabric;
- 2. The "Soft Boot" gripper can adapt to fabrics of different materials and thicknesses;
- 3. The unique structural design ensures a blanking accuracy of 0.05mm.



- 1. The clothing industry relies heavily on manual labor and has an extremely high demand for automation;
- 2. In the clothing industry, there are multiple layers of incoming cut pieces, which are soft, breathable and come in many varieties;
- 3. The separation of single cut pieces has always been a difficult problem in the industry.

WC-1489

Loading and unloading of automobile lamp shades



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Product name	Product code	Quantity
Finger Module	FM-ASV5/LS8[HAS]	8
Accessory Package	PK-AV5	8

- 1. The flexible gripper does not touch the surface of the product and will not scratch or cause dirt. The yield rate is 100%;
- 2. It has a large compatibility range. For left-right symmetrical lamp shades, there is no need to switch fixture;
- 3. The entire set of fixtures is light in weight and saves end load.



- 1. After the automobile lamp shade is painted and dried, annealing treatment is required to increase the strength, and the product surface cannot be touched;
- 2. The design cost of non-standard rigid fixtures is high, and they are easy to scratch the surface and form dirt;
- 3. Automobile lamp products are usually produced in small batches and multiple batches, and non-standard fixtures have high inventory pressure.

WC-1394

Connectors injection molding pick-up



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Product name	Product code	Quantity
Beak Module	BMC-20802[PAS]S	8

- 1. The soft beak is small and can be arranged closely. Compared with the vacuum suction tool scheme, it saves design cost and reduces air consumption;
- 2. The force control accuracy is 0.1N, ensuring 100% yield rate and reducing environmental noise;
- 3. The material is high temperature resistant and light in weight, saving the end load.



- 1. After the injection molding of the connector plastic part, it is not completely cooled. The hollow structure is easy to deform. It is difficult to grasp products with a thickness of 1-3 mm;
- 2. In injection molding, there are usually multiple cavities in one mold, and multiple products need to be taken out of the mold simultaneously;
- 3. The suction cup cannot suck stably, and the steel claw will deform it or there is insufficient space for arrangement.

WC-0836

O-ring internal support



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Product name	Product code	Quantity
Beak Module	BMC-3B14[P]S	1
Connection Module	CM-S04	1

- 1. Simple structure saves design costs and has a low transformation cost;
- 2. There are multiple schemes such as internal gripping and gripping of wire diameters to deal with products of different size;
- 3. High discharging precision improves the stability of the sleeve shaft.



- 1. The wire diameter of the O-ring is small, and the cylinder gripper is easy to deform it;
- 2. Ordinary suction cups cannot suck. The design of profiling suction tools is complex and the dropout rate is high;
- 3. The overall weight of the profiling suction tool scheme is large, increasing the load on the robot.

WC-0262

Powder Metallurgy Parts Handling



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Product name	Product code	Quantity
Beak Module	BMC-4B40[HAS]S	1

- 1. The soft grippers, made of soft materials and featuring an innovative design, can flexibly adapt to powder metallurgy parts of different shapes and sizes;
- 2. Soft grippers stop secondary damage in automated powder-metallurgy part handling, cutting post-sintering defect rates;
- 3. Different standard soft grippers suit circular pipe fittings of varying sizes.



- 1. Powder metallurgy uses powder to make formed parts and is widely used in auto, electronics, etc.
- 2. Pre-sintering, powder metallurgy parts have loose structures, are easily damaged, and circular ones are hard to auto-stack on pallets.
- 3. More small-batch, multi-spec proofing products mean high demand for automated end-effectors.

*For the control unit and other accessories, please consult the account manager.

WC-1872

Engine bearing shells grasping



Scan to watch videos



Product name	Product code	Quantity
Beak Module	BMC-20603[H]S	2
Control Unit	IPCU2-HMV	1

- 1. The soft grippers are made of soft materials, which can effectively achieve gentle handling and prevent damage to the outer surface of the workpiece.
- 2. The soft grippers, small and light, can grip effectively in a narrow space.
- 3. Compared with traditional fixtures, the soft grippers have stronger compatibility.



- 1. The traditional installation of engine bearing shells uses air cylinder with end profiling, which is likely to damage the workpiece.
- 2. When the bearing shells are delivered as raw materials, they are densely arranged, so there are high requirements for the size of the end fixture.
- 3. The engine bearing shells vary in shape and size, so the end fixture is required to have a certain degree of compatibility.

WC-1436

CNC blade placement



Scan to watch videos



Product name	Product code	Quantity
Beak Module	BMC-3G20[H]S+N27[SSD]	1

Quantity

- 1. Soft beak end profiling scheme, with a force control accuracy of 0.1N and no damage to products;
- 2. Compatible with stable grasping for inner diameters of 3~7 mm. No need to switch grippers;
- 3. Simple structure and convenient maintenance.



- 1. After the blade powder is formed, it is taken and placed on a tray. Before sintering, it is fragile and the blade edge cannot be touched;
- 2. Inner diameter is 3~7 mm. The traditional cylinder scheme is difficult to achieve compatibility;
- 3. The handling speed is relatively fast, and there is a high requirement for end stability. Dropped parts may cause damage to the mold.

WC-0355

Feeding for fishhook



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Product name	Product code	Quantity
Beak Module	BMC-20201[H]S	1

- 1. Soft beak has its own elastic buffer. The grasping stability is more than 99%, ensuring production efficiency;
- 2. Standard module saves the cost of non-standard design;
- 3. Light in weight, it can be adapted to a flexible feeding station with a small load.



- 1. Fishhooks are small, irregular in shape, and come in a wide variety. After being picked up by a soft vibration method, they are placed in a mold.
- 2. Vacuum suction tools and steel claws cannot stably suck. The design cost is high.
- 3. Products need to be switched frequently, and there is a high requirement for the universality of the end.

WC-1453

Packing spandex paper tubes



Scan to watch videos



Product name	Product code	Quantity
Beak Module	BMC-4B70[P]S	25

- 1. The material of the soft claw is soft and will not damage the tape paper core, ensuring 100% production yield.
- 2. The soft claw has a simple structure and is small in size. Dozens of them can be arranged closely, greatly ensuring the packing efficiency and helping the production capacity reach 2-3 million pieces per day.
- 3. The grippers have high consistency in opening and closing, which can ensure the stability of multiple synchronous gripping.



- 1. The packing link of spandex paper tubes has long relied on a large number of manual labor. For the automated transformation, in order to ensure the packing efficiency, the entire layer (dozens of them) needs to be clamped simultaneously.
- 2. Suction cups cannot suck. Rigid profiling grippers are too large in structure to be arranged in a close matrix.

DK

Development Kit



Beak kit



All-purpose kit

DK-1.31 Soft Beak Expansion Kit



DK-1.31 Soft Beak Expansion Kit

- Used for 0-55mm small and micro workpiece grip or internal grip;
- Contains 40 types of soft beaks and 4 types of connecting rods;
- Applicable industries: flexible feeding station, testing equipment, injection molding blanking, etc.

DK-1.31 Soft Beak Expansion Kit



Soft Beak X 40



Rod components X4



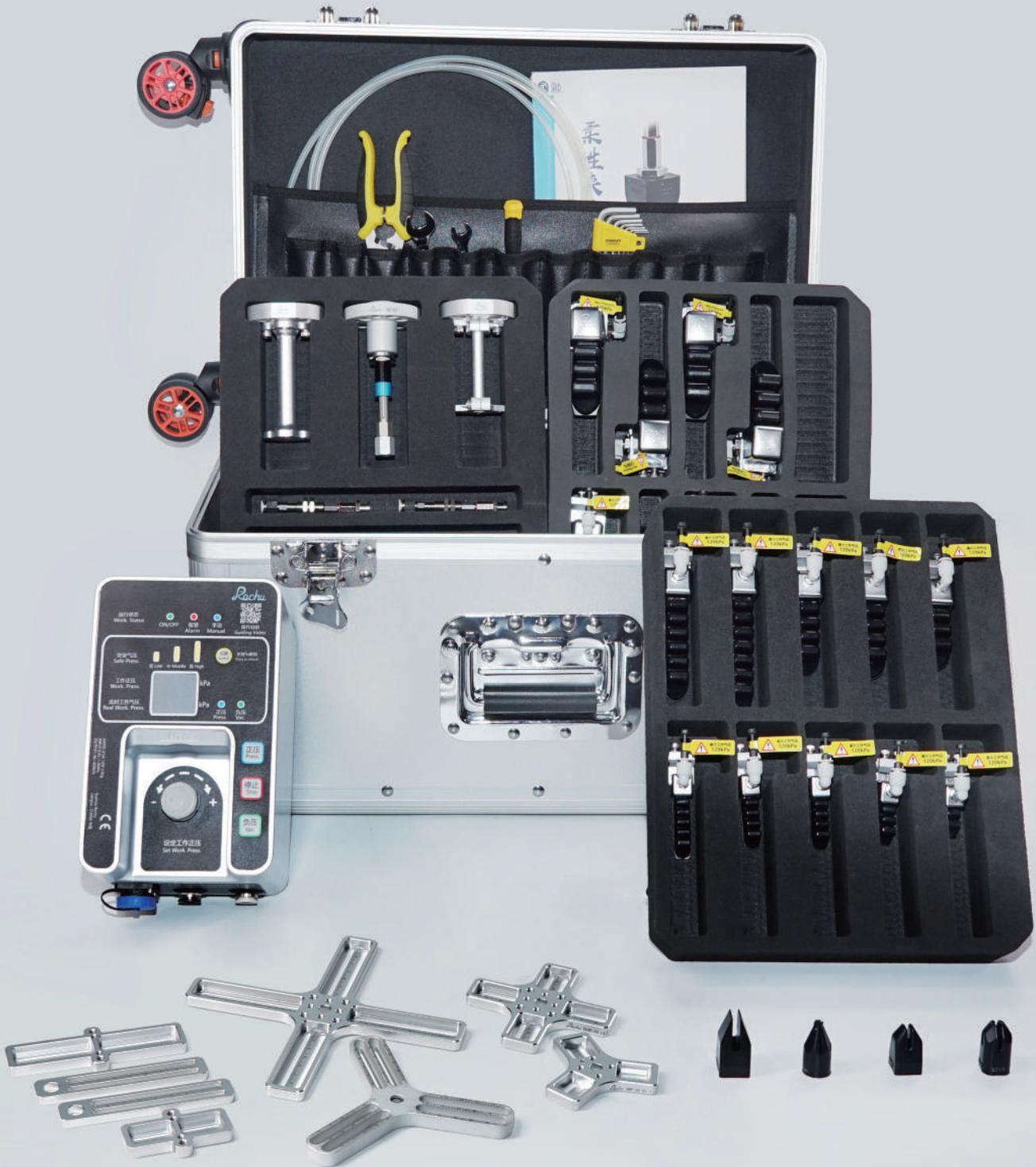
Box X1

DK-1.31 Outer Box

Application case



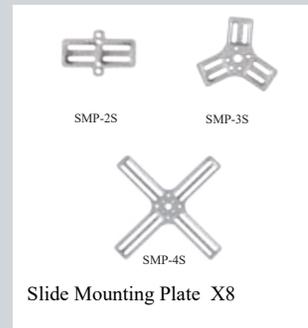
DK-2.0 Omnipotence Kit



DK-2.0 Omnipotence Kit

- Contains a full range of Rochu grippers from beaks to fingers;
- Can be used without additional accessories and tools. Modules can be assembled and tested quickly in minutes;
- Contains a standard plug-and-play control unit that can be driven by compressed air or power;
- It can be used for the food fresh, 3C electronic parts, clothing fabrics, and auto parts industry, etc.

DK-2.0 Omnipotence Kit



BM / B

Beak Module/ Soft Beak



Unicuspid Soft Beak



Bicuspid Soft Beak



Tricuspid Soft Beak



Quadricuspid Soft Beak



Soft Anemone



Soft Boots

Product features

- The single-finger beak can be modularly combined. Fingertip opens under pressure and clamps in a vacuum. It is recommended to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.
- Food-grade material, can be directly used for grasping food.

	BMC-1G071010[P]/S Direct-through P Type	BML-1G071010[P]/S Side-through P Type			
	BMC-1G071010[PAS]/S Direct-through Dust-free P Type	BML-1G071010[PAS]/S Side-through Dust-free P Type			
Weight		4g	Weight		15.5g

B-1G071010[P]/S

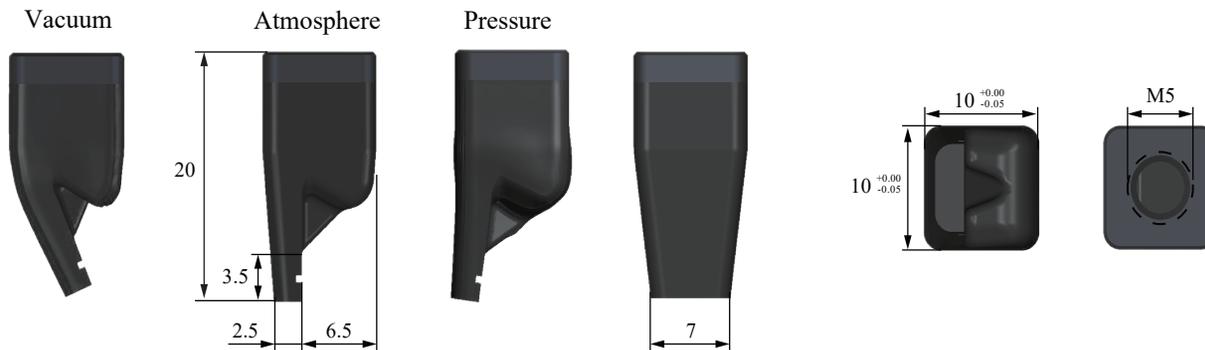
Parameter

Gripping range	—	Gripping force	0-0.7N	Theoretical gripping load**	0-17g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

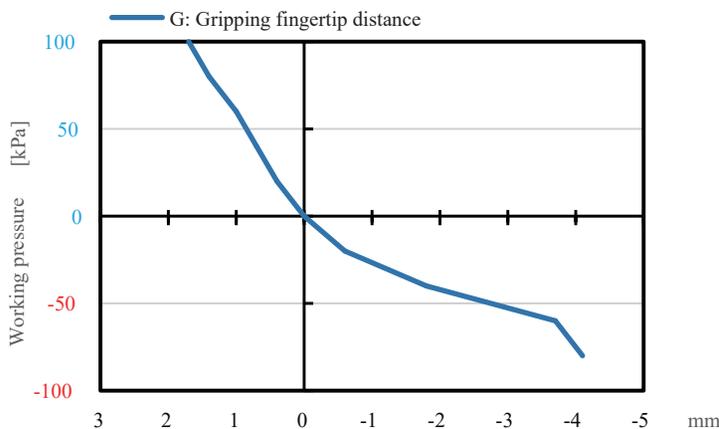
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



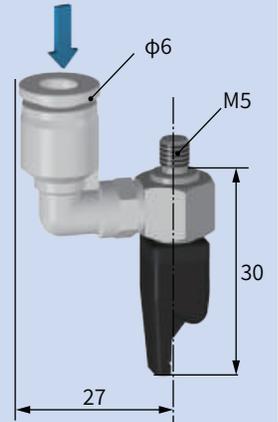
BMC Straight Fitting Installation



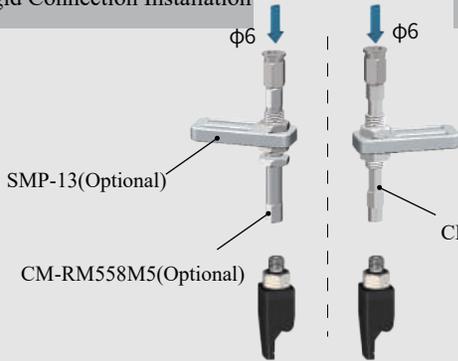
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BML Side Fitting Installation



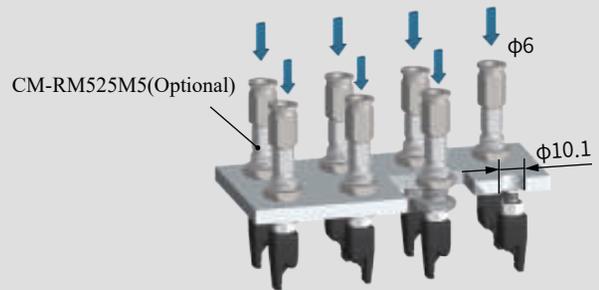
Rigid Connection Installation



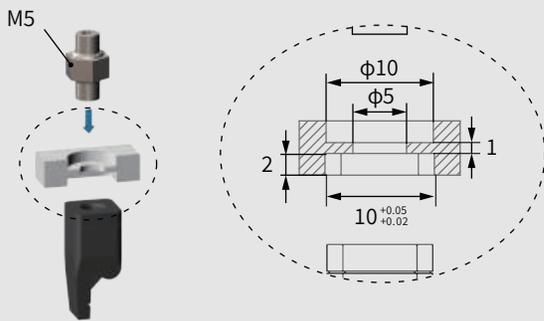
Buffer Installation



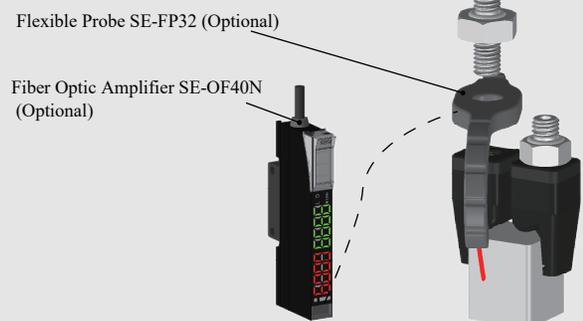
Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation



Product features

- The single-finger beak can be modularly combined. Fingertip opens under pressure and clamps in a vacuum. It is recommended to be used with Rochu control unit.
- Anti-static material meets the national standard GB/T11210-2014, point-to-point resistance 0.1-1000MΩ requirements. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, anti-static dust-free traceless material [LPAS] is preferred

	BMC-1G071010[LP]/S Direct-through Anti-static P Type	BML-1G071010[LP]/S Side-through Anti-static P Type	
	BMC-1G071010[LPAS]/S Direct-through Anti-static P Type	BML-1G071010[LPAS]/S Side-through Anti-static Dust-free P Type	
Weight		Weight	
4g		15.5g	

B-1G071010[LP]/S

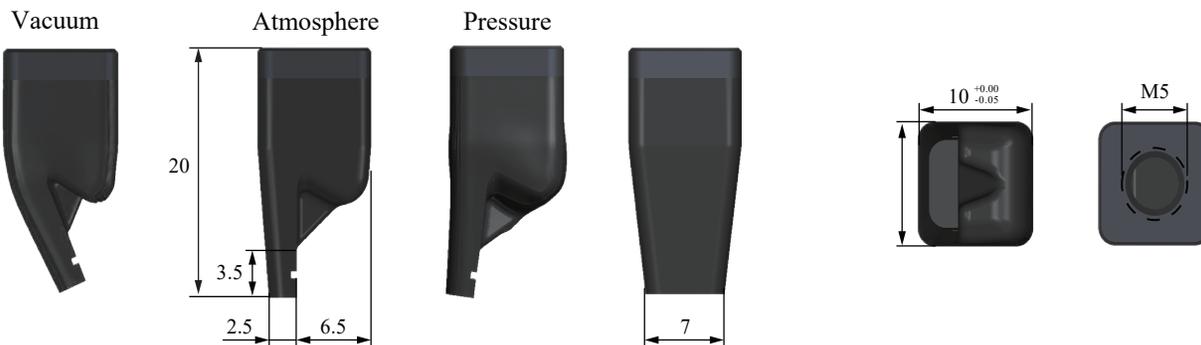
Parameter

Gripping range	—	Gripping force	0-0.7N	Theoretical gripping load**	0-17g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

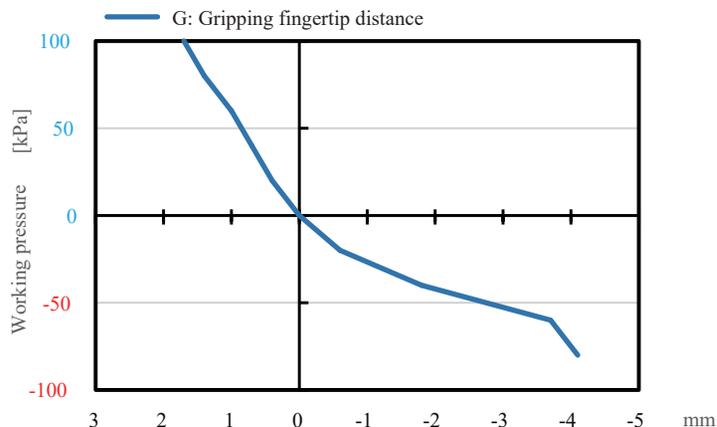
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

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Pressure-Fingertip Distance deformation curve



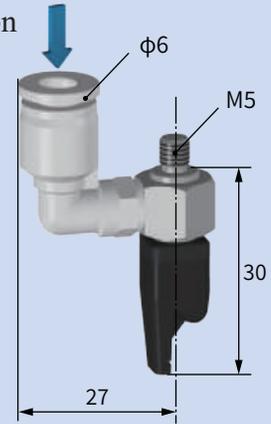
BMC Straight Fitting Installation



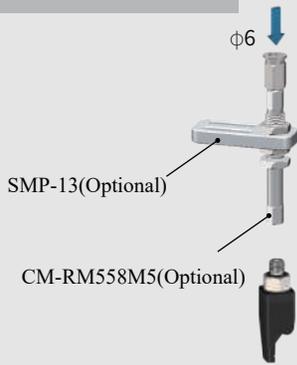
Scan to watch videos



BML Side Fitting Installation



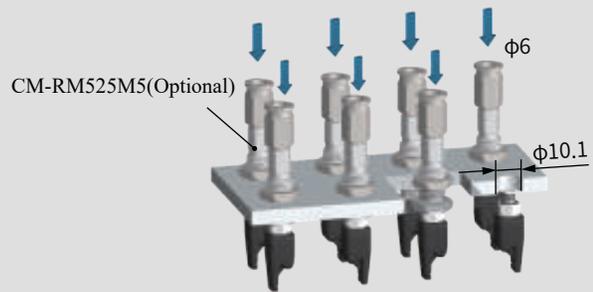
Rigid Connection Installation



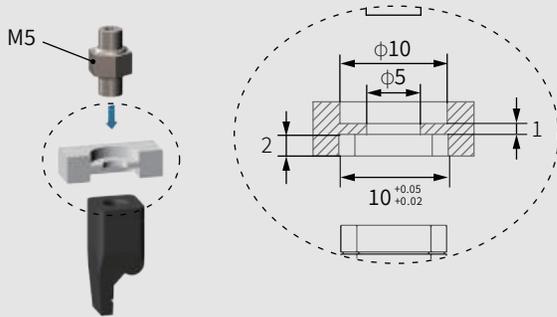
Buffer Installation



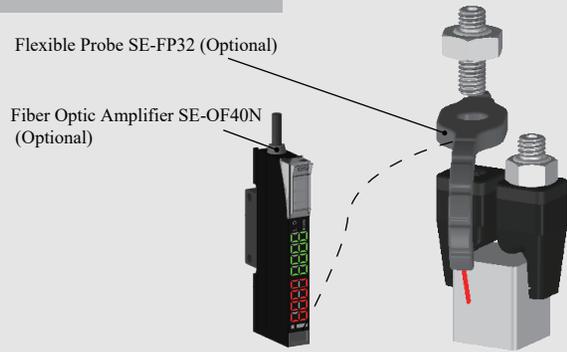
Matrix Installation



Precise Positioning Installation



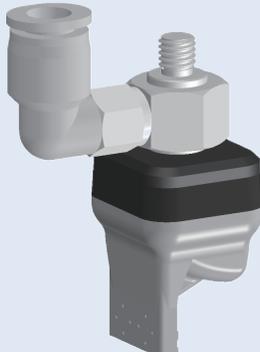
Photoelectric Sensor Installation



B-1G071010[L/P]/S

Soft Beak / Beak Module

B-1G2018[H]/SN

BMC-1G2018[H]/SN Direct-through H Type		BMS-1G2018[H]/SN Direct-through Precision Positioning H Type		BML-1G2018[H]/SN Side-through H Type		BMM-1G2018[H]/SN Multi-way Precision Positioning H Type	
BMC-1G2018[HAS]/SN Direct-through Dust-free H Type		BMS-1G2018[HAS]/SN Direct-through Precision Positioning Dust-free H Type		BML-1G2018[HAS]/SN Side-through Dust-free H Type		BMM-1G2018[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	6.5g	Weight	11.96g	Weight	17.5g	Weight	10.2g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



Parameter

Gripping range	—	Gripping force	0-2.5N	Theoretical gripping load**	0-62g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<140kPa

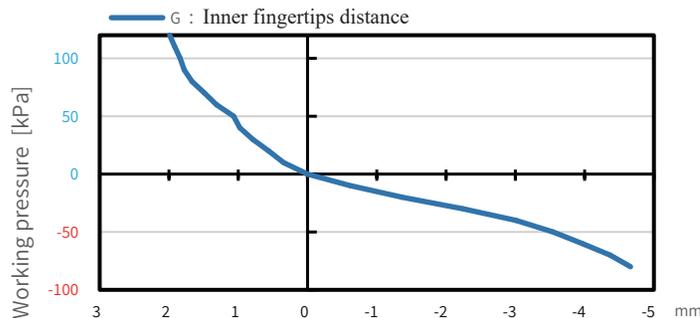
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.

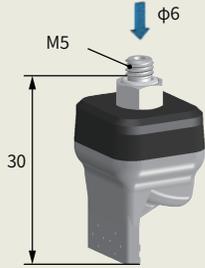


Pressure-Fingertip Distance deformation curve

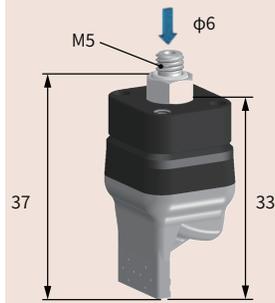


Soft Beak / Beak Module

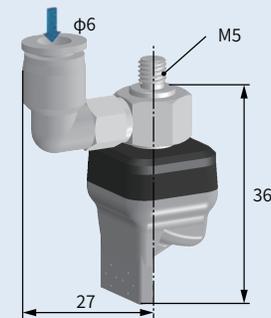
BMC Module
(Direct-through)



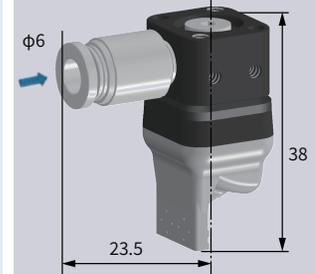
BMS Module
(Precise Positioning Direct-through)



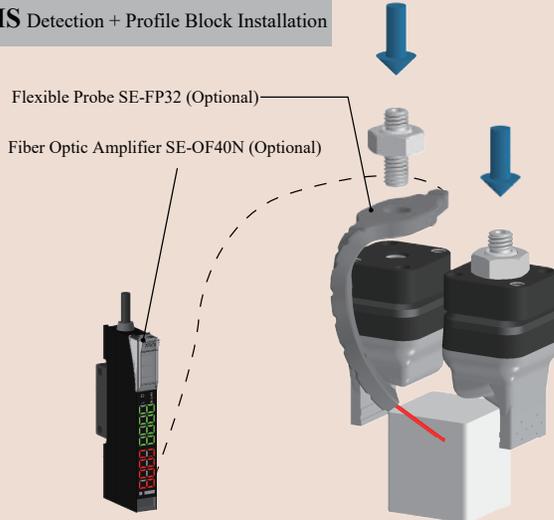
BML Module
(Side-through)



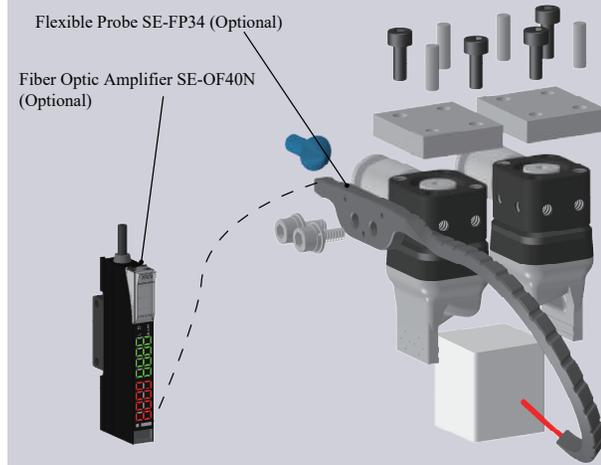
BMM Module
(Precise Positioning Multiple-through)



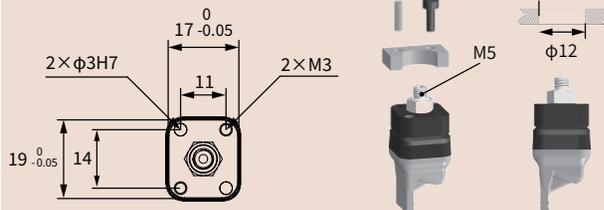
BMS Detection + Profile Block Installation



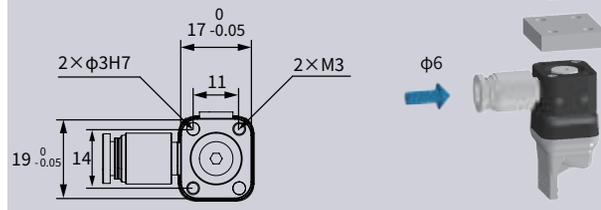
BMM Precise Positioning + Detection + Profile Block Installation



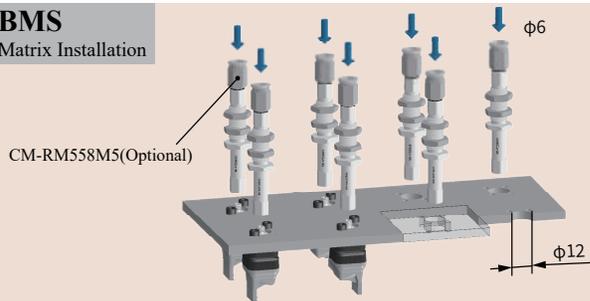
BMS Precise Positioning & Direct-through Installation



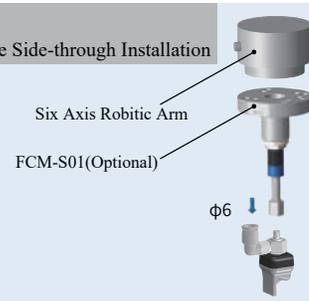
BMM Precise Positioning and Multiple-through Installation



BMS Matrix Installation



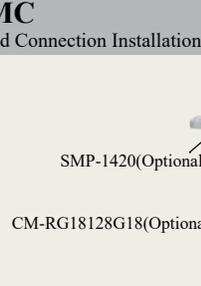
BML Robot Arm Flange Side-through Installation



BMC Scara Robot Arm Installation



BMC Rigid Connection Installation



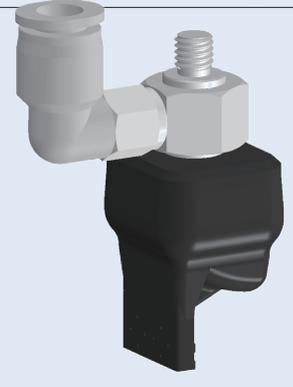
BMC Buffer Installation



B-1G2018[H]/SN

Soft Beak / Beak Module

B-1G2018[LH]/SN

BMC-1G2018[LH]/SN Direct-through Anti-static H Type		BMS-1G2018[LH]/SN Direct-through Anti-static Precision Positioning H Type		BML-1G2018[LH]/SN Side-through Anti-static H Type		BMM-1G2018[LH]/SN Multi-way Anti-static Precision Positioning H Type	
BMC-1G2018[LHAS]/SN Direct-through Anti-static Dust-free H Type		BMS-1G2018[LHAS]/SN Direct-through Anti-static Dust-free Precision Positioning H Type		BML-1G2018[LHAS]/SN Side-through Anti-static Dust-free P Type		BMM-1G2018[LHAS]/SN Side-through Anti-static Dust-free Precision Positioning H Type	
							
Weight	6.5g	Weight	11.96g	Weight	17.5g	Weight	10.2g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



Parameter

Gripping range	—	Gripping force	0-2.5N	Theoretical gripping load**	0-62g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

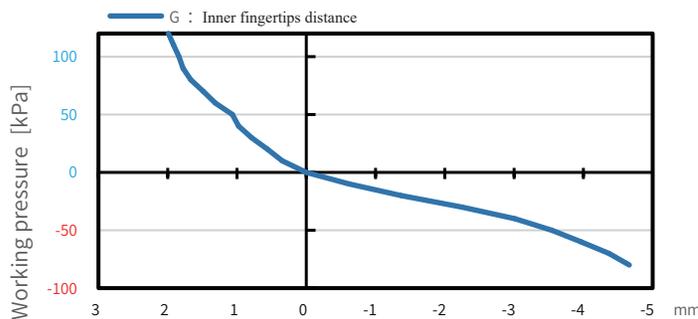
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

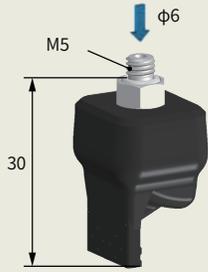
***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



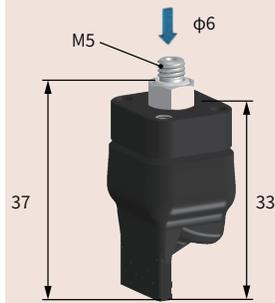
Pressure-Fingertip Distance deformation curve



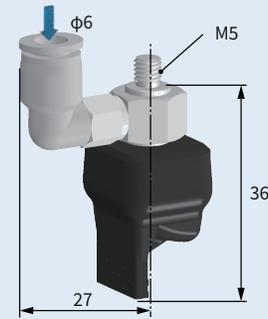
BMC Module
(Direct-through)



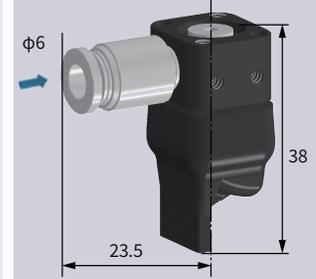
BMS Module
(Precise Positioning Direct-through)



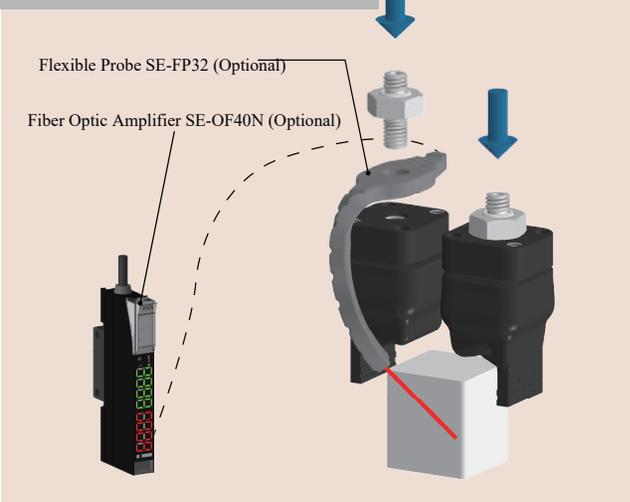
BML Module
(Side-through)



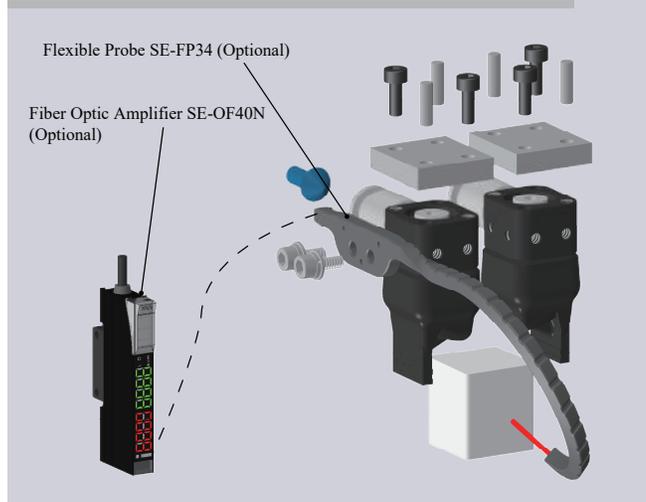
BMM Module
(Precise Positioning Multiple-through)



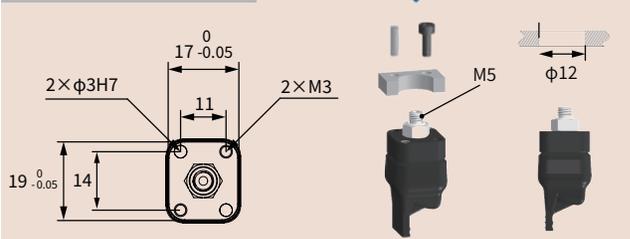
BMS Detection + Profile Block Installation



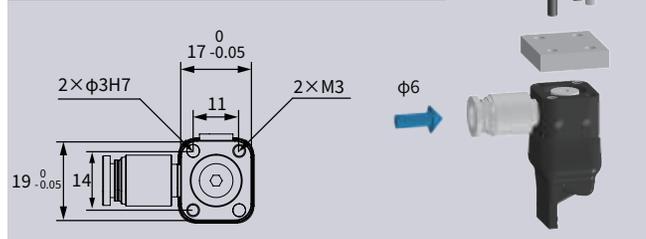
BMM Precise Positioning + Detection + Profile Block Installation



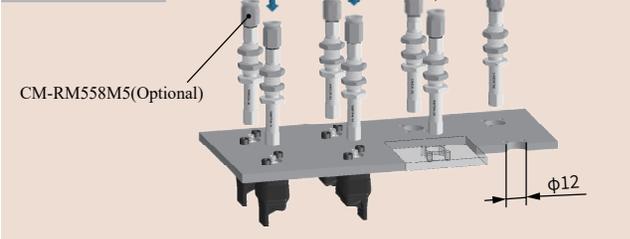
BMS Precise Positioning & Direct-through Installation



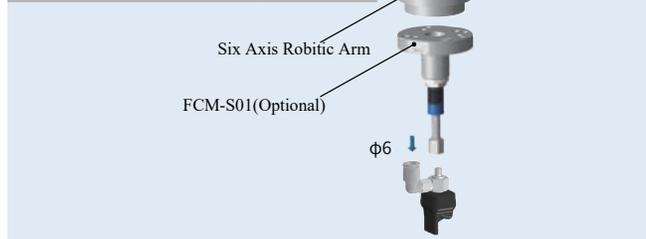
BMM Precise Positioning and Multiple-through Installation



BMS Matrix Installation



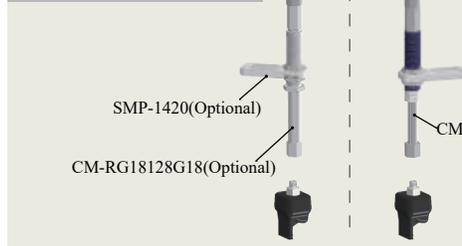
BML Robot Arm Flange Side-through Installation



BMC Scara Robot Arm Installation



BMC Rigid Connection Installation



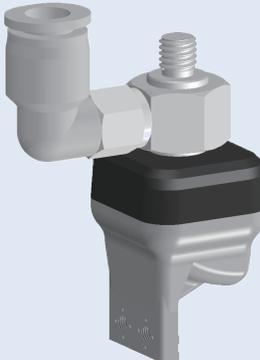
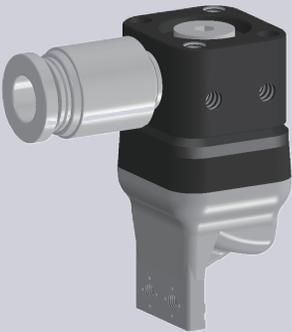
BMC Buffer Installation



B-1G2018[LH]/SN

Soft Beak / Beak Module

B-1GN2018[H]/SN

BMC-1GN2018[H]/SN Direct-through H Type		BMS-1GN2018[H]/SN Direct-through Precision Positioning H Type		BML-1GN2018[H]/SN Side-through H Type		BMM-1GN2018[H]/SN Multi-way Precision Positioning H Type	
BMC-1GN2018[HAS]/SN Direct-through Dust-free H Type		BMS-1GN2018[HAS]/SN Direct-through Precision Positioning Dust-free H Type		BML-1GN2018[HAS]/SN Side-through Dust-free H Type		BMM-1GN2018[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	7.3g	Weight	12.76g	Weight	5g	Weight	11g

Product features

- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



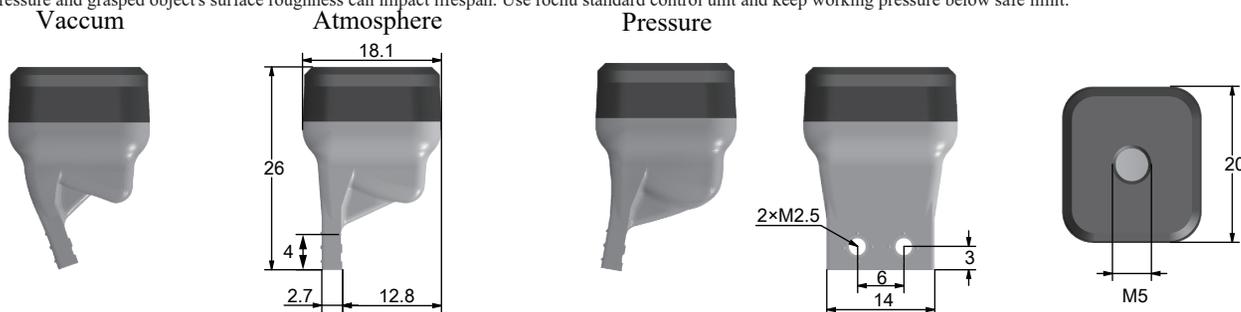
Parameter

Gripping range	—	Gripping force	0-2.5N	Theoretical gripping load**	0-62g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<140kPa

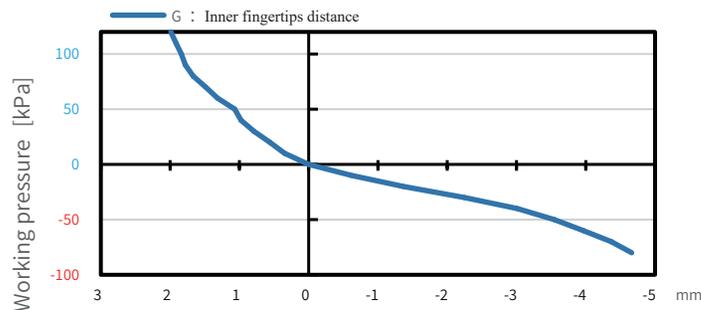
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

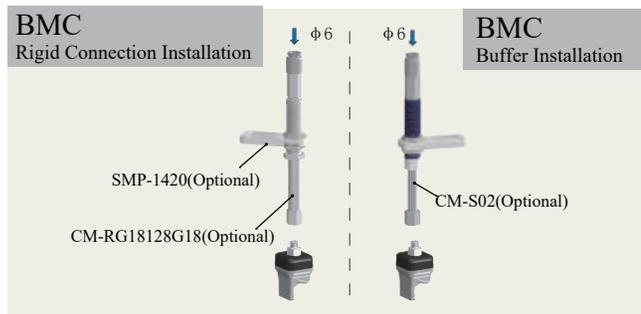
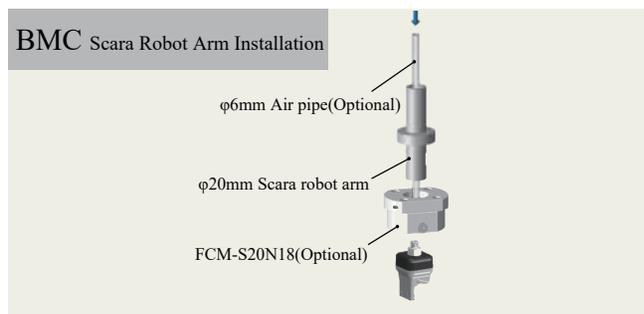
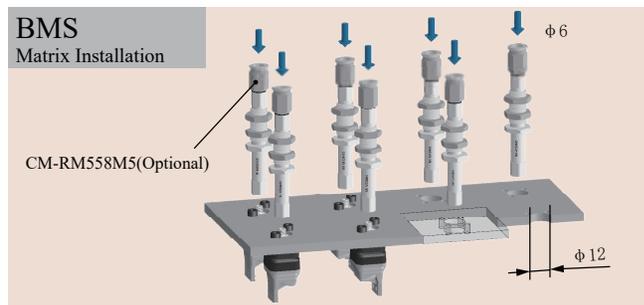
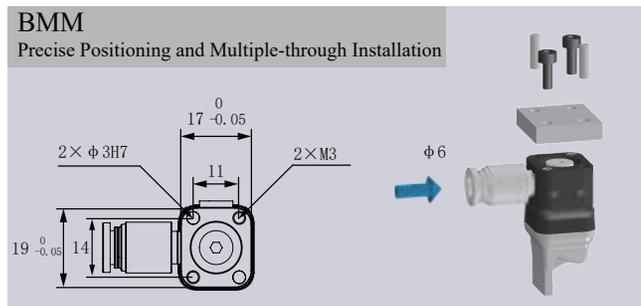
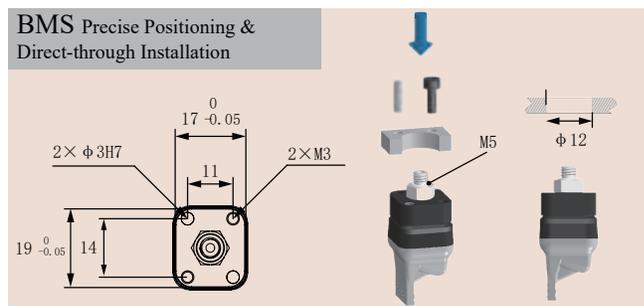
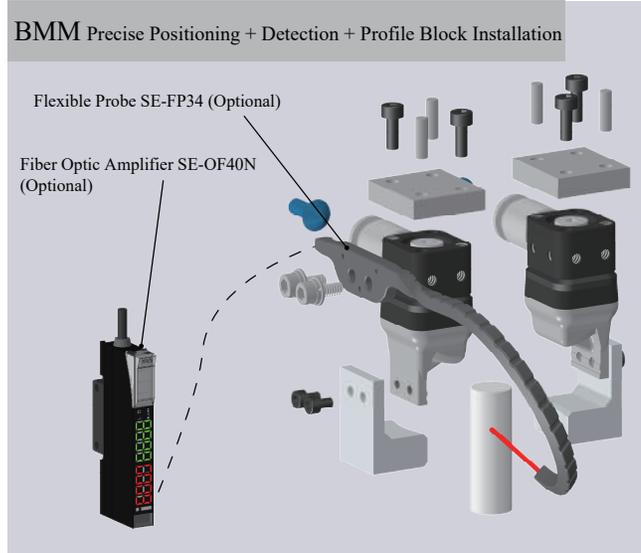
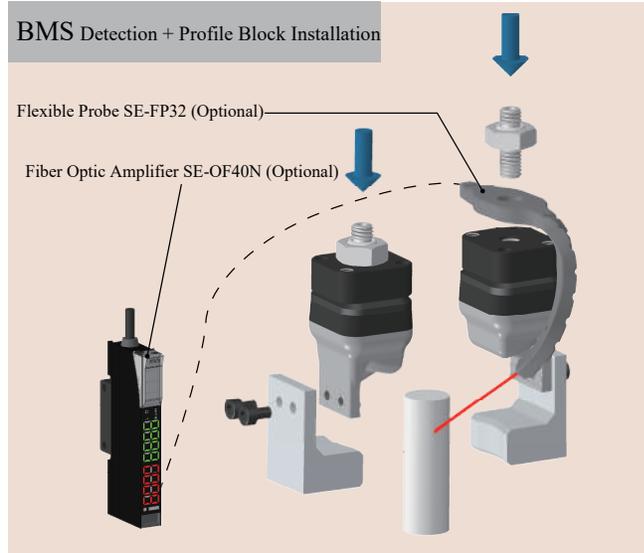
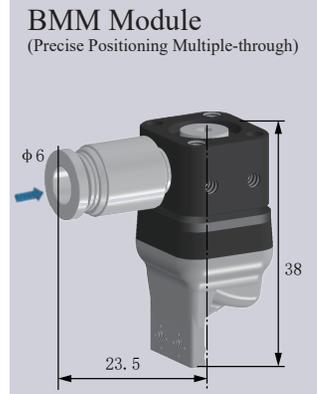
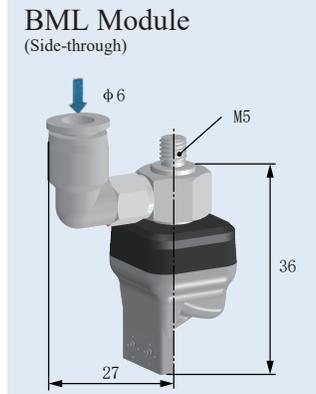
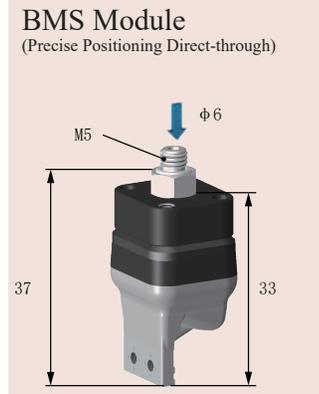
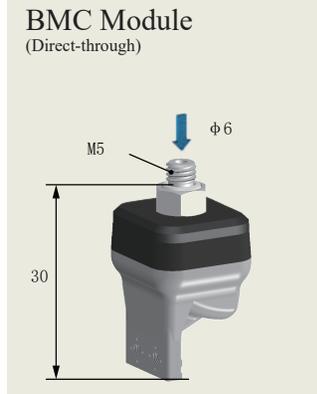
***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



Soft Beak / Beak Module



B-1GN2018[H]/SN

Soft Beak / Beak Module

B-1G2521[H]/SN

BMC-1G2521[H]/SN Direct-through H Type		BMS-1G2521[H]/SN Direct-through Precision Positioning H Type		BML-1G2521[H]/SN Side-through H Type		BMM-1G2521[H]/SN Multi-way Precision Positioning H Type	
BMC-1G2521[HAS]/SN Direct-through Dust-free H Type		BMS-1G2521[HAS]/SN Direct-through Precision Positioning Dust-free H Type		BML-1G2521[HAS]/SN Side-through Dust-free H Type		BMM-1G2521[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	15.2g	Weight	22.43g	Weight	28.6g	Weight	26.58g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



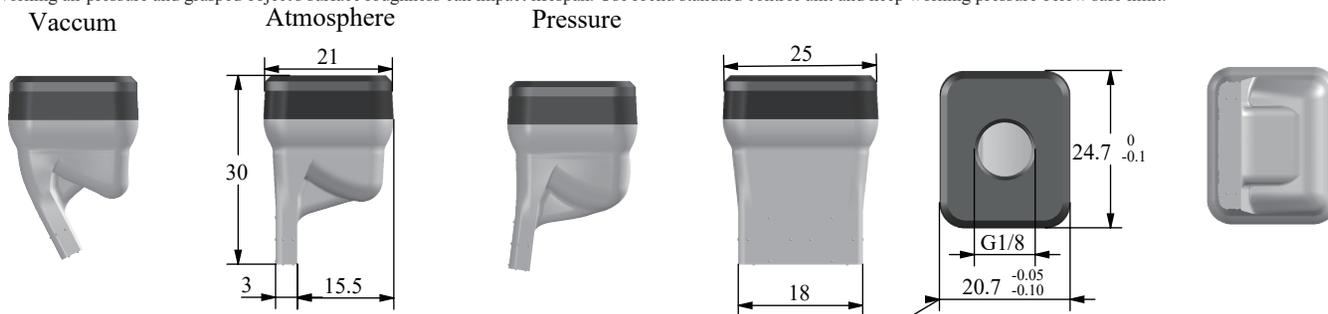
Parameter

Gripping range	—	Gripping force	0-5.5N	Theoretical gripping load**	0-138g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

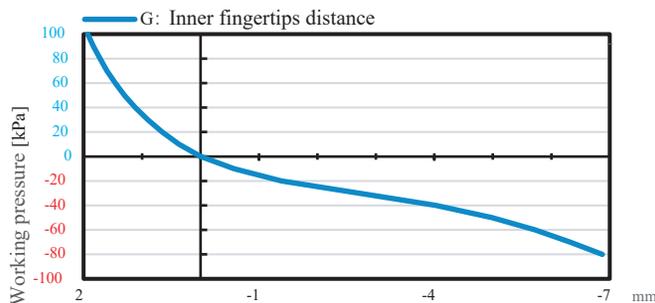
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve

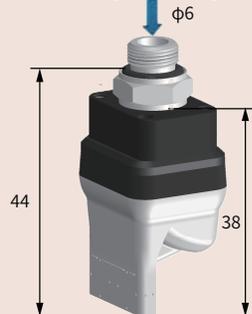


Soft Beak / Beak Module

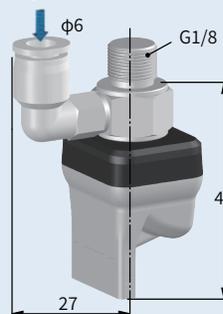
BMC Module (Direct-through)



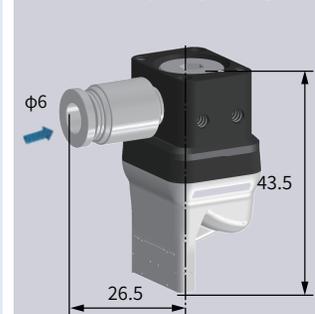
BMS Module (Precise Positioning Direct-through)



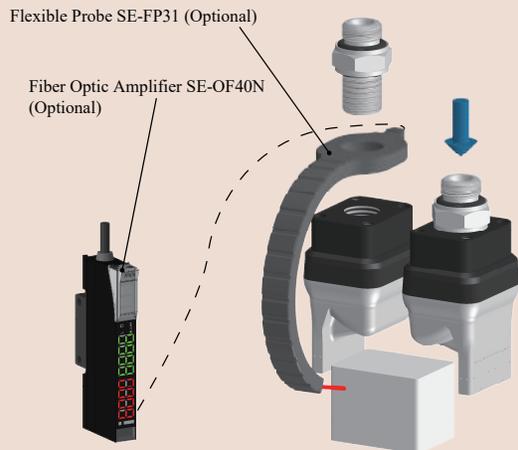
BML Module (Side-through)



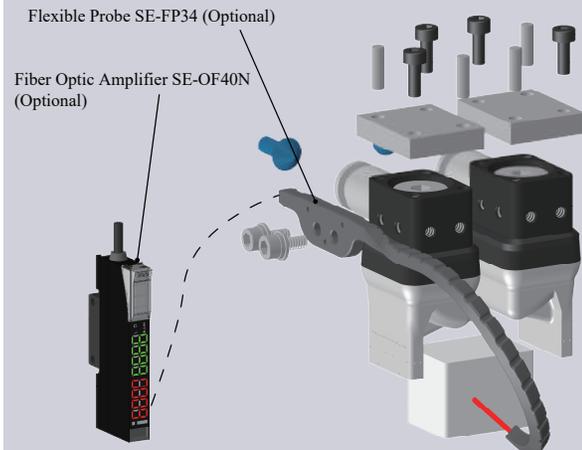
BMM Module (Precise Positioning Multiple-through)



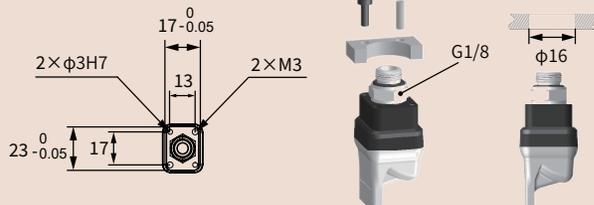
BMS Detection + Profile Block Installation



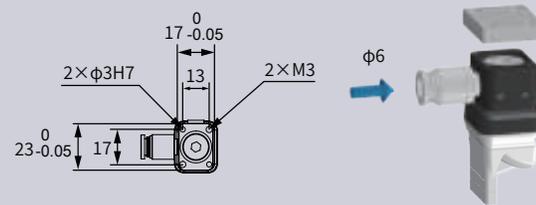
BMM Precise Positioning + Detection + Profile Block Installation



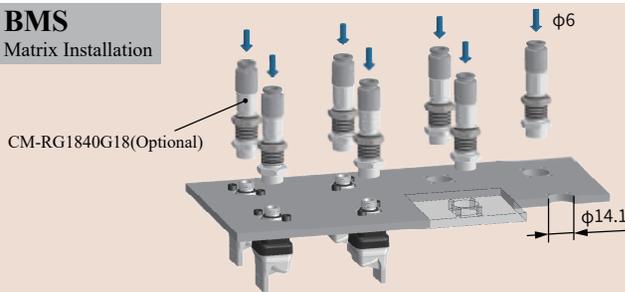
BMS Precise Positioning & Direct-through Installation



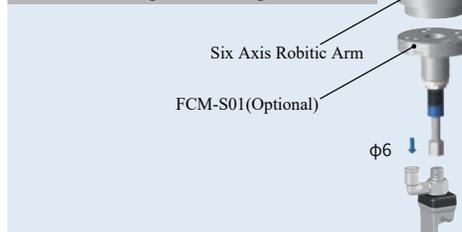
BMM Precise Positioning and Multiple-through Installation



BMS Matrix Installation



BML Robot Arm Flange Side-through Installation



BMC Scara Robot Arm Installation



BMC Rigid Connection Installation



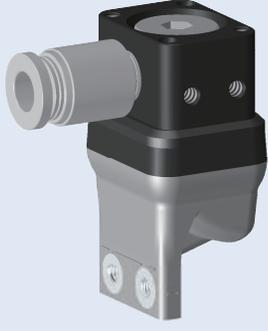
BMC Buffer Installation



B-1G2521(H)/SN

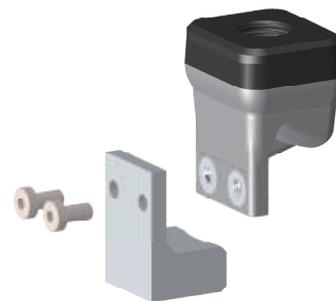
Soft Beak / Beak Module

B-1GN2521[H]/SN

BMC-1GN2521[H]/SN Direct-through H Type		BMS-1GN2521[H]/SN Direct-through Precision Positioning H Type		BML-1GN2521[H]/SN Side-through H Type		BMM-1GN2521[H]/SN Multi-way Precision Positioning H Type	
BMC-1GN2521[HAS]/SN Direct-through Dust-free H Type		BMS-1GN2521[HAS]/SN Direct-through Precision Positioning Dust-free H Type		BML-1GN2521[HAS]/SN Side-through Dust-free H Type		BMM-1GN2521[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	16.1g	Weight	23.33g	Weight	29.5g	Weight	27.48g

Product features

- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, light-weight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



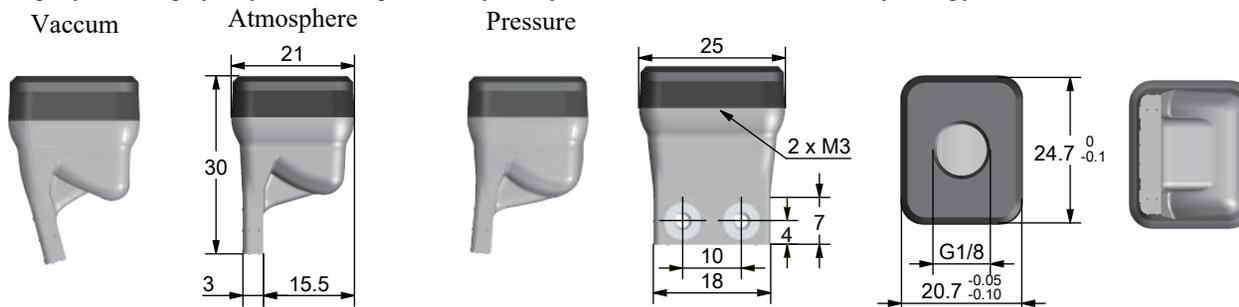
Parameter

Gripping range	—	Gripping force	0-5.5N	Theoretical gripping load**	0-138g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

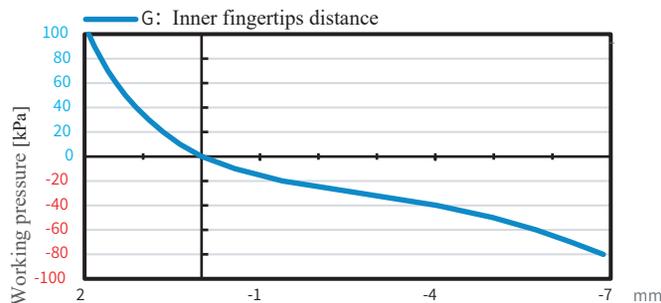
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



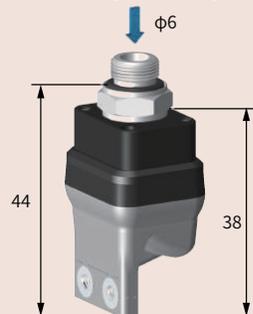
Pressure-Fingertip Distance deformation curve



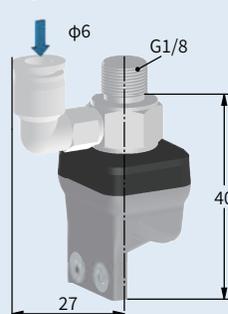
BMC Module (Direct-through)



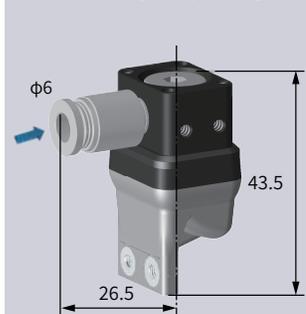
BMS Module (Precise Positioning Direct-through)



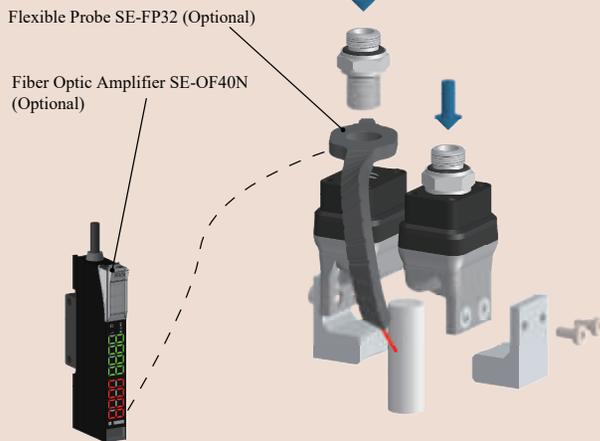
BML Module (Side-through)



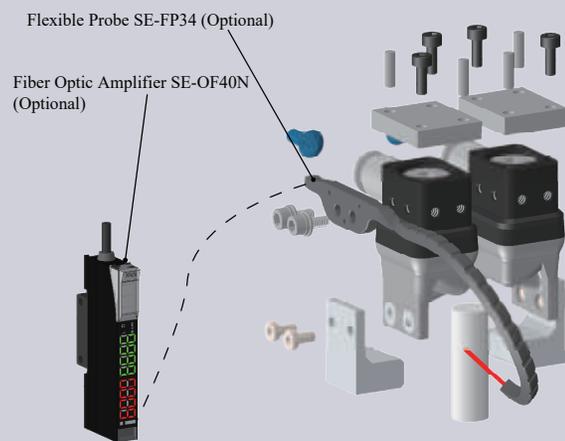
BMM Module (Precise Positioning Multiple-through)



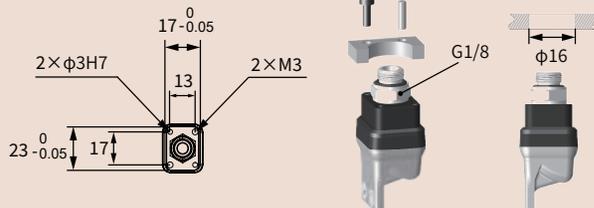
BMS Detection + Profile Block Installation



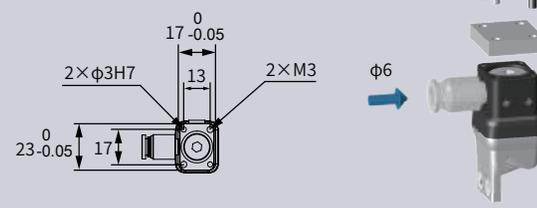
BMM Precise Positioning + Detection + Profile Block Installation



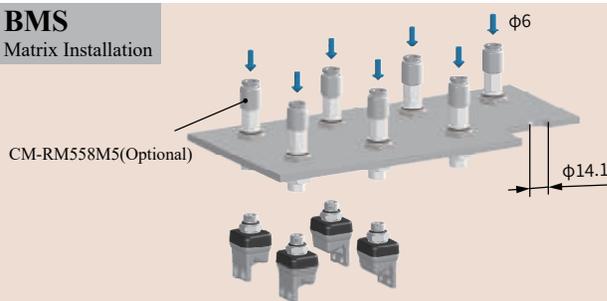
BMS Precise Positioning & Direct-through Installation



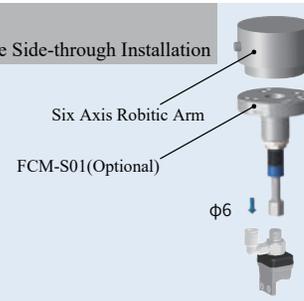
BMM Precise Positioning and Multiple-through Installation



BMS Matrix Installation



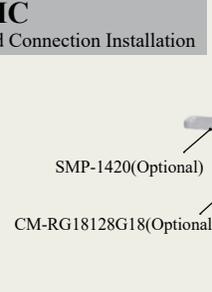
BML Robot Arm Flange Side-through Installation



BMC Scara Robot Arm Installation



BMC Rigid Connection Installation



BMC Buffer Installation



B-1GN2521[H]/SN

Soft Beak / Beak Module

B-1G3024[H]/SN

BMC-1G3024[H]/SN Direct-through H Type		BMS-1G3024[H]/SN Direct-through Precision Positioning H Type		BML-1G3024[H]/SN Side-through H Type		BMM-1G3024[H]/SN Multi-way Precision Positioning H Type	
BMC-1G3024[HAS]/SN Direct-through Dust-free H Type		BMS-1G3024[HAS]/SN Direct-through Precision Positioning Dust-free H Type		BML-1G3024[HAS]/SN Side-through Dust-free H Type		BMM-1G3024[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	17.7g	Weight	24.93g	Weight	31.1g	Weight	29.08g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



Scan to watch videos



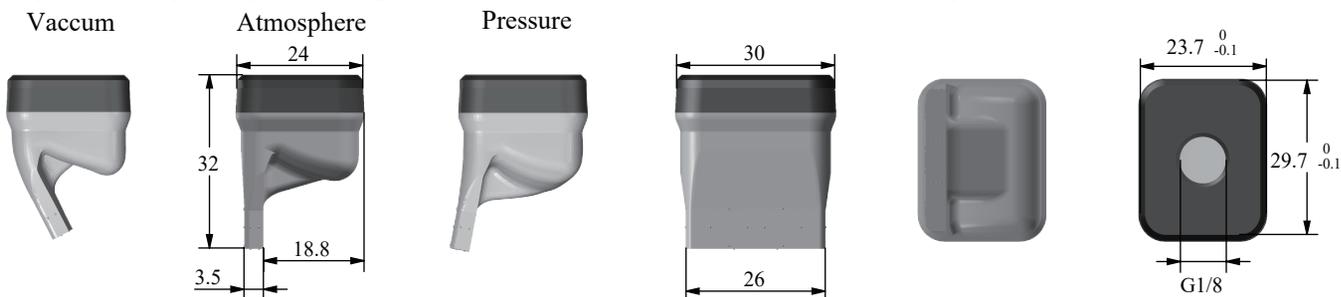
Parameter

Gripping range	—	Gripping force	0-8.6N	Theoretical gripping load**	0-215g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

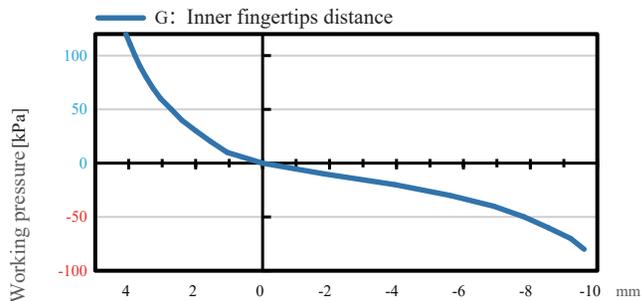
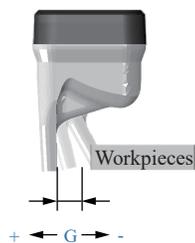
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



BMC Module (Direct-through)

40

BMS Module (Precise Positioning Direct-through)

46 40

BML Module (Side-through)

42 27

BMM Module (Precise Positioning Multiple-through)

45.5 26.5

BMS Detection + Profile Block Installation

Flexible Probe SE-FP32 (Optional)
Fiber Optic Amplifier SE-OF40N (Optional)

BMM Precise Positioning + Detection + Profile Block Installation

Flexible Probe SE-FP34 (Optional)
Fiber Optic Amplifier SE-OF40N (Optional)

BMS Precise Positioning & Direct-through Installation

2x $\phi 3H7$ 17 $+0/-0.05$ 13 2x M3 23 $+0/-0.05$ 17 $\phi 16$

BMM Precise Positioning and Multiple-through Installation

2x $\phi 3H7$ 17 $+0/-0.05$ 13 2x M3 23 $+0/-0.05$ 17 $\phi 6$

BMS Matrix Installation

CM-RM558M5(Optional) $\phi 14.1$ G1/8

BML Robot Arm Flange Side-through Installation

Six Axis Robotic Arm
FCM-S01(Optional) $\phi 6$

BMC Scara Robot Arm Installation

$\phi 6$ mm Air pipe(Optional)
 $\phi 20$ mm Scara robot arm
FCM-S20N18(Optional)

BMC Rigid Connection Installation

SMP-1420(Optional)
CM-RG18128G18(Optional)

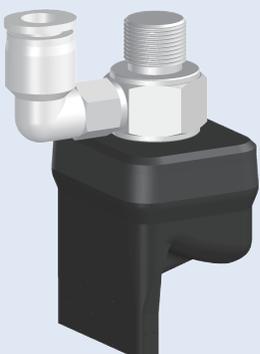
BMC Buffer Installation

CM-S02(Optional)

B-1G3024(H)/SN

Soft Beak / Beak Module

B-1G3024[LH]/SN

BMC-1G3024[LH]/SN Direct-through Anti-static H Type		BMS-1G3024[LH]/SN Direct-through Anti-static Precision Positioning H Type		BML-1G3024[LH]/SN Side-through Anti-static H Type		BMM-1G3024[LH]/SN Multi-way Anti-static Precision Positioning H Type	
BMC-1G3024[LHAS]/SN Direct-through Anti-static Dust-free H Type		BMS-1G3024[LHAS]/SN Direct-through Anti-static Dust-free Precision Positioning H Type		BML-1G3024[LHAS]/SN Side-through Anti-static Dust-free H Type		BMM-1G3024[LHAS]/SN Side-through Anti-static Dust-free Precision Positioning H Type	
							
Weight	17.7g	Weight	24.93g	Weight	31.1g	Weight	29.08g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



Parameter

Gripping range	—	Gripping force	0-8.6N	Theoretical gripping load**	0-215g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.

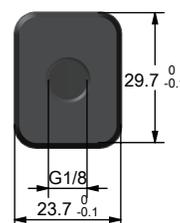
Vacuum



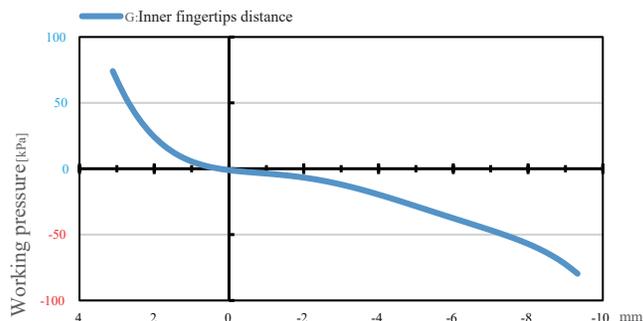
Atmosphere



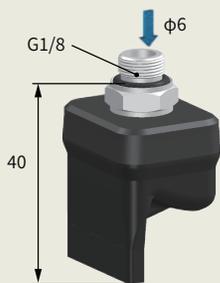
Pressure



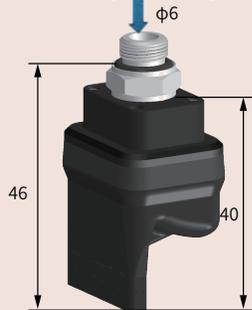
Pressure-Fingertip Distance deformation curve



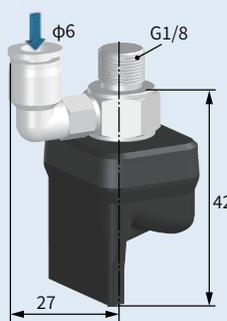
BMC Module
(Direct-through)



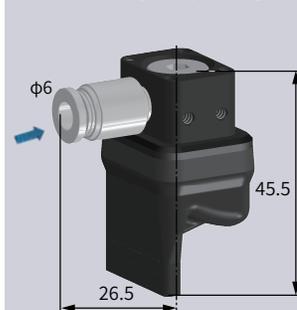
BMS Module
(Precise Positioning Direct-through)



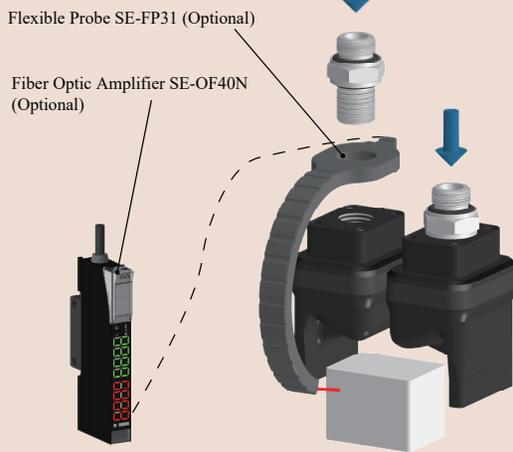
BML Module
(Side-through)



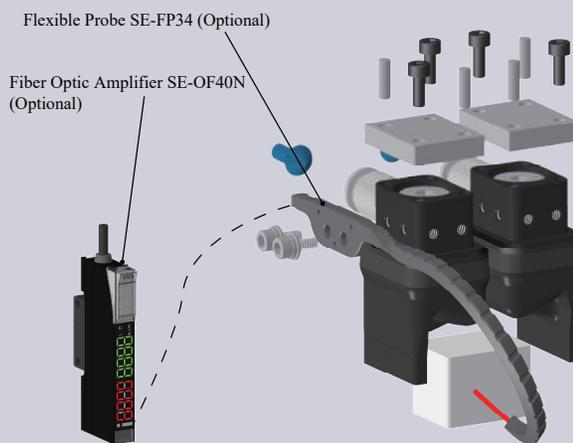
BMM Module
(Precise Positioning Multiple-through)



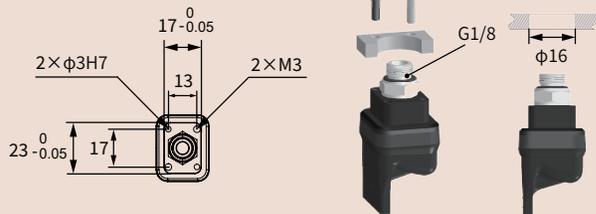
BMS Detection + Profile Block Installation



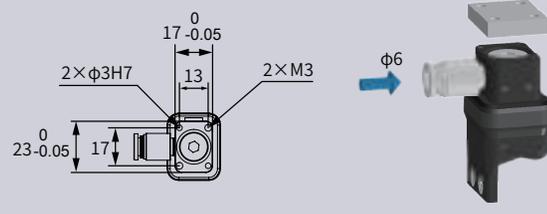
BMM Precise Positioning + Detection + Profile Block Installation



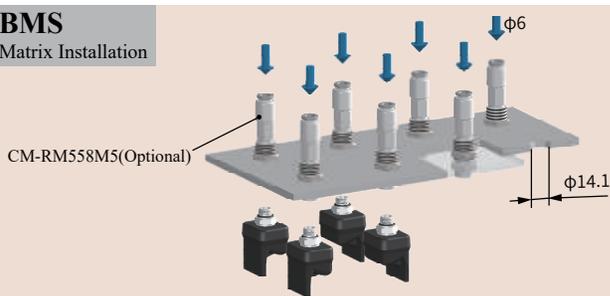
BMS Precise Positioning & Direct-through Installation



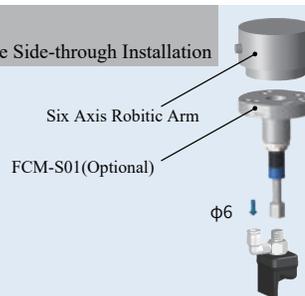
BMM Precise Positioning and Multiple-through Installation



BMS Matrix Installation



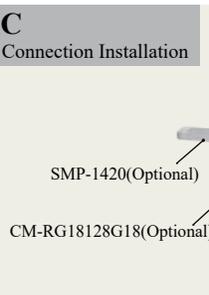
BML Robot Arm Flange Side-through Installation



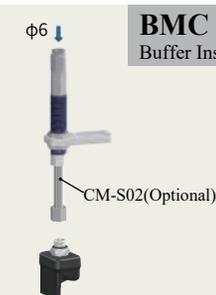
BMC Scara Robot Arm Installation



BMC Rigid Connection Installation



BMC Buffer Installation



B-1G3024(LH)/SN

Soft Beak / Beak Module

B-1GN3024[H]/SN

BMC-1GN3024[H]/SN Direct-through H Type		BMS-1GN3024[H]/SN Direct-through Precision Positioning H Type		BML-1GN3024[H]/SN Side-through H Type		BMM-1GN3024[H]/SN Multi-way Precision Positioning H Type	
BMC-1GN3024[HAS]/SN Direct-through Dust-free H Type		BMS-1GN3024[HAS]/SN Direct-through Precision Positioning Dust-free H Type		BML-1GN3024[HAS]/SN Side-through Dust-free H Type		BMM-1GN3024[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	18.7g	Weight	25.93g	Weight	32.1g	Weight	30.08g

Product features

- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



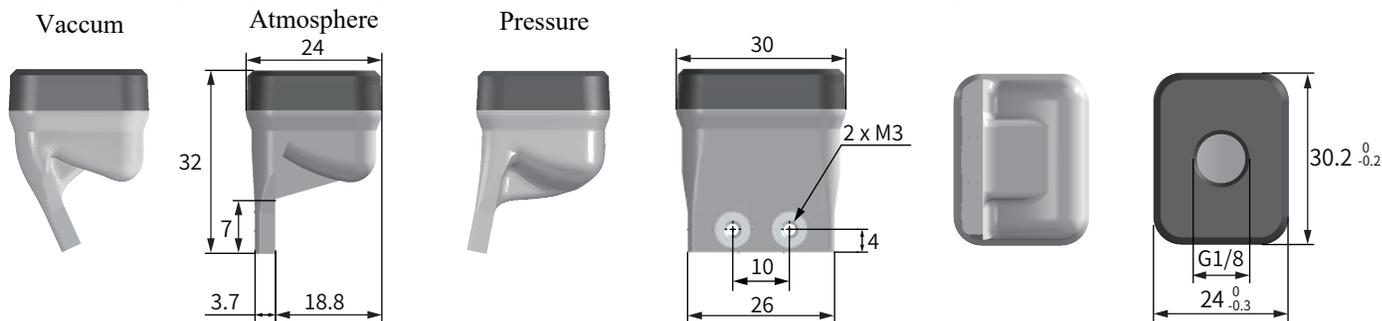
Parameter

Gripping range	—	Gripping force	0-8.6N	Theoretical gripping load**	0-215g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

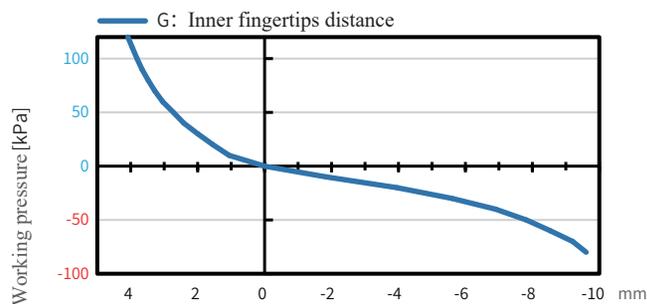
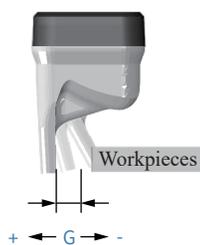
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



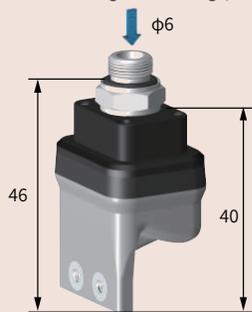
Pressure-Fingertip Distance deformation curve



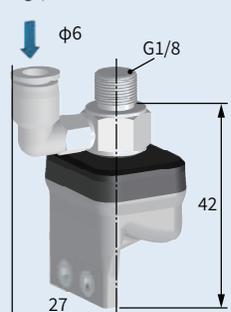
BMC Module (Direct-through)



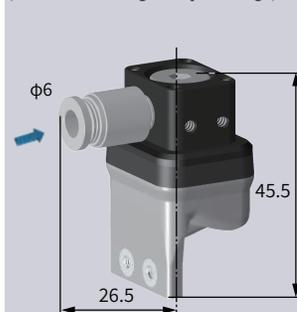
BMS Module (Precise Positioning Direct-through)



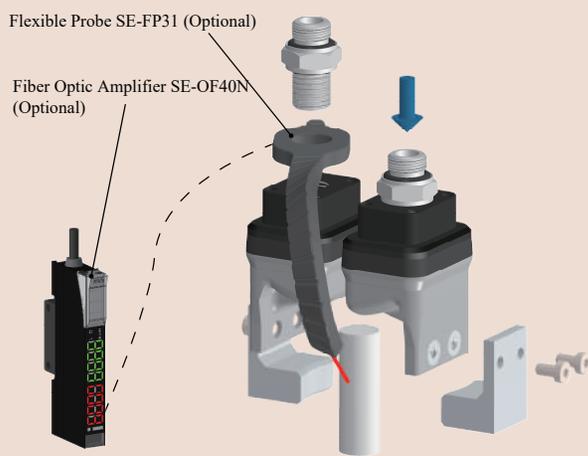
BML Module (Side-through)



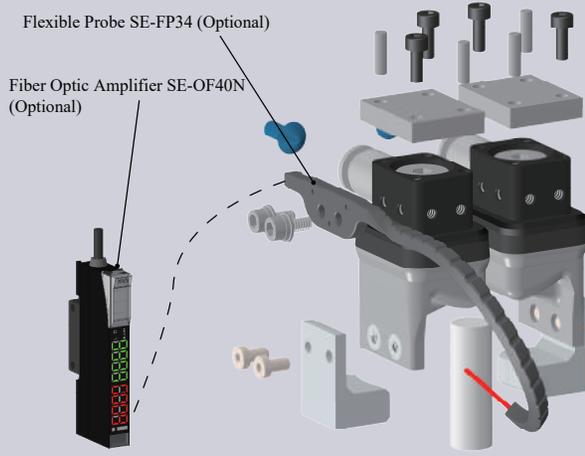
BMM Module (Precise Positioning Multiple-through)



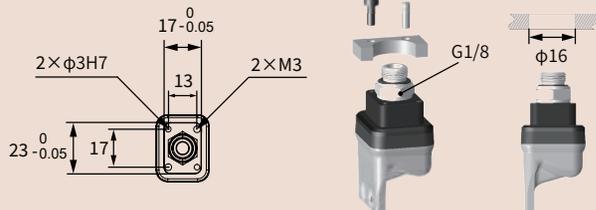
BMS Detection + Profile Block Installation



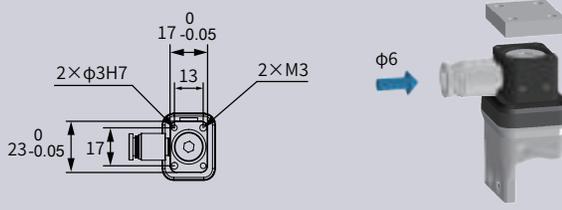
BMM Precise Positioning + Detection + Profile Block Installation



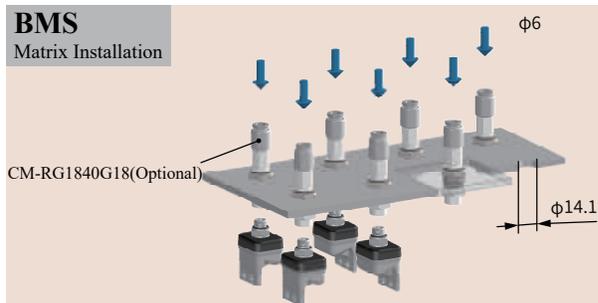
BMS Precise Positioning & Direct-through Installation



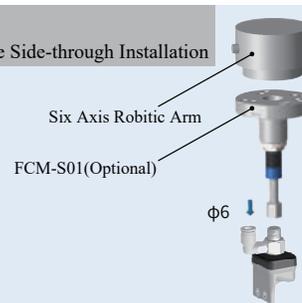
BMM Precise Positioning and Multiple-through Installation



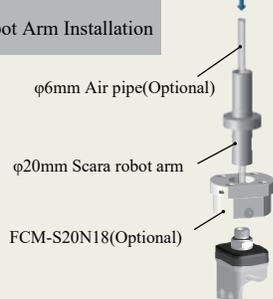
BMS Matrix Installation



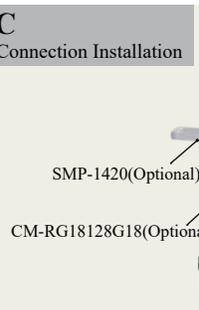
BML Robot Arm Flange Side-through Installation



BMC Scara Robot Arm Installation



BMC Rigid Connection Installation



BMC Buffer Installation



B-1GN3024[H]/SN

Soft Beak / Beak Module

B-1G3527[H]/SN

BMC-1G3527[H]/SN Direct-through H Type		BMS-1G3527[H]/SN Direct-through Precision Positioning H Type		BML-1G3527[H]/SN Side-through H Type		BMM-1G3527[H]/SN Multi-way Precision Positioning H Type	
BMC-1G3527[HAS]/SN Direct-through Dust-free H Type		BMS-1G3527[HAS]/SN Direct-through Precision Positioning Dust-free H Type		BML-1G3527[HAS]/SN Side-through Dust-free H Type		BMM-1G3527[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	21.8g	Weight	29.03g	Weight	35.2g	Weight	33.18g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



Scan to watch videos



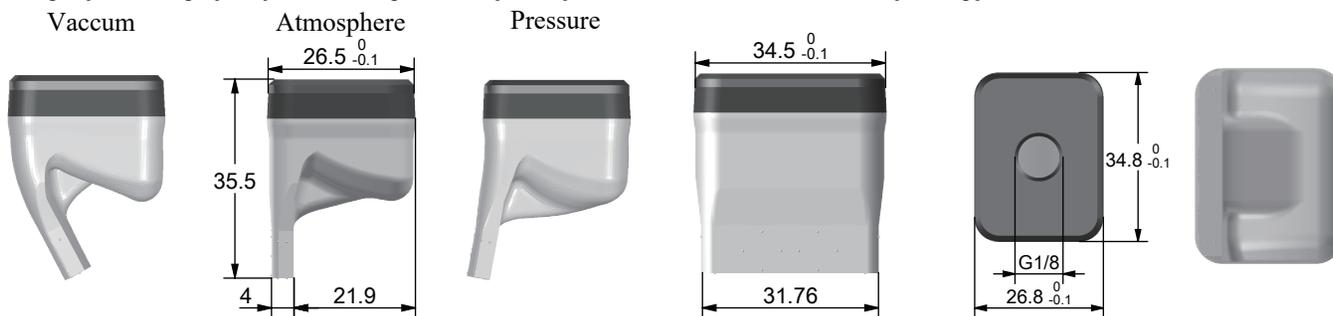
Parameter

Gripping range	—	Gripping force	0-13.2N	Theoretical gripping load**	0-329g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

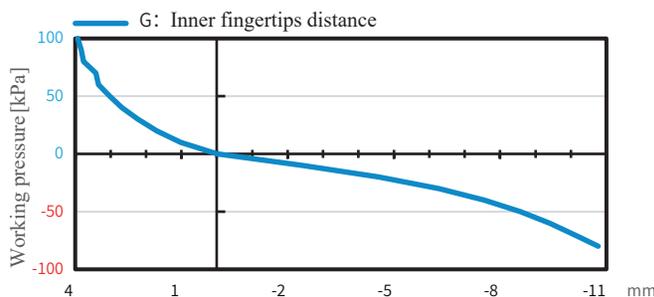
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



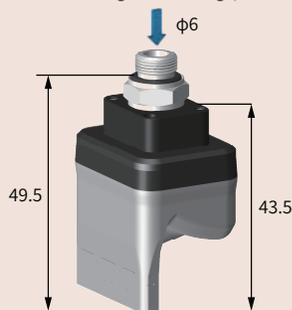
Pressure-Fingertip Distance deformation curve



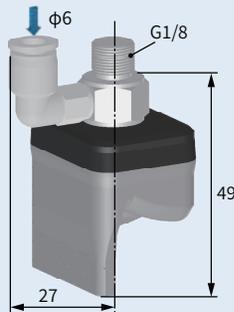
BMC Module (Direct-through)



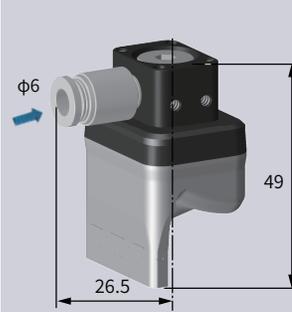
BMS Module (Precise Positioning Direct-through)



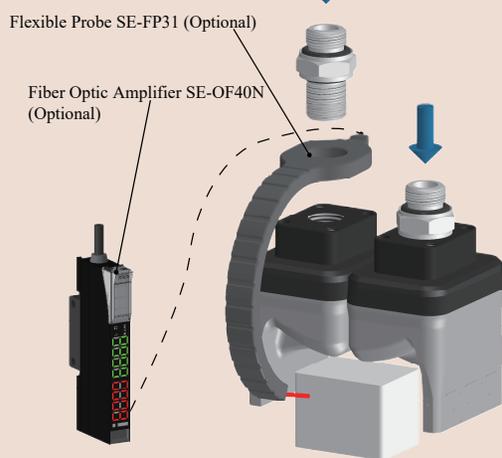
BML Module (Side-through)



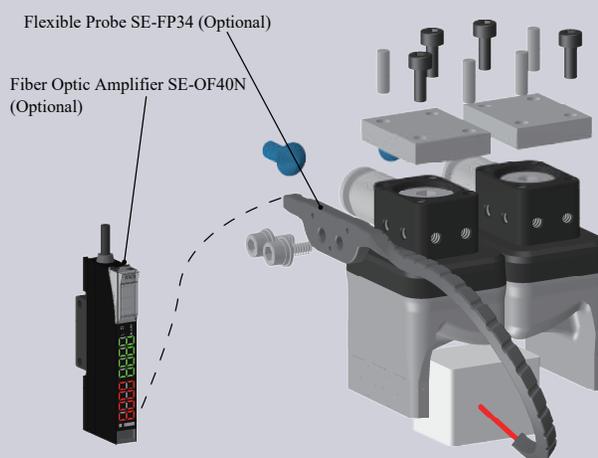
BMM Module (Precise Positioning Multiple-through)



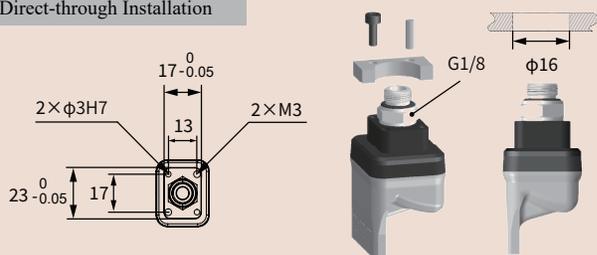
BMS Detection + Profile Block Installation



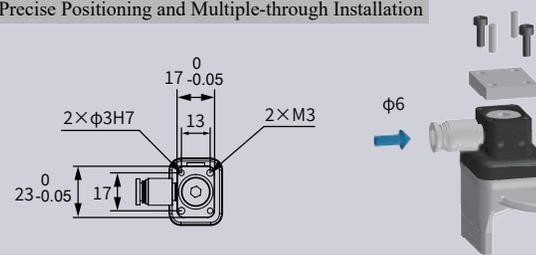
BMM Precise Positioning + Detection + Profile Block Installation



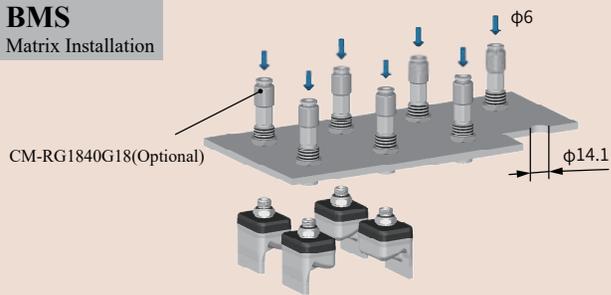
BMS Precise Positioning & Direct-through Installation



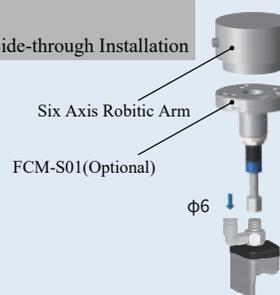
BMM Precise Positioning and Multiple-through Installation



BMS Matrix Installation



BML Robot Arm Flange Side-through Installation



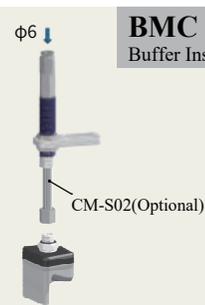
BMC Scara Robot Arm Installation



BMC Rigid Connection Installation



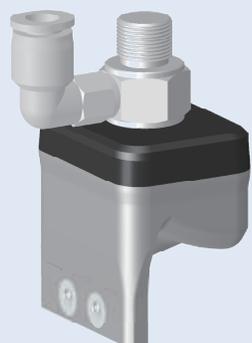
BMC Buffer Installation



B-1G3527(H)/SN

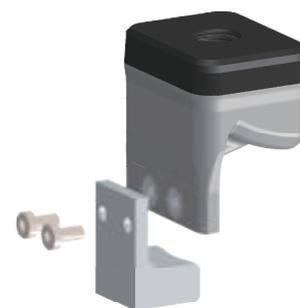
Soft Beak / Beak Module

B-1GN3527[H]/SN

BMC-1GN3527[H]/SN Direct-through H Type		BMS-1GN3527[H]/SN Direct-through Precision Positioning H Type		BML-1GN3527[H]/SN Side-through H Type		BMM-1GN3527[H]/SN Multi-way Precision Positioning H Type	
BMC-1GN3527[HAS]/SN Direct-through Dust-free H Type		BMS-1GN3527[HAS]/SN Direct-through Precision Positioning Dust-free H Type		BML-1GN3527[HAS]/SN Side-through Dust-free H Type		BMM-1GN3527[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	22.7g	Weight	29.93g	Weight	36.1g	Weight	34.08g

Product features

- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



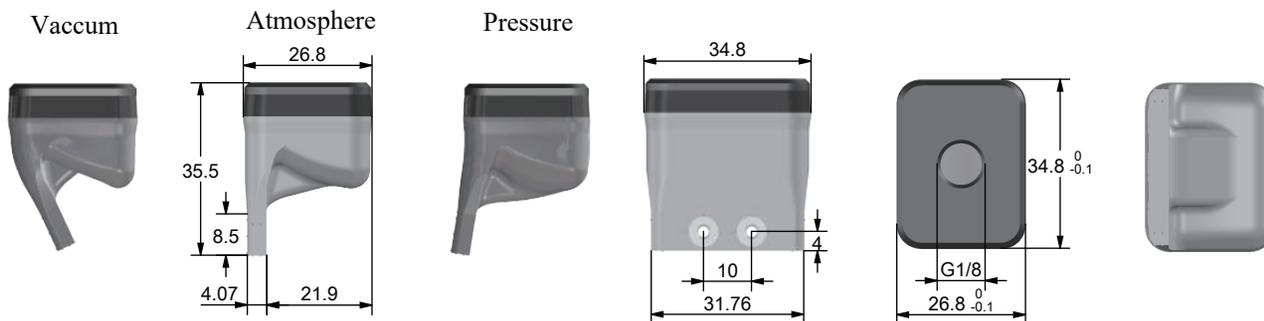
Parameter

Gripping range	—	Gripping force	0-13.2N	Theoretical gripping load**	0-329g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

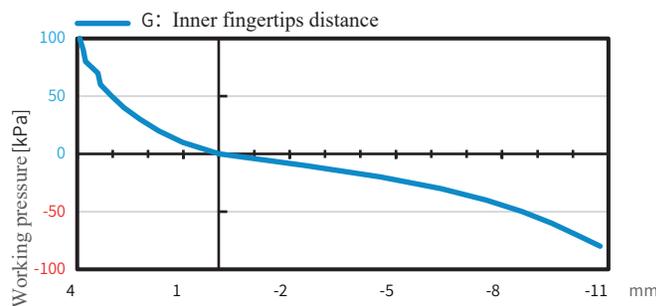
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



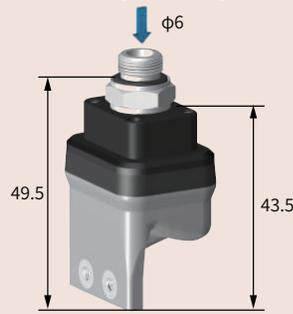
Pressure-Fingertip Distance deformation curve



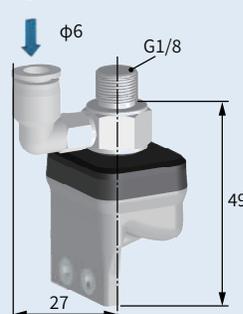
BMC Module
(Direct-through)



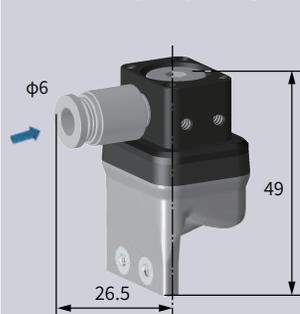
BMS Module
(Precise Positioning Direct-through)



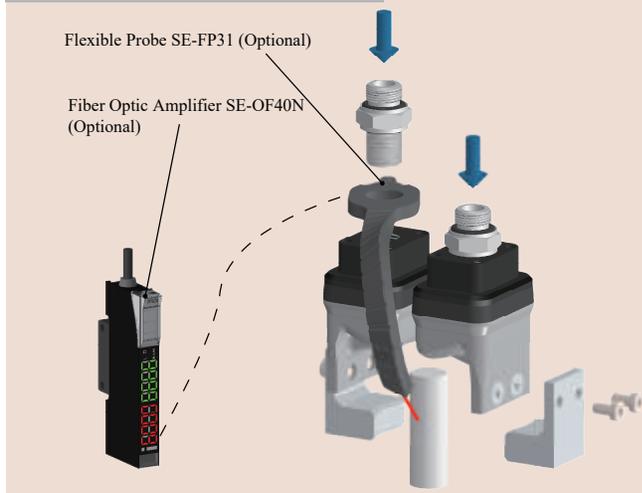
BML Module
(Side-through)



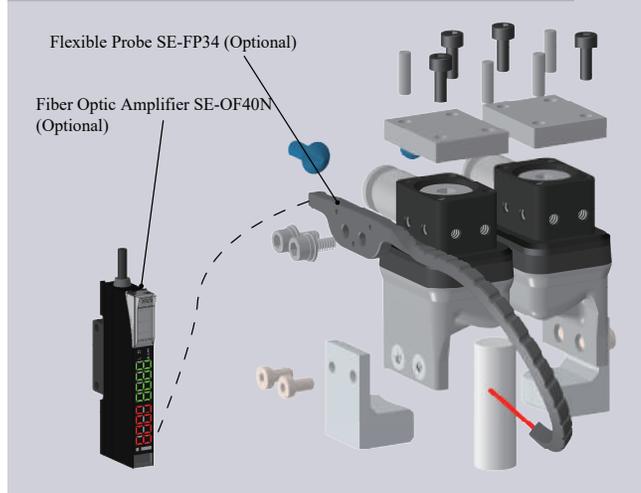
BMM Module
(Precise Positioning Multiple-through)



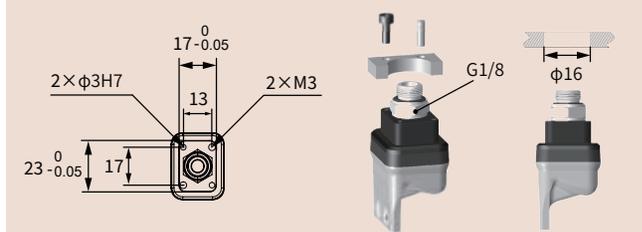
BMS Detection + Profile Block Installation



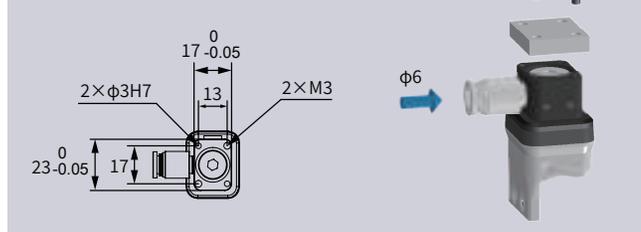
BMM Precise Positioning + Detection + Profile Block Installation



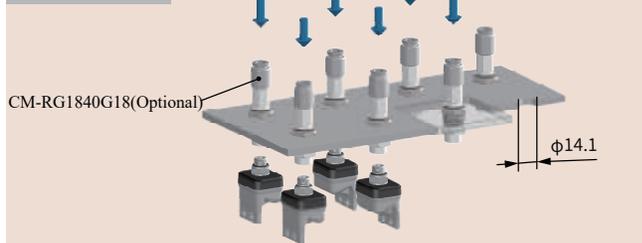
BMS Precise Positioning & Direct-through Installation



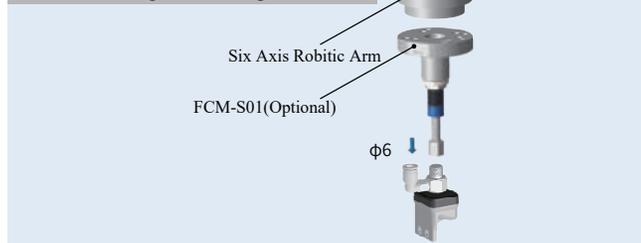
BMM Precise Positioning and Multiple-through Installation



BMS Matrix Installation



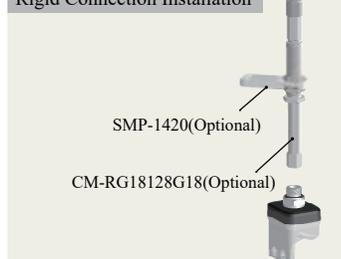
BML Robot Arm Flange Side-through Installation



BMC Scara Robot Arm Installation



BMC Rigid Connection Installation



BMC Buffer Installation

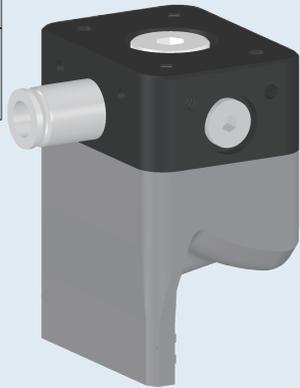


B-1GN3527[H]/SN

Product features

- The single-finger beak can be modularly combined. Fingertip opens under pressure and clamps in a vacuum. It is recommended to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.
- Food-grade material, can be directly used for grasping food.

B-1G4030[H]/M

	BMC-1G4030[H]/M Direct-through H Type	BML-1G4030[H]/M Side-through H Type			
	BMC-1G4030[HAS]/M Direct-through Dust-free H Type	BML-1G4030[HAS]/M Side-through Dust-free H Type			
Weight		78g	Weight		76.9g

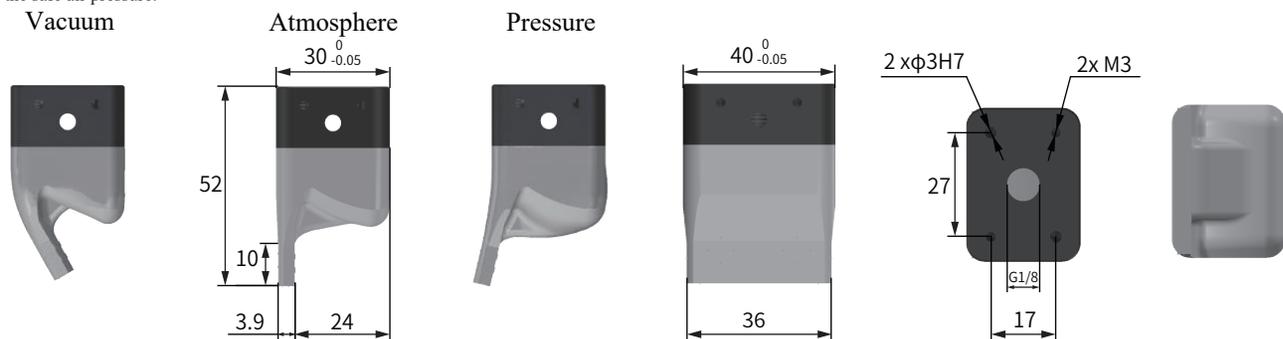
Parameter

Gripping range	—	Gripping force	0-14.2N	Theoretical gripping load**	0-354g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

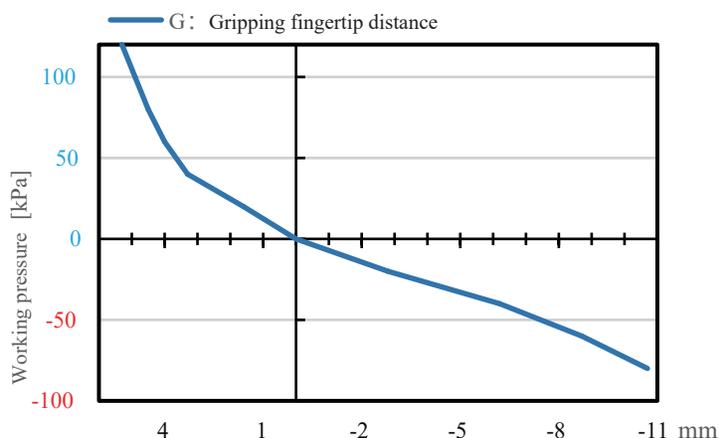
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve

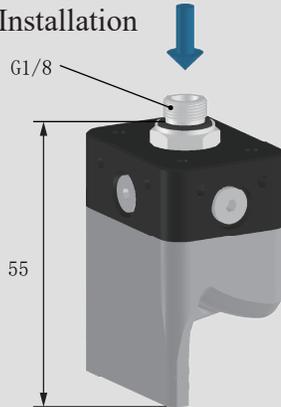


Installation

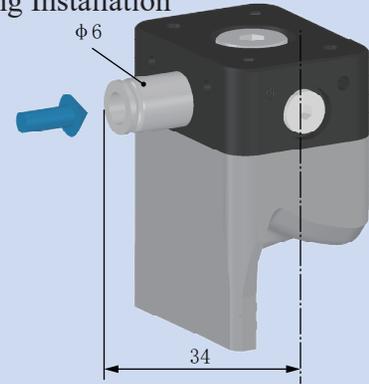
BMC Straight Fitting Installation



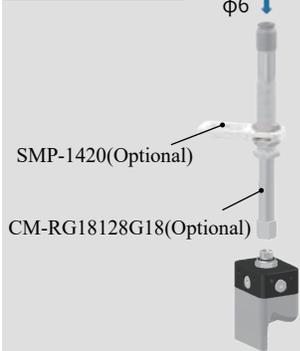
Scan to watch videos



BML Side Fitting Installation



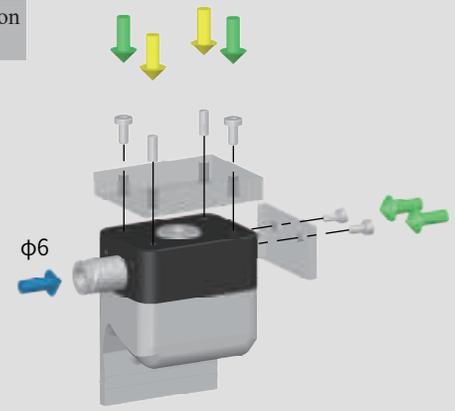
Rigid Connection Installation



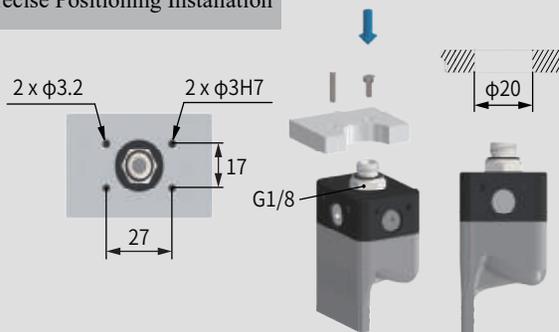
Buffer Installation



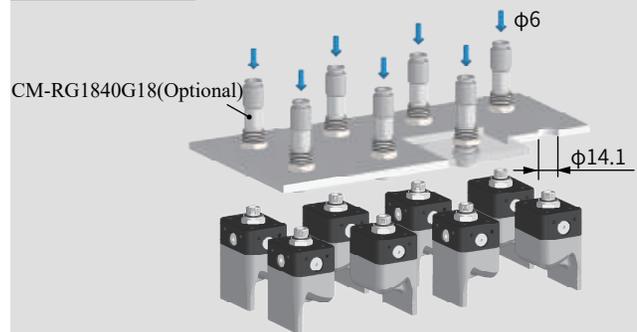
Side-through Partition Plate Installation



Precise Positioning Installation



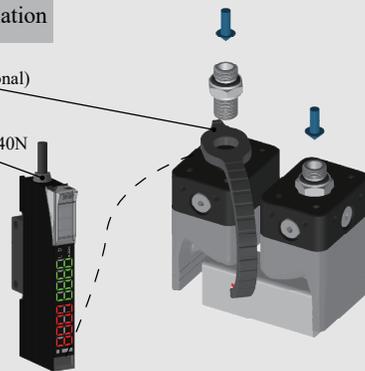
Matrix Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP31 (Optional)

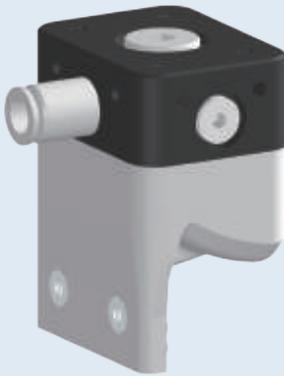
Fiber Optic Amplifier SE-OF40N (Optional)



B-1G4030[H]/M

Product features

- The single-finger beak can be modularly combined. Fingertip opens under pressure and clamps in a vacuum. It is recommended to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.
- Food-grade material, can be directly used for grasping food.

	BMC-1GN4030[H]/M Direct-through H Type	BML-1GN4030[H]/M Side-through H Type		
	BMC-1GN4030[HAS]/M Direct-through Dust-free H Type	BML-1GN4030[HAS]/M Side-through Dust-free H Type		
	Weight	79.4g	Weight	78.3g

B-1GN4030[H]/M

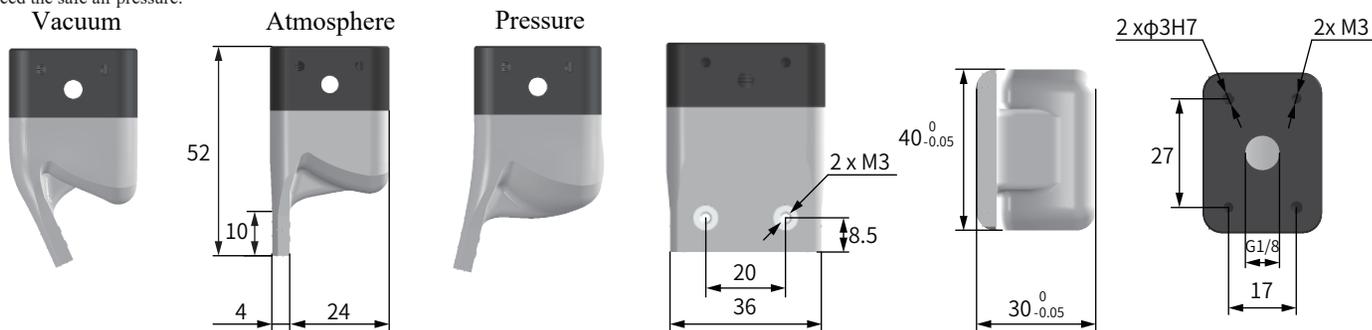
Parameter

Gripping range	—	Gripping force	0-17N	Theoretical gripping load**	0-425g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

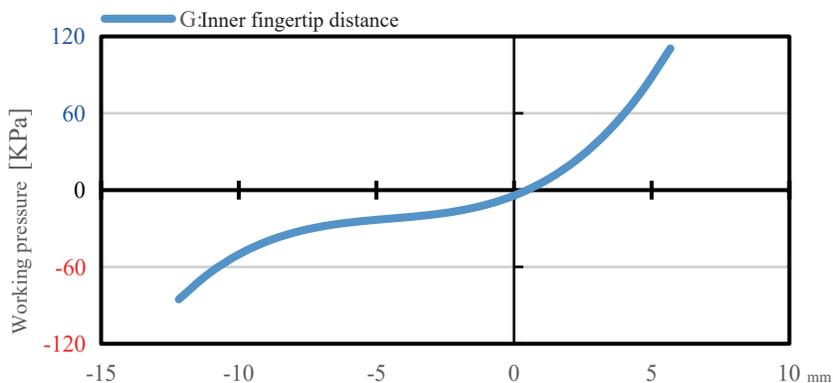
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

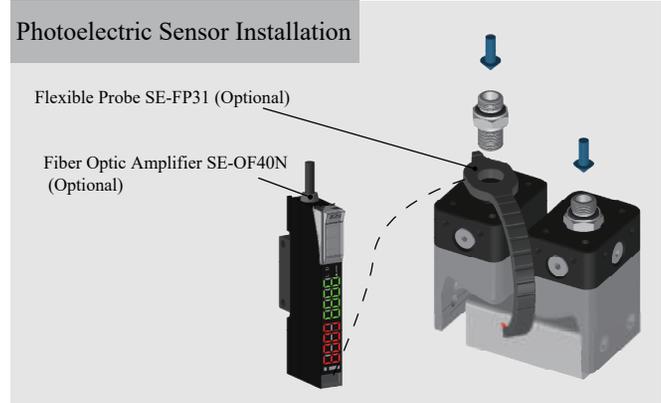
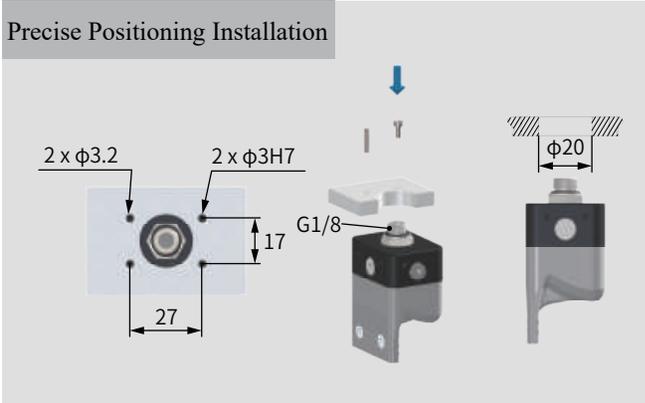
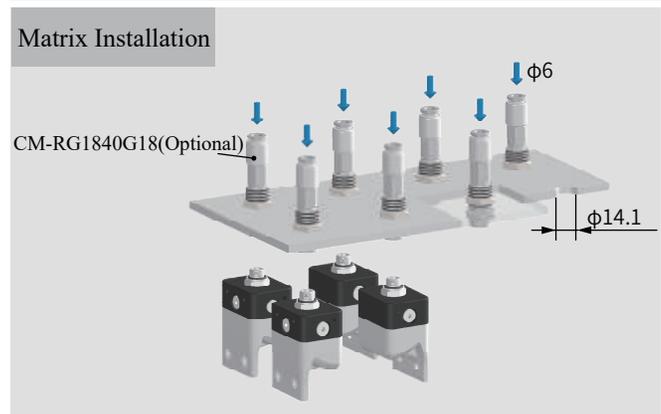
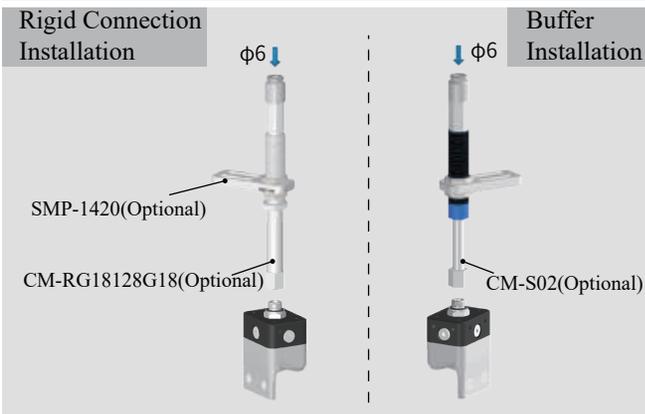
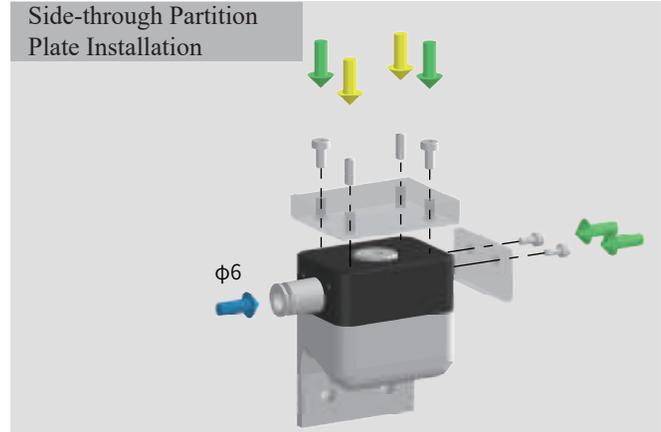
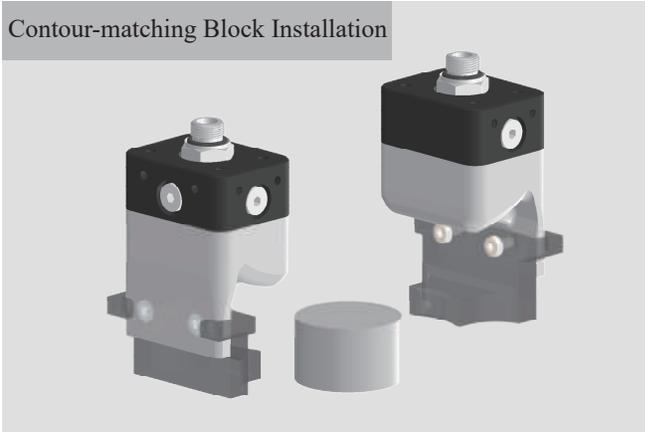
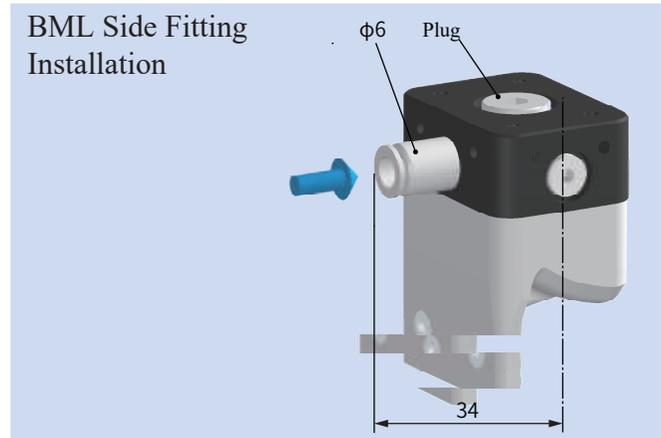
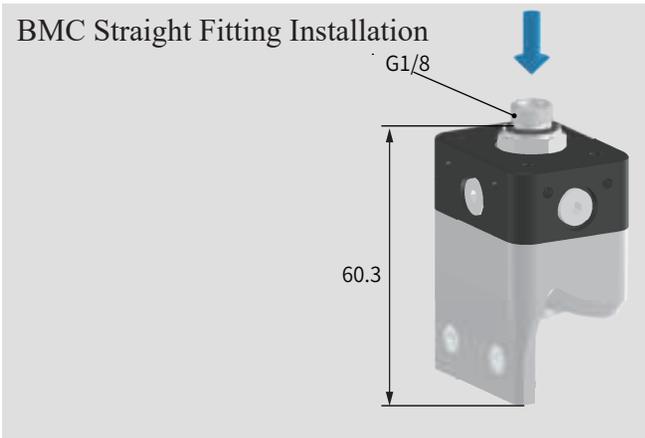
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



Installation



B-1GN4030(H)/M

Product features

- The single-finger beak can be modularly combined. Fingertip opens under pressure and clamps in a vacuum. It is recommended to be used with Rochu control unit.
- The Anti-static material meets the requirements of the national standard GB/T11210-2014, with a point-to-point resistance of 0.1-1000MΩ. The Anti-static Dust-free type [LHAS] is more suitable for dealing with workpieces that have dustproof requirements or are miniature and lightweight.

B-1GN4030[LH]/M

	BMC-1GN4030[LH]/M Direct-through Anti-static H Type	BML-1GN4030[LH]/M Side-through Anti-static H Type		
	BMC-1GN4030[LHAS]/M Direct-through Anti-static Dust-free H Type	BML-1GN4030[LHAS]/M Side-through Anti-static Dust-free H Type		
	Weight	79.4g	Weight	78.3g

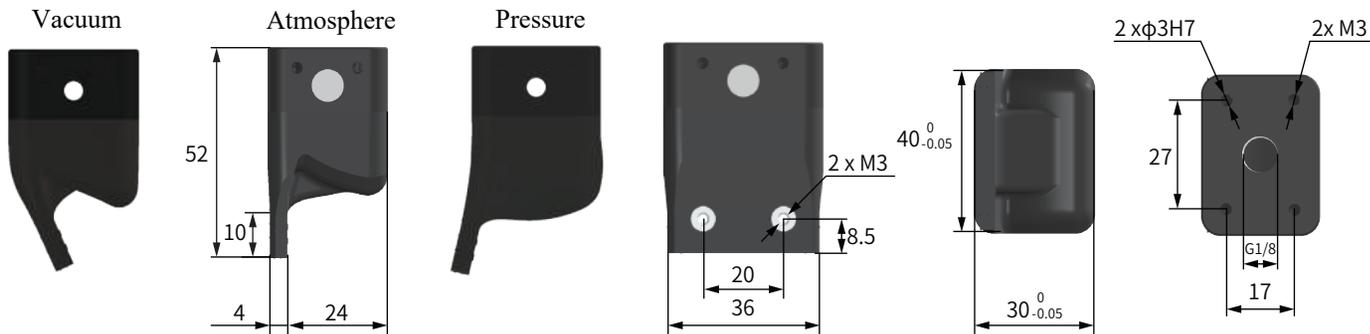
Parameter

Gripping range	—	Gripping force	0-17N	Theoretical gripping load**	0-425g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

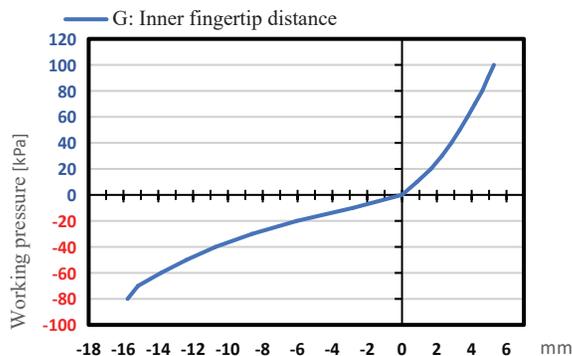
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

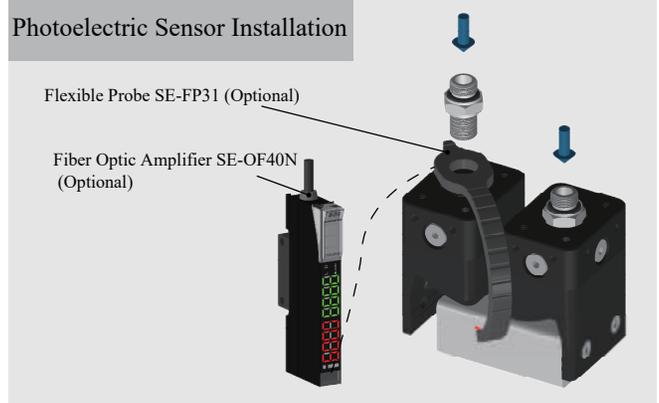
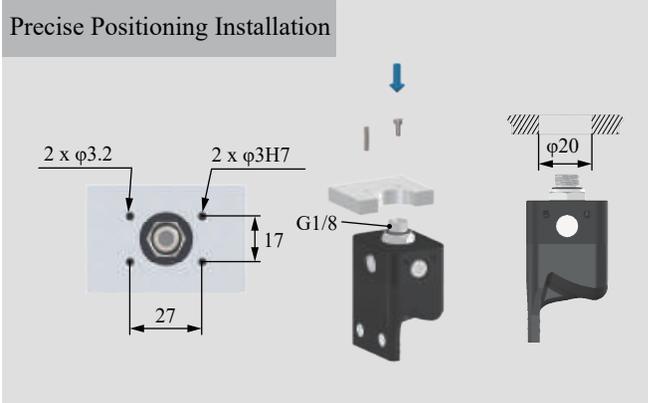
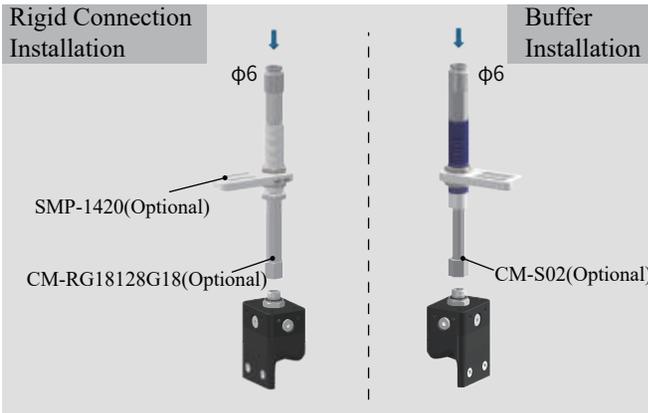
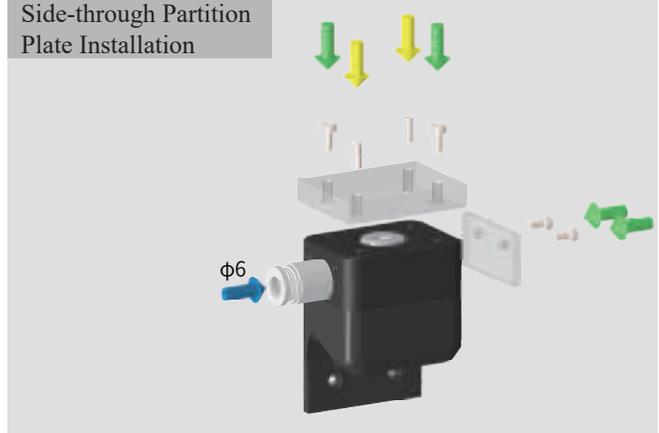
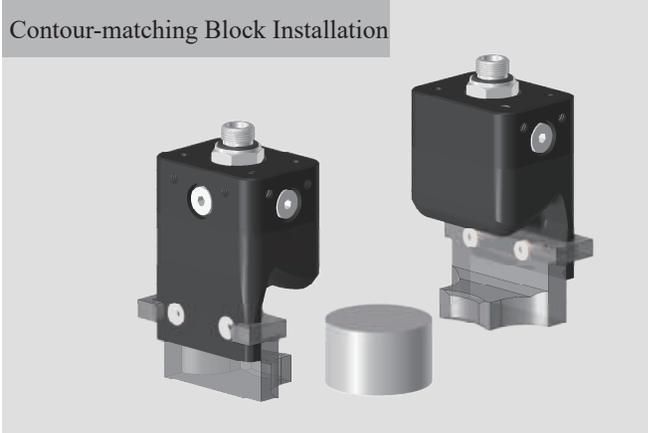
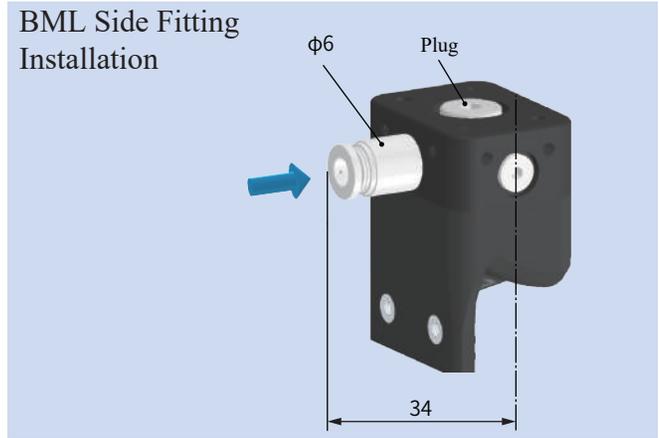
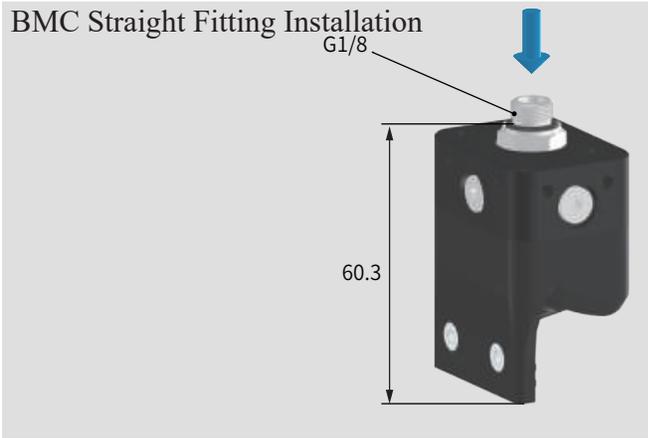
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



Installation



B-1GN4030[LH]/M

Product features

- The single-finger beak can be modularly combined. Fingertip opens under pressure and clamps in a vacuum. It is recommended to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [H] and Dust-free Normal Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [HAS] is preferred.
- Food-grade material, can be directly used for grasping food.

B-1U4030[H]/M

	BMC-1U4030[H]/M Direct-through H Type	BML-1U4030[H]/M Side-through H Type			
	BMC-1U4030[HAS]/M Direct-through Dust-free H Type	BML-1U4030[HAS]/M Side-through Dust-free H Type			
Weight		74.2g	Weight		73.1g

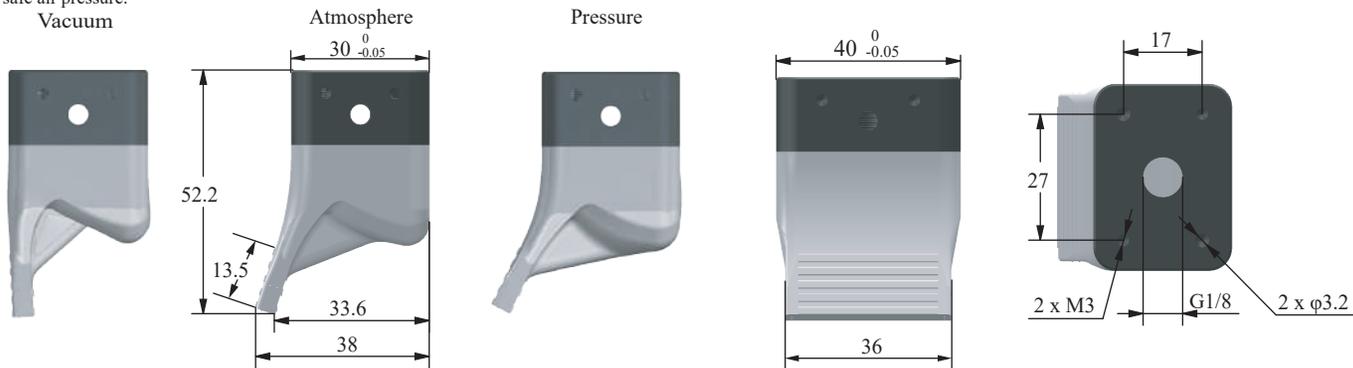
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	0-46.4N	Theoretical internal gripping load**	0-1160g	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

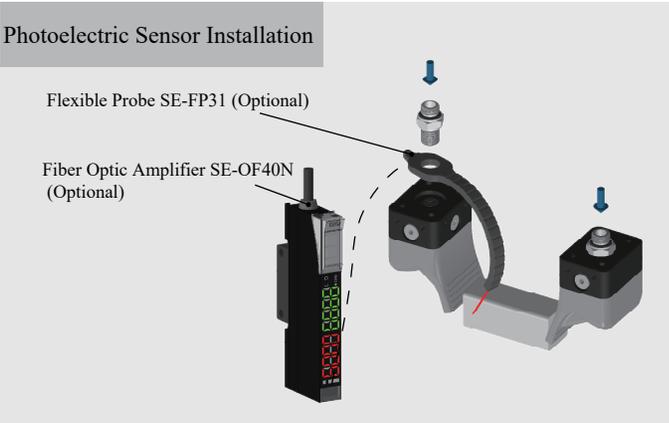
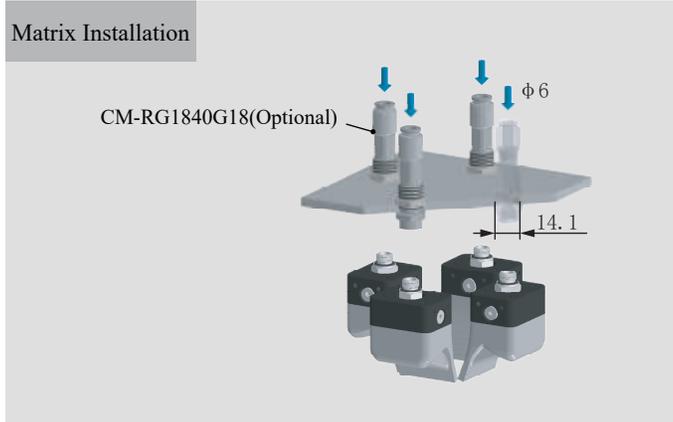
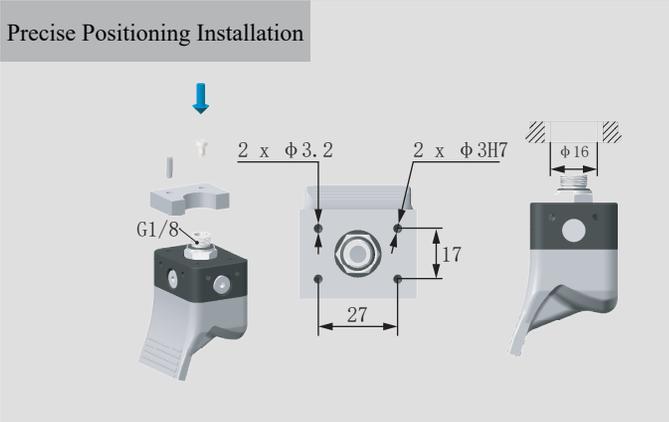
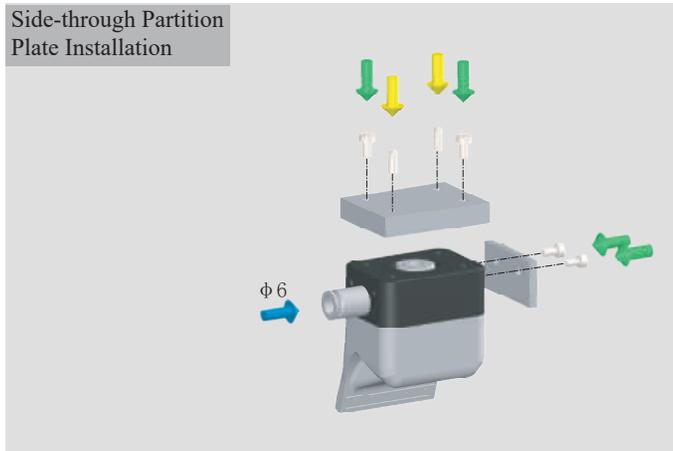
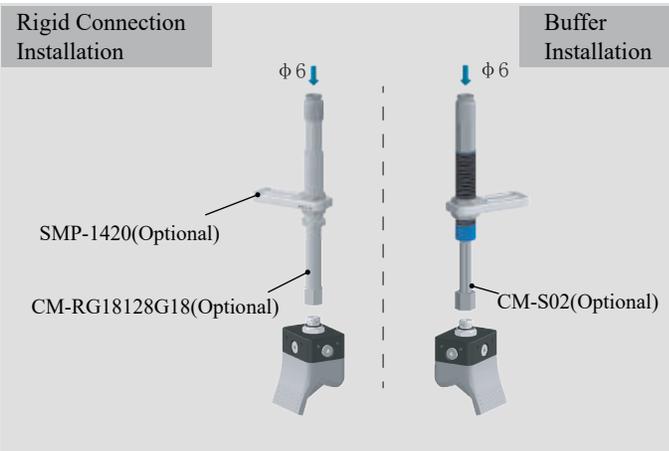
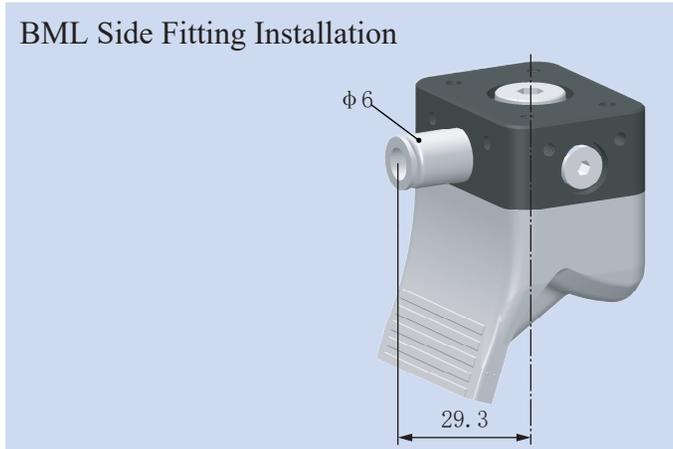
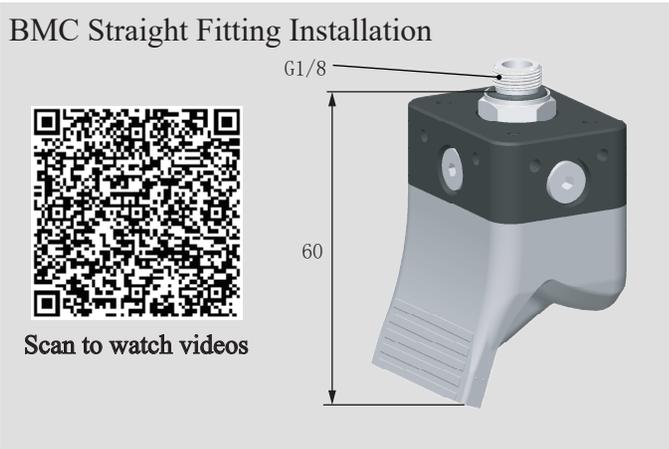
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



Installation



B-1U4030[H]/M

Product features

- The single-finger beak can be modularly combined. Fingertip opens under pressure and clamps in a vacuum. It is recommended to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [H] and Dust-free Normal Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [HAS] is preferred.
- Food-grade material, can be directly used for grasping food.

	BMC-1UN4030[H]/M Direct-through H Type	BML-1UN4030[H]/M Side-through H Type		
	BMC-1UN4030[HAS]/M Direct-through Dust-free H Type	BML-1UN4030[HAS]/M Side-through Dust-free H Type		
	Weight	75.7g	Weight	74.6g

B-1UN4030[H]/M

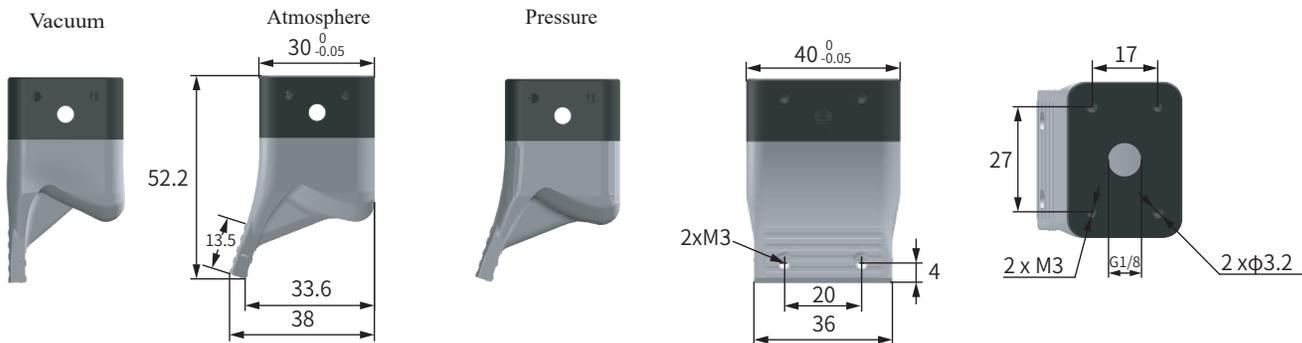
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	0-62N	Theoretical internal gripping load**	0-1550g	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

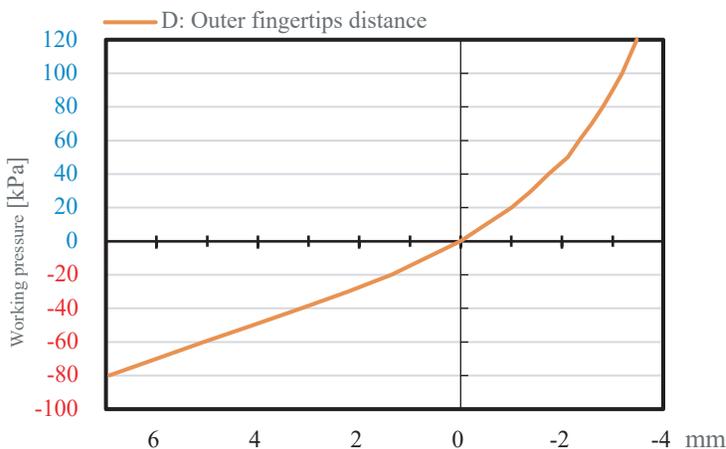
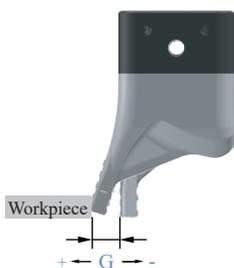
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.

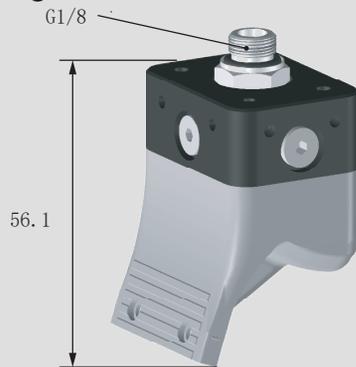


Pressure-Fingertip Distance deformation curve

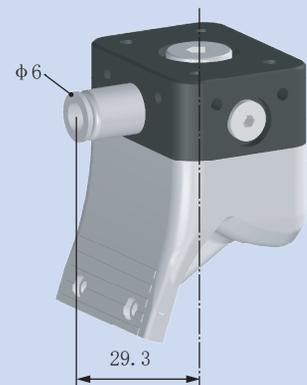


Installation

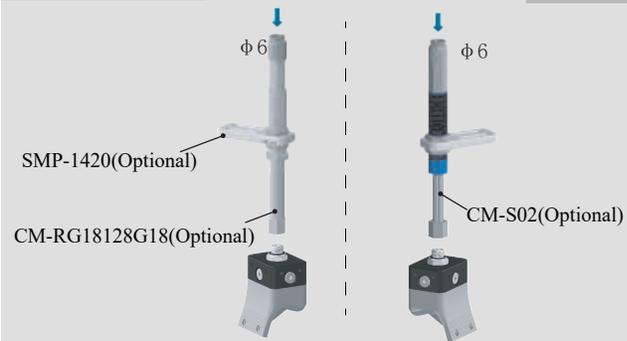
BMC Straight Fitting Installation



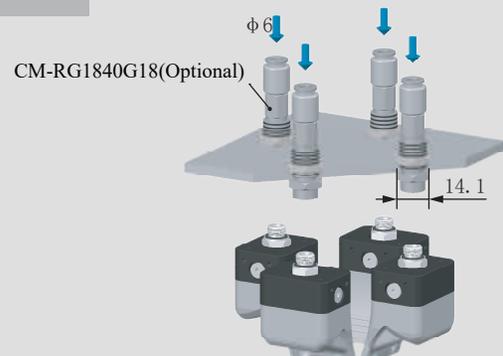
BML Side Fitting Installation



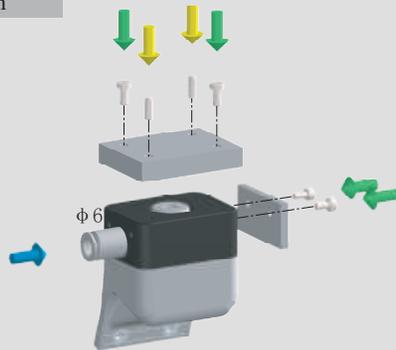
Rigid Connection Installation



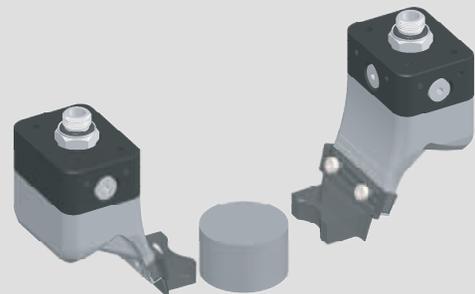
Matrix Installation



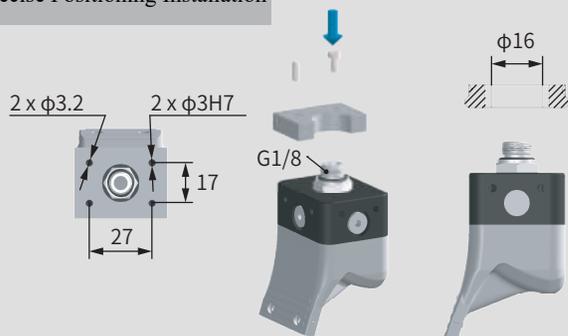
Side-through Partition Plate Installation



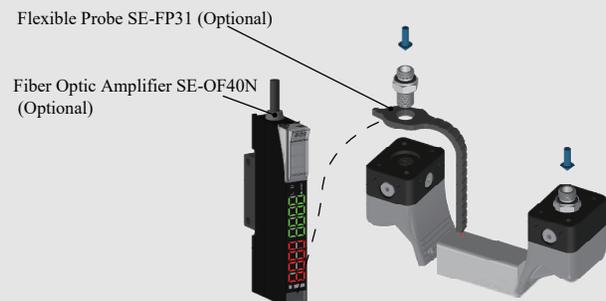
Contour-matching Block Installation



Precise Positioning Installation



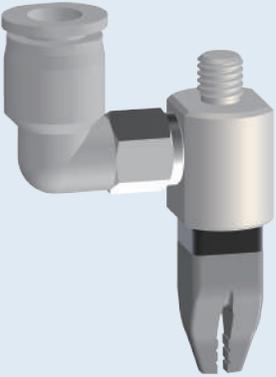
Photoelectric Sensor Installation



Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak materials divided into Strong materials [H] and Dust-free Strong material [HAS]. For workpieces with dustproof requirements, or miniature and lightweight that are prone to being adsorbed on the fingertips, Dust-free type [HAS] should be preferably selected.
- Food-grade material, can be directly used for grasping food.

B-20201[H]/S

	BMC-20201[H]/S Direct-through H Type	BML-20201[H]/S Side-through H Type		
	BMC-20201[HAS]/S Direct-through Dust-free H Type	BML-20201[HAS]/S Side-through Dust-free H Type		
	Weight	1.1g	Weight	16.3g

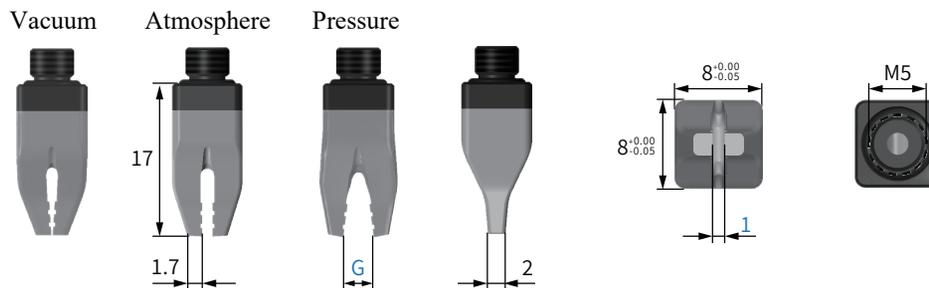
Parameter

Gripping range	0-2.5mm	Gripping force	0-0.6N	Theoretical gripping load**	0-24g	Ideal gripping workpiece size*	1mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<160kPa

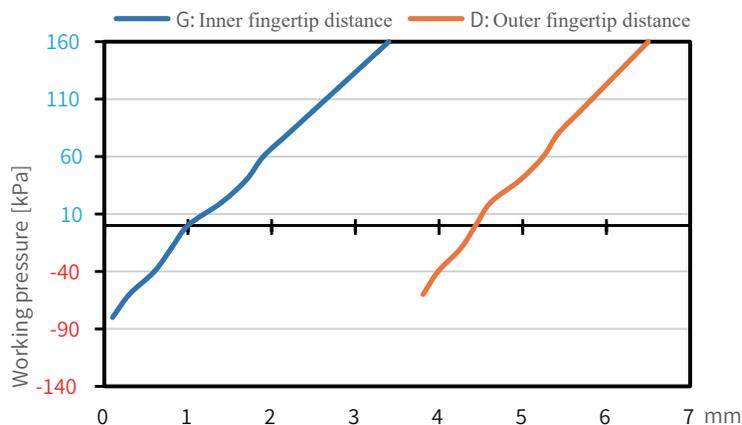
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



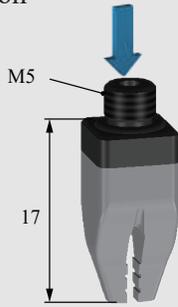
Pressure-Fingertip Distance deformation curve



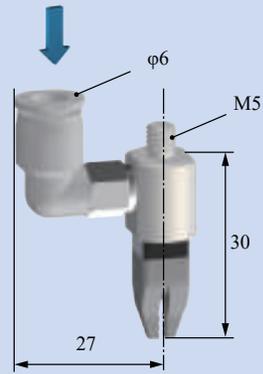
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

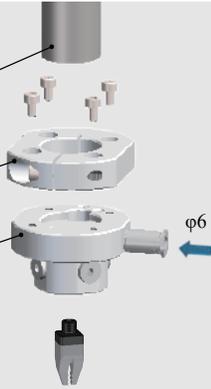


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

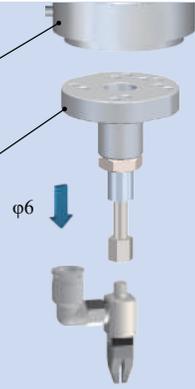
CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

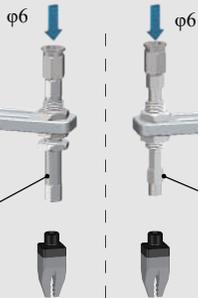
FCM-S01(Optional)



Rigid Connection Installation

SMP-13(Optional)

CM-RM558M5(Optional)



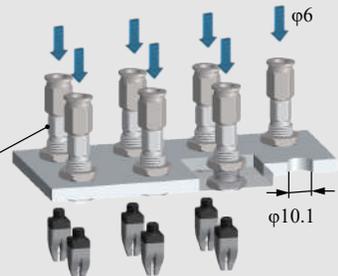
Buffer Installation

CM-S04(Optional)



Matrix Installation

CM-RM525M5(Optional)

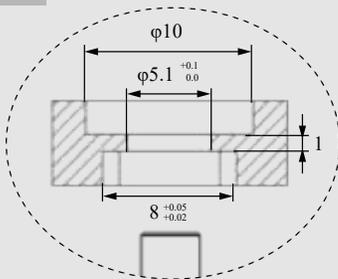


Precise Positioning Installation

PN-CN5N5

OR-02

M5

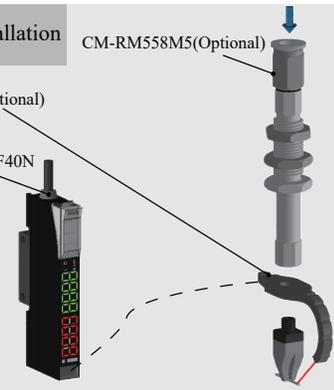


Photoelectric Sensor Installation

CM-RM558M5(Optional)

Flexible Probe SE-FP32(Optional)

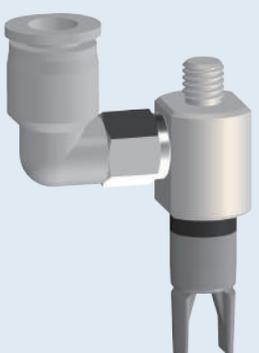
Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak materials divided into Strong materials [H] and Dust-free Strong material [HAS]. For workpieces with dustproof requirements, or miniature and lightweight that are prone to being adsorbed on the fingertips, Dust-free type [PAS] should be preferably selected.
- Food-grade material, can be directly used for grasping food.

B-2D08[H]/S

	BMC-2D08[H]/S Direct-through H Type	BML-2D08[H]/S Side-through H Type	
	BMC-2D08[HAS]/S Direct-through Dust-free H Type	BML-2D08[HAS]/S Side-through Dust-free H Type	
	Weight 0.8g	Weight 15.9g	

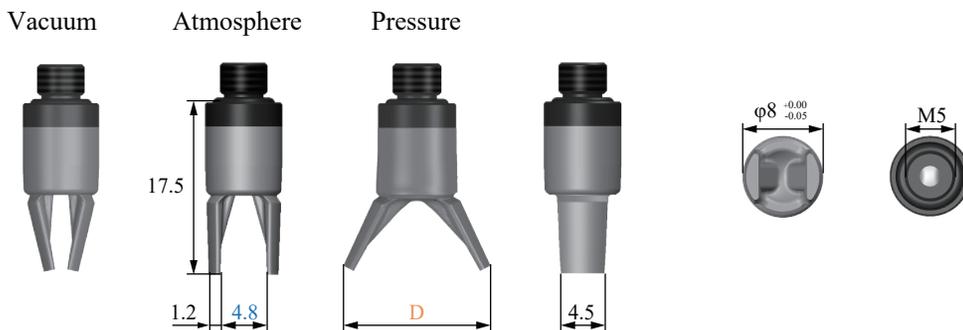
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	4-13mm	Internal gripping force	0-0.9N	Theoretical internal gripping load**	0-37g	Ideal internal gripping workpiece size*	7.2mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<170kPa

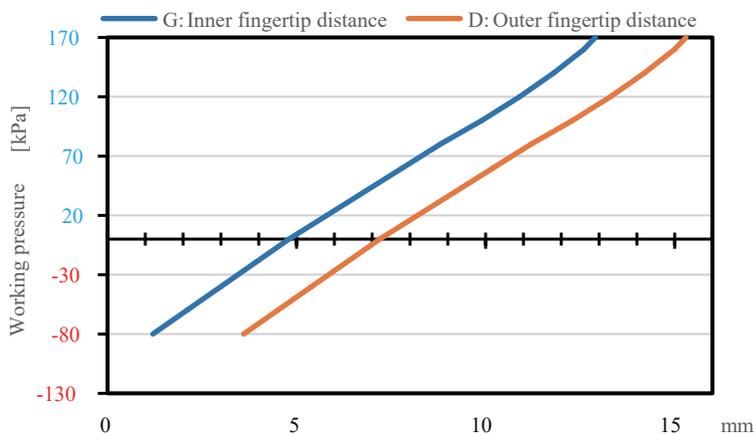
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



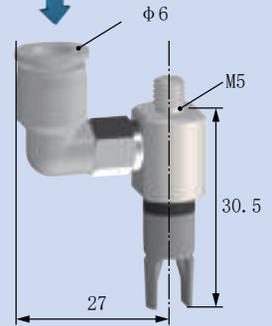
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

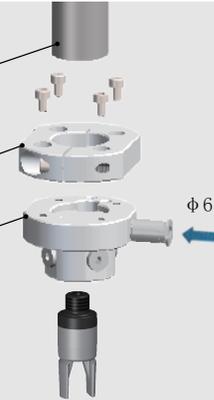


Scara Robotic Arm Installation

$\phi 20$ mm Scara Robotic Arm

CP-193(Optional)

CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(Optional)



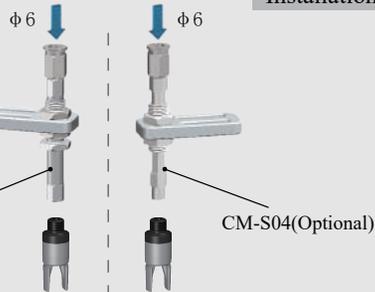
Rigid Connection Installation

SMP-13(Optional)

CM-RM558M5(Optional)

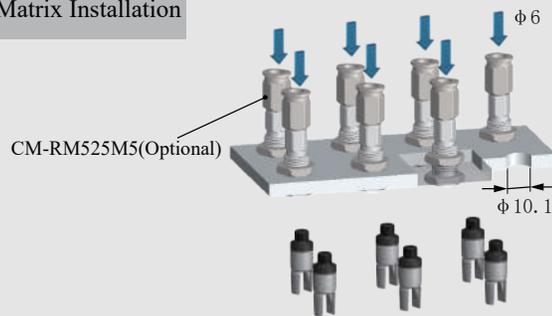
Buffer Installation

CM-S04(Optional)



Matrix Installation

CM-RM525M5(Optional)

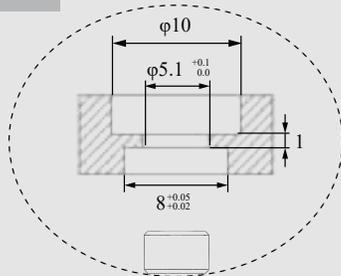


Precise Positioning Installation

PN-CN5N5

OR-02

M5

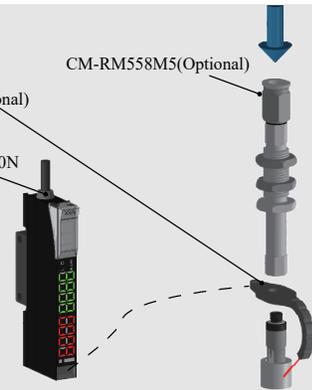


Photoelectric Sensor Installation

CM-RM558M5(Optional)

Flexible Probe SE-FP32(Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak materials divided into Strong materials [P] and Dust-free Strong material [PAS]. For workpieces with dustproof requirements, or miniature and lightweight that are prone to being adsorbed on the fingertips, Dust-free type [PAS] should be preferably selected.
- Food-grade material, can be directly used for grasping food.

B-2051D5[P]/S

	BMC-2051D5[P]/S Direct-through P Type	BML-2051D5[P]/S Side-through P Type	
	BMC-2051D5[PAS]/S Direct-through Dust-free P Type	BML-2051D5[PAS]/S Side-through Dust-free P Type	
	Weight 3.9g	Weight 15.4g	

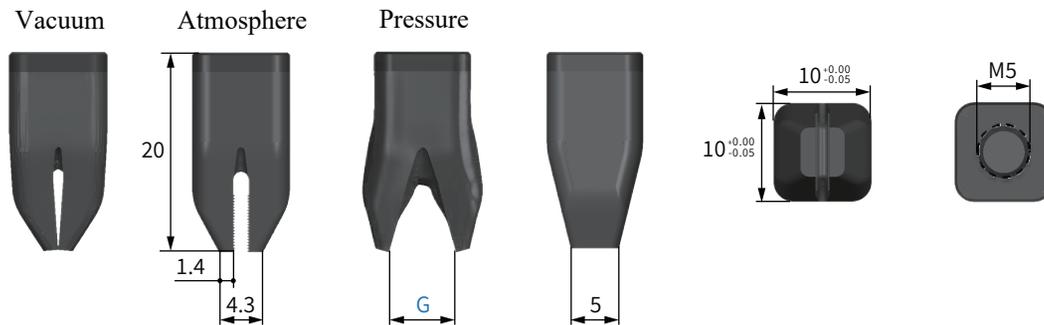
Parameter

Gripping range	0-3mm	Gripping force	0-0.3N	Theoretical gripping load**	0-12g	Ideal gripping workpiece size*	1.5mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<90kPa

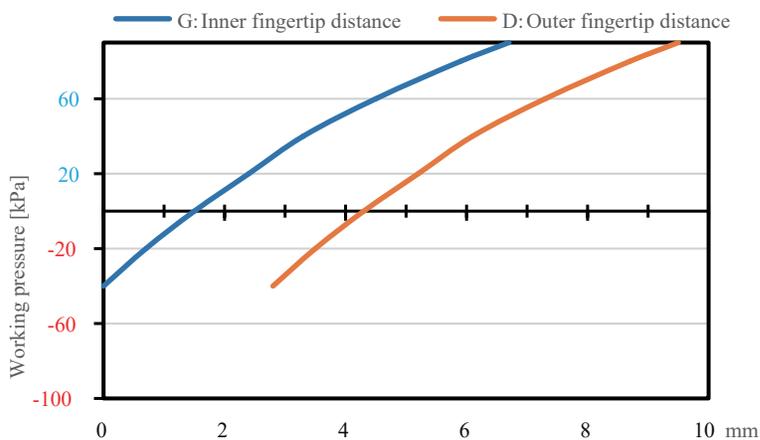
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



BMC Straight Fitting Installation



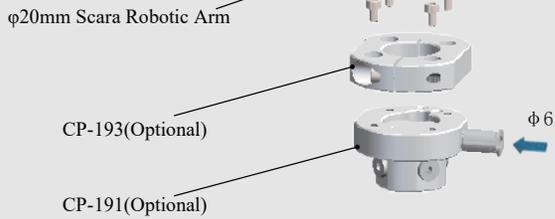
Scan to watch videos



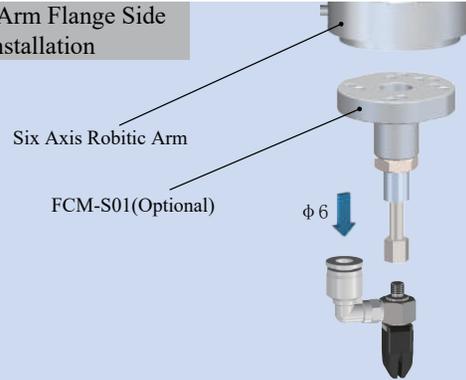
BML Side Fitting Installation



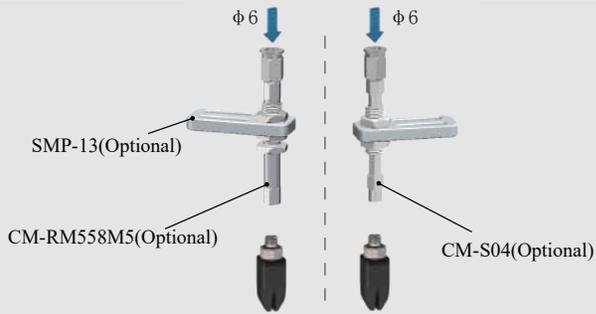
Scara Robotic Arm Installation



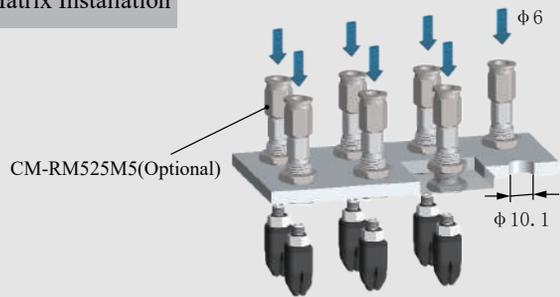
Robotic Arm Flange Side Fitting Installation



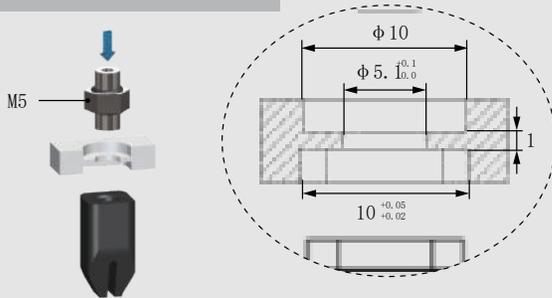
Rigid Connection Installation



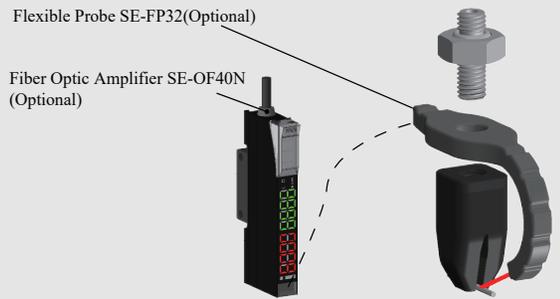
Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Anti-static material meets the national standard GB/T11210-2014, point-to-point resistance 0.1-1000MΩ requirements. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, anti-static dust-free traceless material [LPAS] is preferred.

	BMC-2051D5[LP]/S Direct-through Anti-static P Type	BML-2051D5[LP]/S Side-through P Type		
	BMC-2051D5[LPAS]/S Direct-through Anti-static Dust-free P Type	BML-2051D5[LPAS]/S Side-through Anti-static Dust-free P Type		
	Weight	3.9g	Weight	15.4g

B-2051D5[LP]/S

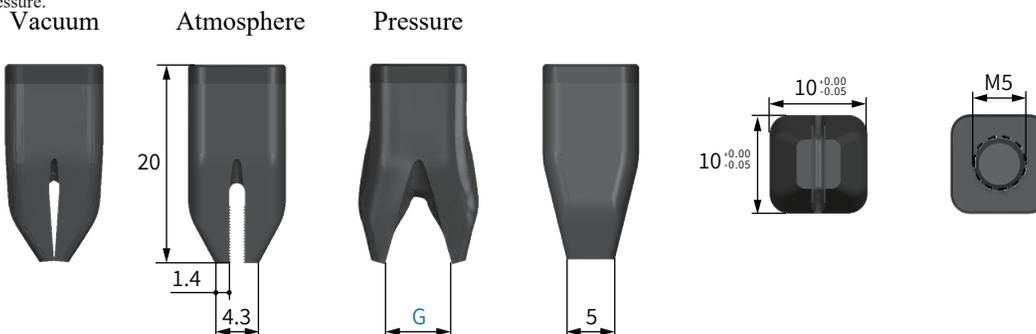
Parameter

Gripping range	0-3mm	Gripping force	0-0.3N	Theoretical gripping load**	0-12g	Ideal gripping workpiece size*	1.5mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

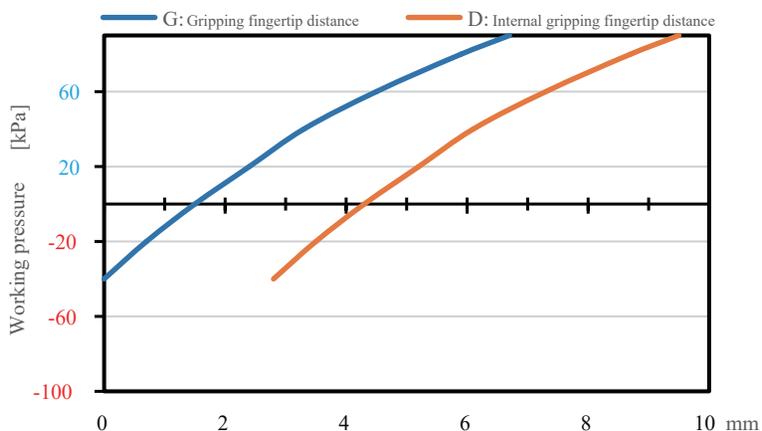
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



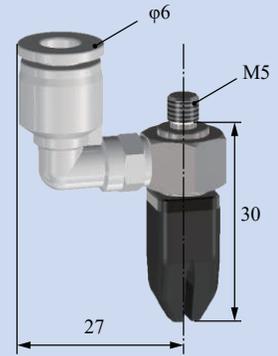
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

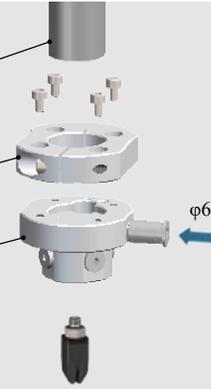


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193 (optional)

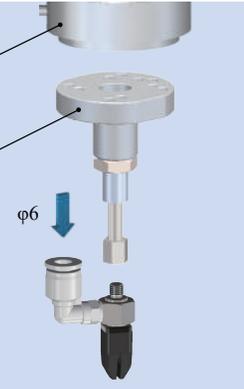
CP-191 (optional)



Robotic Arm Flange Side Fitting Installation

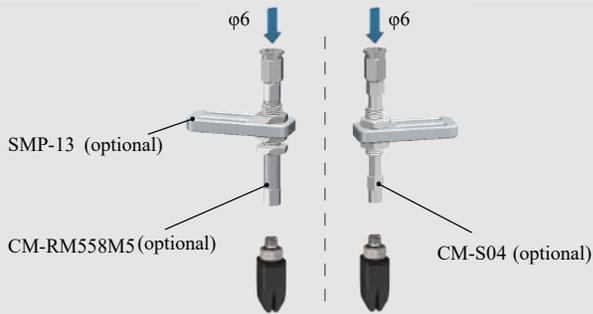
Six Axis Robotic Arm

FCM-S01 (optional)



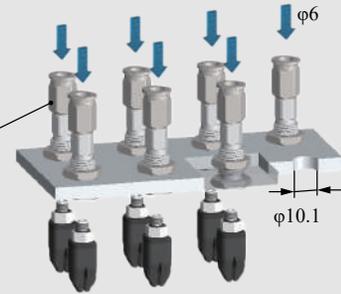
Rigid Connection Installation

Buffer Installation

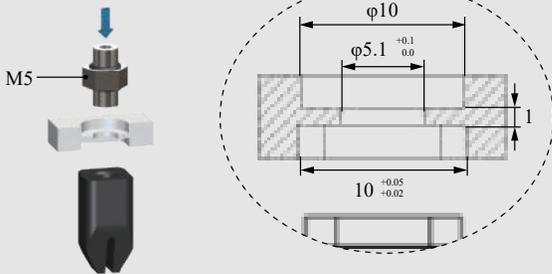


Matrix Installation

CM-RM525M5 (optional)



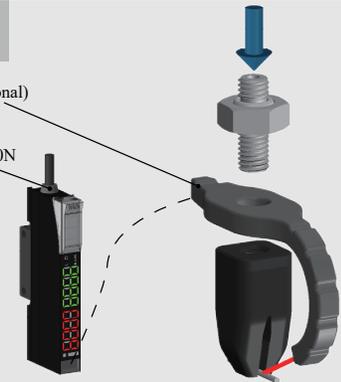
Precise Positioning Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

	BMC-2076D5[P]/S Direct-through P Type	BML-2076D5[PAS]/S Side-through P Type		
	BMC-2076D5[PAS]/S Direct-through Dust-free P Type	BML-2076D5[PAS]/S Side-through Dust-free P Type		
	Weight	5.4g	Weight	16.9g

B-2076D5[P]/S

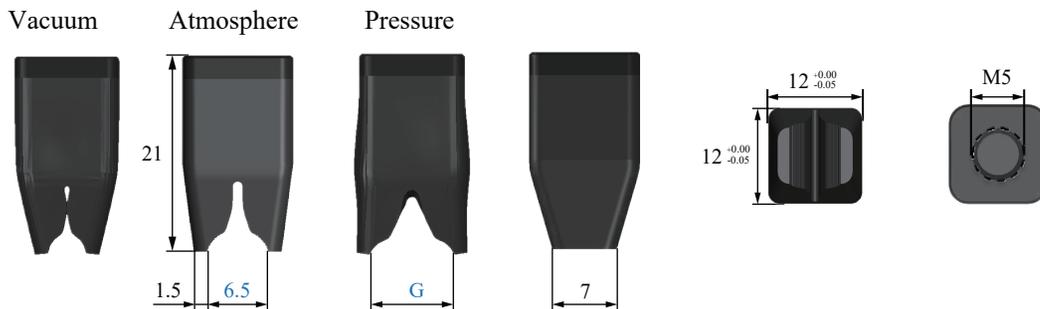
Parameter

Gripping range	5.5-7.5mm	Gripping force	0-0.7N	Theoretical gripping load**	0-29g	Ideal gripping workpiece size*	6.5mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

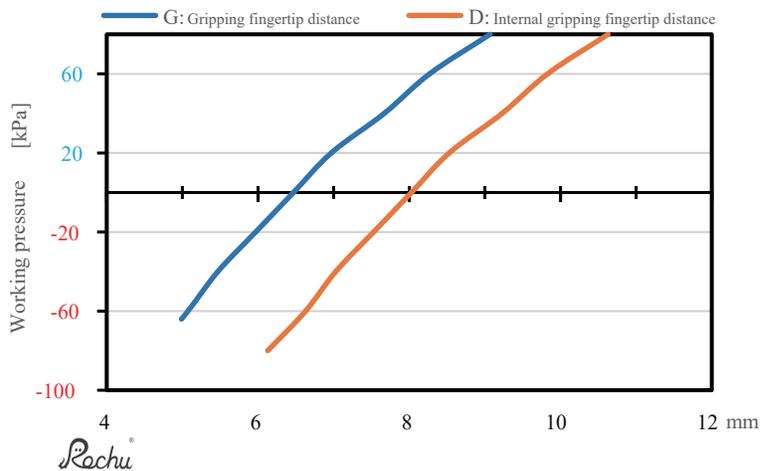
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



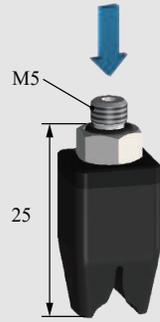
Pressure-Fingertip Distance deformation curve



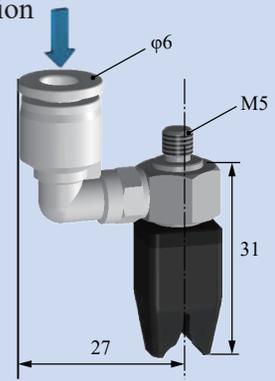
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

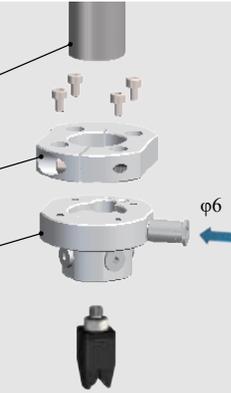


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193 (Optional)

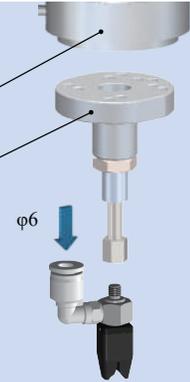
CP-191 (Optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01 (Optional)



Rigid Connection Installation

SMP-13 (Optional)

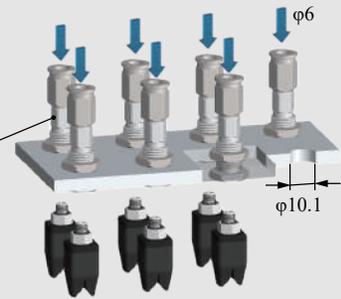
CM-RM558M5 (Optional)

CM-S04 (Optional)

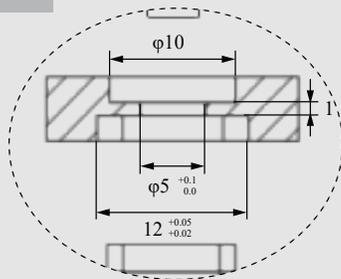


Matrix Installation

CM-RM525M5 (Optional)



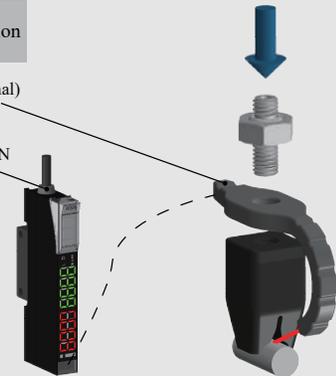
Photoelectric Sensor Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak materials divided into Strong materials [H] and Dust-free Strong material [HAS]. For workpieces with dustproof requirements, or miniature and lightweight that are prone to being adsorbed on the fingertips, Dust-free type [PAS] should be preferably selected.
- Food-grade material, can be directly used for grasping food.

B-20301[H]/S

	BMC-20301[H]/S Direct-through H Type	BML-20301[H]/S Side-through H Type	
	BMC-20301[HAS]/S Direct-through Dust-free H Type	BML-20301[HAS]/S Side-through Dust-free H Type	
	Weight 6g	Weight 17.5g	

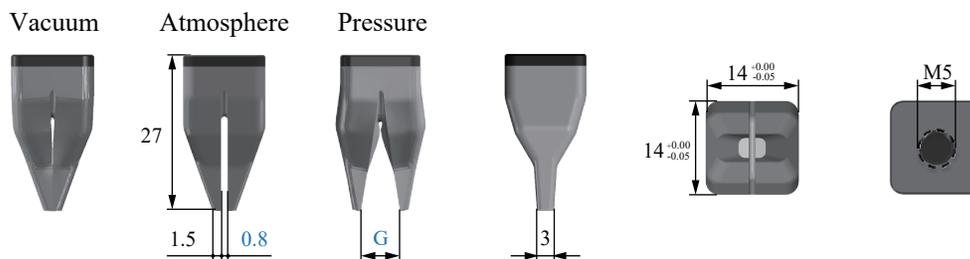
Parameter

Gripping range	0-2.8mm	Gripping force	0-2.7N	Theoretical gripping load**	0-106g	Ideal gripping workpiece size*	0.8mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

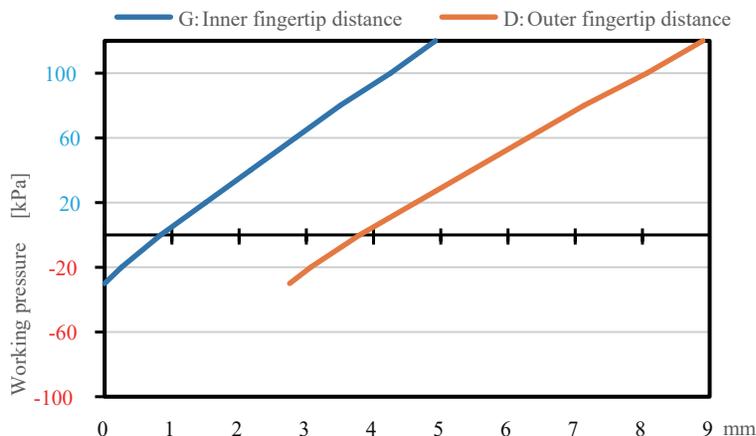
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



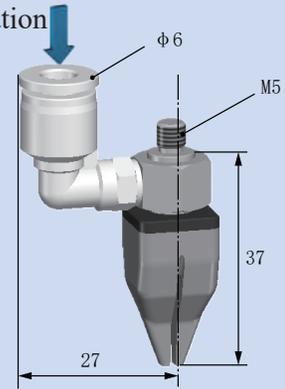
BMC Straight Fitting Installation



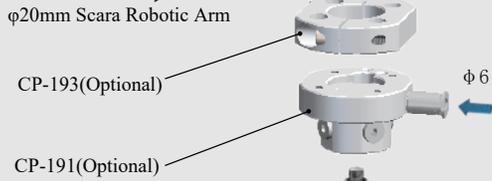
Scan to watch videos



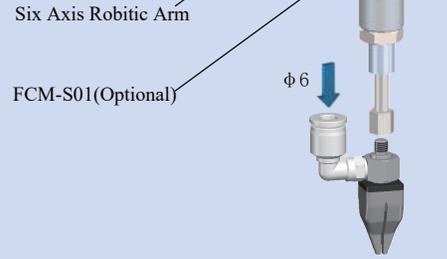
BML Side Fitting Installation



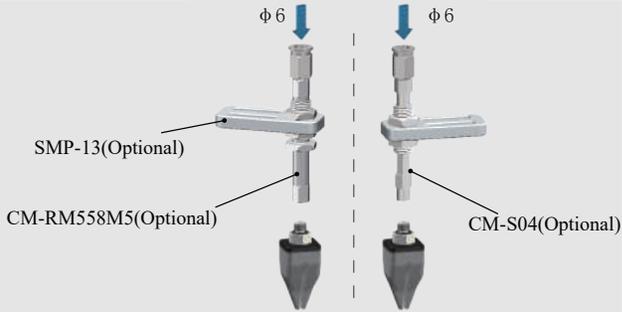
Scara Robotic Arm Installation



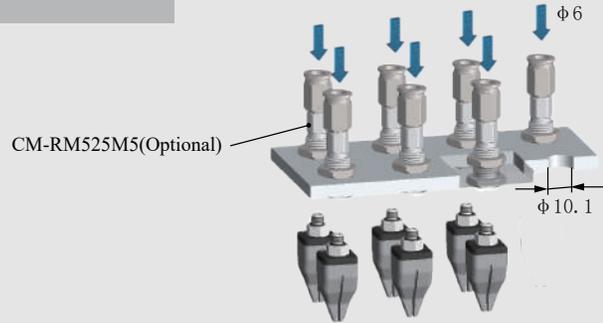
Robotic Arm Flange Side Fitting Installation



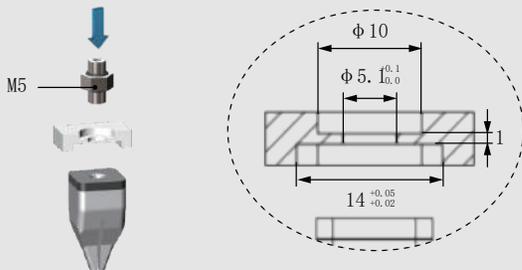
Rigid Connection Installation



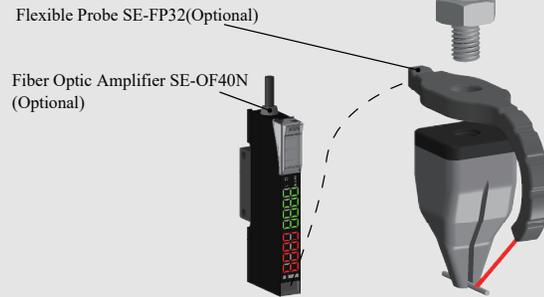
Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation

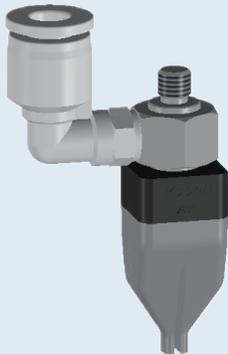


B-20301[H]/S

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak materials divided into Strong materials [H] and Dust-free Strong material [HAS]. For workpieces with dustproof requirements, or miniature and lightweight that are prone to being adsorbed on the fingertips, Dust-free type [PAS] should be preferably selected.
- Food-grade material, can be directly used for grasping food.

B-20501[H]/S

	BMC-20501[H]/S Direct-through H Type	BML-20501[H]/S Side-through H Type	
	BMC-20501[HAS]/S Direct-through Dust-free H Type	BML-20501[HAS]/S Side-through Dust-free H Type	
	Weight 6.6g	Weight 18.1g	

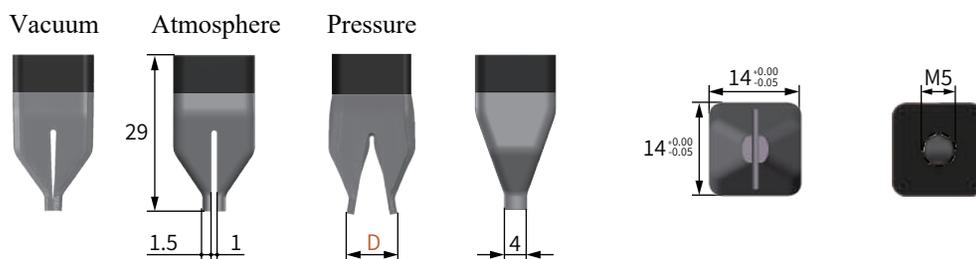
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	3-8mm	Internal gripping force	0-0.5N	Theoretical internal gripping load**	0-21g	Ideal internal gripping workpiece size*	5mm
Joint size	M5	Life time***	150million times	Contact Temperature	<220°C	Safe pressure***	<160kPa

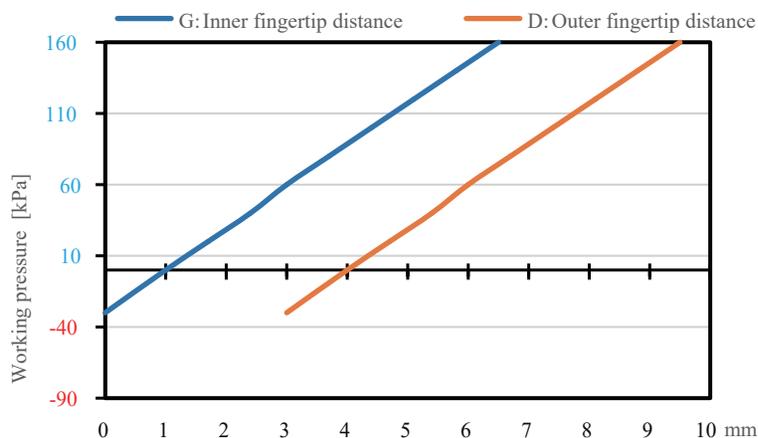
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



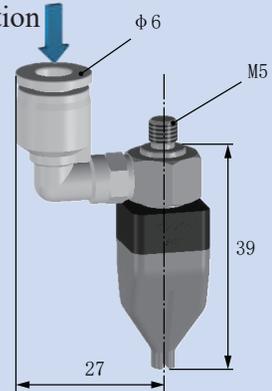
BMC Straight Fitting Installation



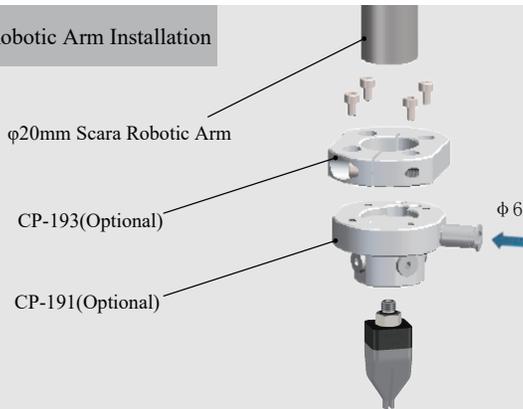
Scan to watch videos



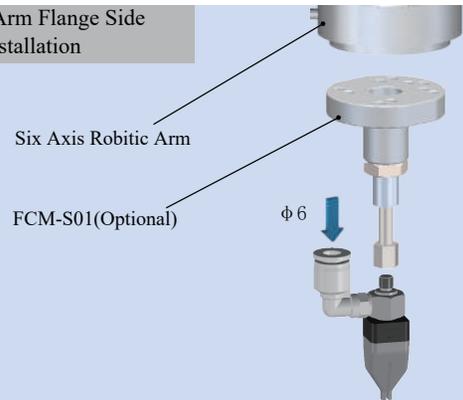
BML Side Fitting Installation



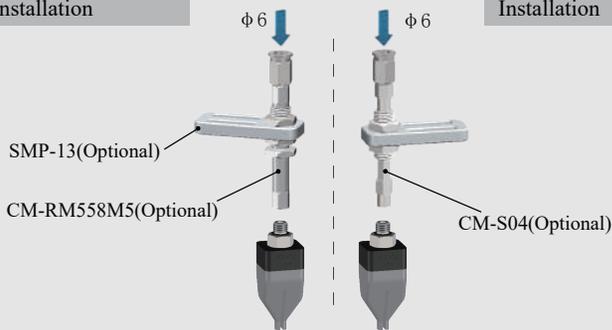
Scara Robotic Arm Installation



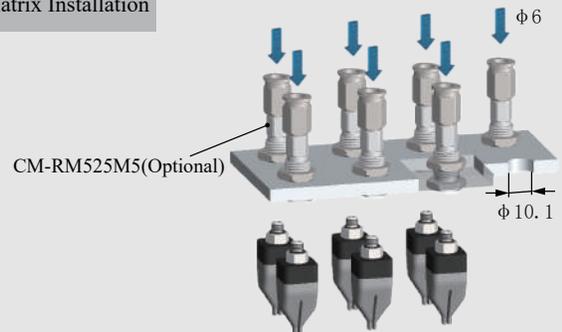
Robotic Arm Flange Side Fitting Installation



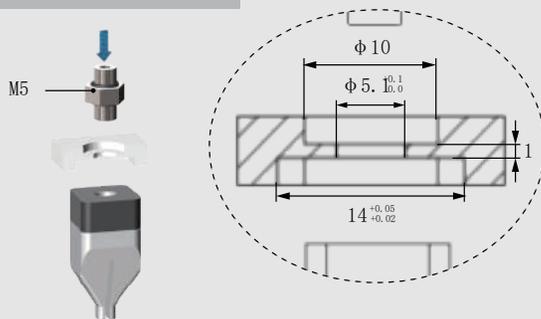
Rigid Connection Installation



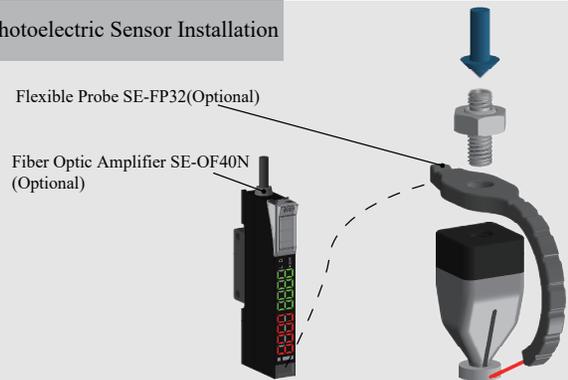
Matrix Installation



Precise Positioning Installation

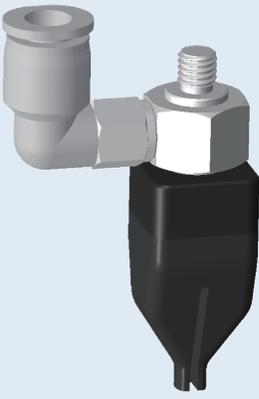


Photoelectric Sensor Installation



Product features

- Fingertips open under pressure state and clamp in a vacuum. Outer fingertip distance D can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- The Anti-static material meets the requirements of the national standard GB/T11210-2014, with a point-to-point resistance of 0.1-1000MΩ. The Anti-static Dust-free type [LHAS] is more suitable for dealing with workpieces that have dustproof requirements or are miniature and lightweight.

	BMC-20501[LH]/S Direct-through Anti-static H Type	BML-20501[LH]/S Side-through Anti-static H Type	
	BMC-20501[LHAS]/S Direct-through Anti-static Dust-free H Type	BML-20501[LHAS]/S Side-through Anti-static Dust-free H Type	
	Weight	6.6g	

B-20501[LH]/S

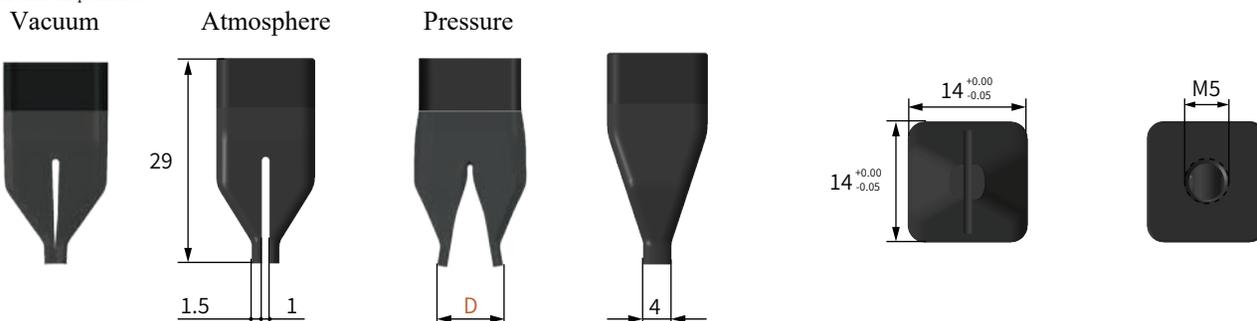
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	3-8mm	Internal gripping force	0-0.5N	Theoretical internal gripping load**	0-21g	Ideal internal gripping workpiece size*	5mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<160kPa

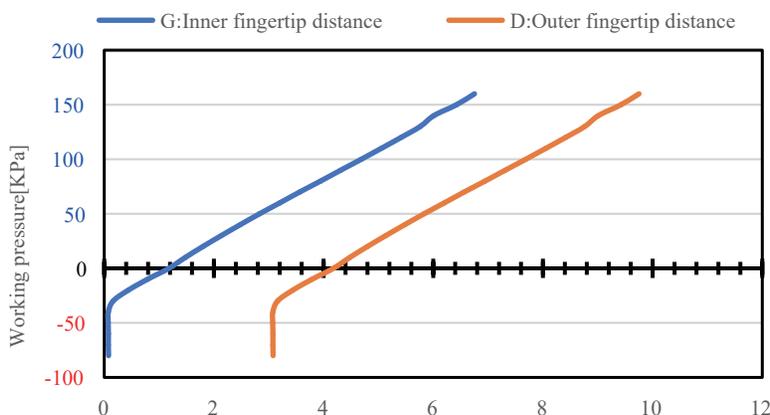
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

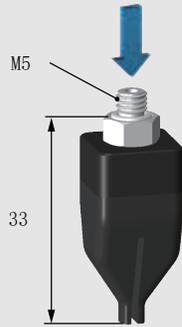
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



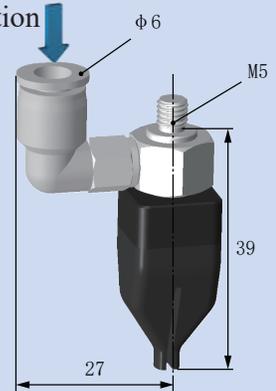
Pressure-Fingertip Distance deformation curve



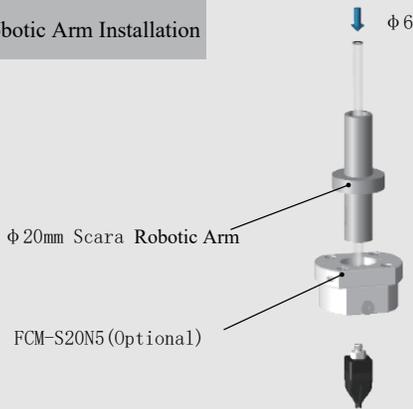
BMC Straight Fitting Installation



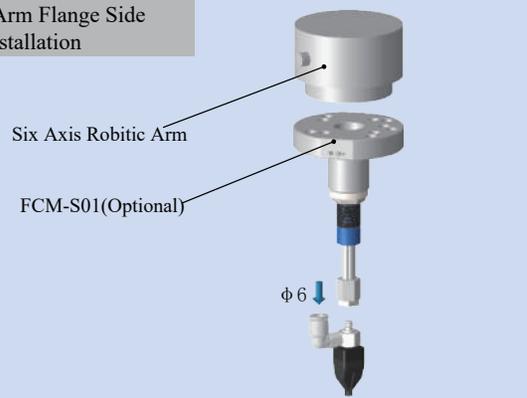
BML Side Fitting Installation



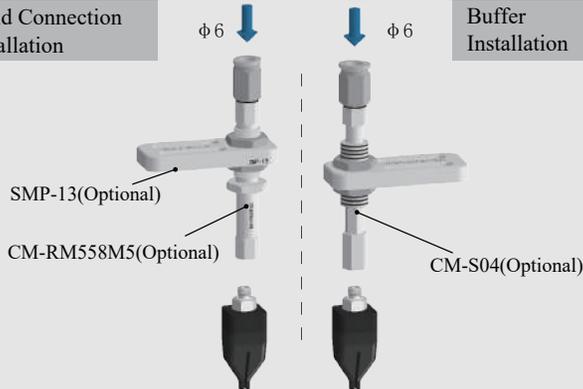
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation

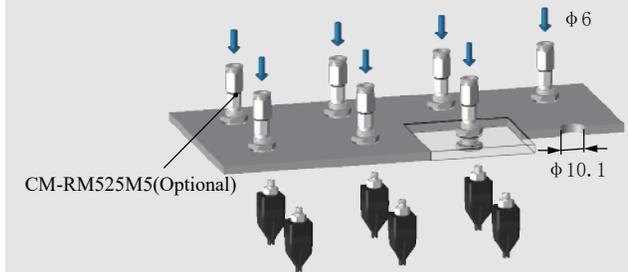


Rigid Connection Installation

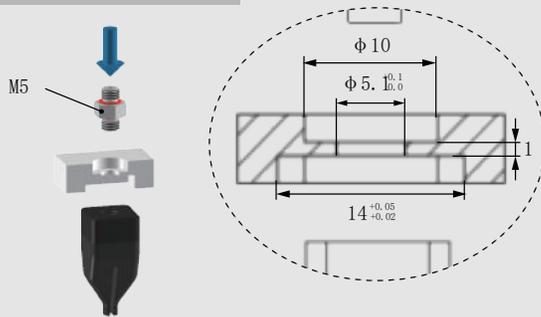


Buffer Installation

Matrix Installation



Precise Positioning Installation



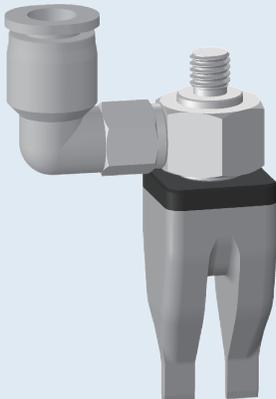
Photoelectric Sensor Installation



Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak materials divided into Strong materials [H] and Dust-free Strong material [HAS]. For workpieces with dustproof requirements, or miniature and lightweight that are prone to being adsorbed on the fingertips, Dust-free type [PAS] should be preferably selected.
- Food-grade material, can be directly used for grasping food.

B-21D204[H]/S

	BMC-21D204[H]/S Direct-through H Type	BML-21D204[H]/S Side-through H Type	
	BMC-21D204[HAS]/S Direct-through Dust-free H Type	BML-21D204[HAS]/S Side-through Dust-free H Type	
	Weight 5.9g	Weight 16.9g	

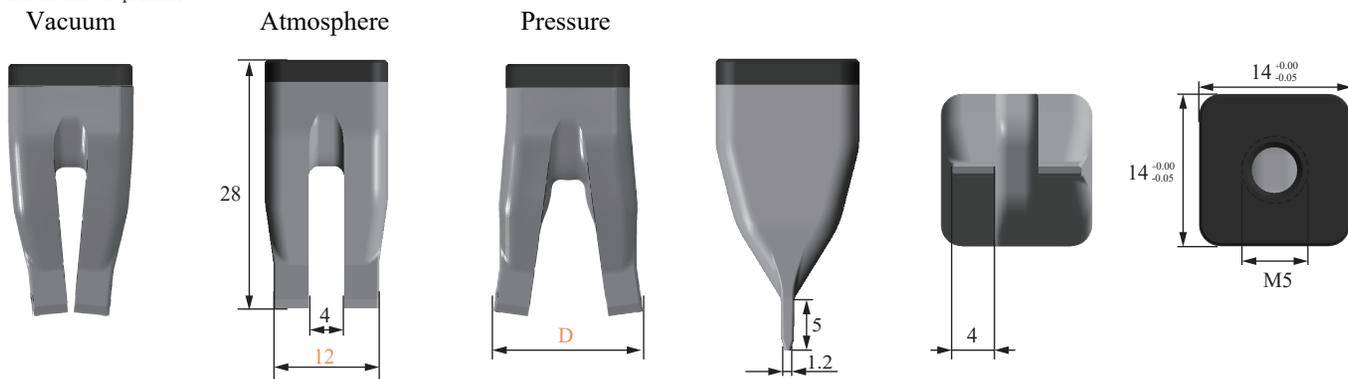
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	8-15mm	Internal gripping force	0-0.5N	Theoretical internal gripping load**	0-20g	Ideal internal gripping workpiece size*	16mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<180kPa

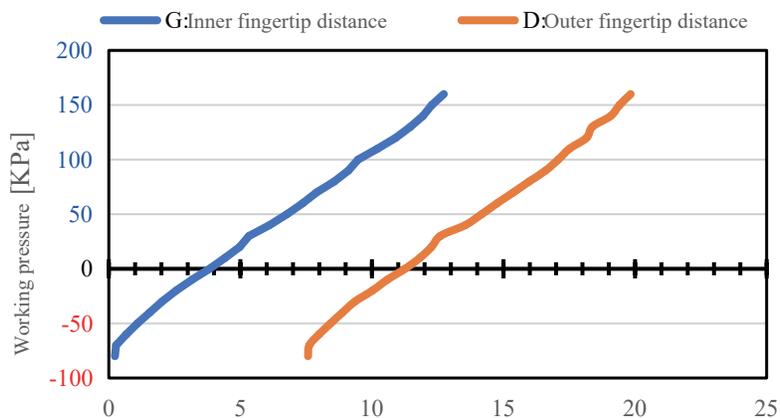
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

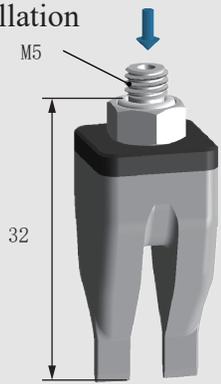
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



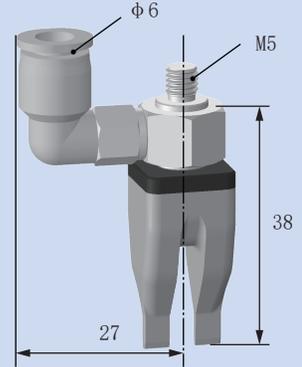
Pressure-Fingertip Distance deformation curve



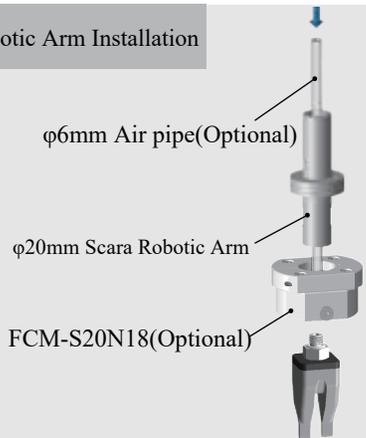
BMC Straight Fitting Installation



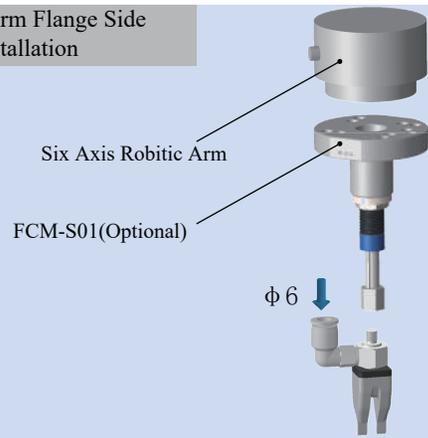
BML Side Fitting Installation



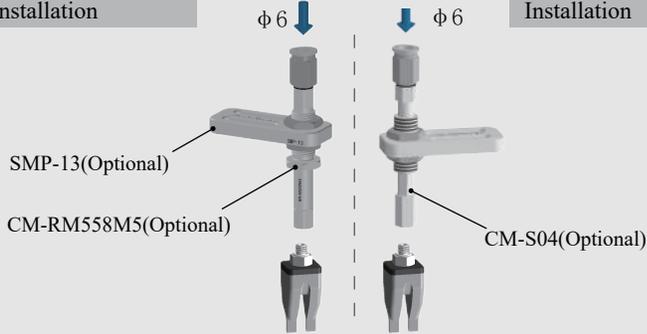
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation

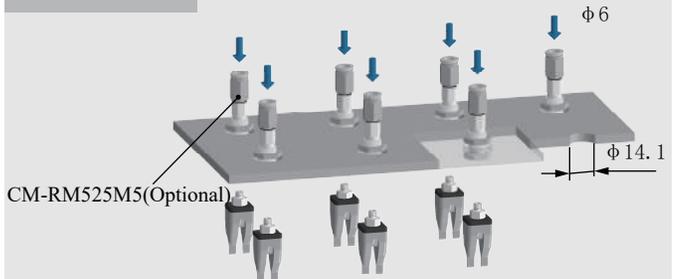


Rigid Connection Installation

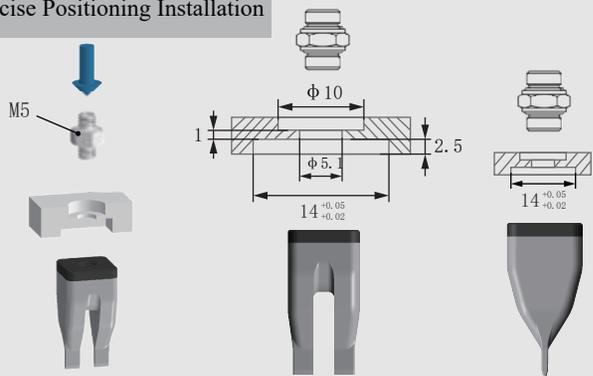


Buffer Installation

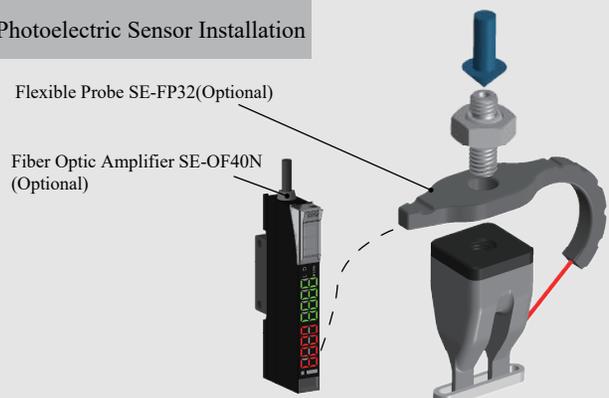
Matrix Installation



Precise Positioning Installation



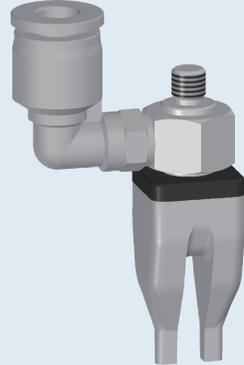
Photoelectric Sensor Installation



B-21D204[H]/S

Product features

- Fingertips open under pressure state and clamp in a vacuum. Outer fingertips distance D can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak materials divided into Strong materials [H] and Dust-free Strong material [HAS]. For workpieces with dustproof requirements, or miniature and lightweight that are prone to being adsorbed on the fingertips, Dust-free type [PAS] should be preferably selected.
- Food-grade material, can be directly used for grasping food.

	BMC-2102D5[H]/S Direct-through H Type	BML-2102D5[H]/S Side-through H Type	
	BMC-2102D5[HAS]/S Direct-through Dust-free H Type	BML-2102D5[HAS]/S Side-through Dust-free H Type	
Weight		Weight	
6g		15.4g	

B-2102D5[H]/S

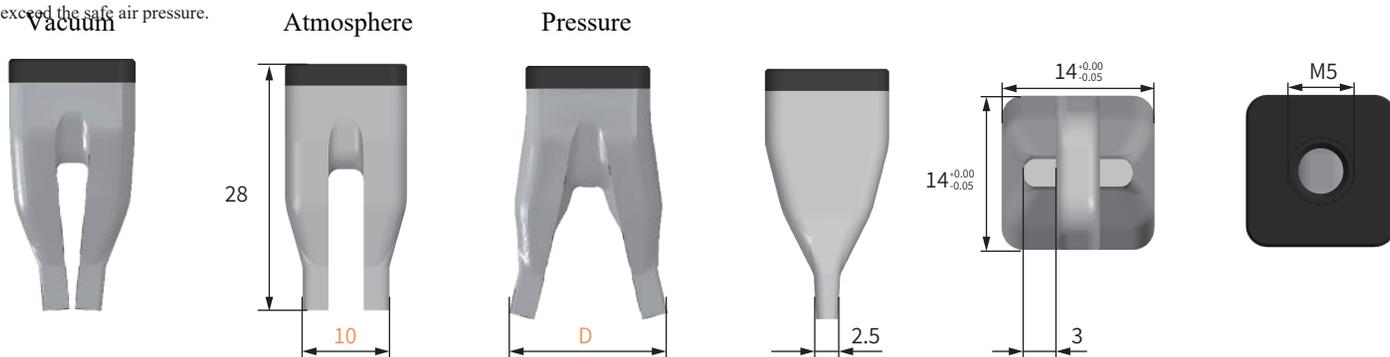
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	8-15mm	Internal gripping force	0-0.9N	Theoretical internal gripping load**	0-34g	Ideal internal gripping workpiece size*	10mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<180kPa

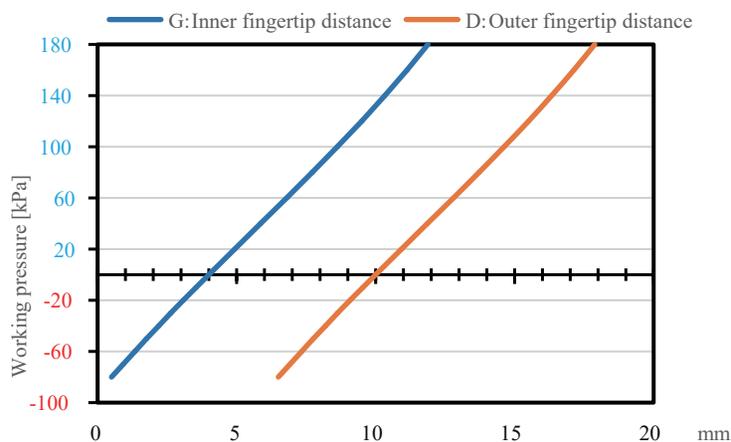
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

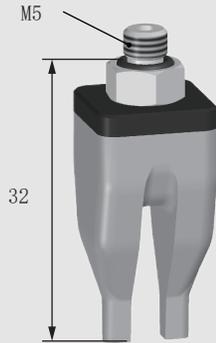
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



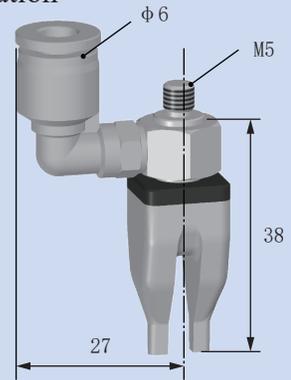
Pressure-Fingertip Distance deformation curve



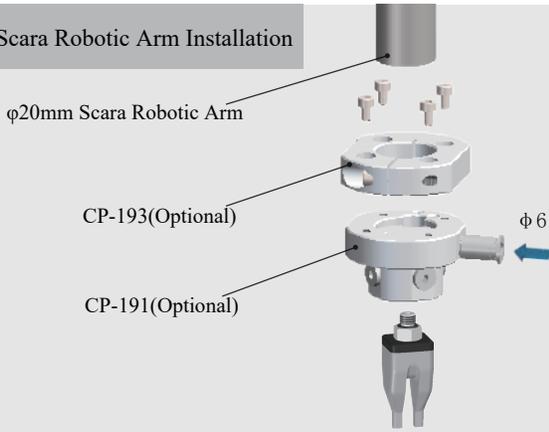
BMC Straight Fitting Installation



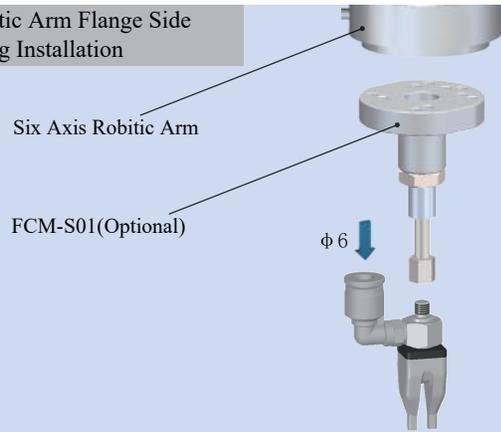
BML Side Fitting Installation



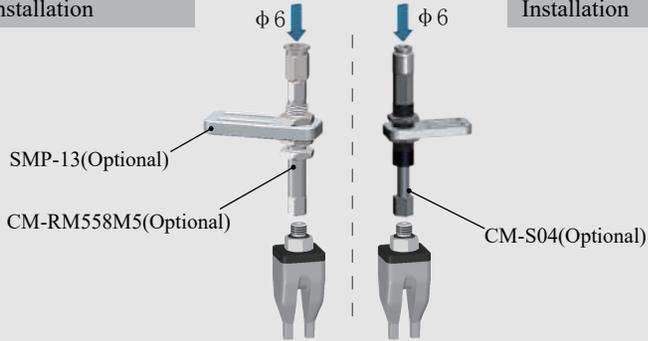
Scara Robotic Arm Installation



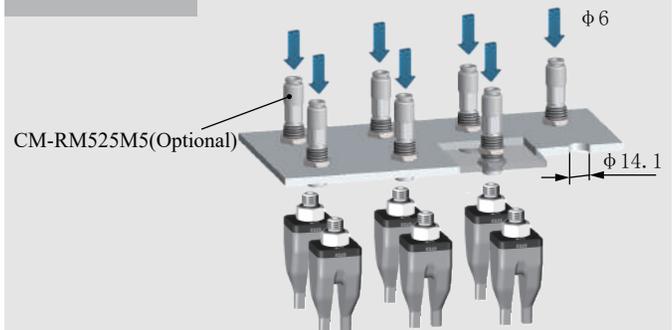
Robotic Arm Flange Side Fitting Installation



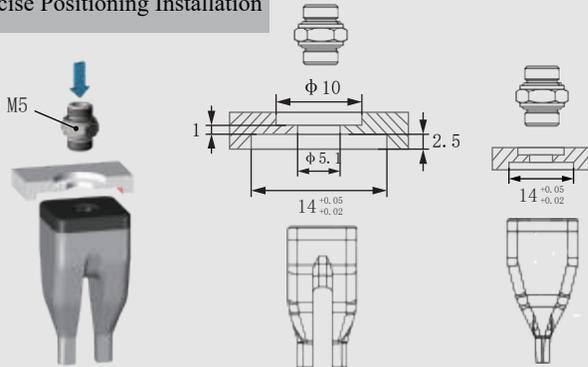
Rigid Connection Installation



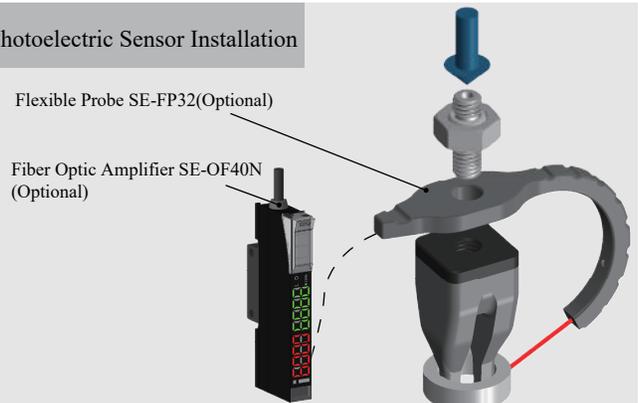
Matrix Installation



Precise Positioning Installation



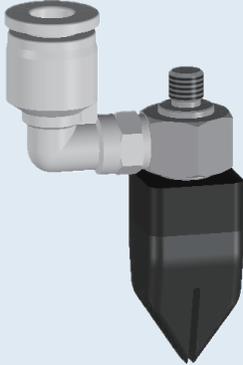
Photoelectric Sensor Installation



Product features

- The single-finger beak can be modularly combined. Fingertip opens under pressure and clamps in a vacuum. It is recommended to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.
- Food-grade material, can be directly used for grasping food.

B-2V0401[P]/S

	BMC-2V0401[P]/S Direct-through P Type	BML-2V0401[P]/S Side-through P Type			
	BMC-2V0401[PAS]/S Direct-through Dust-free P Type	BML-2V0401[PAS]/S Side-through Dust-free P Type			
Weight		6.9g	Weight		18.4g

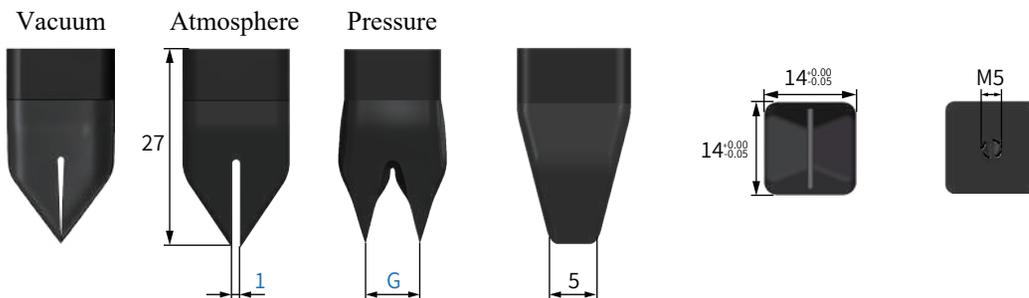
Parameter

Gripping range	0-3mm	Gripping force	0-0.4N	Theoretical gripping load**	0-17g	Ideal gripping workpiece size*	1mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

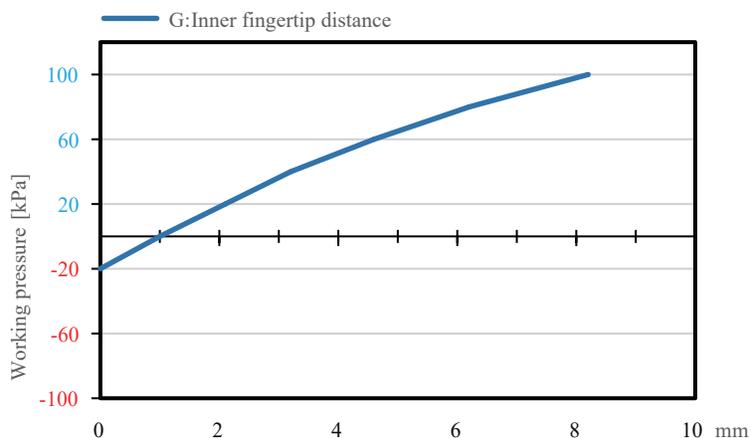
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



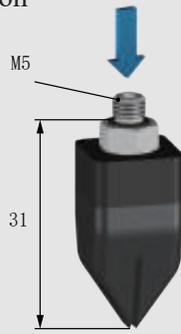
Pressure-Fingertip Distance deformation curve



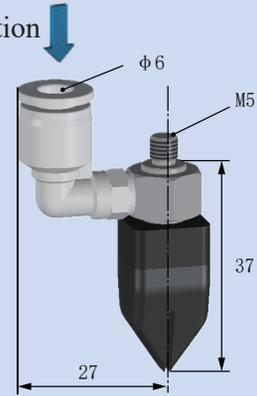
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

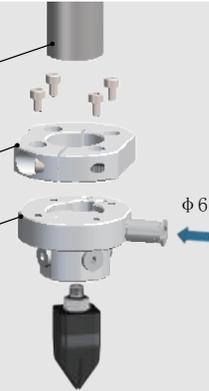


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

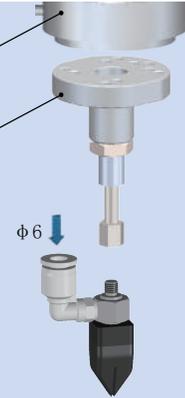
CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(Optional)



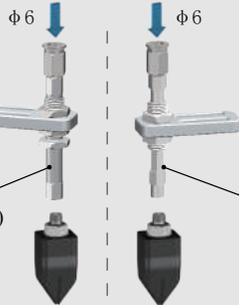
Robotic Arm Flange Side Fitting Installation

Buffer Installation

SMP-13(Optional)

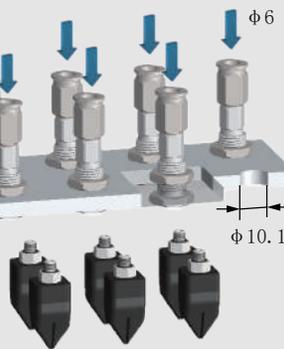
CM-RM558M5(Optional)

CM-S04(Optional)

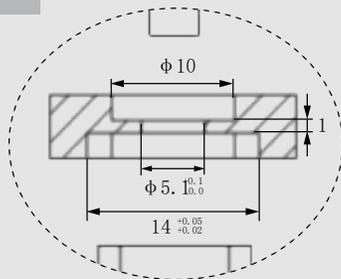


Matrix Installation

CM-RM525M5(Optional)



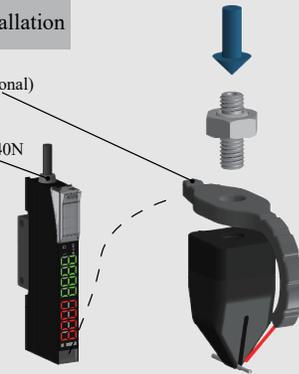
Precise Positioning Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP32(Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

	BMC-2NH1107[P]/S Direct-through P Type	BML-2NH1107[P]/S Side-through P Type	
	BMC-2NH1107[PAS]/S Direct-through Dust-free P Type	BML-2NH1107[PAS]/S Side-through Dust-free P Type	
	Weight 4.7g	Weight 15g	

B-2NH1107[P]/S

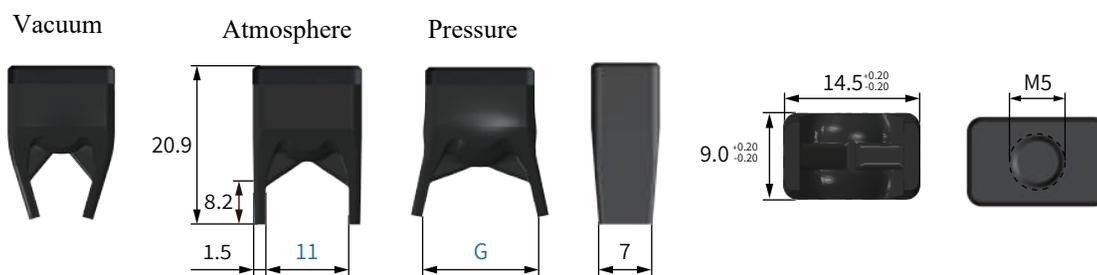
Parameter

Gripping range	8-13mm	Gripping force	0-0.6N	Theoretical gripping load**	0-26g	Ideal gripping workpiece size*	11mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

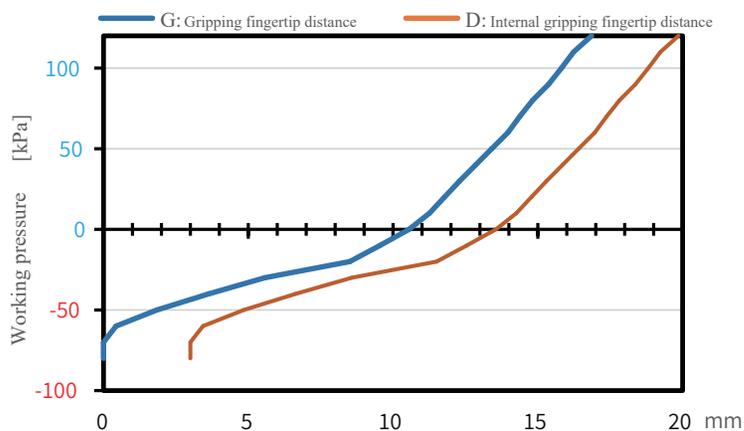
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

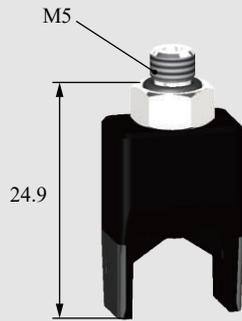
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



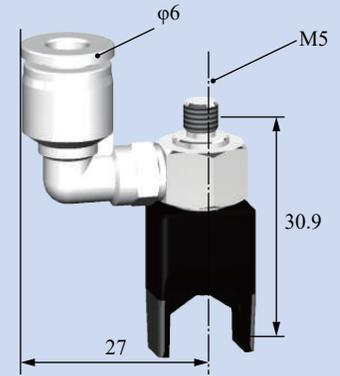
Pressure-Fingertip Distance deformation curve



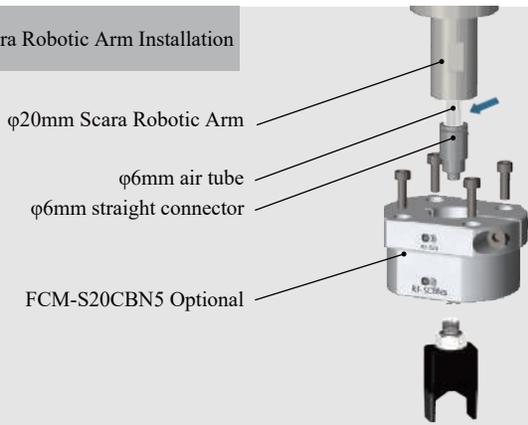
BMC Straight Fitting Installation



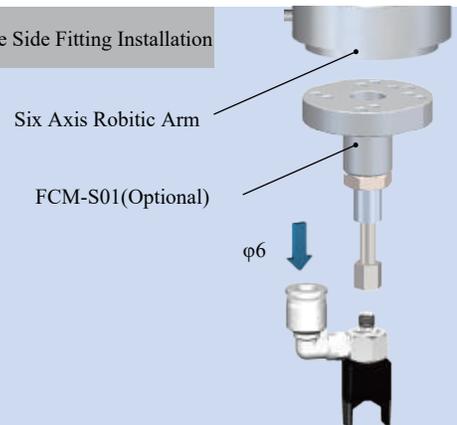
BML Side Fitting Installation



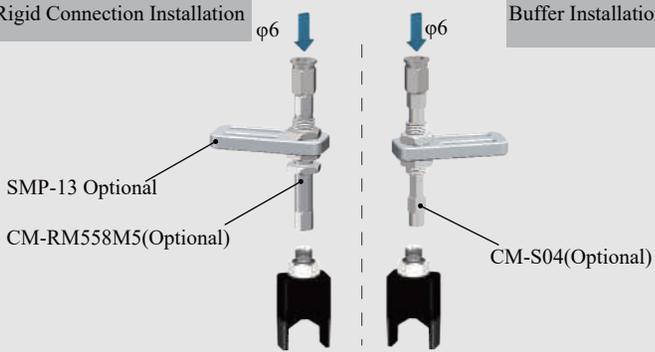
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation

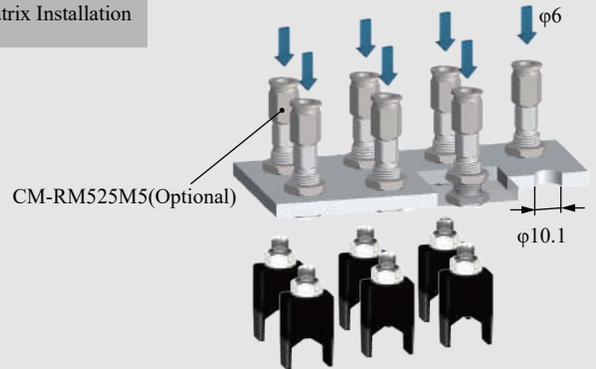


Rigid Connection Installation

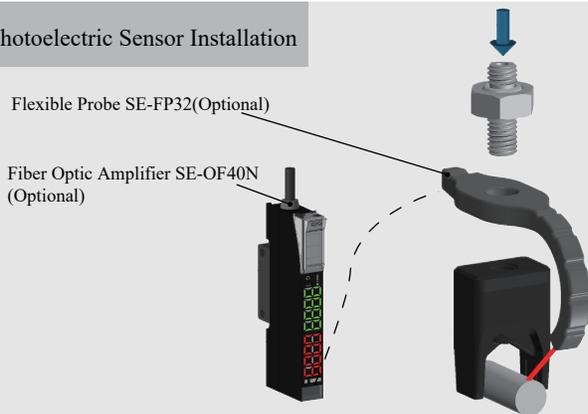


Buffer Installation

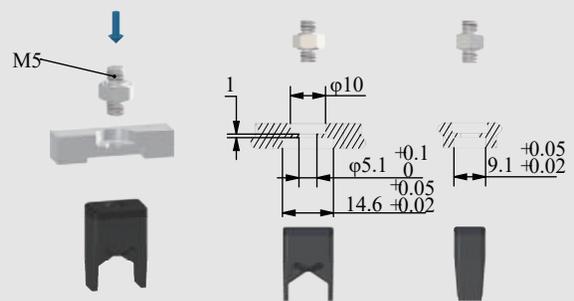
Matrix Installation



Photoelectric Sensor Installation



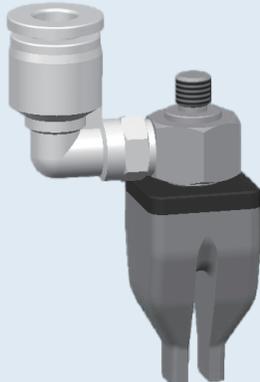
Photoelectric Sensor Installation



B-2NH1107[P]/S

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-20603[H]/S Direct-through H Type	BML-20603[H]/S Side-through H Type		
	BMC-20603[HAS]/S Direct-through Dust-free H Type	BML-20603[HAS]/S Side-through Dust-free H Type		
	Weight	7.3g	Weight	18.8g

B-20603[H]/S

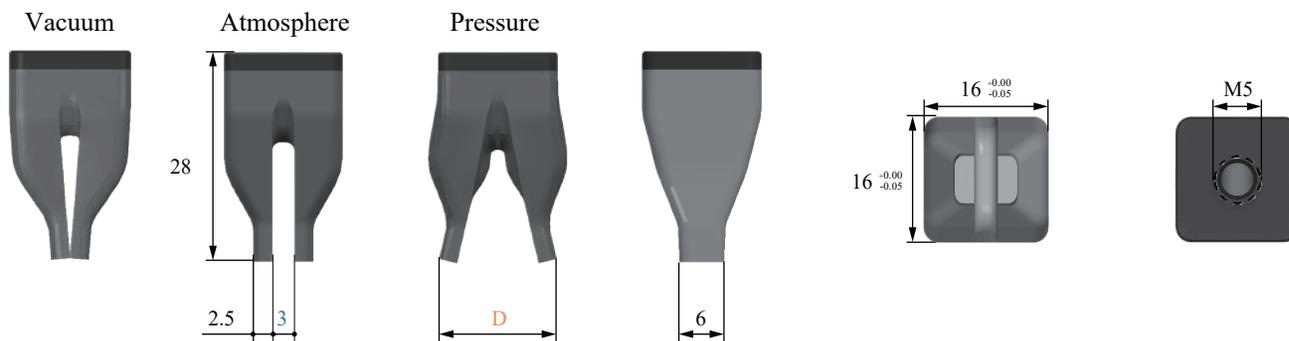
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	6-16mm	Internal gripping force	0-1.7N	Theoretical internal gripping load**	0-70g	Ideal internal gripping workpiece size*	9mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<180kPa

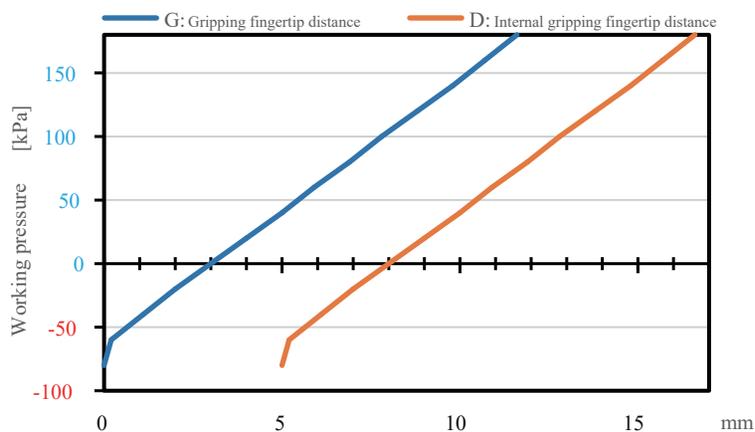
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



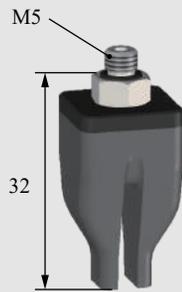
Pressure-Fingertip Distance deformation curve



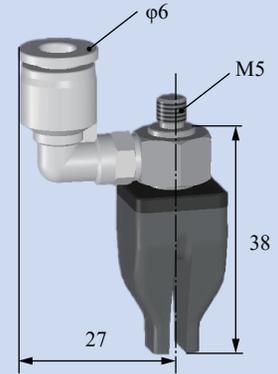
BMC Straight Fitting Installation



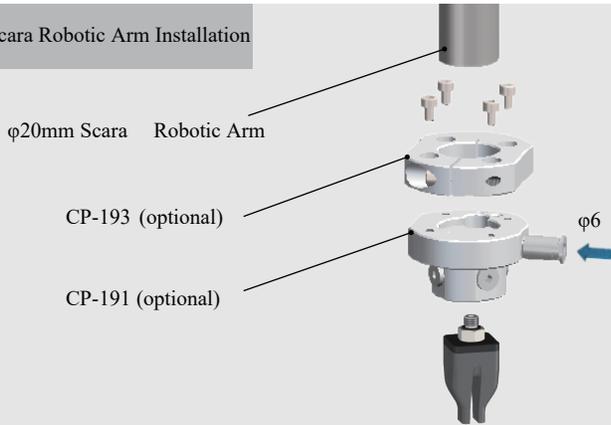
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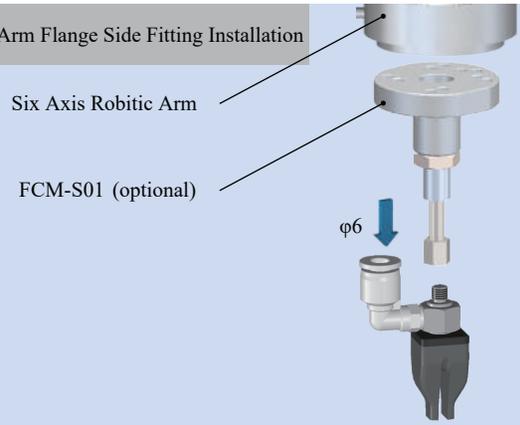
BML Side Fitting Installation



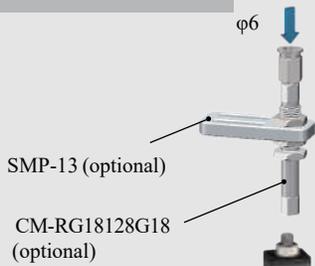
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



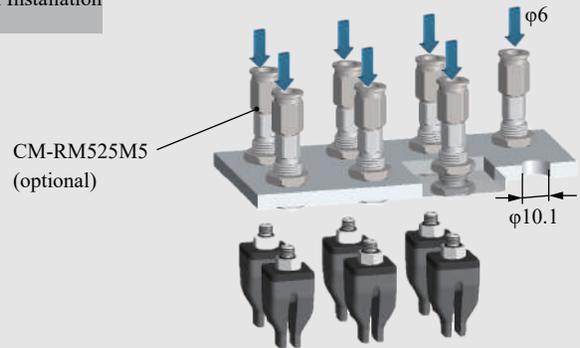
Rigid Connection Installation



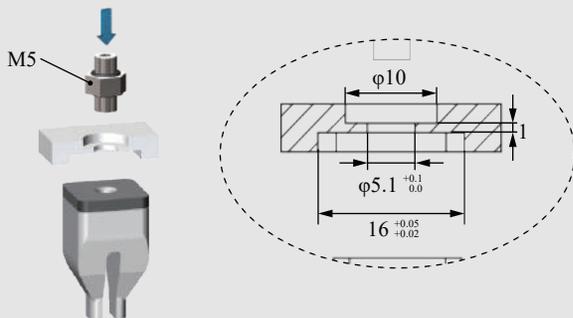
Buffer Installation



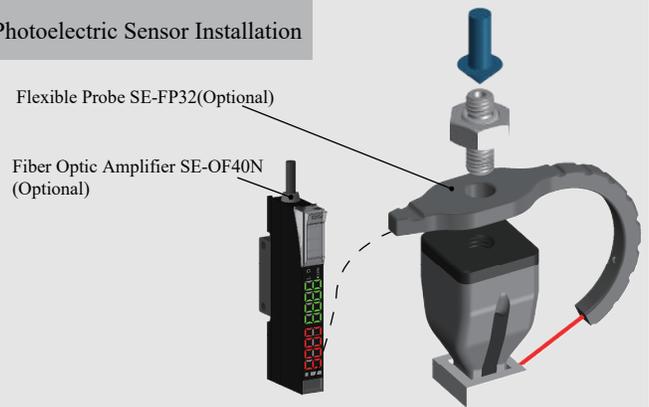
Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation

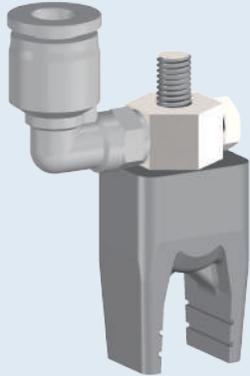


B-20603(H)/S

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

B-2G1211[H]

	BMC-2G1211[H] Direct-through H Type	BML-2G1211[H] Side-through H Type	
	BMC-2G1211[HAS] Direct-through Dust-free H Type	BML-2G1211[HAS] Side-through Dust-free H Type	
	Weight 11.3g	Weight 19.7g	

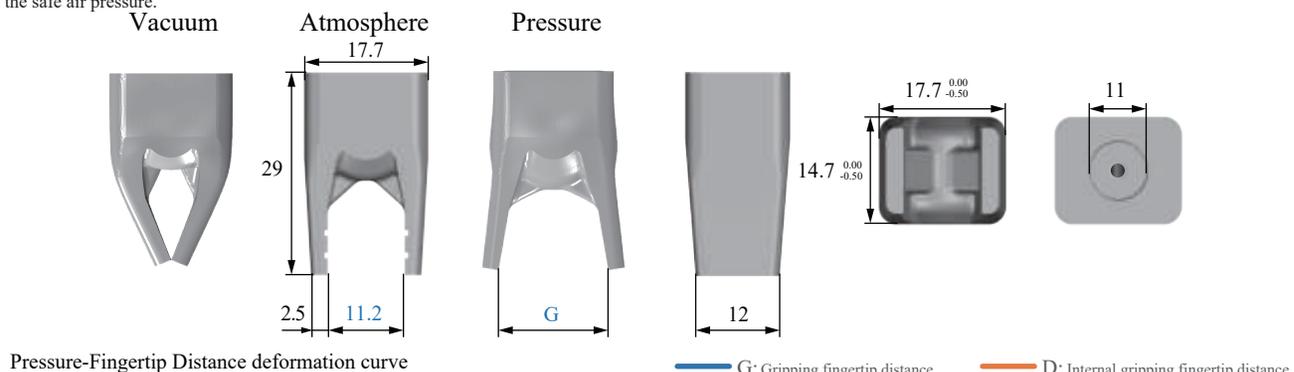
Parameter

Gripping range	0-13.3mm	Gripping force	0-1.5N	Theoretical gripping load**	0-59g	Ideal gripping workpiece size*	11.2mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<160kPa

*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

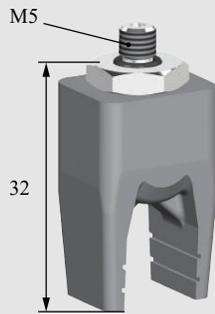
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



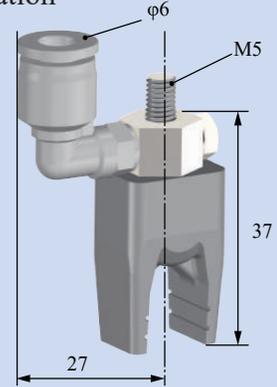
BMC Straight Fitting Installation



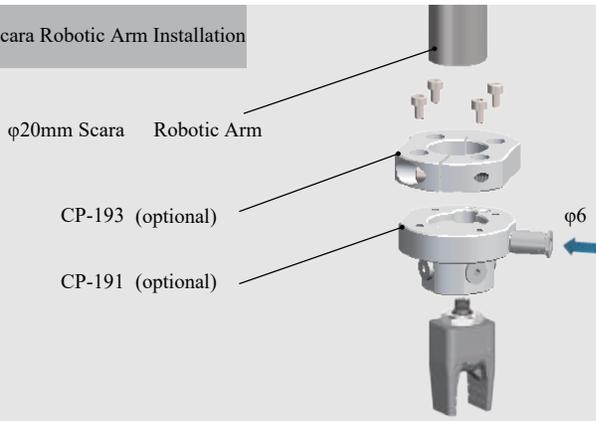
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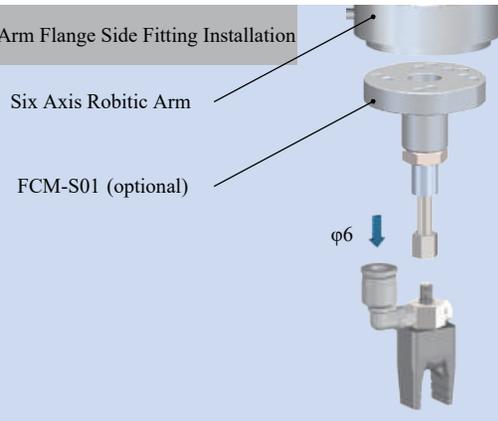
BML Side Fitting Installation



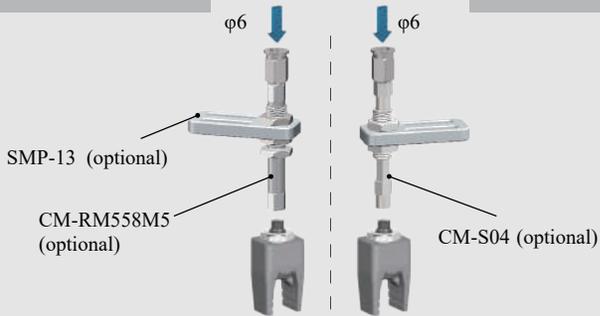
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation

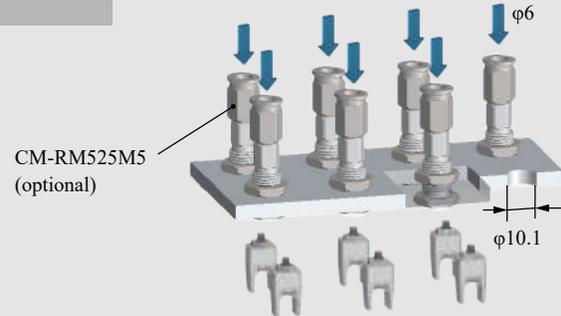


Rigid Connection Installation

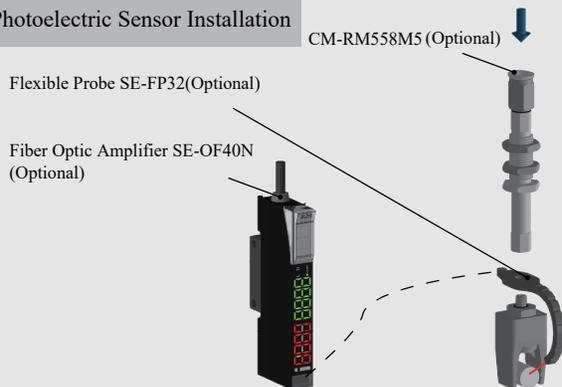


Buffer Installation

Matrix Installation



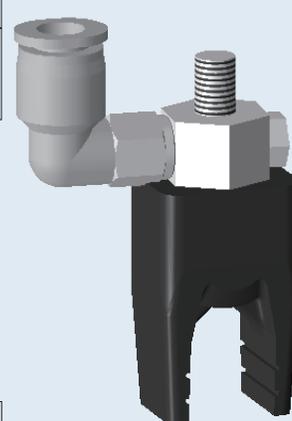
Photoelectric Sensor Installation



Product features

- Fingertips open under pressure state and clamp in a vacuum. Outer fingertips distance D can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- The Anti-static material meets the requirements of the national standard GB/T11210-2014, with a point-to-point resistance of 0.1-1000MΩ. The Anti-static Dust-free type [LHAS] is more suitable for dealing with workpieces that have dustproof requirements or are miniature and lightweight.

B-2G1211[LH]

	BMC-2G1211[LH] Direct-through Anti-static H Type	BML-2G1211[LH] Side-through Anti-static H Type	
	BMC-2G1211[LHAS] Direct-through Anti-static Dust-free H Type	BML-2G1211[LHAS] Side-through Anti-static Dust-free H Type	
Weight	11.3g	Weight	19.7g

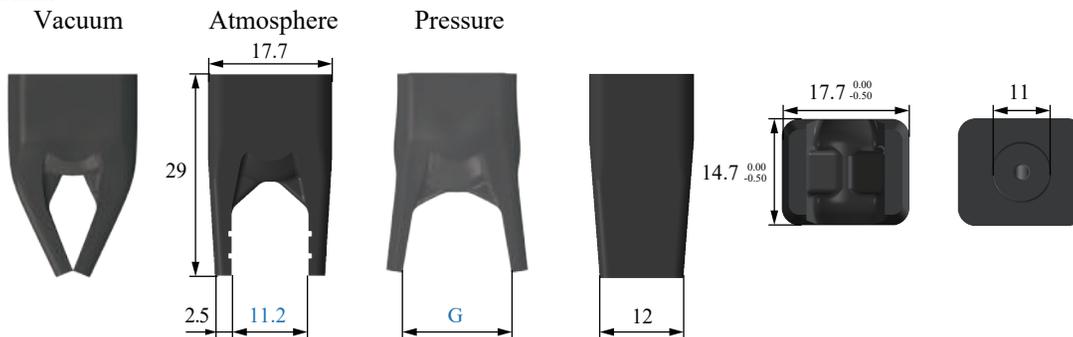
Parameter

Gripping range	0-13.3mm	Gripping force	0-1.1N	Theoretical gripping load**	0-44g	Ideal gripping workpiece size*	11.2mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<140kPa

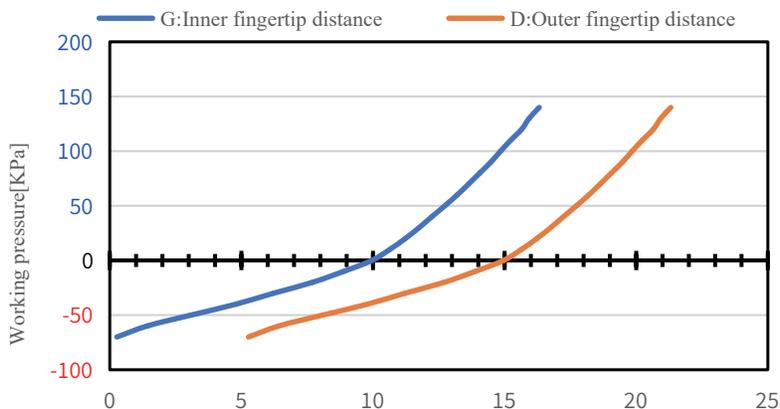
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

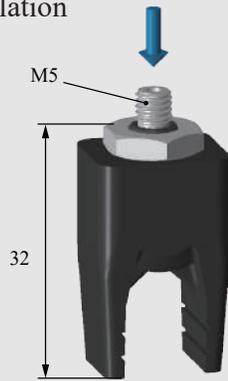
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



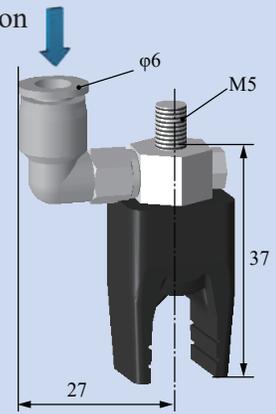
Pressure-Fingertip Distance deformation curve



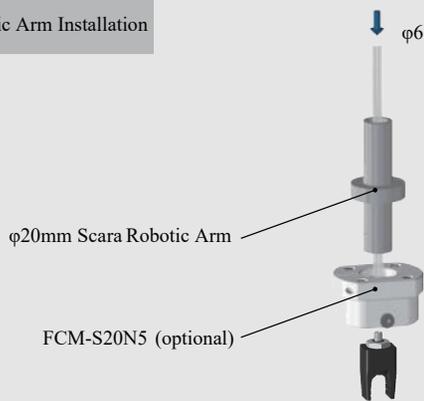
BMC Straight Fitting Installation



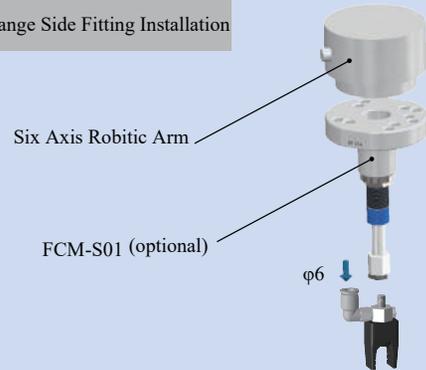
BML Side Fitting Installation



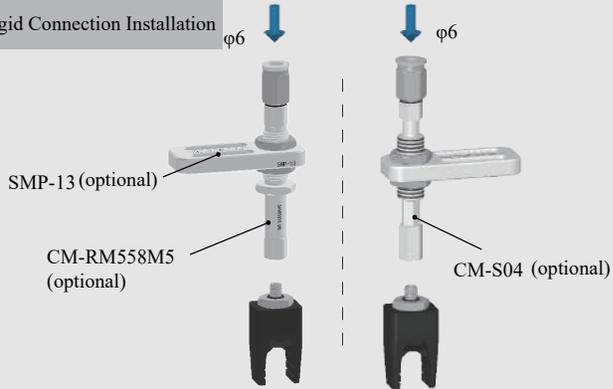
Scara Robotic Arm Installation



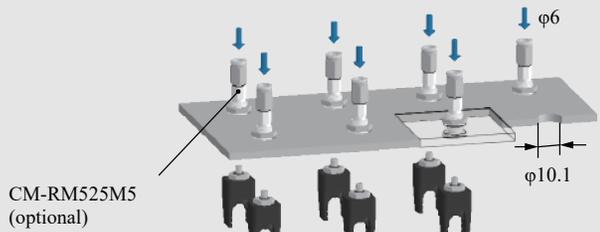
Robotic Arm Flange Side Fitting Installation



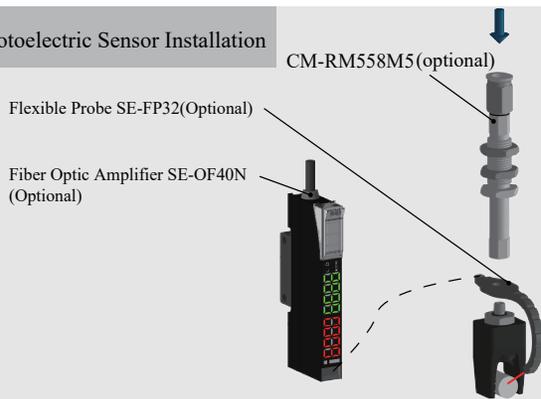
Rigid Connection Installation



Matrix Installation

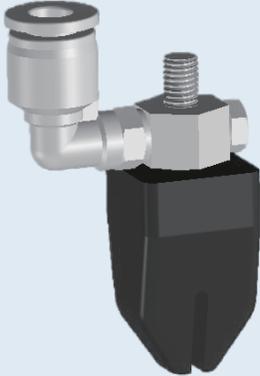


Photoelectric Sensor Installation



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

	BMC-20802[P] Direct-through P Type	BML-20802[P] Side-through P Type		
	BMC-20802[PAS] Direct-through Dust-free P Type	BML-20802[PAS] Side-through Dust-free P Type		
	Weight	13.1g	Weight	21.5g

B-20802[P]

Parameter

Gripping range	0-4mm	Gripping force	0-0.5N	Theoretical gripping load**	0-18g	Ideal gripping workpiece size*	2mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

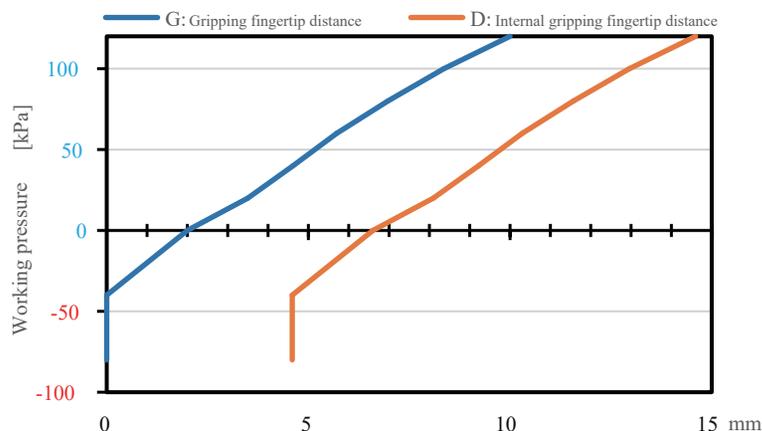
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



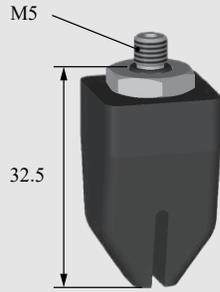
Pressure-Fingertip Distance deformation curve



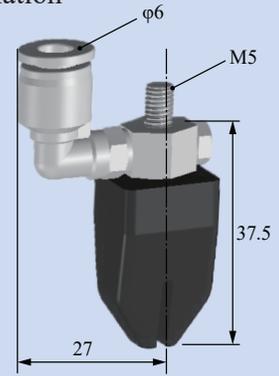
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

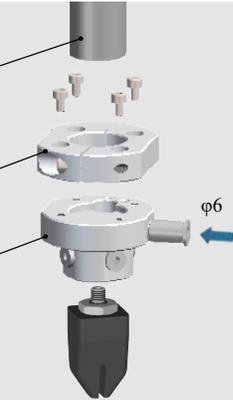


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193 (optional)

CP-191 (optional)

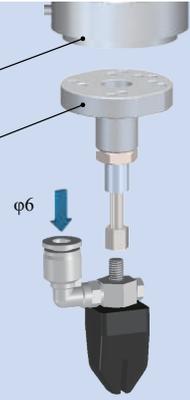


Robotic Arm Flange Side Fitting Installation

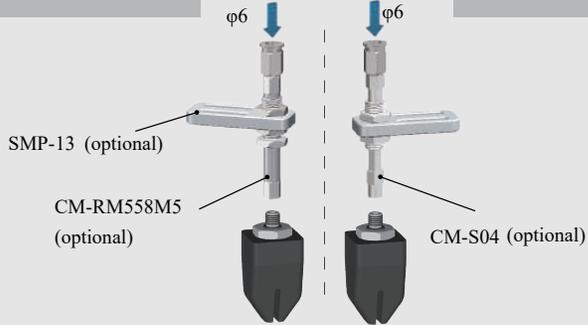
Six Axis Robotic Arm

FCM-S01 (optional)

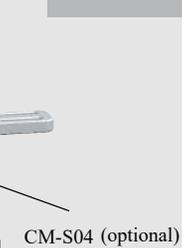
φ6



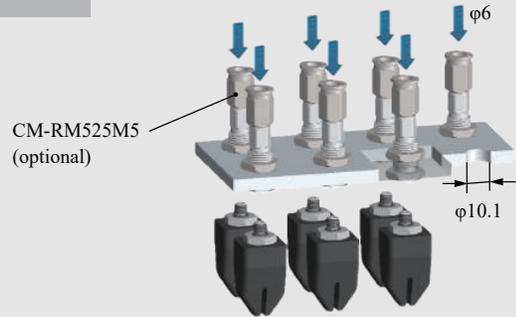
Rigid Connection Installation



Buffer Installation



Matrix Installation

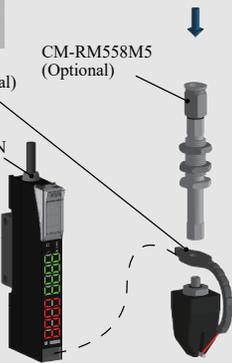


Photoelectric Sensor Installation

Flexible Probe SE-FP32(Optional)

Fiber Optic Amplifier SE-OF40N (Optional)

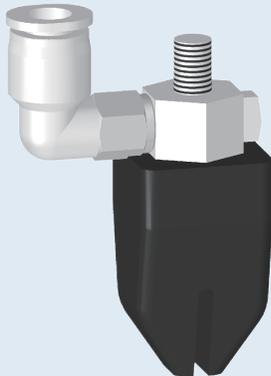
CM-RM558M5 (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Anti-static material meets the national standard GB/T11210-2014, point-to-point resistance 0.1-1000MΩ requirements. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, anti-static dust-free traceless material [LPAS] is preferred.

B-20802[LP]

	BMC-20802[LP] Direct-through Anti-static P Type	BML-20802[LP] Side-through P Type		
	BMC-20802[LP] Direct-through Anti-static Dust-free P Type	BML-20802[LP] Side-through Anti-static Dust-free P Type		
	Weight	12.6g	Weight	21.3g

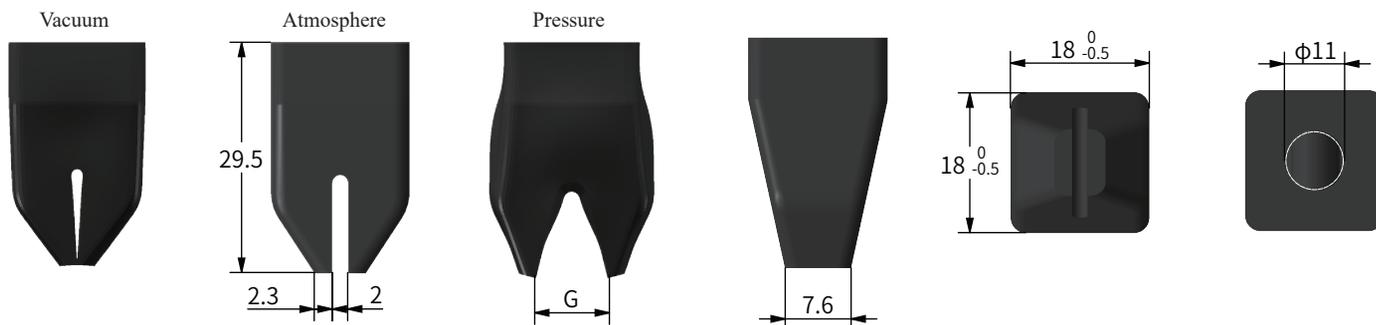
Parameter

Gripping range	0-4mm	Gripping force	0-0.5N	Theoretical gripping load**	0-18g	Ideal gripping workpiece size*	2mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

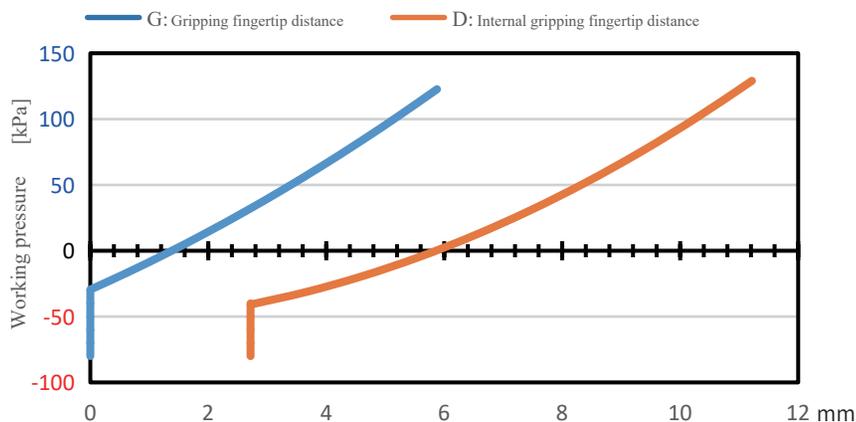
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.

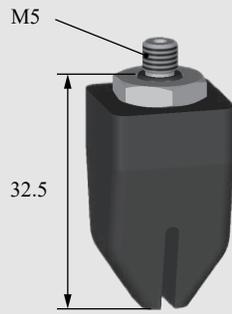


Pressure-Fingertip Distance deformation curve

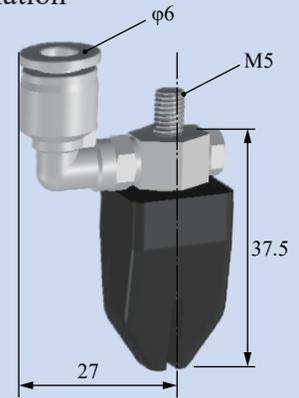


Installation

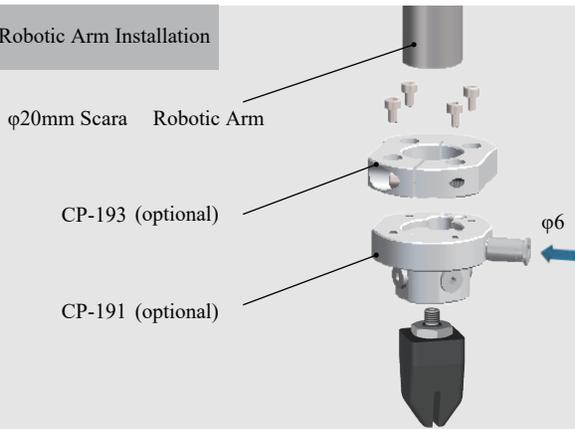
BMC Straight Fitting Installation



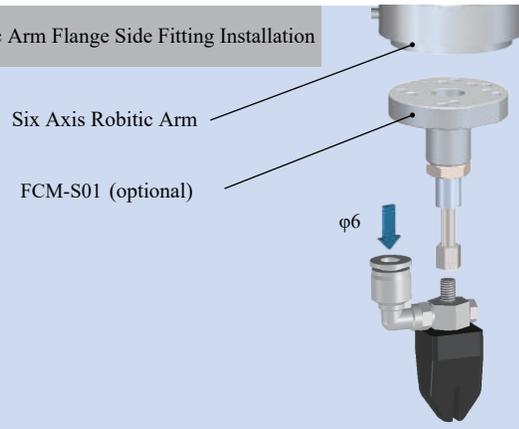
BML Side Fitting Installation



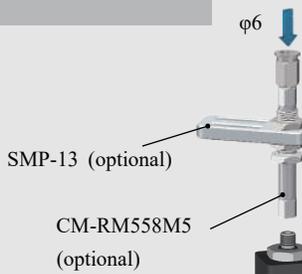
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



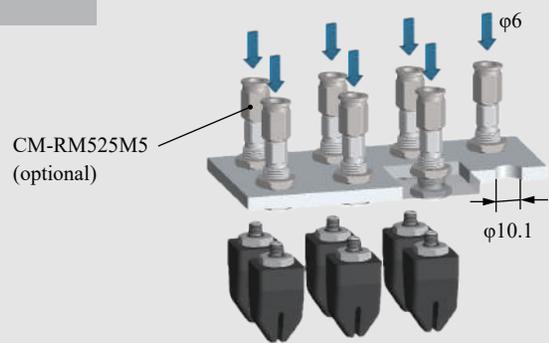
Rigid Connection Installation



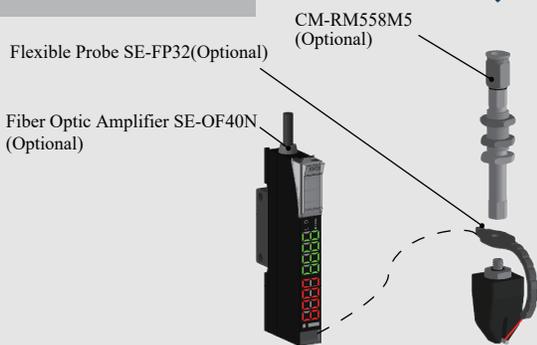
Buffer Installation



Matrix Installation



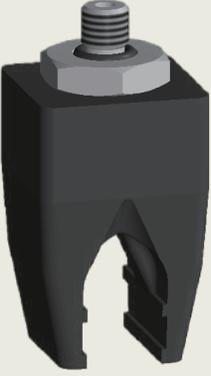
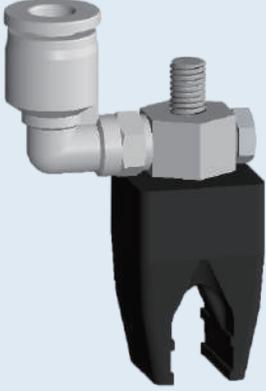
Photoelectric Sensor Installation



B-20802[LP]

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

	BMC-21608[P] Direct-through P Type	BML-21608[P] Side-through P Type		
	BMC-21608[PAS] Direct-through Dust-free P Type	BML-21608[PAS] Side-through Dust-free P Type		
	Weight	13g	Weight	21.4g

B-21608[P]

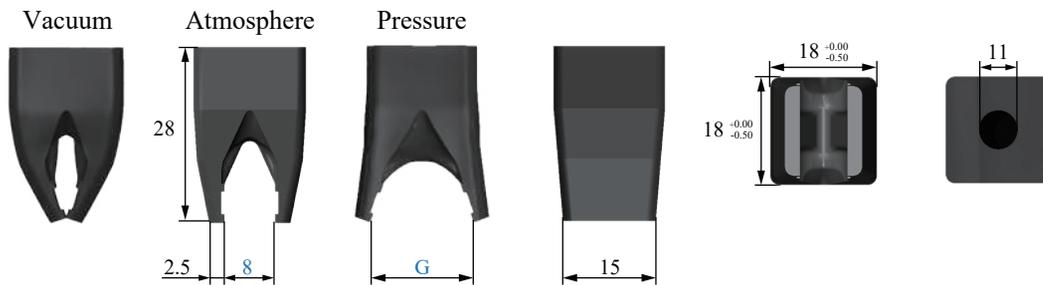
Parameter

Gripping range	0-12mm	Gripping force	0-1N	Theoretical gripping load**	0-38g	Ideal gripping workpiece size*	8mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

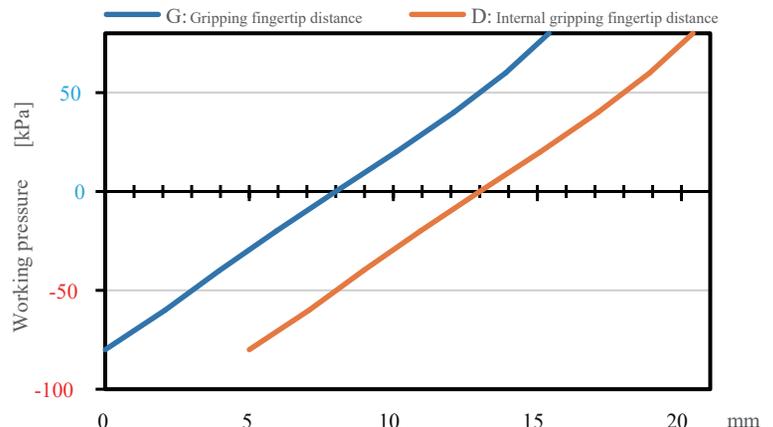
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



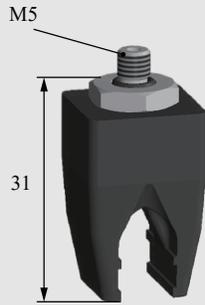
Pressure-Fingertip Distance deformation curve



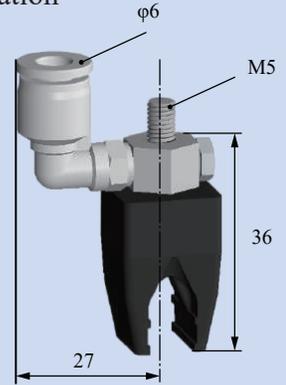
BMC Straight Fitting Installation



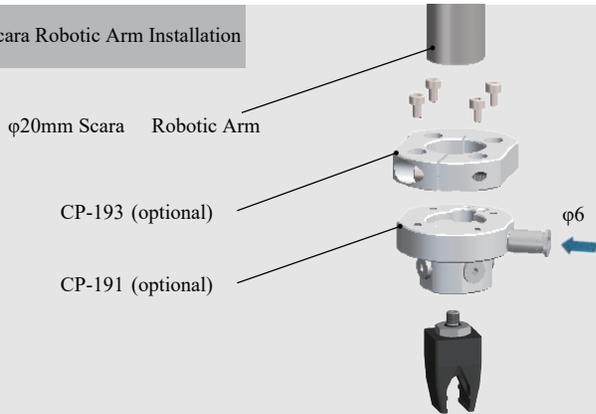
Scan to watch videos



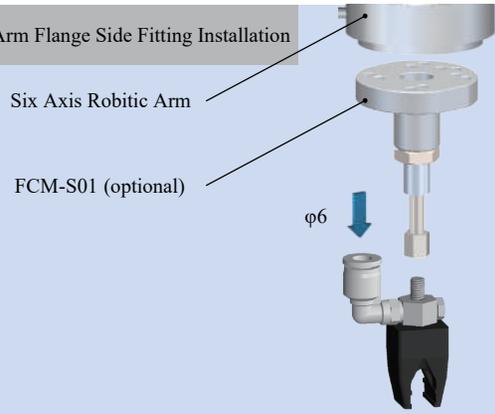
BML Side Fitting Installation



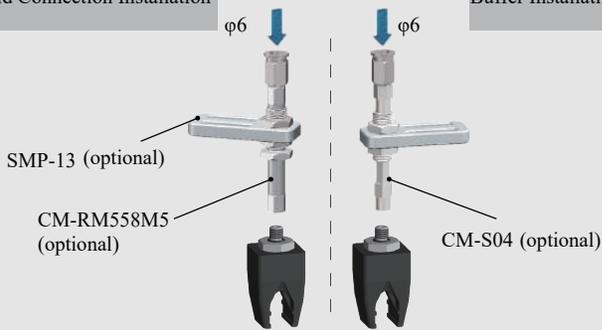
Scara Robotic Arm Installation



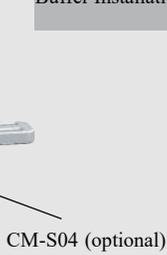
Robotic Arm Flange Side Fitting Installation



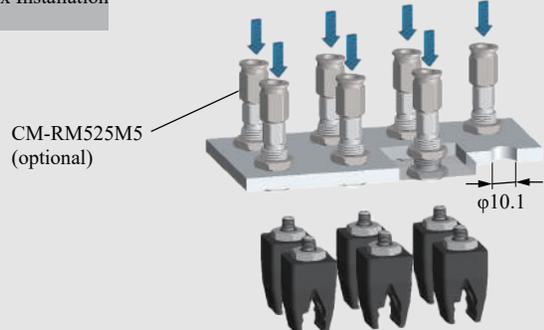
Rigid Connection Installation



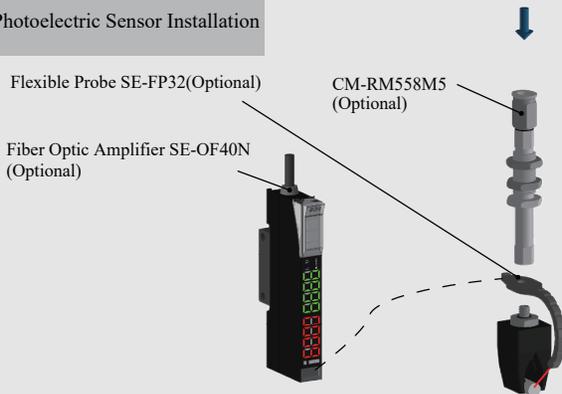
Buffer Installation



Matrix Installation

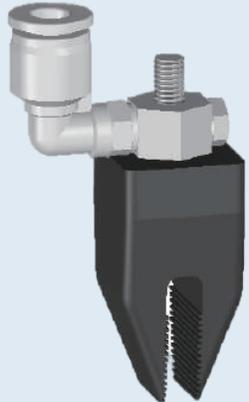


Photoelectric Sensor Installation



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

	BMC-20005V[P] Direct-through P Type	BML-20005V[P] Side-through P Type		
	BMC-20005V[PAS] Direct-through Dust-free P Type	BML-20005V[PAS] Side-through Dust-free P Type		
	Weight	16.9g	Weight	25.6g

B-20005V[P]

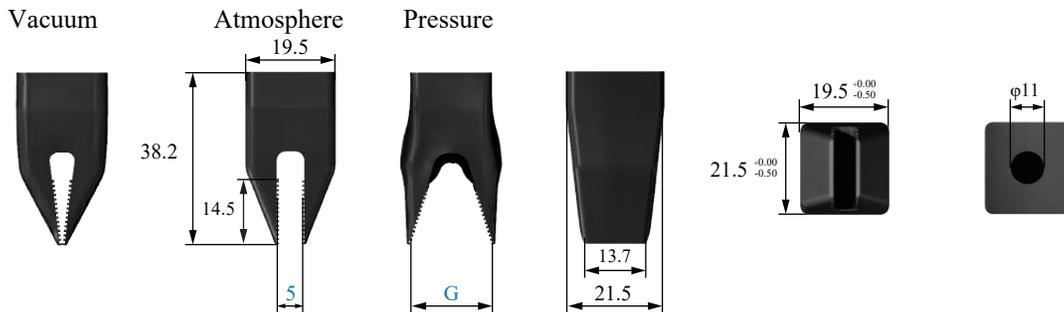
Parameter

Gripping range	0-15mm	Gripping force	0-1.2N	Theoretical gripping load**	0-5g	Ideal gripping workpiece size*	5mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

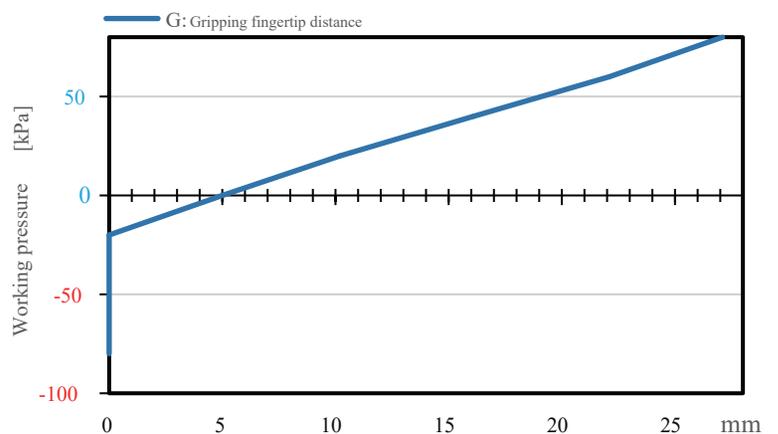
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



BMC Straight Fitting Installation

Scan to watch videos

M5

44.2

BML Side Fitting Installation

φ6

M5

48.2

27

Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193 (optional)

CP-191 (optional)

φ6

Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01 (optional)

φ6

Rigid Connection Installation

φ6

SMP-13 (optional)

CM-RM558M5 (optional)

Buffer Installation

φ6

CM-S04 (optional)

Matrix Installation

φ6

CM-RM525M5 (optional)

φ10.1

Photoelectric Sensor Installation

CM-RM558M5 (optional)

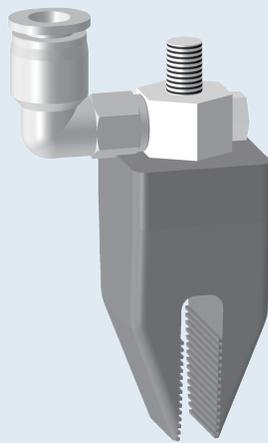
Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

B-20005V[H]

	BMC-20005V[H] Direct-through H Type	BML-20005V[H] Side-through H Type		
	BMC-20005V[H] Direct-through Dust-free H Type	BML-20005V[H] Side-through Dust-free H Type		
	Weight	16.9g	Weight	25.6g

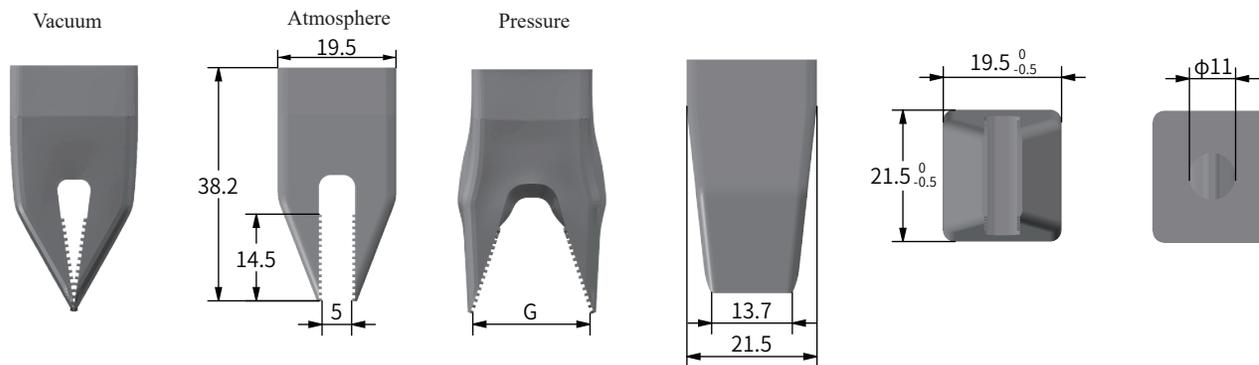
Parameter

Gripping range	0-15mm	Gripping force	0-2.5N	Theoretical gripping load**	0-99 g	Ideal gripping workpiece size*	5mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<160kPa

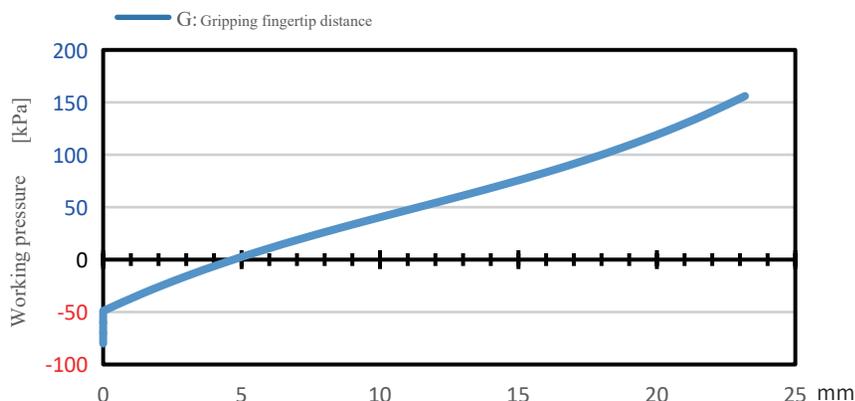
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

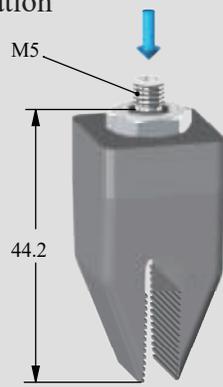
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



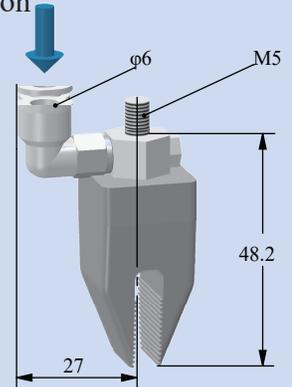
Pressure-Fingertip Distance deformation curve



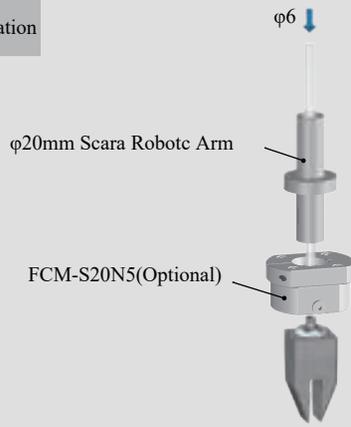
BMC Straight Fitting Installation



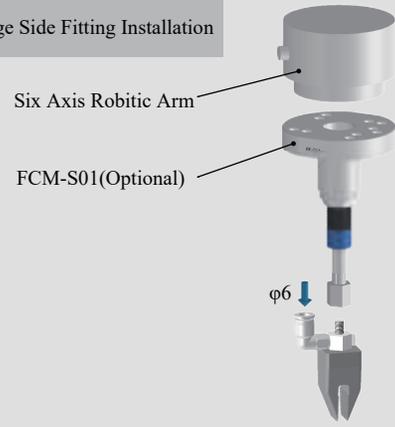
BML Side Fitting Installation



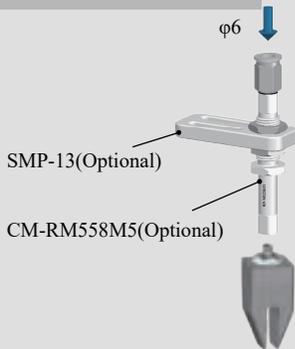
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



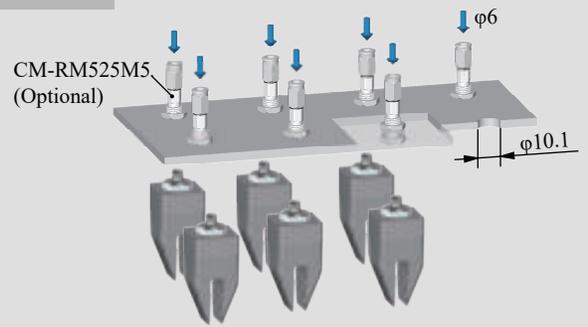
Rigid Connection Installation



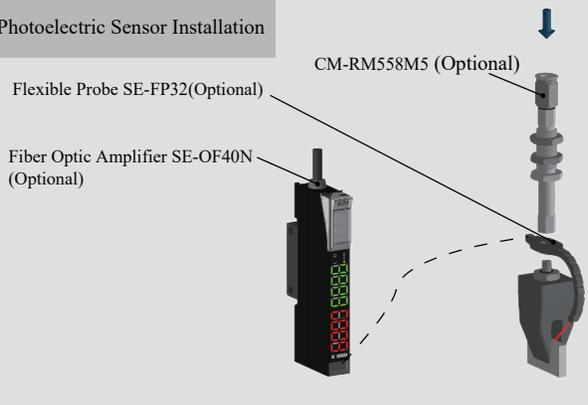
Buffer Installation



Matrix Installation



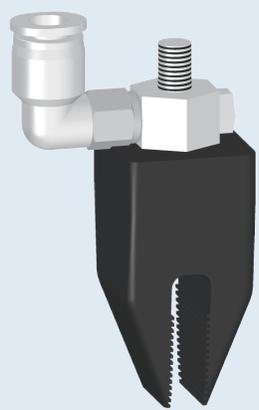
Photoelectric Sensor Installation



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Anti-static material meets the national standard GB/T11210-2014, point-to-point resistance 0.1-1000MΩ requirements. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, anti-static dust-free traceless material [LHAS] is preferred.

B-20005V[LH]

	BMC-20005V[LH] Direct-through Anti-static H Type	BML-20005V[LH] Side-through Anti-static H Type			
	BMC-20005V[LH] Direct-through Anti-static Dust-free H Type	BML-20005V[LH] Side-through Anti-static Dust-free H Type			
Weight		16.9g	Weight		25.6g

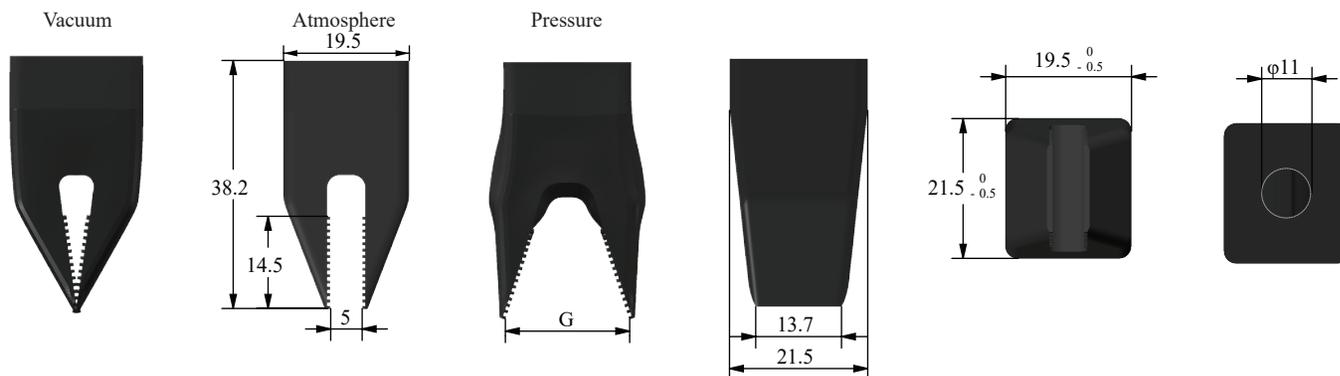
Parameter

Gripping range	1-15mm	Gripping force	0-2.5N	Theoretical gripping load**	0-99 g	Ideal gripping workpiece size*	5mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<160kPa

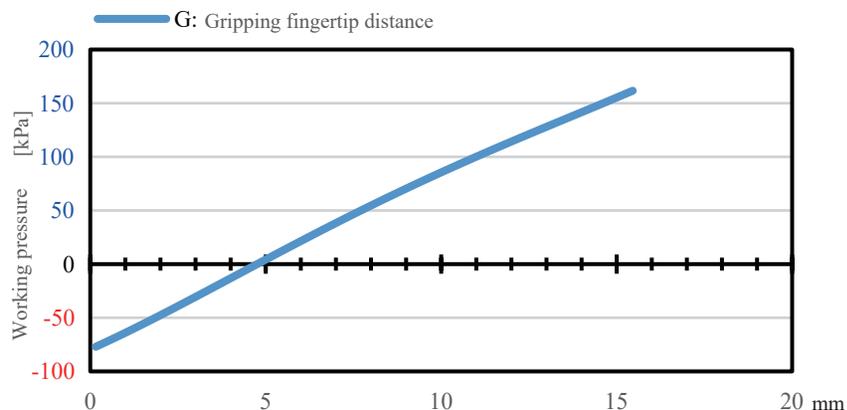
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

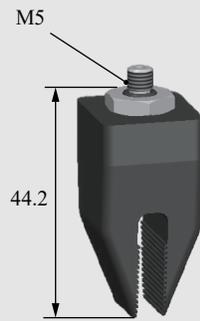
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



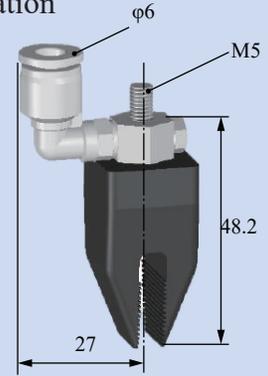
Pressure-Fingertip Distance deformation curve



BMC Straight Fitting Installation



BML Side Fitting Installation



Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193 (optional)

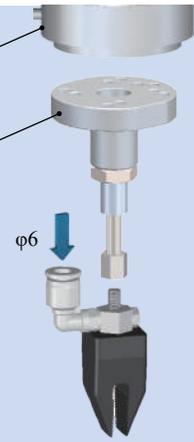
CP-191 (optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(optional)



Rigid Connection Installation

φ6

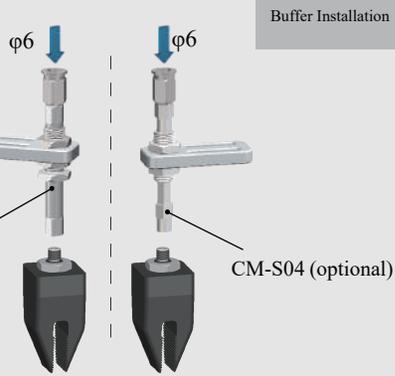
Buffer Installation

φ6

SMP-13 (optional)

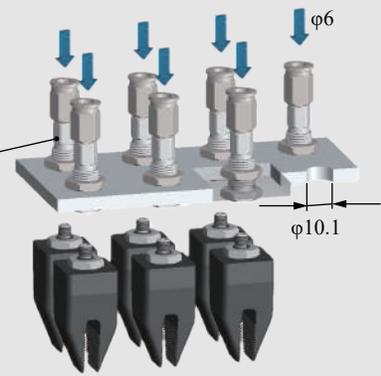
CM-RM558M5 (optional)

CM-S04 (optional)



Matrix Installation

CM-RM525M5 (optional)



Photoelectric Sensor Installation

CM-RM558M5 (optional)

Flexible Probe SE-FP32(Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.
- Used in conjunction with the fitting PN-CW5A11, the installation angle of the flexible claw will not shift after multiple openings and closings.

	BMC-20005V[P]A11 Direct-through Anti-rotation P Type	BML-20005V[P]A11 Side-through Anti-rotation P Type		
	BMC-20005V[PAS]A11 Direct-through Anti-rotation Dust-free P Type	BML-20005V[PAS]A11 Side-through Anti-rotation Dust-free P Type		
	Weight	16.6g	Weight	24.9g

B-20005V[P]/A11

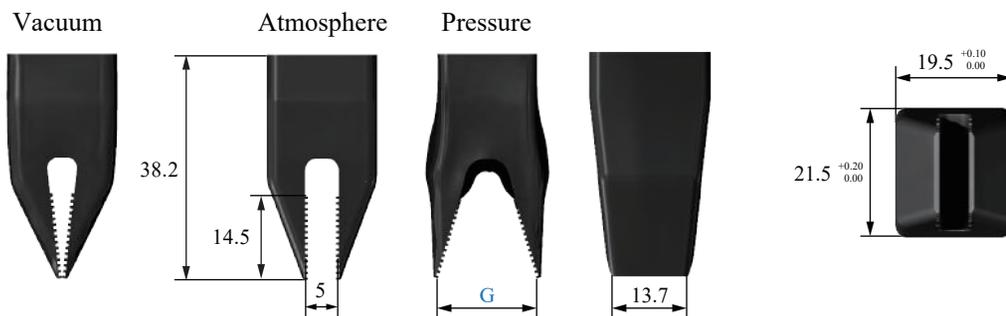
Parameter

Gripping range	0-15mm	Gripping force	0-1.2N	Theoretical gripping load**	0-5g	Ideal gripping workpiece size*	5mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

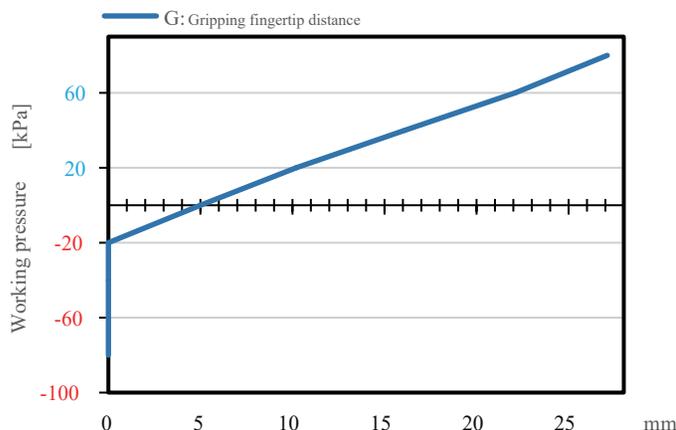
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



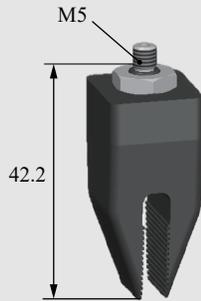
Pressure-Fingertip Distance deformation curve



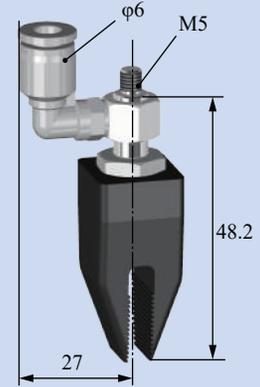
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

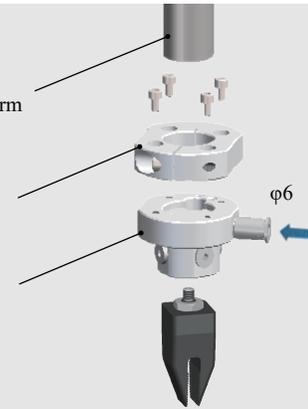


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193 (optional)

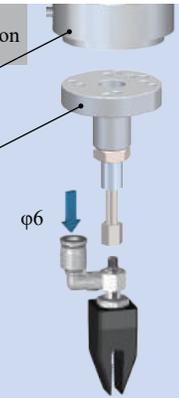
CP-191 (optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01 (optional)

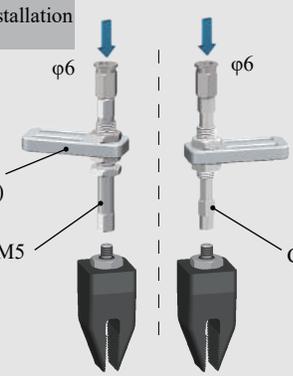


Rigid Connection Installation

φ6

SMP-13 (optional)

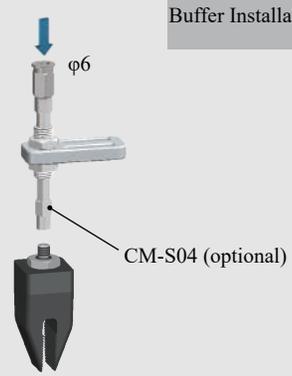
CM-RM558M5 (optional)



Buffer Installation

φ6

CM-S04 (optional)

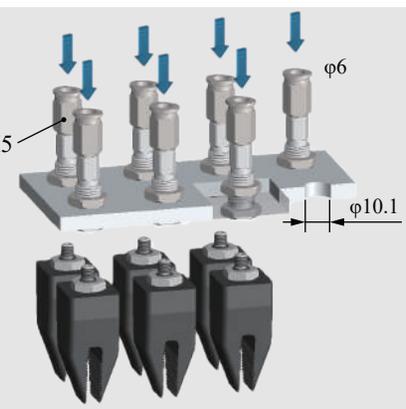


Matrix Installation

CM-RM525M5 (optional)

φ6

φ10.1

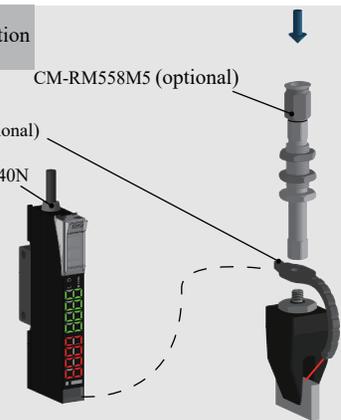


Photoelectric Sensor Installation

CM-RM558M5 (optional)

Flexible Probe SE-FP32(Optional)

Fiber Optic Amplifier SE-OF40N (Optional)

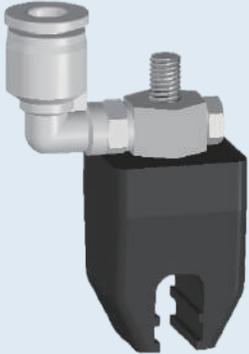


B-20005V[P]/A11

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

B-20006[P]

	BMC-20006[P] Direct-through P Type	BML-20006[P] Side-through P Type		
	BMC-20006[PAS] Direct-through Dust-free P Type	BML-20006[PAS] Side-through Dust-free P Type		
	Weight	16.3g	Weight	24.7g

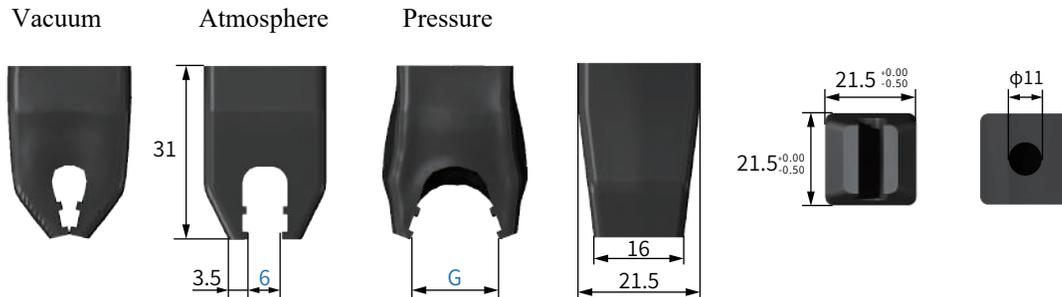
Parameter

Gripping range	0-12mm	Gripping force	0-1N	Theoretical gripping load**	0-80g	Ideal gripping workpiece size*	6mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

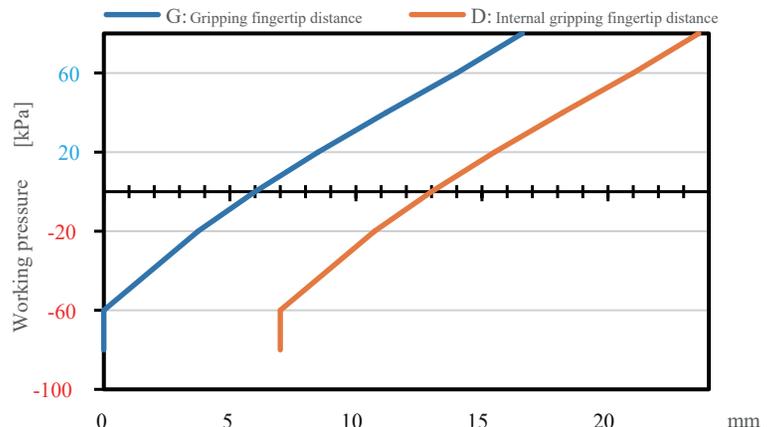
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



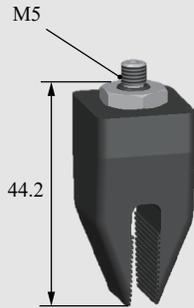
Pressure-Fingertip Distance deformation curve



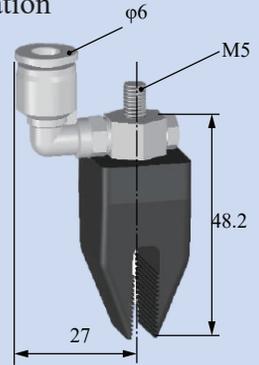
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation



Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193 (optional)

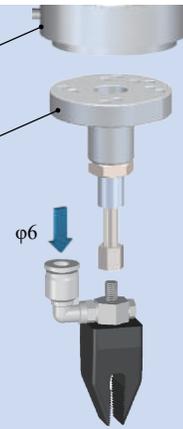
CP-191 (optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01 (optional)



Rigid Connection Installation

φ6

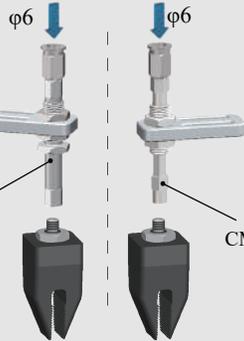
SMP-13 (optional)

CM-RM558M5 (optional)

Buffer Installation

φ6

CM-S04 (optional)

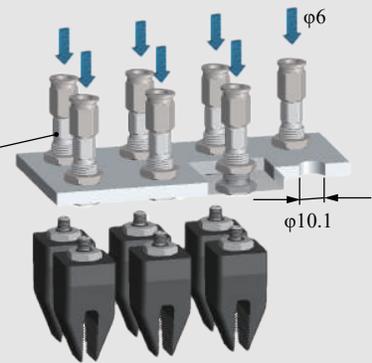


Matrix Installation

CM-RM525M5 (optional)

φ6

φ10.1

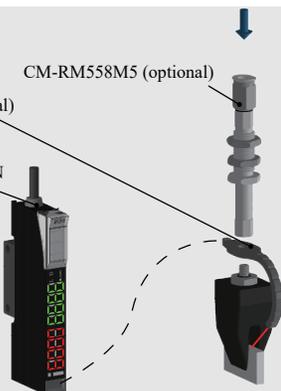


Photoelectric Sensor Installation

CM-RM558M5 (optional)

Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



B-20006[P]

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

	BMC-21606[P]/M Direct-through P Type	BML-21606[P]/M Side-through P Type		
	BMC-21606[PAS]/M Direct-through Dust-free P Type	BML-21606[PAS]/M Side-through Dust-free P Type		
	Weight	23.7g	Weight	24.6g

B-21606[P]/M

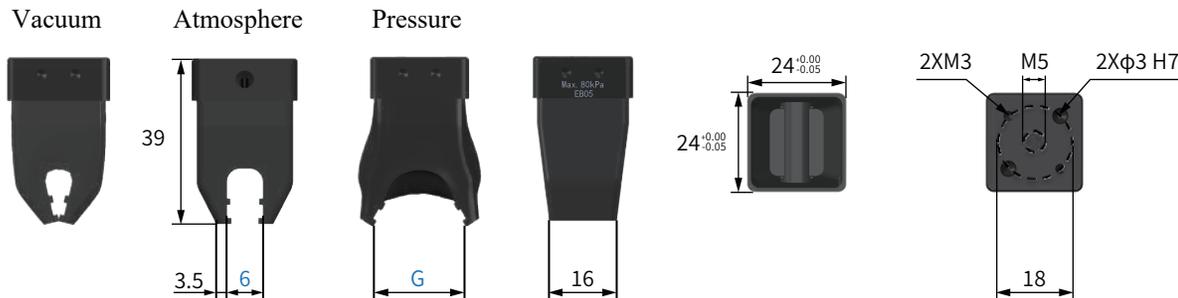
Parameter

Gripping range	0-12mm	Gripping force	0-1N	Theoretical gripping load**	0-80g	Ideal gripping workpiece size*	6mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

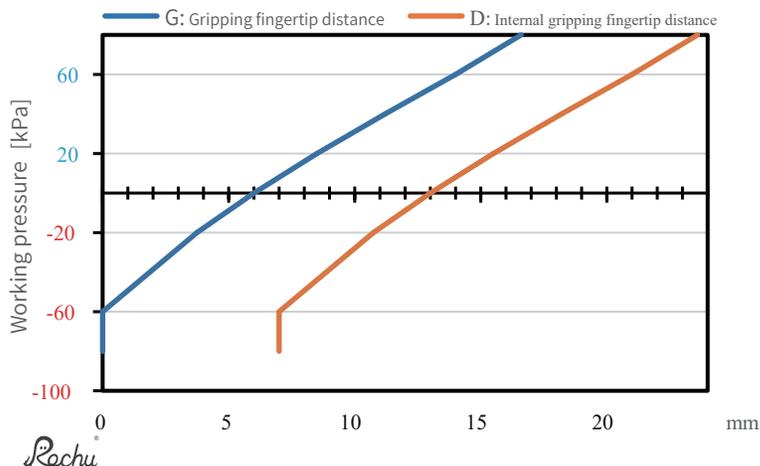
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

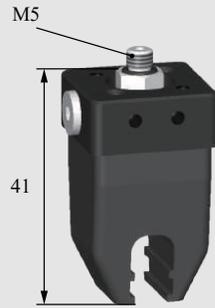
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



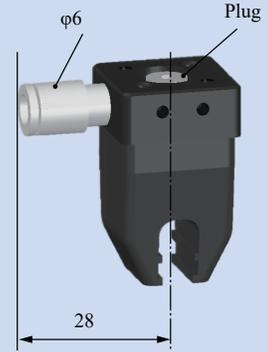
Pressure-Fingertip Distance deformation curve



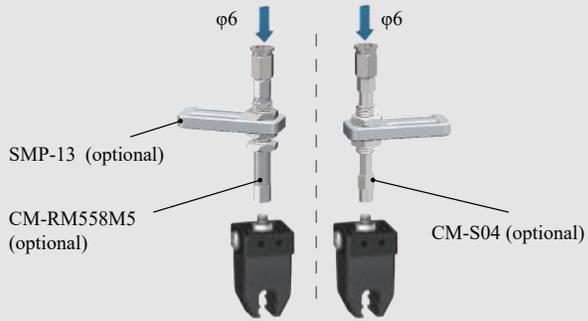
BMC Straight Fitting Installation



BML Side Fitting Installation

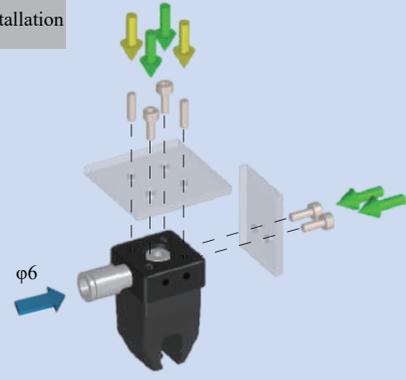


Rigid Connection Installation

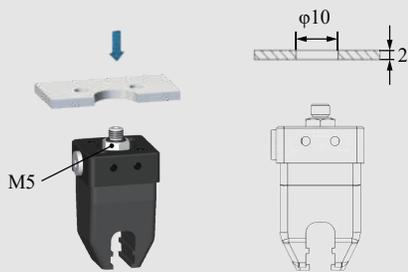


Buffer Installation

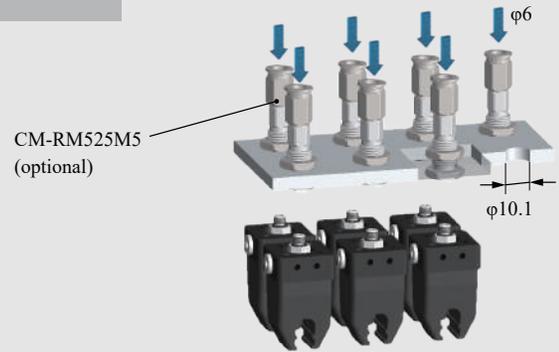
Side Access Partition Installation



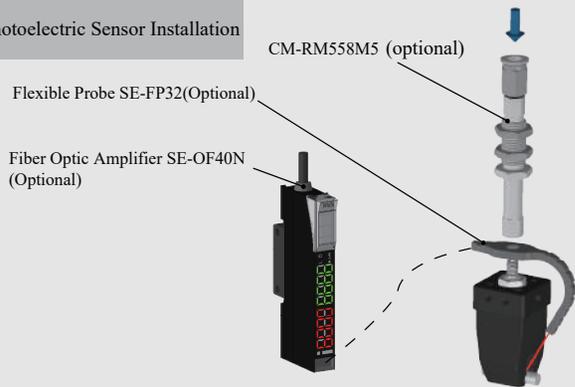
Precise Positioning Installation



Matrix Installation



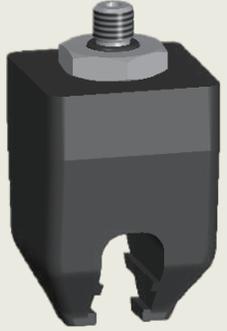
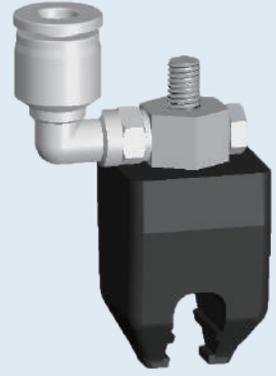
Photoelectric Sensor Installation



B-21606[P]/M

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

	BMC-20606[P] Direct-through P Type	BML-20606[P] Side-through P Type		
	BMC-20606[PAS] Direct-through Dust-free P Type	BML-20606[PAS] Side-through Dust-free P Type		
	Weight	16.3g	Weight	24.7g

B-20606[P]

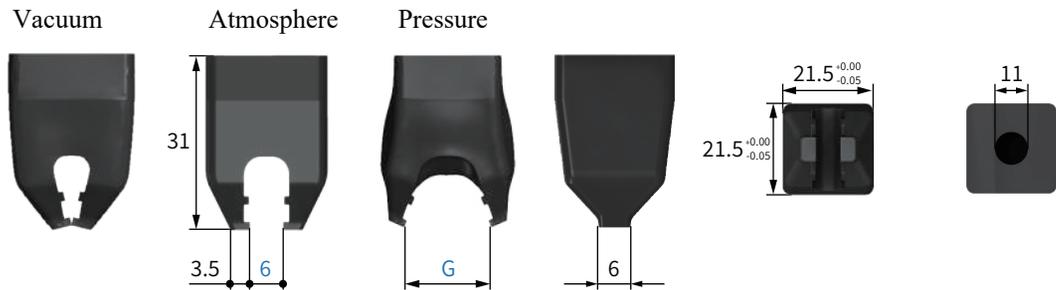
Parameter

Gripping range	0-12mm	Gripping force	0-1N	Theoretical gripping load**	0-80g	Ideal gripping workpiece size*	6mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

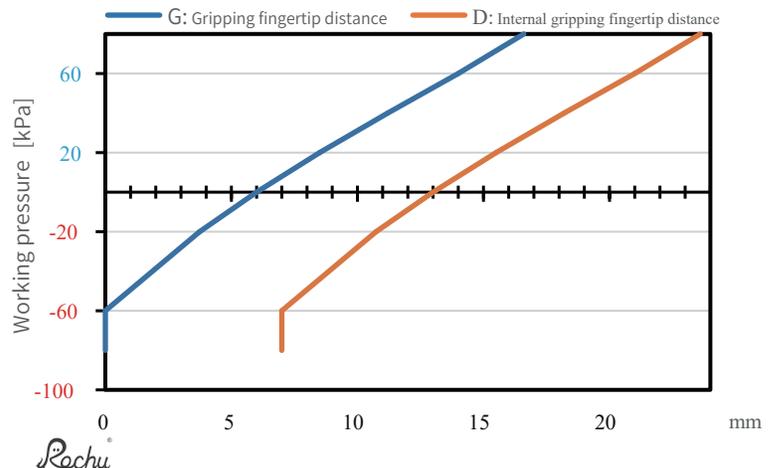
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



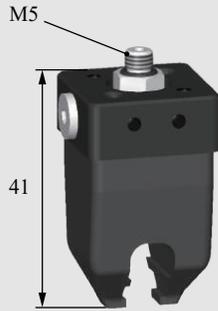
Pressure-Fingertip Distance deformation curve



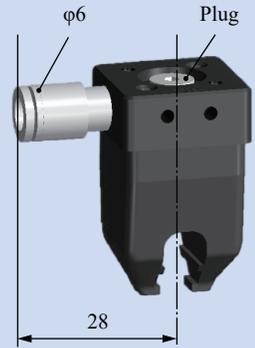
BMC Straight Fitting Installation



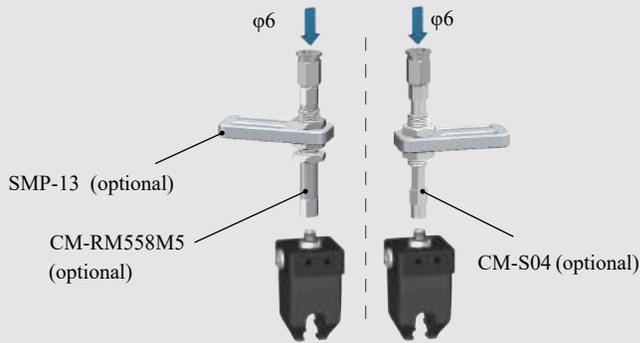
Scan to watch videos



BML Side Fitting Installation

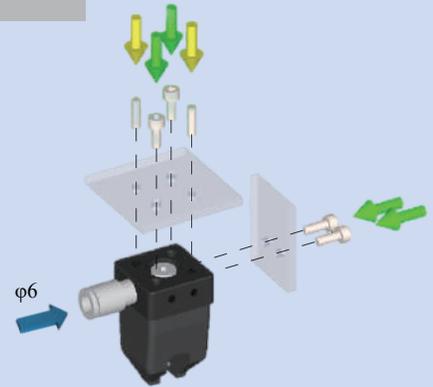


Rigid Connection Installation

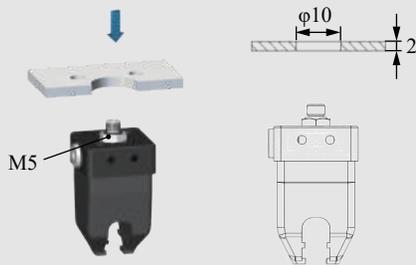


Buffer Installation

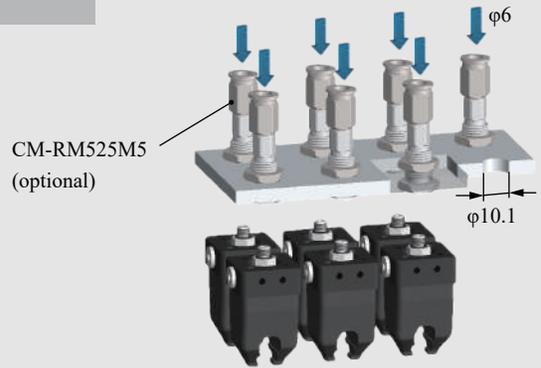
Side Access Partition Installation



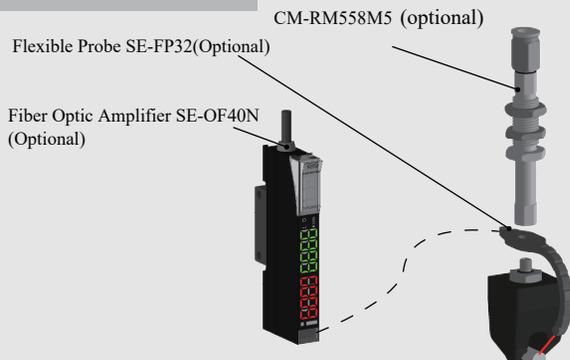
Precise Positioning Installation



Matrix Installation



Photoelectric Sensor Installation



B-20606[P]

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

	BMC-20606[P]/M Direct-through P Type	BML-20606[P]/M Side-through P Type		
	BMC-20606[PAS]/M Direct-through Dust-free P Type	BML-20606[PAS]/M Side-through Dust-free P Type		
	Weight	23.2g	Weight	24g

B-20606[P]/M

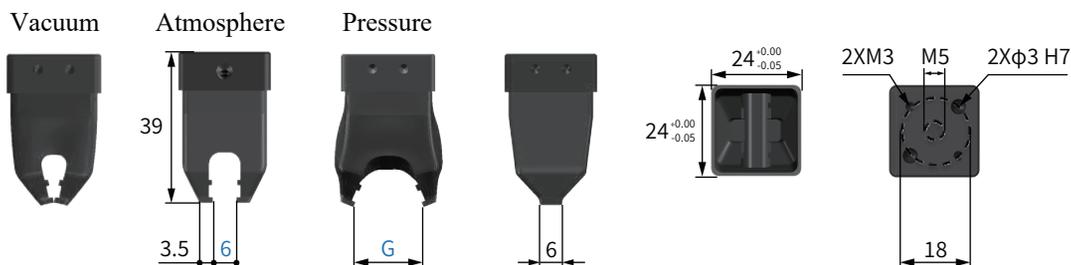
Parameter

Gripping range	0-12mm	Gripping force	0-1N	Theoretical gripping load**	0-80g	Ideal gripping workpiece size*	6mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

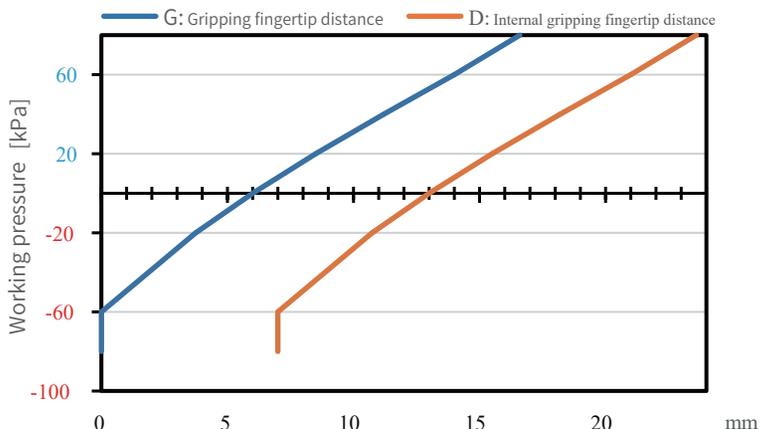
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



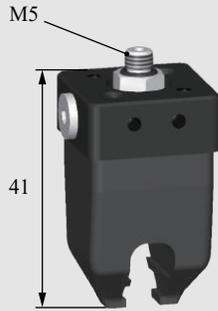
Pressure-Fingertip Distance deformation curve



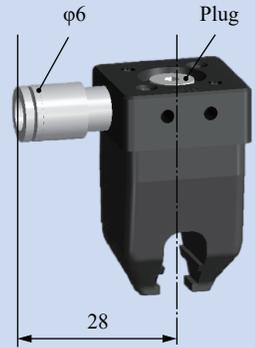
BMC Straight Fitting Installation



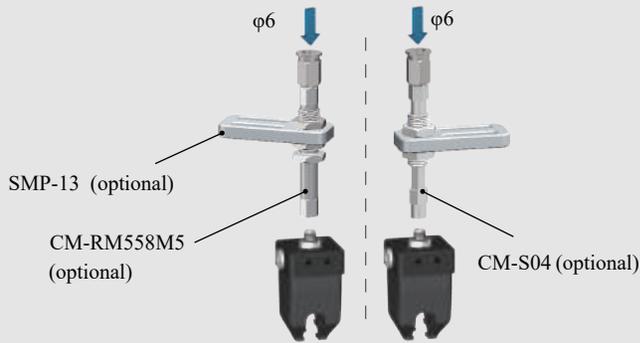
Scan to watch videos



BML Side Fitting Installation

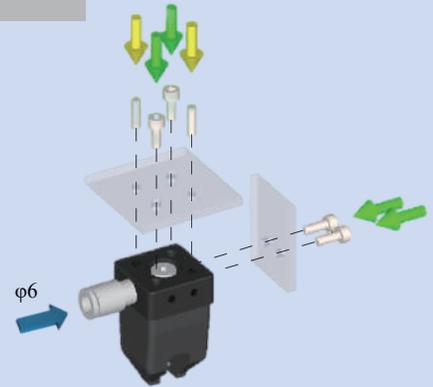


Rigid Connection Installation

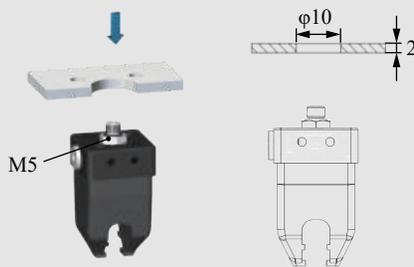


Buffer Installation

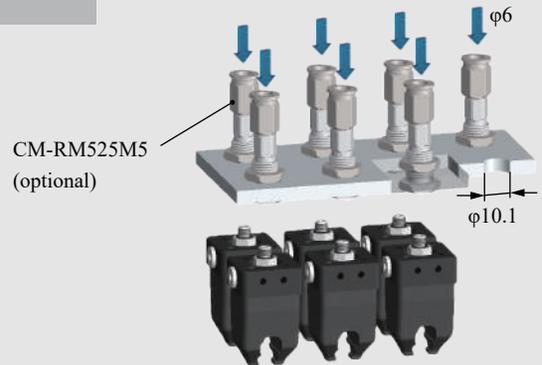
Side Access Partition Installation



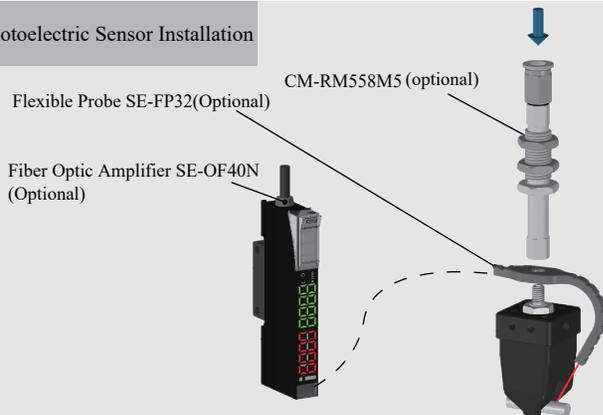
Precise Positioning Installation



Matrix Installation



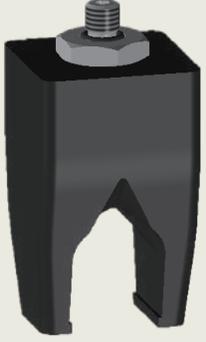
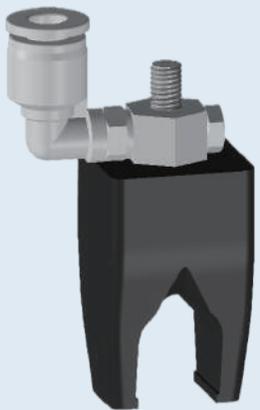
Photoelectric Sensor Installation



B-20606[P]/M

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

	BMC-21413[P] Direct-through P Type	BML-21413[P] Side-through P Type	
	BMC-21413[PAS] Direct-through Dust-free P Type	BML-21413[PAS] Side-through Dust-free P Type	
Weight 20.2g		Weight 28.6g	

B-21413[P]

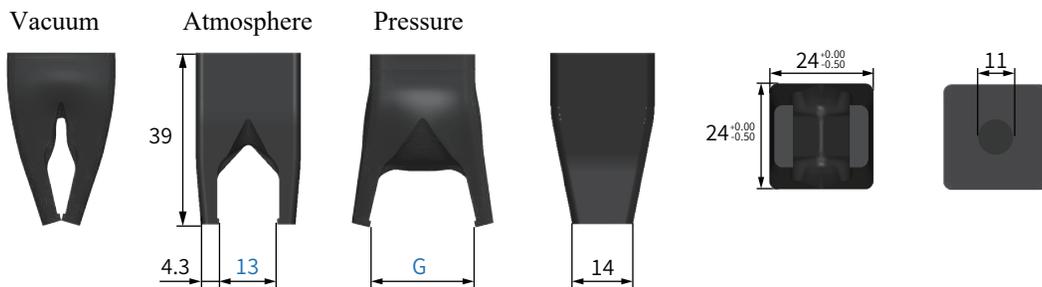
Parameter

Gripping range	0-17mm	Gripping force	0-1.7N	Theoretical gripping load**	0-69g	Ideal gripping workpiece size*	13mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<60kPa

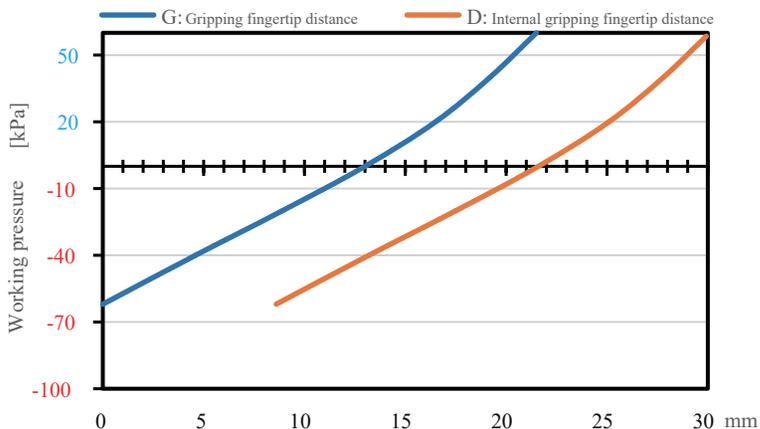
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



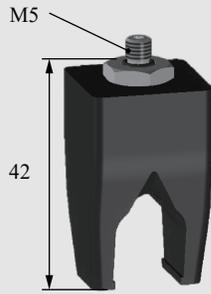
Pressure-Fingertip Distance deformation curve



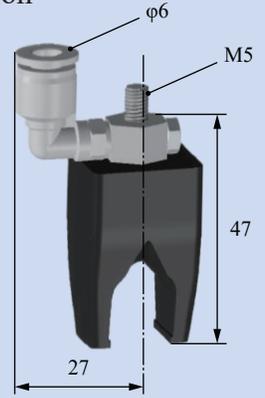
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation



Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193 (optional)

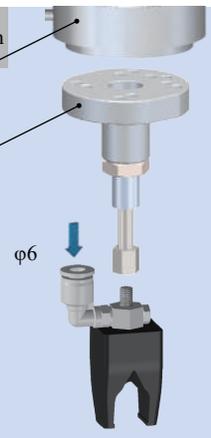
CP-191 (optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

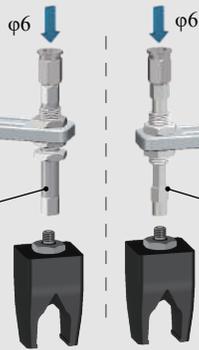
FCM-S01 (optional)



Rigid Connection Installation

SMP-13 (optional)

CM-RM558M5 (optional)



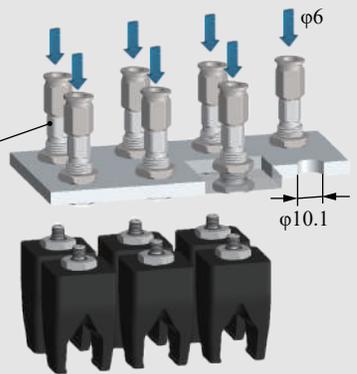
Buffer Installation

CM-S04 (optional)



Matrix Installation

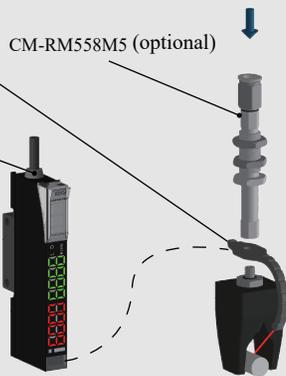
CM-RM525M5 (optional)



Photoelectric Sensor Installation

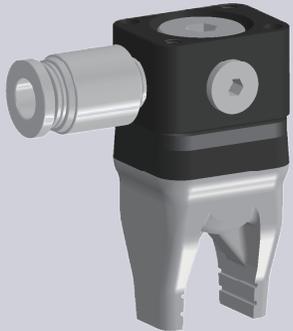
Flexible Probe SE-FP32(Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Soft Beak / Beak Module

B-2G1012[H]/SN

BMC-2G1012[H]/SN Direct-through H Type		BMS-2G1012[H]/SN Direct-through Precision Positioning H Type		BML-2G1012[H]/SN Side-through H Type		BMM-2G1012[H]/SN Multi-way Precision Positioning H Type	
BMC-2G1012[HAS]/SN Direct-through Dust-free H Type		BMS-2G1012[HAS]/SN Direct-through Precision Positioning Dust-free H Type		BML-2G1012[HAS]/SN Side-through Dust-free H Type		BMM-2G1012[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	14.9g	Weight	22.13g	Weight	28.3g	Weight	26.28g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



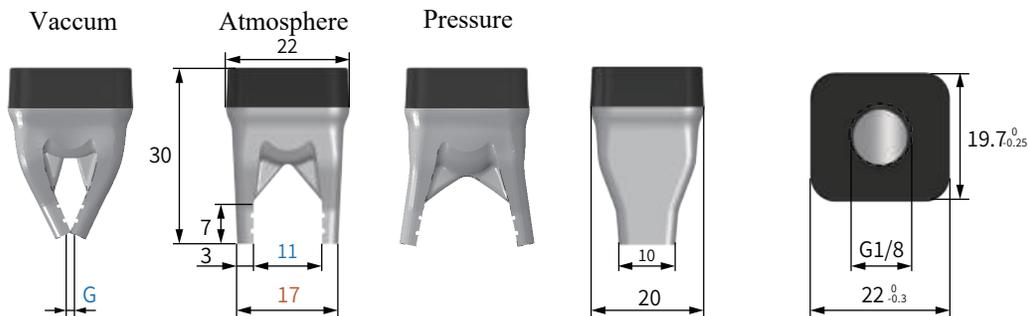
Parameter

Gripping range	0-14mm	Gripping force	0-2.5N	Theoretical gripping load**	0-102g	Ideal gripping workpiece size*	11mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

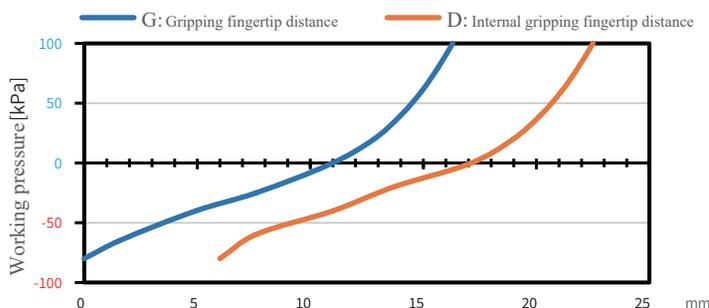
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



BMC Module

(Direct-through)

BMS Module

(Precise Positioning Direct-through)

BML Module

(Side-through)

BMM Module

(Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

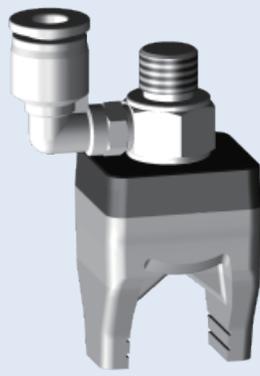
BMC Rigid Connection Installation

BMC Buffer Installation

B-2G1012[H]/SN

Soft Beak / Beak Module

B-2G1217[H]/SN

BMC-2G1217[H]/SN Direct-through H Type	BMS-2G1217[H]/SN Direct-through Precision Positioning H Type	BML-2G1217[H]/SN Side-through H Type	BMM-2G1217[H]/SN Multi-way Precision Positioning H Type
BMC-2G1217[HAS]/SN Direct-through Dust-free H Type	BMS-2G1217[HAS]/SN Direct-through Precision Positioning Dust-free H Type	BML-2G1217[HAS]/SN Side-through Dust-free H Type	BMM-2G1217[HAS]/SN Multi-way Precision Positioning Dust-free H Type
			
Weight 19.7g	Weight 26.93g	Weight 33.1g	Weight 31.08g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



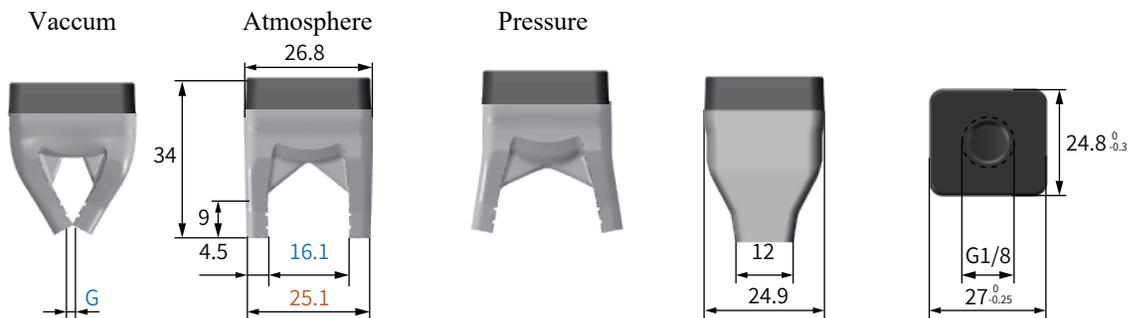
Parameter

Gripping range	0-18mm	Gripping force	0-7.5N	Theoretical gripping load**	0-299g	Ideal gripping workpiece size*	16.5mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

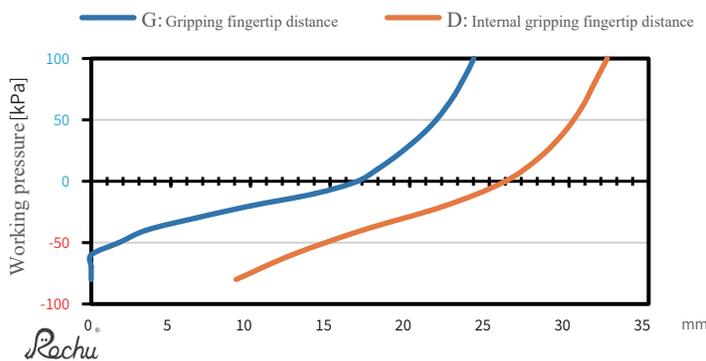
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



BMC Module
(Direct-through)

BMS Module
(Precise Positioning Direct-through)

BML Module
(Side-through)

BMM Module
(Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

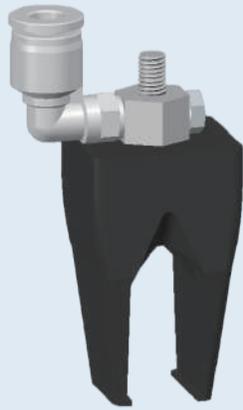
BMC Rigid Connection Installation

BMC Buffer Installation

B-2G1217[H]/SN

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

	BMC-21812[P] Direct-through P Type	BML-21812[P] Side-through P Type		
	BMC-21812[PAS] Direct-through Dust-free P Type	BML-21812[PAS] Side-through Dust-free P Type		
	Weight	23g	Weight	31.4g

B-21812[P]

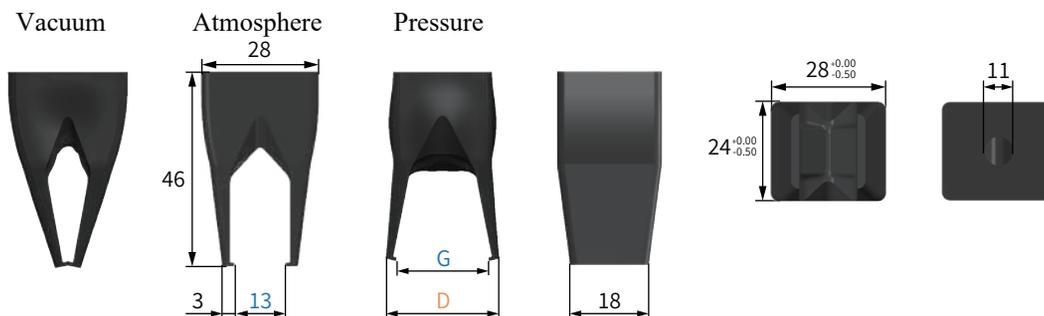
Parameter

Gripping range	0-21mm	Gripping force	0-1.7N	Theoretical gripping load**	0-68g	Ideal gripping workpiece size*	13mm
Internal gripping range	11-31mm	Internal gripping force	0-5.1N	Theoretical internal gripping load**	0-204g	Ideal internal gripping workpiece size*	19mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

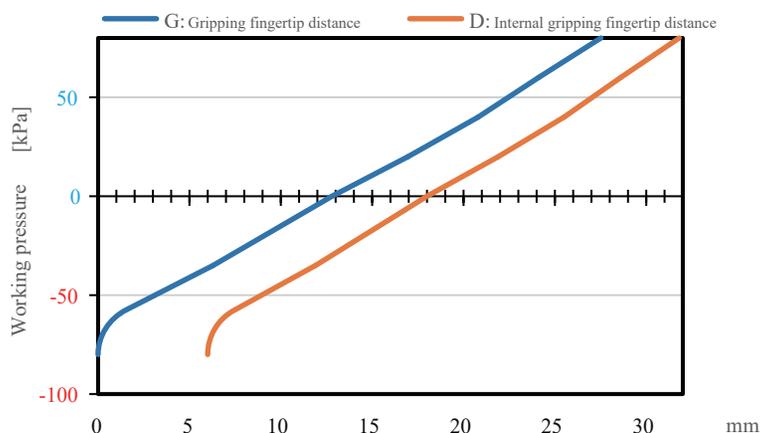
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

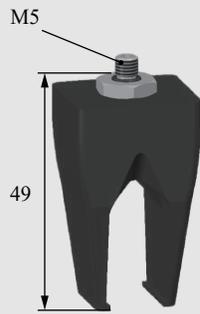
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



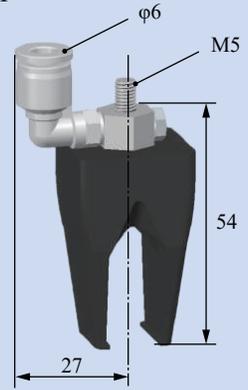
Pressure-Fingertip Distance deformation curve



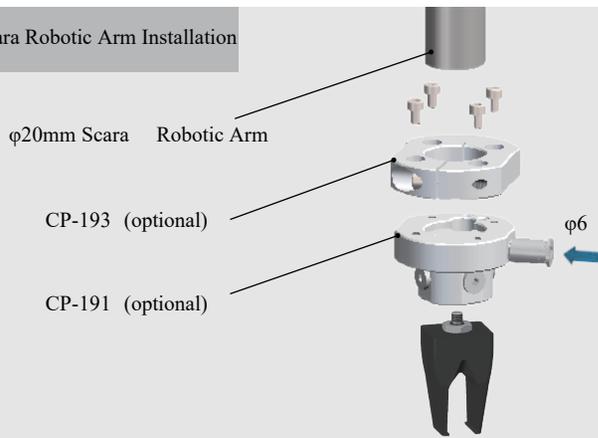
BMC Straight Fitting Installation



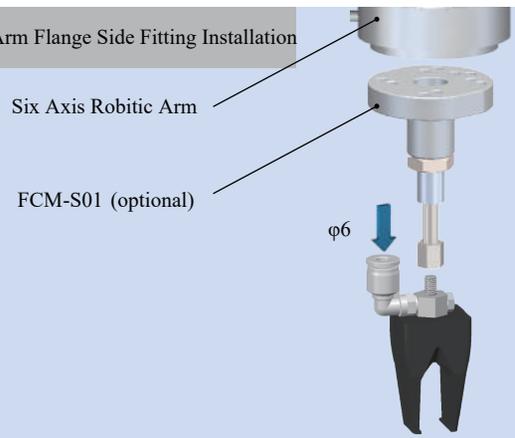
BML Side Fitting Installation



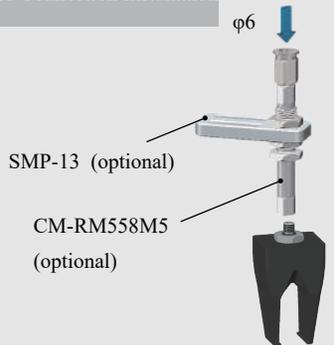
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



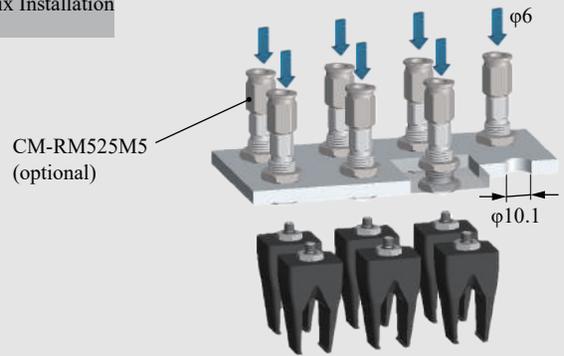
Rigid Connection Installation



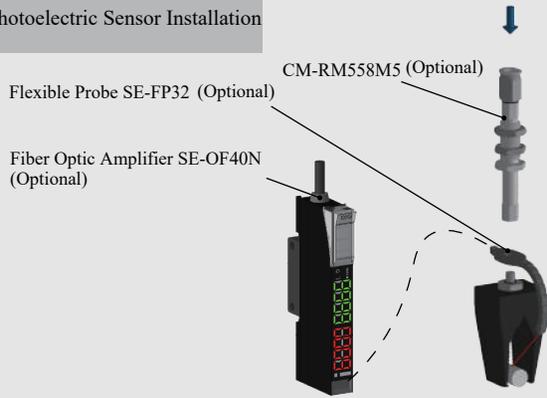
Buffer Installation



Matrix Installation



Photoelectric Sensor Installation



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

B-21812[P]/M

	BMC-21812[P]/M Direct-through P Type	BML-21812[P]/M Side-through P Type			
	BMC-21812[PAS]/M Direct-through Dust-free P Type	BML-21812[PAS]/M Side-through Dust-free P Type			
Weight		39.6g	Weight		40.4g

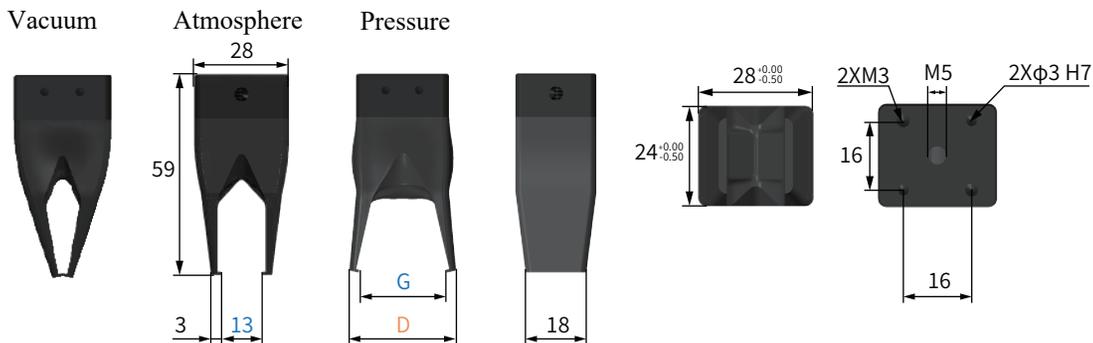
Parameter

Gripping range	0-21mm	Gripping force	0-1.7N	Theoretical gripping load**	0-68g	Ideal gripping workpiece size*	13mm
Internal gripping range	11-31mm	Internal gripping force	0-5.1N	Theoretical internal gripping load**	0-204g	Ideal internal gripping workpiece size*	19mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

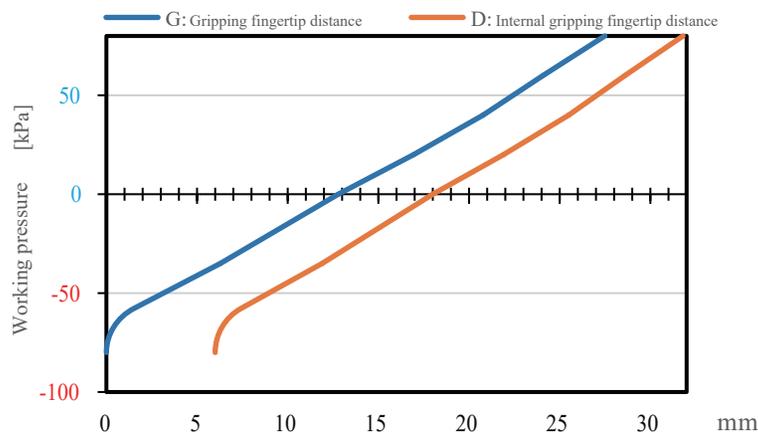
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

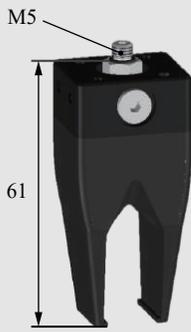
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



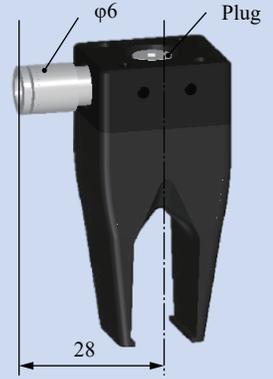
Pressure-Fingertip Distance deformation curve



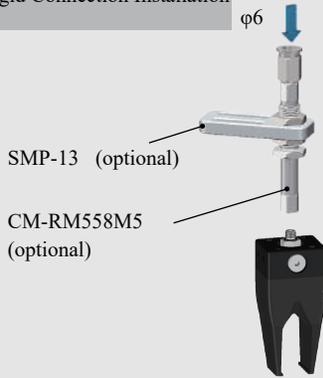
BMC Straight Fitting Installation



BML Side Fitting Installation



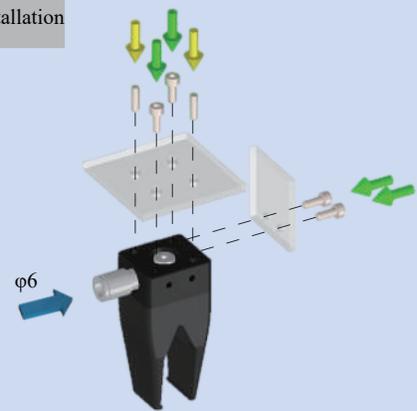
Rigid Connection Installation



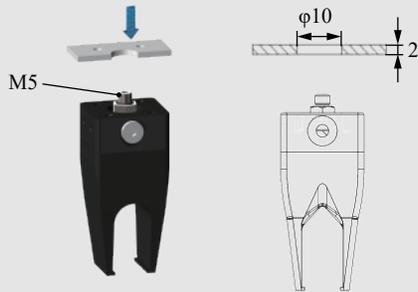
Buffer Installation



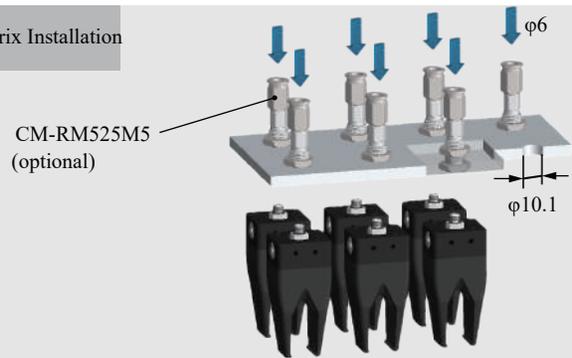
Side Access Partition Installation



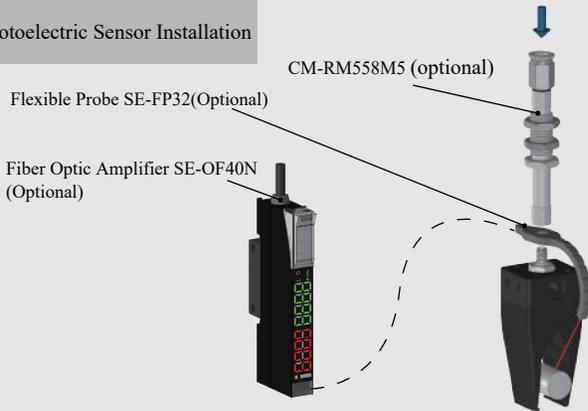
Precise Positioning Installation



Matrix Installation



Photoelectric Sensor Installation



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Normal Material [P] and Dust-free Normal Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Normal Material [PAS] is preferred.

	BMC-22219[P]/M Direct-through P Type	BML-22219[P]/M Side-through P Type		
	BMC-22219[PAS]/M Direct-through Dust-free P Type	BML-22219[PAS]/M Side-through Dust-free P Type		
	Weight	48.3g	Weight	49.3g

B-22219[P]/M

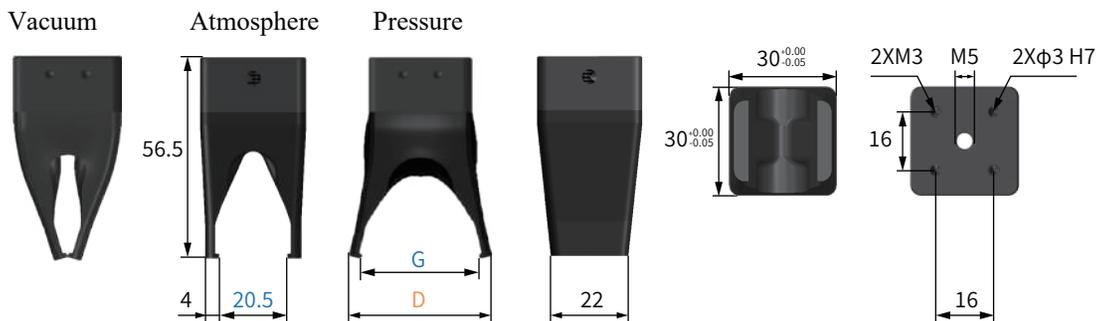
Parameter

Gripping range	4-29.5mm	Gripping force	0-1.1N	Theoretical gripping load**	0-42g	Ideal gripping workpiece size*	20mm
Internal gripping range	13.5-38mm	Internal gripping force	0-5.6N	Theoretical internal gripping load**	0-223g	Ideal internal gripping workpiece size*	30mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

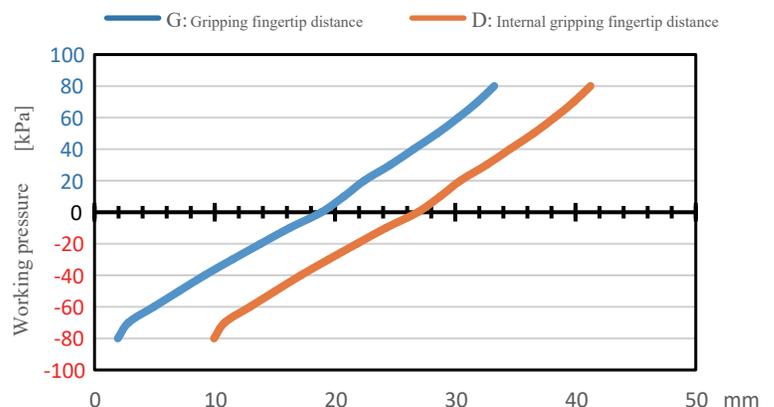
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

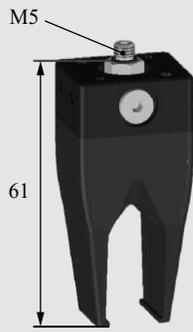
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



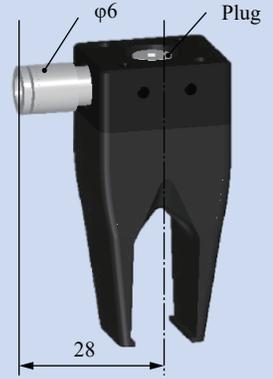
Pressure-Fingertip Distance deformation curve



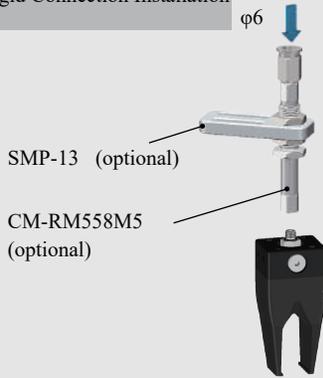
BMC Straight Fitting Installation



BML Side Fitting Installation



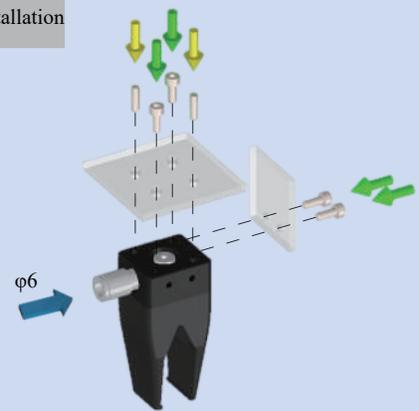
Rigid Connection Installation



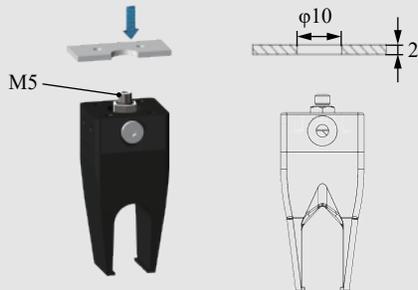
Buffer Installation



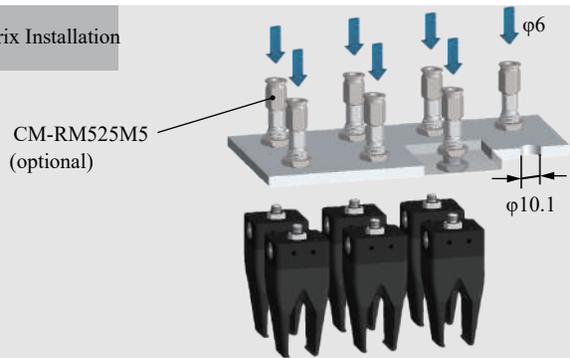
Side Access Partition Installation



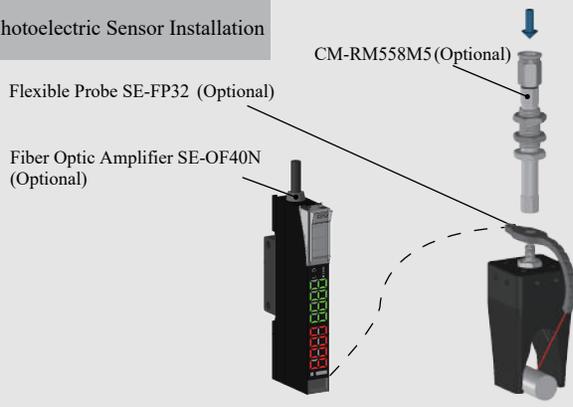
Precise Positioning Installation



Matrix Installation

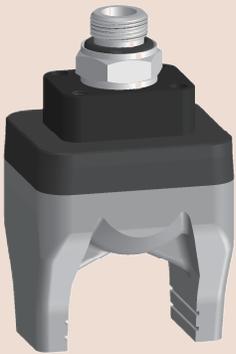
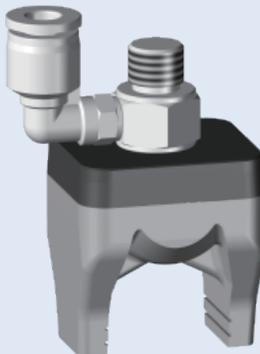


Photoelectric Sensor Installation



Soft Beak / Beak Module

B-2G1622[H]/SN

BMC-2G1622[H]/SN Direct-through H Type	BMS-2G1622[H]/SN Direct-through Precision Positioning H Type	BML-2G1622[H]/SN Side-through H Type	BMM-2G1622[HS]/SN Multi-way Precision Positioning H Type
BMC-2G1622[HAS]/SN Direct-through Dust-free H Type	BMS-2G1622[HAS]/SN Direct-through Precision Positioning Dust-free H Type	BML-2G1622[HAS]/SN Side-through Dust-free H Type	BMM-2G1622[HAS]/SN Multi-way Precision Positioning Dust-free H Type
			
Weight 23.8g	Weight 31.03g	Weight 37.2g	Weight 35.18g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



Scan to watch videos



Parameter

Gripping range	0-25mm	Gripping force	0-9.4N	Theoretical gripping load**	0-374g	Ideal gripping workpiece size*	21.0mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

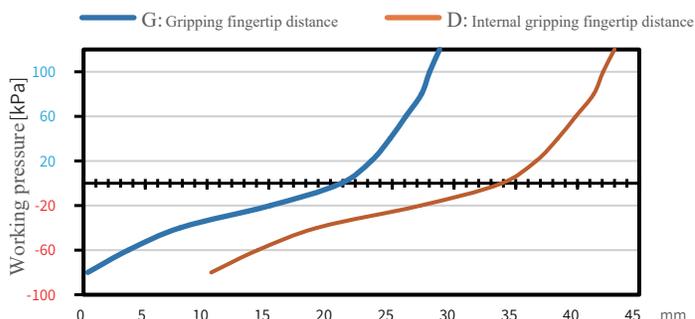
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



BMC Module

(Direct-through)

BMS Module

(Precise Positioning Direct-through)

BML Module

(Side-through)

BMM Module

(Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

BMC Rigid Connection Installation

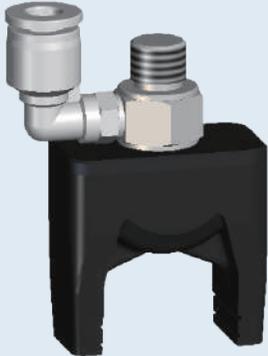
BMC Buffer Installation

B-2G162[H]/SN

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [HB] and Dust-free Strengthen Material [HBAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Strengthen Material [HBAS] is preferred.

B-2G1624[HB]/S

	BMC-2G1624[HB]/S Direct-through HB Type	BML-2G1624[HB]/S Side-through HB Type	
	BMC-2G1624[HBAS]/S Direct-through Dust-free HB Type	BML-2G1624[HBAS]/S Side-through Dust-free HB Type	
Weight	23.6g	Weight	38.1g

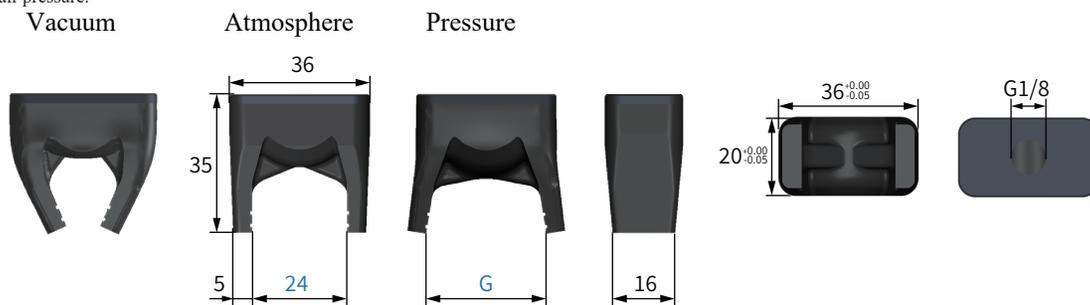
Parameter

Gripping range	8-24mm	Gripping force	0-9.4N	Theoretical gripping load**	0-374g	Ideal gripping workpiece size*	24mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

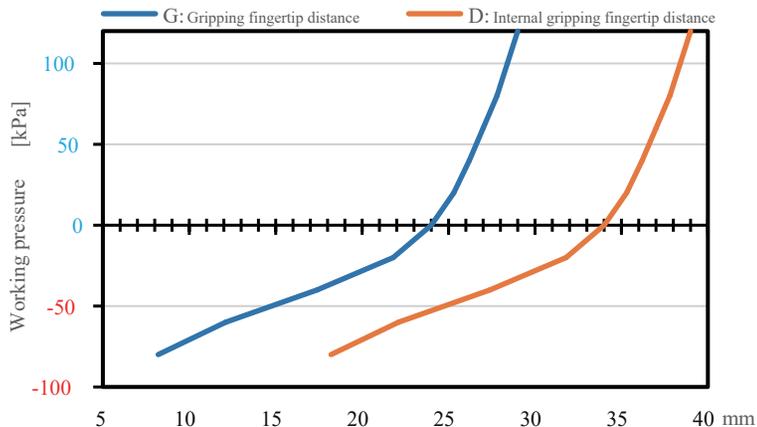
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

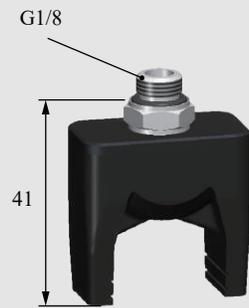
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



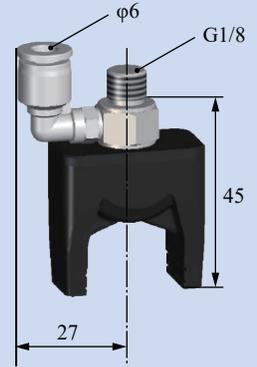
Pressure-Fingertip Distance deformation curve



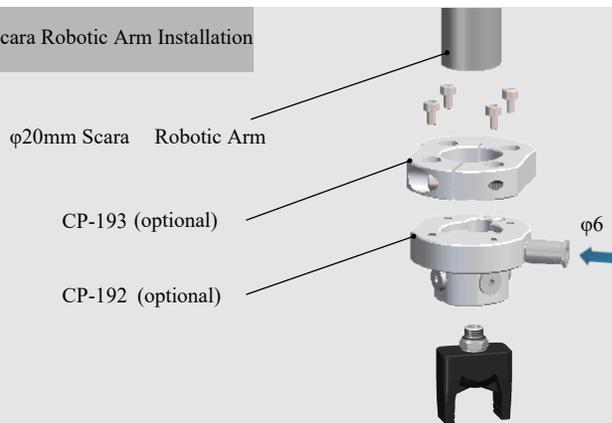
BMC Straight Fitting Installation



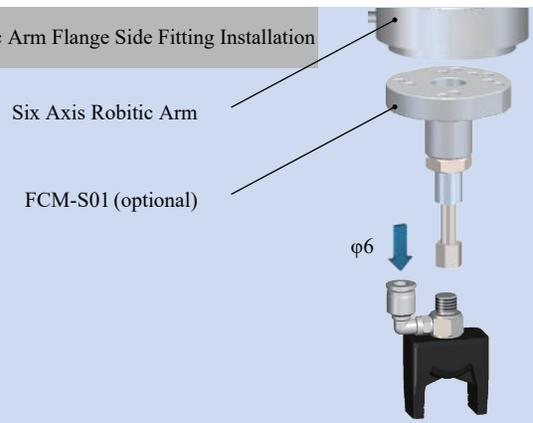
BML Side Fitting Installation



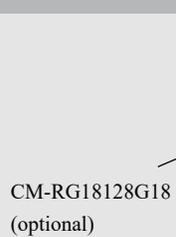
Scara Robotic Arm Installation



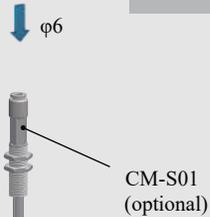
Robotic Arm Flange Side Fitting Installation



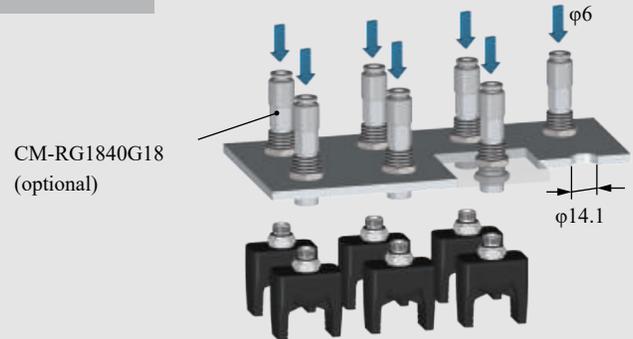
Rigid Connection Installation



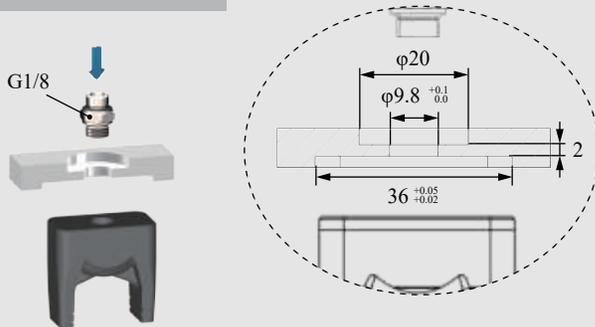
Buffer Installation



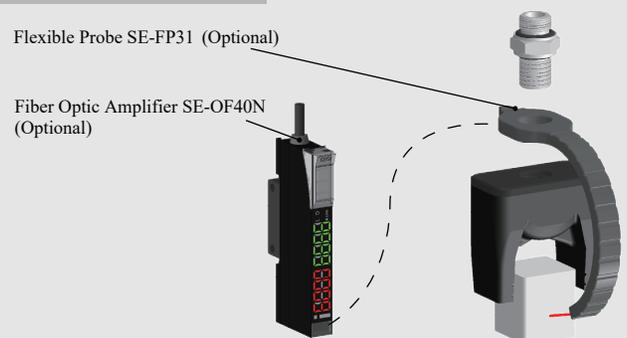
Matrix Installation



Precise Positioning Installation

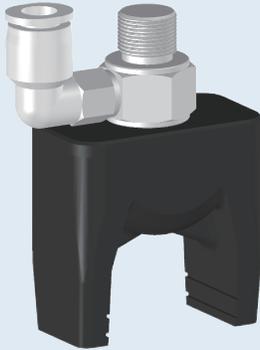


Photoelectric Sensor Installation



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Anti-static material meets the national standard GB/T11210-2014, point-to-point resistance 0.1-1000MΩ requirements. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, anti-static dust-free traceless material [LPAS] is preferred.

	BMC-2G1624[LH]/S Direct-through Anti-static H Type	BML-2G1624[LH]/S Side-through Anti-static H Type	
	BMC-2G1624[LH]/S Direct-through Anti-static Dust-free H Type	BML-2G1624[LH]/S Side-through Anti-static Dust-free H Type	
	Weight	25.9g	

B-2G1624[LH]/S

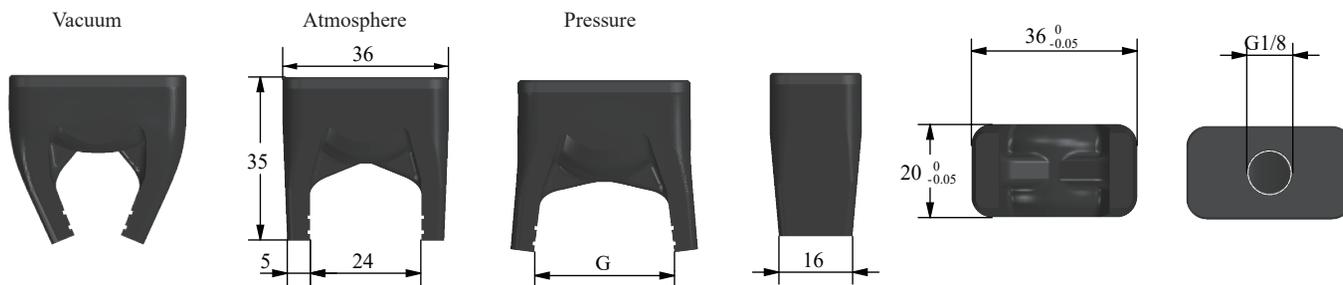
Parameter

Gripping range	8-24mm	Gripping force	0-9.4N	Theoretical gripping load**	0-374g	Ideal gripping workpiece size*	24mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

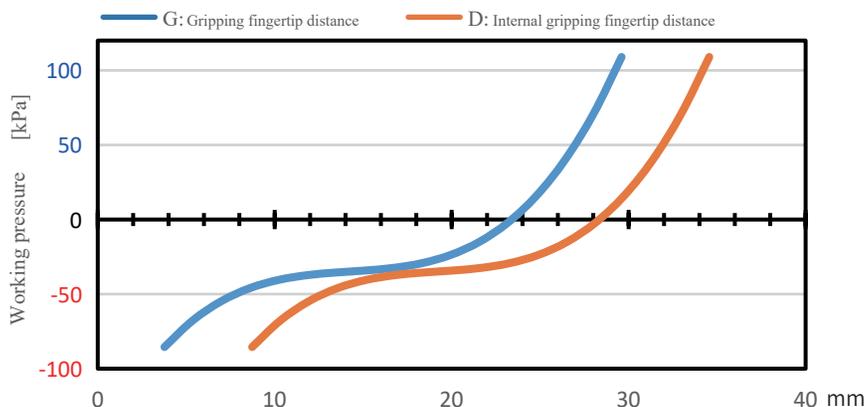
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

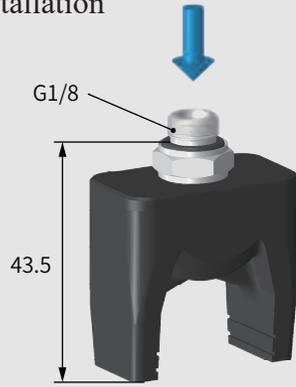
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



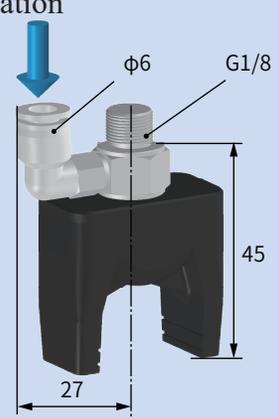
Pressure-Fingertip Distance deformation curve



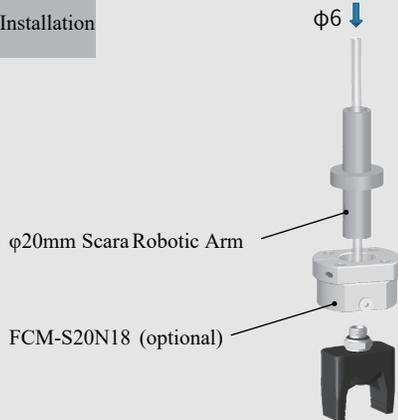
BMC Straight Fitting Installation



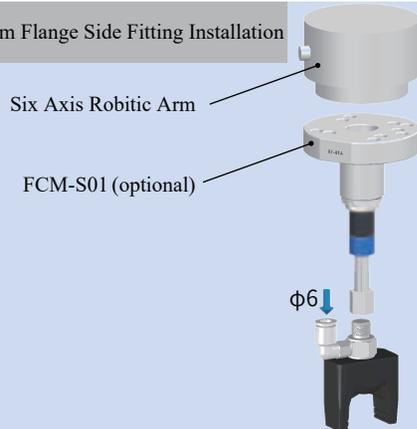
BML Side Fitting Installation



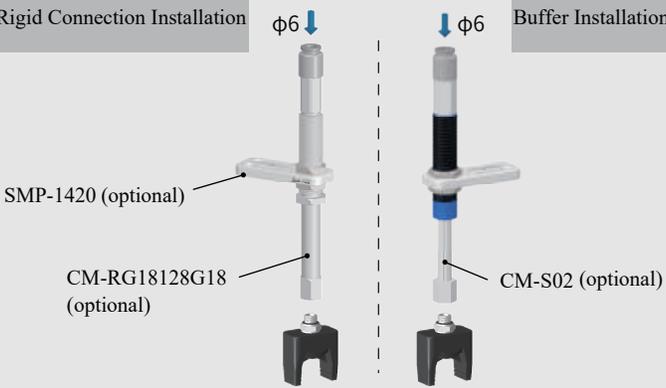
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



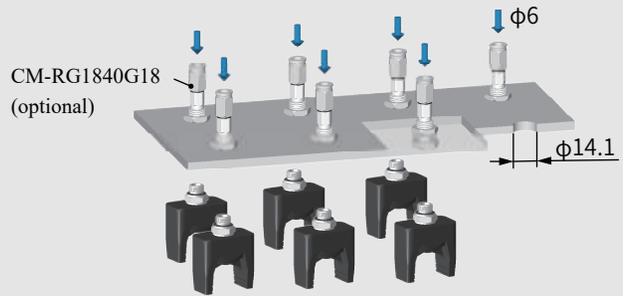
Rigid Connection Installation



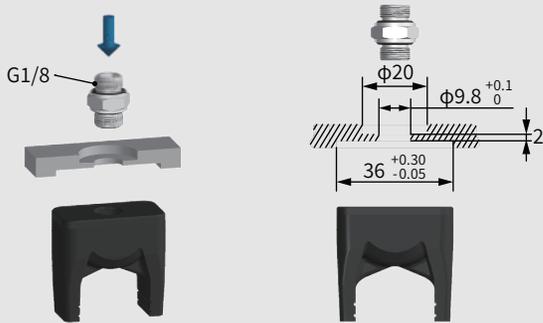
Buffer Installation



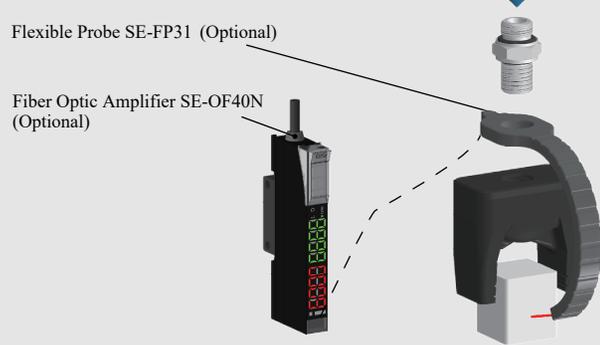
Matrix Installation



Precise Positioning Installation

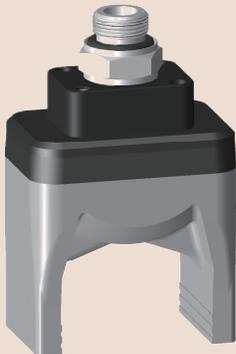
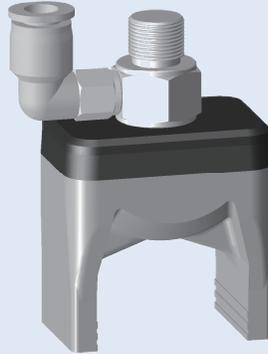


Photoelectric Sensor Installation



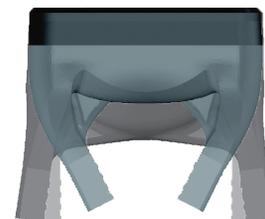
Soft Beak / Beak Module

B-2G2227[H]/SN

BMC-2G2227[H]/SN Direct-through H Type	BMS-2G2227[H]/SN Direct-through Precision Positioning H Type	BML-2G2227[H]/SN Side-through H Type	BMM-2G2227[H]/SN Multi-way Precision Positioning H Type
BMC-2G2227[HAS]/SN Direct-through Dust-free H Type	BMS-2G2227[HAS]/SN Direct-through Precision Positioning Dust-free H Type	BML-2G2227[HAS]/SN Side-through Dust-free H Type	BMM-2G2227[HAS]/SN Multi-way Precision Positioning Dust-free H Type
			
Weight 23.6g	Weight 30.83g	Weight 37g	Weight 34.98g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



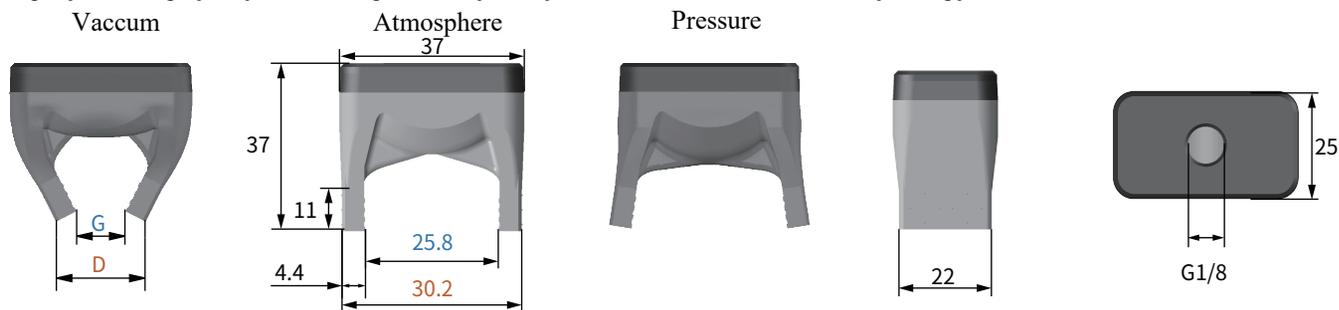
Parameter

Gripping range	3-30mm	Gripping force	0-8.5N	Theoretical gripping load**	0-338g	Ideal gripping workpiece size*	25.5mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<140kPa

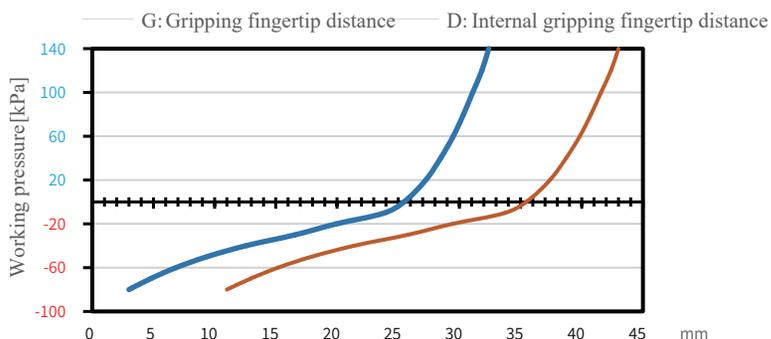
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.

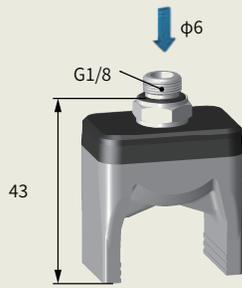


Pressure-Fingertip Distance deformation curve

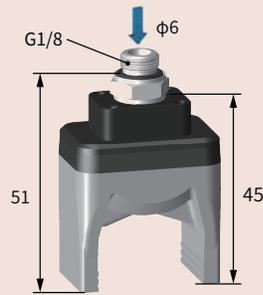


Soft Beak / Beak Module

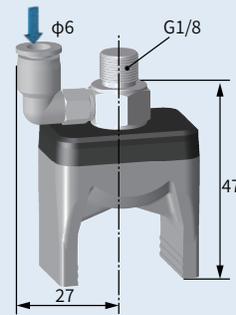
BMC Module
(Direct-through)



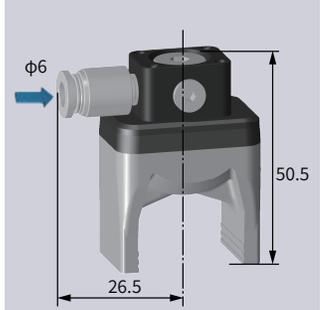
BMS Module
(Precise Positioning Direct-through)



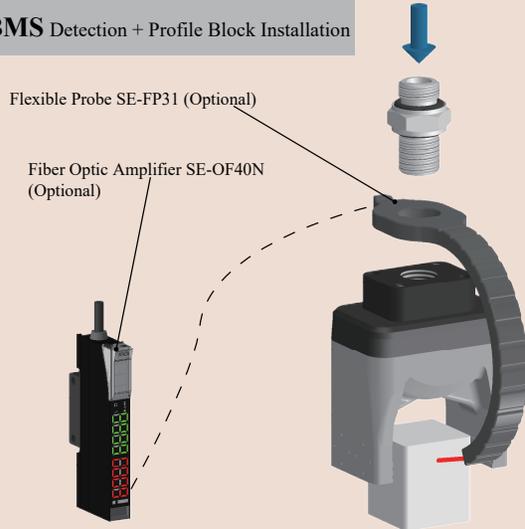
BML Module
(Side-through)



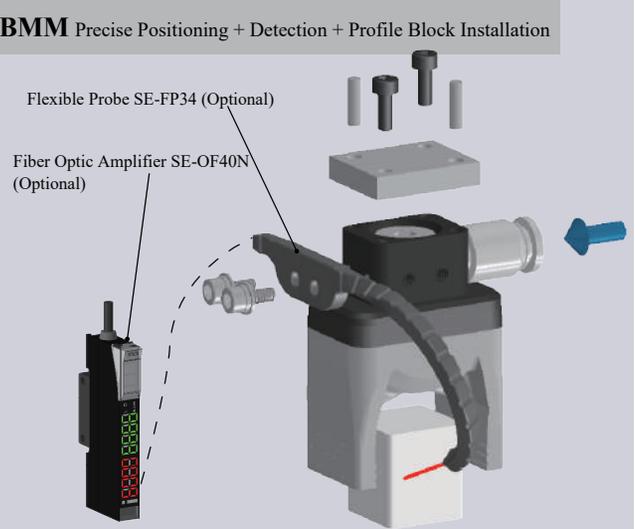
BMM Module
(Precise Positioning Multiple-through)



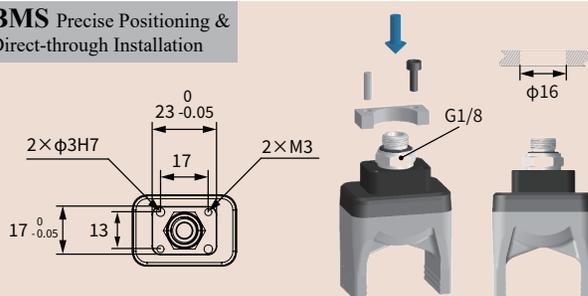
BMS Detection + Profile Block Installation



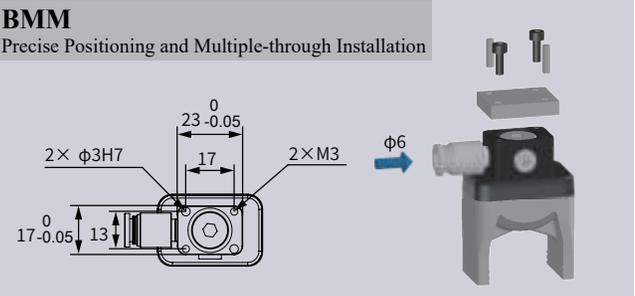
BMM Precise Positioning + Detection + Profile Block Installation



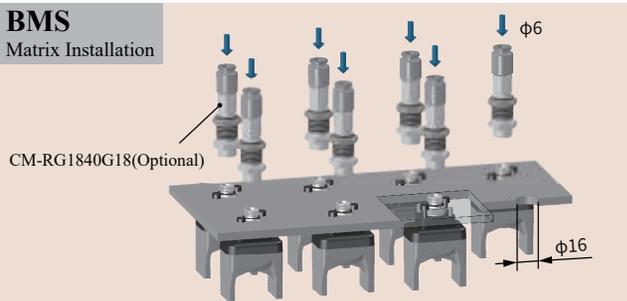
BMS Precise Positioning & Direct-through Installation



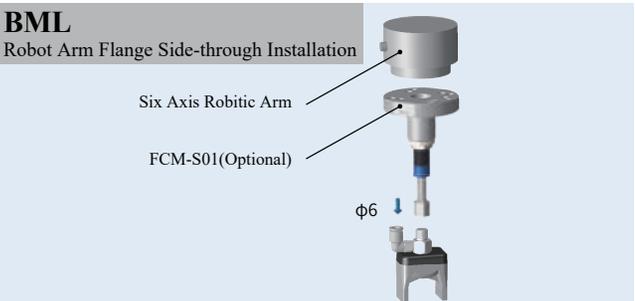
BMM Precise Positioning and Multiple-through Installation



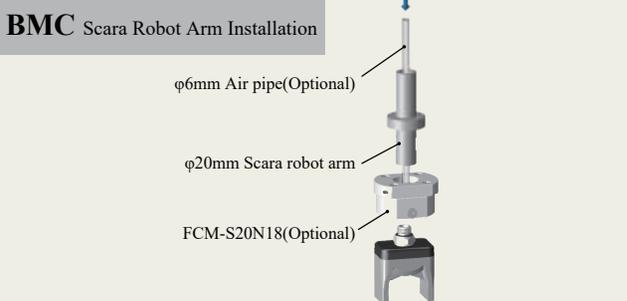
BMS Matrix Installation



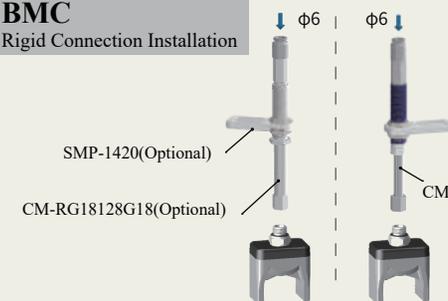
BML Robot Arm Flange Side-through Installation



BMC Scara Robot Arm Installation



BMC Rigid Connection Installation



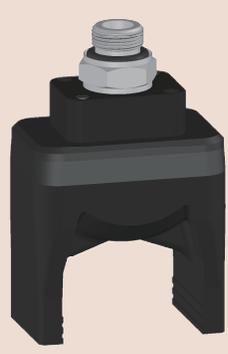
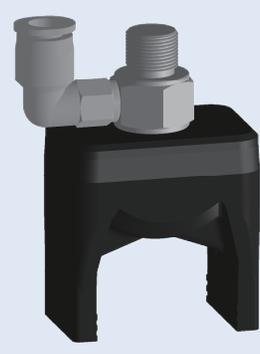
BMC Buffer Installation



B-2G2227[H]/SN

Soft Beak / Beak Module

B-2G2227[LH]/SN

BMC-2G2227[LH]/SN Direct-through Anti-static H Type	BMS-2G2227[LH]/SN Direct-through Anti-static Precision Positioning H Type	BML-2G2227[LH]/SN Side-through Anti-static H Type	BMM-2G2227[LH]/SN Multi-way Anti-static Precision Positioning H Type
BMC-2G2227[LHAS]/SN Direct-through Anti-static Dust-free H Type	BMS-2G2227[LHAS]/SN Direct-through Anti-static Dust-free Precision Positioning H Type	BML-2G2227[LHAS]/SN Side-through Anti-static Dust-free H Type	BMM-2G2227[LHAS]/SN Side-through Anti-static Dust-free Precision Positioning H Type
			
Weight 23.6g	Weight 30.83g	Weight 37g	Weight 34.98g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [LHAS] preferentially.



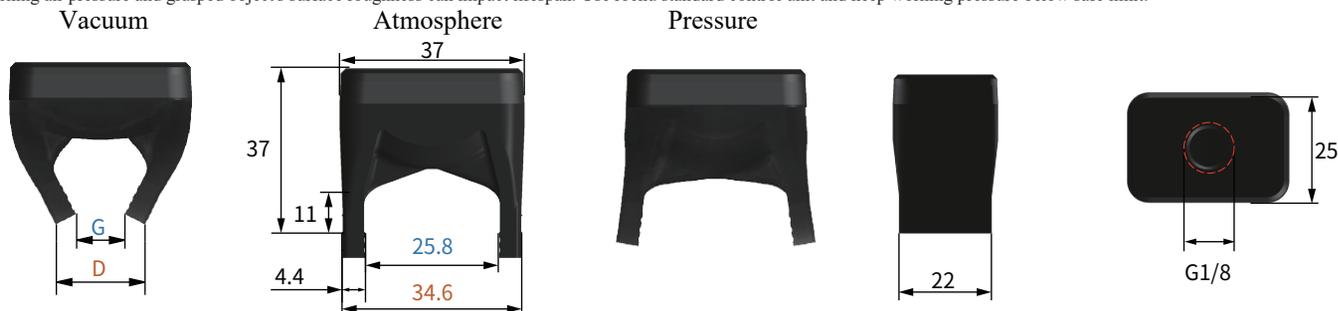
Parameter

Gripping range	3-30mm	Gripping force	0-8.5N	Theoretical gripping load**	0-338g	Ideal gripping workpiece size*	25.5mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

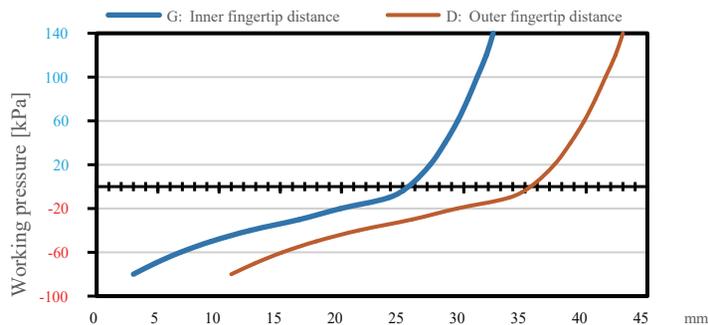
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



BMC Module
(Direct-through)

43

BMS Module
(Precise Positioning Direct-through)

51

45

BML Module
(Side-through)

47

27

BMM Module
(Precise Positioning Multiple-through)

50.5

26.5

BMS Detection + Profile Block Installation

Flexible Probe SE-FP31 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)

BMM Precise Positioning + Detection + Profile Block Installation

Flexible Probe SE-FP34 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)

BMS Precise Positioning and Direct-through Installation

2x $\phi 3H7$

23⁰_{-0.05}

17

2x M3

17⁰_{-0.05}

13

$\phi 16$

BMM Precise Positioning and Multiple-through Installation

2x $\phi 3H7$

23⁰_{-0.05}

17

2x M3

17⁰_{-0.05}

13

$\phi 6$

BMS Matrix Installation

CM-RG1840G18 (Optional)

$\phi 16$

BML Robot Arm Flange Side-through Installation

Six Axis Robotic Arm

FCM-S01 (Optional)

$\phi 6$

BMC Scara Scara Robot Arm Installation

$\phi 6\text{mm}$ Air pipe (Optional)

$\phi 20\text{mm}$ Scara Robotic Arm

FCM-S20N18 (Optional)

BMC Rigid Connection Installation

SMP-1420 (Optional)

CM-RG18128G18 (Optional)

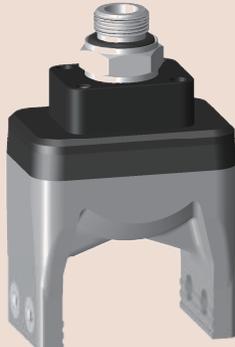
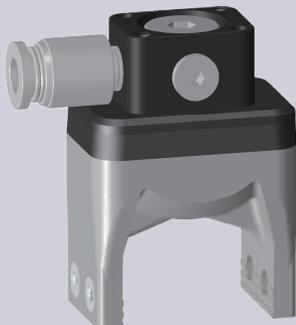
BMC Buffer Installation

CM-S02 (Optional)

B-2G2227(LH)/SN

Soft Beak / Beak Module

B-2GN2227[H]/SN

BMC-2GN2227[H]/SN Direct-through H Type		BMS-2GN2227[H]/SN Direct-through Precision Positioning H Type		BML-2GN2227[H]/SN Side-through H Type		BMM-2GN2227[H]/SN Multi-way Precision Positioning H Type	
BMC-2GN2227[HAS]/SN Direct-through Dust-free H Type		BMS-2GN2227[HAS]/SN Direct-through Precision Positioning Dust-free H Type		BML-2GN2227[HAS]/SN Side-through Dust-free H Type		BMM-2GN2227[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	25.2g	Weight	32.43g	Weight	38.6g	Weight	36.58g

Product features

- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



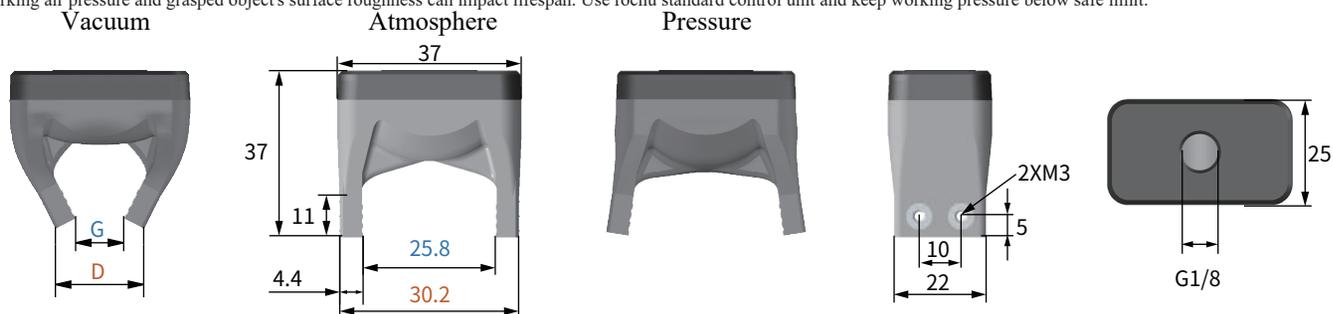
Parameter

Gripping range	3-30mm	Gripping force	0-7.1N	Theoretical gripping load**	0-282g	Ideal gripping workpiece size*	25.5mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<140kPa

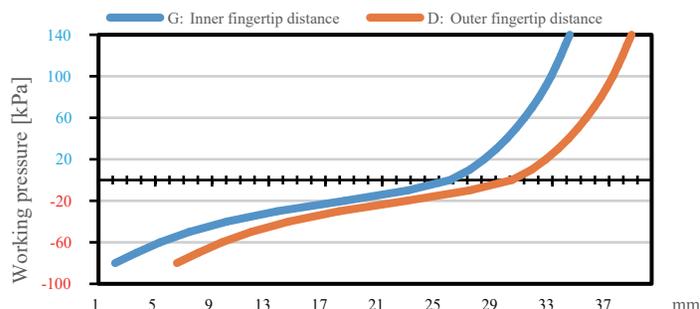
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

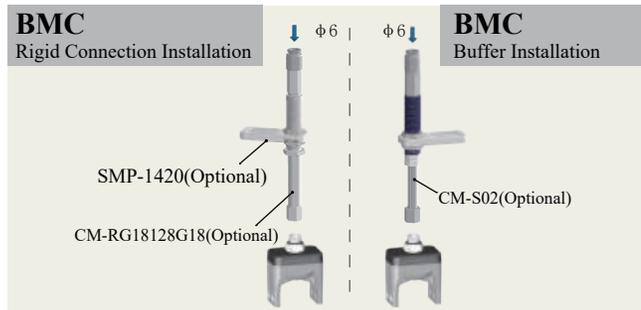
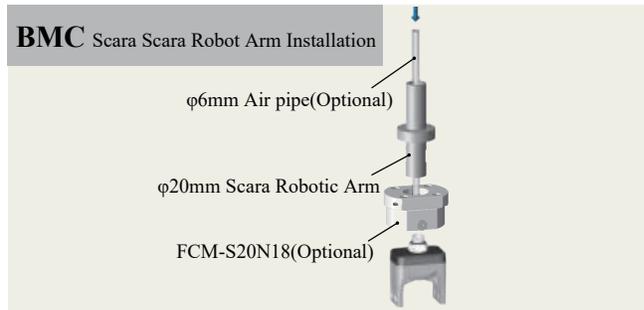
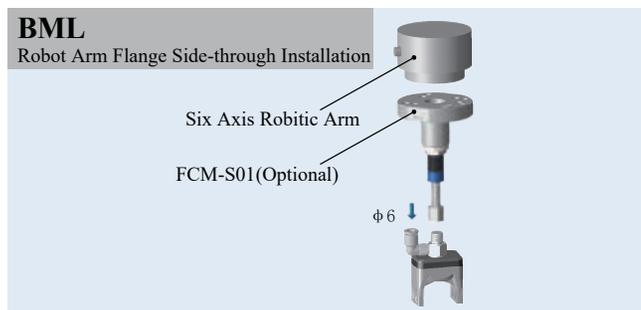
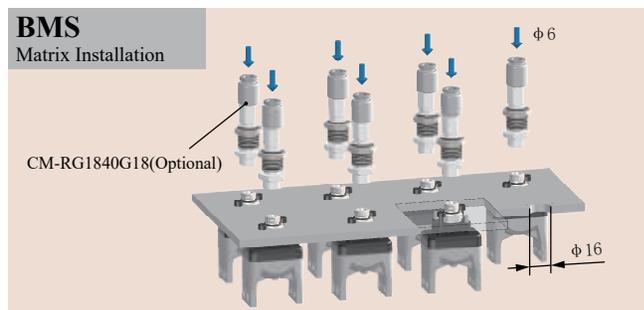
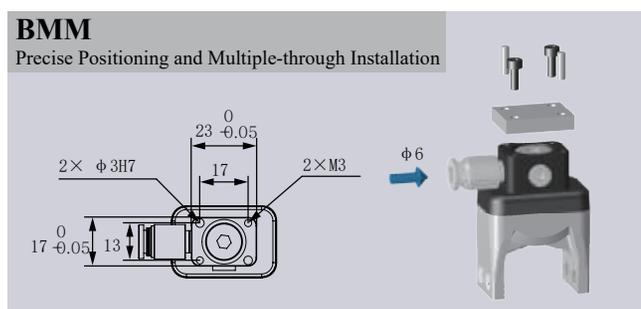
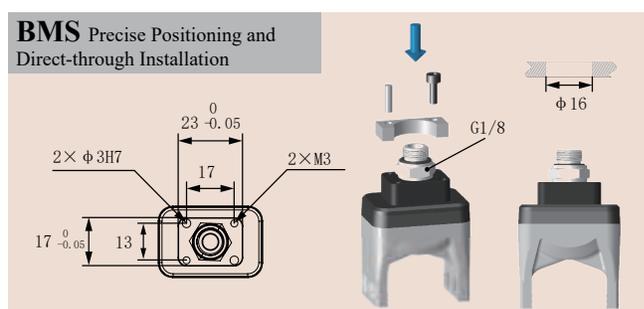
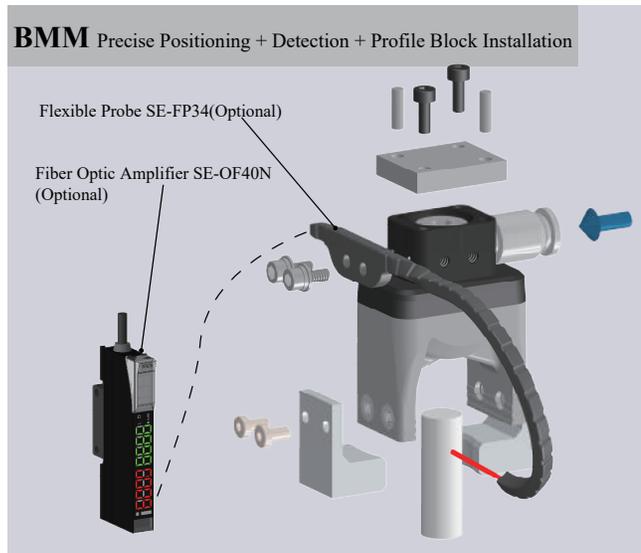
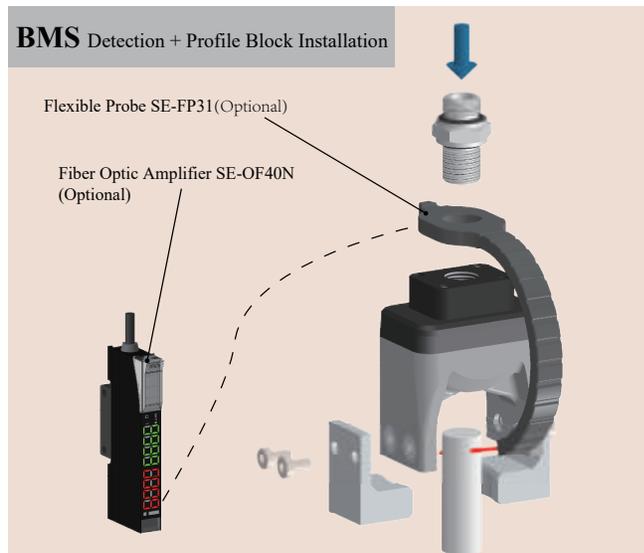
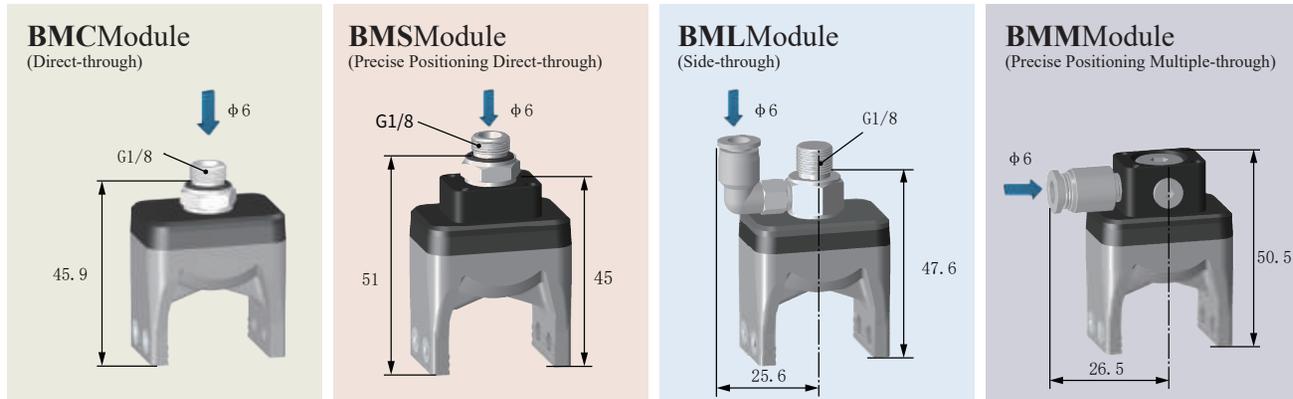
** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve

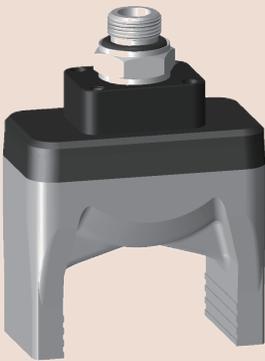
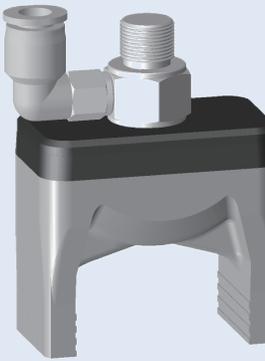
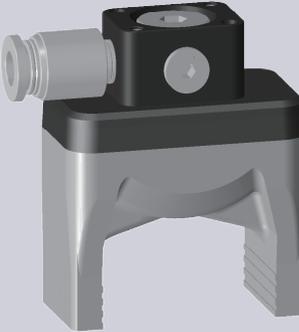




B-2GN2227[H]/SN

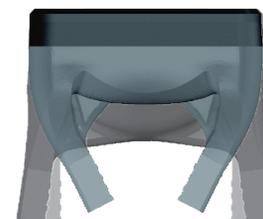
Soft Beak / Beak Module

B-2G2232[H]/SN

BMC-2G2232[H]/SN Direct-through H Type	BMS-2G2232[H]/SN Direct-through Precision Positioning H Type	BML-2G2232[H]/SN Side-through H Type	BMM-2G2232[H]/SN Multi-way Precision Positioning H Type
BMC-2G2232[HAS]/SN Direct-through Dust-free H Type	BMS-2G2232[HAS]/SN Direct-through Precision Positioning Dust-free H Type	BML-2G2232[HAS]/SN Side-through Dust-free H Type	BMM-2G2232[HAS]/SN Multi-way Precision Positioning Dust-free H Type
			
Weight 26.5g	Weight 33.73g	Weight 39.9g	Weight 37.88g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



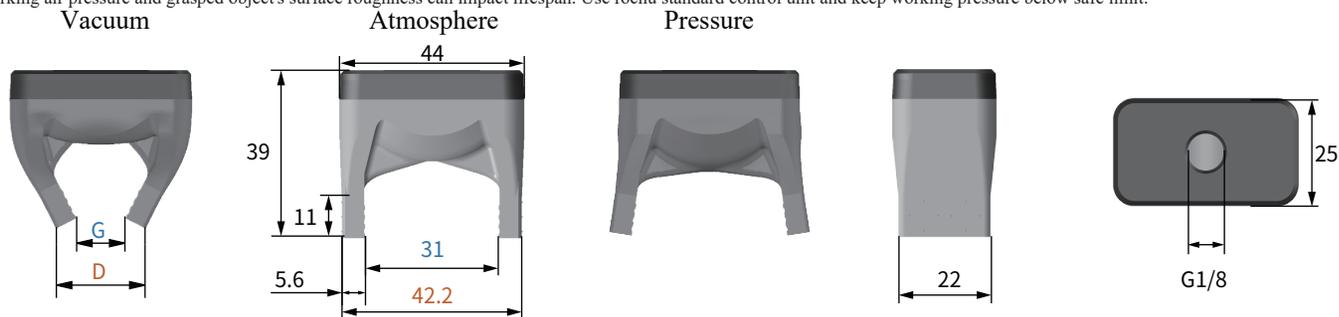
Parameter

Gripping range	20-35.5mm	Gripping force	0-7.9N	Theoretical gripping load**	0-318g	Ideal gripping workpiece size*	31.0mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

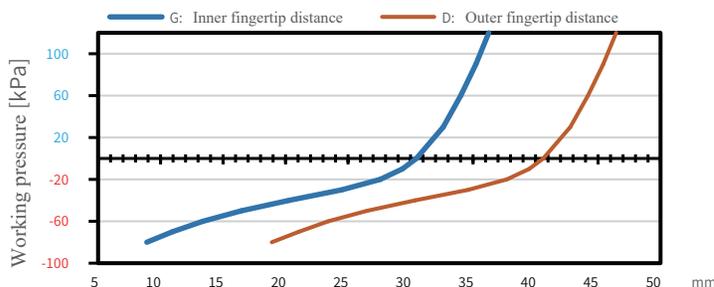
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

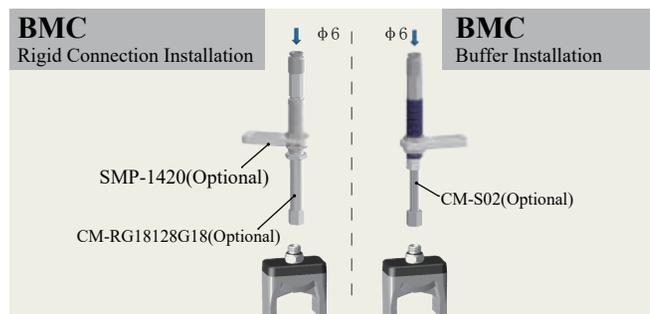
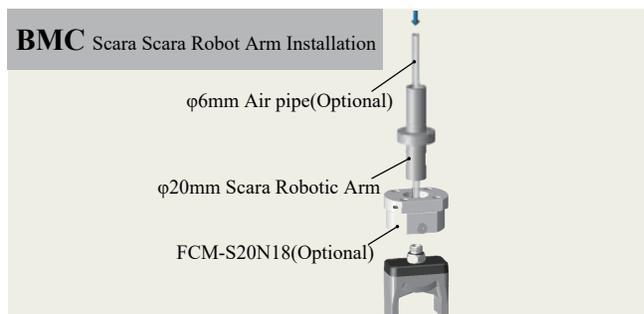
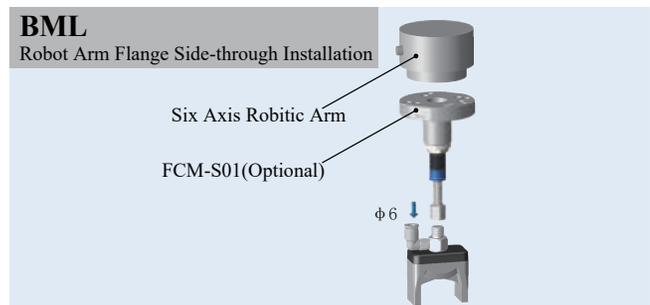
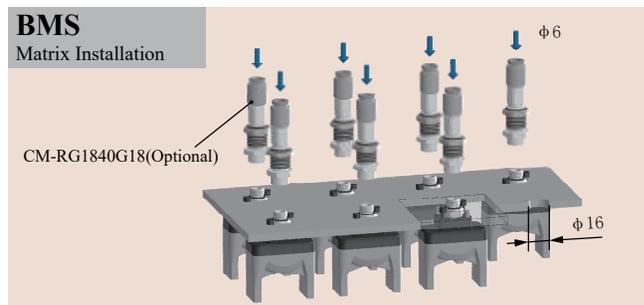
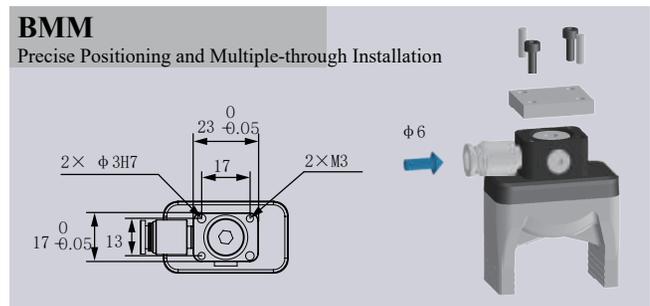
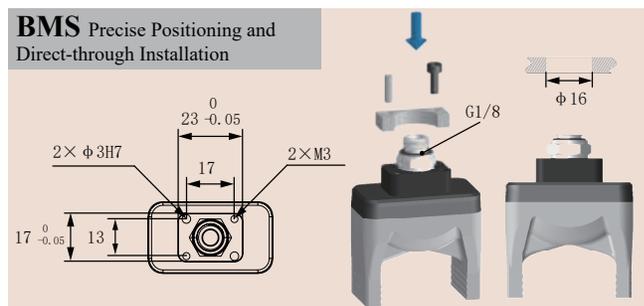
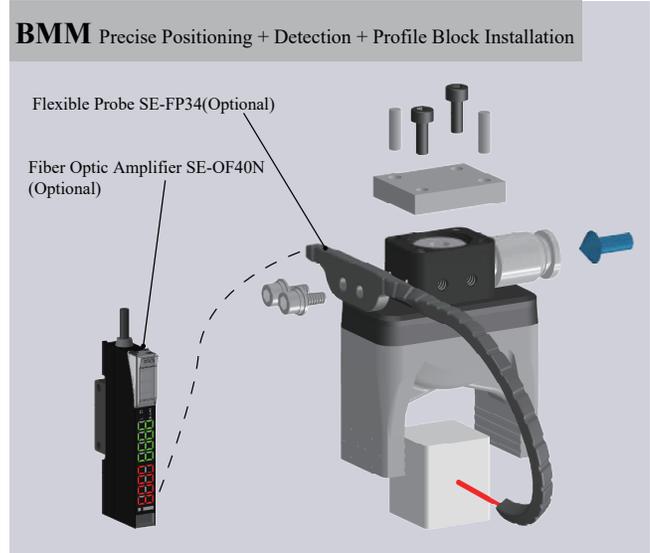
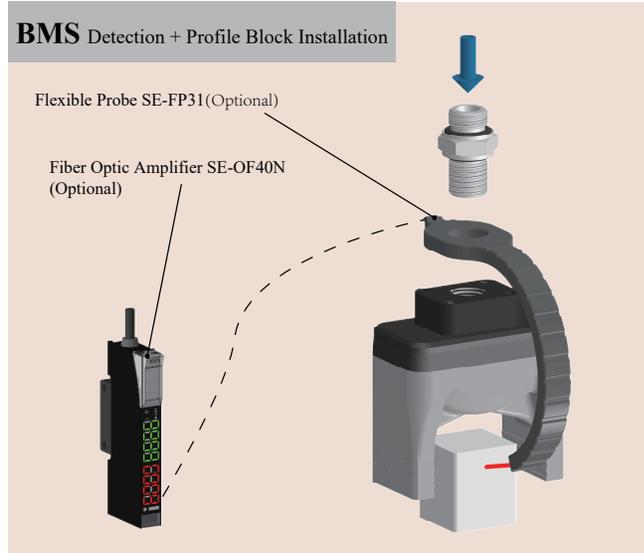
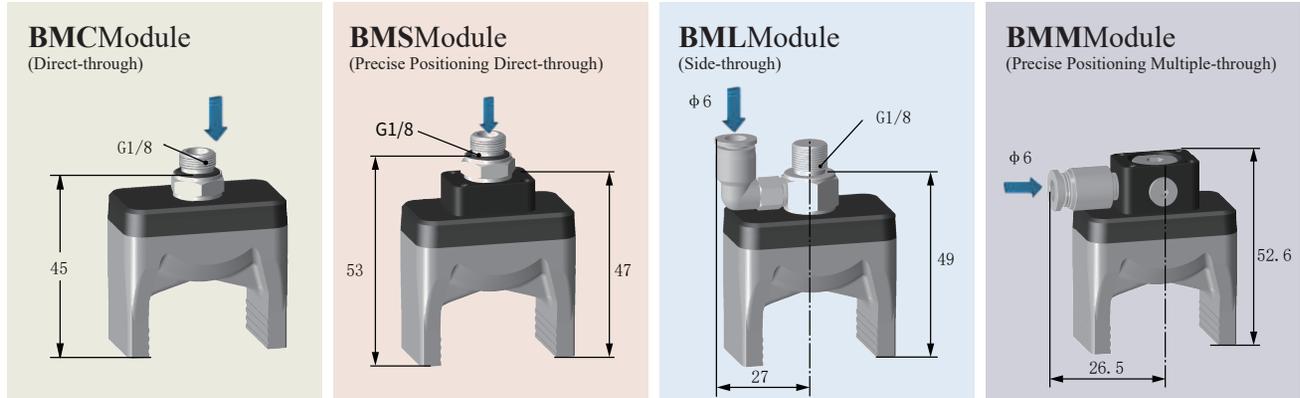
** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve

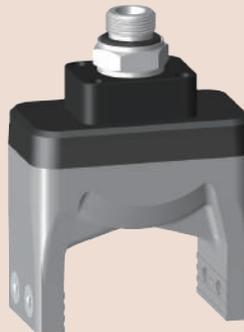
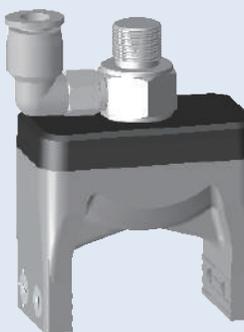
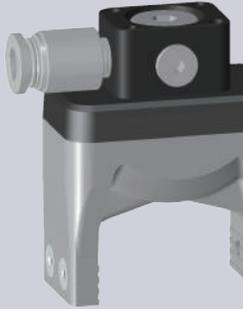




B-2G2232[H]/SN

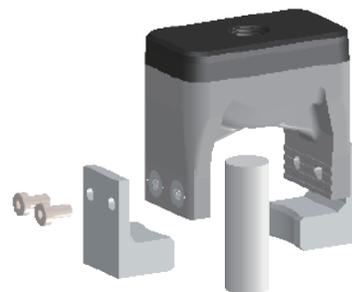
Soft Beak / Beak Module

B-2GN2232[H]/SN

BMC-2GN2232[H]/SN Direct-through H Type		BMS-2GN2232[H]/SN Direct-through Precision Positioning H Type		BML-2GN2232[H]/SN Side-through H Type		BMM-2GN2232[HS]/SN Multi-way Precision Positioning H Type	
BMC-2GN2232[HAS]/SN Direct-through Dust-free H Type		BMS-2GN2232[HAS]/SN Direct-through Precision Positioning Dust-free H Type		BML-2GN2232[HAS]/SN Side-through Dust-free H Type		BMM-2GN2232[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	28.8g	Weight	36.03g	Weight	42.2g	Weight	40.18g

Product features

- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



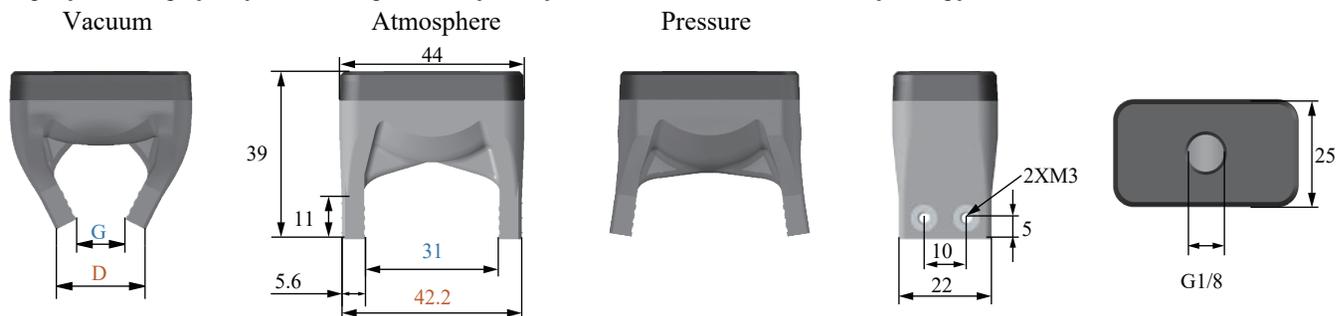
Parameter

Gripping range	20-35.5mm	Gripping force	0-7.9N	Theoretical gripping load**	0-318g	Ideal gripping workpiece size*	31mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

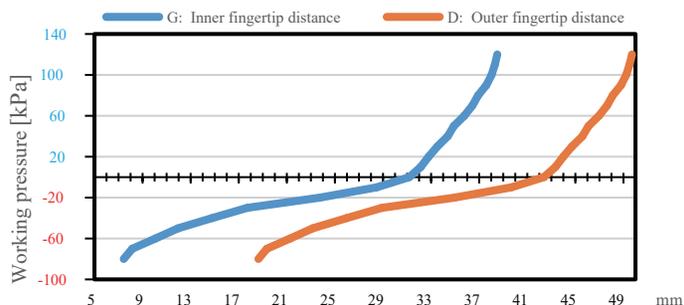
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

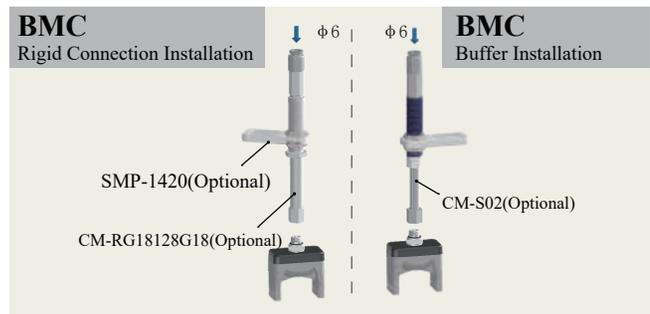
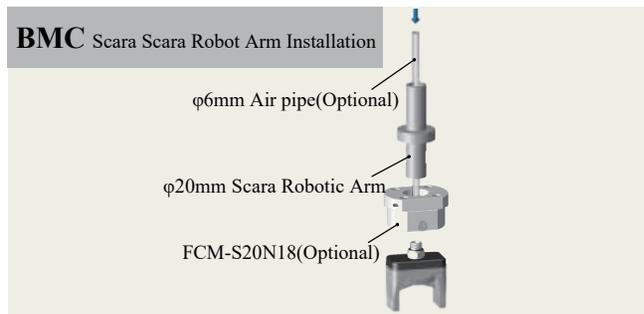
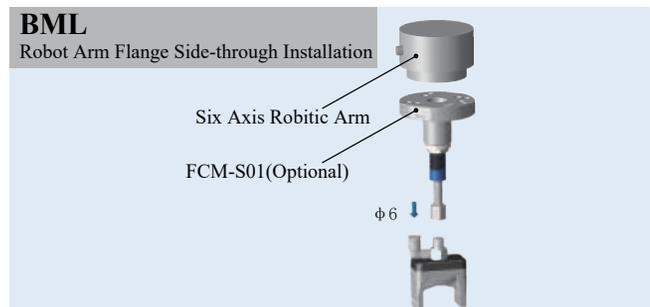
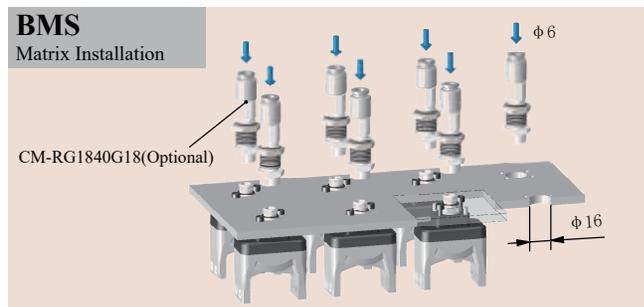
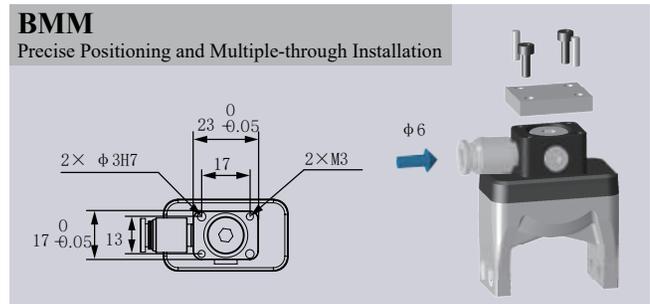
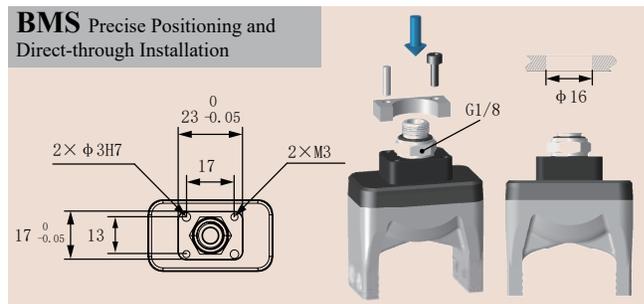
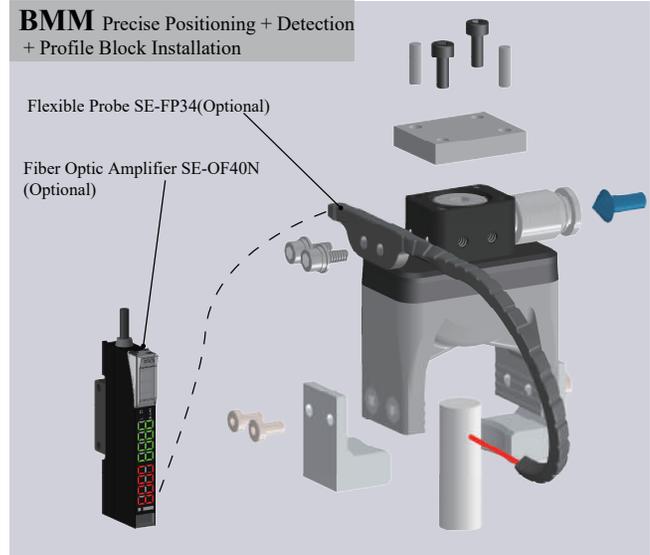
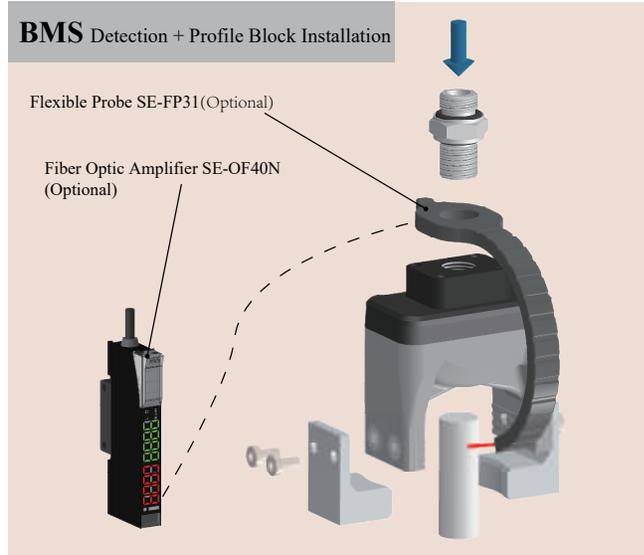
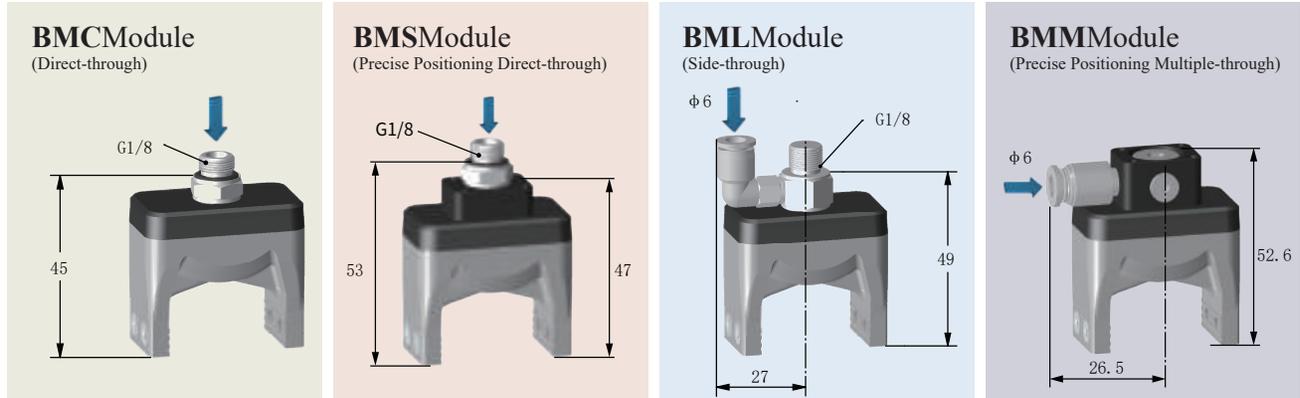
** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve

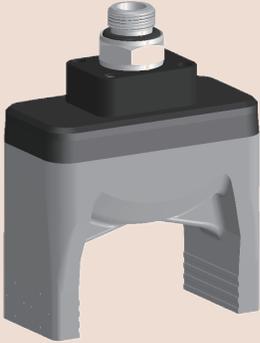
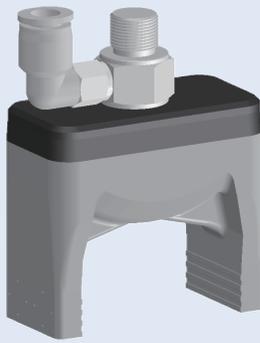
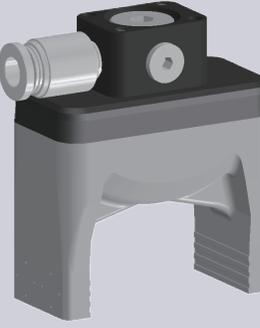




B-2GN2232[H]/SN

Soft Beak / Beak Module

B-2G2237[H]/SN

BMC-2G2237[H]/SN Direct-through H Type	BMS-2G2237[H]/SN Direct-through Precision Positioning H Type	BML-2G2237[H]/SN Side-through H Type	BMM-2G2237[HS]/SN Multi-way Precision Positioning H Type
BMC-2G2237[HAS]/SN Direct-through Dust-free H Type	BMS-2G2237[HAS]/SN Direct-through Precision Positioning Dust-free H Type	BML-2G2237[HAS]/SN Side-through Dust-free H Type	BMM-2G2237[HAS]/SN Multi-way Precision Positioning Dust-free H Type
			
Weight 30g	Weight 37.23g	Weight 43.4g	Weight 41.38g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



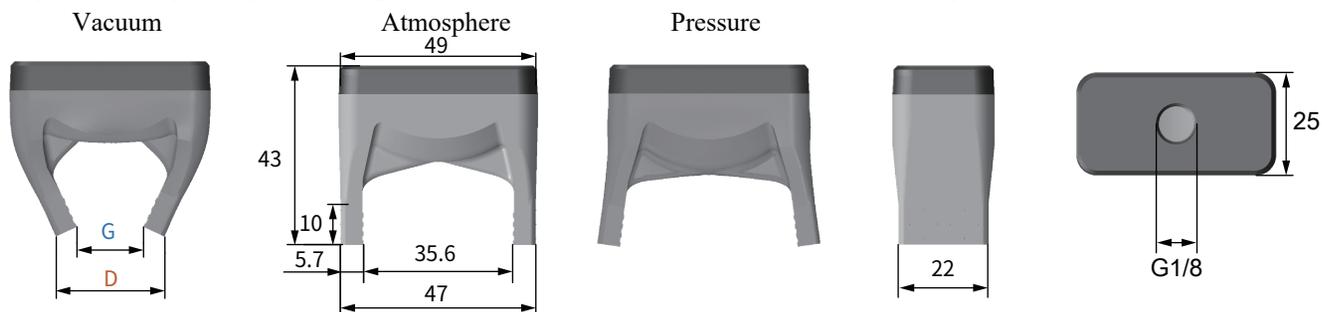
Parameter

Gripping range	18-38mm	Gripping force	0-7.5N	Theoretical gripping load**	0-298g	Ideal gripping workpiece size*	36.0mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

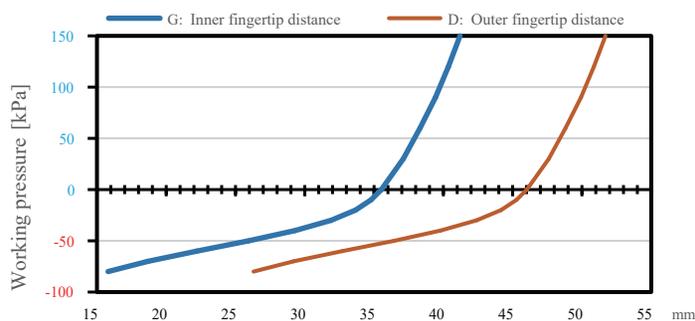
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



BMC Module
(Direct-through)

BMS Module
(Precise Positioning Direct-through)

BML Module
(Side-through)

BMM Module
(Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

BMC Rigid Connection Installation

BMC Buffer Installation

B-2G2237[H]/SN

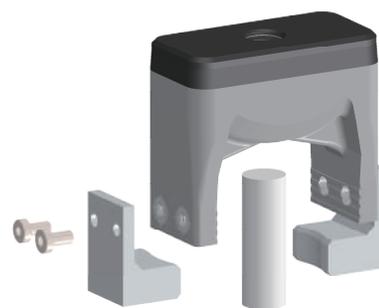
Soft Beak / Beak Module

B-2GN2237[H]/SN

BMC-2GN2237[H]/SN Direct-through H Type	BMS-2GN2237[H]/SN Direct-through Precision Positioning H Type	BML-2GN2237[H]/SN Side-through H Type	BMM-2GN2237[HS]/SN Multi-way Precision Positioning H Type
BMC-2GN2237[HAS]/SN Direct-through Dust-free H Type	BMS-2GN2237[HAS]/SN Direct-through Precision Positioning Dust-free H Type	BML-2GN2237[HAS]/SN Side-through Dust-free H Type	BMM-2GN2237[HAS]/SN Multi-way Precision Positioning Dust-free H Type
			
Weight 32.7g	Weight 39.93g	Weight 46.1g	Weight 44.08g

Product features

- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



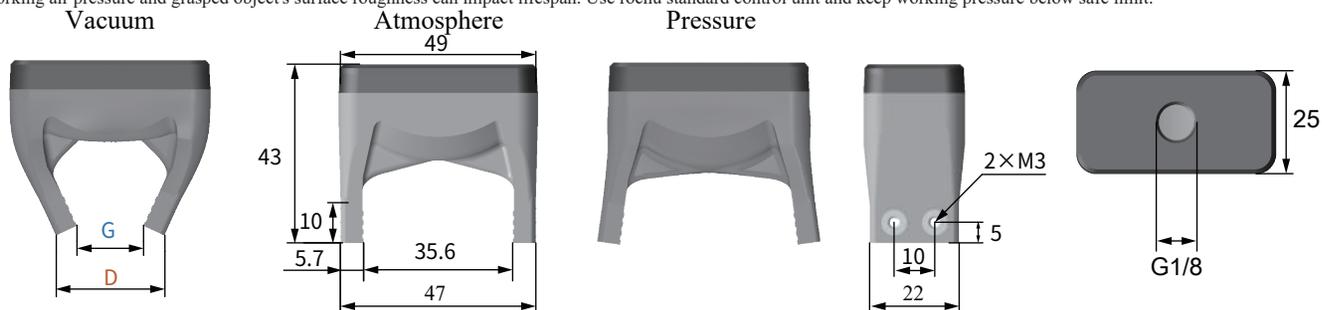
Parameter

Gripping range	18-38mm	Gripping force	0-7.5N	Theoretical gripping load**	0-298g	Ideal gripping workpiece size*	36.0mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

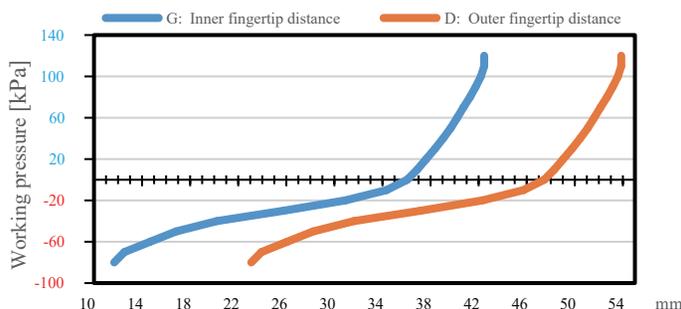
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.

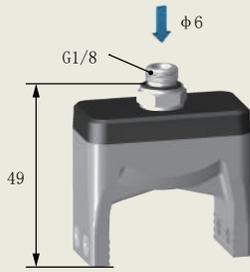


Pressure-Fingertip Distance deformation curve

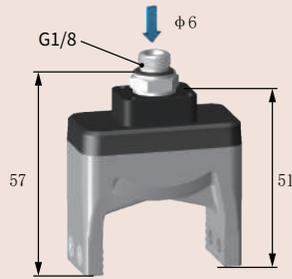


Soft Beak / Beak Module

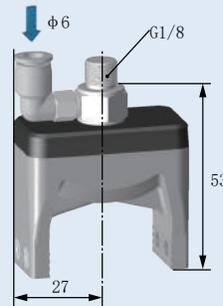
BMCModule
(Direct-through)



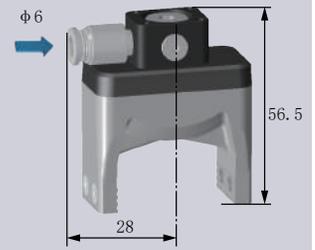
BMSModule
(Precise Positioning Direct-through)



BMLModule
(Side-through)

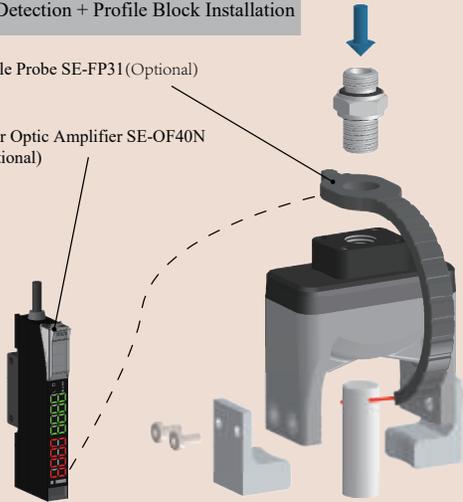


BMMModule
(Precise Positioning Multiple-through)



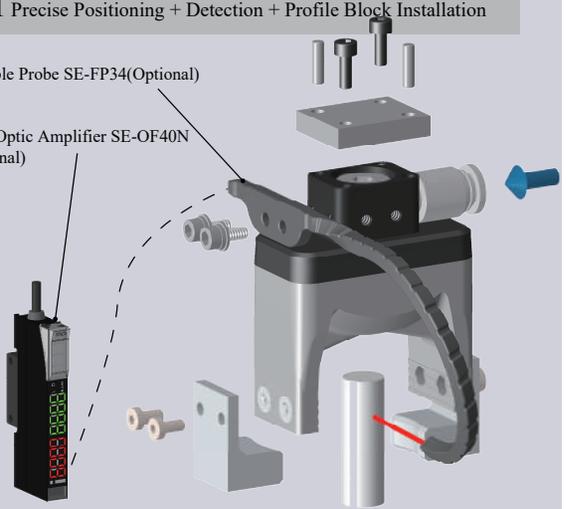
BMS Detection + Profile Block Installation

Flexible Probe SE-FP31 (Optional)
Fiber Optic Amplifier SE-OF40N (Optional)

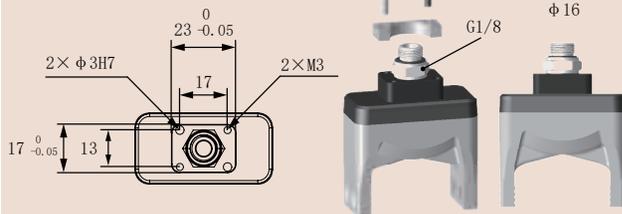


BMM Precise Positioning + Detection + Profile Block Installation

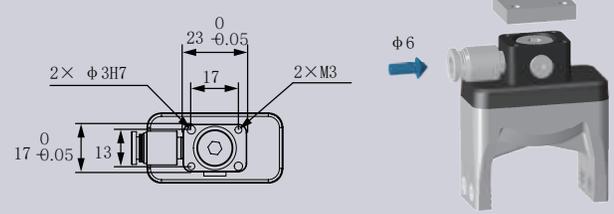
Flexible Probe SE-FP34 (Optional)
Fiber Optic Amplifier SE-OF40N (Optional)



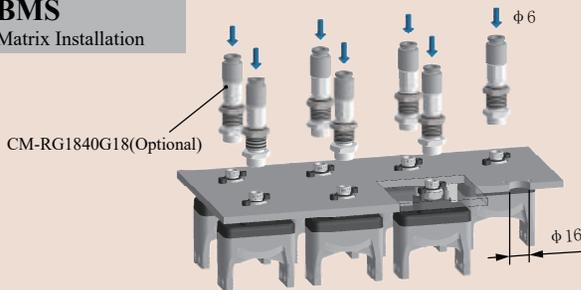
BMS Precise Positioning and Direct-through Installation



BMM Precise Positioning and Multiple-through Installation



BMS Matrix Installation



BML Robot Arm Flange Side-through Installation



BMC Scara Scara Robot Arm Installation

φ6mm Air pipe (Optional)
φ20mm Scara Robotic Arm
FCM-S20N18 (Optional)



BMC Rigid Connection Installation

SMP-1420 (Optional)
CM-RG18128G18 (Optional)



BMC Buffer Installation

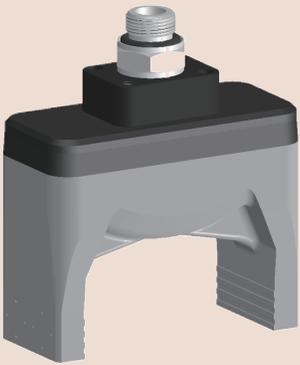
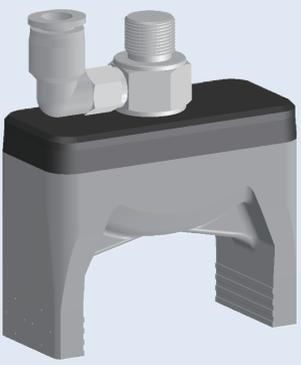
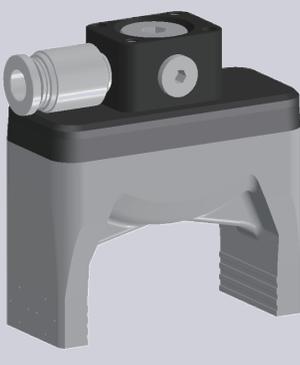
CM-S02 (Optional)



B-2GN2237[H]/SN

Soft Beak / Beak Module

B-2G2242[H]/SN

BMC-2G2242[H]/SN 直通安全增强型	BMS-2G2242[H]/SN 直通精定位安全增强型	BML-2G2242[H]/SN 侧通安全增强型	BMM-2G2242[H]/SN 多通精定位安全增强型
BMC-2G2242[HAS]/SN 直通安全增强无痕型	BMS-2G2242[HAS]/SN 直通精定位安全增强无痕型	BML-2G2242[HAS]/SN 侧通安全增强无痕型	BMM-2G2242[HAS]/SN 多通精定位安全增强无痕型
			
模块自重 32g	模块自重 39.23g	模块自重 45.4g	模块自重 43.38g

产品特点

- 正压状态指尖打开，真空状态夹紧，内指尖距 G 可使用工作气压调节，建议配合柔触驱动器使用。
- 柔爪直接接触工件时，应对防尘要求或微型、较轻易吸附的工件，应优选无痕型材质[HAS]。
- 食品级材质，可直接用于食品抓取。



Parameter

Gripping range	26.5-40mm	Gripping force	0-9.6N	Theoretical gripping load**	0-383g	Ideal gripping workpiece size*	40mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150万次	Contact Temperature	<220°C	Safe pressure***	<100kPa

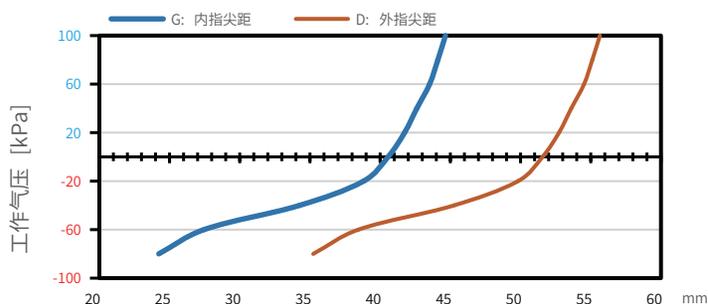
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

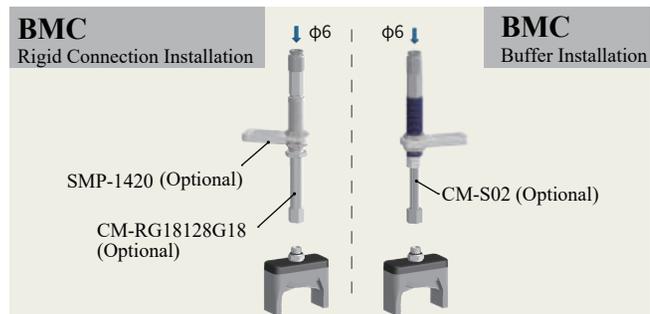
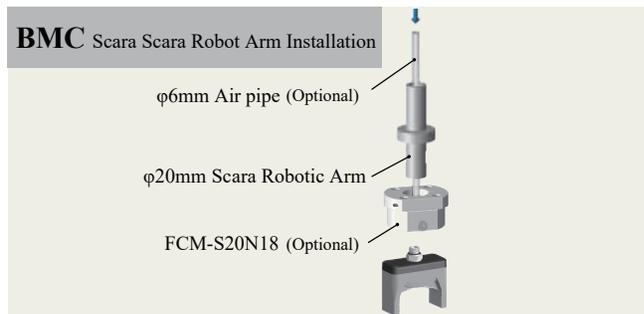
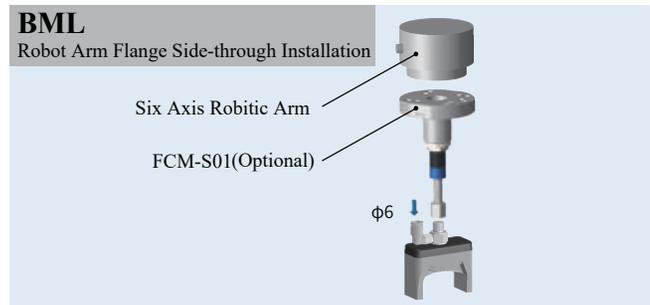
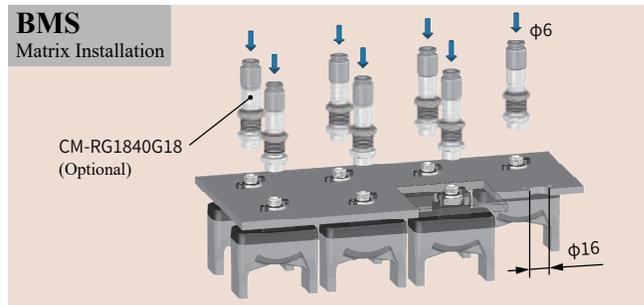
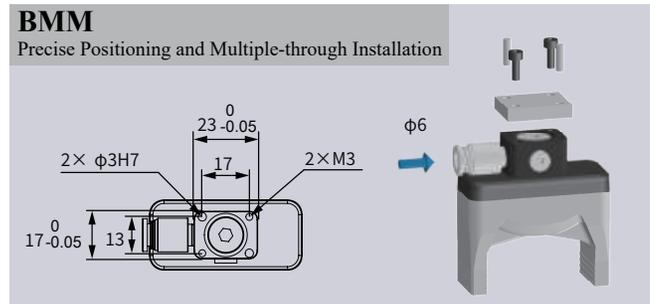
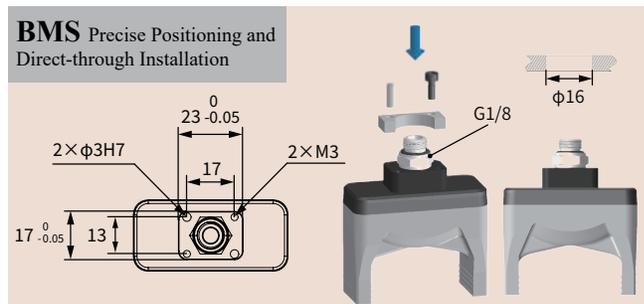
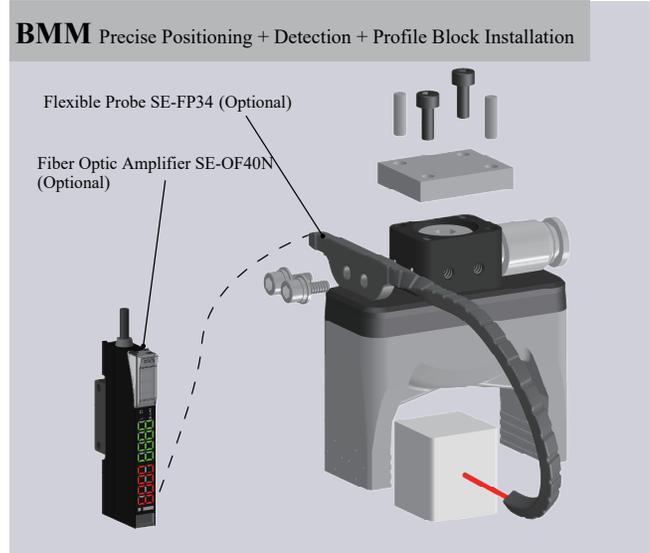
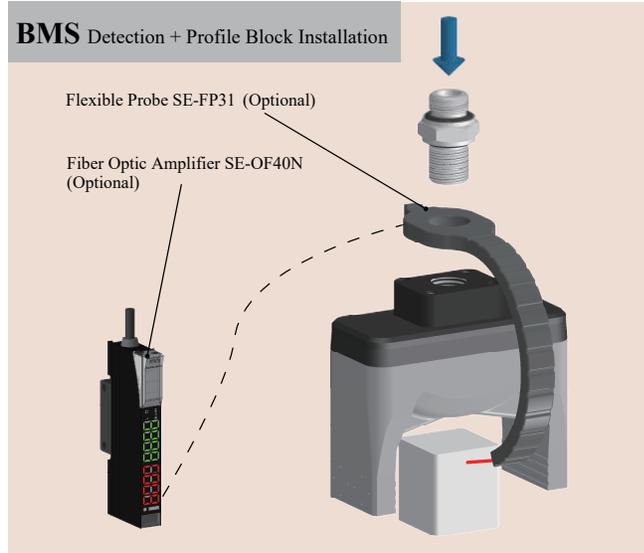
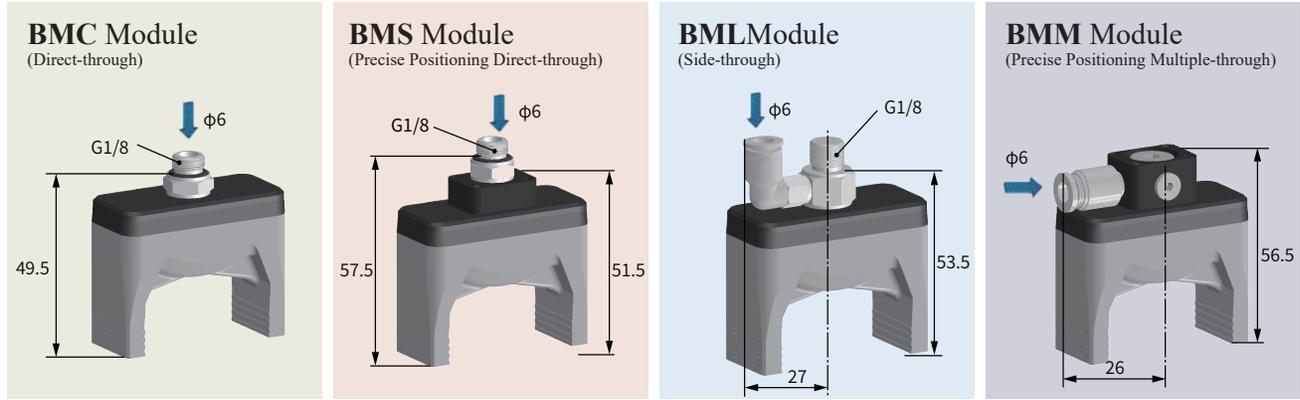
**： Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



气压-指尖距变形曲线图





B-2G2242[H]/SN

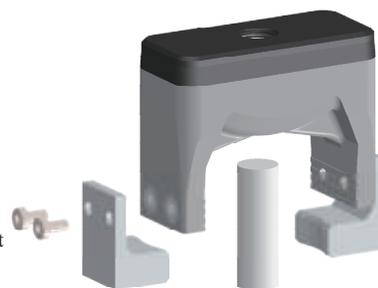
Soft Beak / Beak Module

B-2GN2242[H]/SN

BMC-2GN2242[H]/SN Direct-through H Type	BMS-2GN2242[H]/SN Direct-through Precision Positioning H Type	BML-2GN2242[H]/SN Side-through H Type	BMM-2GN2242[H]/SN Multi-way Precision Positioning H Type
BMC-2GN2242[HAS]/SN Direct-through Dust-free H Type	BMS-2GN2242[HAS]/SN Direct-through Precision Positioning H Type	BML-2GN2242[HAS]/SN Side-through Dust-free H Type	BMM-2GN2242[HAS]/SN Multi-way Precision Positioning Dust-free H Type
			
Weight 34.4g	Weight 41.63g	Weight 47.8g	Weight 45.78g

Product features

- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



Parameter

Gripping range	26.5-40mm	Gripping force	0-7.0N	Theoretical gripping load**	0-280g	Ideal gripping workpiece size*	40mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

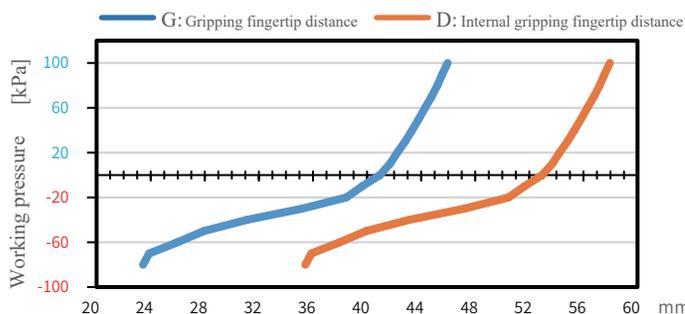
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



BMC Module
(Direct-through)

BMS Module
(Precise Positioning Direct-through)

BML Module
(Side-through)

BMM Module
(Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

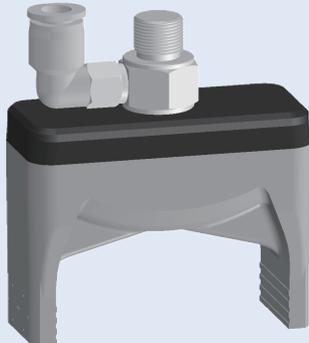
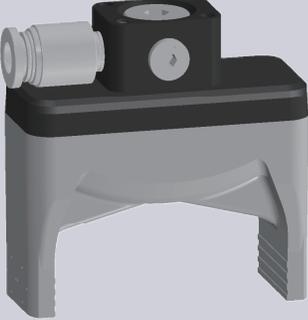
BMC Rigid Connection Installation

BMC Buffer Installation

B-2GN2242[H]/SN

Soft Beak / Beak Module

B-2G2247[H]/SN

BMC-2G2247[H]/SN Direct-through H Type	BMS-2G2247[H]/SN Direct-through Precision Positioning H Type	BML-2G2247[H]/SN Side-through H Type	BMM-2G2247[H]/SN Multi-way Precision Positioning H Type
BMC-2G2247[HAS]/SN Direct-through Dust-free H Type	BMS-2G2247[HAS]/SN Direct-through Precision Positioning H Type	BML-2G2247[HAS]/SN Side-through Dust-free H Type	BMM-2G2247[HAS]/SN Multi-way Precision Positioning Dust-free H Type
			
Weight 32g	Weight 39.23g	Weight 45.4g	Weight 43.38g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



Parameter

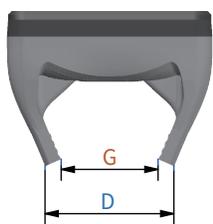
Gripping range	30-48mm	Gripping force	0-12N	Theoretical gripping load**	0-480g	Ideal gripping workpiece size*	47mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

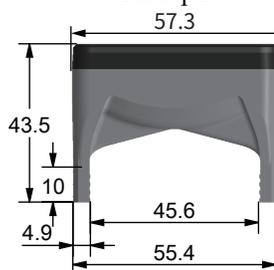
** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.

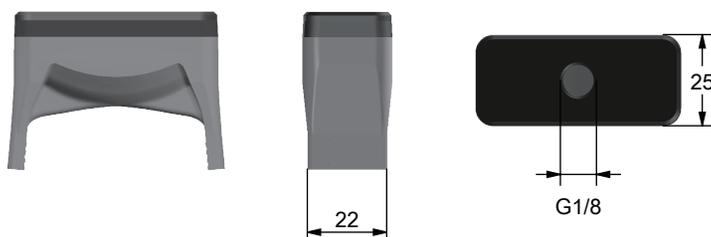
Vacuum



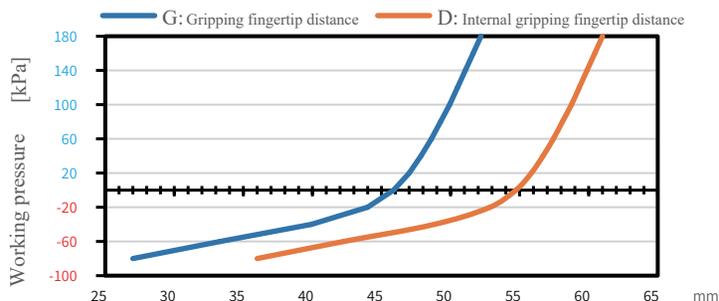
Atmosphere

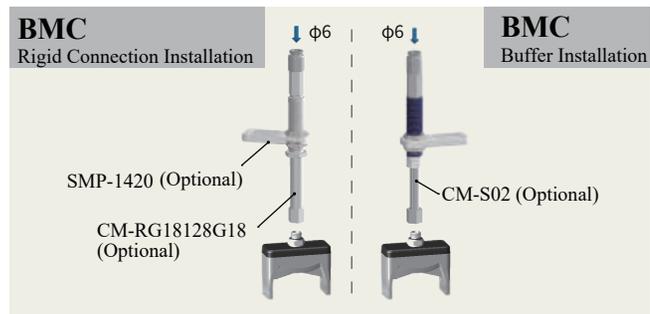
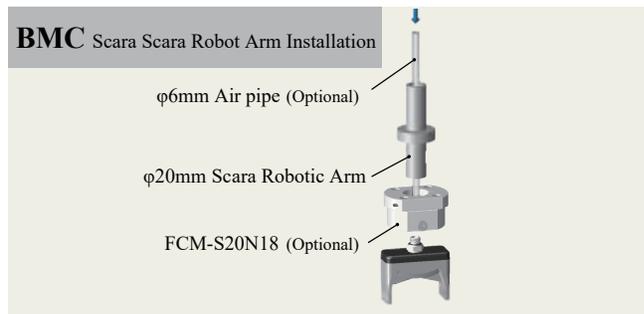
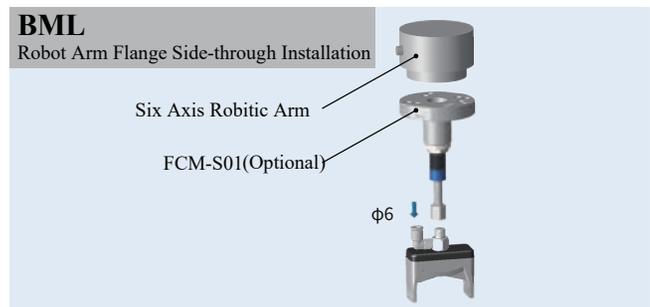
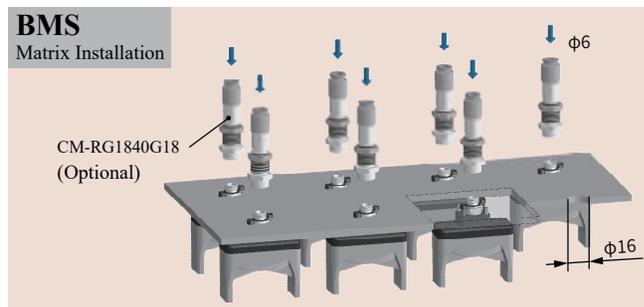
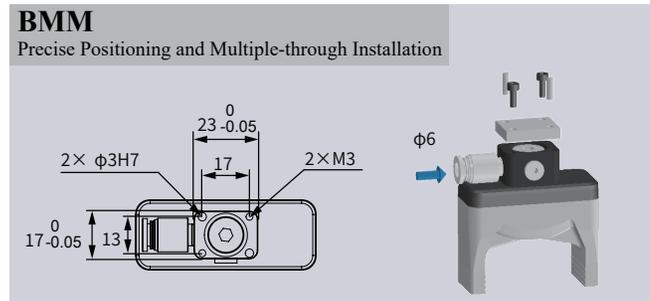
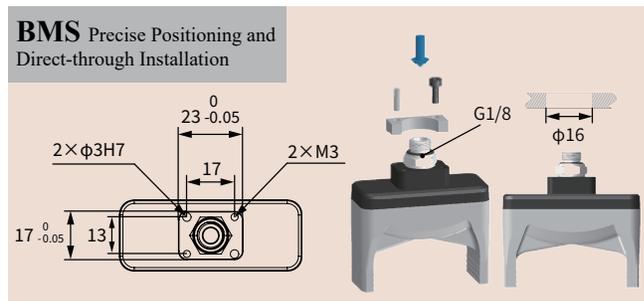
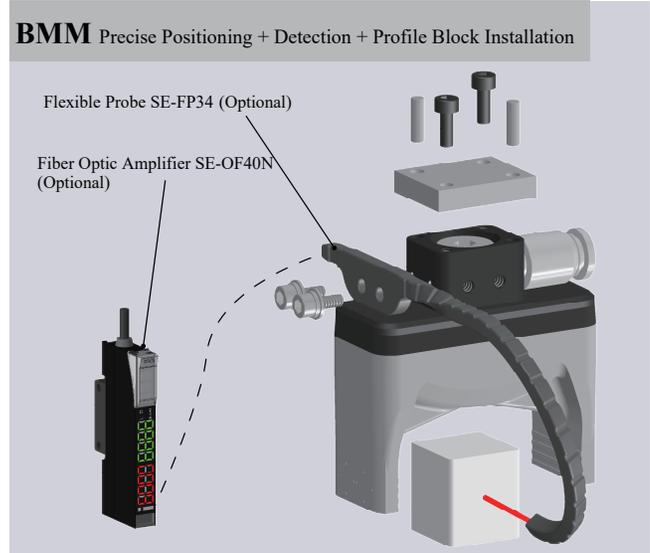
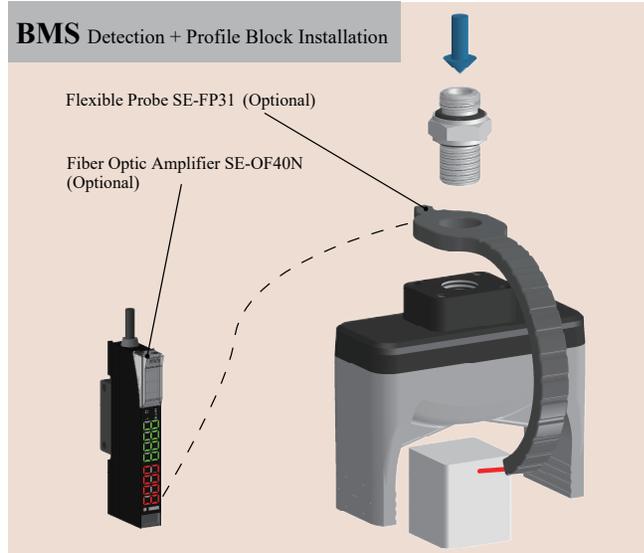
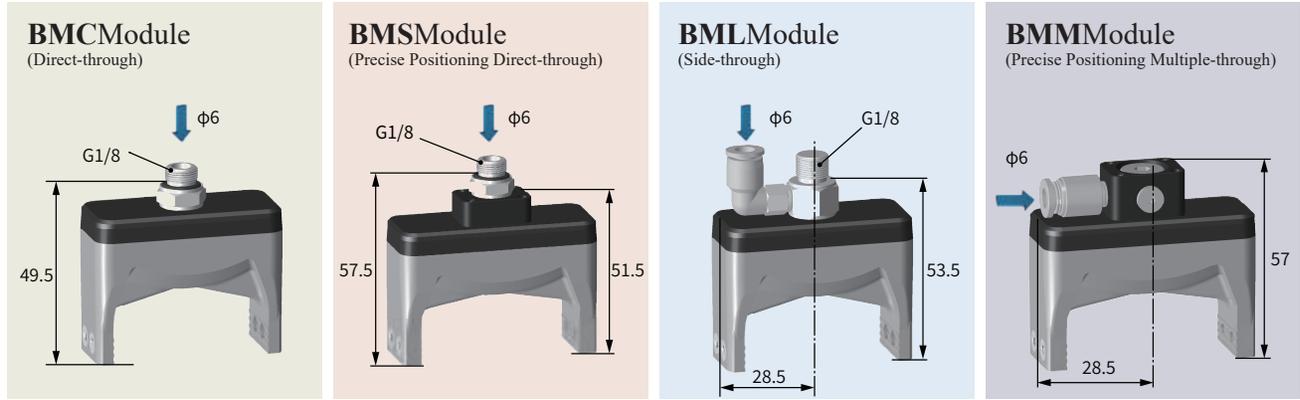


Pressure



Pressure-Fingertip Distance deformation curve





B-2G2247[H]/SN

Soft Beak / Beak Module

B-2G2247[LH]/SN

BMC-2G2247[LH]/SN Direct-through Anti-static H Type	BMS-2G2247[LH]/SN Direct-through Anti-static Precision Positioning H Type	BML-2G2247[LH]/SN Side-through Anti-static H Type	BMM-2G2247[LH]/SN Multi-way Anti-static Precision Positioning H Type
BMC-2G2247[LHAS]/SN Direct-through Anti-static H Type	BMS-2G2247[LHAS]/SN Direct-through Anti-static Dust-free Precision Positioning H Type	BML-2G2247[LHAS]/SN Side-through Anti-static Dust-free P Type	BMM-2G2247[LHAS]/SN Side-through Anti-static Dust-free Precision Positioning H Type
			
Weight 32g	Weight 39.23g	Weight 45.4g	Weight 43.38g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G and outer fingertips distance D can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [LHAS] preferentially.



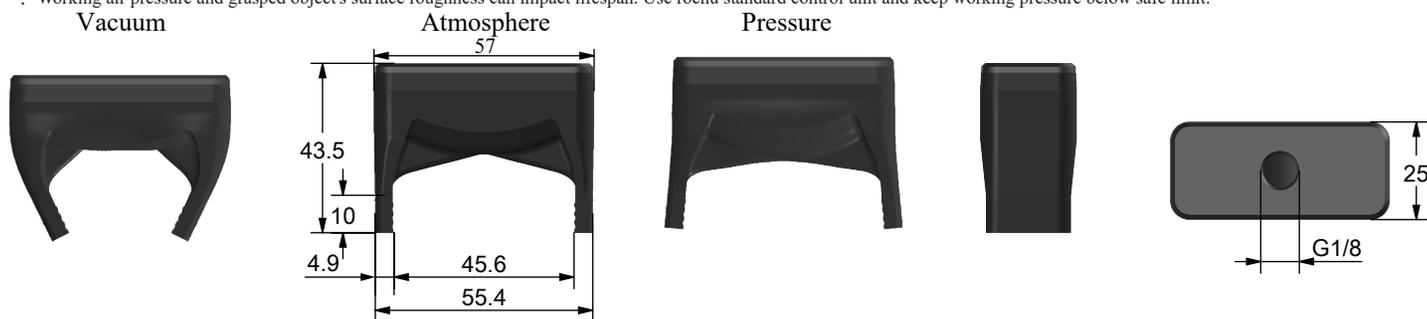
Parameter

Gripping range	30-48mm	Gripping force	0-9.4N	Theoretical gripping load**	0-378g	Ideal gripping workpiece size*	46.0mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

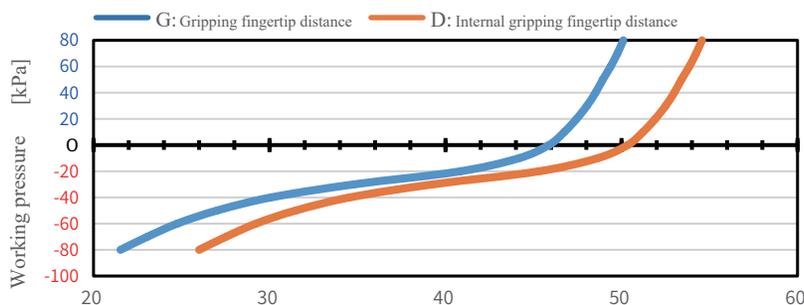
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



BMC Module
(Direct-through)

BMS Module
(Precise Positioning Direct-through)

BML Module
(Side-through)

BMM Module
(Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

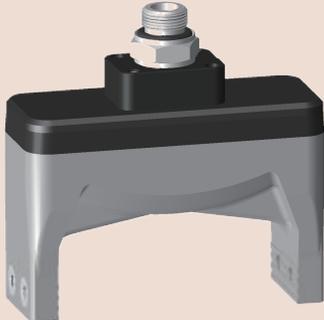
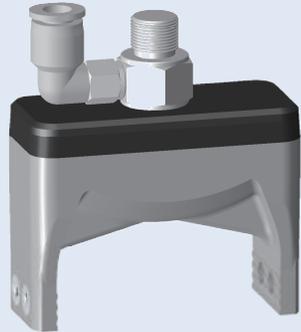
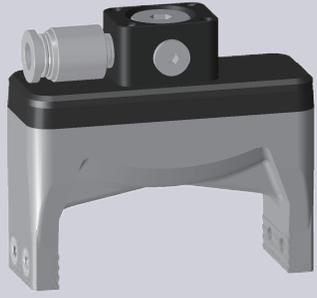
BMC Rigid Connection Installation

BMC Buffer Installation

B-2G2247(LH)/SN

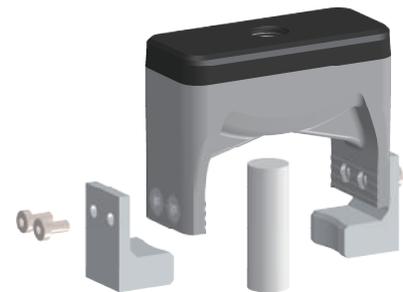
Soft Beak / Beak Module

B-2GN2247[H]/SN

BMC-2GN2247[H]/SN Direct-through H Type		BMS-2GN2247[H]/SN Direct-through Precision Positioning H Type		BML-2GN2247[H]/SN Side-through H Type		BMM-2GN2247[H]/SN Multi-way Precision Positioning H Type	
BMC-2GN2247[HAS]/SN Direct-through Dust-free H Type		BMS-2GN2247[HAS]/SN Direct-through Precision Positioning H Type		BML-2GN2247[HAS]/SN Side-through Dust-free H Type		BMM-2GN2247[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	34.2g	Weight	41.43g	Weight	47.6g	Weight	45.58g

Product features

- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



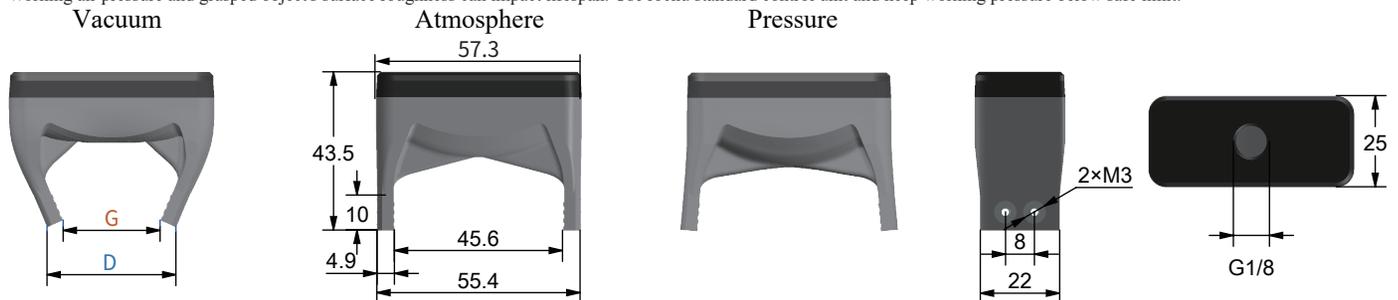
Parameter

Gripping range	30-48mm	Gripping force	0-9.4N	Theoretical gripping load**	0-378g	Ideal gripping workpiece size*	46.0mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

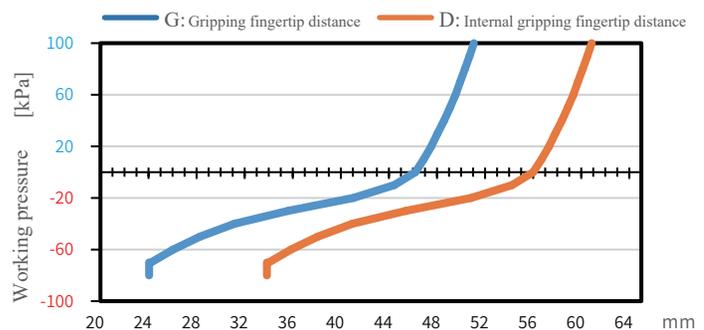
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



Soft Beak / Beak Module

BMCModule

(Direct-through)

BMSModule

(Precise Positioning Direct-through)

BMLModule

(Side-through)

BMMModule

(Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

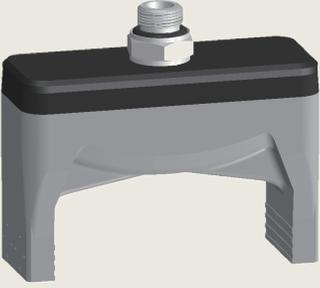
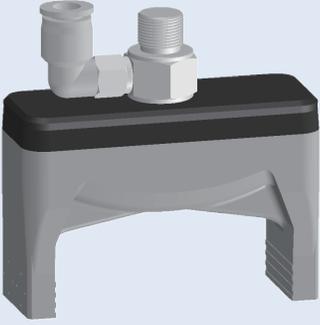
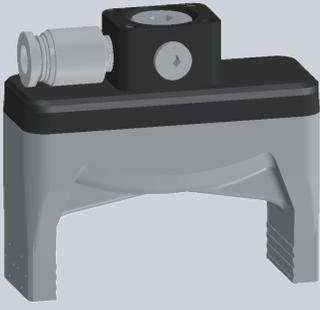
BMC Rigid Connection Installation

BMC Buffer Installation

B-2GN2247[H]/SN

Soft Beak / Beak Module

B-2G2252[H]/SN

BMC-2G2252[H]/SN Direct-through H Type	BMS-2G2252[H]/SN Direct-through Precision Positioning H Type	BML-2G2252[H]/SN Side-through H Type	BMM-2G2252[H]/SN Multi-way Precision Positioning H Type
BMC-2G2252[HAS]/SN Direct-through Dust-free H Type	BMS-2G2252[HAS]/SN Direct-through Precision Positioning H Type	BML-2G2252[HAS]/SN Side-through Dust-free H Type	BMM-2G2252[HAS]/SN Multi-way Precision Positioning Dust-free H Type
			
Weight 34.4g	Weight 41.63g	Weight 47.8g	Weight 45.78g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



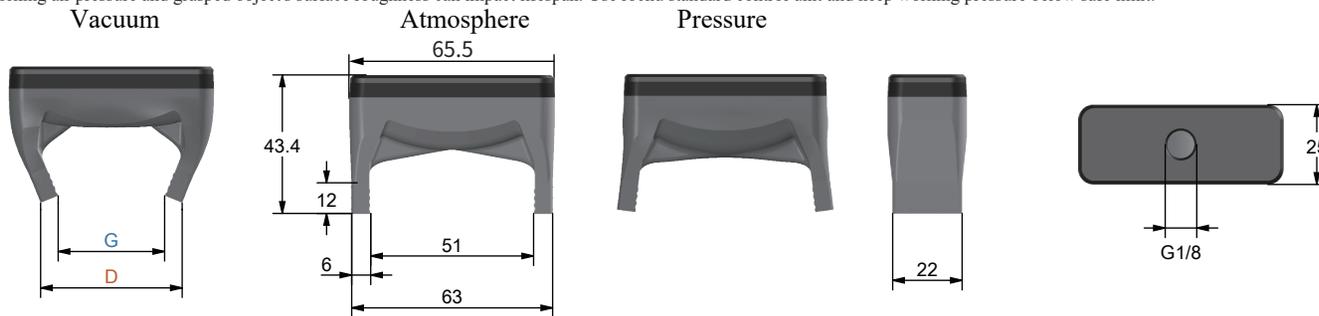
Parameter

Gripping range	34-52mm	Gripping force	0-14.2N	Theoretical gripping load**	0-568g	Ideal gripping workpiece size*	52mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

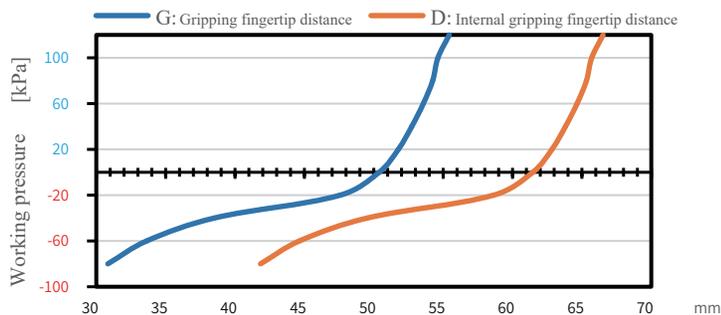
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

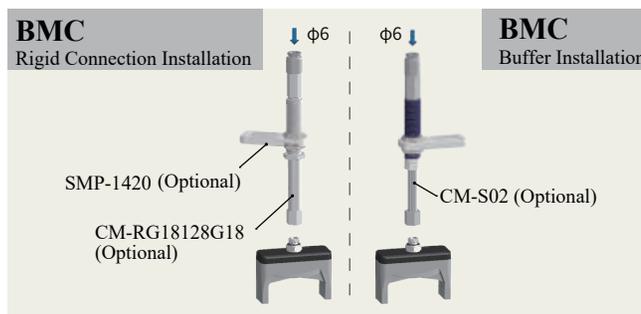
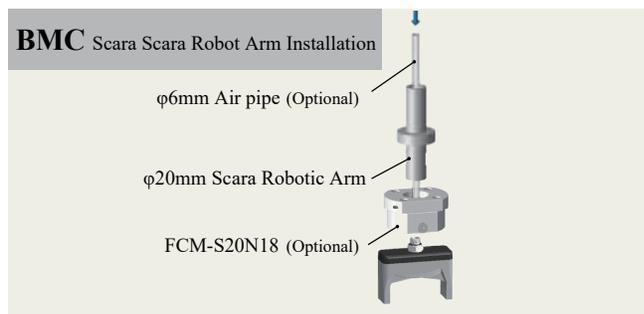
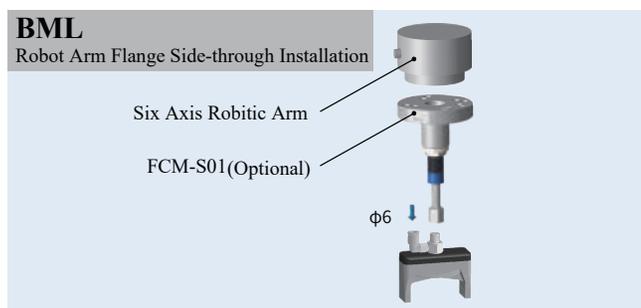
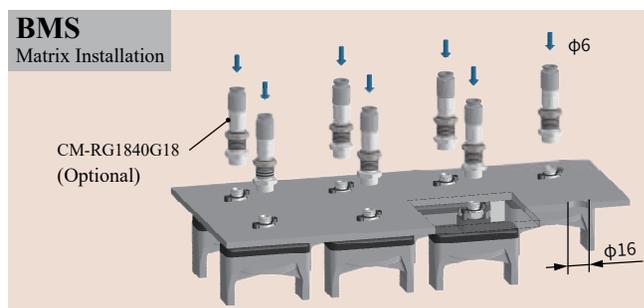
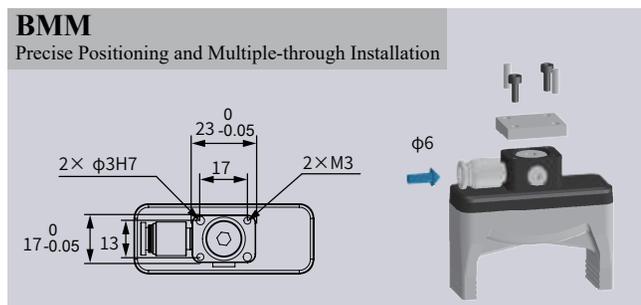
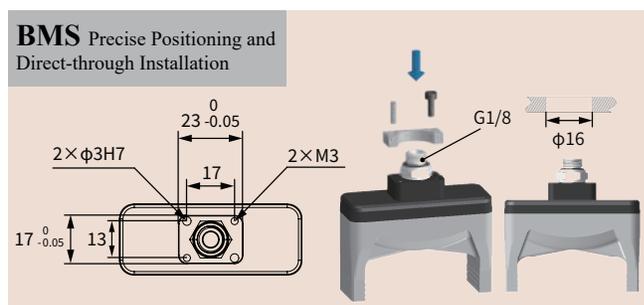
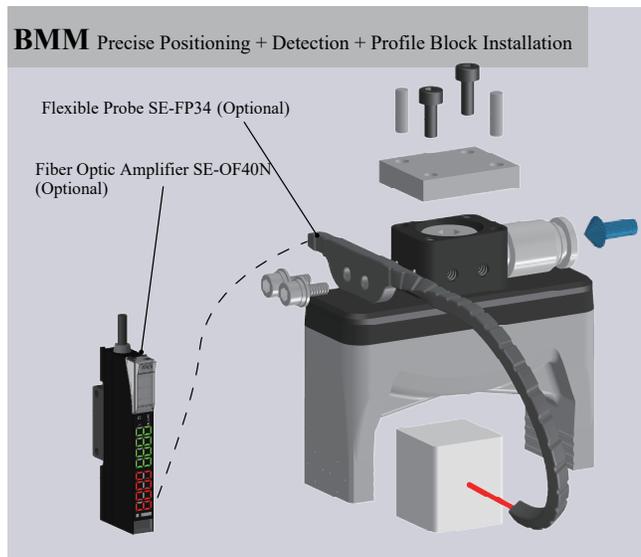
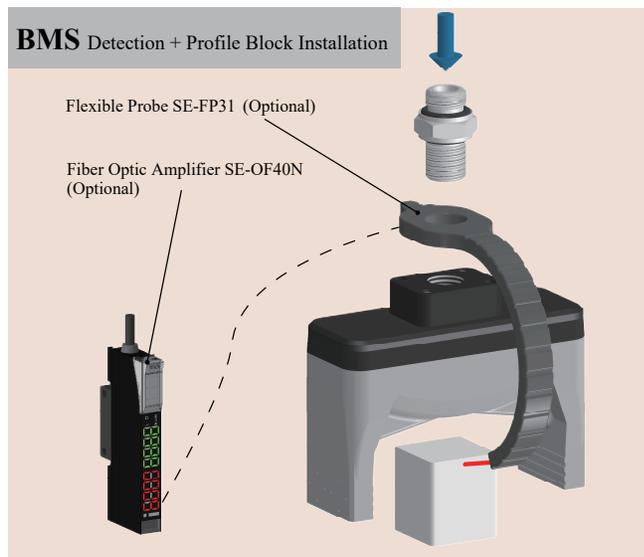
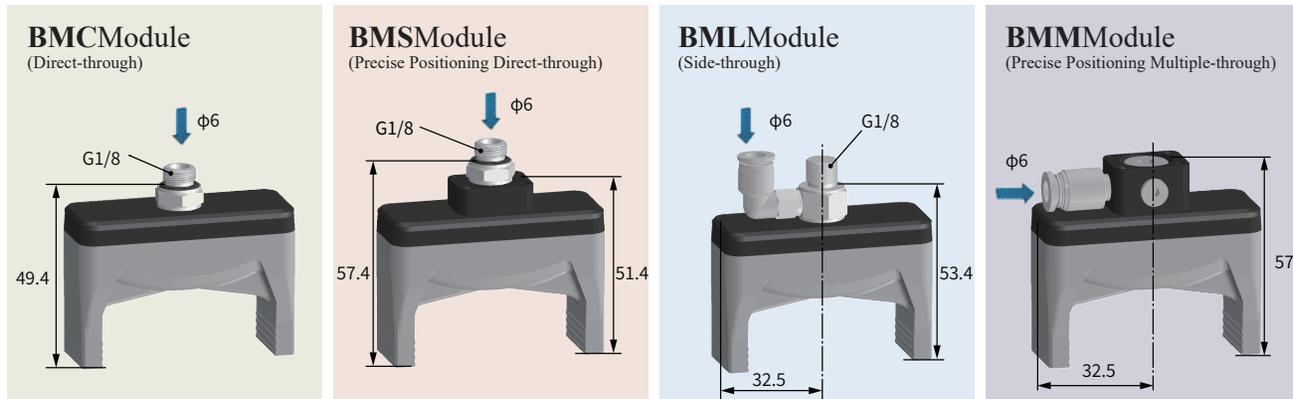
** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve

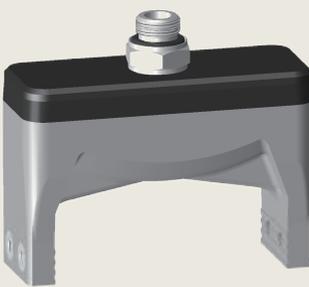
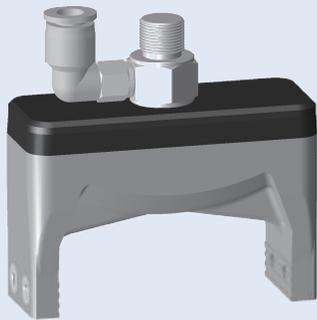




B-2G2252[H]/SN

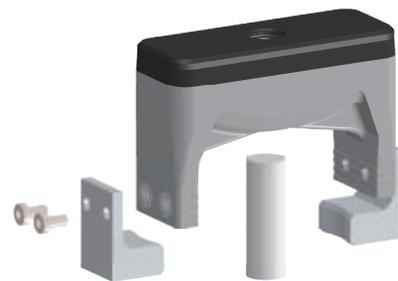
Soft Beak / Beak Module

B-2GN2252[H]/SN

BMC-2GN2252[H]/SN Direct-through H Type	BMS-2GN2252[H]/SN Direct-through Precision Positioning H Type	BML-2GN2252[H]/SN Side-through H Type	BMM-2GN2252[H]/SN Multi-way Precision Positioning H Type
BMC-2GN2252[HAS]/SN Direct-through Dust-free H Type	BMS-2GN2252[HAS]/SN Direct-through Precision Positioning H Type	BML-2GN2252[HAS]/SN Side-through Dust-free H Type	BMM-2GN2252[HAS]/SN Multi-way Precision Positioning Dust-free H Type
			
Weight 36.5g	Weight 43.73g	Weight 49.9g	Weight 47.88g

Product features

- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



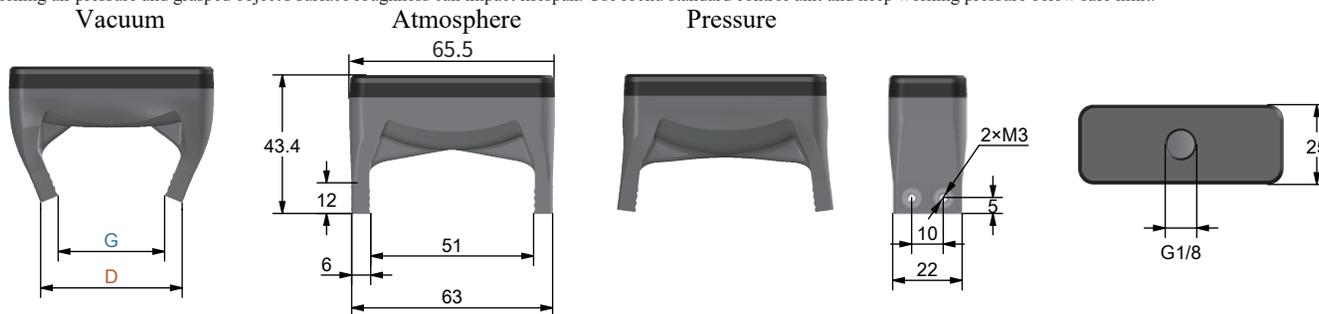
Parameter

Gripping range	34-52mm	Gripping force	0-10.5N	Theoretical gripping load**	0-420g	Ideal gripping workpiece size*	51.0mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

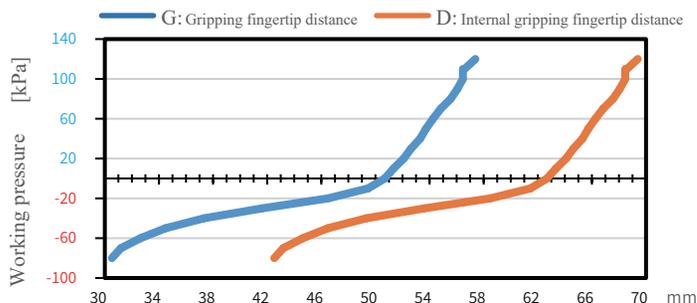
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



BMCModule (Direct-through)

BMSModule (Precise Positioning Direct-through)

BMLModule (Side-through)

BMMModule (Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

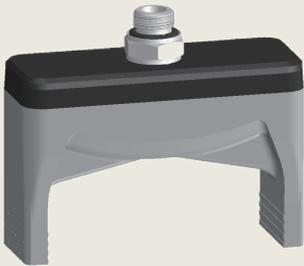
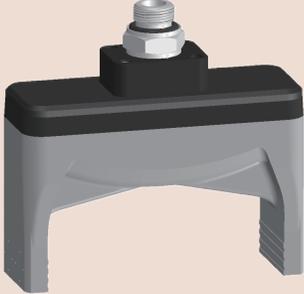
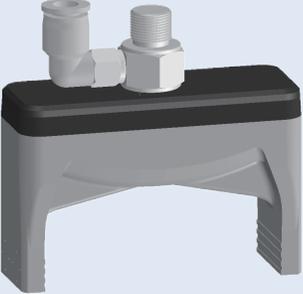
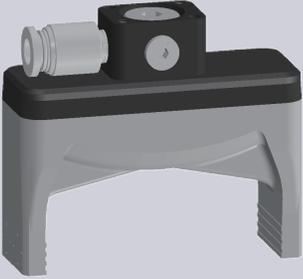
BMC Rigid Connection Installation

BMC Buffer Installation

B-2GN2252[H]/SN

Soft Beak / Beak Module

B-2G2257[H]/SN

BMC-2G2257[H]/SN Direct-through H Type	BMS-2G2257[H]/SN Direct-through Precision Positioning H Type	BML-2G2257[H]/SN Side-through H Type	BMM-2G2257[H]/SN Multi-way Precision Positioning H Type
BMC-2G2257[HAS]/SN Direct-through Dust-free H Type	BMS-2G2257[HAS]/SN Direct-through Precision Positioning H Type	BML-2G2257[HAS]/SN Side-through Dust-free H Type	BMM-2G2257[HAS]/SN Multi-way Precision Positioning Dust-free H Type
			
Weight 35.4g	Weight 42.63g	Weight 48.8g	Weight 46.78g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



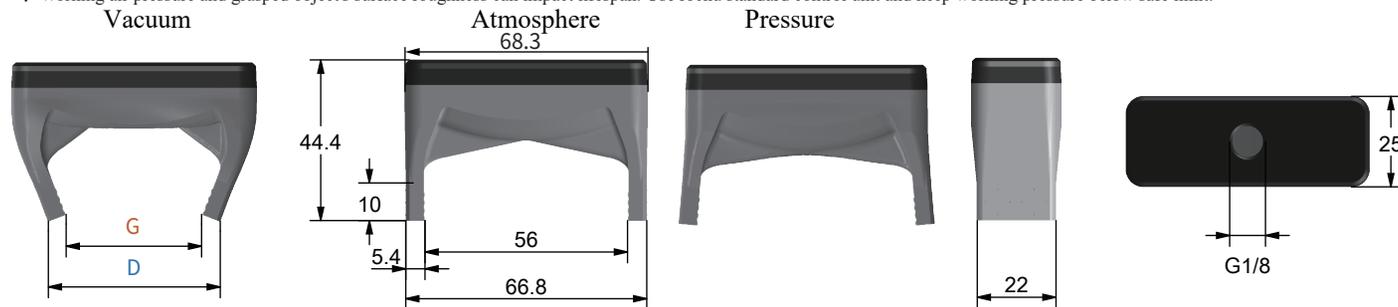
Parameter

Gripping range	38-59mm	Gripping force	0-13.5N	Theoretical gripping load**	0-540g	Ideal gripping workpiece size*	58mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

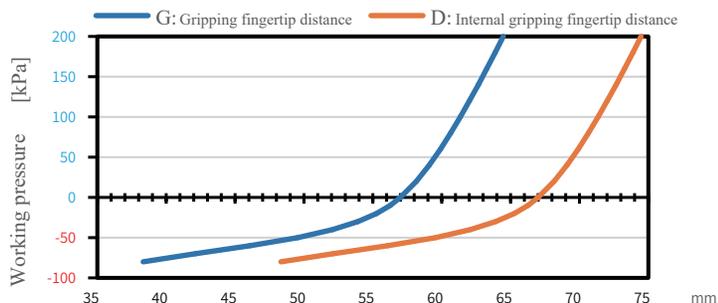
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

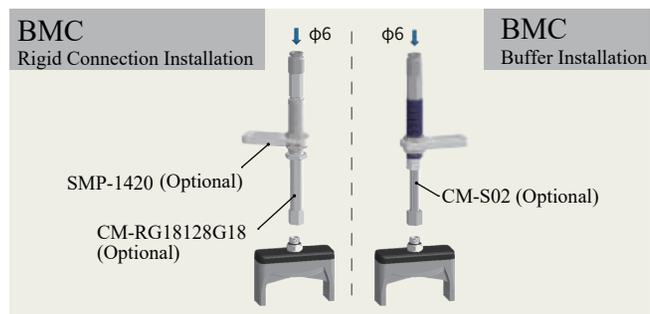
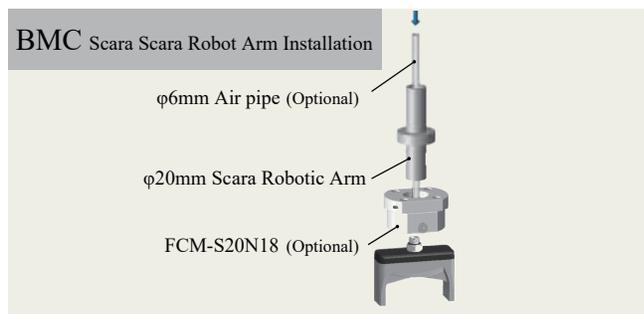
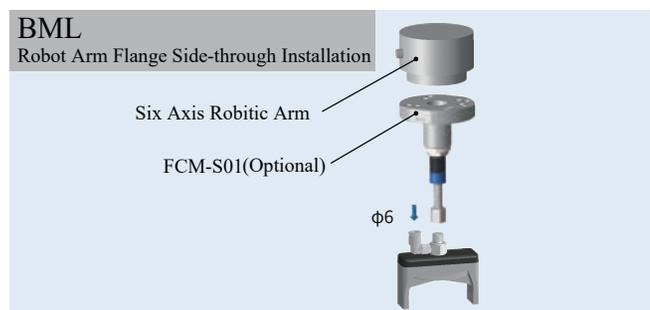
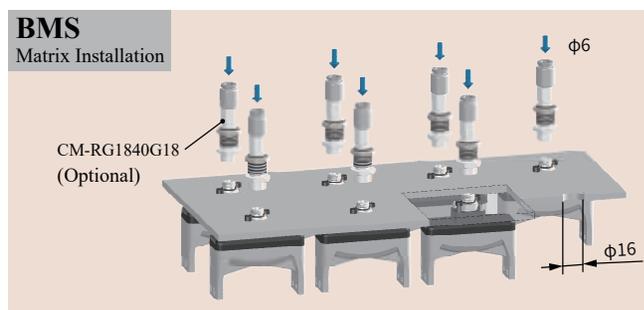
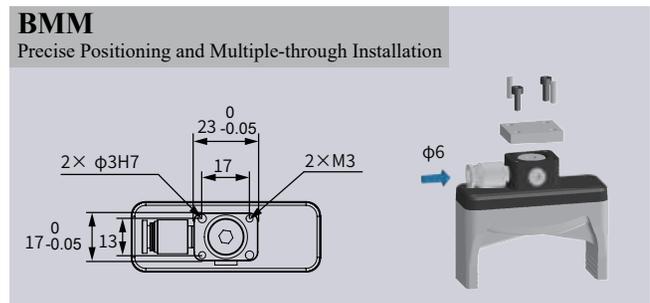
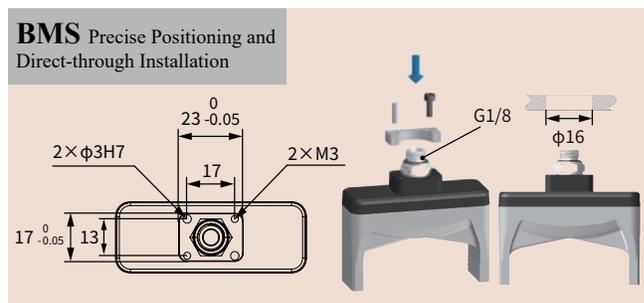
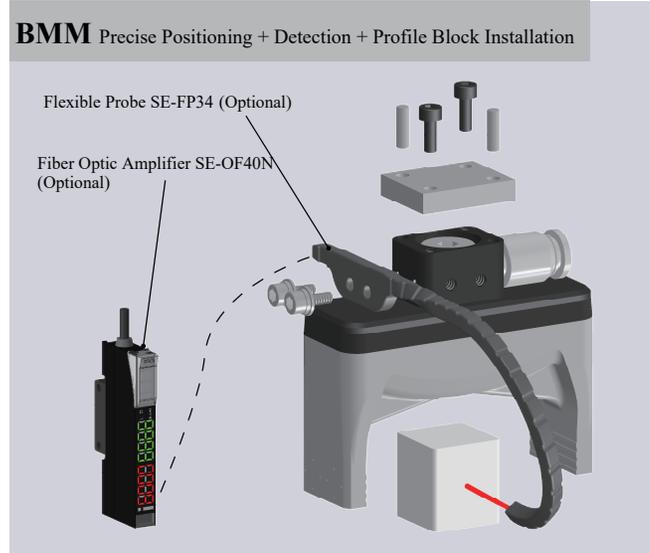
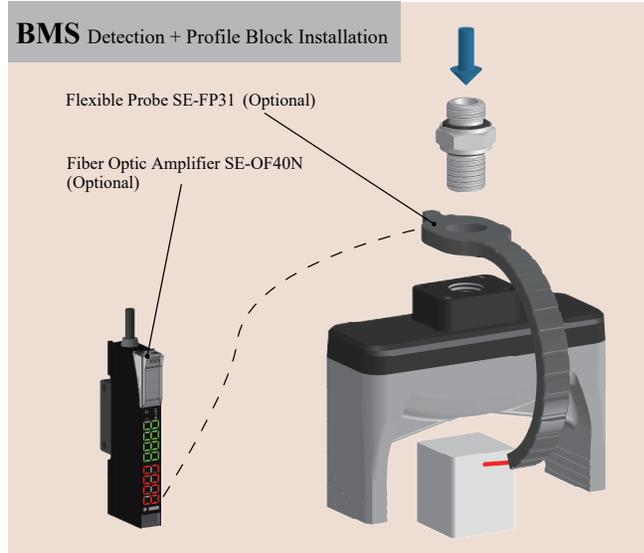
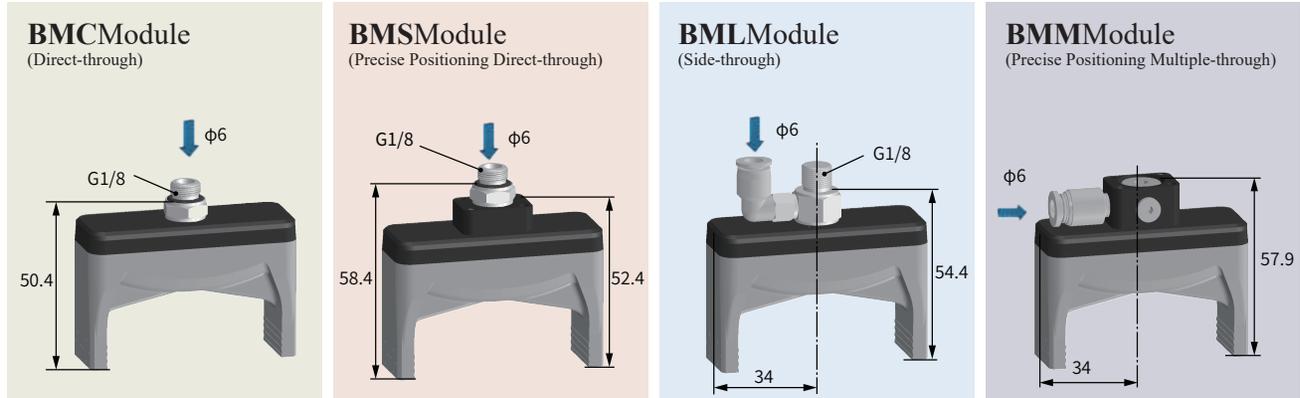
** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve

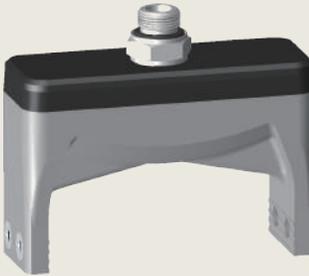
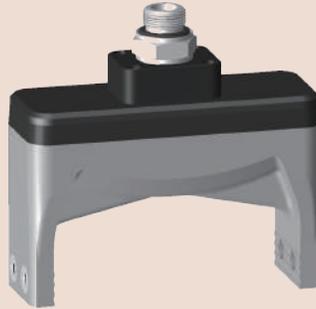




B-2G2257[H]/SN

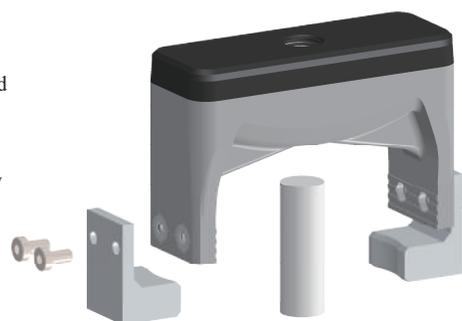
Soft Beak / Beak Module

B-2GN2257[H]/SN

BMC-2GN2257[H]/SN Direct-through H Type	BMS-2GN2257[H]/SN Direct-through Precision Positioning H Type	BML-2GN2257[H]/SN Side-through H Type	BMM-2GN2257[H]/SN Multi-way Precision Positioning H Type
BMC-2GN2257[HAS]/SN Direct-through Dust-free H Type	BMS-2GN2257[HAS]/SN Direct-through Precision Positioning H Type	BML-2GN2257[HAS]/SN Side-through Dust-free H Type	BMM-2GN2257[HAS]/SN Multi-way Precision Positioning Dust-free H Type
			
Weight 38g	Weight 45.23g	Weight 51.4g	Weight 49.38g

Product features

- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, light-weight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



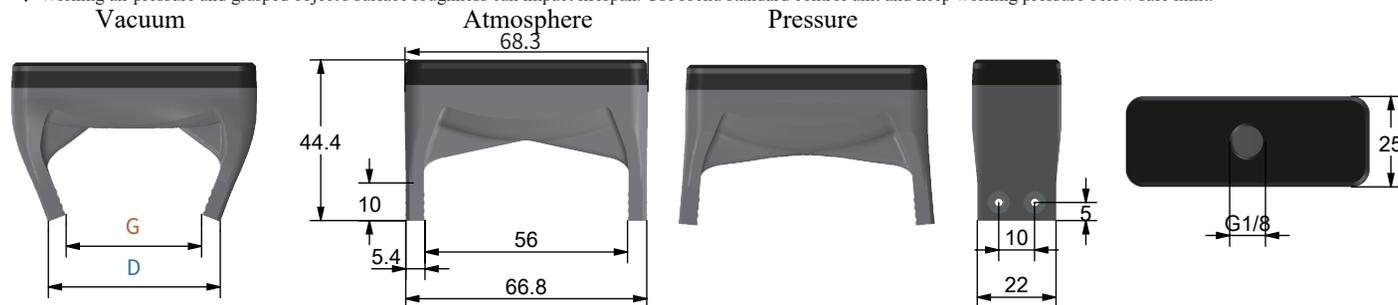
Parameter

Gripping range	38-59mm	Gripping force	0-11.8N	Theoretical gripping load**	0-470g	Ideal gripping workpiece size*	56.0mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

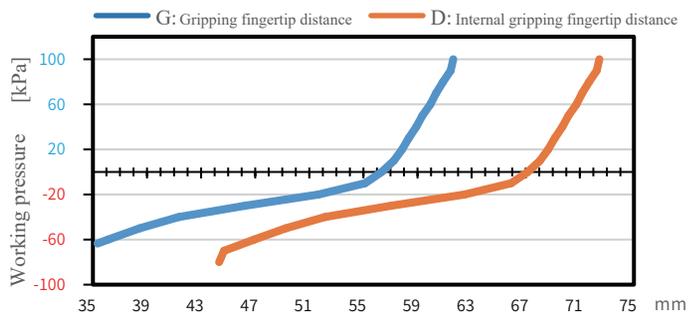
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



BMC Module
(Direct-through)

BMS Module
(Precise Positioning Direct-through)

BML Module
(Side-through)

BMM Module
(Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

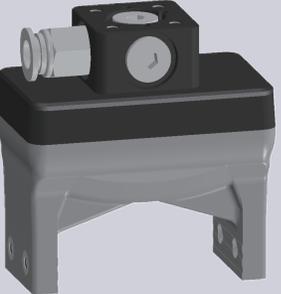
BMC Rigid Connection Installation

BMC Buffer Installation

B-2GN2257[H]/SN

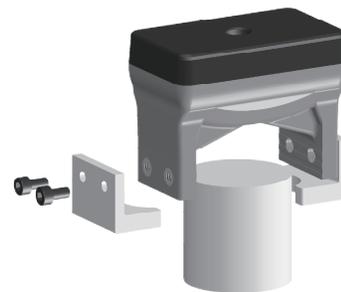
Soft Beak / Beak Module

B-2GN4067[H]/SN

BMC-2GN4067[H]/SN Direct-through H Type		BMS-2GN4067[H]/SN Direct-through Precision Positioning H Type		BMM-2GN4067[H]/SN Side-through H Type	
BMC-2GN4067[HAS]/SN Direct-through Dust-free H Type		BMS-2GN4067[HAS]/SN Direct-through Precision Positioning H Type		BMM-2GN4067[HAS]/SN Side-through Dust-free H Type	
					
Weight	87.37g	Weight	137.69g	Weight	154.88g

Product features

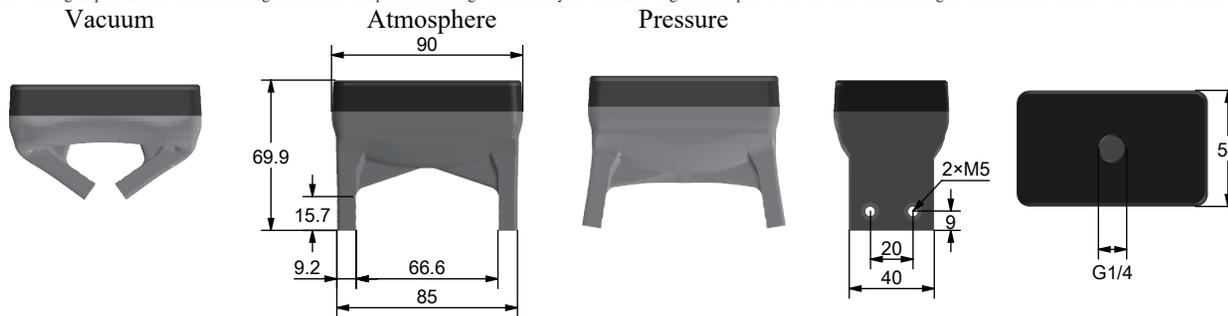
- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



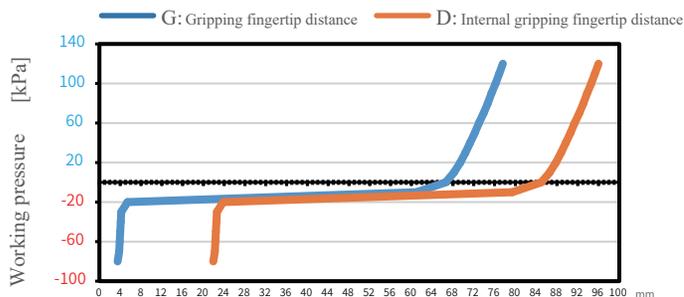
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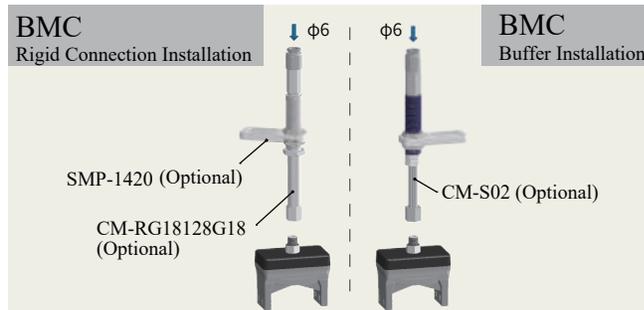
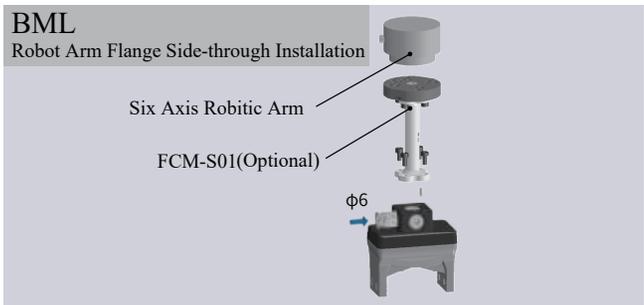
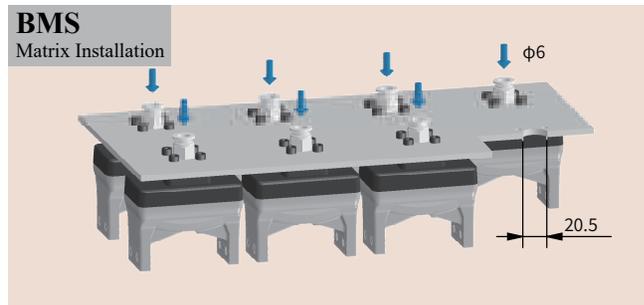
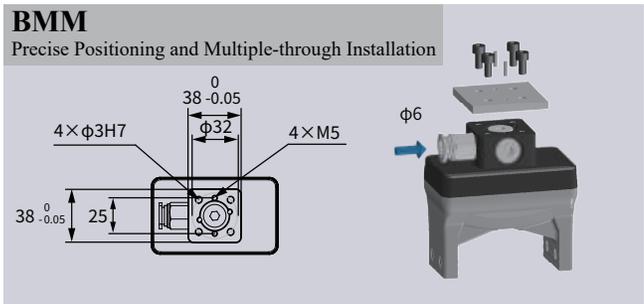
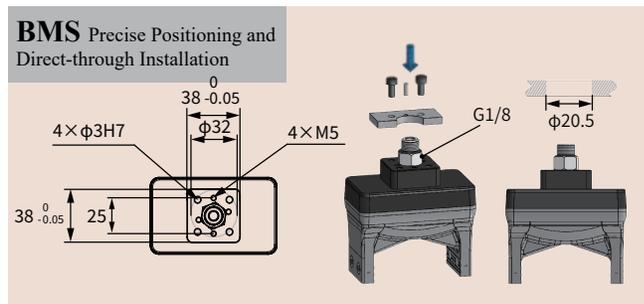
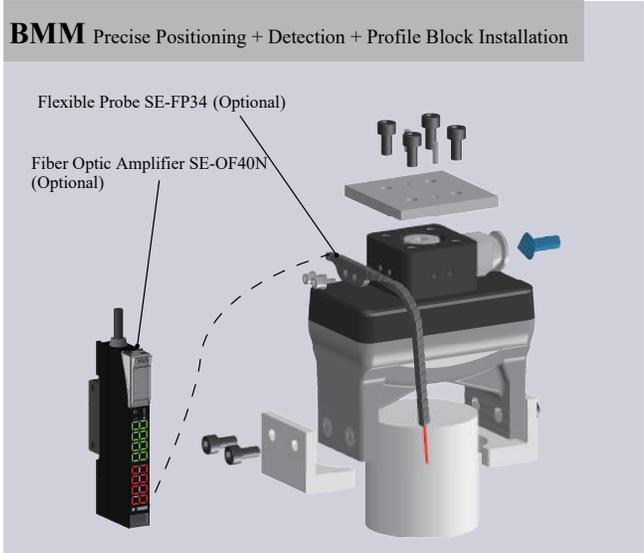
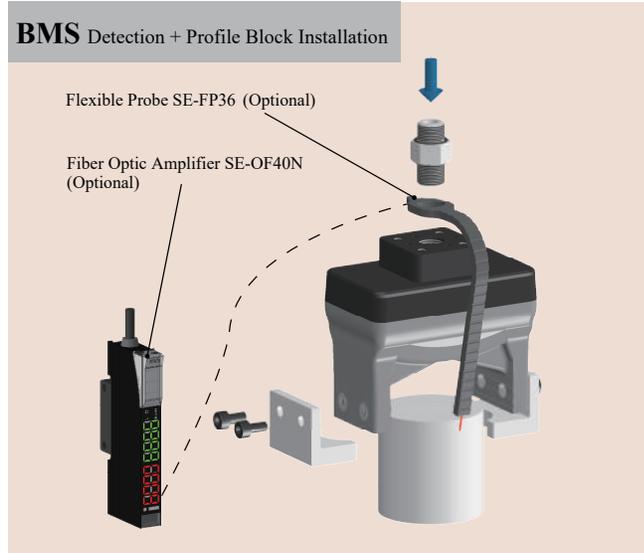
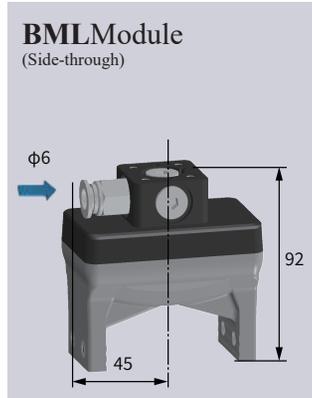
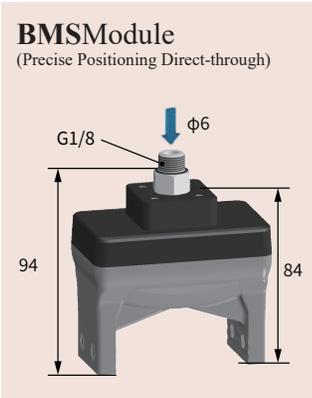
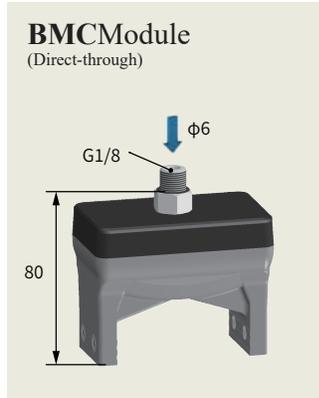
Gripping range	10-70mm	Gripping force	0-50N	Theoretical gripping load**	0-2000g	Ideal gripping workpiece size*	66.0mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/4	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);
 **: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;
 ***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve

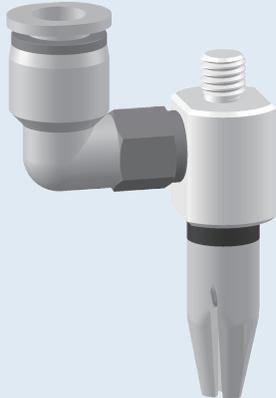




B-2GN4067[H]/SN

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-3B08[H]/S Direct-through H Type	BML-3B08[H]/S Side-through H Type		
	BMC-3B08[HAS]/S Direct-through Dust-free H Type	BML-3B08[HAS]/S Side-through Dust-free H Type		
	Weight	1g	Weight	16.1g

B-3B08[H]/S

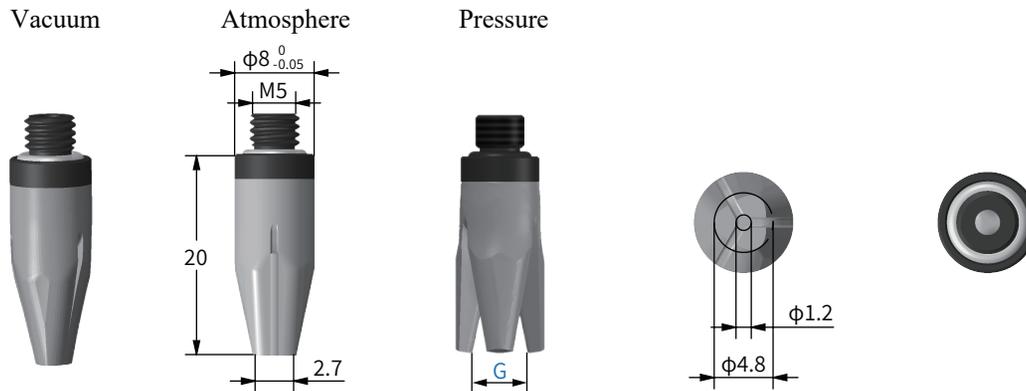
Parameter

Gripping range	0.5-2mm	Gripping force	0-0.9N	Theoretical gripping load**	0-68g	Ideal gripping workpiece size*	1.2mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<170kPa

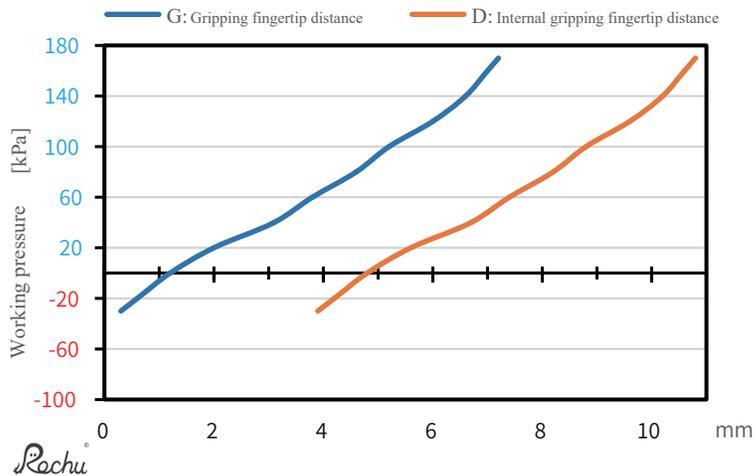
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



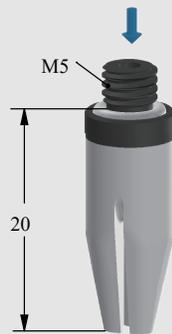
Pressure-Fingertip Distance deformation curve



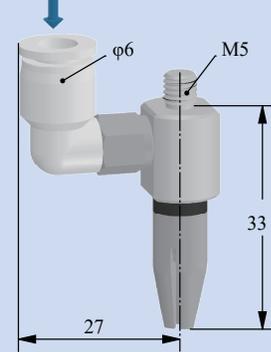
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation



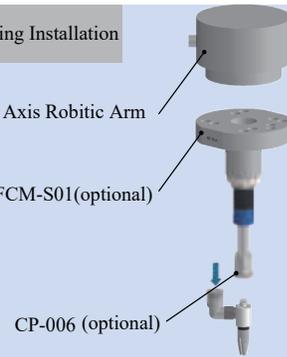
Scara Robotic Arm Installation

- 6mm air tube (optional)
- φ20mm Scara Robotic Arm
- FCM-S20N5(optional)



Robotic Arm Flange Side Fitting Installation

- Six Axis Robotic Arm
- FCM-S01(optional)
- CP-006 (optional)



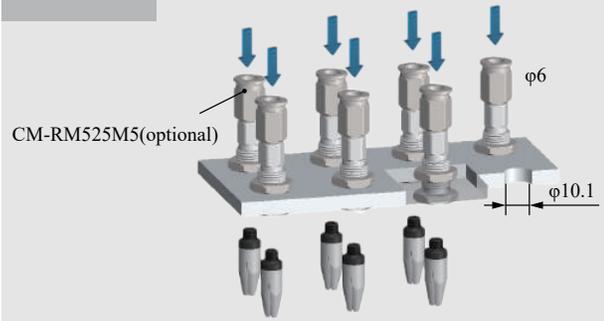
Rigid Connection Installation



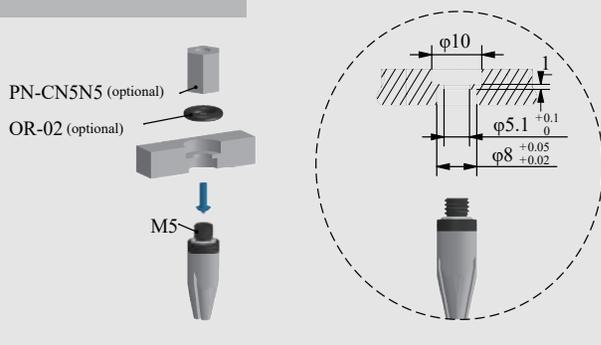
Buffer Installation



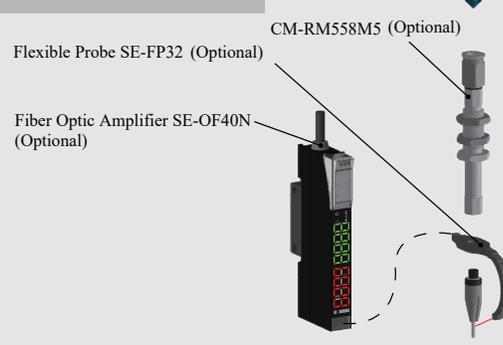
Matrix Installation



Precise Positioning Installation

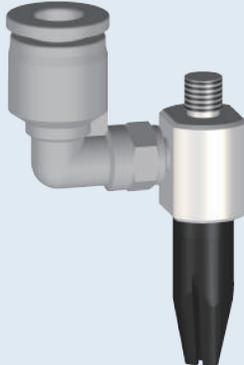


Photoelectric Sensor Installation



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Anti-static material meets the national standard GB/T11210-2014, point-to-point resistance 0.1-1000MΩ requirements. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, anti-static dust-free traceless material [LHAS] is preferred.

	BMC-3B08[LH]/S Direct-through Anti-static H Type	BML-3B08[LH]/S Side-through Anti-static H Type		
	BMC-3B08[LHAS]/S Direct-through Anti-static Dust-free H Type	BML-3B08[LHAS]/S Side-through Anti-static Dust-free H Type		
	Weight	1g	Weight	16.1g

B-3B08[LH]/S

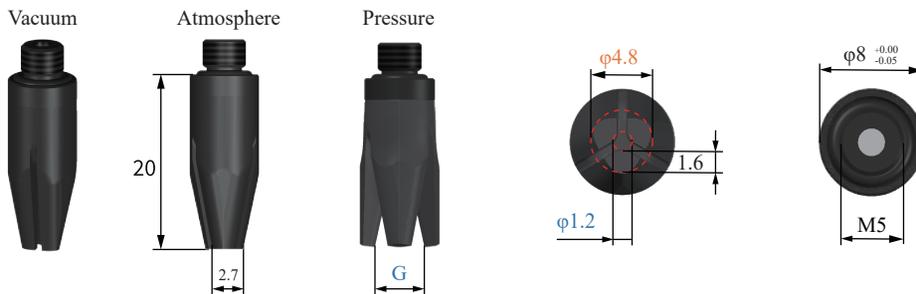
Parameter

Gripping range	0.5-2mm	Gripping force	0-0.9N	Theoretical gripping load**	0-68g	Ideal gripping workpiece size*	1.2mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

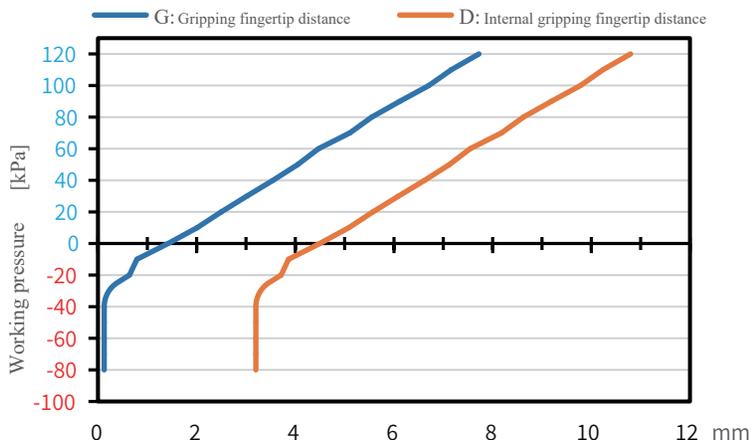
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



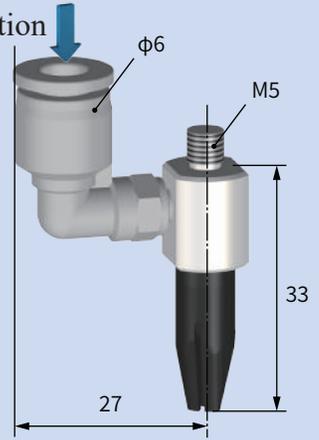
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

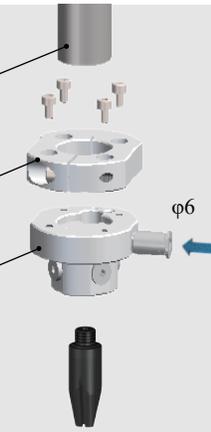


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

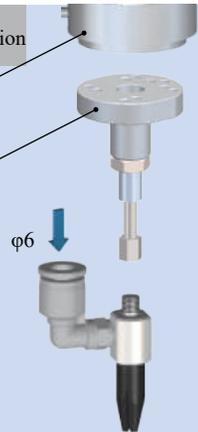
CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

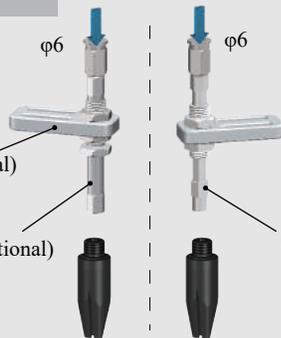
FCM-S01(Optional)



Rigid Connection Installation

SMP-13(Optional)

CM-RM558M5(Optional)



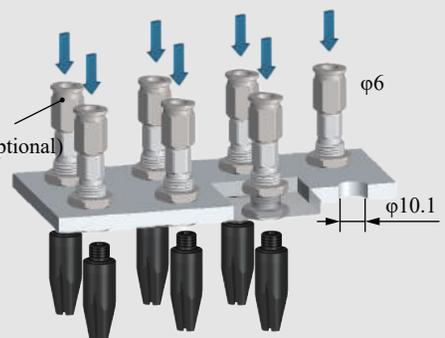
Buffer Installation

CM-S04(Optional)



Matrix Installation

CM-RM525M5(Optional)

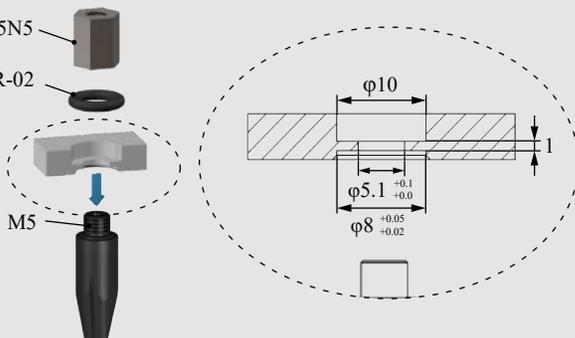


Precise Positioning Installation

PN-CN5N5

OR-02

M5

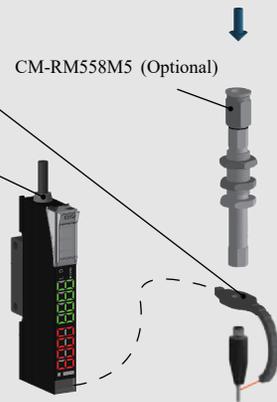


Photoelectric Sensor Installation

CM-RM558M5 (Optional)

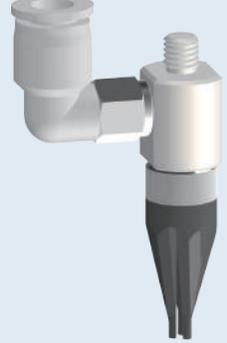
Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance D can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-3B10[H]/S Direct-through H Type	BML-3B10[H]/S Side-through H Type	
	BMC-3B10[HAS]/S Direct-through Dust-free H Type	BML-3B10[HAS]/S Side-through Dust-free H Type	
Weight	2.4g	Weight	17.5g

B-3B10[H]/S

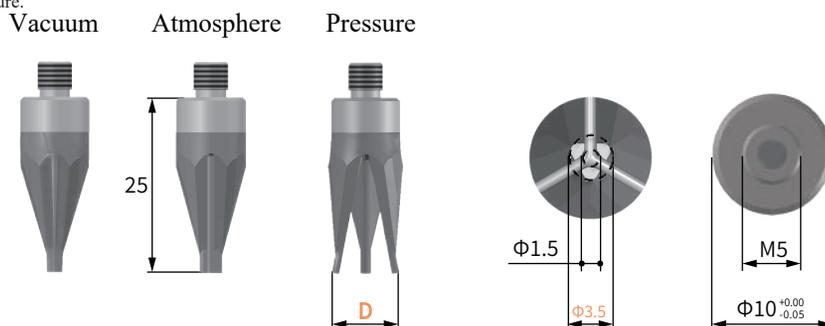
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	2.5-5mm	Internal gripping force	0-0.1N	Theoretical internal gripping load**	0-4g	Ideal internal gripping workpiece size*	4mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<250kPa

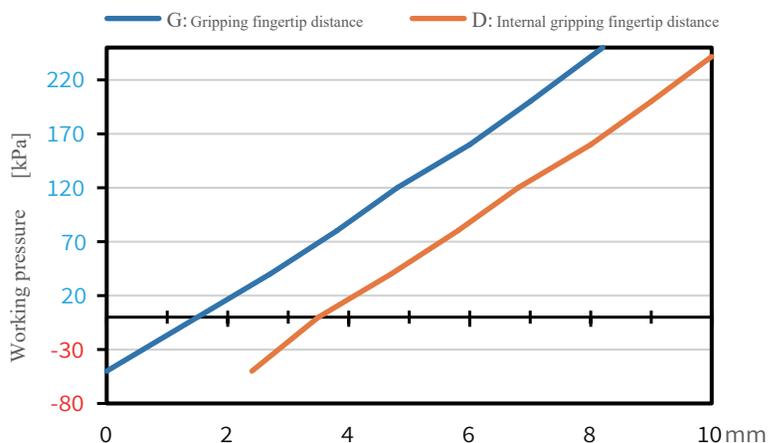
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



BMC Straight Fitting Installation

Scan to watch videos

BML Side Fitting Installation

Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

CP-191(Optional)

Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(Optional)

Rigid Connection Installation

SMP-13(Optional)

CM-RM558M5(Optional)

Buffer Installation

CM-S04(Optional)

Matrix Installation

CM-RM525M5 (Optional)

Precise Positioning Installation

PN-CN5N5

OR-02

M5

Photoelectric Sensor Installation

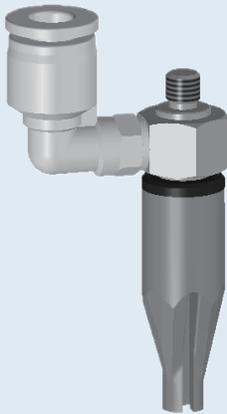
Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)

CM-RM525M5 (Optional)

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-3B12[H]/S Direct-through H Type	BML-3B12[H]/S Side-through H Type		
	BMC-3B12[HAS]/S Direct-through Dust-free H Type	BML-3B12[HAS]/S Side-through Dust-free H Type		
	Weight	5.1g	Weight	16.6g

B-3B12[H]/S

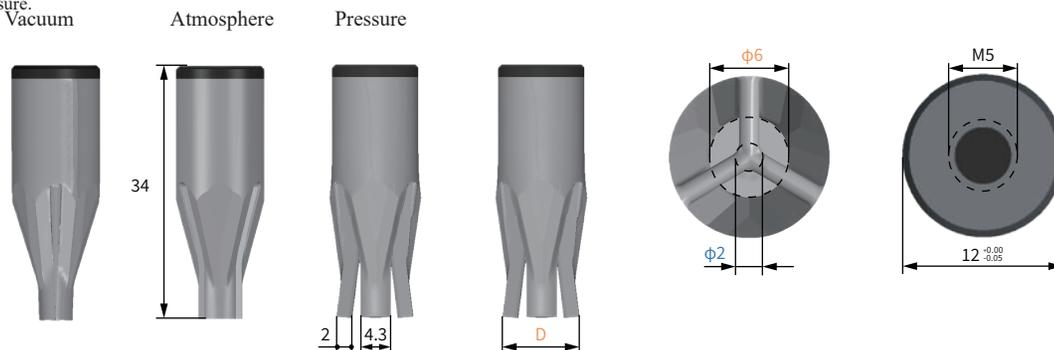
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	5.5-12mm	Internal gripping force	0-0.1N	Theoretical internal gripping load**	0-8g	Ideal internal gripping workpiece size*	8mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<240kPa

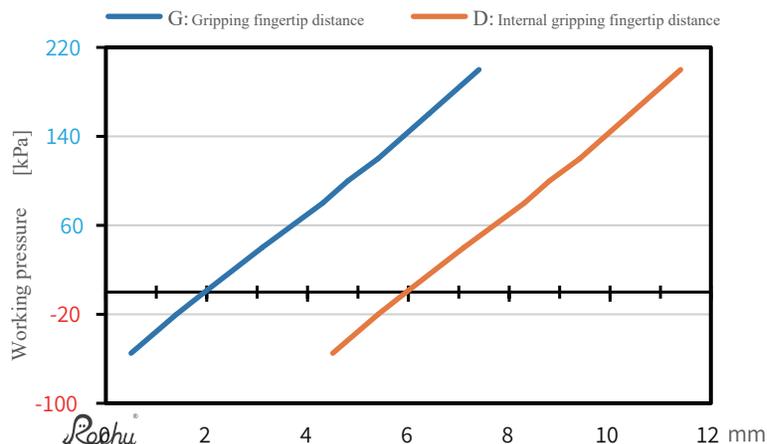
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



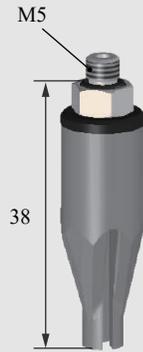
Pressure-Fingertip Distance deformation curve



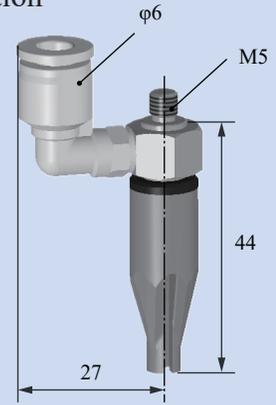
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

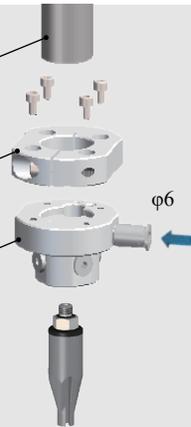


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

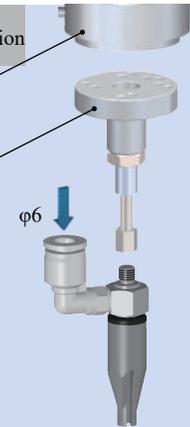
CP-191(Optional)



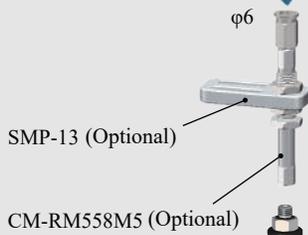
Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(Optional)



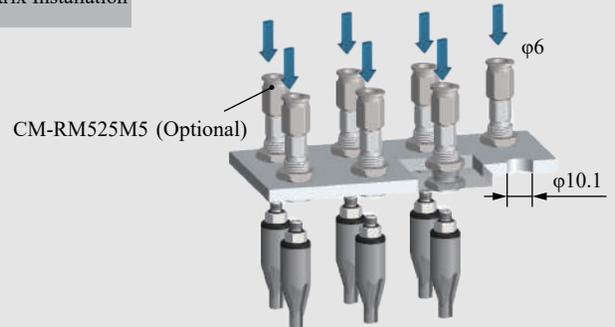
Rigid Connection Installation



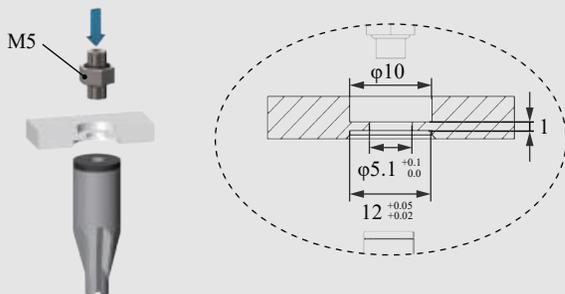
Buffer Installation



Matrix Installation



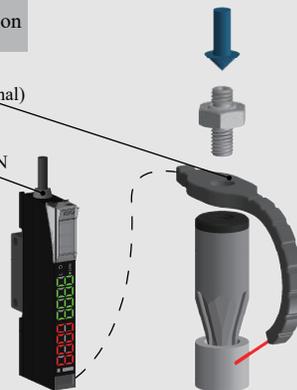
Precise Positioning Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP32 (Optional)

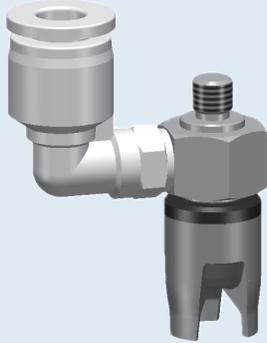
Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

B-3C12[H]/S

	BMC-3C12[H]/S Direct-through H Type	BML-3C12[H]/S Side-through H Type	
	BMC-3C12[HAS]/S Direct-through Dust-free H Type	BML-3C12[HAS]/S Side-through Dust-free H Type	
	Weight 4g	Weight 15.5g	

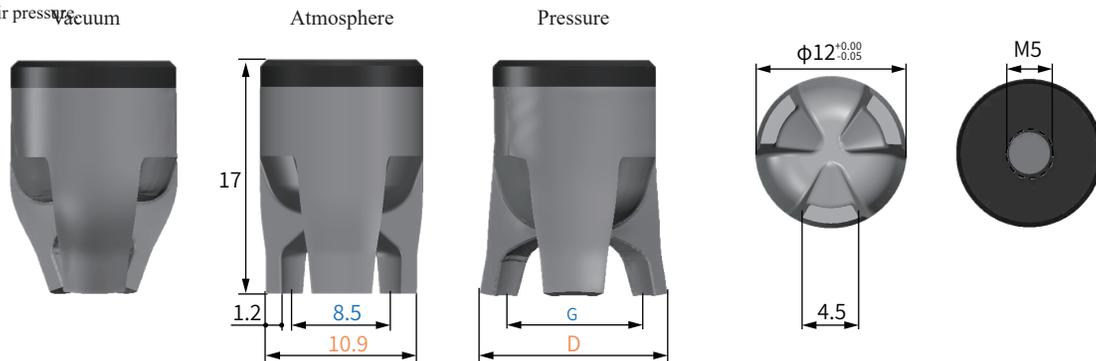
Parameter

Gripping range	4-11mm	Gripping force	0-0.5N	Theoretical gripping load**	0-38g	Ideal gripping workpiece size*	8mm
Internal gripping range	11-14mm	Internal gripping force	0-0.4N	Theoretical internal gripping load**	0-26g	Ideal internal gripping workpiece size*	12mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<200kPa

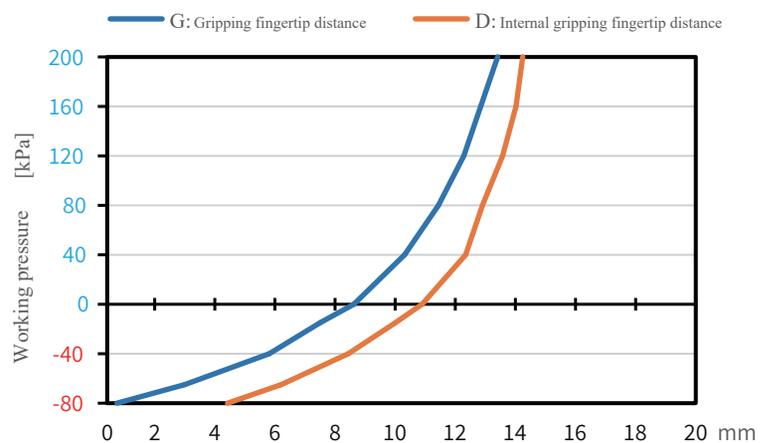
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



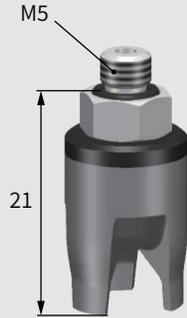
Pressure-Fingertip Distance deformation curve



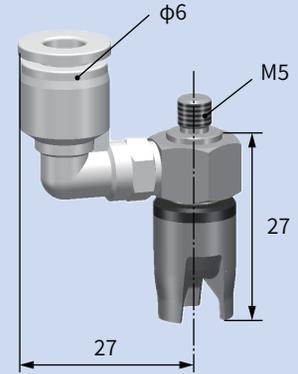
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

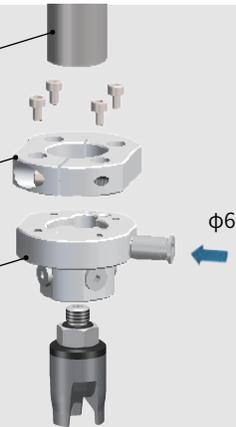


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

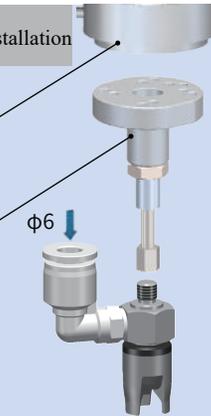
CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

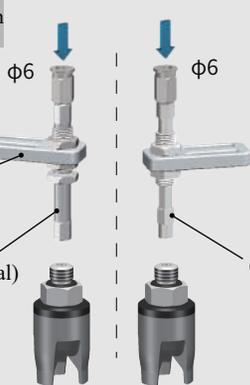
FCM-S01(Optional)



Rigid Connection Installation

SMP-13 (Optional)

CM-RM558M5 (Optional)



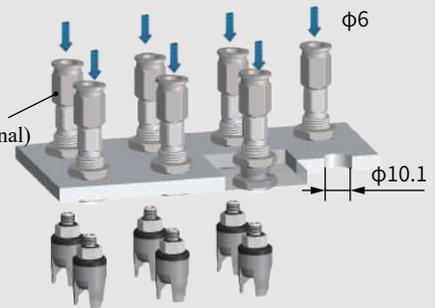
Buffer Installation

CM-S04 (Optional)



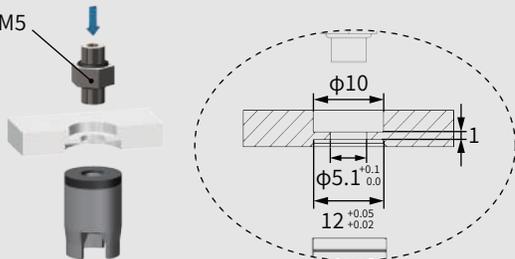
Matrix Installation

CM-RM525M5 (Optional)



Precise Positioning Installation

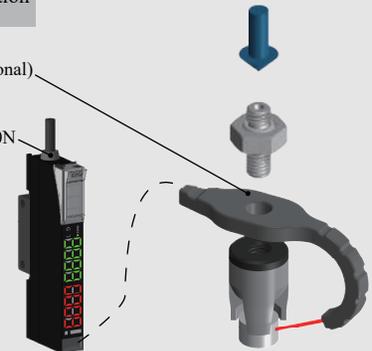
M5



Photoelectric Sensor Installation

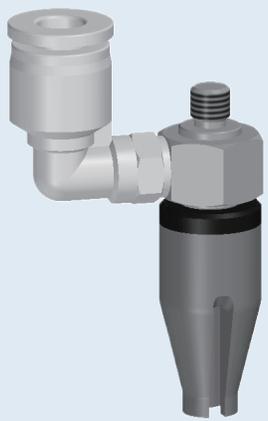
Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-3B13[H]/S Direct-through H Type	BML-3B13[H]/S Side-through H Type		
	BMC-3B13[HAS]/S Direct-through Dust-free H Type	BML-3B13[HAS]/S Side-through Dust-free H Type		
	Weight	4.9g	Weight	16.4g

B-3B13[H]/S

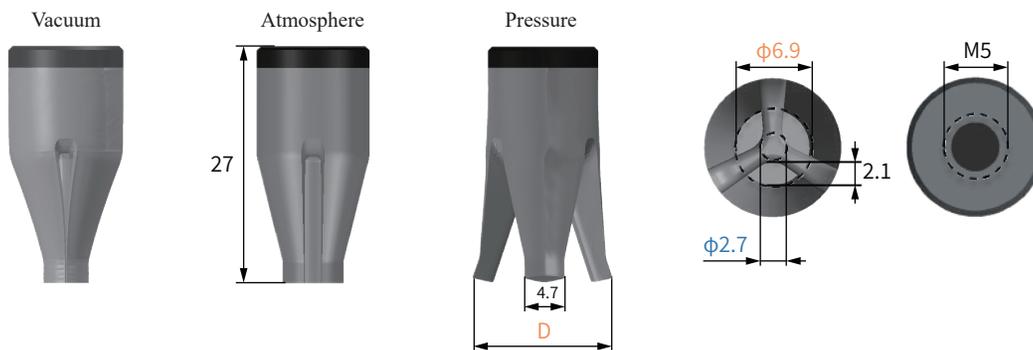
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	6-15mm	Internal gripping force	0-0.2N	Theoretical internal gripping load**	0-14g	Ideal internal gripping workpiece size*	10mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<180kPa

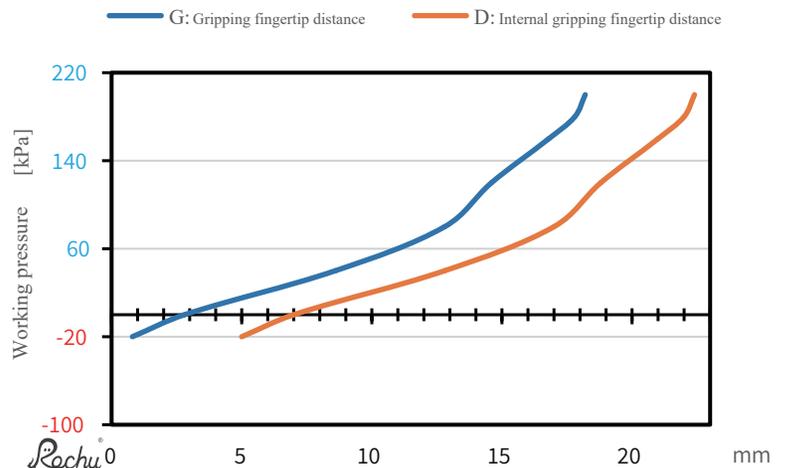
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



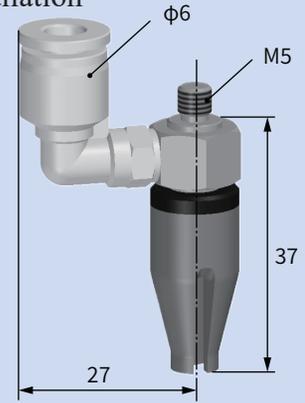
Pressure-Fingertip Distance deformation curve



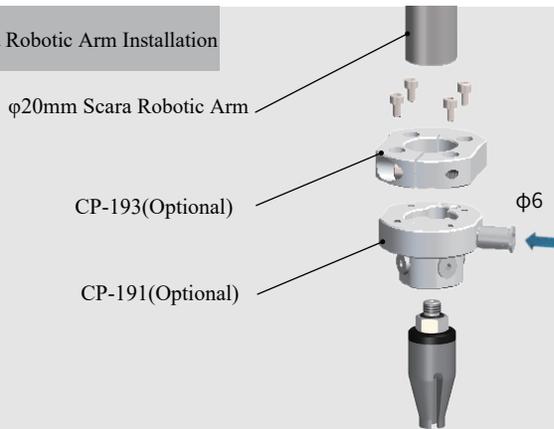
BMC Straight Fitting Installation



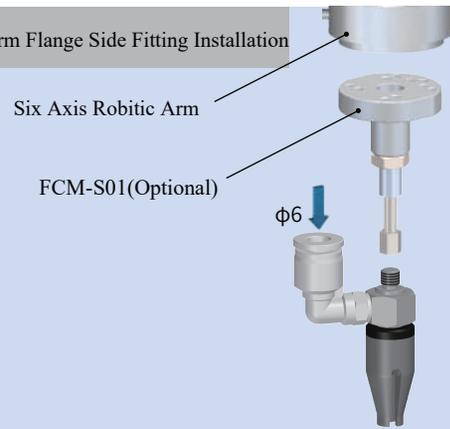
BML Side Fitting Installation



Scara Robotic Arm Installation



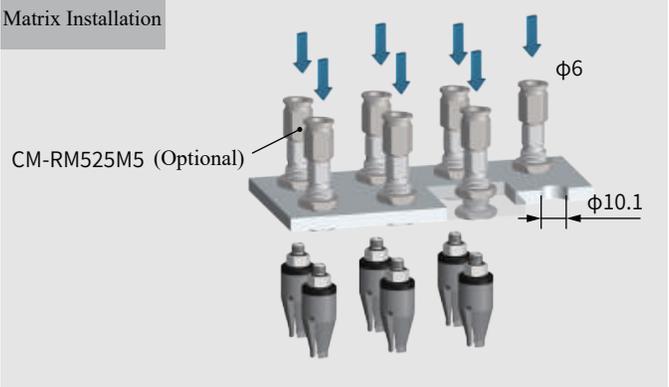
Robotic Arm Flange Side Fitting Installation



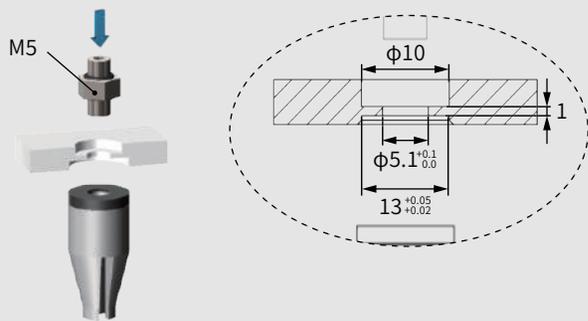
Rigid Connection Installation



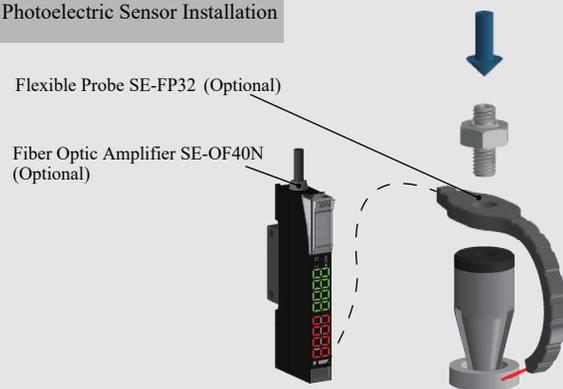
Matrix Installation



Precise Positioning Installation



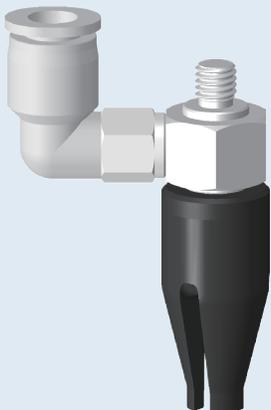
Photoelectric Sensor Installation



Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G and outer fingertips distance D can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- The material of [NH] has good abrasion resistance and oil resistance. It can be in contact with workpieces containing heavy oil (such as lubricating oil, gear oil, hydraulic oil, etc.) for a long time, and can be applied in the metal processing industry.

B-3B13[NH]/S

	BMC-3B13[NH]/S Direct-through Oil-resistant			BML-3B13[NH]/S Side Fitting Oil-resistant Material	
	Weight	4.9g		Weight	16.4g

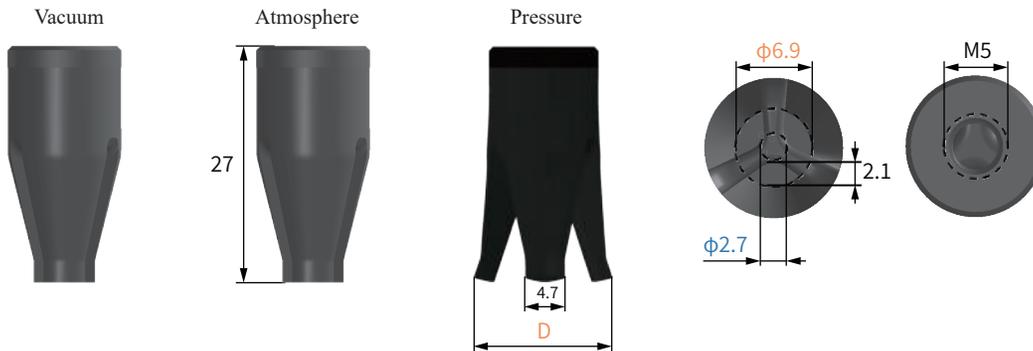
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	6-15mm	Internal gripping force	0-0.5N	Theoretical internal gripping load**	0-38g	Ideal internal gripping workpiece size*	10mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<100°C	Safe pressure***	<150kPa

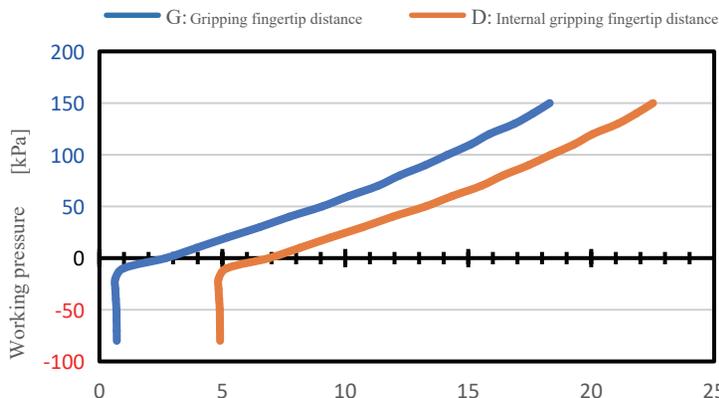
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

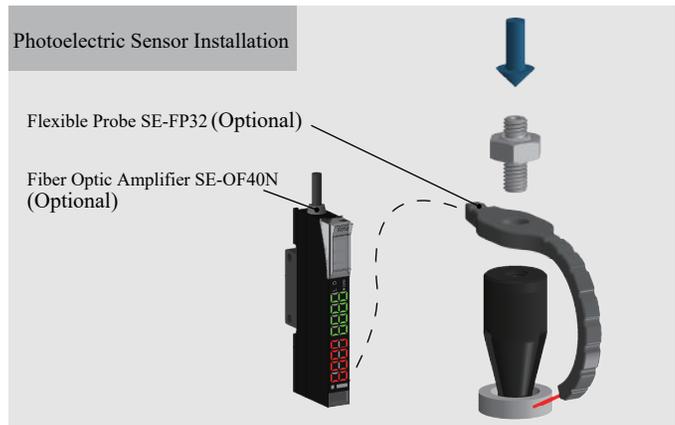
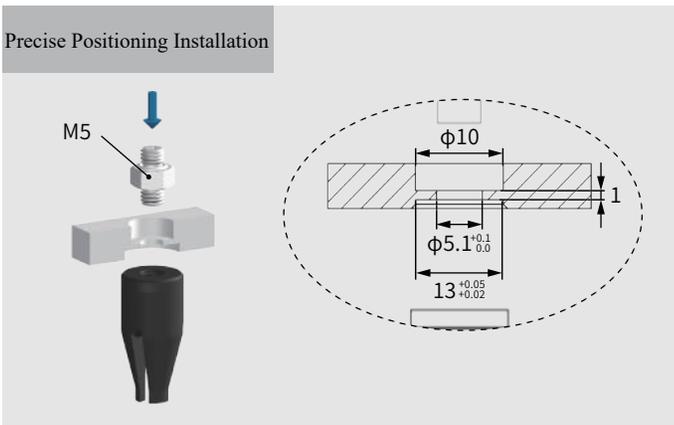
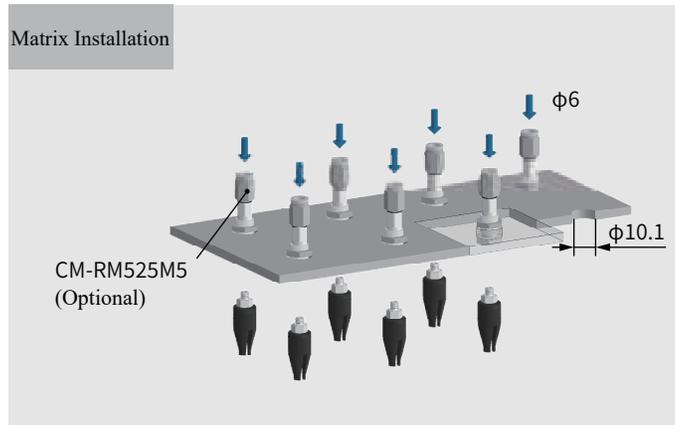
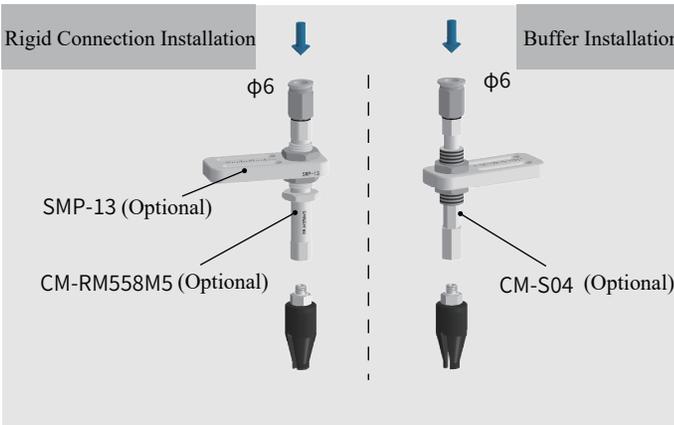
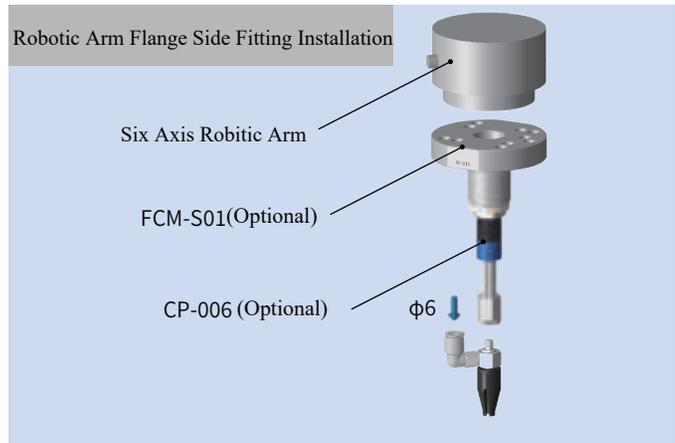
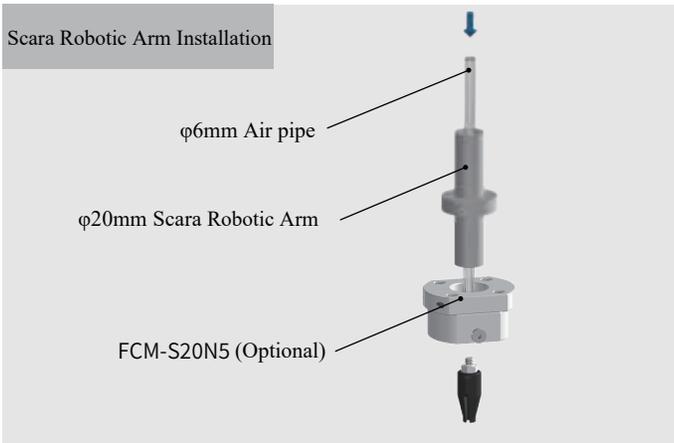
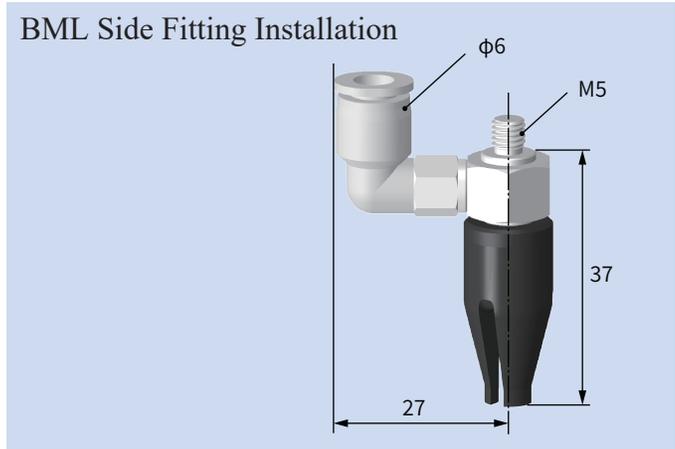
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



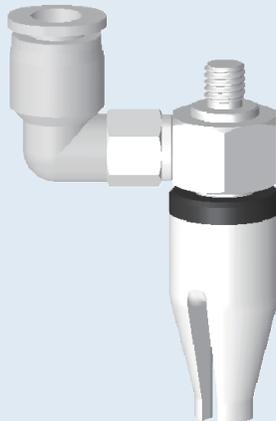
Installation



B-3B13[NH]/S

Product features

- Fingertips open under pressure state and clamp in a vacuum. Outer fingertips distance D can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak materials divided into Strong materials [HW] and Dust-free Normal material [HWAS]. For workpieces with dustproof requirements, or miniature and lightweight that are prone to being adsorbed on the fingertips, Dust-free type [PAS] should be preferably selected.
- The soft beak has a white appearance, which can provide a high-contrast white background for dark-colored workpieces at the machine vision inspection station.

	BMC-3B13[HW]/S Direct-through H Type	BML-3B13[HW]/S Side-through H Type	
	BMC-3B13[HWAS]/S Direct-through Dust-free H Type	BML-3B13[HWAS]/S Side-through Dust-free H Type	
Weight	4.9g	Weight	16.4g

B-3B13[HW]/S

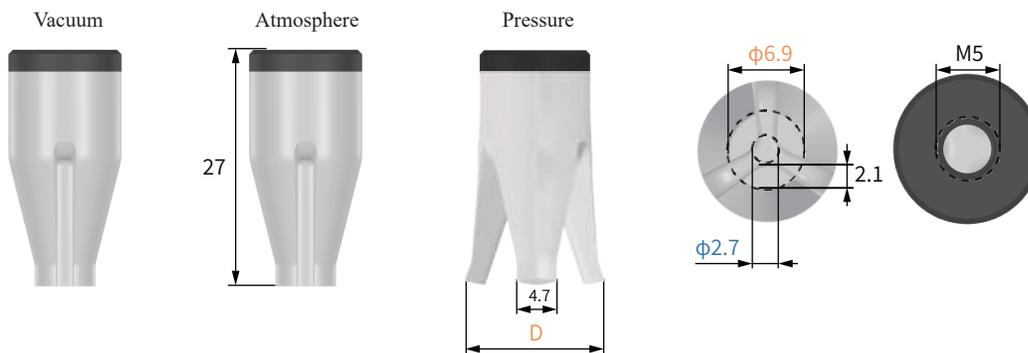
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	6-15mm	Internal gripping force	0-0.2N	Theoretical internal gripping load**	0-14g	Ideal internal gripping workpiece size*	10mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<180kPa

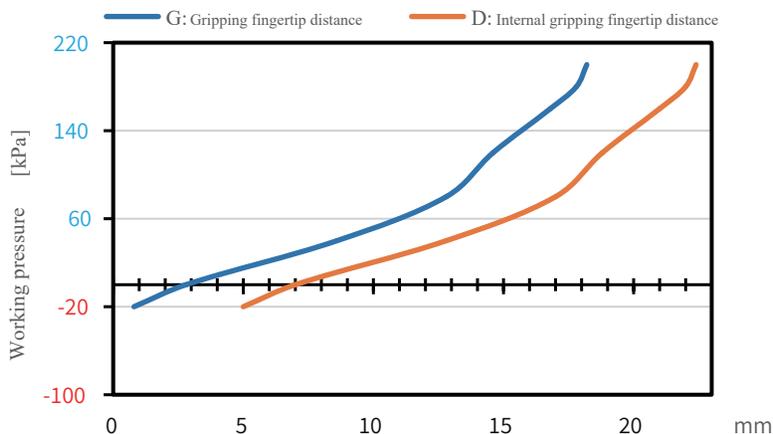
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

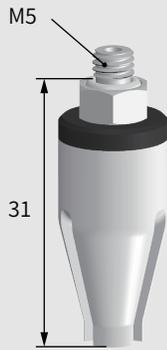
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



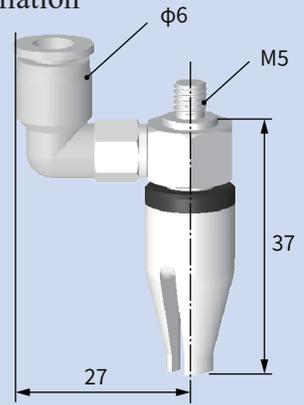
Pressure-Fingertip Distance deformation curve



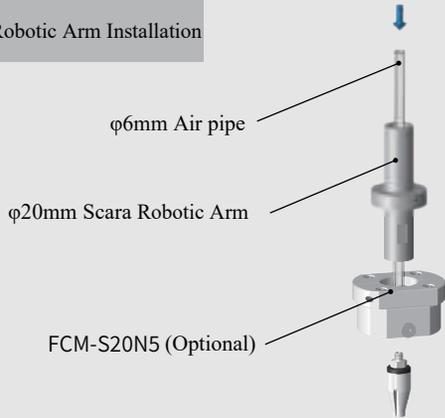
BMC Straight Fitting Installation



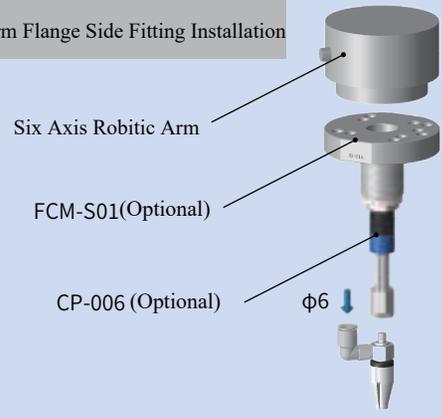
BML Side Fitting Installation



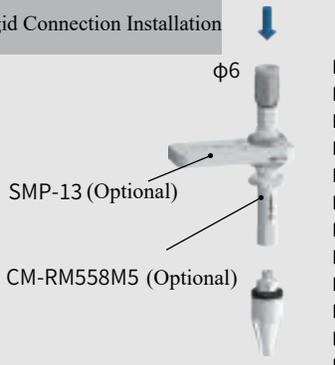
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



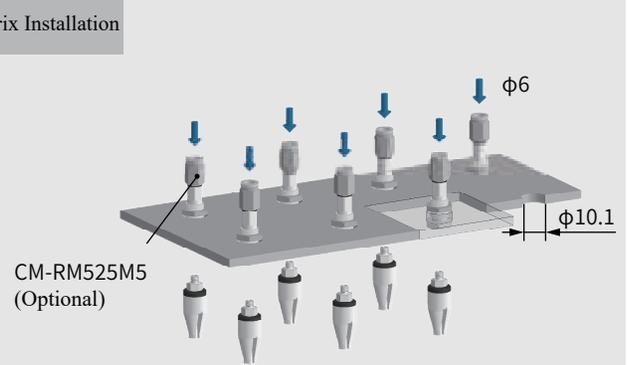
Rigid Connection Installation



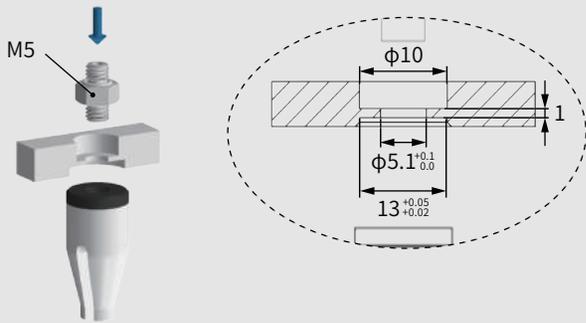
Buffer Installation



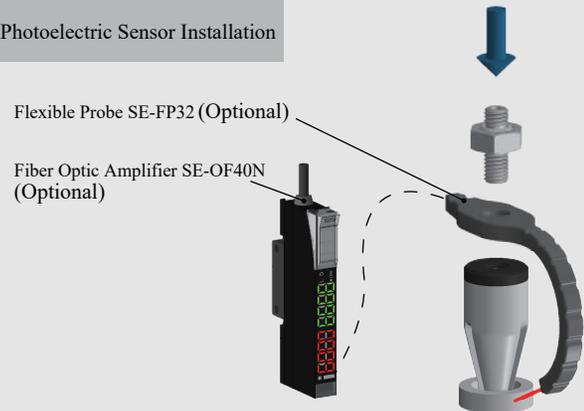
Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance D can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

	BMC-3B14[P]/S Direct-through P Type	BML-3B14[P]/S Side-through P Type		
	BMC-3B14[PAS]/S Direct-through Dust-free P Type	BML-3B14[PAS]/S Side-through Dust-free P Type		
	Weight	5.2g	Weight	16.7g

B-3B14[P]/S

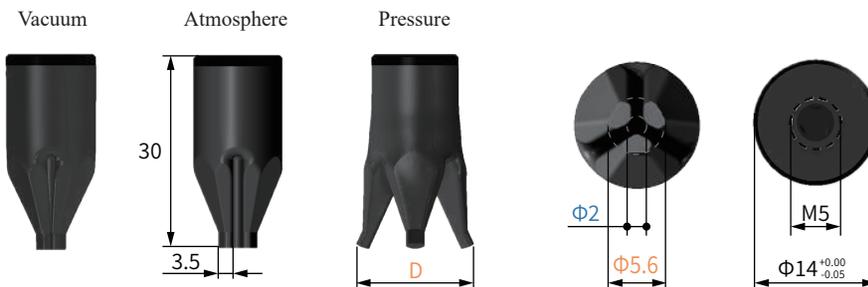
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	5.5-13mm	Internal gripping force	0-0.2N	Theoretical internal gripping load**	0-17g	Ideal internal gripping workpiece size*	8mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

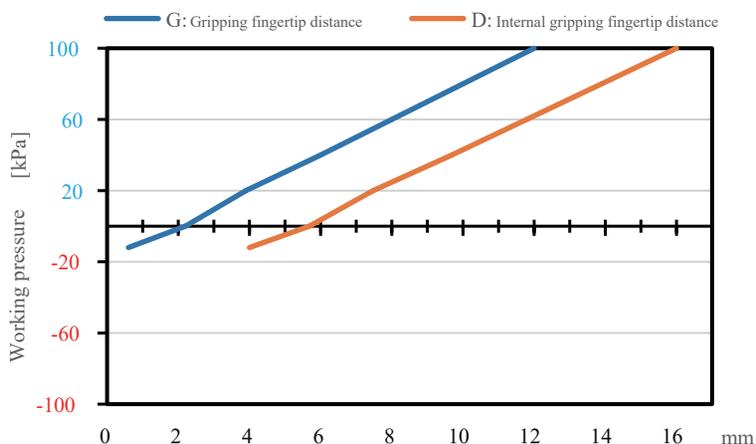
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



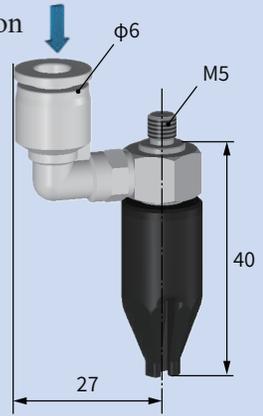
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

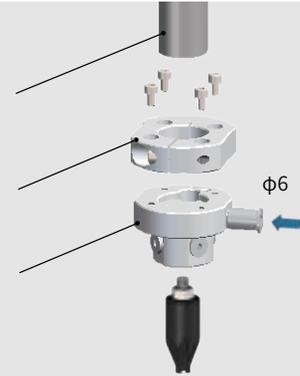


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

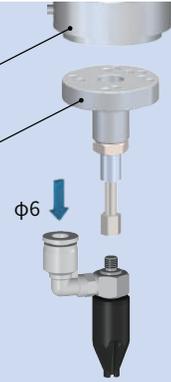
CP-191(Optional)



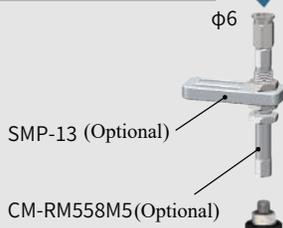
Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(Optional)



Rigid Connection Installation

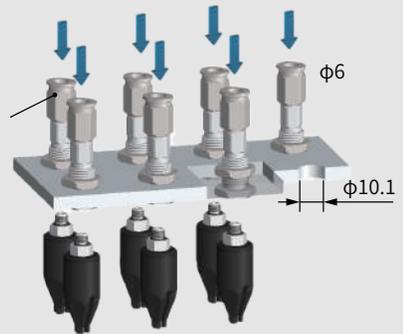


Buffer Installation

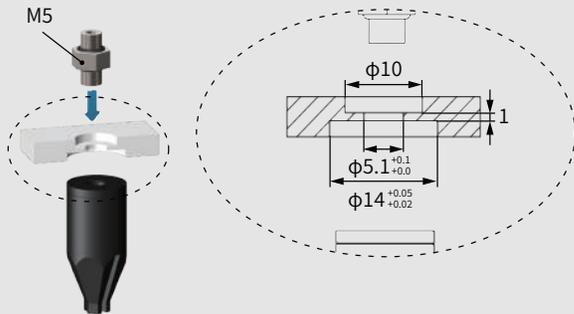


Matrix Installation

CM-RM525M5 (Optional)



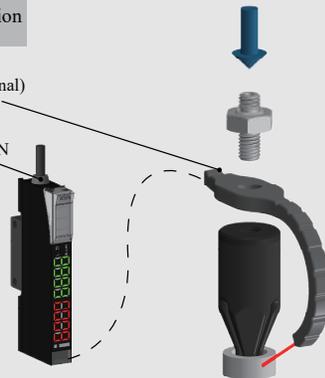
Precise Positioning Installation



Photoelectric Sensor Installation

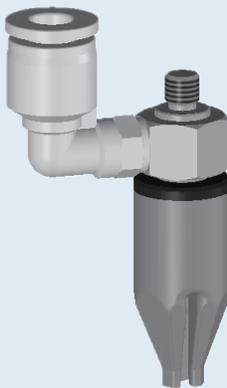
Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance D can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-3B14[H]/S Direct-through H Type	BML-3B14[H]/S Side-through H Type		
	BMC-3B14[HAS]/S Direct-through Dust-free H Type	BML-3B14[HAS]/S Side-through Dust-free H Type		
	Weight	5.7g	Weight	17.2g

B-3B14[H]/S

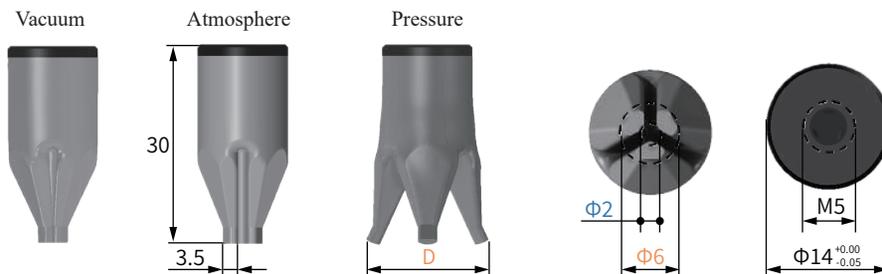
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	5.5-11mm	Internal gripping force	0-0.3N	Theoretical internal gripping load**	0-21g	Ideal internal gripping workpiece size*	8mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<180kPa

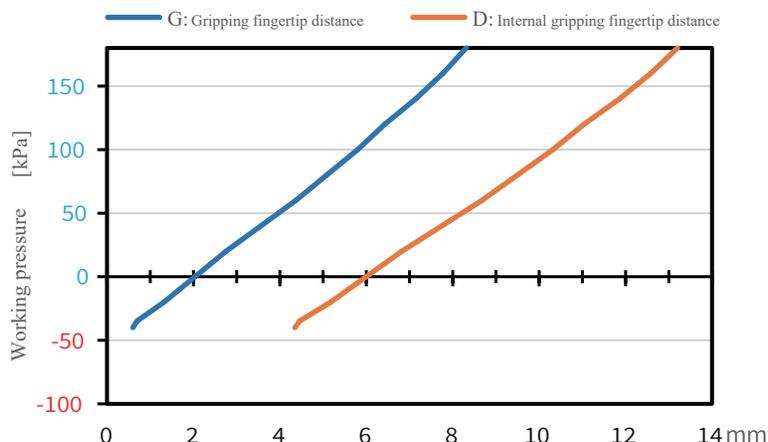
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

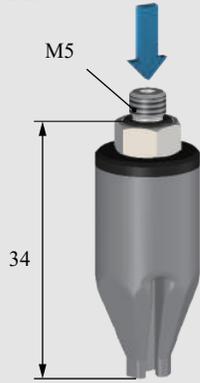
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



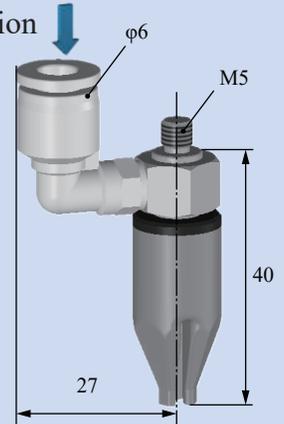
Pressure-Fingertip Distance deformation curve



BMC Straight Fitting Installation



BML Side Fitting Installation

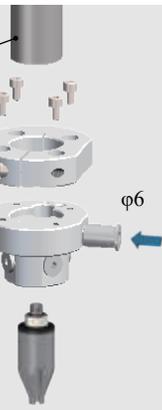


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

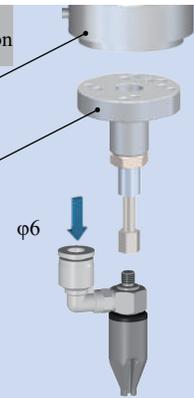
CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(Optional)



Rigid Connection Installation

Buffer Installation

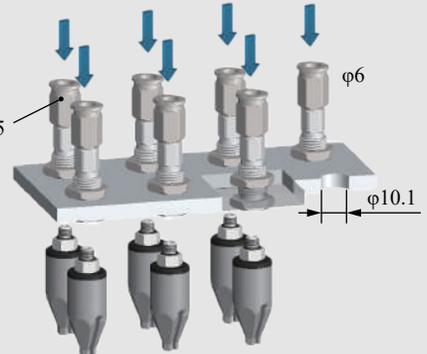
φ6
SMP-13 (Optional)
CM-RM558M5(Optional)

φ6
CM-S04 (Optional)



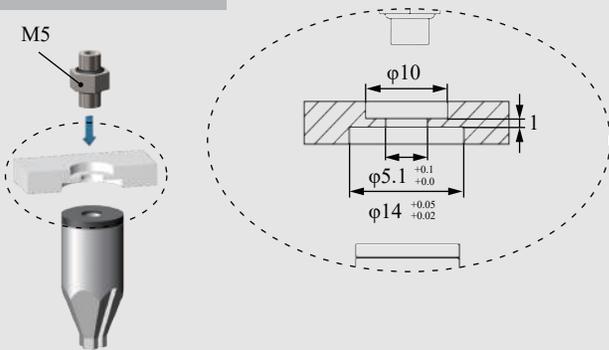
Matrix Installation

CM-RM525M5 (Optional)



Precise Positioning Installation

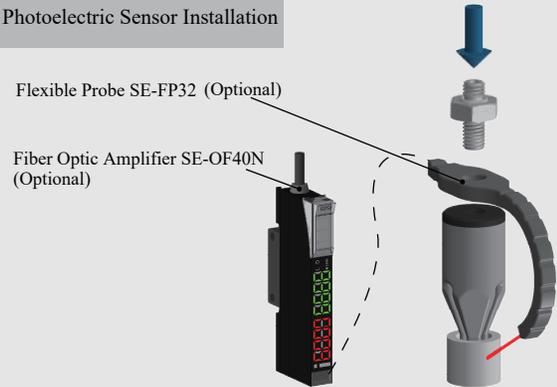
M5



Photoelectric Sensor Installation

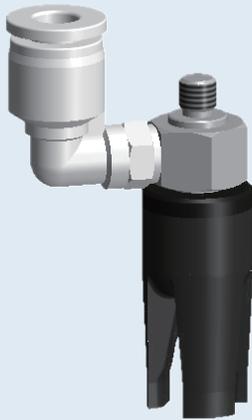
Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

	BMC-3A15[P]/S Direct-through P Type	BML-3A15[P]/S Direct-through P Type		
	BMC-3A15[PAS]/S Direct-through Dust-free P Type	BML-3A15[PAS]/S Side-through Dust-free P Type		
	Weight	6.4g	Weight	17.9g

B-3A15[P]/S

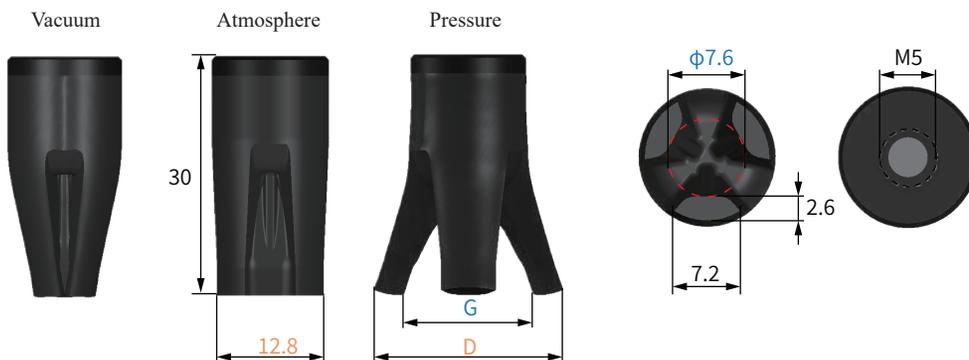
Parameter

Gripping range	2-8mm	Gripping force	0-0.2N	Theoretical gripping load**	0-16g	Ideal gripping workpiece size*	7.5mm
Internal gripping range	15-22mm	Internal gripping force	0-0.6N	Theoretical internal gripping load**	0-45g	Ideal internal gripping workpiece size*	15mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<90kPa

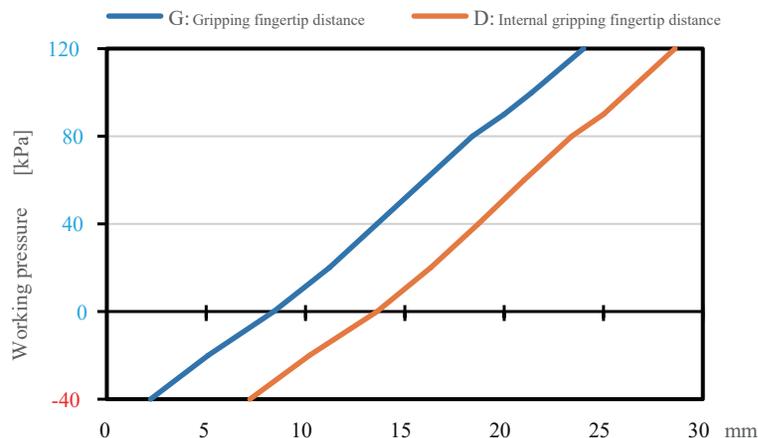
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



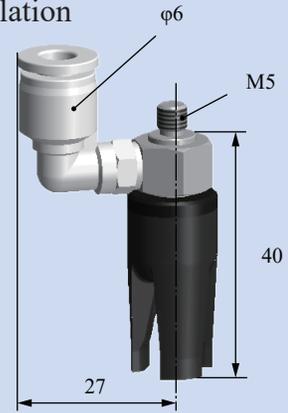
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

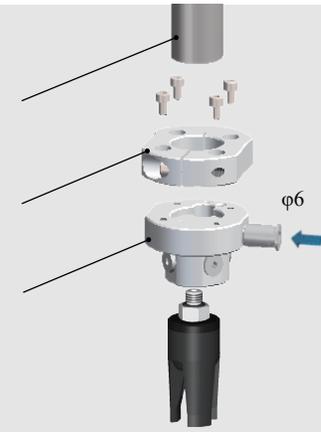


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

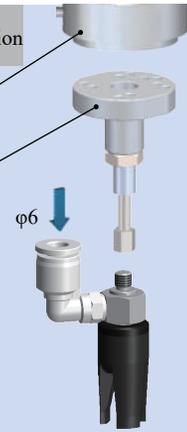
CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

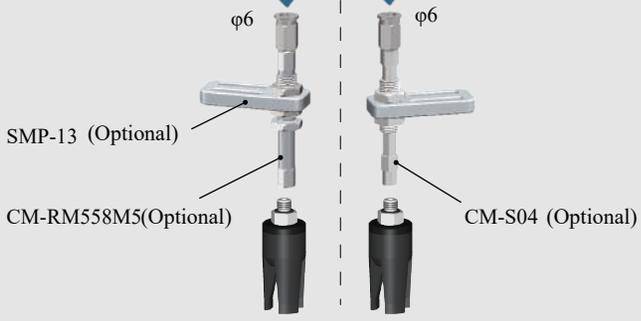
Six Axis Robotic Arm

FCM-S01(Optional)

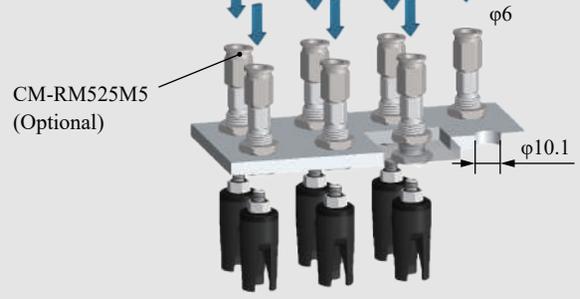


Rigid Connection Installation

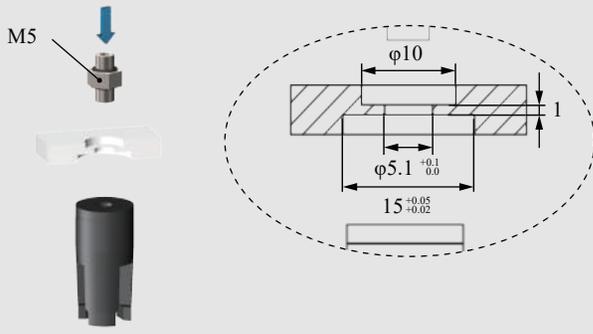
Buffer Installation



Matrix Installation



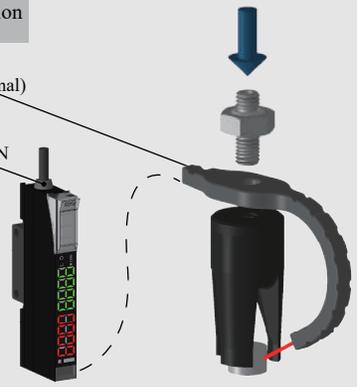
Precise Positioning Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)

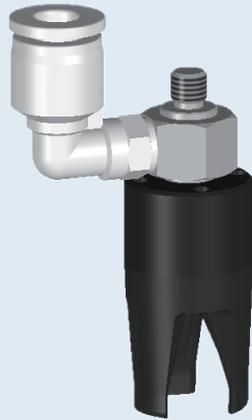


B-3A15[P]/S

Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

B-3A18[P]/S

	BMC-3A18[P]/S Direct-through P Type	BML-3A18[P]/S Direct-through P Type	
	BMC-3A18[PAS]/S Direct-through Dust-free P Type	BML-3A18[PAS]/S Side-through Dust-free P Type	
Weight	9.9g	Weight	21.4g

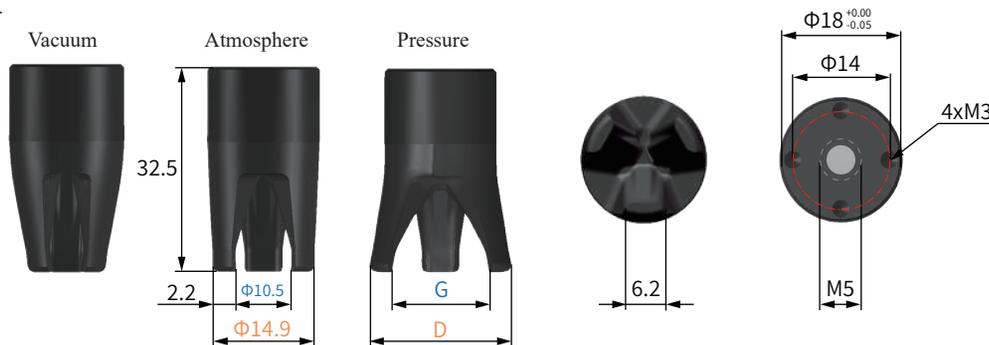
Parameter

Gripping range	3-12mm	Gripping force	0-0.3N	Theoretical gripping load**	0-24g	Ideal gripping workpiece size*	10.5mm
Internal gripping range	17-21mm	Internal gripping force	0-0.9N	Theoretical internal gripping load**	0-69g	Ideal internal gripping workpiece size*	17mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

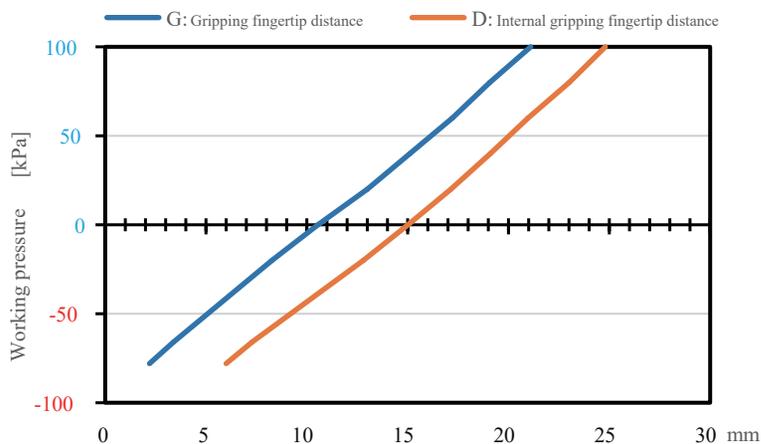
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



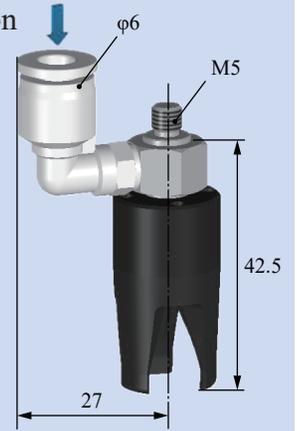
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation



Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

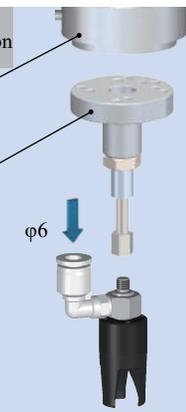
CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

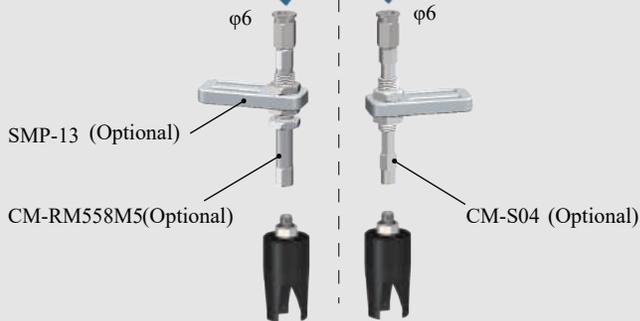
Six Axis Robotic Arm

FCM-S01(Optional)

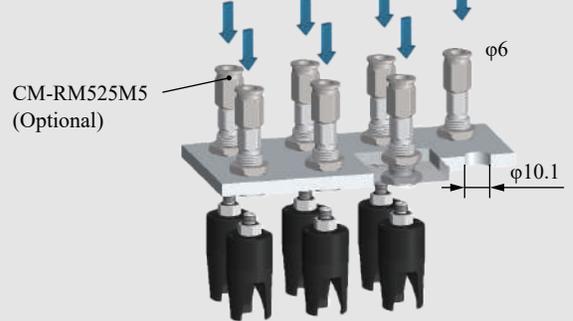


Rigid Connection Installation

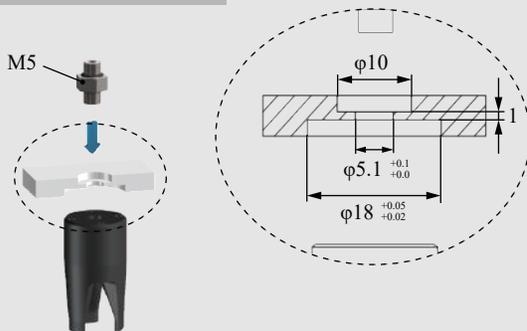
Buffer Installation



Matrix Installation



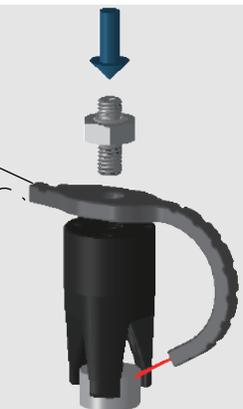
Precise Positioning Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP32 (Optional)

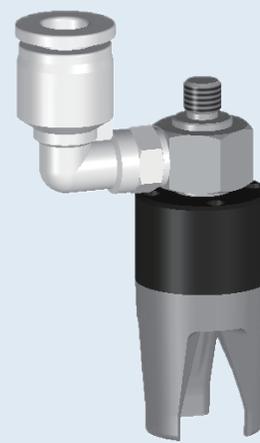
Fiber Optic Amplifier SE-OF40N (Optional)



B-3A18[P]/S

Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

	BMC-3A18[H]/S Direct-through H Type	BML-3A18[H]/S Side-through H Type		
	BMC-3A18[HAS]/S Direct-through Dust-free H Type	BML-3A18[HAS]/S Side-through Dust-free H Type		
	Weight	9.9g	Weight	21.4g

B-3A18[H]/S

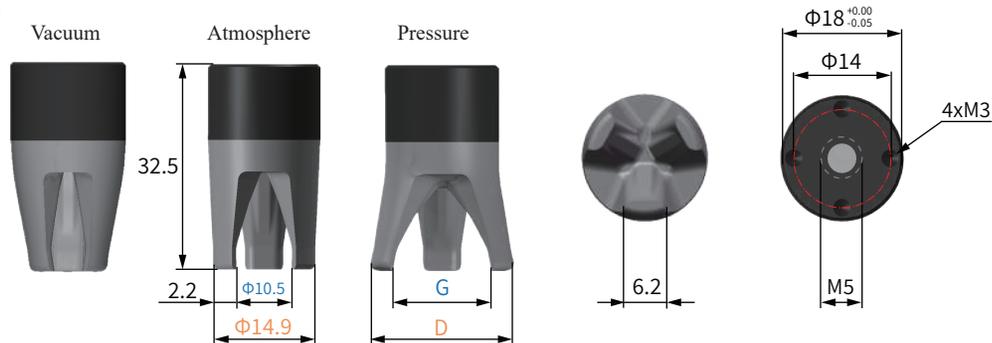
Parameter

Gripping range	3-12mm	Gripping force	0-0.4N	Theoretical gripping load**	0-26g	Ideal gripping workpiece size*	10.5mm
Internal gripping range	17-21mm	Internal gripping force	0-0.9N	Theoretical internal gripping load**	0-127g	Ideal internal gripping workpiece size*	17mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<200kPa

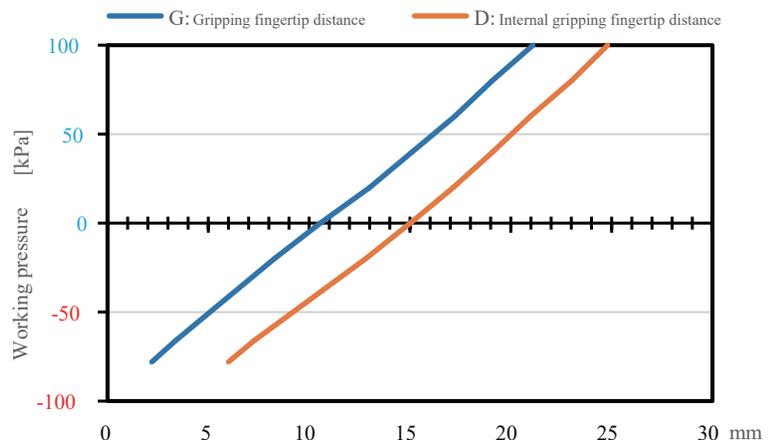
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



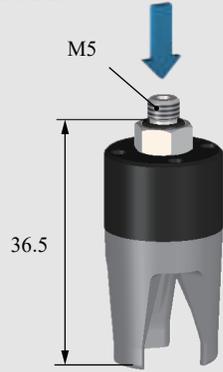
Pressure-Fingertip Distance deformation curve



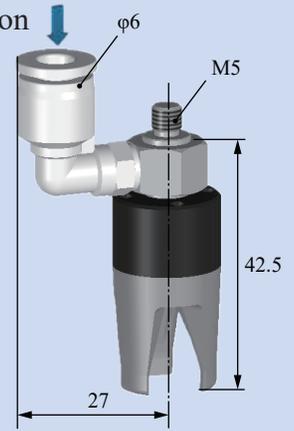
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

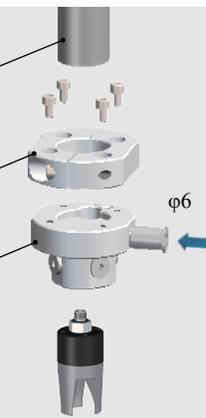


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

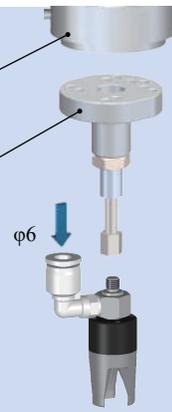
CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

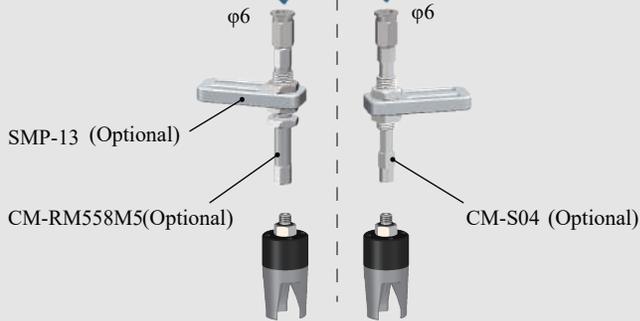
Six Axis Robotic Arm

FCM-S01(Optional)

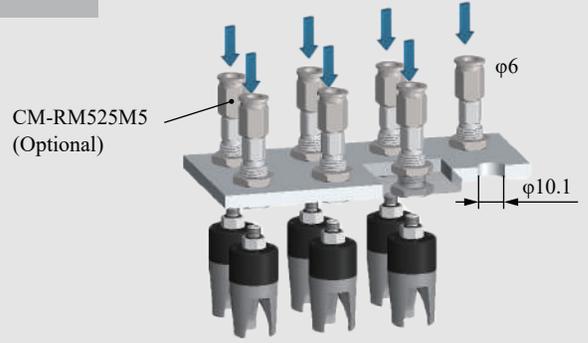


Rigid Connection Installation

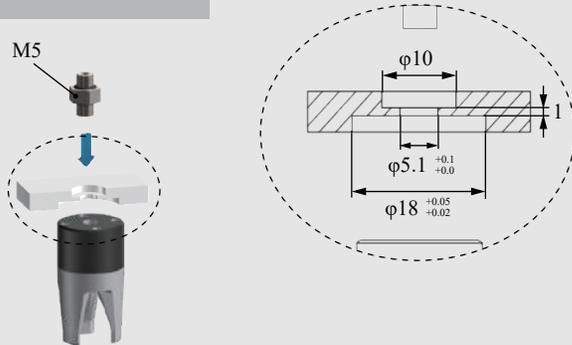
Buffer Installation



Matrix Installation



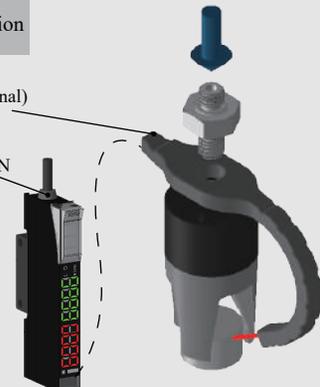
Precise Positioning Installation



Photoelectric Sensor Installation

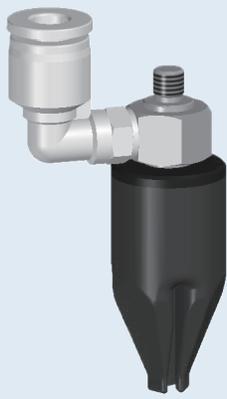
Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

	BMC-3B18[P]/S Direct-through P Type	BML-3B18[P]/S Direct-through P Type		
	BMC-3B18[PAS]/S Direct-through Dust-free P Type	BML-3B18[PAS]/S Side-through Dust-free P Type		
	Weight	8.3g	Weight	21.5g

B-3B18[P]/S

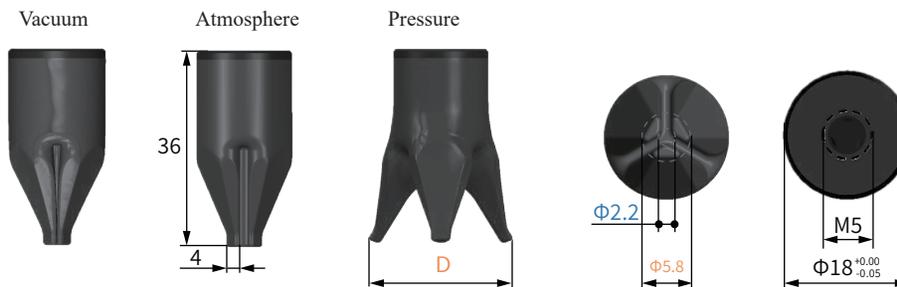
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	5.5-19mm	Internal gripping force	0-0.5N	Theoretical internal gripping load**	0-41g	Ideal internal gripping workpiece size*	10mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

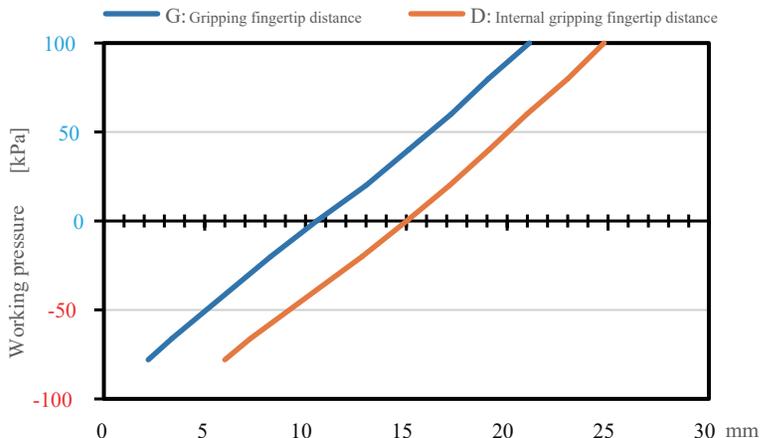
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



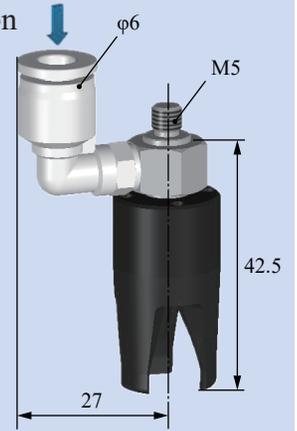
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

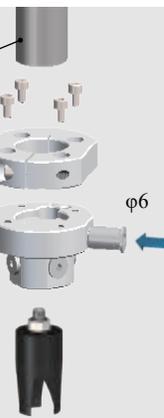


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

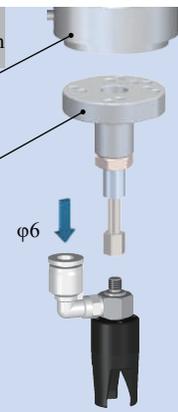
CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

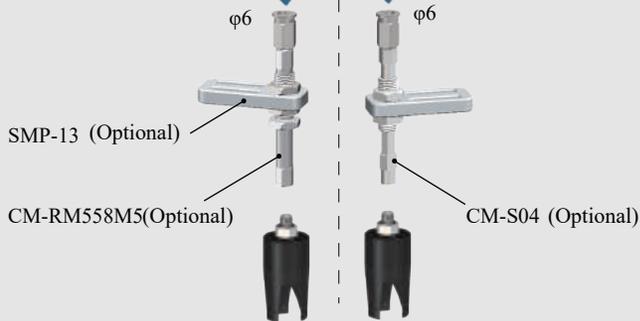
Six Axis Robotic Arm

FCM-S01(Optional)

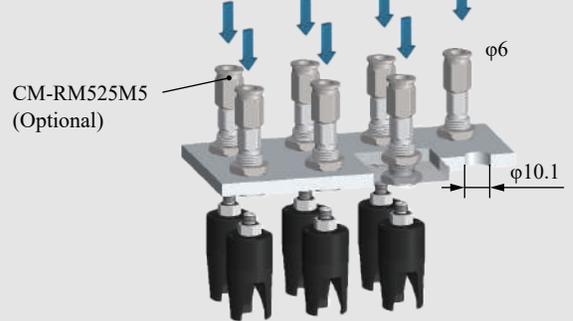


Rigid Connection Installation

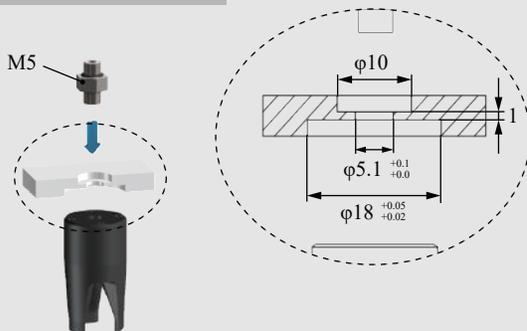
Buffer Installation



Matrix Installation



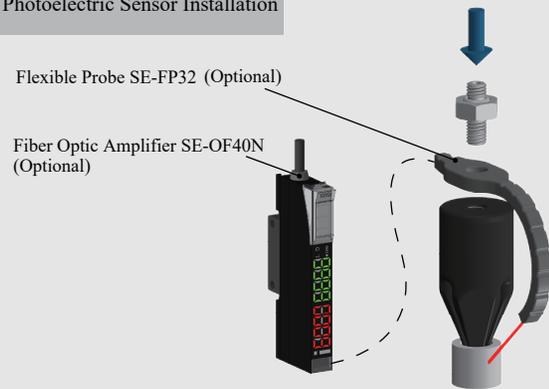
Precise Positioning Installation



Photoelectric Sensor Installation

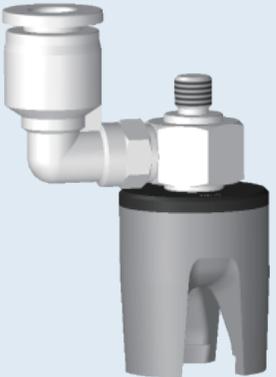
Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-3A20[H]/S Direct-through H Type	BML-3A20[H]/S Side-through H Type		
	BMC-3A20[HAS]/S Direct-through Dust-free H Type	BML-3A20[HAS]/S Side-through Dust-free H Type		
	Weight	8.1g	Weight	19.6g

B-3A20[H]/S

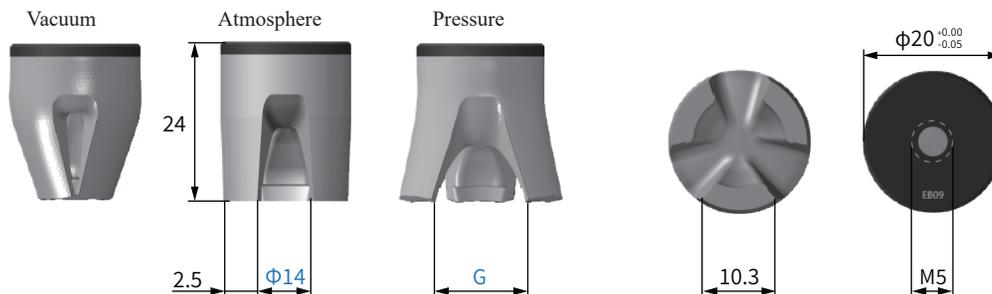
Parameter

Gripping range	6-17mm	Gripping force	0-1.3N	Theoretical gripping load**	0-99g	Ideal gripping workpiece size*	14mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<180kPa

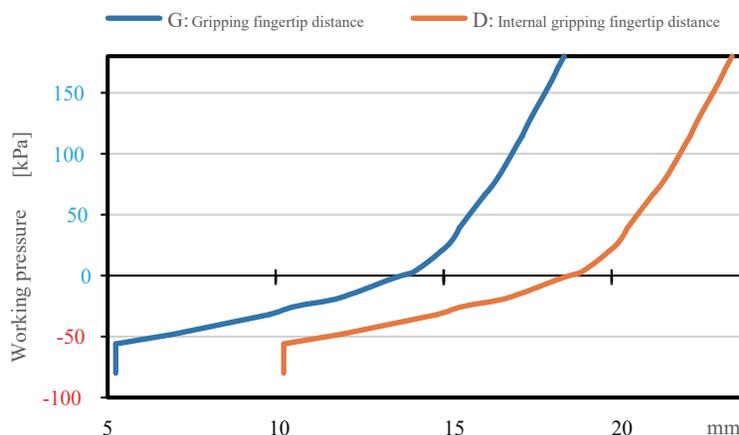
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



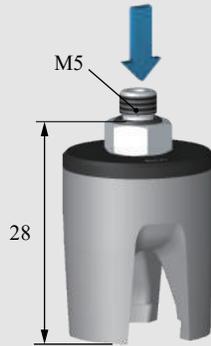
Pressure-Fingertip Distance deformation curve



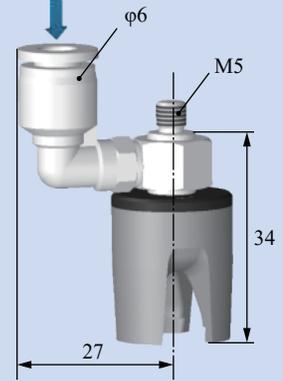
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

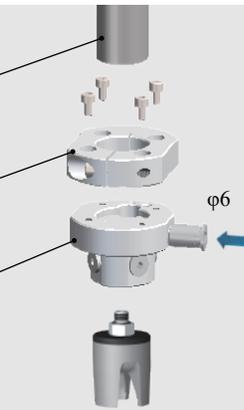


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(Optional)

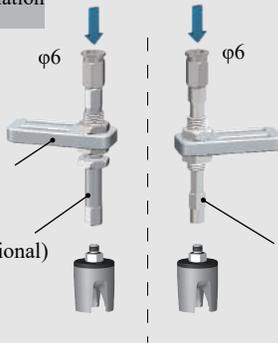


Rigid Connection Installation

Buffer Installation

SMP-13 (Optional)

CM-RM558M5(Optional)

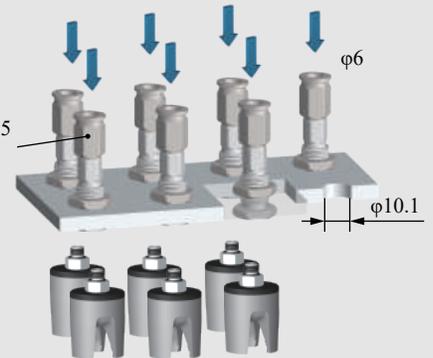


CM-S04 (Optional)



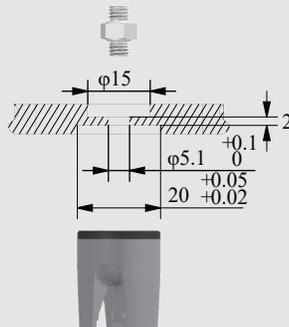
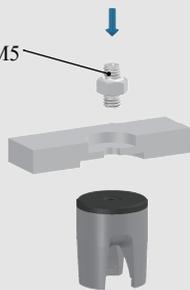
Matrix Installation

CM-RM525M5 (Optional)



Precise Positioning Installation

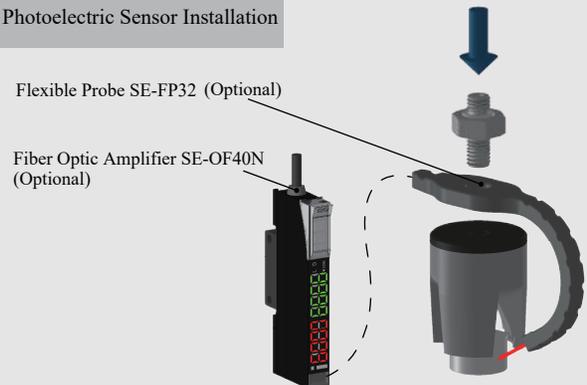
M5



Photoelectric Sensor Installation

Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-3G20[H]/S Direct-through H Type	BML-3G20[H]/S Side-through H Type		
	BMC-3G20[HAS]/S Direct-through Dust-free H Type	BML-3G20[HAS]/S Side-through Dust-free H Type		
	Weight	8.4g	Weight	19.9g

B-3G20[H]/S

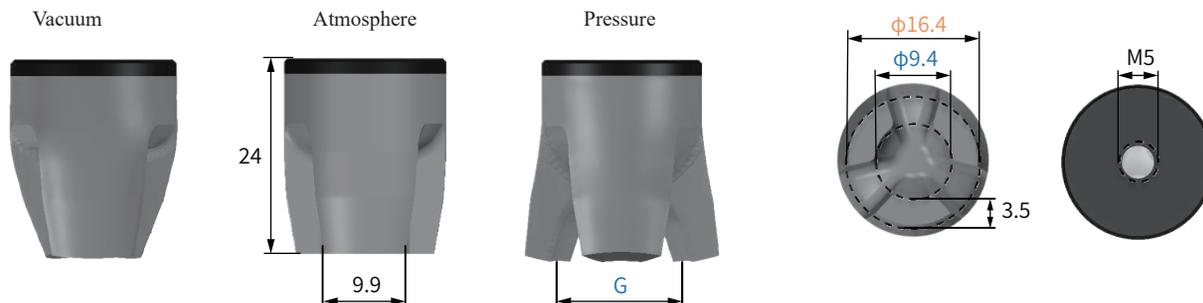
Parameter

Gripping range	5-12mm	Gripping force	0-1.5N	Theoretical gripping load**	0-111g	Ideal gripping workpiece size*	10mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<180kPa

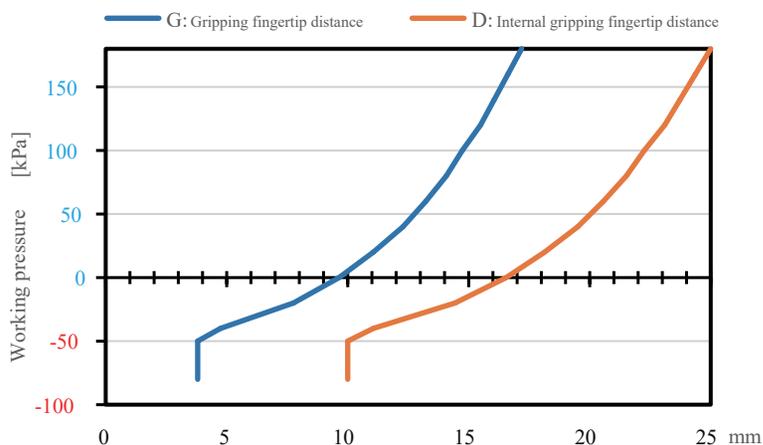
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



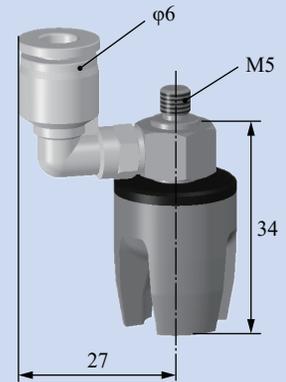
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

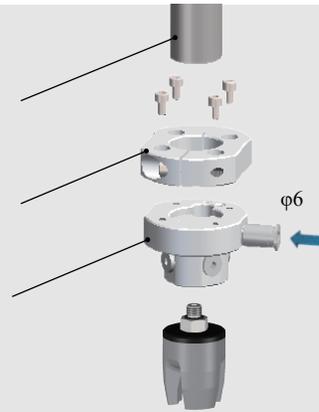


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

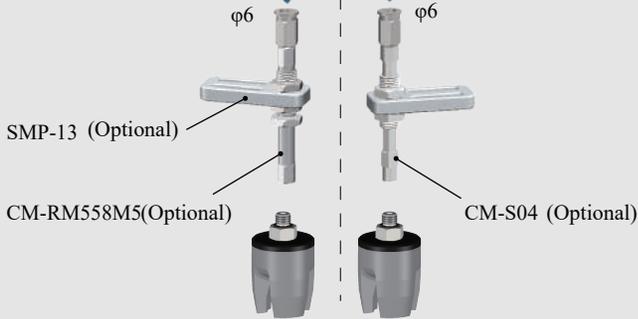
Six Axis Robotic Arm

FCM-S01(Optional)

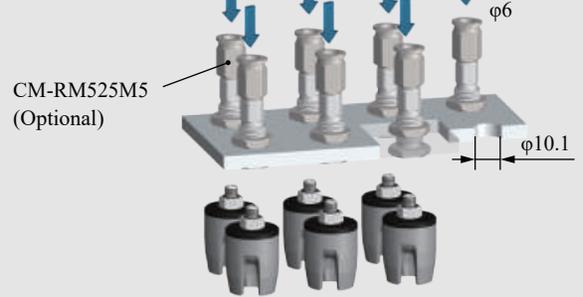


Rigid Connection Installation

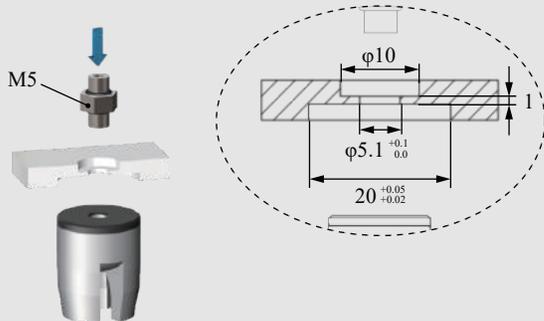
Buffer Installation



Matrix Installation



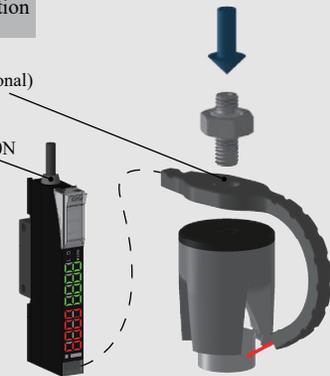
Precise Positioning Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

B-3B24[H]/S

	BMC-3B24[H]/S Direct-through H Type	BML-3B24[H]/S Side-through H Type	
	BMC-3B24[HAS]/S Direct-through Dust-free H Type	BML-3B24[HAS]/S Side-through Dust-free H Type	
Weight	20g	Weight	34g

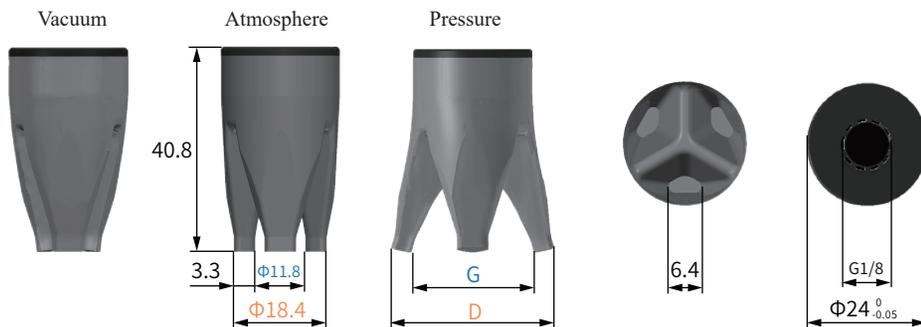
Parameter

Gripping range	3.5-12mm	Gripping force	0-0.4N	Theoretical gripping load**	0-33g	Ideal gripping workpiece size*	10mm
Internal gripping range	15-29mm	Internal gripping force	0-1.6N	Theoretical internal gripping load**	0-118g	Ideal internal gripping workpiece size*	25mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<180kPa

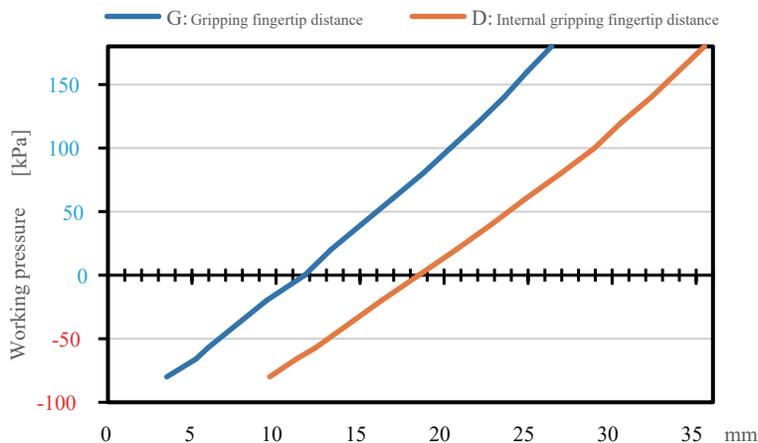
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure RoChu control Unit. Do not exceed the safe air pressure.



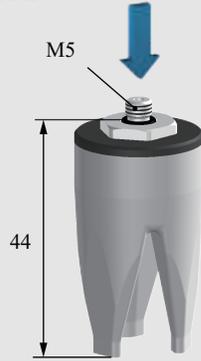
Pressure-Fingertip Distance deformation curve



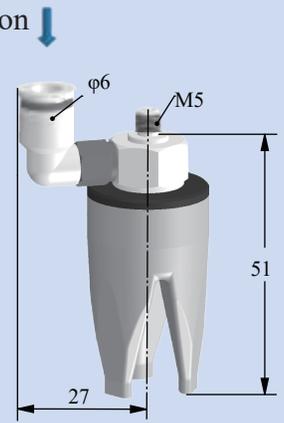
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation



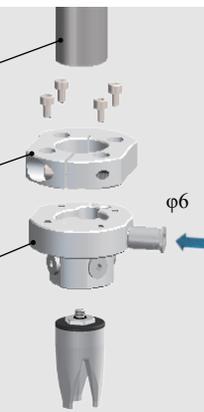
B-3B24[H]/S

Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(Optional)



Rigid Connection Installation

Buffer Installation

SMP-13 (Optional)

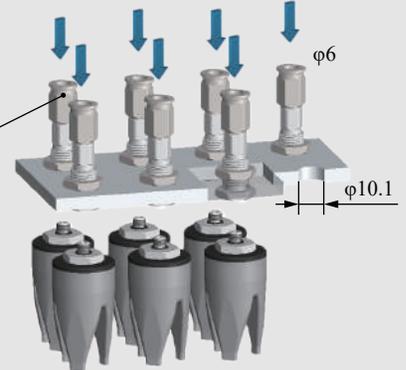
CM-RM558M5(Optional)



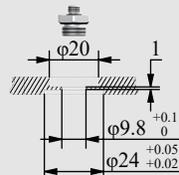
CM-S04 (Optional)

Matrix Installation

CM-RM525M5 (Optional)



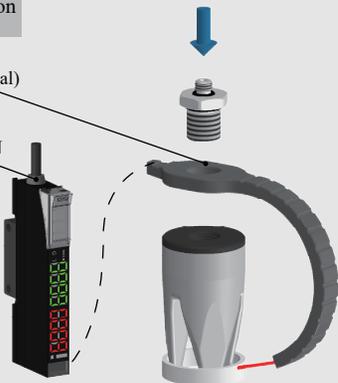
Precise Positioning Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP31 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G and outer fingertips distance D can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- The Anti-static material meets the requirements of the national standard GB/T11210-2014, with a point-to-point resistance of 0.1-1000MΩ. The Anti-static Dust-free type [LHAS] is more suitable for dealing with workpieces that have dustproof requirements or are miniature and lightweight.

	BMC-3B24[LH]/S Direct-through Anti-static H Type	BML-3B24[LH]/S Side-through Anti-static H Type		
	BMC-3B24[LHAS]/S Direct-through Anti-static Dust-free H Type	BML-3B24[LHAS]/S Side-through Anti-static Dust-free H Type		
	Weight	20g	Weight	34g

B-3B24[LH]/S

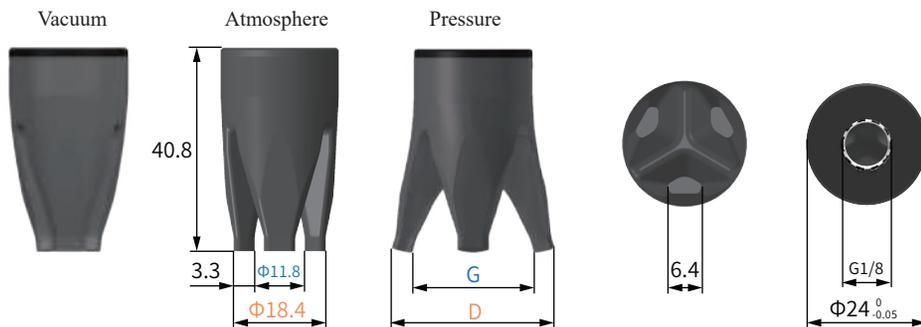
Parameter

Gripping range	3.5-12mm	Gripping force	0-0.4N	Theoretical gripping load**	0-33g	Ideal gripping workpiece size*	10mm
Internal gripping range	15-29mm	Internal gripping force	0-1.6N	Theoretical internal gripping load**	0-118g	Ideal internal gripping workpiece size*	25mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<150kPa

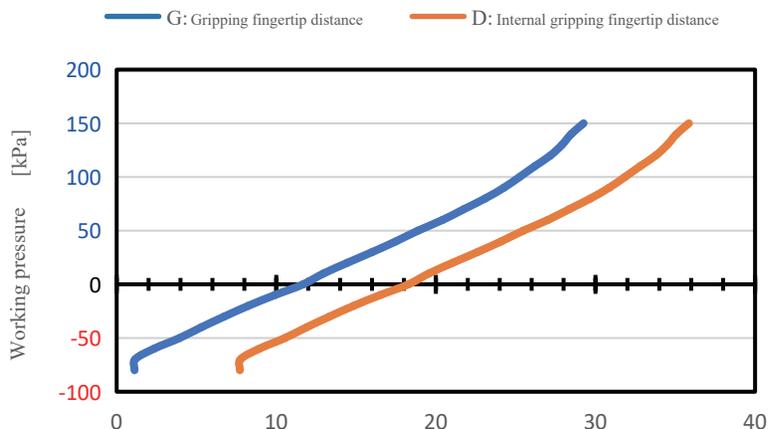
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



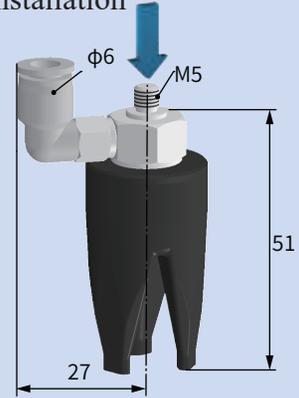
Pressure-Fingertip Distance deformation curve



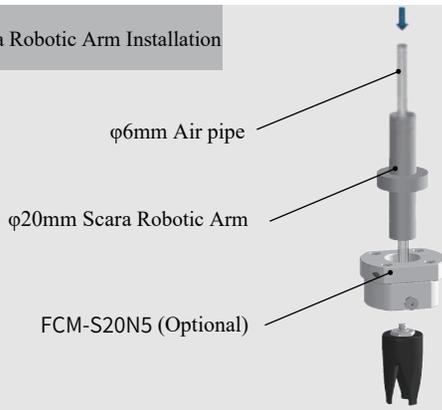
BMC Straight Fitting Installation



BML Side Fitting Installation



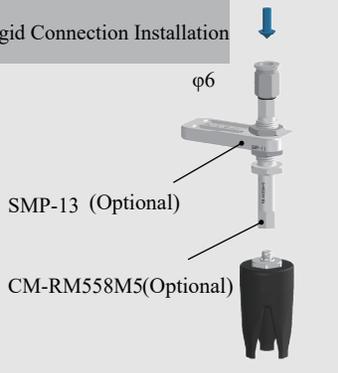
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



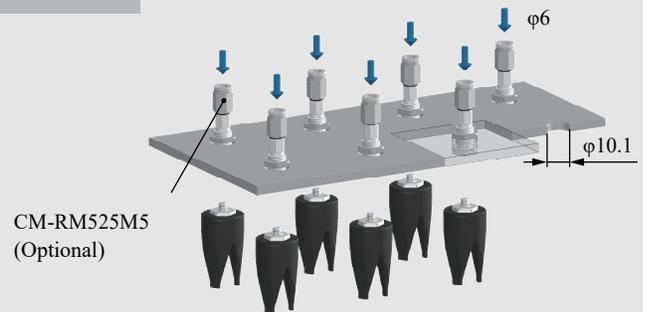
Rigid Connection Installation



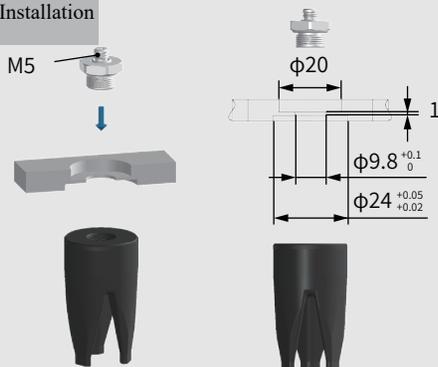
Buffer Installation



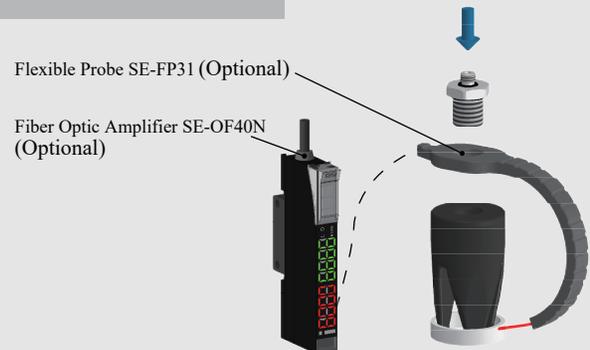
Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

B-3C24[P]/S

	BMC-3C24[P]/S Direct-through P Type	BML-3C24[P]/S Direct-through P Type		
	BMC-3C24[PAS]/S Direct-through Dust-free P Type	BML-3C24[PAS]/S Side-through Dust-free P Type		
	Weight	16.5g	Weight	28.8g

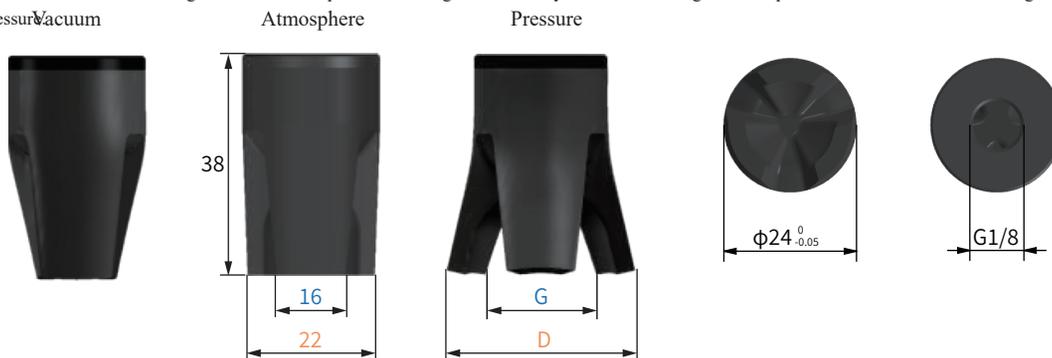
Parameter

Gripping range	6-20mm	Gripping force	0-1.2N	Theoretical gripping load**	0-91g	Ideal gripping workpiece size*	16mm
Internal gripping range	24-30mm	Internal gripping force	0-3.4N	Theoretical internal gripping load**	0-257g	Ideal internal gripping workpiece size*	24mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<90kPa

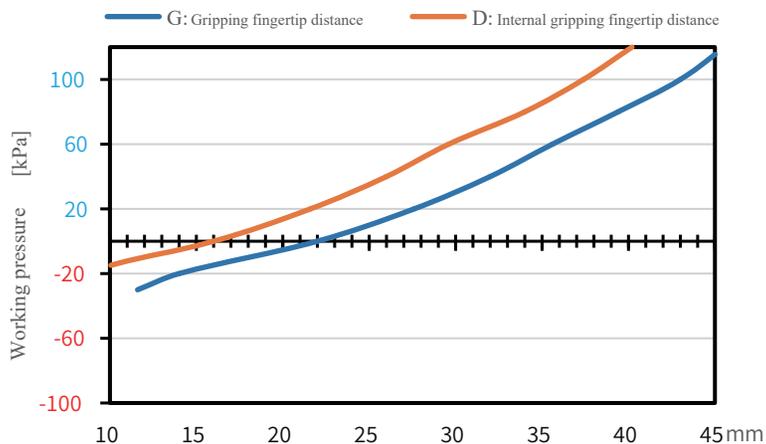
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

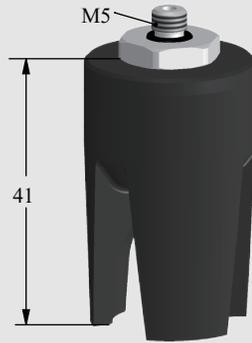
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure/vacuum



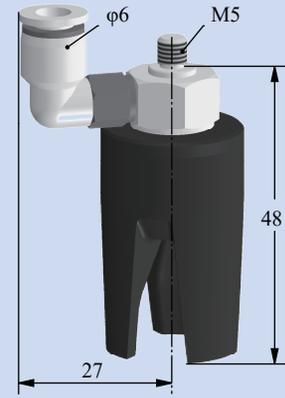
Pressure-Fingertip Distance deformation curve



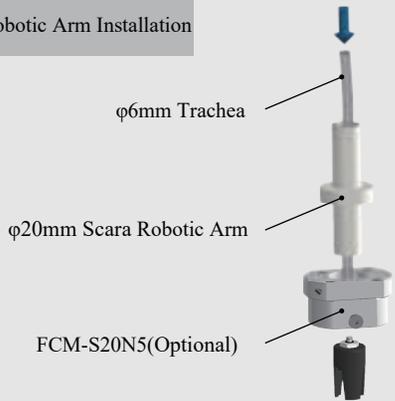
BMC Straight Fitting Installation



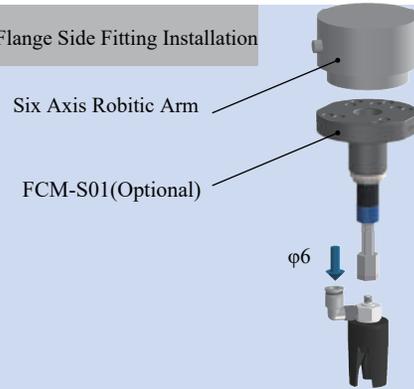
BML Side Fitting Installation



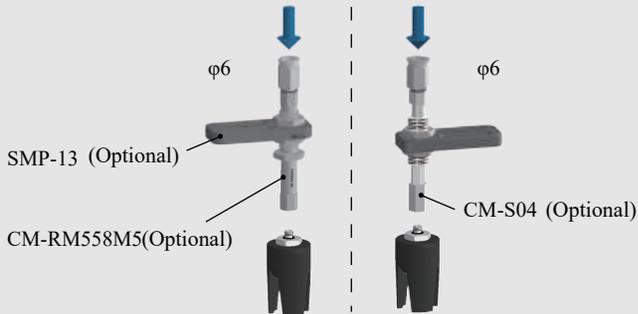
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation

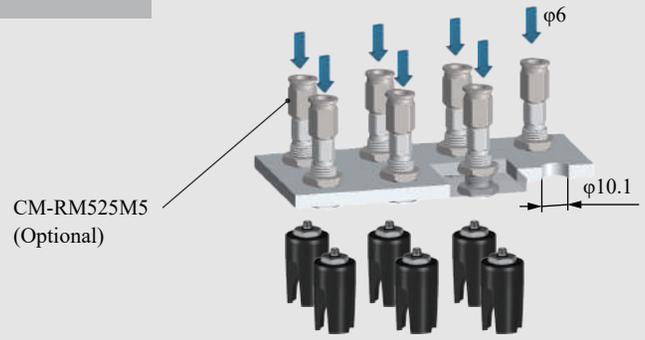


Rigid Connection Installation

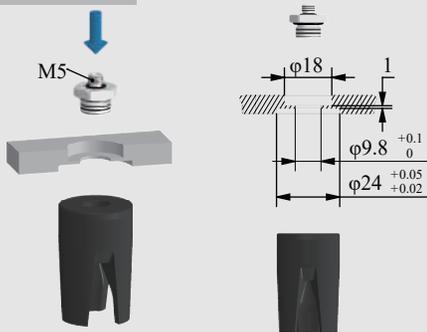


Buffer Installation

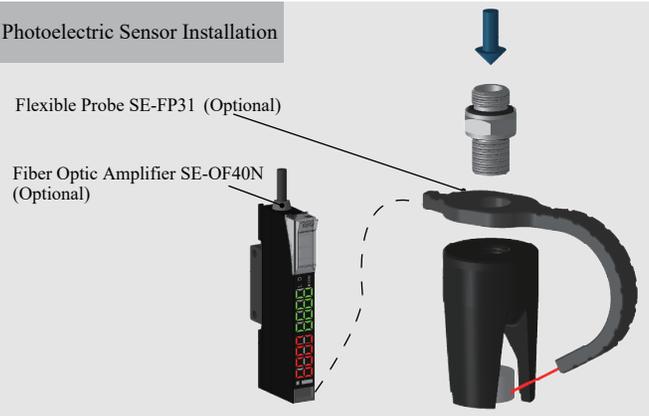
Matrix Installation



Precise Positioning Installation

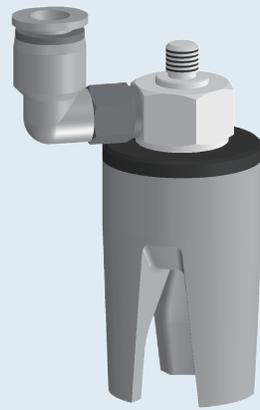


Photoelectric Sensor Installation



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-3C24[H]/S Direct-through H Type	BML-3C24[H]/S Side-through H Type		
	BMC-3C24[HAS]/S Direct-through Dust-free H Type	BML-3C24[HAS]/S Side-through Dust-free H Type		
	Weight	16.7g	Weight	29g

B-3C24[H]/S

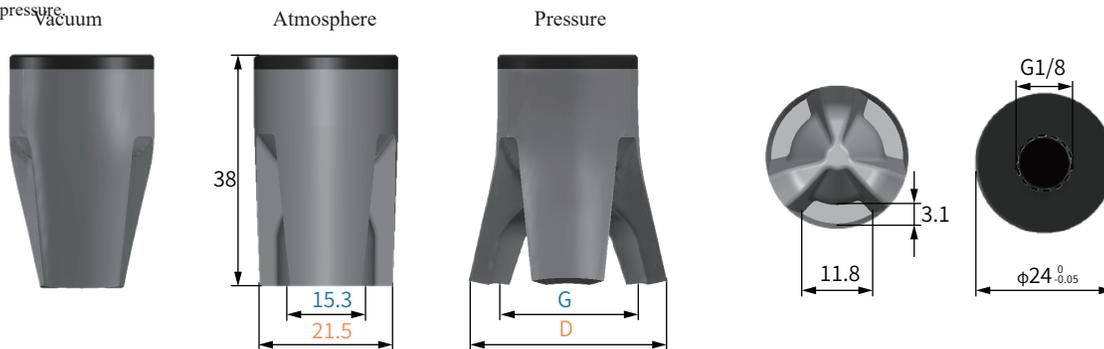
Parameter

Gripping range	6-20mm	Gripping force	0-1.6N	Theoretical gripping load**	0-122g	Ideal gripping workpiece size*	16mm
Internal gripping range	24-30mm	Internal gripping force	0-4.4N	Theoretical internal gripping load**	0-329g	Ideal internal gripping workpiece size*	24mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<180kPa

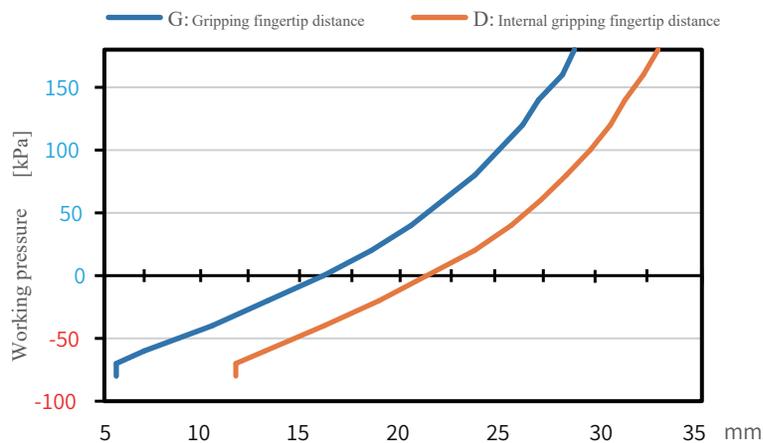
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



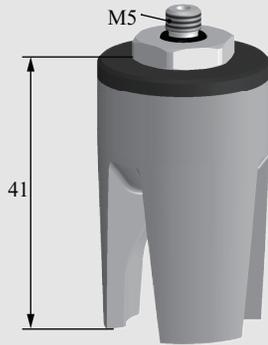
Pressure-Fingertip Distance deformation curve



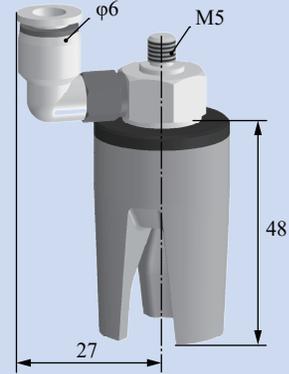
BMC Straight Fitting Installation



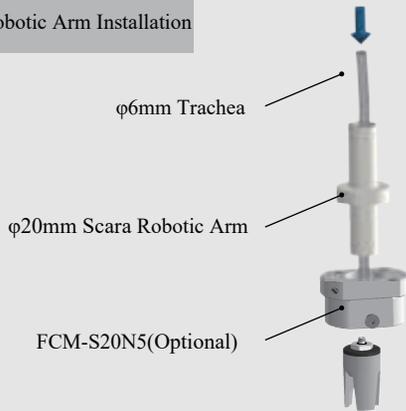
Scan to watch videos



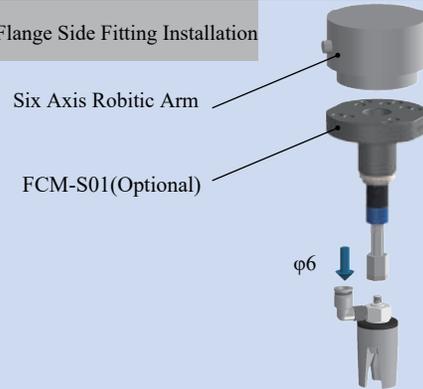
BML Side Fitting Installation



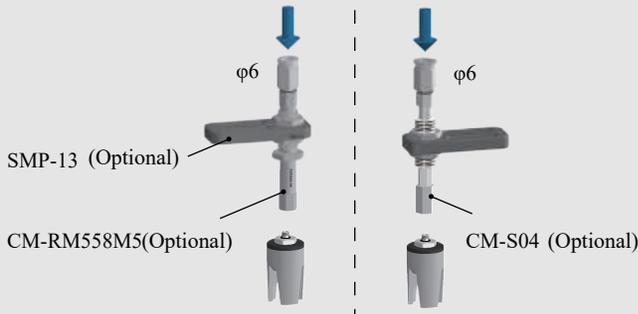
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



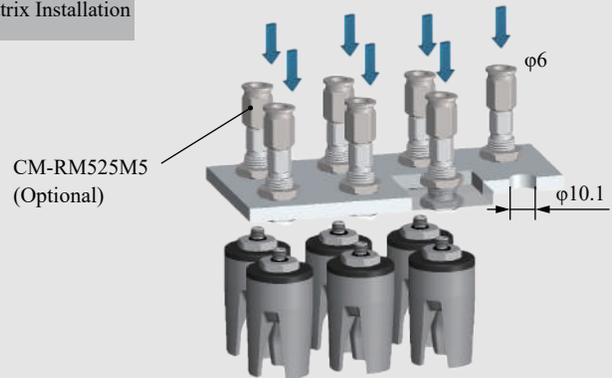
Rigid Connection Installation



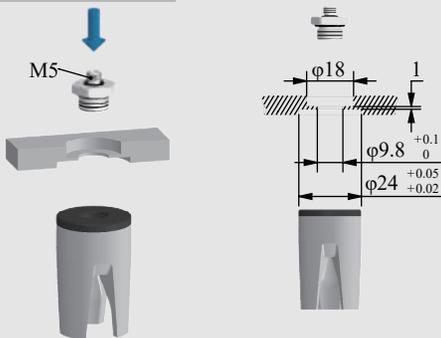
Buffer Installation



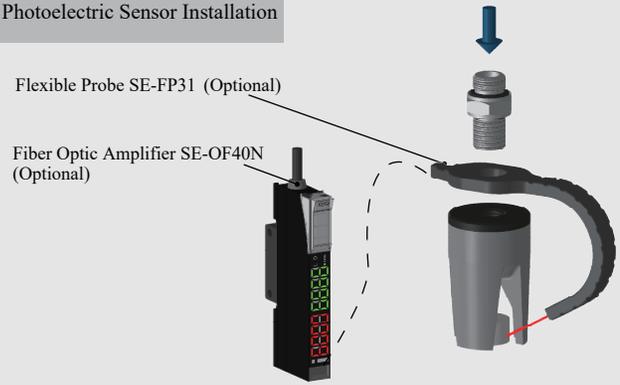
Matrix Installation



Precise Positioning Installation

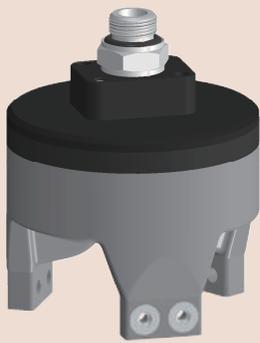
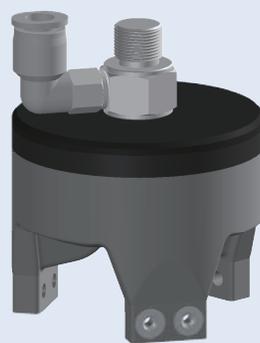
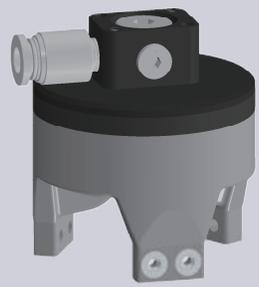


Photoelectric Sensor Installation



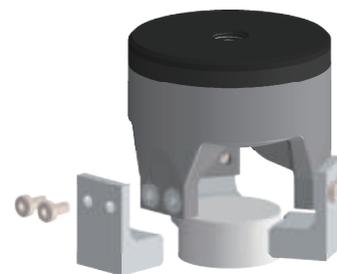
Soft Beak / Beak Module

B-3GN51[H]/S

BMC-3GN51[H]/SN Direct-through H Type		BMS-3GN51[H]/SN Direct-through Precision Positioning H Type		BML-3GN51[H]/SN Side-through H Type		BMM-3GN51[H]/SN Multi-way Precision Positioning H Type	
BMC-3GN51[HAS]/SN Direct-through Dust-free H Type		BMS-3GN51[HAS]/SN Direct-through Precision Positioning H Type		BML-3GN51[HAS]/SN Side-through Dust-free H Type		BMM-3GN51[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	43.5g	Weight	50.73g	Weight	56.9g	Weight	54.88g

Product features

- Suitable for complex-shaped workpieces. Profiling nails, designed to fit the workpiece's shape, are installed via soft grippers' fingertip screw holes. They can be made of rigid materials like plastic or metal, depending on the workpiece.
- Fingertips open under pressure state and clamp in a vacuum. Inner fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



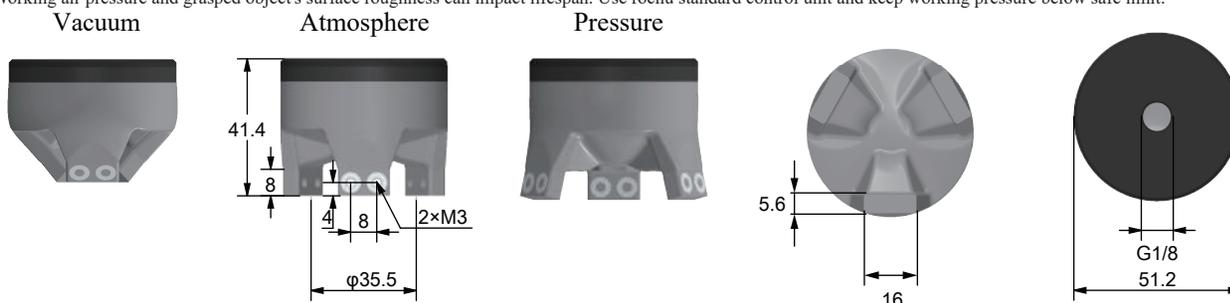
Parameter

Gripping range	10-35mm	Gripping force	0-19.1N	Theoretical gripping load**	0-1431g	Ideal gripping workpiece size*	36.0mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

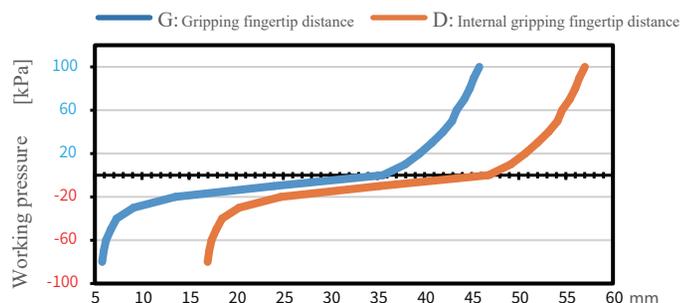
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

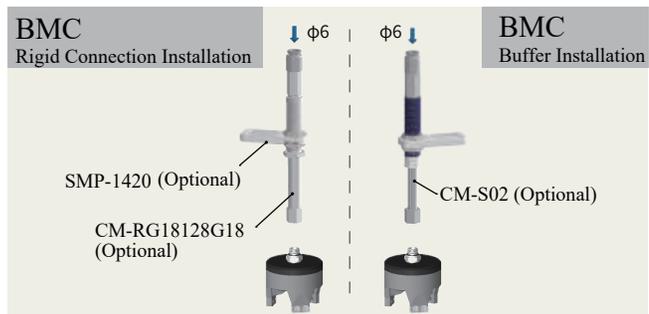
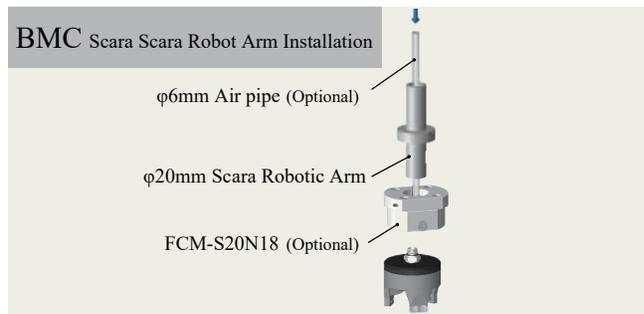
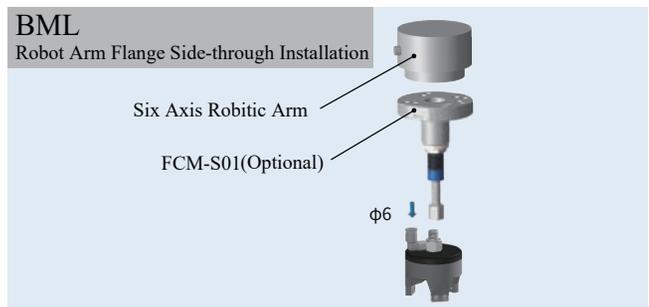
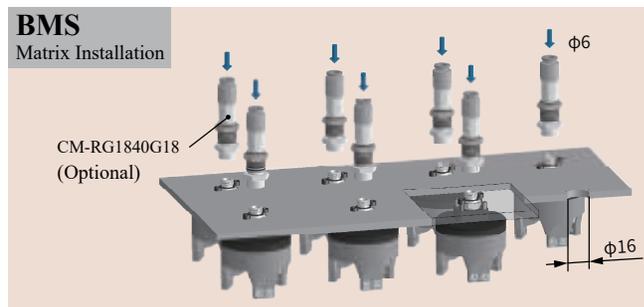
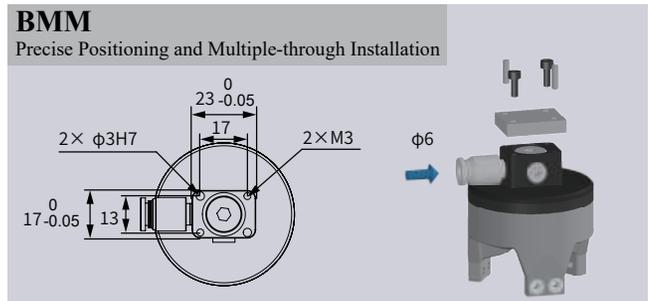
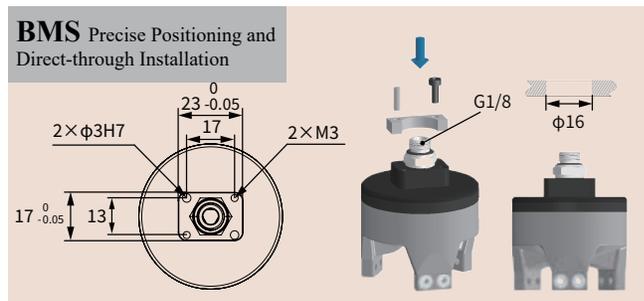
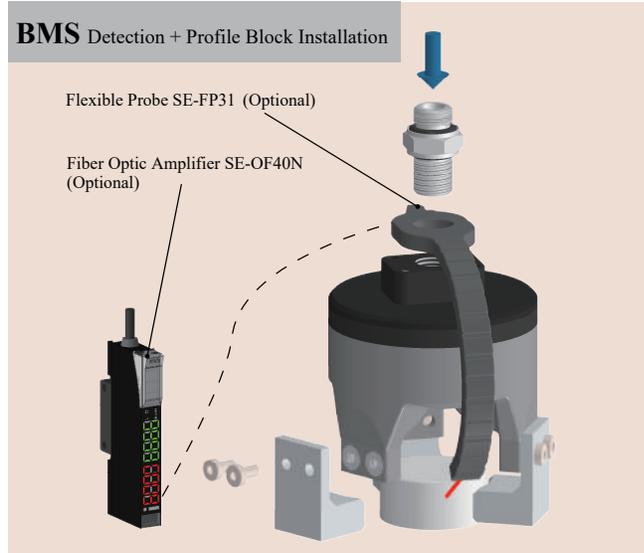
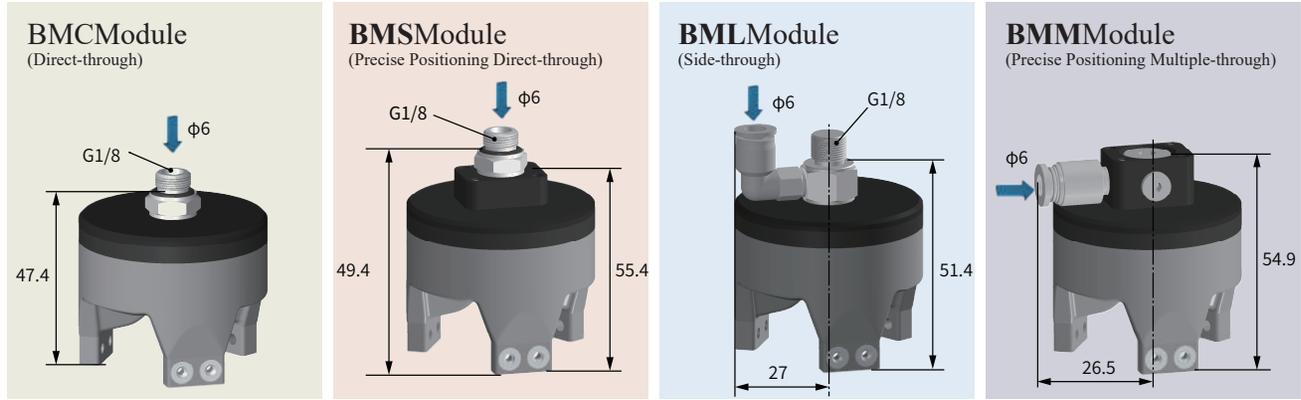
** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve





B-3GN51LH/S

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

B-4B18[P]

	BMC-4B18[P] Direct-through P Type	BML-4B18[P] Direct-through P Type	
	BMC-4B18[PAS] Direct-through Dust-free P Type	BML-4B18[PAS] Side-through Dust-free P Type	
Weight	13.8g	Weight	22.2g

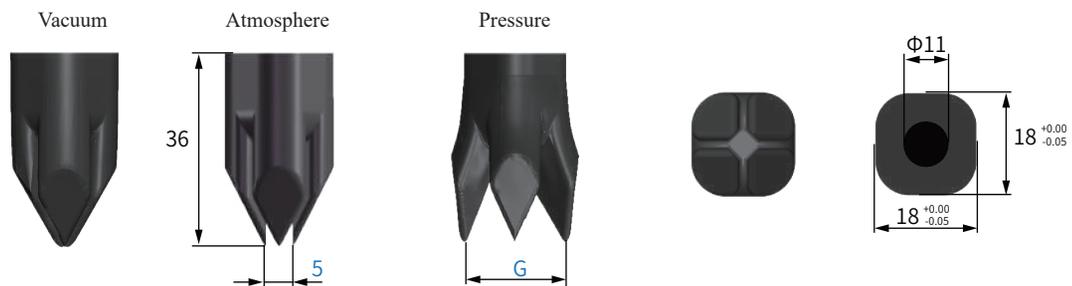
Parameter

Gripping range	3-8mm	Gripping force	0-0.3N	Theoretical gripping load**	0-17g	Ideal gripping workpiece size*	6mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<90kPa

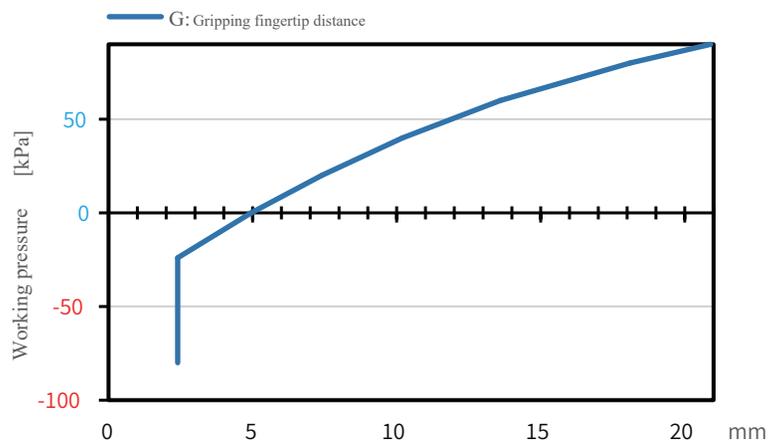
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



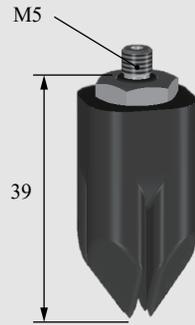
Pressure-Fingertip Distance deformation curve



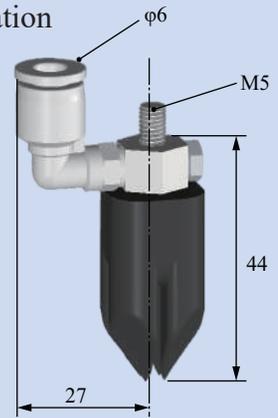
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation



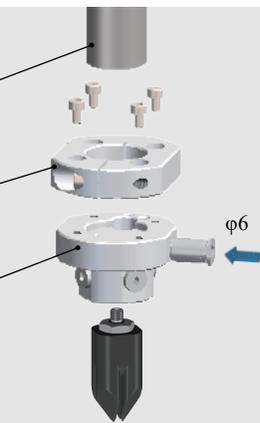
B-4B18[P]

Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

CP-191(Optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(Optional)

φ6



Rigid Connection Installation

φ6

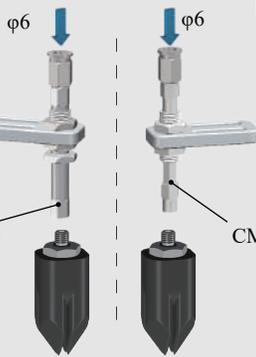
SMP-13 (Optional)

CM-RM558M5(Optional)

Buffer Installation

φ6

CM-S04 (Optional)

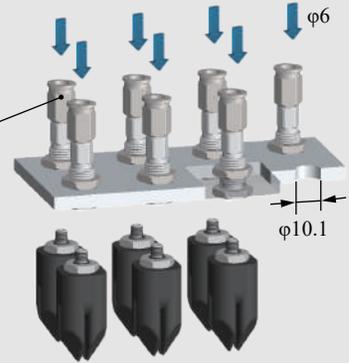


Matrix Installation

CM-RM525M5 (Optional)

φ6

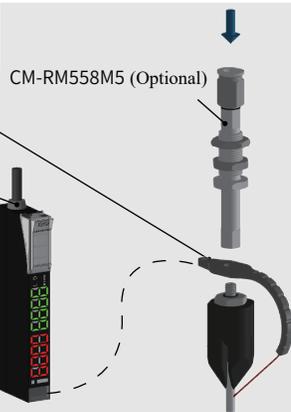
φ10.1



Photoelectric Sensor Installation

Flexible Probe SE-FP31 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

B-4B18[P]/S

	BMC-4B18[P]/S Direct-through P Type	BML-4B18[P]/S Direct-through P Type	
	BMC-4B18[PAS]/S Direct-through Dust-free P Type	BML-4B18[PAS]/S Side-through Dust-free P Type	
Weight	10g	Weight	21.5g

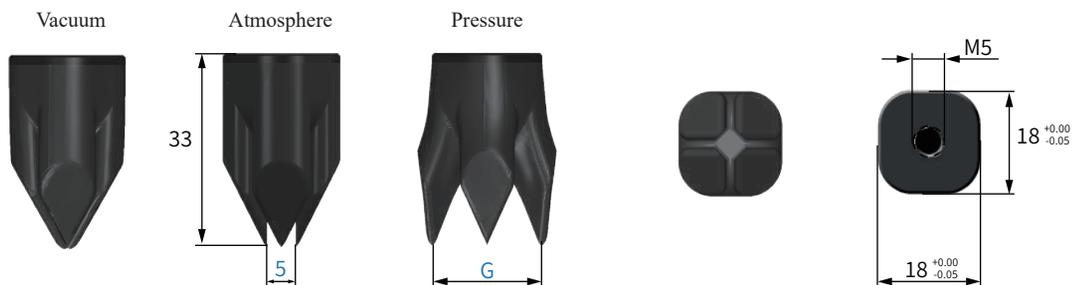
Parameter

Gripping range	3-8mm	Gripping force	0-0.3N	Theoretical gripping load**	0-17g	Ideal gripping workpiece size*	6mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<90kPa

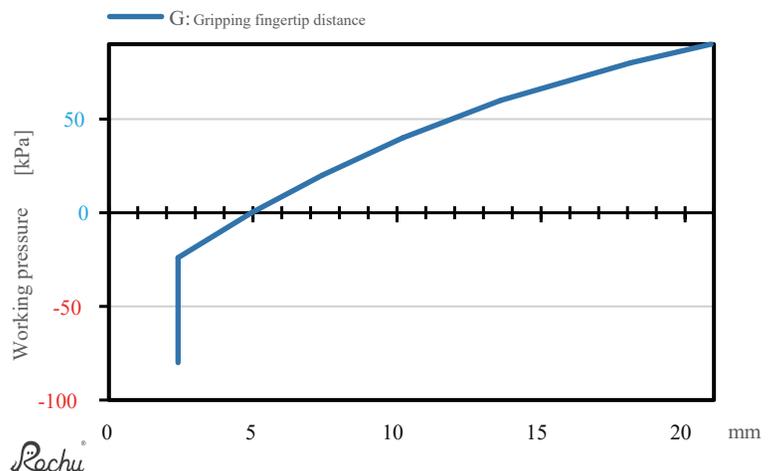
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



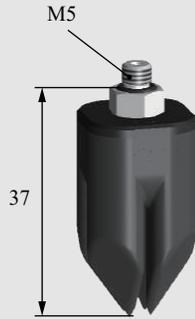
Pressure-Fingertip Distance deformation curve



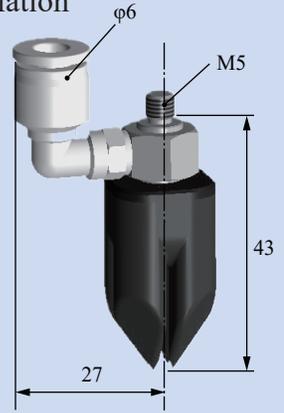
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation



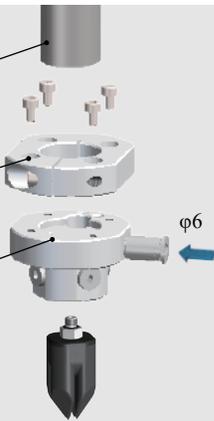
B-4B18[P]/S

Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

RF-S20(Optional)

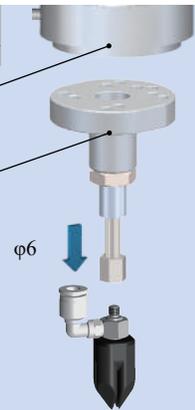
RF-SFB(Optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(Optional)

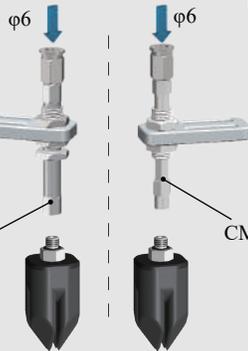


Rigid Connection Installation

Buffer Installation

SMP-13 (Optional)

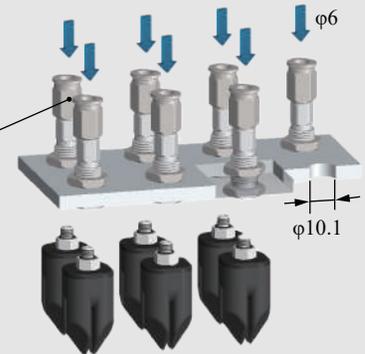
CM-RM558M5(Optional)



CM-S04 (Optional)

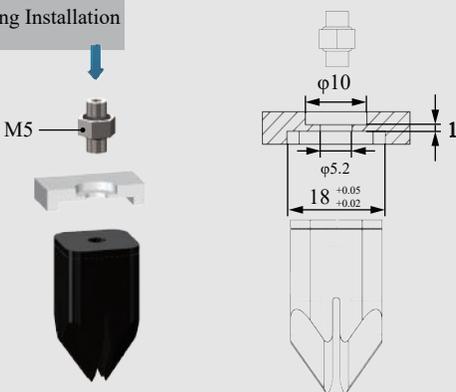
Matrix Installation

CM-RM525M5 (Optional)



Precise Positioning Installation

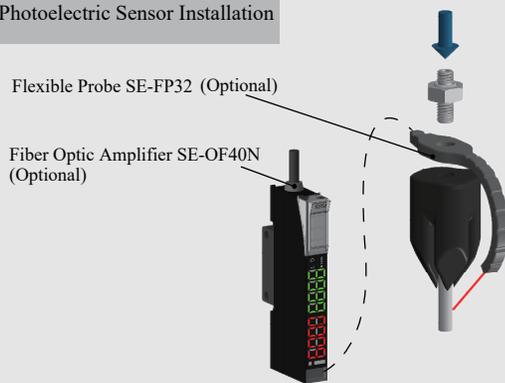
M5



Photoelectric Sensor Installation

Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance D can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

B-4H18[H]/S

	BMC-4H18[H]/S Direct-through H Type	BML-4H18[H]/S Side-through H Type		
	BMC-4H18[HAS]/S Direct-through Dust-free H Type	BML-4H18[HAS]/S Side-through Dust-free H Type		
	Weight	12.2g	Weight	23.7g

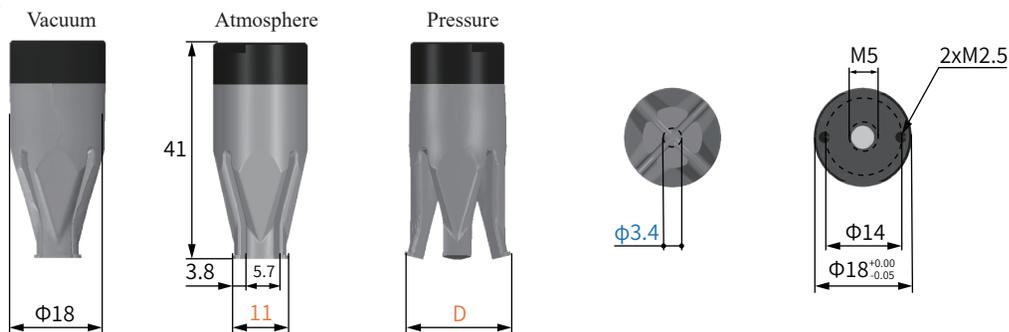
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	12-22mm	Internal gripping force	0-0.6N	Theoretical internal gripping load**	0-37g	Ideal internal gripping workpiece size*	14mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<180kPa

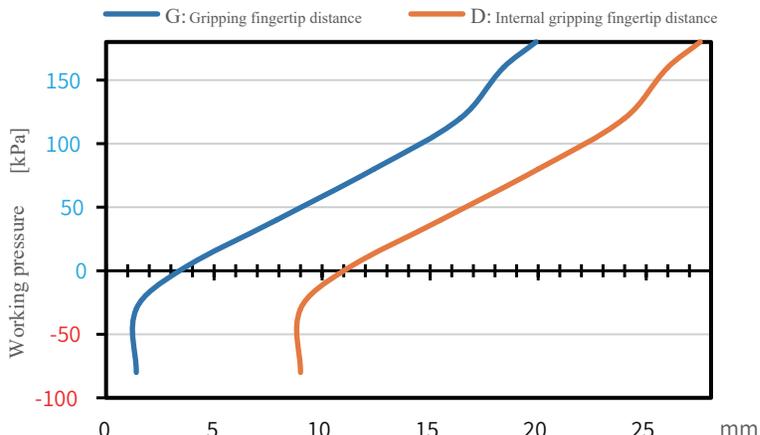
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



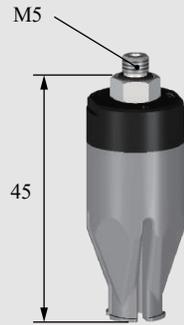
Pressure-Fingertip Distance deformation curve



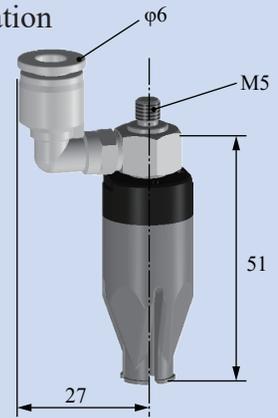
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation



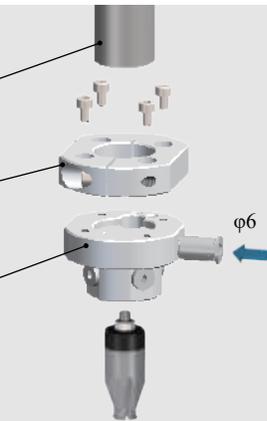
B-4H18[H]/S

Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193(Optional)

CP-191(Optional)

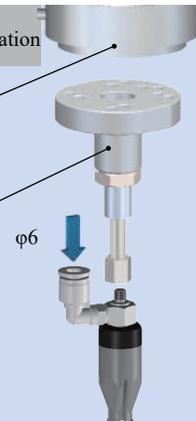


Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(Optional)

φ6

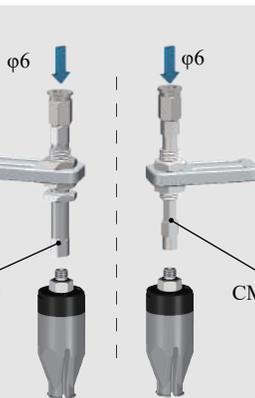


Rigid Connection Installation

φ6

SMP-13 (Optional)

CM-RM558M5(Optional)



Buffer Installation

φ6

CM-S04 (Optional)

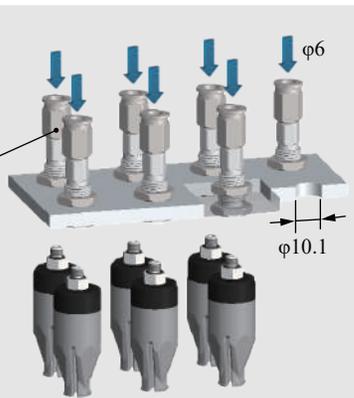


Matrix Installation

CM-RM525M5 (Optional)

φ6

φ10.1



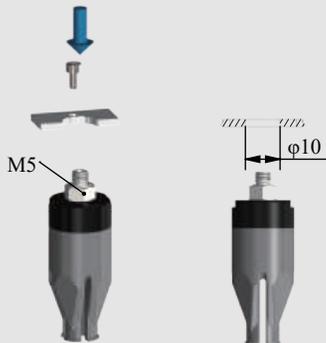
Precise Positioning Installation

2×φ2.7

14

M5

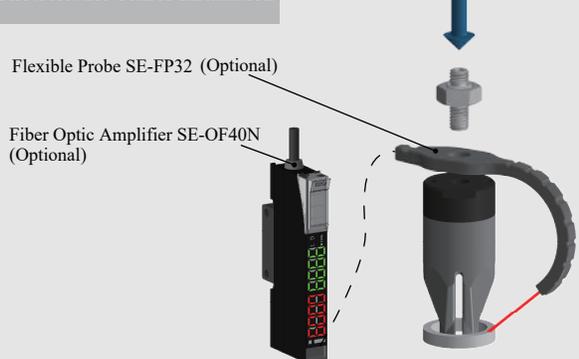
φ10



Photoelectric Sensor Installation

Flexible Probe SE-FP32 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Soft Beak / Beak Module

B-4G22[H]/S

BMC-4G22[H]/SN Direct-through H Type		BMS-4G22[H]/SN Direct-through Precision Positioning H Type		BML-4G22[H]/SN Side-through H Type		BMM-4G22[H]/SN Multi-way Precision Positioning H Type	
BMC-4G22[HAS]/SN Direct-through Dust-free H Type		BMS-4G22[HAS]/SN Direct-through Precision Positioning H Type		BML-4G22[HAS]/SN Side-through Dust-free H Type		BMM-4G22[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	14.5g	Weight	21.73g	Weight	27.9g	Weight	25.88g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak materials divided into Strong materials [P] and Dust-free Strong material [PAS]. For workpieces with dustproof requirements, or miniature and lightweight that are prone to being adsorbed on the fingertips, Dust-free type [PAS] should be preferably selected.
- Food-grade material, can be directly used for grasping food.



Scan to watch videos

Parameter

Gripping range	5.5-12mm	Gripping force	0-0.7N	Theoretical gripping load**	0-42g	Ideal gripping workpiece size*	8mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

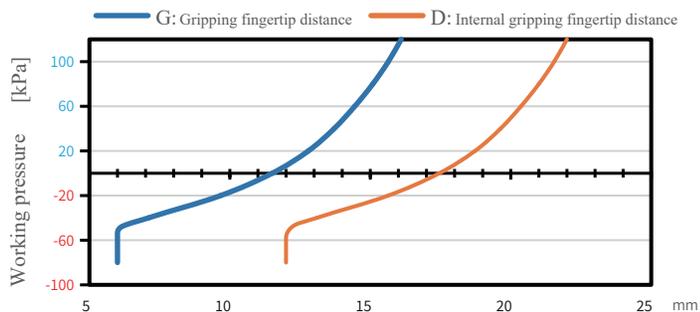
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



Soft Beak / Beak Module

BMC Module
(Direct-through)

BMS Module
(Precise Positioning Direct-through)

BML Module
(Side-through)

BMM Module
(Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

BMC Rigid Connection Installation

BMC Buffer Installation

B-4G2[H]/S

Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-4A24[H]/S Direct-through H Type	BML-4A24[H]/S Side-through H Type		
	BMC-4A24[HAS]/S Direct-through Dust-free H Type	BML-4A24[HAS]/S Side-through Dust-free H Type		
	Weight	19g	Weight	33g

B-4A24[H]/S

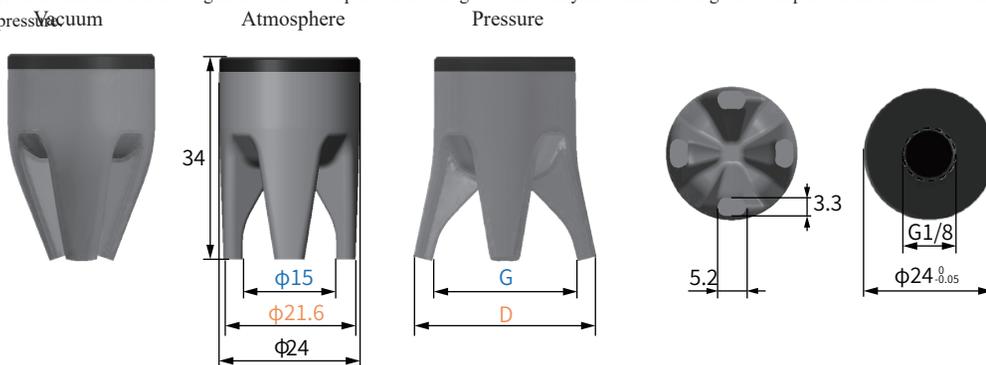
Parameter

Gripping range	5.5-16mm	Gripping force	0-1.3N	Theoretical gripping load**	0-75g	Ideal gripping workpiece size*	15.5mm
Internal gripping range	24-30mm	Internal gripping force	0-2N	Theoretical internal gripping load**	0-121g	Ideal internal gripping workpiece size*	24mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<160kPa

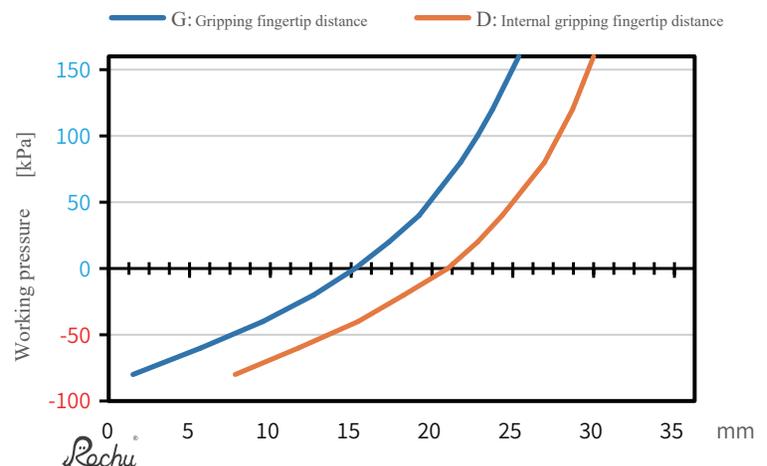
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



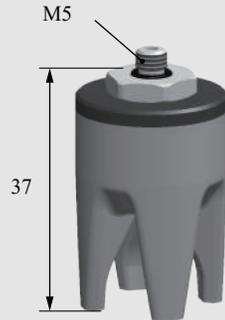
Pressure-Fingertip Distance deformation curve



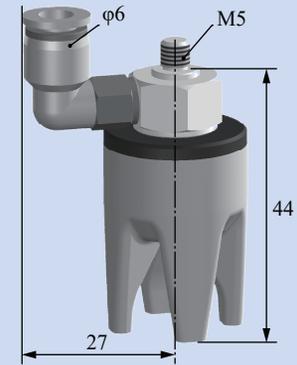
BMC Straight Fitting Installation



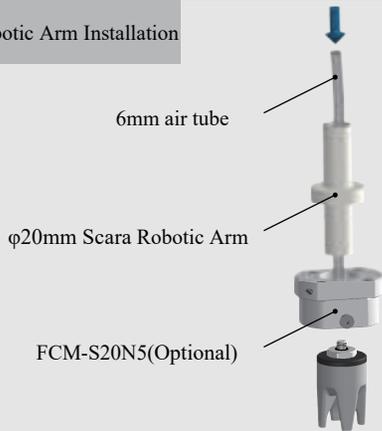
Scan to watch videos



BML Side Fitting Installation



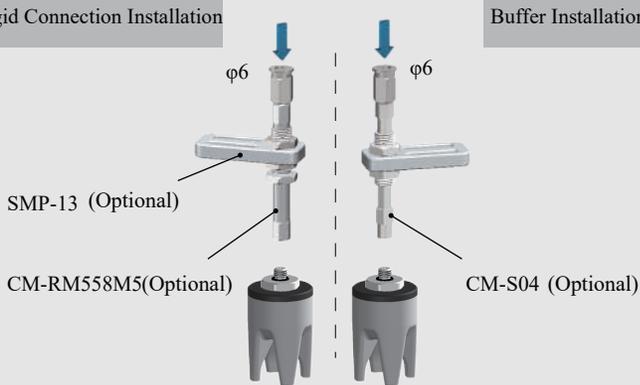
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



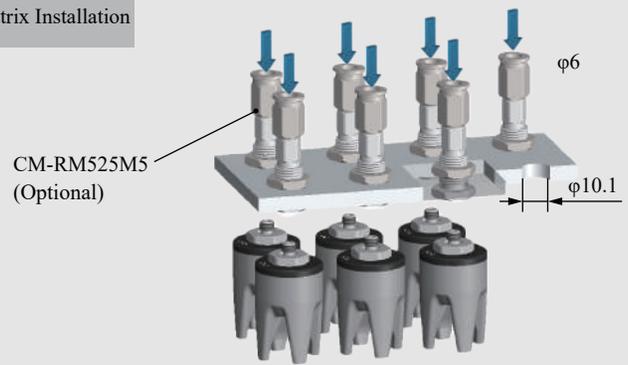
Rigid Connection Installation



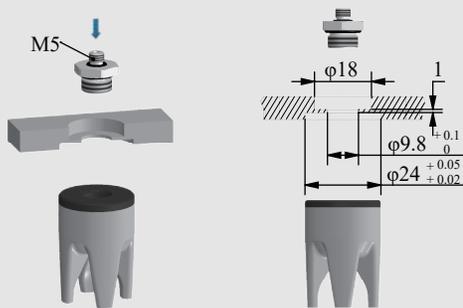
Buffer Installation



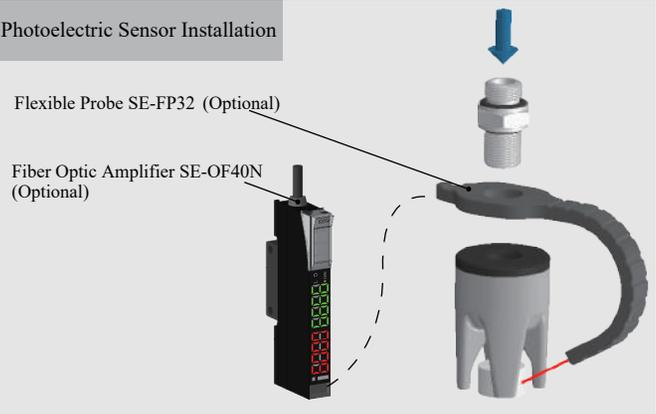
Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation

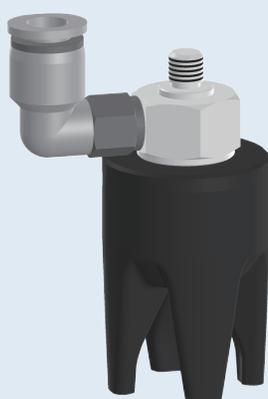


B-4A24[H]/S

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G and outer fingertips distance D can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- The material of [MHB] has good acid and alkali resistance. It can come into contact with workpieces containing alkaline electrolyte and can be used in the lithium battery industry.

B-4A24[MHB]/S

	BMC-4A24[MHB]/S Direct-through Acid&Alkali Resistant Type		BML-4A24[MHB]/S Side-through Acid&Alkali Resistant Type
	Weight		19g

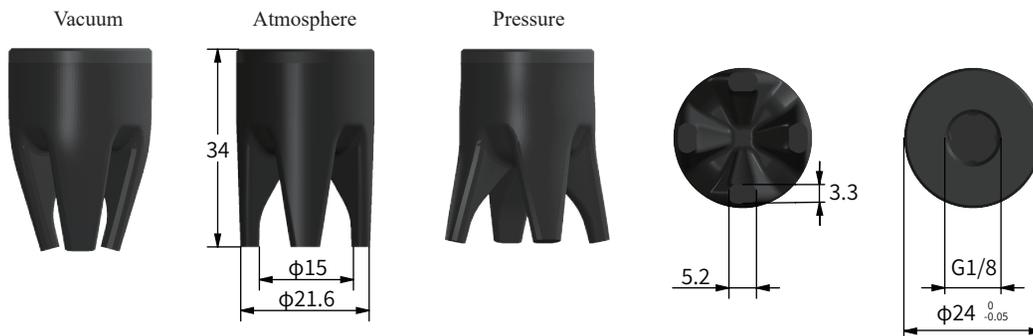
Parameter

Gripping range	8-16mm	Gripping force	0-1.3N	Theoretical gripping load**	0-75g	Ideal gripping workpiece size*	14mm
Internal gripping range	24-30mm	Internal gripping force	0-2N	Theoretical internal gripping load**	0-121g	Ideal internal gripping workpiece size*	20mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<150°C	Safe pressure***	<160kPa

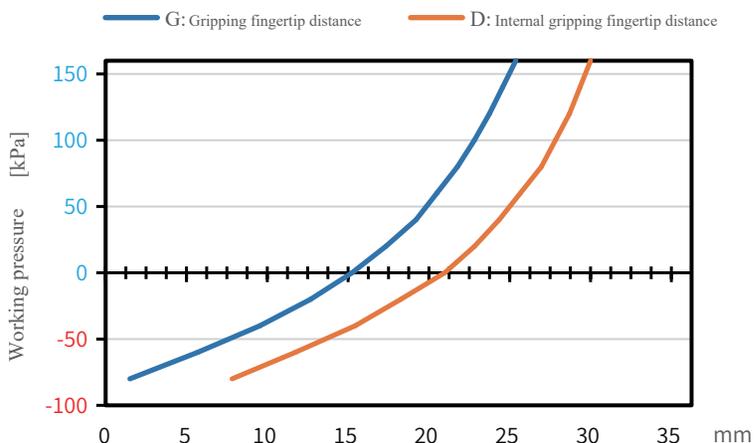
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



Installation

BMC Straight Fitting Installation

M5

37

BML Side Fitting Installation

φ6

M5

44

27

Scara Robotic Arm Installation

6mm air tube

φ20mm Scara Robotic Arm

FCM-S20N5(Optional)

Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01(Optional)

φ6

Rigid Connection Installation

φ6

SMP-13 (Optional)

CM-RM558M5(Optional)

Buffer Installation

φ6

CM-S04 (Optional)

Matrix Installation

CM-RM525M5 (Optional)

φ6

φ10.1

Precise Positioning Installation

M5

φ18

1

φ9.8^{+0.1}/₀

φ24^{+0.05}/_{-0.02}

Photoelectric Sensor Installation

Flexible Probe SE-FP31 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)

B-4A24[MH]B/S

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [HW] and Dust-free Strengthen Material [HWAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HWAS] is preferred.
- The soft beak has a white appearance and can provide a high-contrast white background for dark workpieces at the machine vision inspection station.

	BMC-4A24[HW]/S Direct-through H Type	BML-4A24[HW]/S Side-through H Type		
	BMC-4A24[HWAS]/S Direct-through Dust-free H Type	BML-4A24[HWAS]/S Side-through Dust-free H Type		
	Weight	18.6g	Weight	32.5g

B-4A24[HW]/S

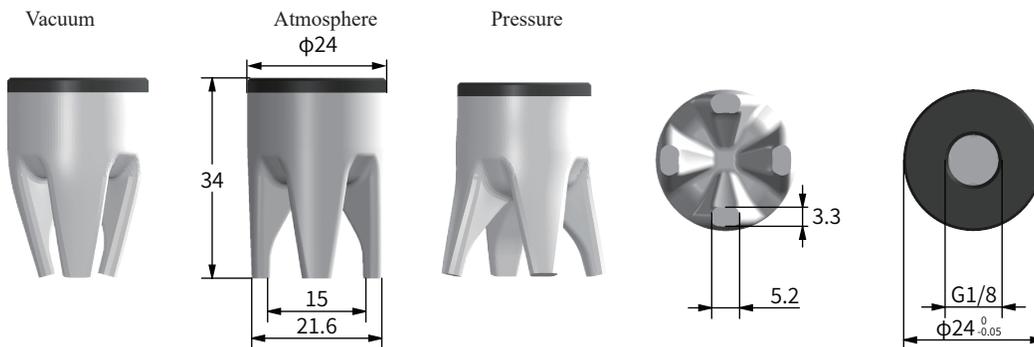
Parameter

Gripping range	5.5-16mm	Gripping force	0-1.3N	Theoretical gripping load**	0-75g	Ideal gripping workpiece size*	15.5mm
Internal gripping range	24-30mm	Internal gripping force	0-2N	Theoretical internal gripping load**	0-121g	Ideal internal gripping workpiece size*	24mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<160kPa

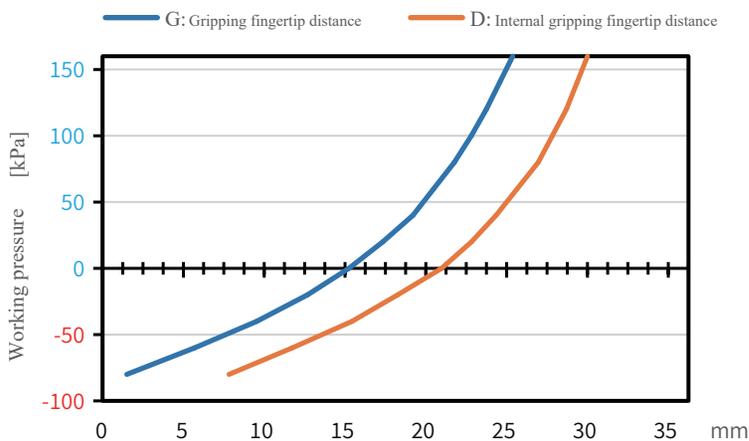
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

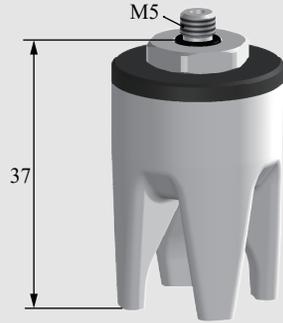
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



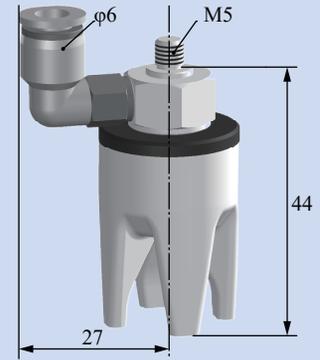
Pressure-Fingertip Distance deformation curve



BMC Straight Fitting Installation



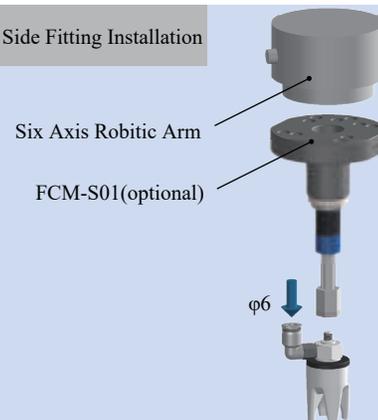
BML Side Fitting Installation



Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



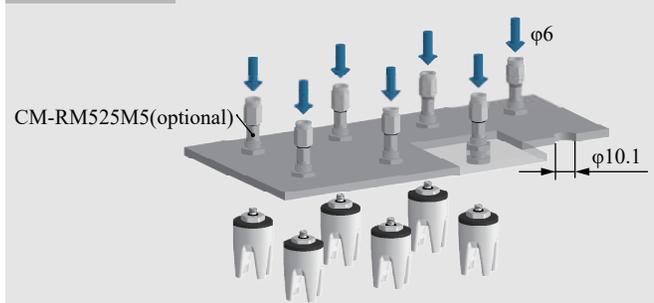
Rigid Connection Installation



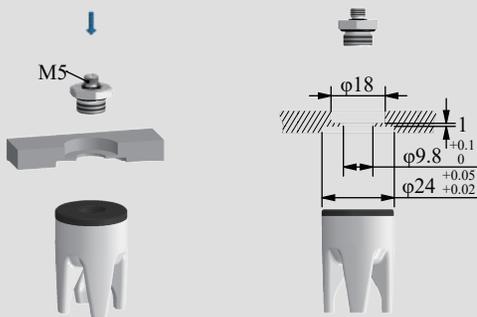
Buffer Installation



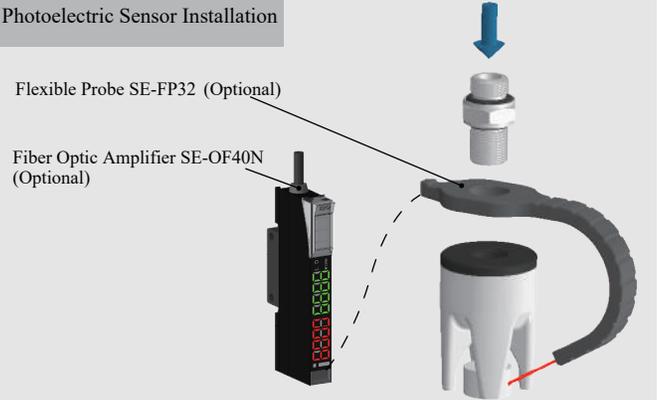
Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation



Soft Beak / Beak Module

B-4G27[H]/SN

BMC-4G27[H]/SN Direct-through H Type		BMS-4G27[H]/SN Direct-through Precision Positioning H Type		BML-4G27[H]/SN Side-through H Type		BMM-4G27[H]/SN Multi-way Precision Positioning H Type	
BMC-4G27[HAS]/SN Direct-through Dust-free H Type		BMS-4G27[HAS]/SN Direct-through Precision Positioning H Type		BML-4G27[HAS]/SN Side-through Dust-free H Type		BMM-4G27[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	17.9g	Weight	25.13g	Weight	31.3g	Weight	29.28g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



Scan to watch videos



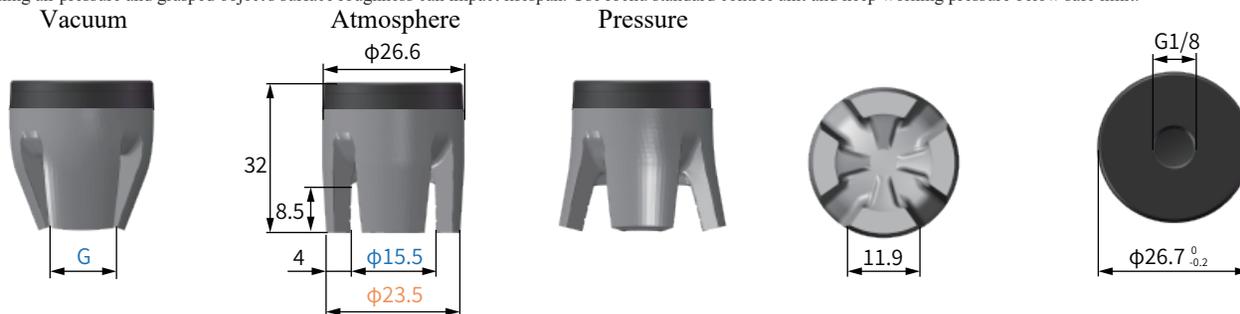
Parameter

Gripping range	8-22mm	Gripping force	0-2.6N	Theoretical gripping load**	0-157g	Ideal gripping workpiece size*	14mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

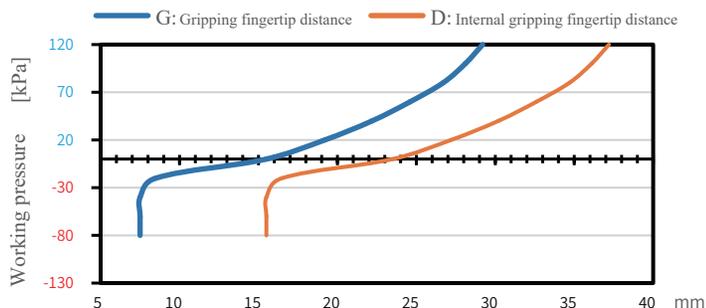
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



BMC Module
(Direct-through)

BMS Module
(Precise Positioning Direct-through)

BML Module
(Side-through)

BMM Module
(Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

BMC Rigid Connection Installation

BMC Buffer Installation

B-4G27(H)/SN

Product features

- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

	BMC-4A30[P]/M Direct-through P Type	BML-4A30[P]/M Side-through P Type		
	BMC-4A30[PAS]/M Direct-through Dust-free P Type	BML-4A30[PAS]/M Side-through Dust-free P Type		
	Weight	43.4g	Weight	60.6g

B-4A30[P]/M

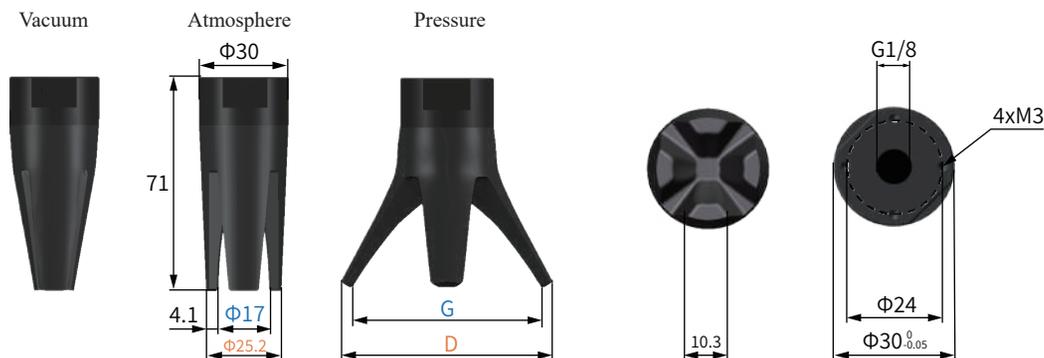
Parameter

Gripping range	7-15mm	Gripping force	0-0.6N	Theoretical gripping load**	0-34g	Ideal gripping workpiece size*	11mm
Internal gripping range	24-50mm	Internal gripping force	0-6.1N	Theoretical internal gripping load**	0-364g	Ideal internal gripping workpiece size*	29mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

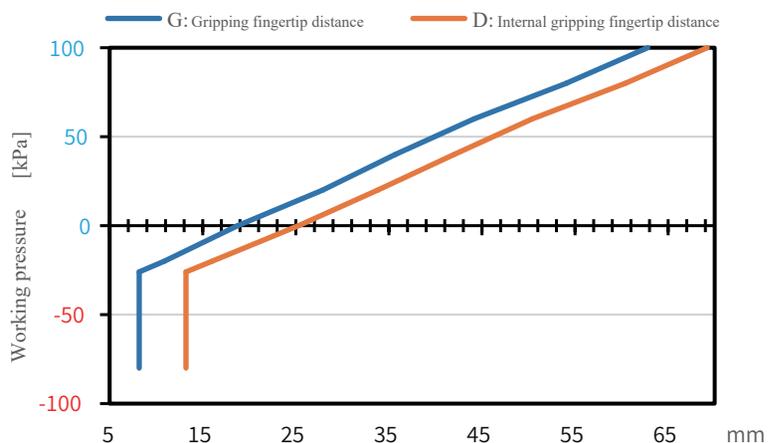
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



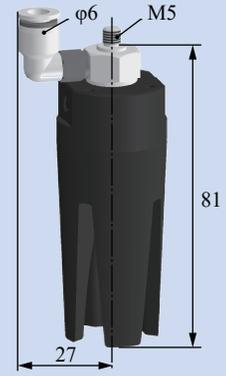
BMC Straight Fitting Installation



Scan to watch videos



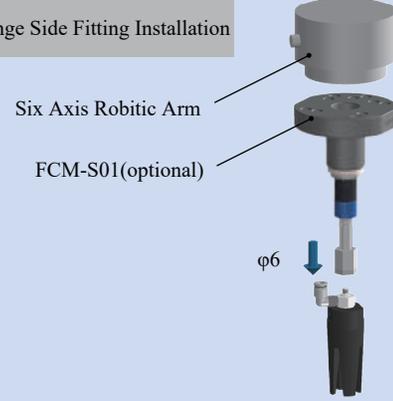
BML Side Fitting Installation



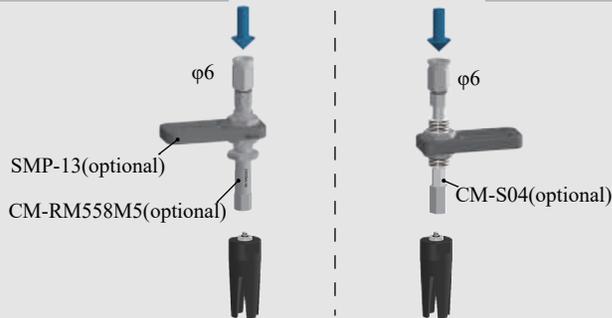
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation

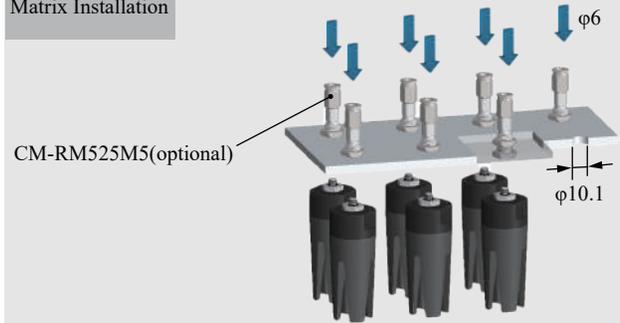


Rigid Connection Installation

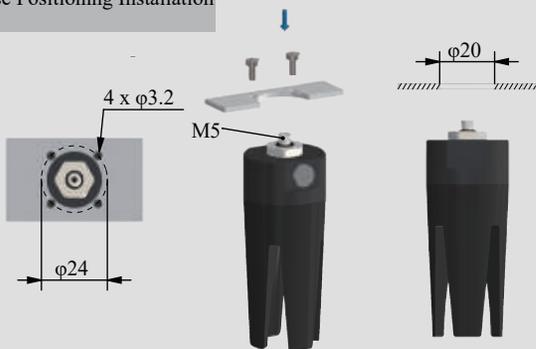


Buffer Installation

Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation



B-4A30[P]/M

Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-4B30[H]/S Direct-through H Type	BML-4B30[H]/S Side-through H Type		
	BMC-4B30[HAS]/S Direct-through Dust-free H Type	BML-4B30[HAS]/S Side-through Dust-free H Type		
	Weight	28g	Weight	40.4g

B-4B30[H]/S

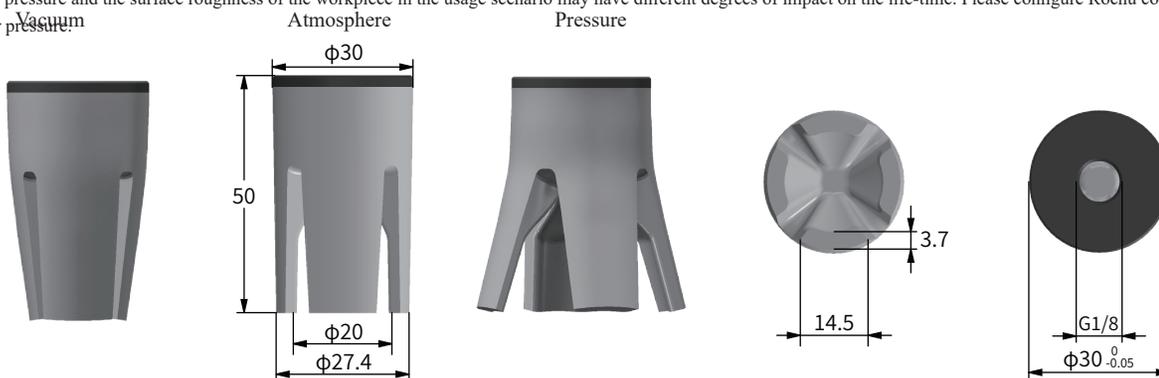
Parameter

Gripping range	13-23mm	Gripping force	0-1.8N	Theoretical gripping load**	0-108g	Ideal gripping workpiece size*	21mm
Internal gripping range	26-45mm	Internal gripping force	0-8.2N	Theoretical internal gripping load**	0-409g	Ideal internal gripping workpiece size*	28mm
Joint size	M5	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<140kPa

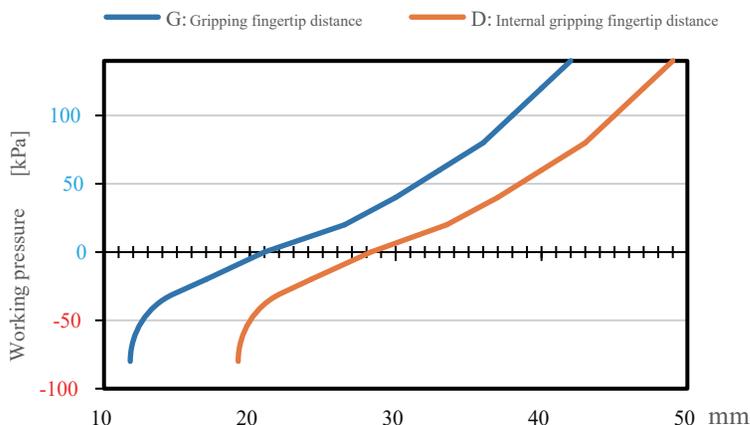
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



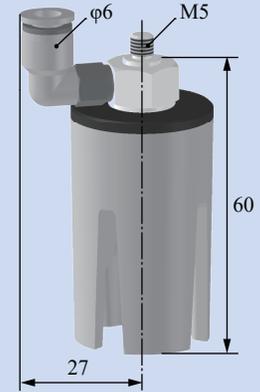
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation



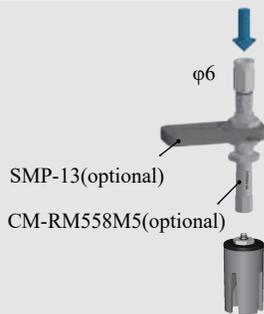
Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



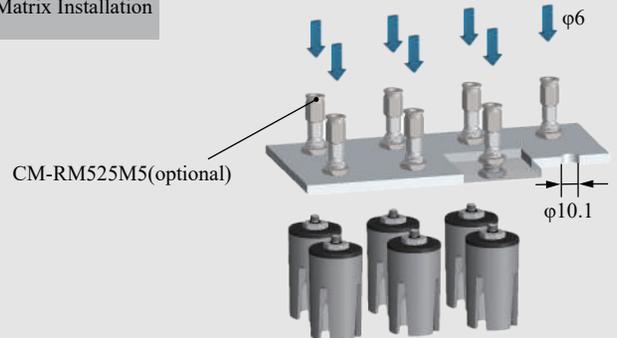
Rigid Connection Installation



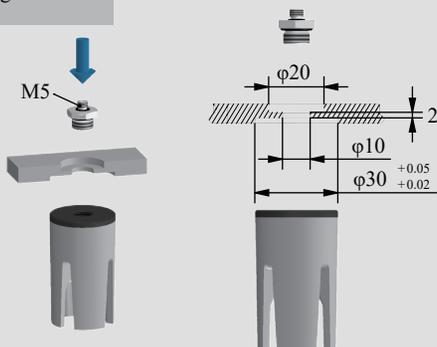
Buffer Installation



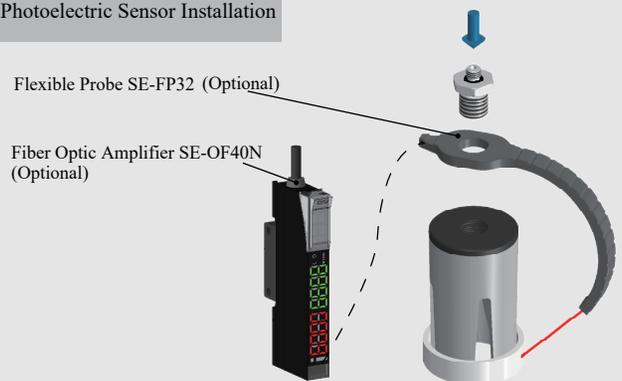
Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation



B-4B30[H]/S

Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

	BMC-4B32[P]/S Direct-through P Type	BML-4B32[P]/S Side-through P Type		
	BMC-4B32[PAS]/S Direct-through Dust-free P Type	BML-4B32[PAS]/S Side-through Dust-free P Type		
	Weight	37.9g	Weight	52.4g

B-4B32[P]/S

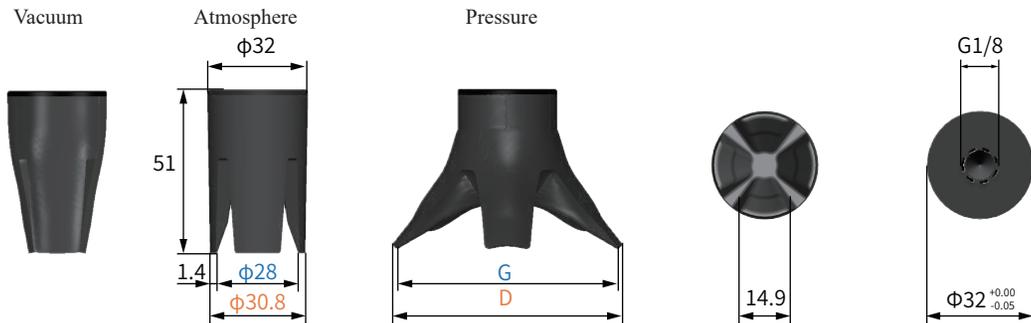
Parameter

Gripping range	20-30mm	Gripping force	0-1.6N	Theoretical gripping load**	0-94g	Ideal gripping workpiece size*	26mm
Internal gripping range	28-50mm	Internal gripping force	0-8.1N	Theoretical internal gripping load**	0-485g	Ideal internal gripping workpiece size*	29mm
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<70kPa

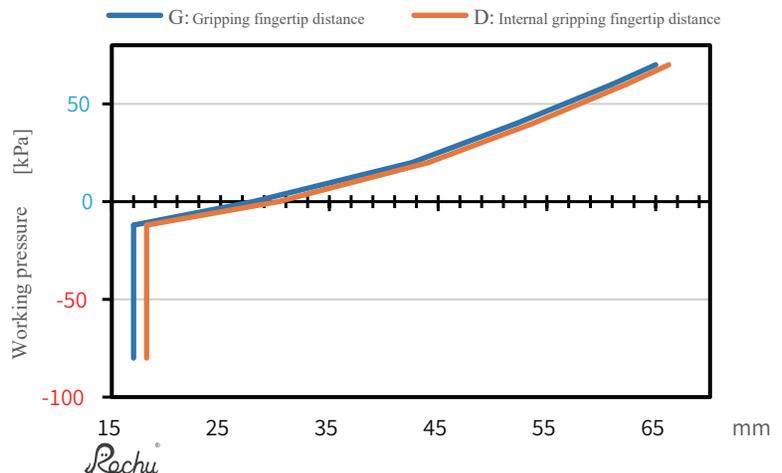
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

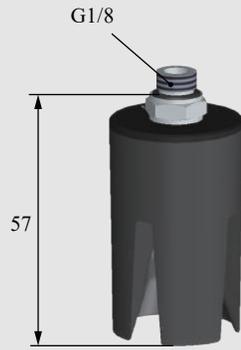
***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



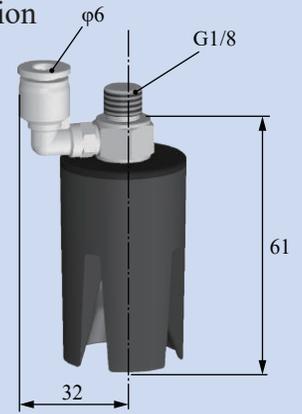
Pressure-Fingertip Distance deformation curve



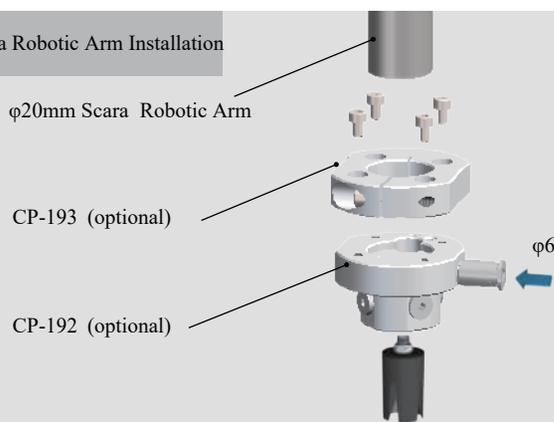
BMC Straight Fitting Installation



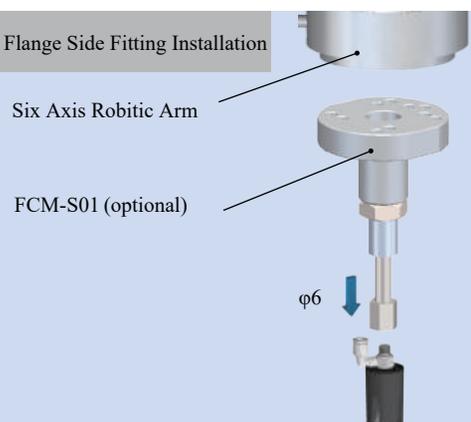
BML Side Fitting Installation



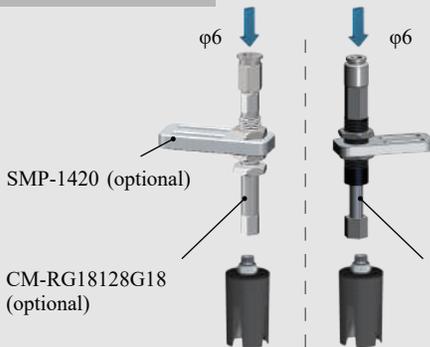
Scara Robotic Arm Installation



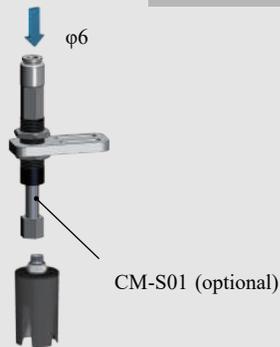
Robotic Arm Flange Side Fitting Installation



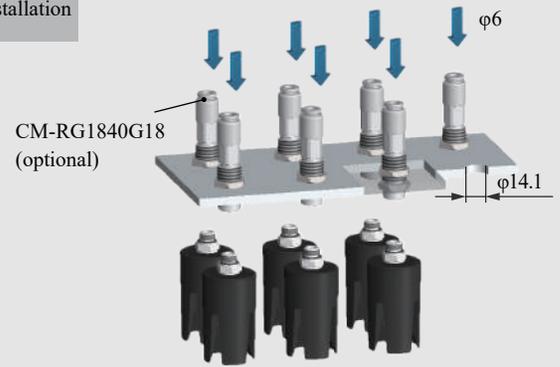
Rigid Connection Installation



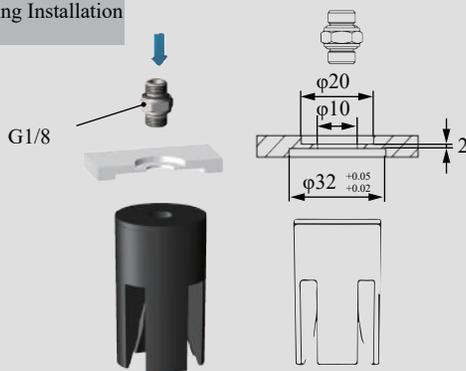
Buffer Installation



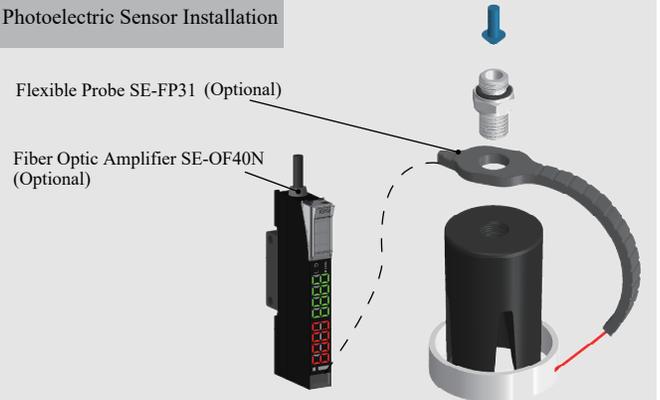
Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation



Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-4B32[H]/S Direct-through H Type	BML-4B32[H]/S Side-through H Type		
	BMC-4B32[HAS]/S Direct-through Dust-free H Type	BML-4B32[HAS]/S Side-through Dust-free H Type		
	Weight	37.9g	Weight	52.4g

B-4B32[H]/S

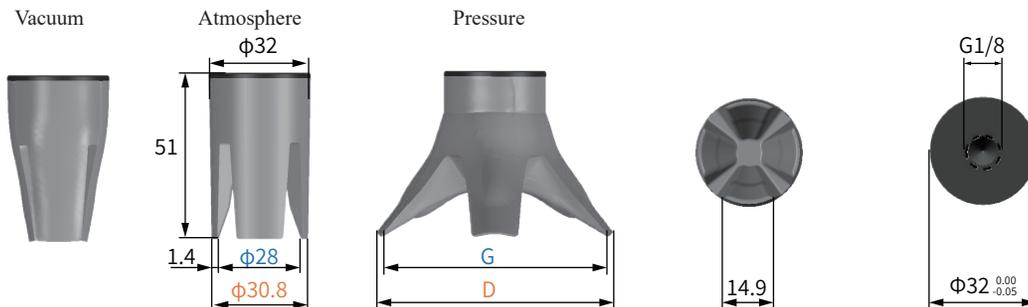
Parameter

Gripping range	20-30mm	Gripping force	0-3.4N	Theoretical gripping load**	0-201g	Ideal gripping workpiece size*	26mm
Internal gripping range	26-45mm	Internal gripping force	0-11.2N	Theoretical internal gripping load**	0-673g	Ideal internal gripping workpiece size*	29mm
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

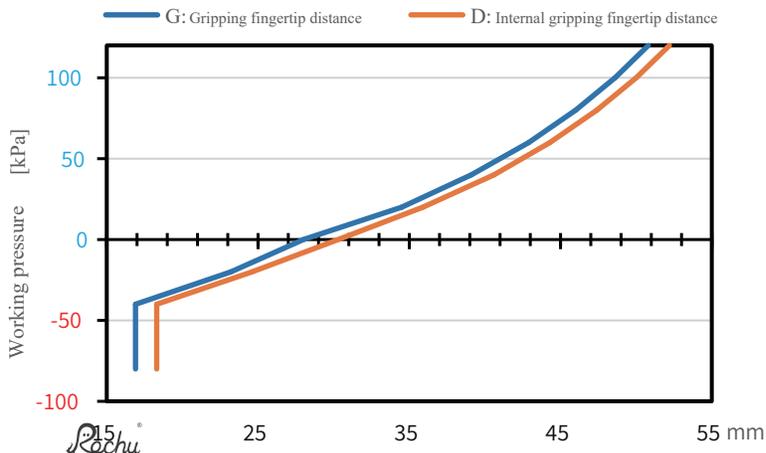
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



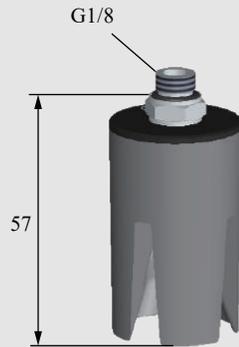
Pressure-Fingertip Distance deformation curve



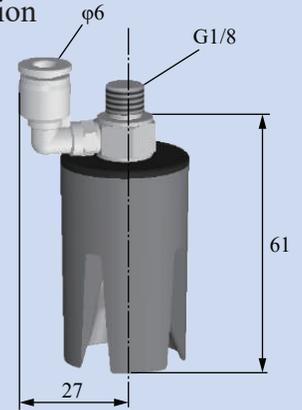
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

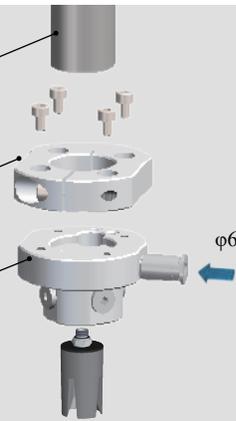


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193 (optional)

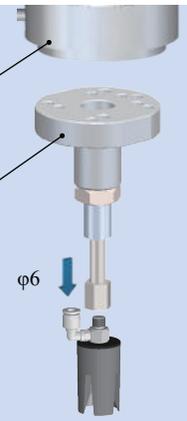
CP-192 (optional)



Robotic Arm Flange Side Fitting Installation

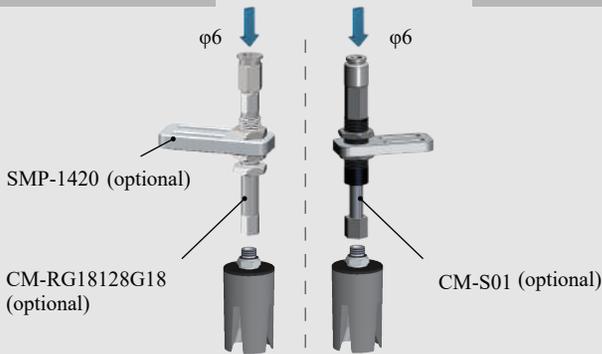
Six Axis Robotic Arm

FCM-S01 (optional)

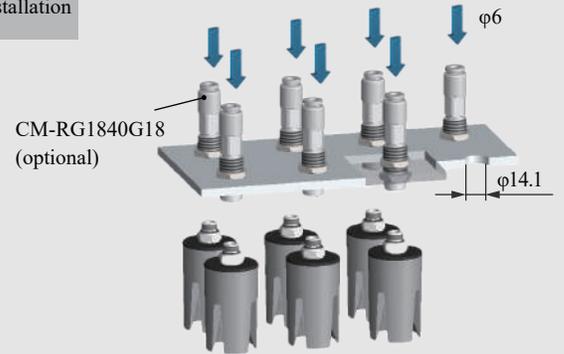


Rigid Connection Installation

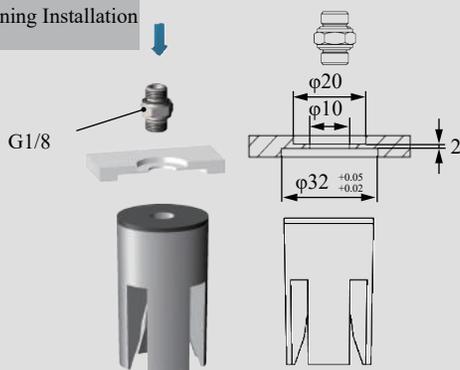
Buffer Installation



Matrix Installation



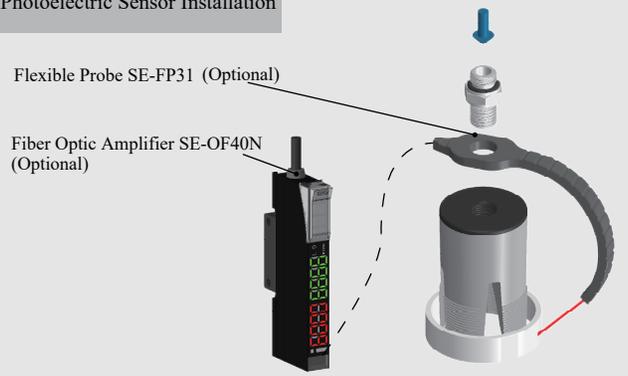
Precise Positioning Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP31 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



B-4B32[H]/S

Soft Beak / Beak Module

B-4G34[H]/SN

BMC-4G34[H]/SN Direct-through H Type		BMS-4G34[H]/SN Direct-through Precision Positioning H Type		BML-4G34[H]/SN Side-through H Type		BMM-4G34[H]/SN Multi-way Precision Positioning H Type	
BMC-4G34[HAS]/SN Direct-through Dust-free H Type		BMS-4G34[HAS]/SN Direct-through Precision Positioning H Type		BML-4G34[HAS]/SN Side-through Dust-free H Type		BMM-4G34[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	25.8g	Weight	33.03g	Weight	39.2g	Weight	37.18g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



Scan to watch videos



Parameter

Gripping range	12-24mm	Gripping force	0-3.2N	Theoretical gripping load**	0-191g	Ideal gripping workpiece size*	18mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

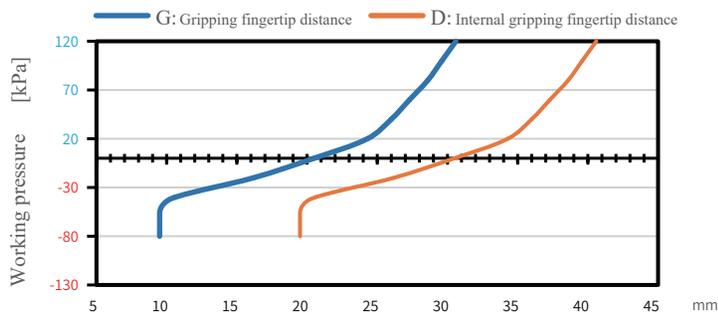
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



BMCModule

(Direct-through)

BMSModule

(Precise Positioning Direct-through)

BMLModule

(Side-through)

BMMModule

(Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

BMC Rigid Connection Installation

BMC Buffer Installation

B-4G34(H)/SN

Soft Beak / Beak Module

B-4G34[LH]/SN

BMC-4G34[LH]/SN Direct-through Anti-static H Type	BMS-4G34[LH]/SN Direct-through Anti-static Precision Positioning H Type	BML-4G34[LH]/SN Side-through Anti-static H Type	BMM-4G34[LH]/SN Multi-way Anti-static Precision Positioning H Type
BMC-4G34[LHAS]/SN Direct-through Anti-static Dust-free H Type	BMS-4G34[LHAS]/SN Direct-through Anti-static Dust-free Precision Positioning H Type	BML-4G34[LHAS]/SN Side-through Anti-static Dust-free H Type	BMM-4G34[LHAS]/SN Side-through Anti-static Dust-free Precision Positioning H Type
			
Weight 25.8g	Weight 33.03g	Weight 39.2g	Weight 37.18g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, light-weight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.



Parameter

Gripping range	12-24mm	Gripping force	0-3.2N	Theoretical gripping load**	0-191g	Ideal gripping workpiece size*	18mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

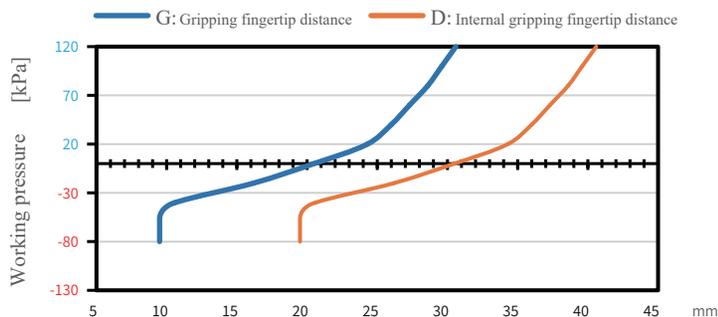
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

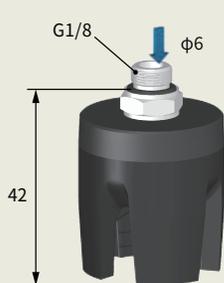
***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



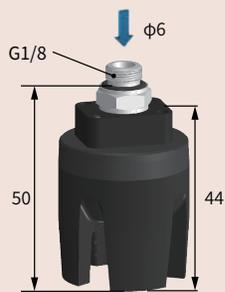
Pressure-Fingertip Distance deformation curve



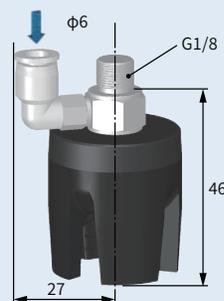
BMCModule
(Direct-through)



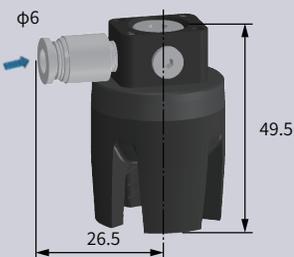
BMSModule
(Precise Positioning Direct-through)



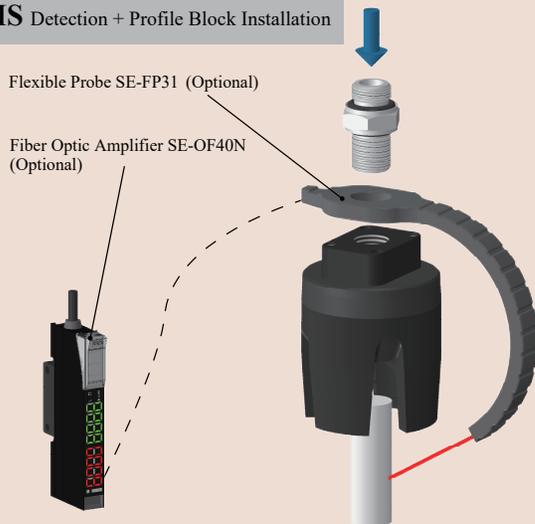
BMLModule
(Side-through)



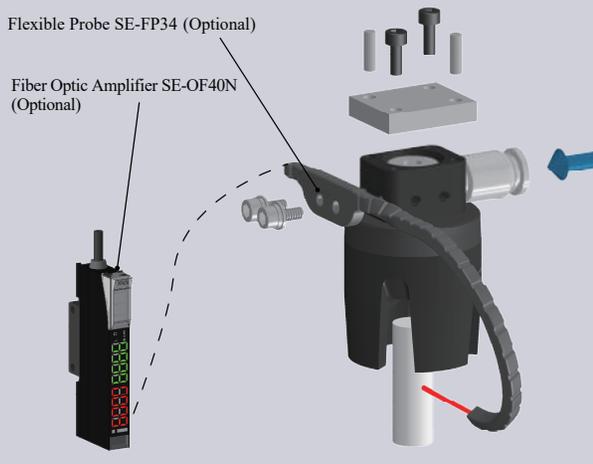
BMMModule
(Precise Positioning Multiple-through)



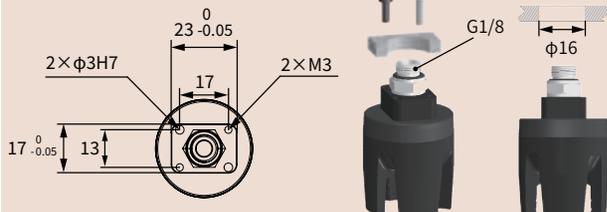
BMS Detection + Profile Block Installation



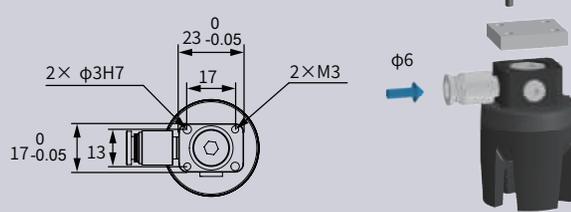
BMM Precise Positioning + Detection + Profile Block Installation



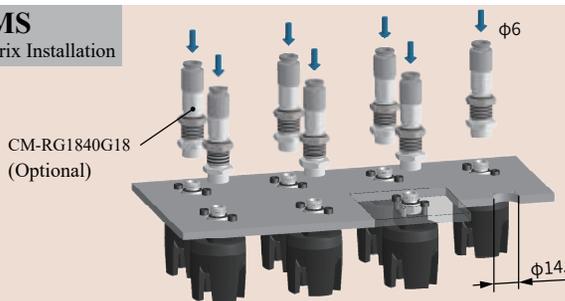
BMS Precise Positioning and Direct-through Installation



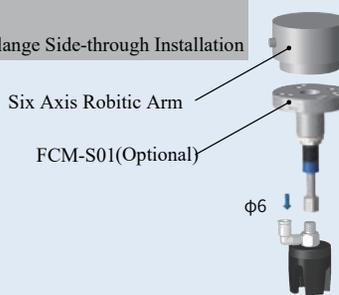
BMM Precise Positioning and Multiple-through Installation



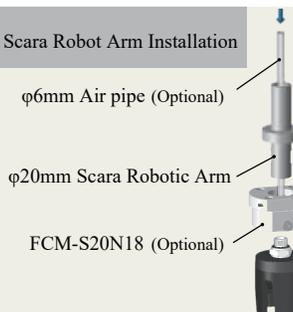
BMS Matrix Installation



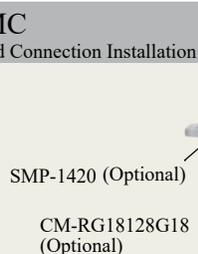
BML Robot Arm Flange Side-through Installation



BMC Scara Scara Robot Arm Installation



BMC Rigid Connection Installation



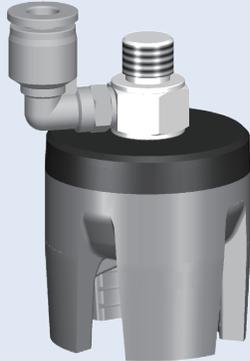
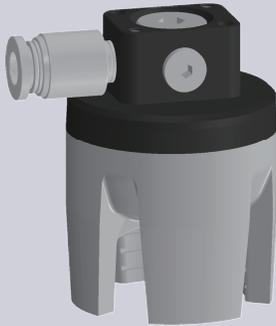
BMC Buffer Installation



B-4G34[LH]/SN

Soft Beak / Beak Module

B-4G39[H]/SN

BMC-4G39[H]/SN Direct-through H Type		BMS-4G39[H]/SN Direct-through Precision Positioning H Type		BML-4G39[H]/SN Side-through H Type		BMM-4G39[H]/SN Multi-way Precision Positioning H Type	
BMC-4G39[HAS]/SN Direct-through Dust-free H Type		BMS-4G39[HAS]/SN Direct-through Precision Positioning H Type		BML-4G39[HAS]/SN Side-through Dust-free H Type		BMM-4G39[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	29.6g	Weight	36.83g	Weight	43g	Weight	40.98g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- When soft grippers contact workpieces, especially those with dust-prevention needs, or miniature, lightweight and easily-adsorbable ones, choose dust-free material [HAS] preferentially.
- Food-grade material, can be directly used for grasping food.



Parameter

Gripping range	15-27mm	Gripping force	0-6N	Theoretical gripping load**	0-361g	Ideal gripping workpiece size*	22mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

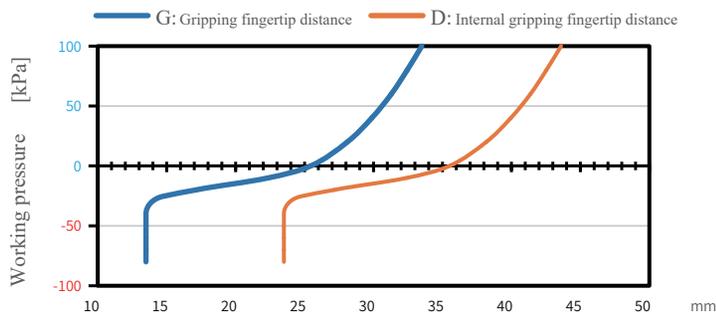
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve



Soft Beak / Beak Module

BMC Module
(Direct-through)

BMS Module
(Precise Positioning Direct-through)

BML Module
(Side-through)

BMM Module
(Precise Positioning Multiple-through)

BMS Detection + Profile Block Installation

BMM Precise Positioning + Detection + Profile Block Installation

BMS Precise Positioning and Direct-through Installation

BMM Precise Positioning and Multiple-through Installation

BMS Matrix Installation

BML Robot Arm Flange Side-through Installation

BMC Scara Scara Robot Arm Installation

BMC Rigid Connection Installation

BMC Buffer Installation

B-4G39[H]/SN

Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

	BMC-4B40[P]/S Direct-through P Type	BML-4B40[P]/S Side-through P Type		
	BMC-4B40[PAS]/S Direct-through Dust-free P Type	BML-4B40[PAS]/S Side-through Dust-free P Type		
	Weight	59.2g	Weight	73.7g

B-4B40[P]/S

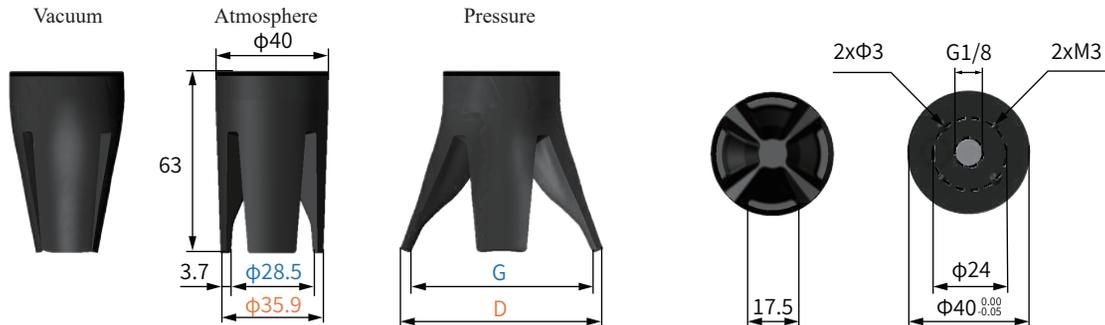
Parameter

Gripping range	19-33mm	Gripping force	0-0.5N	Theoretical gripping load**	0-30g	Ideal gripping workpiece size*	28mm
Internal gripping range	34-60mm	Internal gripping force	0-14.8N	Theoretical internal gripping load**	0-889g	Ideal internal gripping workpiece size*	36mm
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<70kPa

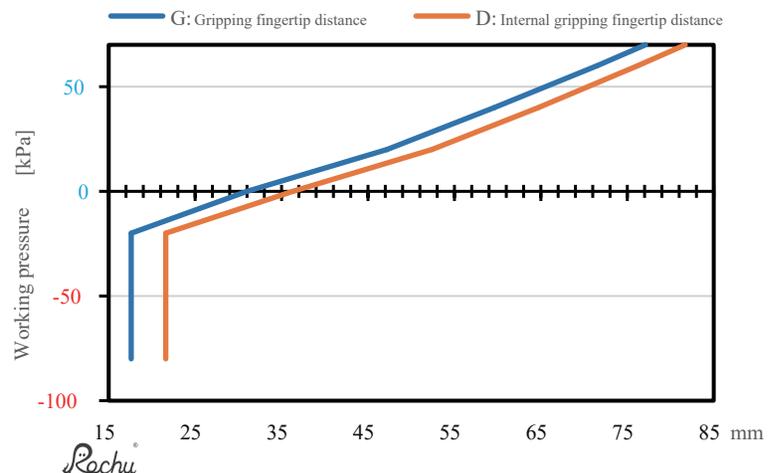
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



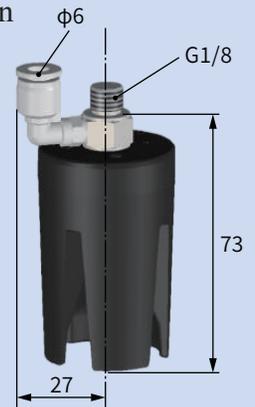
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

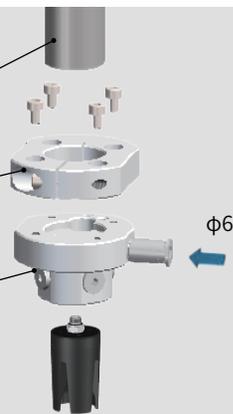


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

RF-S20 (optional)

RF-SFB (optional)



Robotic Arm Flange Side Fitting Installation

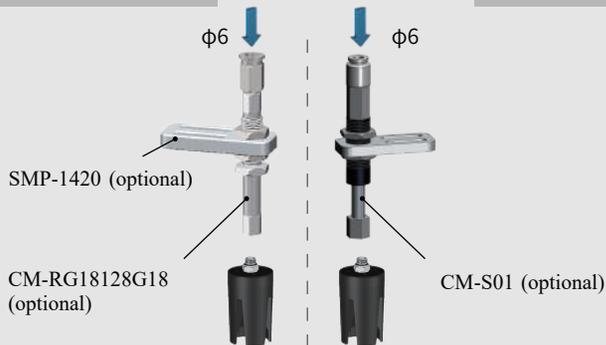
Six Axis Robotic Arm

FCM-S01 (optional)

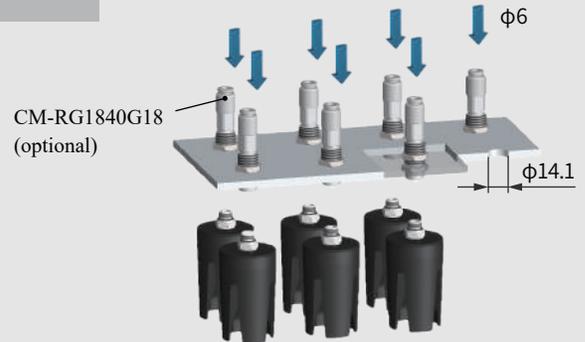


Rigid Connection Installation

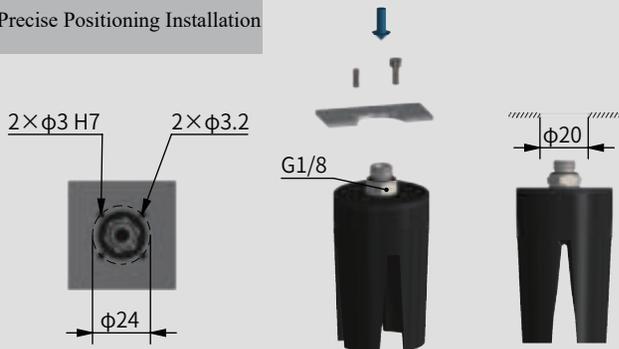
Buffer Installation



Matrix Installation



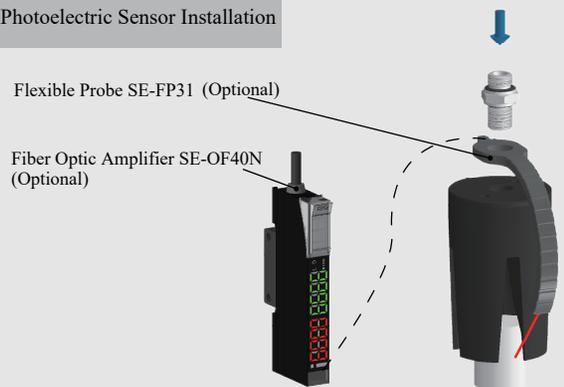
Precise Positioning Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP31 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-4B40[H]/S Direct-through H Type	BML-4B40[H]/S Side-through H Type		
	BMC-4B40[HAS]/S Direct-through Dust-free H Type	BML-4B40[HAS]/S Side-through Dust-free H Type		
	Weight	57.2g	Weight	71.7g

B-4B40[H]/S

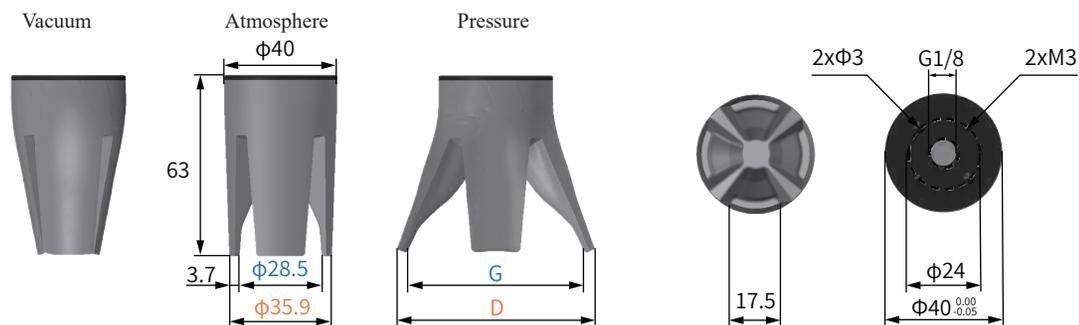
Parameter

Gripping range	19-33mm	Gripping force	0-1.7N	Theoretical gripping load**	0-103g	Ideal gripping workpiece size*	28mm
Internal gripping range	37-66mm	Internal gripping force	0-14.8N	Theoretical internal gripping load**	0-1439g	Ideal internal gripping workpiece size*	36mm
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<160kPa

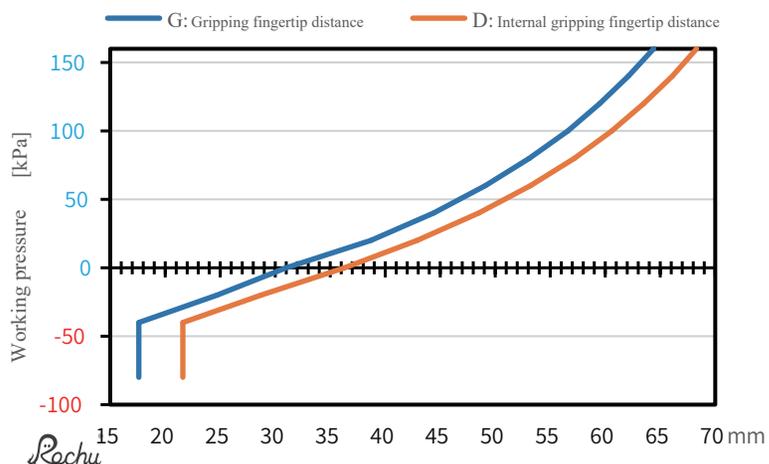
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



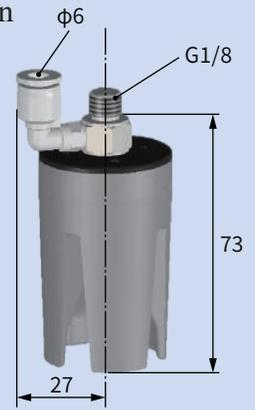
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation



Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

RF-S20 (optional)

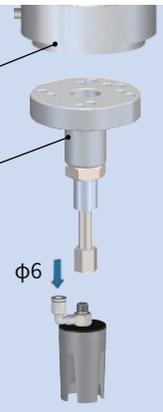
RF-SFB (optional)



Robotic Arm Flange Side Fitting Installation

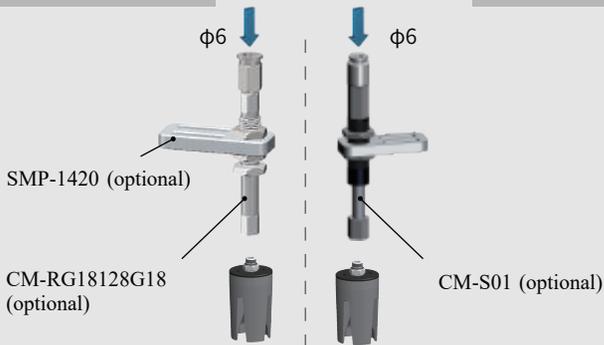
Six Axis Robotic Arm

FCM-S01 (optional)

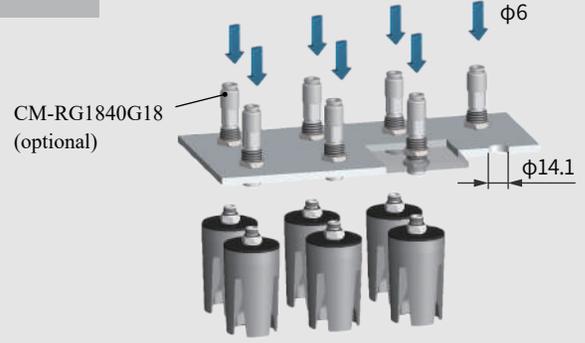


Rigid Connection Installation

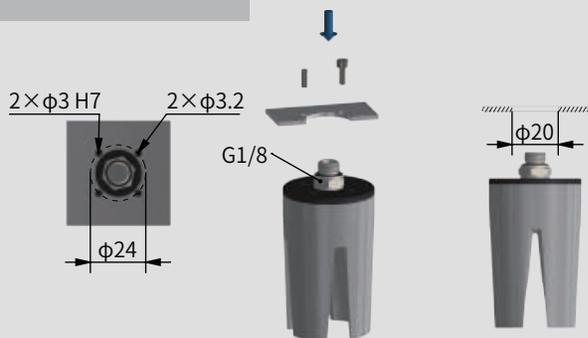
Buffer Installation



Matrix Installation



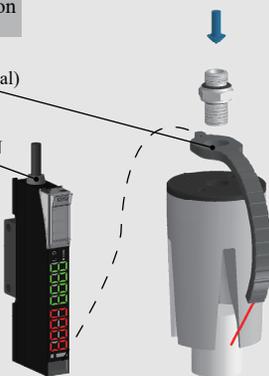
Precise Positioning Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP31 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



B-4B40[H]/S

Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-4G40[H]/S Direct-through H Type	BML-4G40[H]/S Side-through H Type		
	BMC-4G40[HAS]/S Direct-through Dust-free H Type	BML-4G40[HAS]/S Side-through Dust-free H Type		
	Weight	61.7g	Weight	76.2g

B-4G40[H]/S

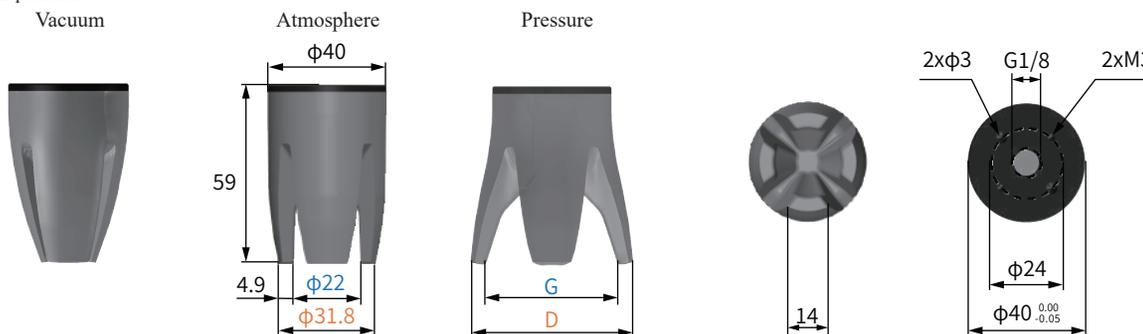
Parameter

Gripping range	9-30mm	Gripping force	0-4.7N	Theoretical gripping load**	0-284g	Ideal gripping workpiece size*	24mm
Internal gripping range	35-48mm	Internal gripping force	0-10.9N	Theoretical internal gripping load**	0-654g	Ideal internal gripping workpiece size*	36mm
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<150kPa

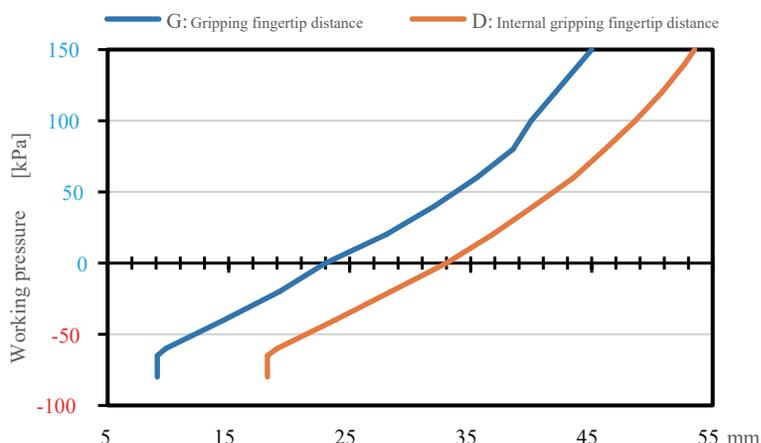
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure RoChu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve



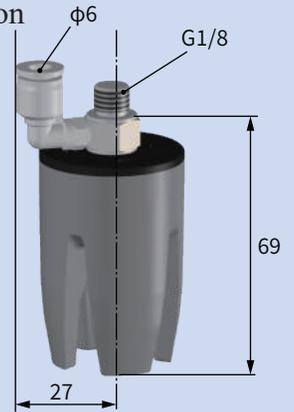
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

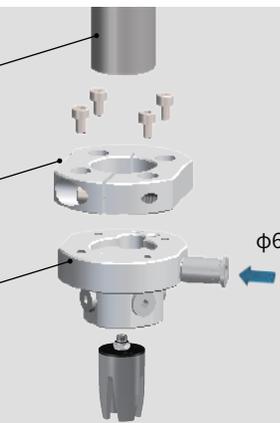


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

RF-S20 (optional)

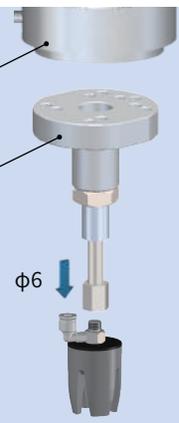
RF-SFB (optional)



Robotic Arm Flange Side Fitting Installation

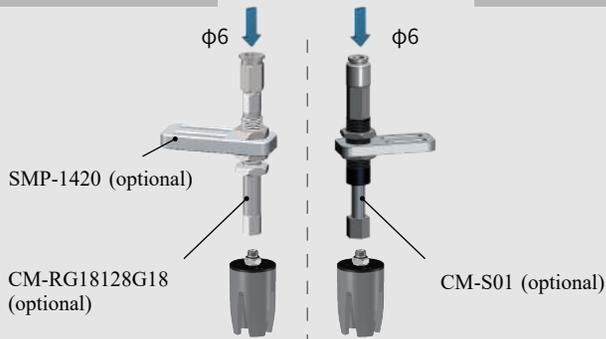
Six Axis Robotic Arm

FCM-S01 (optional)

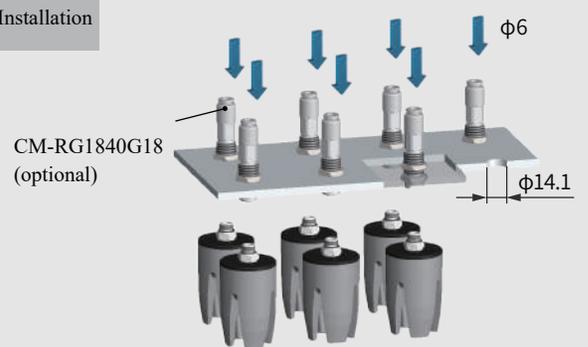


Rigid Connection Installation

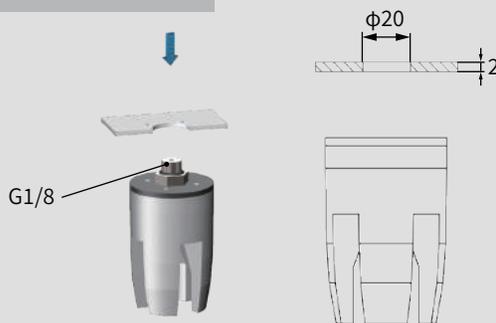
Buffer Installation



Matrix Installation



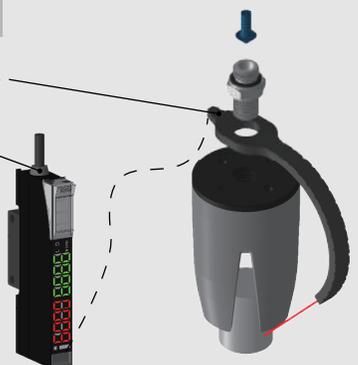
Precise Positioning Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP31 (Optional)

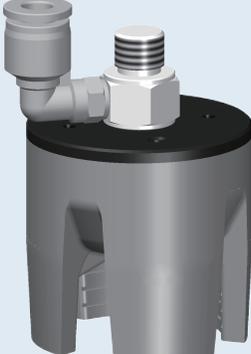
Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

B-4G44[H]/S

	BMC-4G44[H]/S Direct-through H Type	BML-4G44[H]/S Side-through H Type		
	BMC-4G44[HAS]/S Direct-through Dust-free H Type	BML-4G44[HAS]/S Side-through Dust-free H Type		
	Weight	59.8g	Weight	73.7g

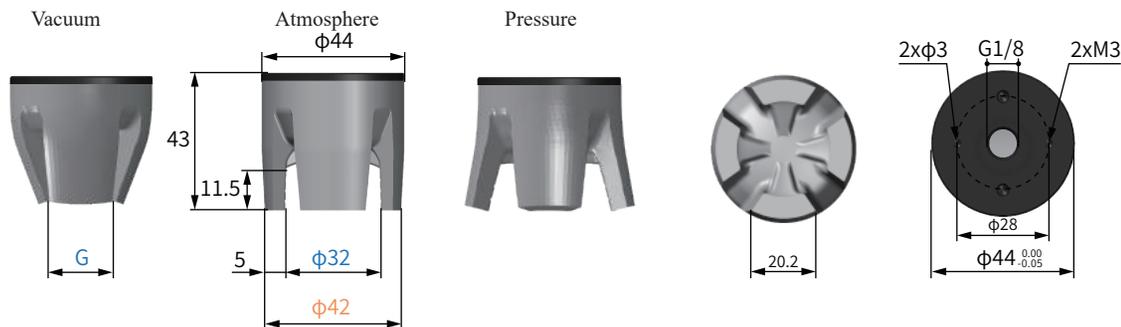
Parameter

Gripping range	18-31.5mm	Gripping force	0-8.4N	Theoretical gripping load**	0-505g	Ideal gripping workpiece size*	30mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<150kPa

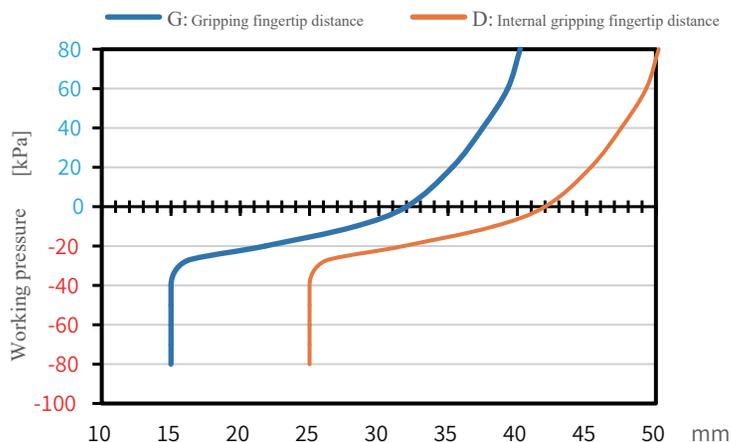
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



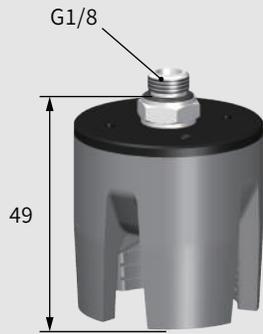
Pressure-Fingertip Distance deformation curve



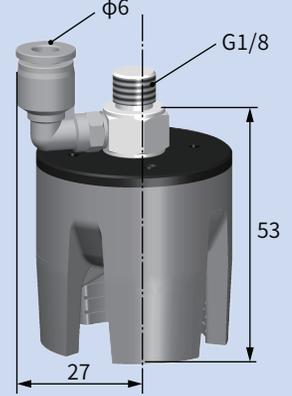
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

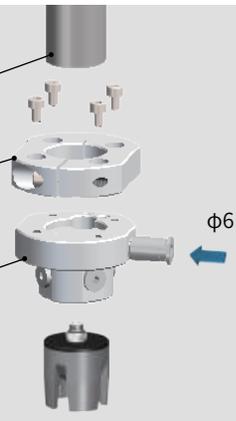


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

RF-S20 (optional)

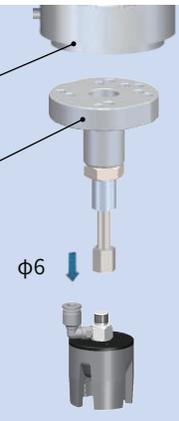
RF-SFB (optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01 (optional)



Rigid Connection Installation

SMP-1420 (optional)

CM-RG18128G18 (optional)



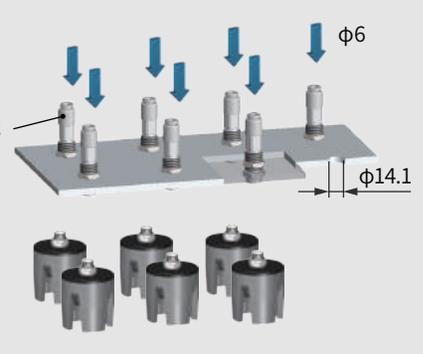
Buffer Installation



CM-S01 (optional)

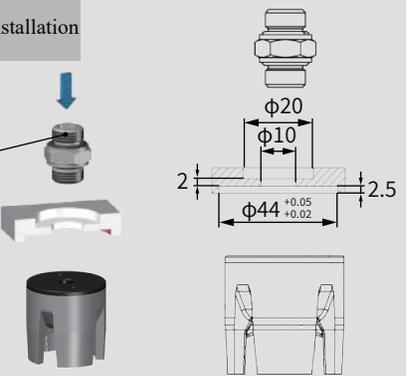
Matrix Installation

CM-RG1840G18 (optional)



Precise Positioning Installation

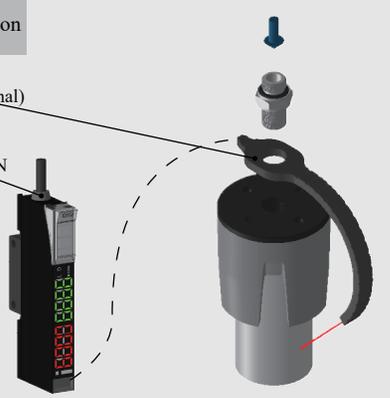
G1/8



Photoelectric Sensor Installation

Flexible Probe SE-FP31 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

	BMC-4B50[P]/S Direct-through H Type	BML-4B50[P]/S Side-through H Type		
	BMC-4B50[PAS]/S Direct-through Dust-free H Type	BML-4B50[PAS]/S Side-through Dust-free H Type		
	Weight	92.1g	Weight	106.6g

B-4B50[P]/S

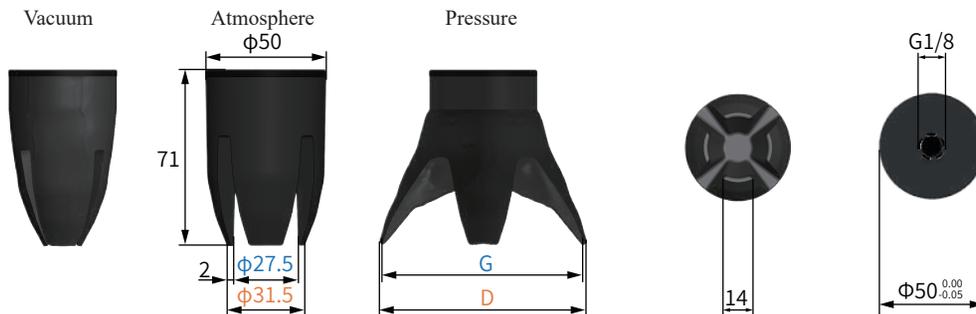
Parameter

Gripping range	15-40mm	Gripping force	0-2.1N	Theoretical gripping load**	0-123g	Ideal gripping workpiece size*	22mm
Internal gripping range	35-70mm	Internal gripping force	0-10.1N	Theoretical internal gripping load**	0-605g	Ideal internal gripping workpiece size*	52mm
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

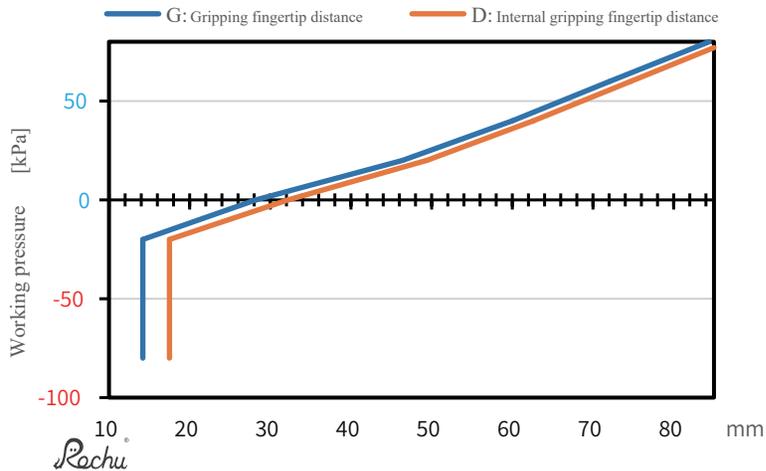
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



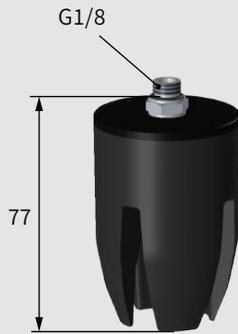
Pressure-Fingertip Distance deformation curve



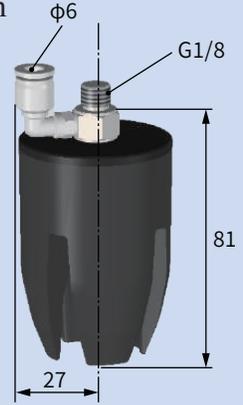
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

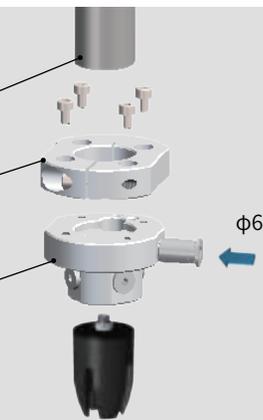


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

RF-S20 (optional)

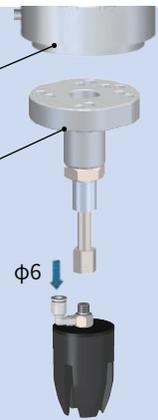
RF-SFB (optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

FCM-S01 (optional)



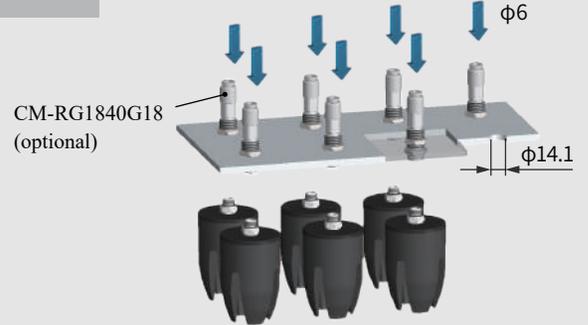
Rigid Connection Installation



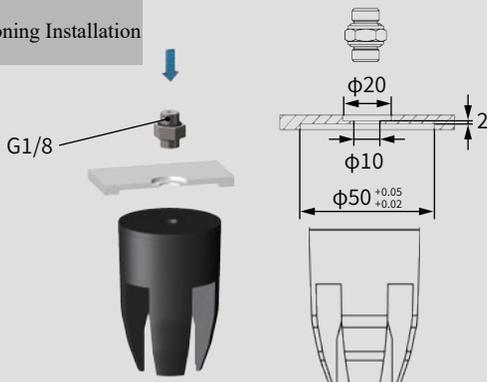
Buffer Installation



Matrix Installation



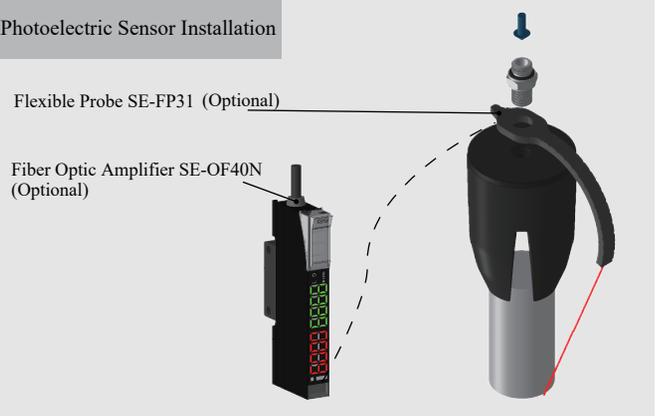
Precise Positioning Installation



Photoelectric Sensor Installation

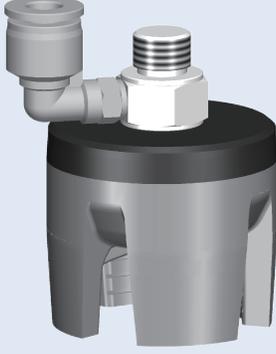
Flexible Probe SE-FP31 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Soft Beak / Beak Module

B-4G51[H]/SN

BMC-4G51[H]/SN Direct-through H Type		BMS-4G51[H]/SN Direct-through Precision Positioning H Type		BML-4G51[H]/SN Side-through H Type		BMM-4G51[H]/SN Multi-way Precision Positioning H Type	
BMC-4G51[HAS]/SN Direct-through Dust-free H Type		BMS-4G51[HAS]/SN Direct-through Precision Positioning H Type		BML-4G51[HAS]/SN Side-through Dust-free H Type		BMM-4G51[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	47.1g	Weight	54.33g	Weight	60.5g	Weight	58.48g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak materials divided into Strong materials [P] and Dust-free Strong material [PAS]. For workpieces with dustproof requirements, or miniature and lightweight that are prone to being adsorbed on the fingertips, Dust-free type [PAS] should be preferably selected.
- Food-grade material, can be directly used for grasping food.



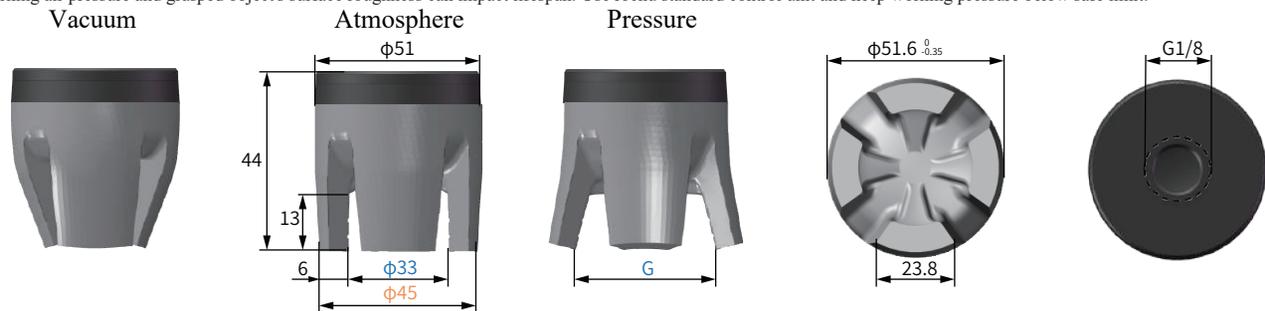
Parameter

Gripping range	20-35mm	Gripping force	0-12.3N	Theoretical gripping load**	0-739g	Ideal gripping workpiece size*	30mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

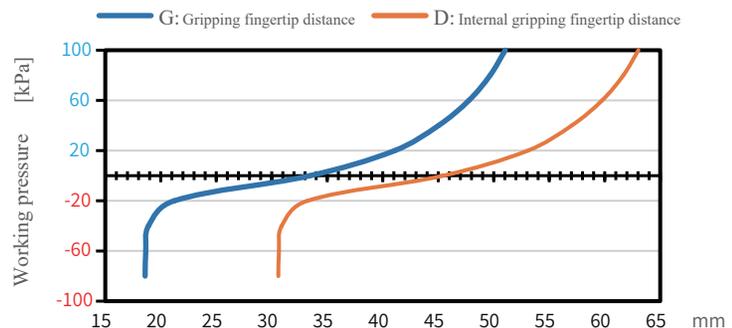
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

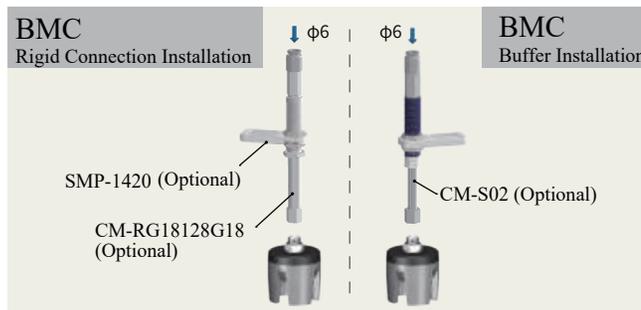
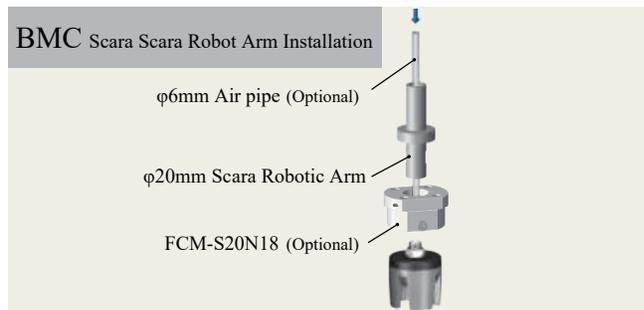
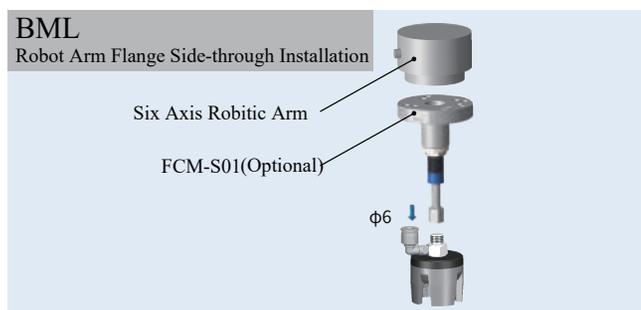
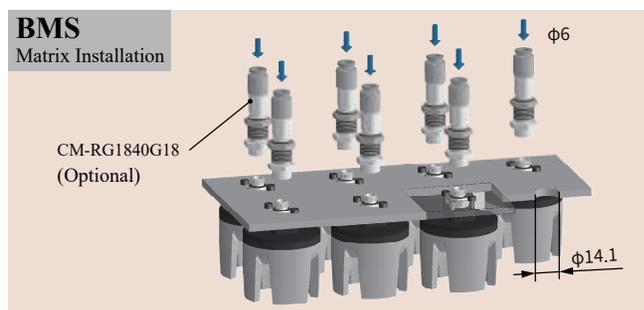
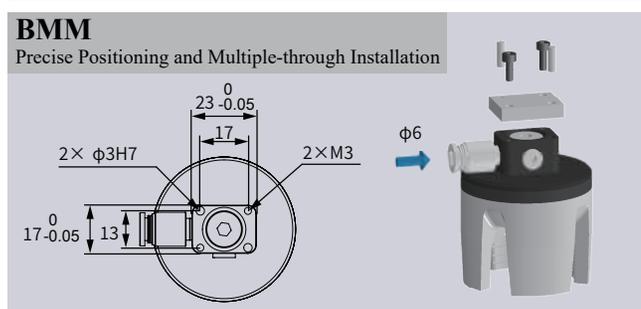
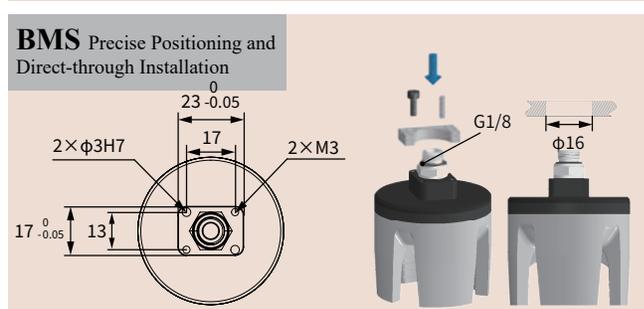
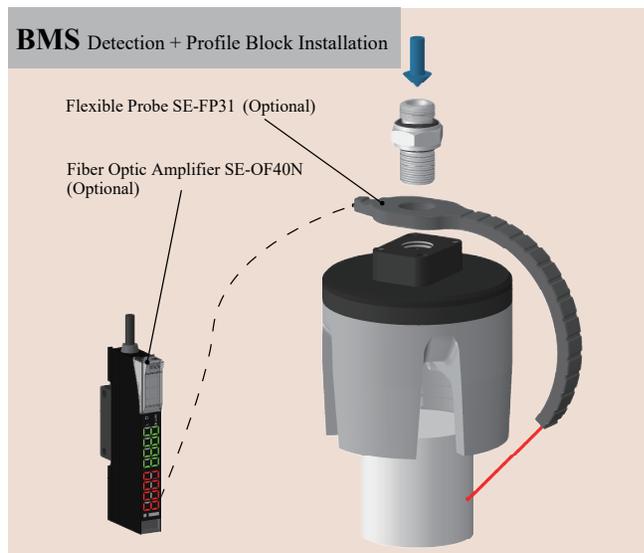
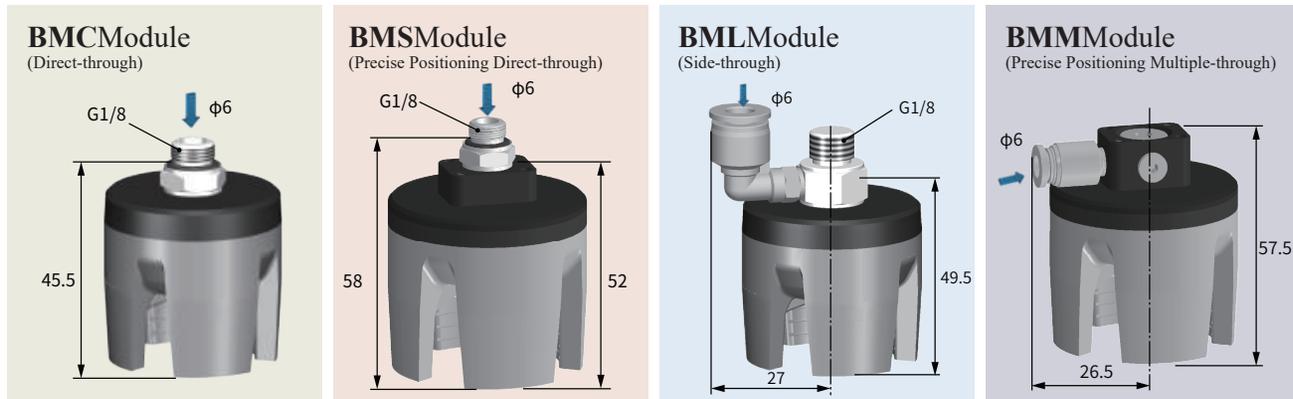
** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve





B-4G51(H)/SN

Soft Beak / Beak Module

B-4G58[H]/SN

BMC-4G58[H]/SN Direct-through H Type		BMS-4G58[H]/SN Direct-through Precision Positioning H Type		BML-4G58[H]/SN Side-through H Type		BMM-4G58[H]/SN Multi-way Precision Positioning H Type	
BMC-4G58[HAS]/SN Direct-through Dust-free H Type		BMS-4G58[HAS]/SN Direct-through Precision Positioning H Type		BML-4G58[HAS]/SN Side-through Dust-free H Type		BMM-4G58[HAS]/SN Multi-way Precision Positioning Dust-free H Type	
							
Weight	61.3g	Weight	68.53g	Weight	74.7g	Weight	72.68g

Product features

- Fingertips open under pressure state and clamp in a vacuum. Inner fingertips distance G can be adjusted by working pressure. It is suggested to be used with RoChu control unit.
- Soft beak materials divided into Strong materials [P] and Dust-free Strong material [PAS]. For workpieces with dustproof requirements, or miniature and lightweight that are prone to being adsorbed on the fingertips, Dust-free type [PAS] should be preferably selected.
- Food-grade material, can be directly used for grasping food.



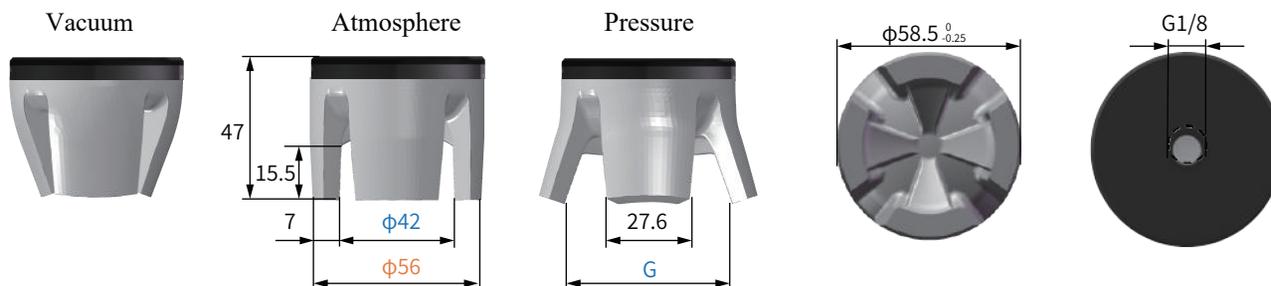
Parameter

Gripping range	24.5-50mm	Gripping force	0-17.1N	Theoretical gripping load**	0-1023g	Ideal gripping workpiece size*	40mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<120kPa

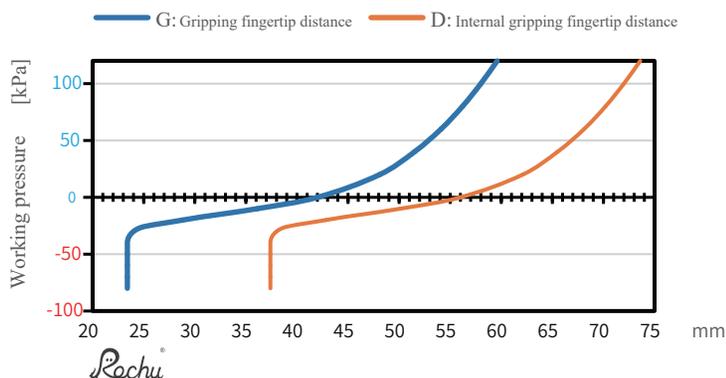
*: Width of cuboid (2-finger clamp) for max force, outer diameter of cylinder (multi-finger clamp), width of square hole (2-finger inner support), or inner diameter of round hole (multi-finger inner support);

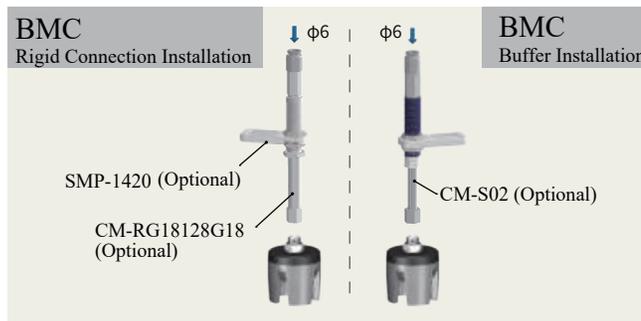
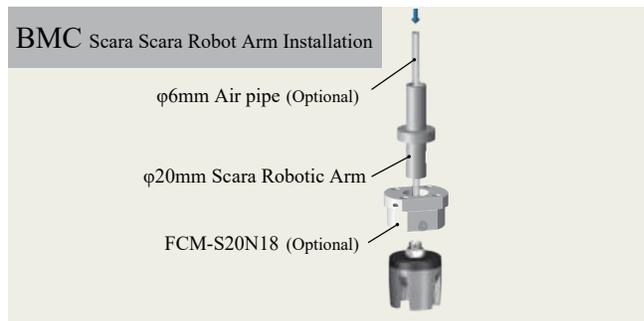
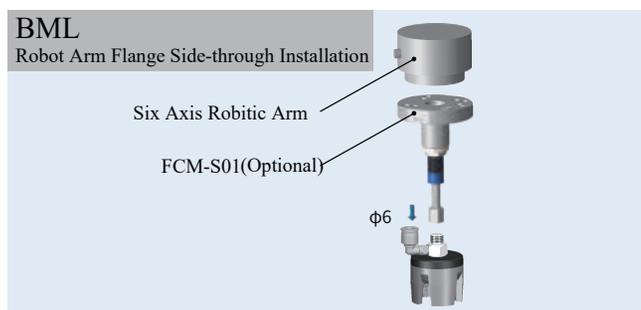
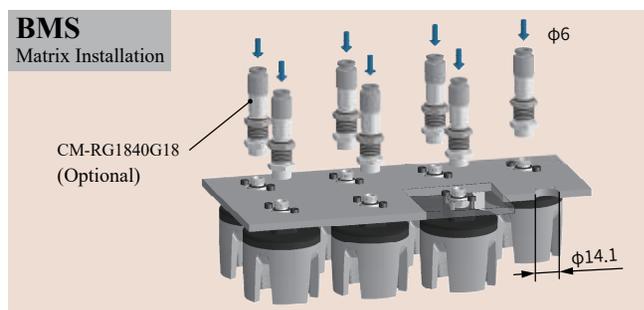
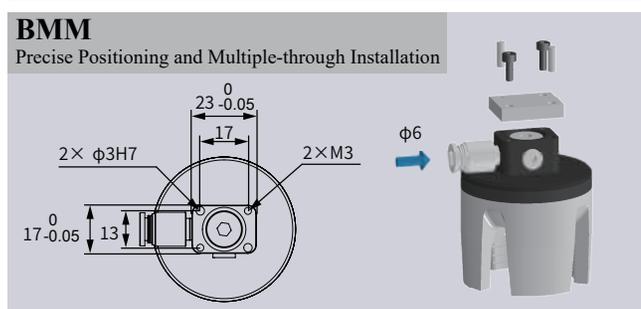
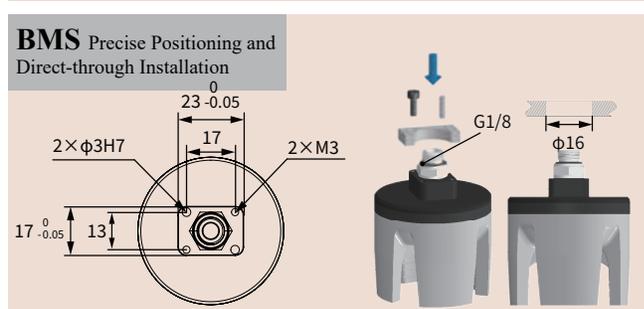
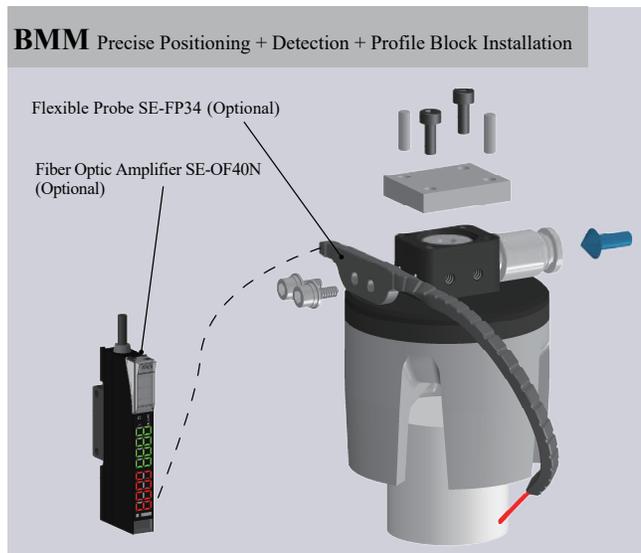
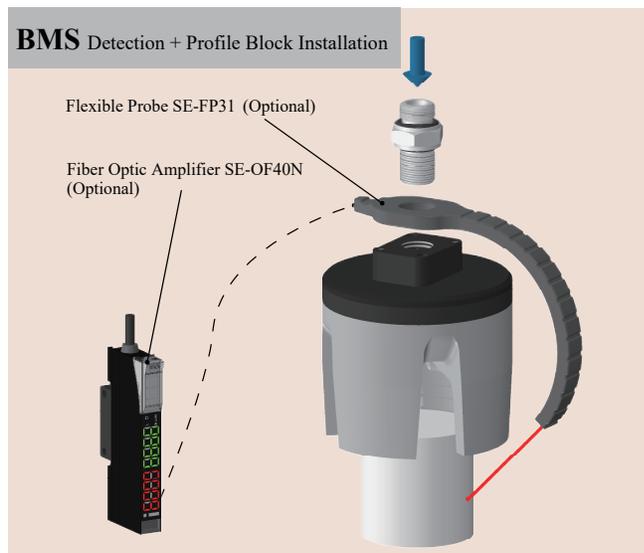
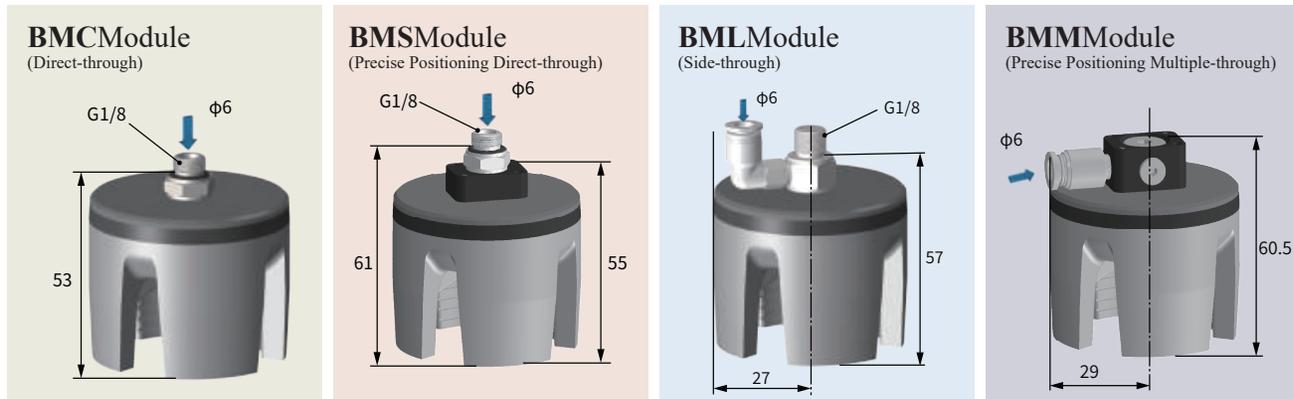
** : Only theoretical load of ideal workpiece under standard conditions is shown for reference. Actual load capacity is affected by factors like grasped object's surface structure and roughness. Rely on measured data;

***: Working air pressure and grasped object's surface roughness can impact lifespan. Use rochu standard control unit and keep working pressure below safe limit.



Pressure-Fingertip Distance deformation curve

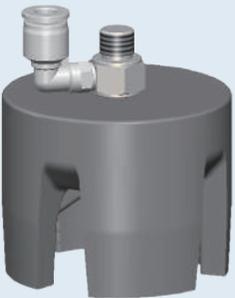




B-4G58[H]/SN

Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [H] and Dust-free Strengthen Material [HAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [HAS] is preferred.

	BMC-4G64[H]/S Direct-through H Type	BML-4G64[H]/S Side-through H Type	
	BMC-4G64[HAS]/S Direct-through Dust-free H Type	BML-4G64[HAS]/S Side-through Dust-free H Type	
Weight		Weight	
114.7g		129.2g	

B-4G64[H]/S

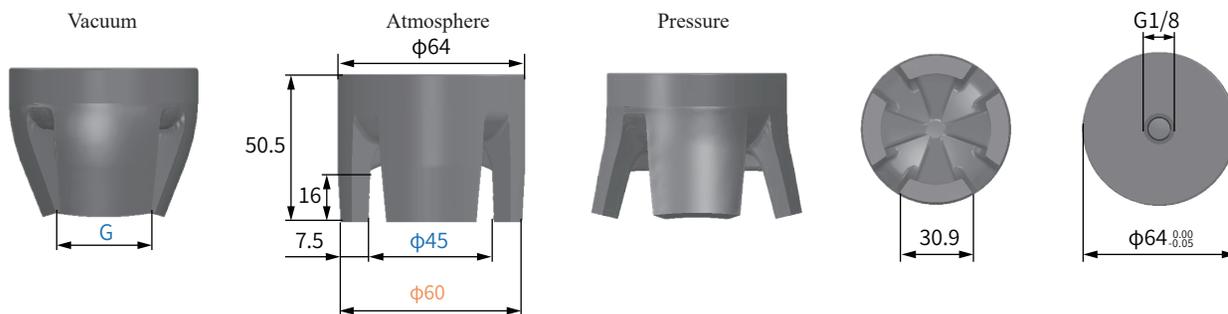
Parameter

Gripping range	30-50mm	Gripping force	0-22.1N	Theoretical gripping load**	0-1325g	Ideal gripping workpiece size*	45mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<80kPa

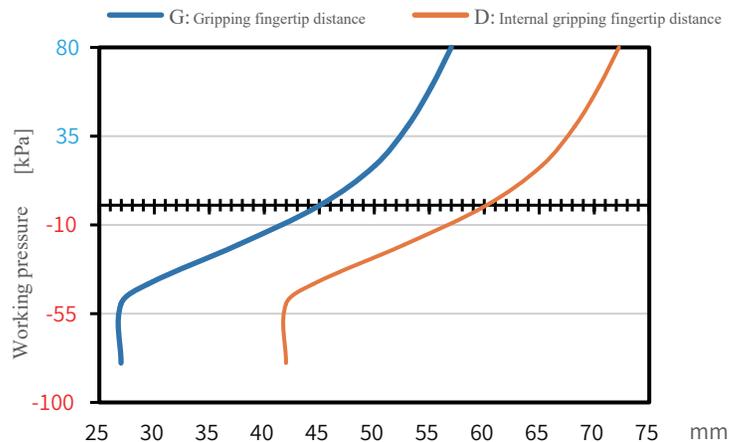
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



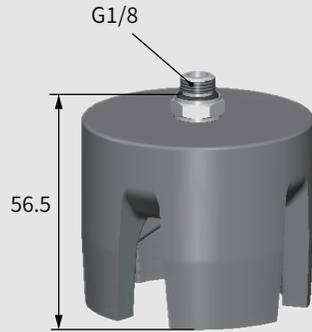
Pressure-Fingertip Distance deformation curve



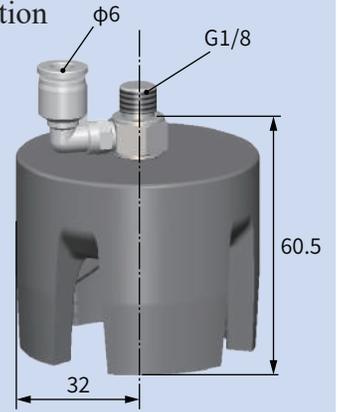
BMC Straight Fitting Installation



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BML Side Fitting Installation



Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

RF-S20 (optional)

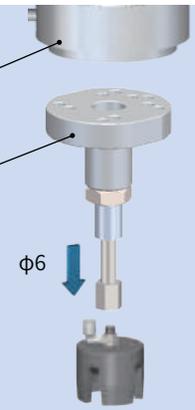
RF-SFB (optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

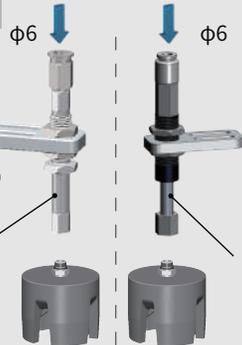
FCM-S01 (optional)



Rigid Connection Installation

SMP-1420 (optional)

CM-RG18128G18 (optional)



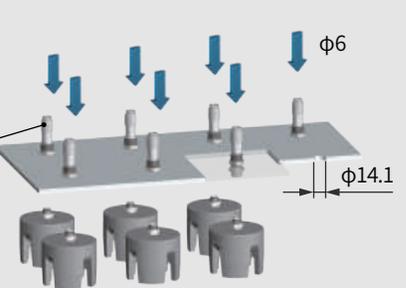
Buffer Installation

CM-S01 (optional)



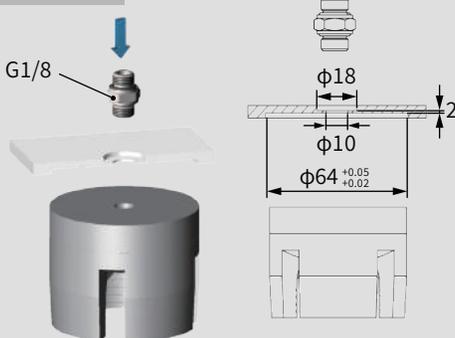
Matrix Installation

CM-RG1840G18 (optional)



Precise Positioning Installation

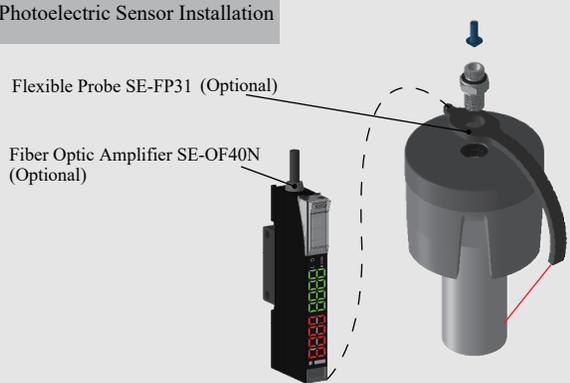
G1/8



Photoelectric Sensor Installation

Flexible Probe SE-FP31 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- Fingertip open under pressure and clamped in a vacuum. Fingertip distance G can be adjusted by working pressure. It is suggested to be used with Rochu control unit.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorb on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

	BMC-4BG64[P]/S Direct-through P Type	BML-4BG64[P]/S Side-through P Type		
	BMC-4BG64[PAS]/S Direct-through Dust-free P Type	BML-4BG64[PAS]/S Side-through Dust-free P Type		
	Weight	114.7g	Weight	129.2g

B-4BG64[P]/S

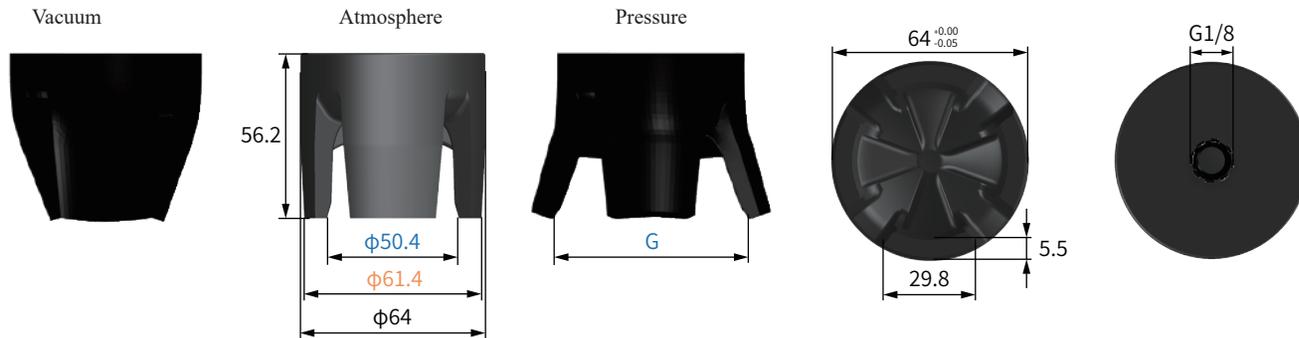
Parameter

Gripping range	35-65mm	Gripping force	0-11.5N	Theoretical gripping load**	0-690g	Ideal gripping workpiece size*	50mm
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<70kPa

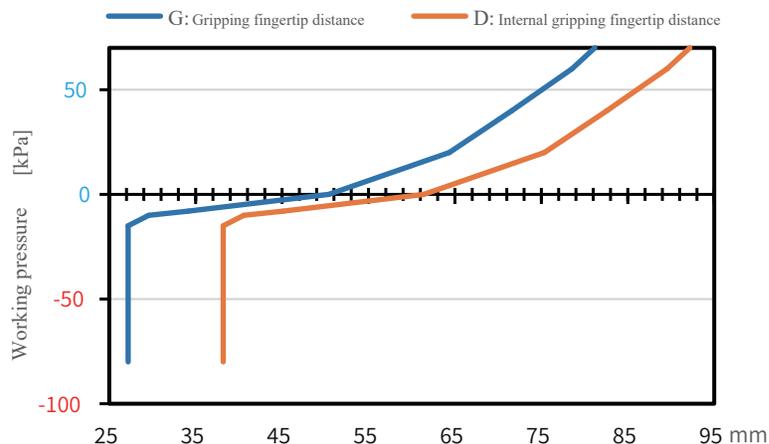
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



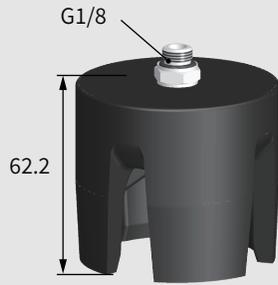
Pressure-Fingertip Distance deformation curve



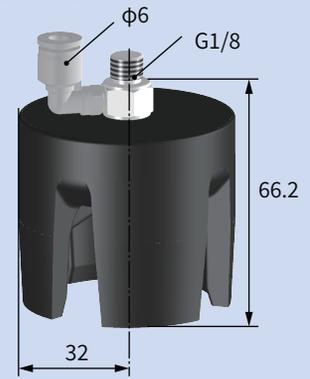
BMC Straight Fitting Installation



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BML Side Fitting Installation



Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193 (optional)

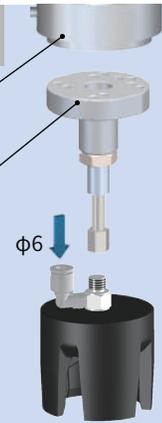
CP-192 (optional)



Robotic Arm Flange Side Fitting Installation

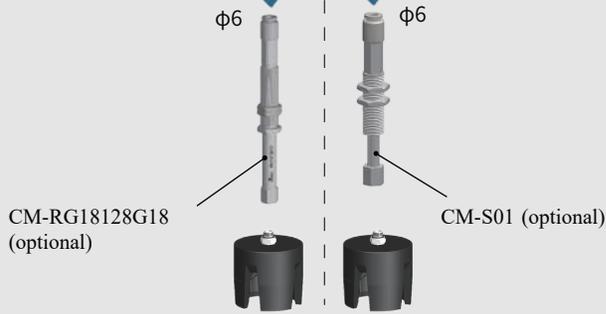
Six Axis Robotic Arm

FCM-S01 (optional)

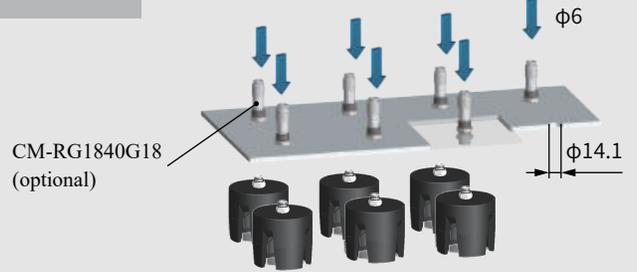


Rigid Connection Installation

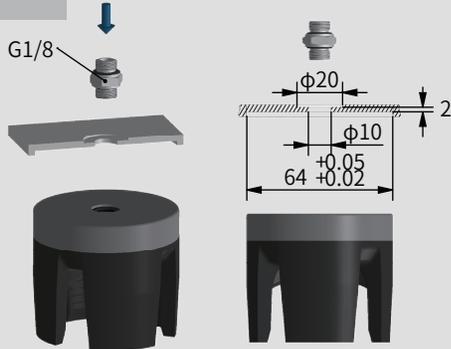
Buffer Installation



Matrix Installation



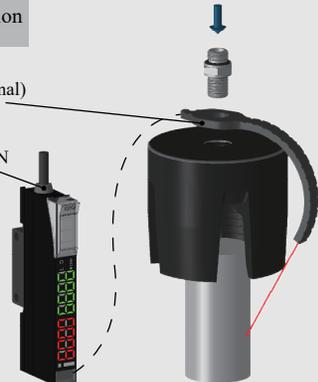
Precise Positioning Installation



Photoelectric Sensor Installation

Flexible Probe SE-FP31 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

- The inner fingertip distance G and the outer fingertip distance D can be adjusted by using the working air pressure.
- Soft beak material is divided into Strengthen Material [P] and Dust-free Strengthen Material [PAS]. When the workpiece is light, or very soft, easy to adhere to adsorp on the soft beak, Dust-free Strengthen Material [PAS] is preferred.

B-4B70[P]/S

	BMC-4B70[P]/S Direct-through P Type	BML-4B70[P]/S Side-through P Type	
	BMC-4B70[PAS]/S Direct-through Dust-free P Type	BML-4B70[PAS]/S Side-through Dust-free P Type	
Weight	210.1g	Weight	224.6g

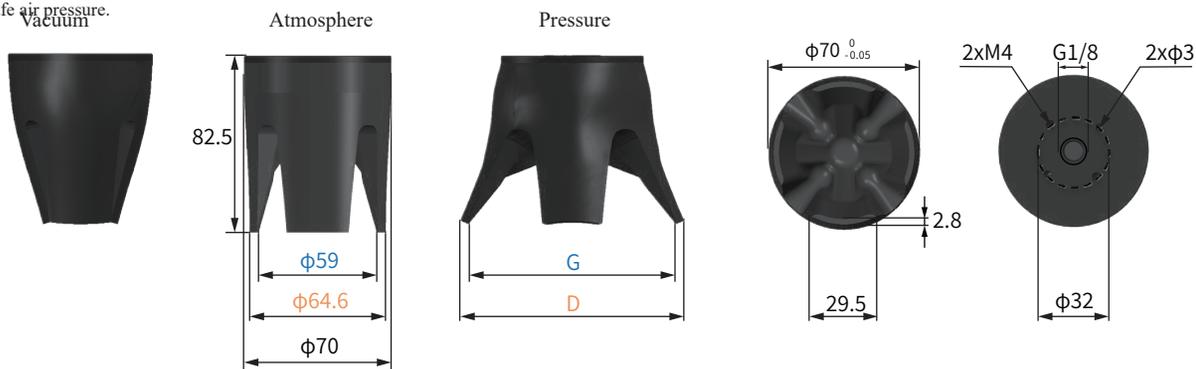
Parameter

Gripping range	32-65mm	Gripping force	0-12N	Theoretical gripping load**	0-718g	Ideal gripping workpiece size*	50mm
Internal gripping range	60-90mm	Internal gripping force	0-18N	Theoretical internal gripping load**	0-1081g	Ideal internal gripping workpiece size*	75mm
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

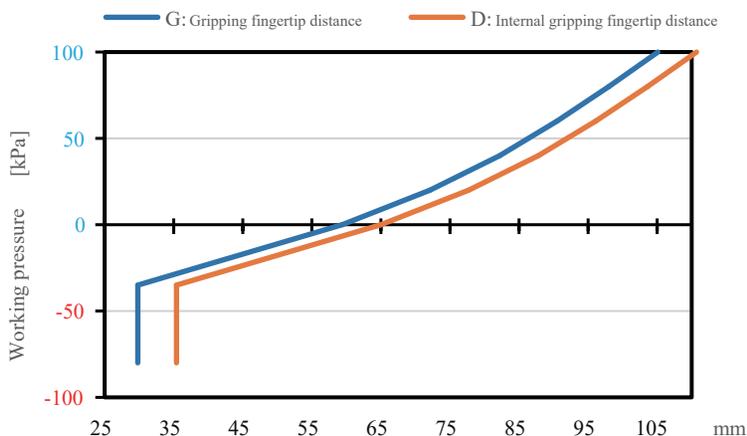
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



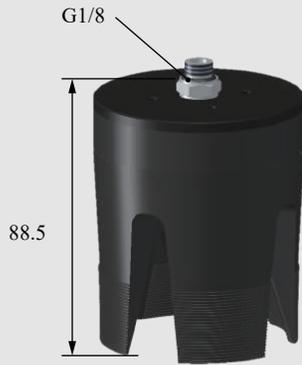
Pressure-Fingertip Distance deformation curve



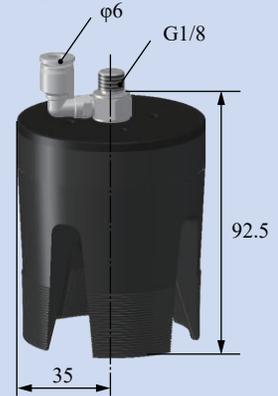
BMC Straight Fitting Installation



Scan to watch videos



BML Side Fitting Installation

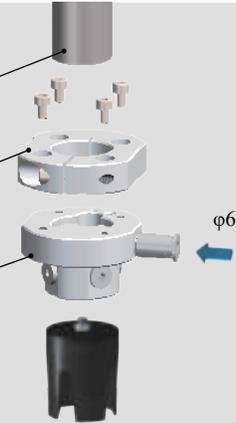


Scara Robotic Arm Installation

φ20mm Scara Robotic Arm

CP-193 (optional)

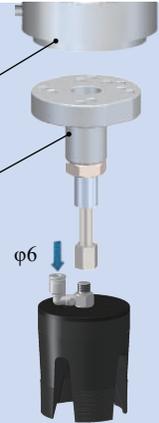
CP-192 (optional)



Robotic Arm Flange Side Fitting Installation

Six Axis Robotic Arm

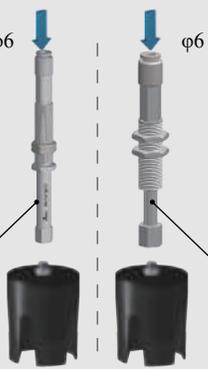
FCM-S01 (optional)



Rigid Connection Installation

φ6

CM-RG18128G18 (optional)



Buffer Installation

φ6

CM-S01 (optional)

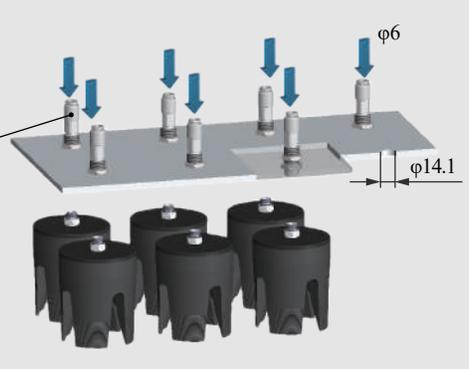


Matrix Installation

CM-RG1840G18 (optional)

φ6

φ14.1

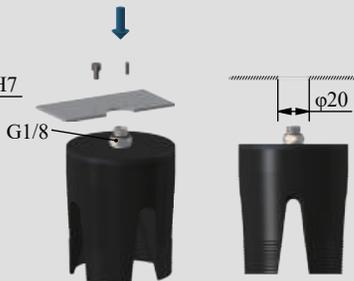


Precise Positioning Installation

2×φ4.2

2×φ3 H7

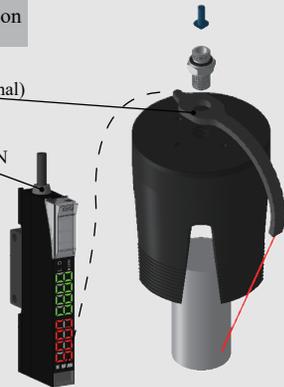
φ32



Photoelectric Sensor Installation

Flexible Probe SE-FP31 (Optional)

Fiber Optic Amplifier SE-OF40N (Optional)



Product features

-The Soft Anemone, resembling a sea anemone, has multiple tentacles that spread out under normal pressure.
 -Its soft tentacles are highly adaptable. They can deform with the workpiece for a wrapping grasp, suitable for soft, irregular, changeable workpieces without precise positioning needs.
 -In vacuum, the Soft Anemone retracts to tightly hold the workpiece. It can be used with a rochu control unit, and the negative pressure can be set to adjust the grip force.

B-20G51[H]/SN



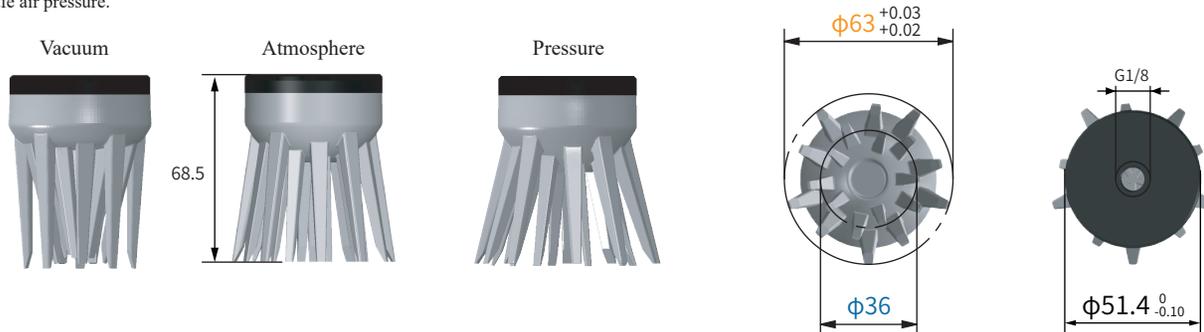
Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<100kPa

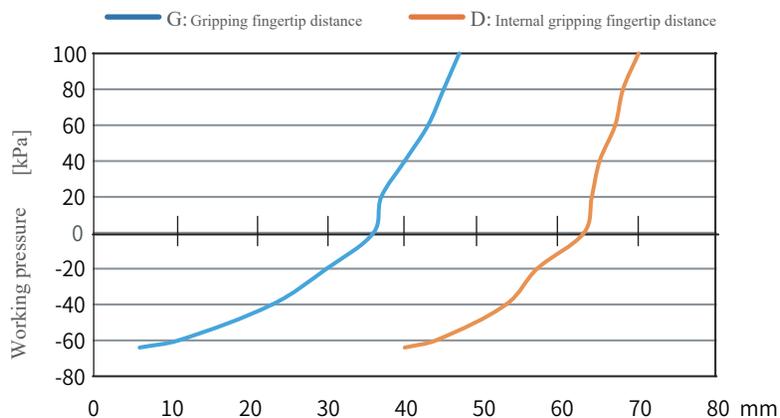
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

** : Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.



Pressure-Fingertip Distance deformation curve

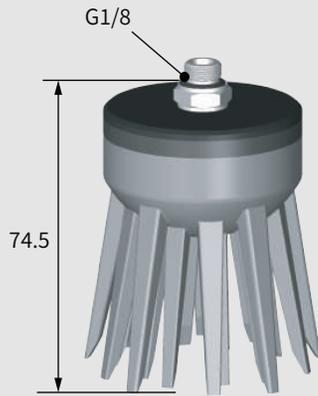


Installation

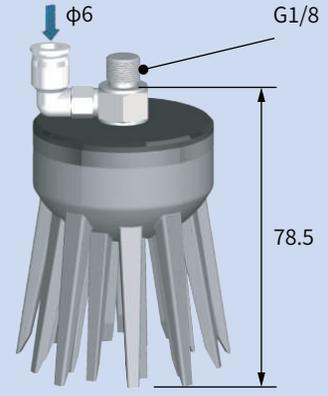
BMC Straight Fitting Installation



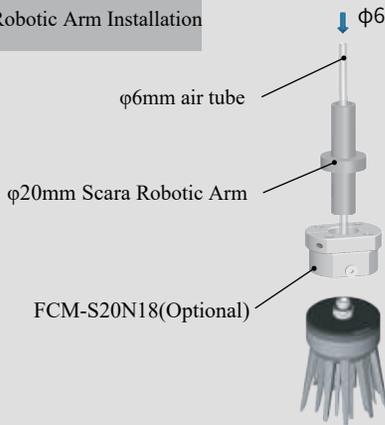
Scan to watch videos



BML Side Fitting Installation



Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



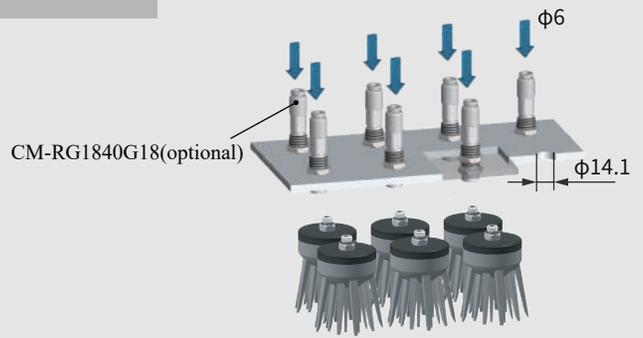
Rigid Connection Installation



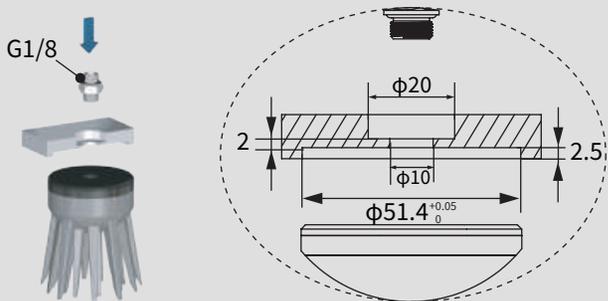
Buffer Installation



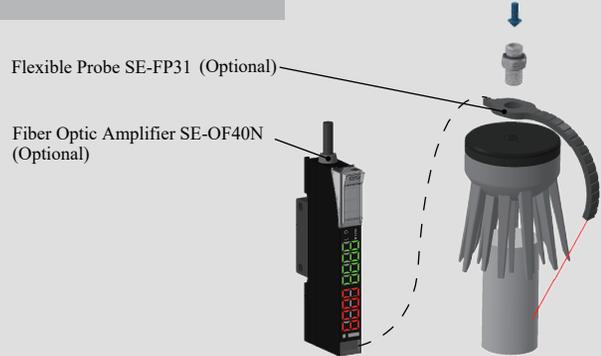
Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation

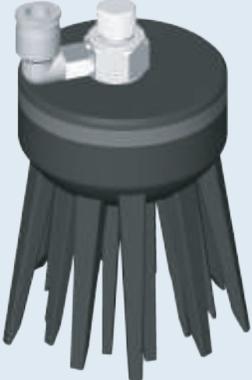


B-20G51[H]/SN

Product features

- The Soft Anemone, resembling a sea anemone, has multiple tentacles that spread out under normal pressure.
- Its soft tentacles are highly adaptable. They can deform with the workpiece for a wrapping grasp, suitable for soft, irregular, changeable workpieces without precise positioning needs.
- In vacuum, the Soft Anemone retracts to tightly hold the workpiece. It can be used with a rochu control unit, and the negative pressure can be set to adjust the grip force.

B-20G51[P]/SN

	BMC-20G51[P]/SN Direct-through P Type			BML-20G51[P]/SN Side-through P Type	
	Weight	55g		Weight	68g

Parameter

Gripping range	—	Gripping force	—	Theoretical gripping load**	—	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<220°C	Safe pressure***	<30kPa

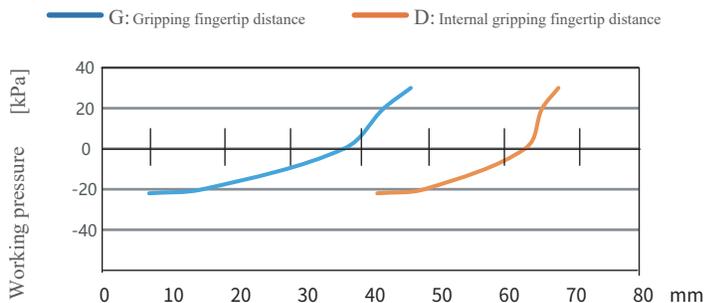
*: The width of the cuboid that generates the maximum gripping force (two-finger gripping), the outer diameter of the cylinder (multi-finger gripping), the width of the square hole (two-finger internal gripping), or the inner diameter of the circular hole (multi-finger internal gripping);

**: Only the theoretical load of the ideal workpiece under standard working conditions is marked for reference and comparison. The real load capacity is also affected by factors such as the surface structure and roughness of the workpiece. Please take the measured data as the standard;

***: The working air pressure and the surface roughness of the workpiece in the usage scenario may have different degrees of impact on the life-time. Please configure Rochu control Unit. Do not exceed the safe air pressure.

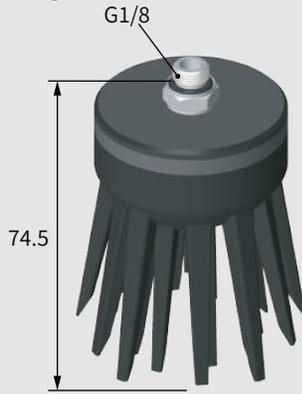


Pressure-Fingertip Distance deformation curve

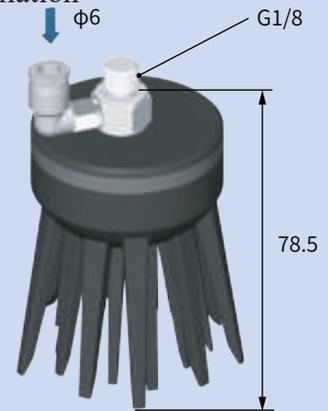


Installation

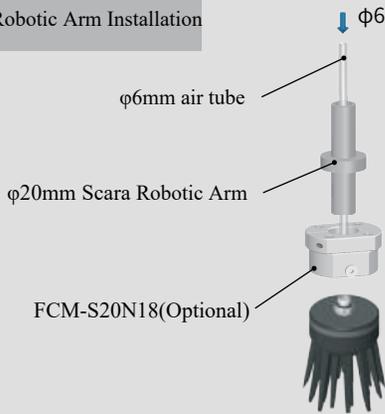
BMC Straight Fitting Installation



BML Side Fitting Installation



Scara Robotic Arm Installation



Robotic Arm Flange Side Fitting Installation



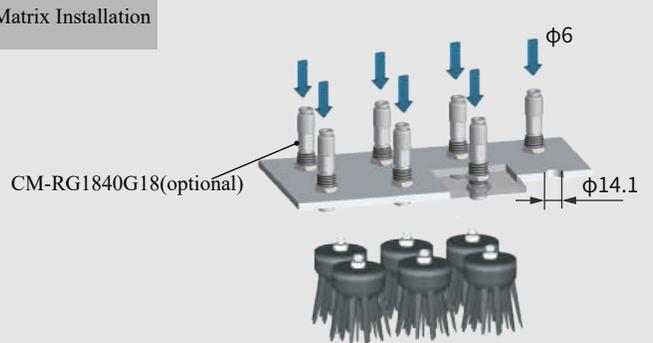
Rigid Connection Installation



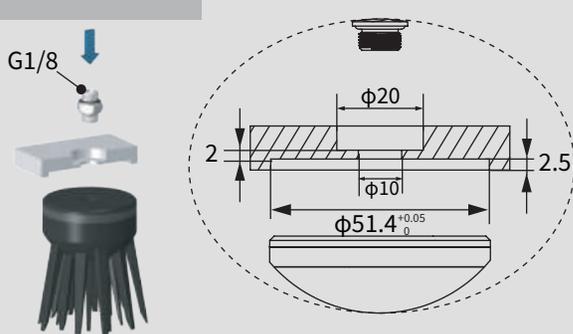
Buffer Installation



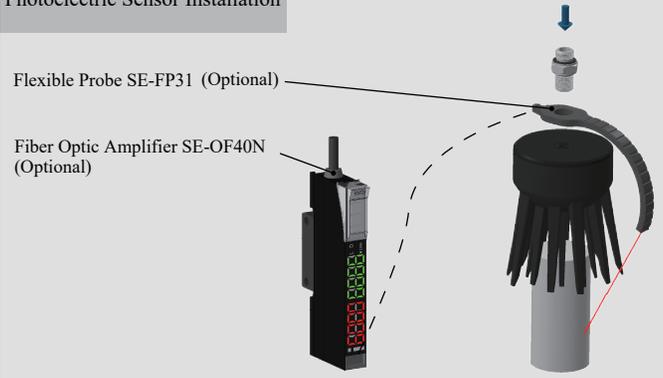
Matrix Installation



Precise Positioning Installation



Photoelectric Sensor Installation



B-20G51[P]/SN

Product features

- Special for soft fabrics, used for layered picking and precise positioning of fabrics.
- The soft friction surface with special texture can "rub" up the fabric. Combined with the rigid positioning end, the blanking error can reach $\pm 2\text{mm}$.
- The fingertip is opened in positive pressure state and clamped in vacuum state. The clamping force is adjusted by working air pressure. It is recommended to be used with Rochu control unit.

	BMC-H5024[P]/S Direct-through P Type			BML-H5024[P]/S Side Fitting Normal Materia	
	Weight	73.2g		Weight	85.7g

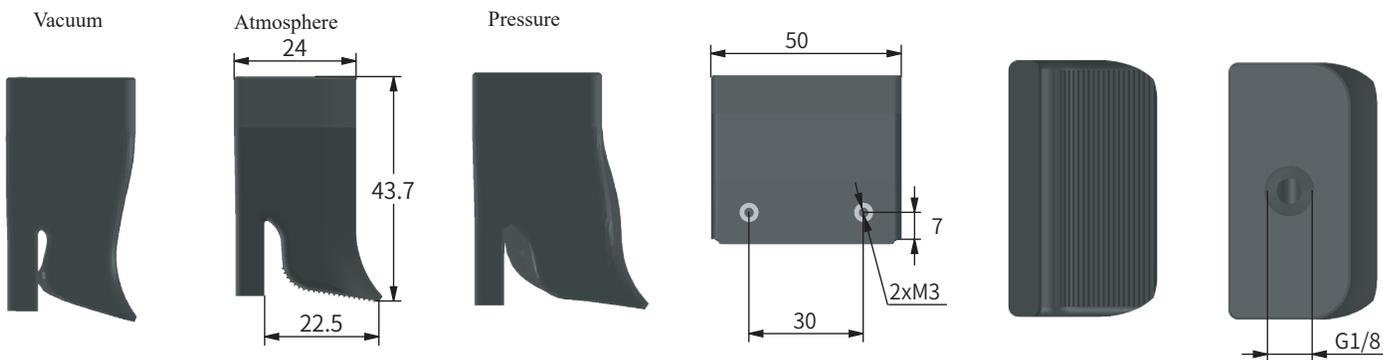
B-H5024[P]/S

Parameter

Gripping range	—	Gripping force	0-2N	Theoretical gripping load**	200g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<180°C	Safe pressure***	<70kPa

*: The experimental conditions of the load are limited to soft fabric products.

***: Working air pressure and object surface roughness can impact service life. Use rochu standard control unit and don't exceed safe air pressure.

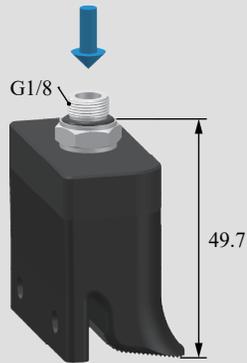


Installation

BMC Straight Fitting Installation



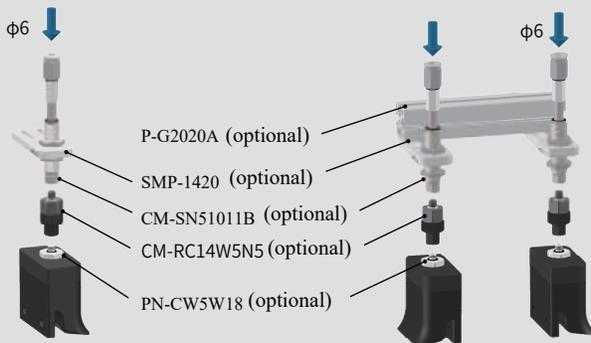
Scan to watch videos



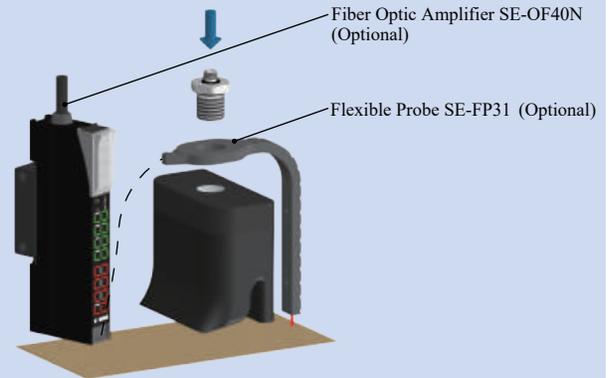
BML Side Fitting Installation



Installation method



Photoelectric Sensor Installation



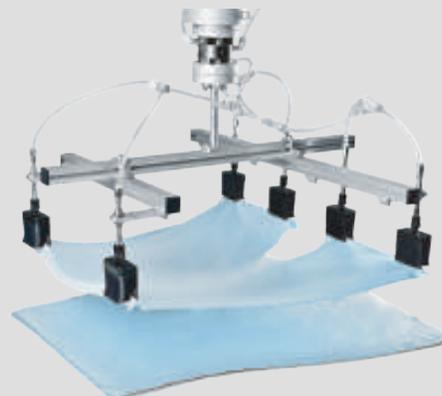
Unilateral stratification

Product Name	Model	Quantity
Beak Module	B-H5024[P]/S	2
Rotary Joint	CM-RC14W5N5	2
Connection Module	CM-S04	2
Slide Mounting Plate	SMP-14	2
Flange Connection Module	FCM-R03	1
Profile	P-G2020A<300>	1



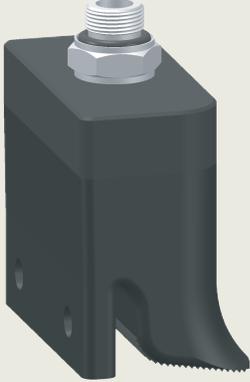
Frontal stratification

Product Name	Model	Quantity
Beak Module	B-H5024[P]/S	6
Rotary Joint	CM-RC14W5N5	6
Connection Module	CM-S04	6
Slide Mounting Plate	SMP-14	6
Flange Connection Module	FCM-R03	1
Profile	P-G2020A<500>	2
Profile	P-G2020A<300>	1
Connector Part	CP-001	2



Product features

- Special for soft fabrics, used for layered picking and precise positioning of fabrics.
- The soft friction surface with special texture can "rub" up the fabric. Combined with the rigid positioning end, the blanking error can reach $\pm 2\text{mm}$.
- The fingertip is opened in positive pressure state and clamped in vacuum state. The clamping force is adjusted by working air pressure. It is recommended to be used with Rochu control unit.

	BMC-H5024[LP]/S Direct-through Anti-static P Type			BML-H5024[LP]/S Side-through Anti-static P Type	
	Weight	73.2g		Weight	85.7g

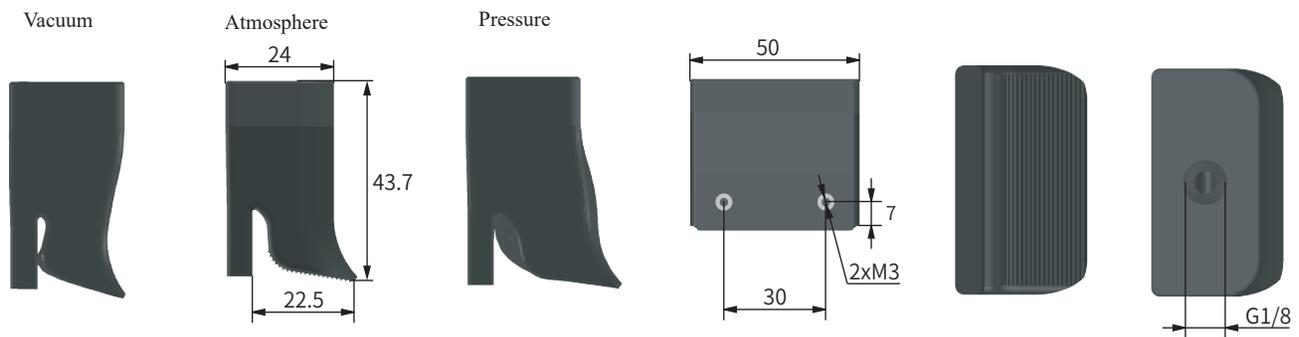
B-H5024[LP]/S

Parameter

Gripping range	—	Gripping force	0-2N	Theoretical gripping load**	200g	Ideal gripping workpiece size*	—
Internal gripping range	—	Internal gripping force	—	Theoretical internal gripping load**	—	Ideal internal gripping workpiece size*	—
Joint size	G1/8	Life time***	150 million times	Contact Temperature	<180°C	Safe pressure***	<60kPa

*: The experimental conditions of the load are limited to soft fabric products.

***: Working air pressure and object surface roughness can impact service life. Use rochu standard control unit and don't exceed safe air pressure.

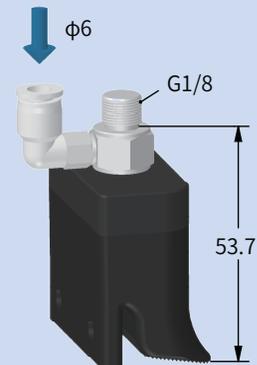


Installation

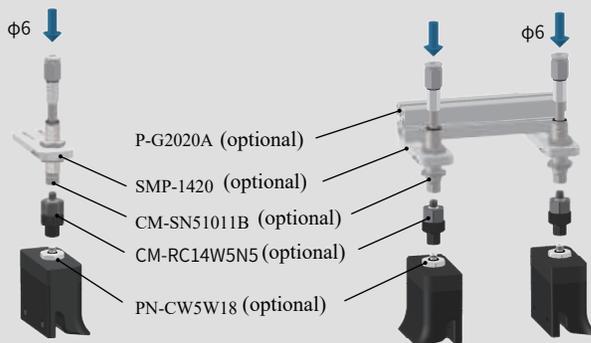
BMC Straight Fitting Installation



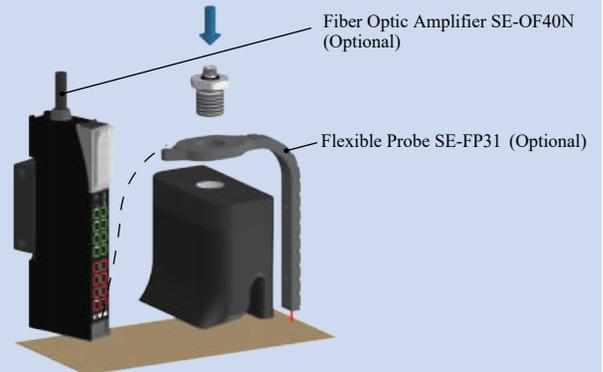
BML Side Fitting Installation



Installation method



Photoelectric Sensor Installation



Unilateral stratification

Product Name	Model	Quantity
Beak Module	B-H5024[LP]/S	2
Rotary Joint	CM-RC14W5N5	2
Connection Module	CM-S04	2
Slide Mounting Plate	SMP-14	2
Flange Connection Module	FCM-R03	1
Profile	P-G2020A<300>	1



Frontal stratification

Product Name	Model	Quantity
Beak Module	B-H5024[LP]/S	6
Rotary Joint	CM-RC14W5N5	6
Connection Module	CM-S04	6
Slide Mounting Plate	SMP-14	6
Flange Connection Module	FCM-R03	1
Profile	P-G2020A<500>	2
Profile	P-G2020A<300>	1
Connector Part	CP-001	2



FM / F

Finger Module / Finger



Finger Module A



Finger Module B



Finger Module C



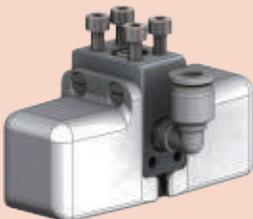
Finger Module D

Finger Module[FM]

- Finger Module [FM] is composed of the Finger [F] and the Fixed Module [SFM].
- Different Fixed [SFM] has different air intake, fixation position, and combination mode.
- Select the appropriate Finger [F] type according to the weight and size of the gripped workpiece, gripping force is determined by the Finger [F] type, working pressure and installation position.
- The safe pressure of the Finger Module [FM] is 120-300kpa. Please refer to the product label or packaging instructions.

·Fixed Module [SFM]

V1



V2



V3



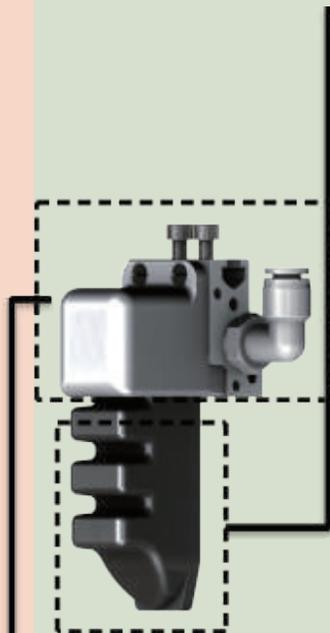
V4



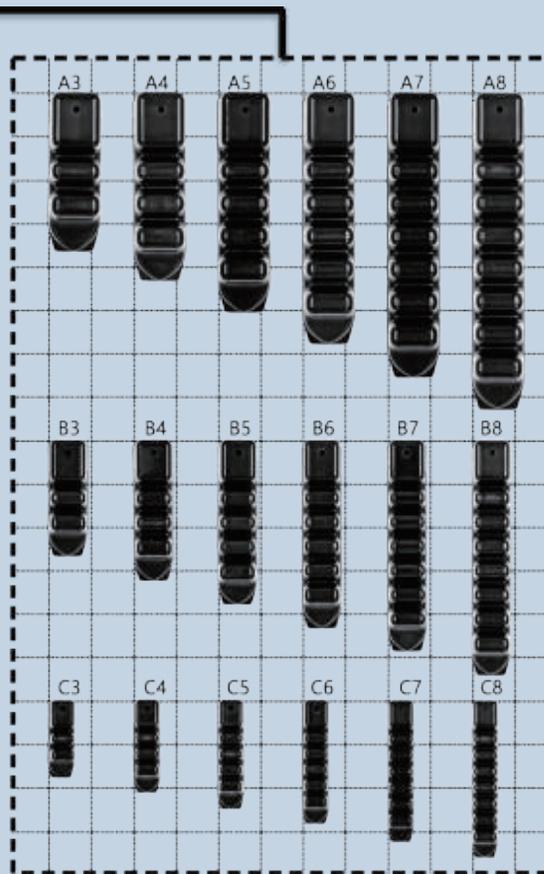
V5



·Finger Module [FM]



·Finger [F]

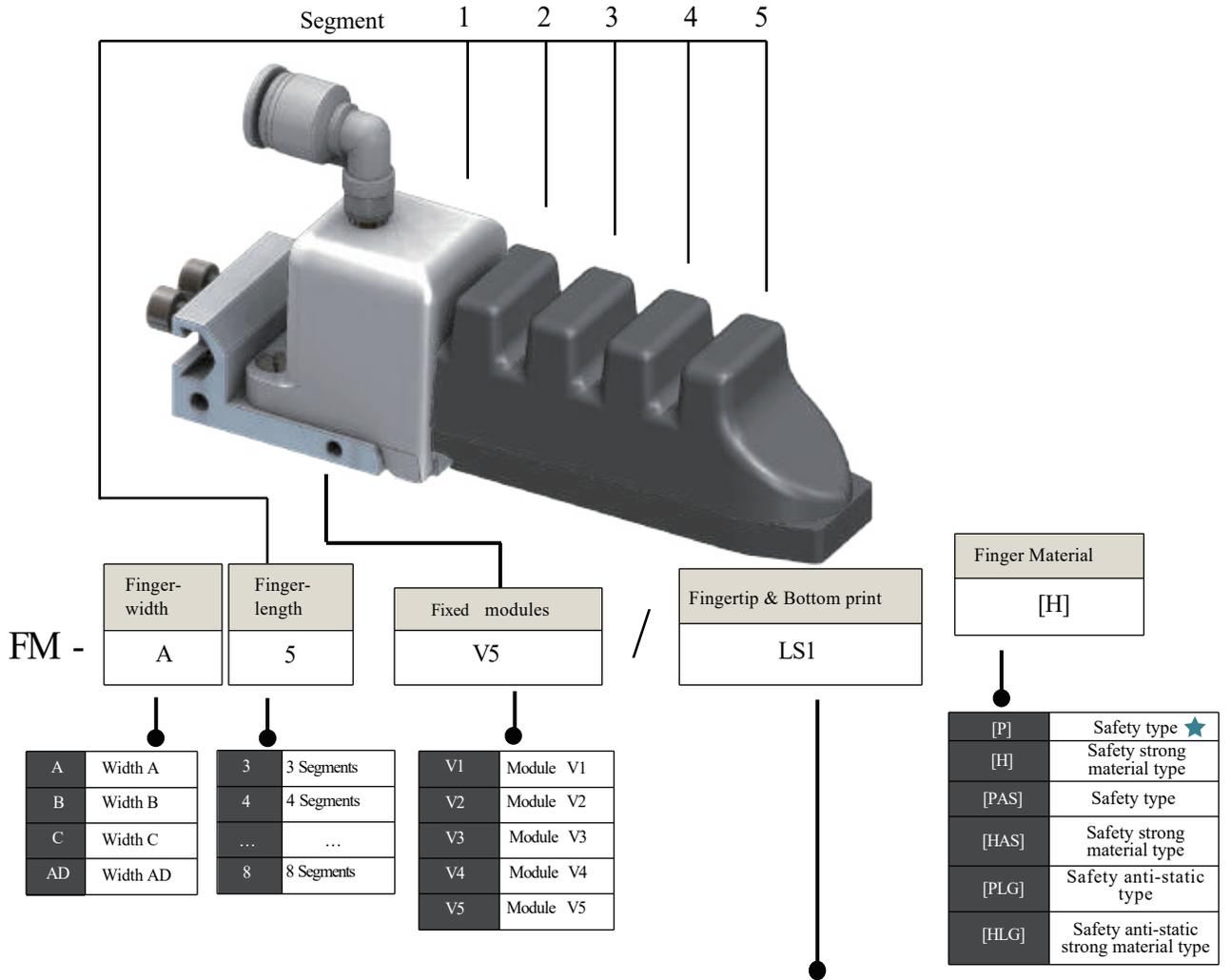


Series Division of Finger Fixed Modules

There're five Fixed Modules **V1**, **V2**, **V3**, **V4** and **V5** with different air intakes and fixation positions.

Fixed Module	Pictures	Structural Features
<p>V1 Compact two-finger Module</p>		<ul style="list-style-type: none"> • Features: Double finger module combination, compact structure, and small space. Finger spacing and installation angle are unadjustable. It is suitable for gripping small, light, and thin workpieces. • Fixation: Can be fixed on three sides (optional). • Air intake: Intake joints are installed on three sides (optional). • Additional Sensor module (optional).
<p>V2 Single-finger Module</p>		<ul style="list-style-type: none"> • Features: Single finger module combination, compatible with [SMP] sliding mounting plate, adjustable spacing and angle between fingers. • Fixation: Can be fixed on four sides (optional). • Air intake: Intake joints can be installed on three sides (optional). • Additional Sensor module (optional).
<p>V3 Siner-finger Module</p>		<ul style="list-style-type: none"> • Features: Single finger module combination, compatible with [SMP] Slide Mounting Plate, adjustable spacing, and angle between fingers. • Fixation: Can be fixed on three sides (optional). • Air intake: The intake joint can only be installed on one side (the back of the finger). • Additional Sensor module (optional).
<p>V4 Siner-finger Module</p>		<ul style="list-style-type: none"> • Features: Series-finger Module, the gripping force is large, which can be used in series (using a parts kit [PK]). Only one air intake when more finger modules build in series. More fingers in series are good at gripping large and heavy objects. • Fixation: It is fixed with T-nut. When installed with a sliding mounting plate, it can adjust the front and rear, left and right, and rotation respectively. • Air intake: Air intake on left or right sides (optional).
<p>V5 Siner-finger Module</p>		<ul style="list-style-type: none"> • Features: Series-finger Module, can be used in series. the minimum finger spacing of the installation module is only 10mm, which is suitable for clamping small and light workpieces. Compared with V4, each finger needs an independent air intake. • Fixation: It is fixed with T-nut. When installed with a sliding mounting plate, it can adjust the front and rear, left and right, and rotation respectively. • Air intake: Single air intake on finger backside.

Encoding Method



Fingertip & Bottom Print	Features	Pictures		
Standard LS1	Good versatility and wear resistance, suitable for rough object surfaces such as food, metal, and plastics.			
Special *	LF1	Suitable for smooth dry workpieces and soft food.		
	FS3	Suitable for soft fabric products.		
	LS8	Suitable for sheet metal parts, flat glass, PCB, car headlights, and other plates.		
* Please consult our customer service for more		Special Fingertips and Bottom prints .		

Size of Finger Module [FM]

According to the width and length of Fingers[F], they are divided into the following 18 sizes*.

A3, A4, A5, A6, A7, A8;

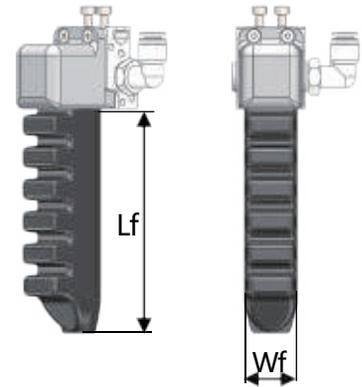
B3, B4, B5, B6, B7, B8;

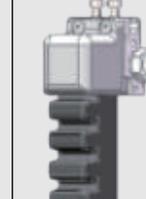
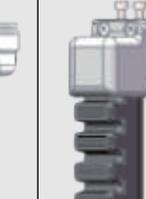
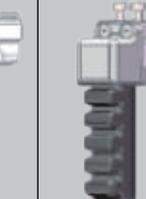
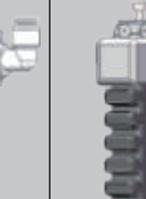
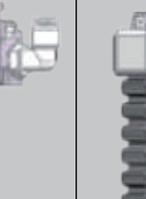
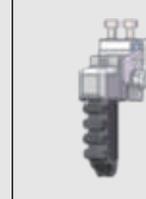
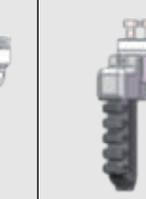
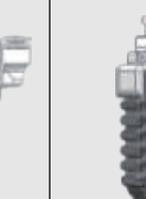
C3, C4, C5, C6, C7, C8.

Select different finger-widths [Wf] according to the weight of the workpiece. The larger the [Wf], the greater the gripping force

According to the workpiece size, select different finger-lengths [Lf].

Long fingers have a better fitting of the big workpiece. Short fingers have higher accuracy.



	3 Segments	4 Segments	5 Segments	6 Segments	7 Segments	8 Segments	Wf [mm]
Finger Size	A3	A4	A5	A6	A7	A8	
Lf [mm]	41	55	69	83	97	111	
A		 ★	 ★				24
Finger Size	B3	B4	B5	B6	B7	B8	
Lf [mm]	31	41.5	52	62.5	73	83.5	
B			 ★				18
Finger Size	C3	C4	C5	C6	C7	C8	
Lf [mm]	21	28	35	42	49	56	
C		 ★					12

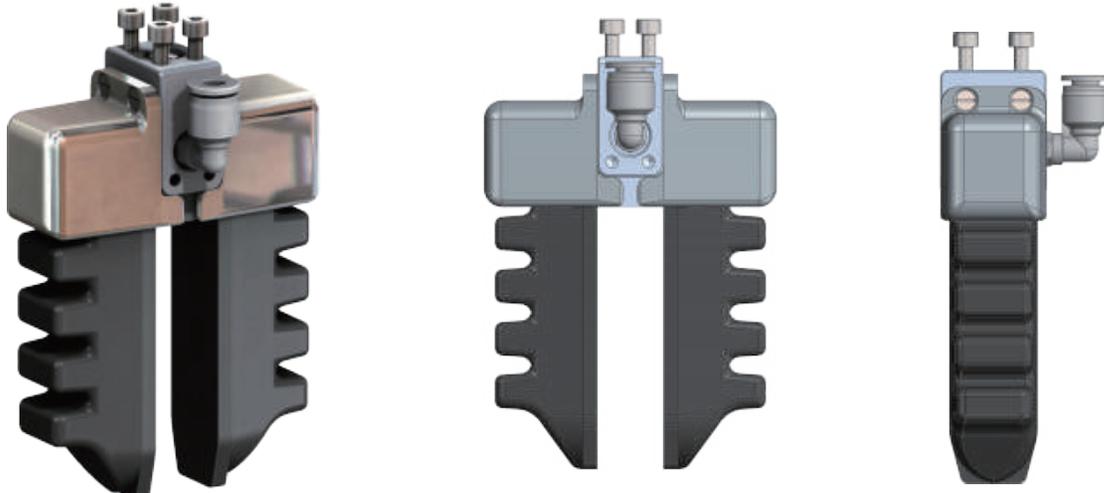
★ : Core Finger size

* : If you need to customize non-standard soft finger, please consult customer service

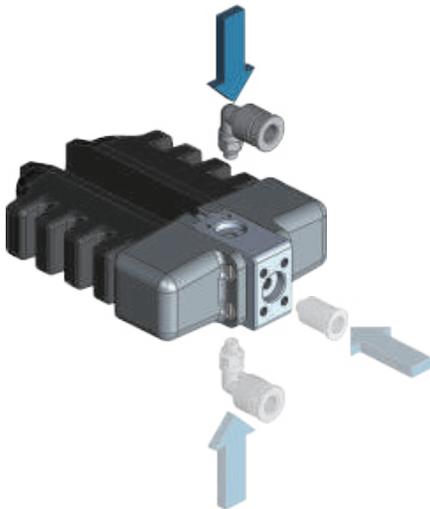
** : According to the working pressure in the application scenario and the surface roughness of the gripped object, the service life may be affected to different degrees. It is recommended to configure a flexible touch standard driver. The working pressure must not exceed the safe working pressure range.

V1 Fixed Module: Compact Two-finger Module

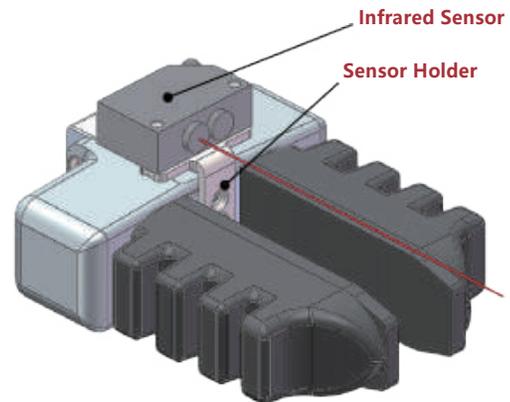
- **Features:** Double finger module combination, compact structure, and small space. Finger spacing and installation angle are unadjustable. It is suitable for gripping small, light, and thin workpieces.
- **Fixation:** Can be fixed on three sides (optional).
- **Air intake:** Intake joints are installed on three sides (optional).
- Additional Sensor module (optional).



Air Intake

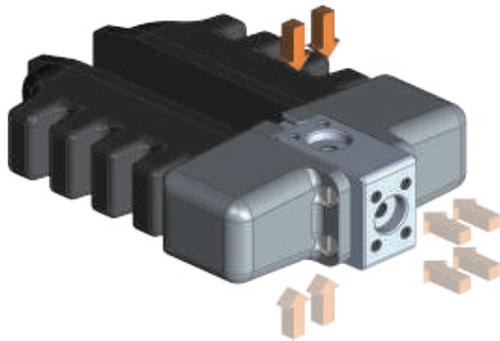


Sensor Installation

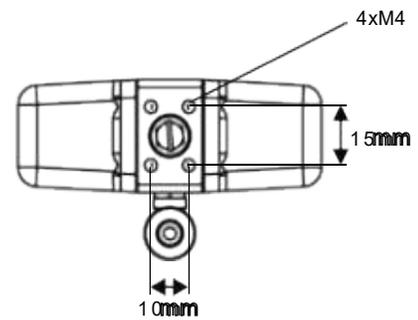
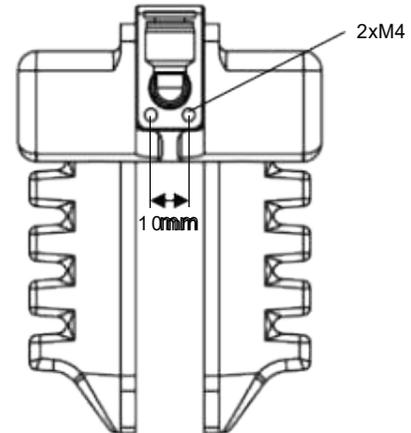


V1 Fixed Module: Compact Two-finger Module

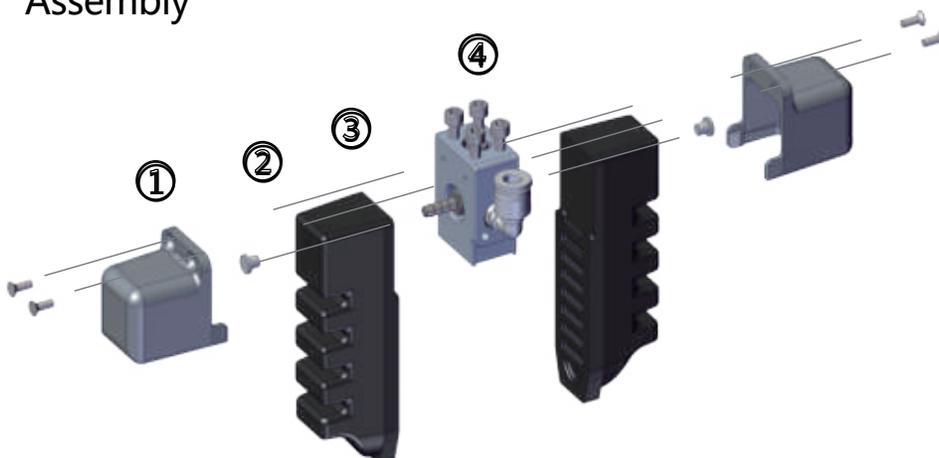
Fixation



Dimensions



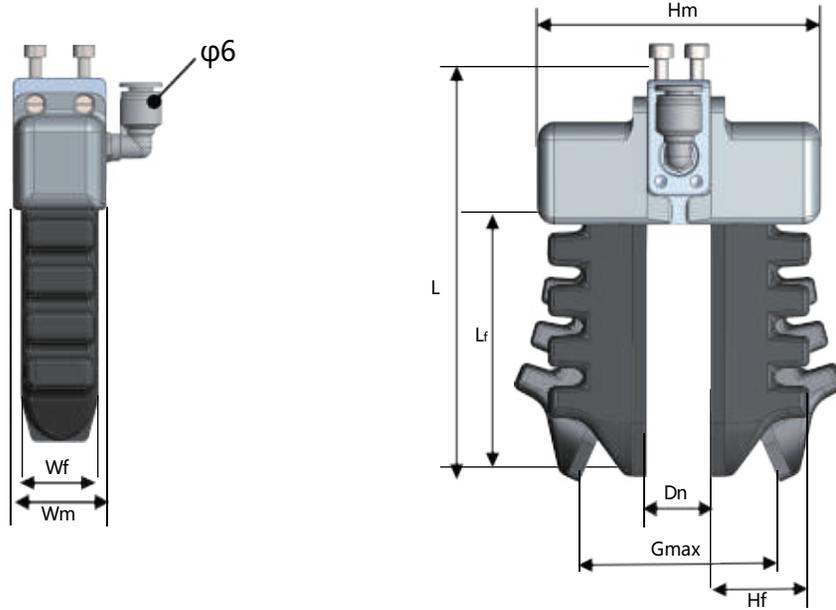
Assembly



Spare Part:

- ① Shell
- ② Plug
- ③ Finger
- ④ Mounting Block

V1 Fixed Module: Compact Two-finger Module



Finger Size	Finger Module	Normal Pressure Fingertip Distance* Dmax [mm]	Negative Pressure Fingertip Distance* Gmax [mm]		Module-Height Hm [mm]	Finger-Height Hf [mm]	Module-Lenth Lm [mm]	Finger-Lenth Lf [mm]	Module-Width Wm [mm]	Finger-Width Wf [mm]	Weight [g]	Safe Pressure [kPa]	
			[P]/[PAS]	[H]/[HAS]								[P]/[PAS]	[H]/[HAS]
A3	FM-A3V1	18	34	32	80	28	81	41	29	24	153	120	300
A4	FM-A4V1	18	38	42	80	28	95	55	29	24	167	120	300
A5	FM-A5V1	18	56	50	80	28	109	69	29	24	181	120	300
A6	FM-A6V1	18	84	62	80	28	123	83	29	24	195	120	300
A7	FM-A7V1	18	96	72	80	28	137	97	29	24	210	120	300
A8	FM-A8V1	18	108	82	80	28	151	111	29	24	224	120	300
B3	FM-B3V1	18	38	30	65	21	64	31	23	18	77	120	260
B4	FM-B4V1	18	44	38	65	21	74.5	41.5	23	18	85	120	260
B5	FM-B5V1	18	50	46	65	21	85	52	23	18	94	120	260
B6	FM-B6V1	18	64	52	65	21	95.5	62.5	23	18	102	120	260
B7	FM-B7V1	18	78	60	65	21	106	73	23	18	110	120	260
B8	FM-B8V1	18	92	68	65	21	116.5	83.5	23	18	118	120	260
C3	FM-C3V1	15	25	17	47	14	46	21	21.5	12	42	120	220
C4	FM-C4V1	15	33	21	47	14	53	28	21.5	12	44	120	220
C5	FM-C5V1	15	39	31	47	14	60	35	21.5	12	45	120	220
C6	FM-C6V1	15	55	35	47	14	67	42	21.5	12	47	120	220
C7	FM-C7V1	15	73	41	47	14	74	49	21.5	12	48	120	220
C8	FM-C8V1	15	91	47	47	14	81	56	21.5	12	50	120	220

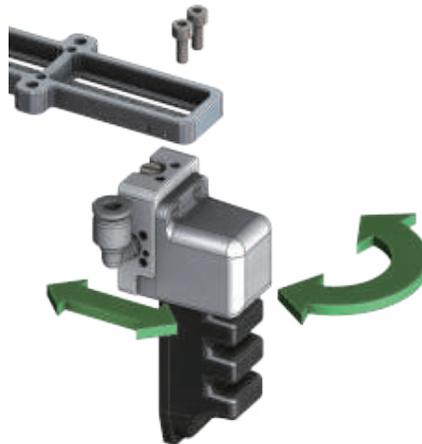
*: Negative pressure fingertip distance G_{max} : Measured when real working pressure is -80kPa

V2 Fixed Module: Singel-Finger Module

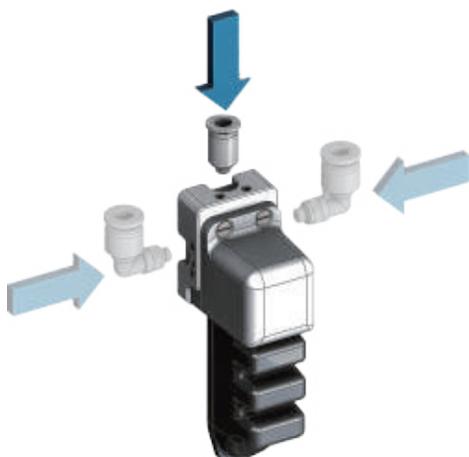
- **Features:** Single finger module combination, compatible with [SMP] sliding mounting plate, adjustable spacing and angle between fingers.
- **Fixation:** Can be fixed on four sides (optional).
- **Air intake:** Intake joints can be installed on three sides (optional).
- Additional Sensor module (optional).



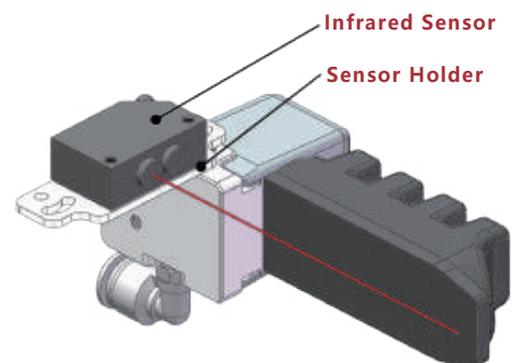
Pose Adjustment



Air Intake

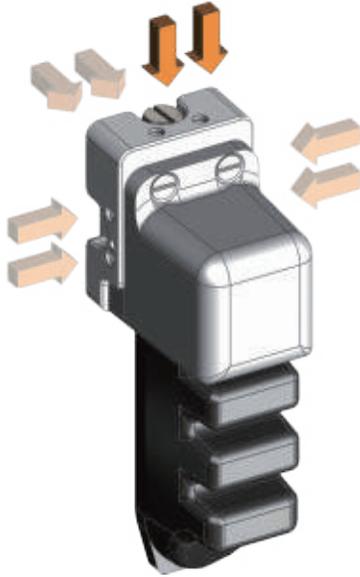


Sensor Installation

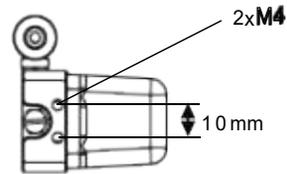
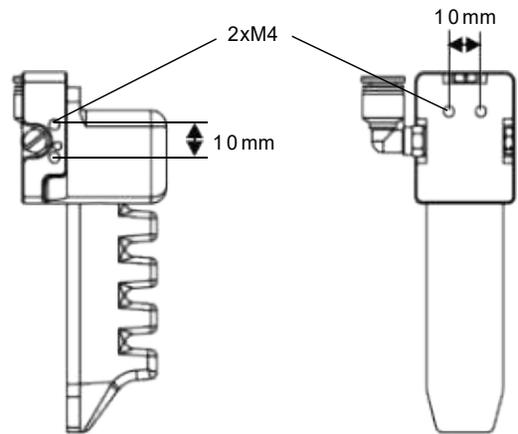


V2 Fixed Module: Singel-Finger Module

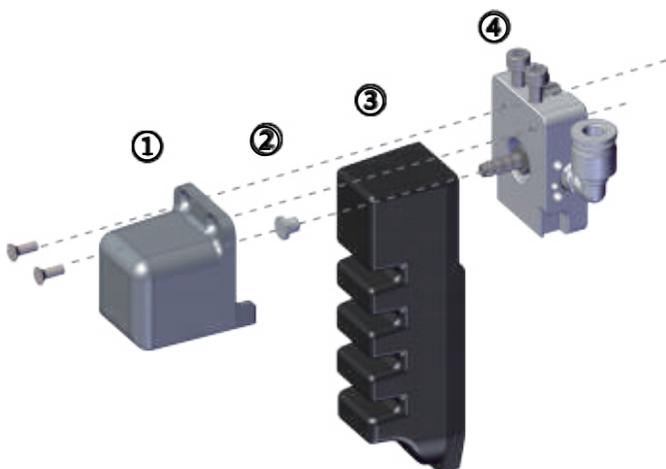
Fixation



Dimensions



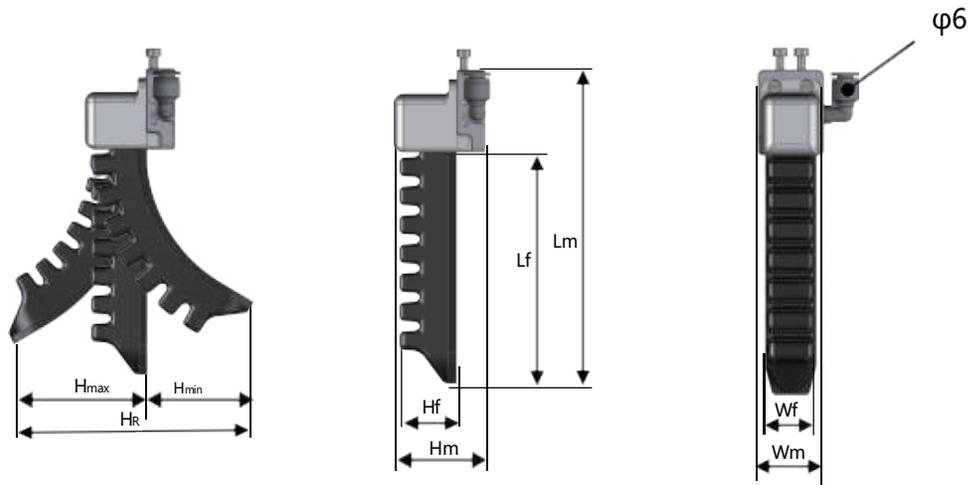
Assembly



Spare Part:

- ① Shell
- ② Plug
- ③ Finger
- ④ Mounting Block

V2 Fixed Module: Singel-Finger Module



Finger Size	Finger Module	Fingertip Stroke HR [mm]	Negative Pressure Fingertip Distance* Hmax [mm]		Positive Pressure Range** Hmin [mm]	Module-Height Hm [mm]	Finger-Height Hf [mm]	Module-Lenth Lm [mm]	Finger-Lenth Lf [mm]	Module-Width Wm [mm]	Finger-Width Wf [mm]	Weight [g]	Safe Pressure [kPa]	
			[P]/[PAS]	[H]/[HAS]									[P]/[PAS]	[H]/[HAS]
A3	FM-A3V2	16.5	8	7	8.5	45	28	82	41	31	24	92	120	300
A4	FM-A4V2	27	10	12	17	45	28	96	55	31	24	99	120	300
A5	FM-A5V2	43.5	19	16	24.5	45	28	110	69	31	24	106	120	300
A6	FM-A6V2	72	33	22	39	45	28	124	83	31	24	113	120	300
A7	FM-A7V2	90	39	27	51	45	28	138	97	31	24	120	120	300
A8	FM-A8V2	109	45	32	64	45	28	152	111	31	24	127	120	300
B3	FM-B3V2	19	10	6	9	37.5	21	65	31	25	18	52	120	260
B4	FM-B4V2	29	13	10	16	37.5	21	76	41.5	25	18	56	120	260
B5	FM-B5V2	40	16	14	24	37.5	21	86	52	25	18	60	120	260
B6	FM-B6V2	53	23	17	30	37.5	21	97	62.5	25	18	64	120	260
B7	FM-B7V2	75	30	21	45	37.5	21	107	73	25	18	68	120	260
B8	FM-B8V2	98	37	25	61	37.5	21	118	83.5	25	18	72	120	260
C3	FM-C3V2	10.5	5	1	5.5	30	14	44	21	18	12	27	120	220
C4	FM-C4V2	20	9	3	11	30	14	51	28	18	12	27	120	220
C5	FM-C5V2	27	12	8	15	30	14	58	35	18	12	28	120	220
C6	FM-C6V2	42	20	10	22	30	14	65	42	18	12	29	120	220
C7	FM-C7V2	63	29	13	34	30	14	72	49	18	12	30	120	220
C8	FM-C8V2	80	38	16	42	30	14	79	56	18	12	31	120	220

*: Negative Pressure Range Hmax : Measured when real working pressure is -80kPa.

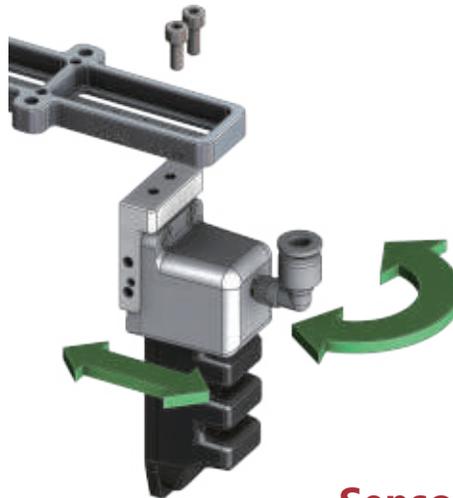
** : Positive Pressure Range Hmin: For Normal Material Finger [P]/[PAS], working pressure is 100kPa. For Strong Material Finger [H]/[HAS], working pressure is 250kPa.

V3 Fixed Module: Singel-Finger Module

- **Features:** Single finger module combination, compatible with [SMP] Slide Mounting Plate, adjustable spacing, and angle between fingers.
- **Fixation:** Can be fixed on three sides (optional).
- **Air intake:** The intake joint can only be installed on one side (the back of the finger).
- Additional Sensor module (optional).



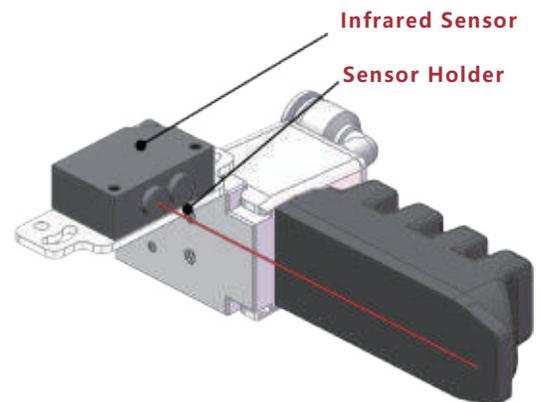
Pose Adjustment



Air Intake

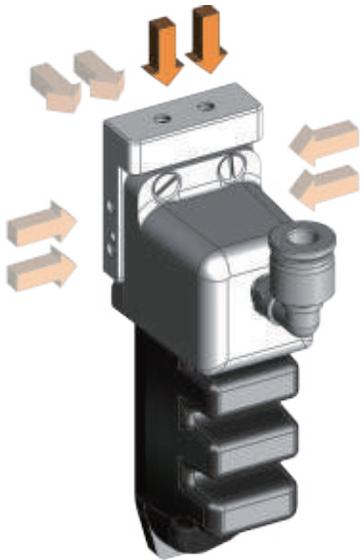


Sensor Installation

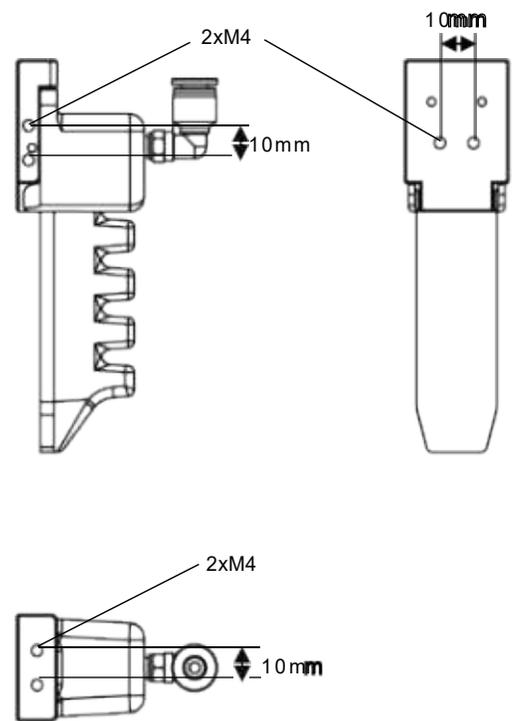


V3 Fixed Module: Singel-Finger Module

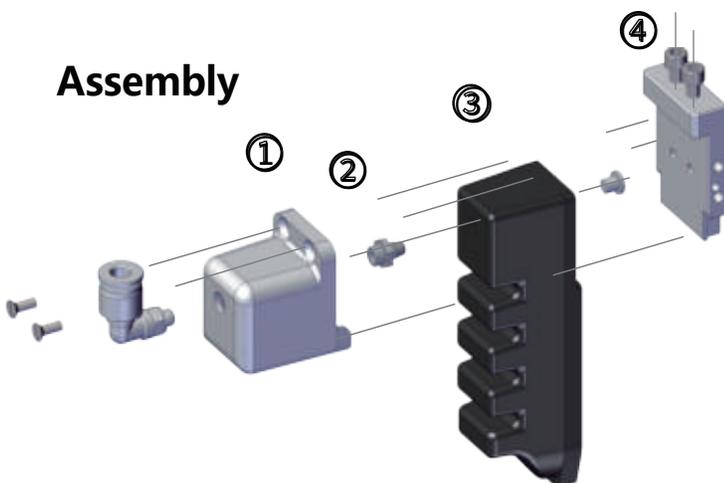
Fixation



Dimensions



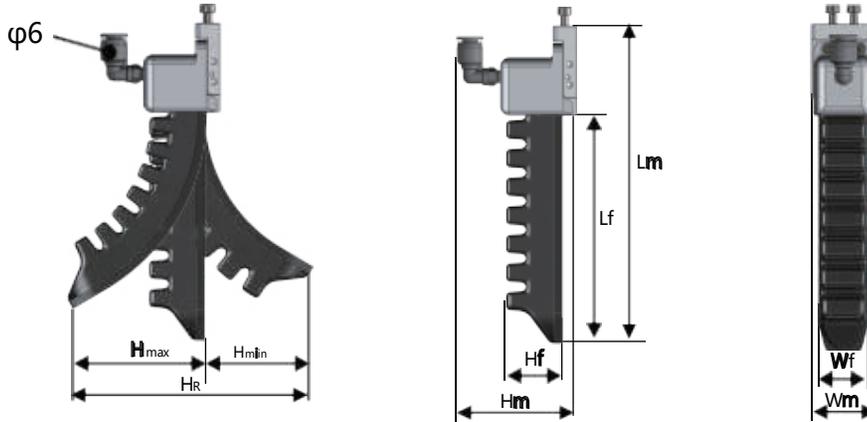
Assembly



Spare Part:

- ① Shell
- ② Plug
- ③ Finger
- ④ Mounting Block

V3 Fixed Module: Singel-Finger Module



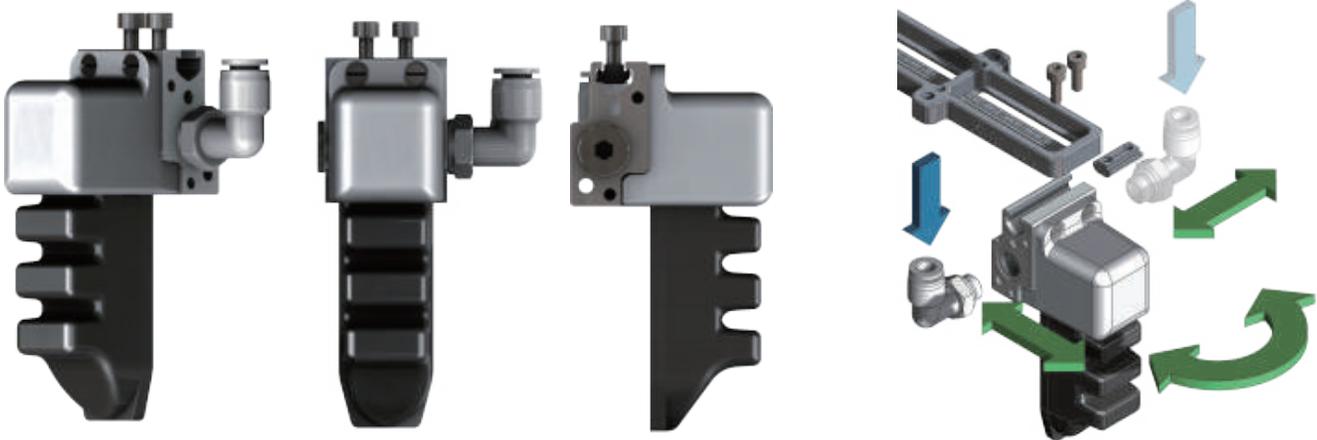
Finger Size	Finger Module	Fingertip Stroke HR [mm]	Negative Pressure Fingertip Distance* Hmax [mm]		Positive Pressure Range** Hmin [mm]	Module-Height Hm [mm]	Finger-Height Hf [mm]	Module-Lenth Lm [mm]	Finger-Lenth Lf [mm]	Module-Width Wm [mm]	Finger-Width Wf [mm]	Weight [g]	Safe Pressure [kPa]	
			[P]/[PAS]	[H]/[HAS]									[P]/[PAS]	[H]/[HAS]
A3	FM-A3V3	16.5	8	7	8.5	60	28	85.5	41	31	24	77	120	300
A4	FM-A4V3	27	10	12	17	60	28	99.5	55	31	24	84	120	300
A5	FM-A5V3	43.5	19	16	24.5	60	28	113.5	69	31	24	91	120	300
A6	FM-A6V3	72	33	22	39	60	28	127.5	83	31	24	98	120	300
A7	FM-A7V3	90	39	27	51	60	28	141.5	97	31	24	105	120	300
A8	FM-A8V3	109	45	32	64	60	28	155.5	111	31	24	112	120	300
B3	FM-B3V3	19	10	6	9	53	21	68.5	31	25	18	43	120	260
B4	FM-B4V3	29	13	10	16	53	21	79.5	41.5	25	18	47	120	260
B5	FM-B5V3	40	16	14	24	53	21	89.5	52	25	18	51	120	260
B6	FM-B6V3	53	23	17	30	53	21	100.5	62.5	25	18	55	120	260
B7	FM-B7V3	75	30	21	45	53	21	110.5	73	25	18	59	120	260
B8	FM-B8V3	98	37	25	61	53	21	121.5	83.5	25	18	63	120	260
C3	FM-C3V3	10.5	5	1	5.5	46	14	51	21	18	12	24	120	220
C4	FM-C4V3	20	9	3	11	46	14	58	28	18	12	25	120	220
C5	FM-C5V3	27	12	8	15	46	14	65	35	18	12	26	120	220
C6	FM-C6V3	42	20	10	22	46	14	72	42	18	12	26	120	220
C7	FM-C7V3	63	29	13	34	46	14	79	49	18	12	27	120	220
C8	FM-C8V3	80	38	16	42	46	14	86	56	18	12	28	120	220

*: Negative Pressure Range Hmax : Measured when real working pressure is -80kPa.

** : Positive Pressure Range Hmin: For Normal Material Finger [P]/[PAS], working pressure is 100kPa. For Strong Material Finger[H]/[HAS], working pressure is 250kPa.

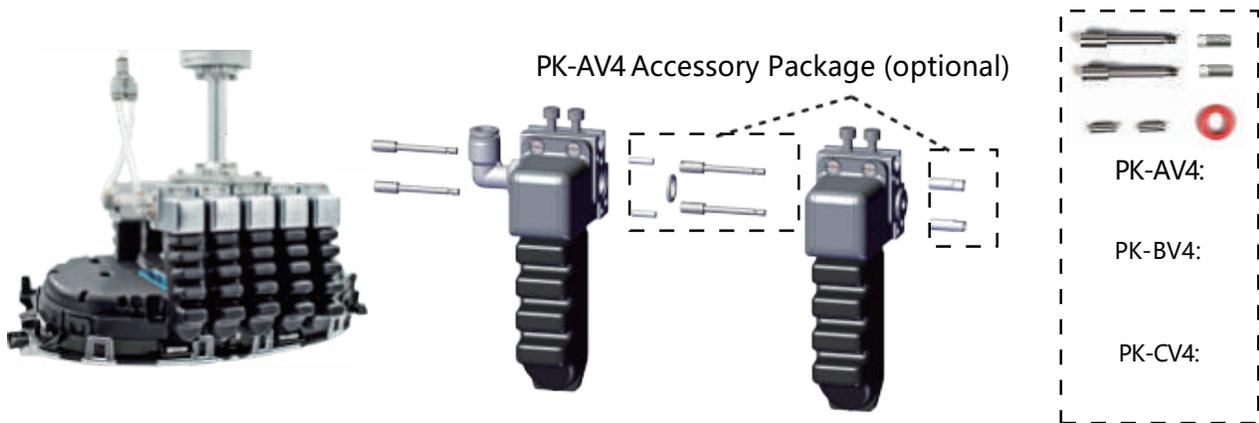
V4 Series-finger Module: Series air circuit, high load.

- **Features:** Series-finger Module, the gripping force is large, which can be used in series (using a parts kit [PK]). Only one air intake when more finger modules build in series. More fingers in series are good at gripping large and heavy objects.
- **Fixation:** It is fixed with T-nut. When installed with a sliding mounting plate, it can adjust the front and rear, left and right, and rotation respectively.
- **Air intake:** Air intake on left or right sides (optional).

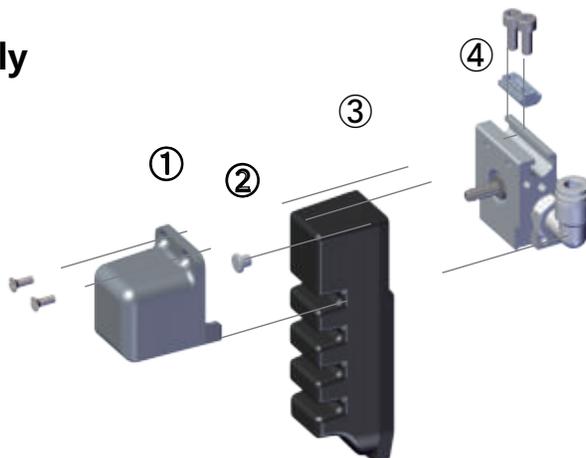


Series combination:

- Multiple finger modules are combined in series to increase the gripping force.
 - It can realize the seamless splicing between fingers and share the air inlet to save space.
- *Splicing finger modules requires a parts kit [PK] containing the bolts, nuts, sealings, and pins. The parts kit is not included in the finger module and needs to be ordered separately.



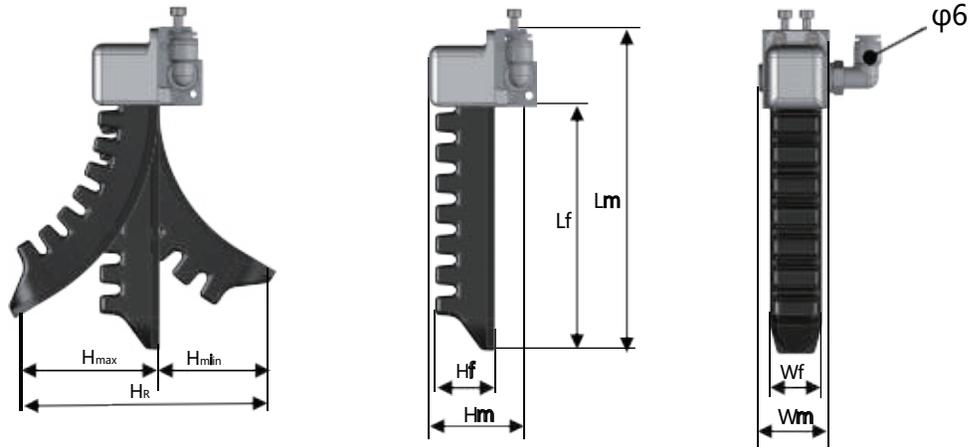
Assembly



Spare Part:

- ① Shell
- ② Plug
- ③ Finger
- ④ Mounting Block

V4 Series-finger Module: Series air circuit, high load.



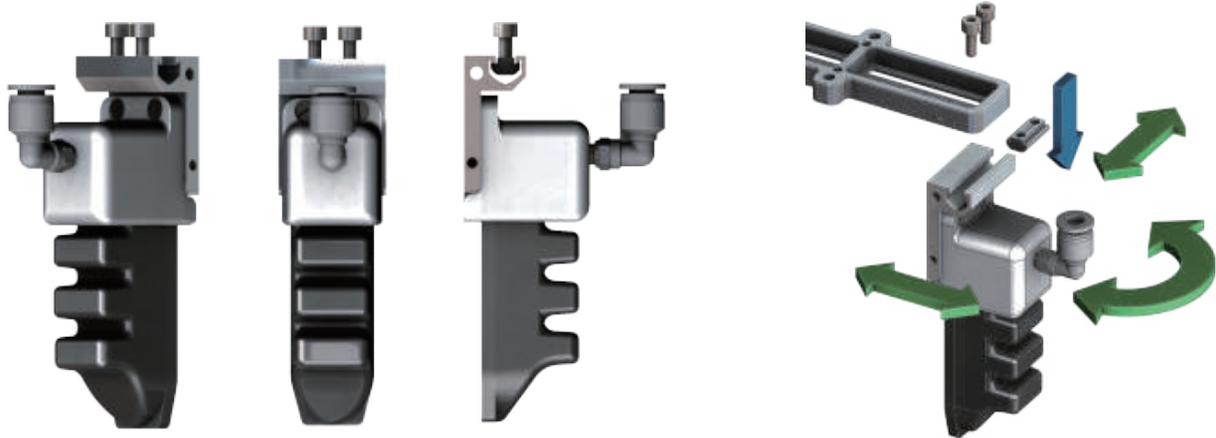
Finger Size	Finger Module	Fingertip Stroke HR [mm]	Negative Pressure Fingertip Distance* Hmax [mm]		Positive Pressure Range** Hmin [mm]	Module-Height Hm [mm]	Finger-Height Hf [mm]	Module-Lenth Lm [mm]	Finger-Lenth Lf [mm]	Module-Width Wm [mm]	Finger-Width Wf [mm]	Weight [g]	Safe Pressure [kPa]	
			[P]/[PAS]	[H]/[HAS]									[P]/[PAS]	[H]/[HAS]
A3	FM-A3V4	16.5	8	7	8.5	51	28	78	41	31	24	97	120	300
A4	FM-A4V4	27	10	12	17	51	28	92	55	31	24	104	120	300
A5	FM-A5V4	43.5	19	16	24.5	51	28	106	69	31	24	111	120	300
A6	FM-A6V4	72	33	22	39	51	28	120	83	31	24	119	120	300
A7	FM-A7V4	90	39	27	51	51	28	134	97	31	24	126	120	300
A8	FM-A8V4	109	45	32	64	51	28	148	111	31	24	133	120	300
B3	FM-B3V4	19	10	6	9	45	21	61	31	25	18	61	120	260
B4	FM-B4V4	29	13	10	16	45	21	72	41.5	25	18	65	120	260
B5	FM-B5V4	40	16	14	24	45	21	82	52	25	18	69	120	260
B6	FM-B6V4	53	23	17	30	45	21	93	62.5	25	18	73	120	260
B7	FM-B7V4	75	30	21	45	45	21	103	73	25	18	77	120	260
B8	FM-B8V4	98	37	25	61	45	21	114	83.5	25	18	81	120	260
C3	FM-C3V4	10.5	5	1	5.5	35	14	50	21	18	12	35	120	220
C4	FM-C4V4	20	9	3	11	35	14	57	28	18	12	36	120	220
C5	FM-C5V4	27	12	8	15	35	14	64	35	18	12	37	120	220
C6	FM-C6V4	42	20	10	22	35	14	71	42	18	12	38	120	220
C7	FM-C7V4	63	29	13	34	35	14	78	49	18	12	38	120	220
C8	FM-C8V4	80	38	16	42	35	14	85	56	18	12	39	120	220

*: Negative Pressure Range Hmax : Measured when real working pressure is -80kPa.

** : Positive Pressure Range Hmin: For Normal Material Finger [P]/[PAS], working pressure is 100kPa. For Strong Material Finger[H]/[HAS], working pressure is 250kPa.

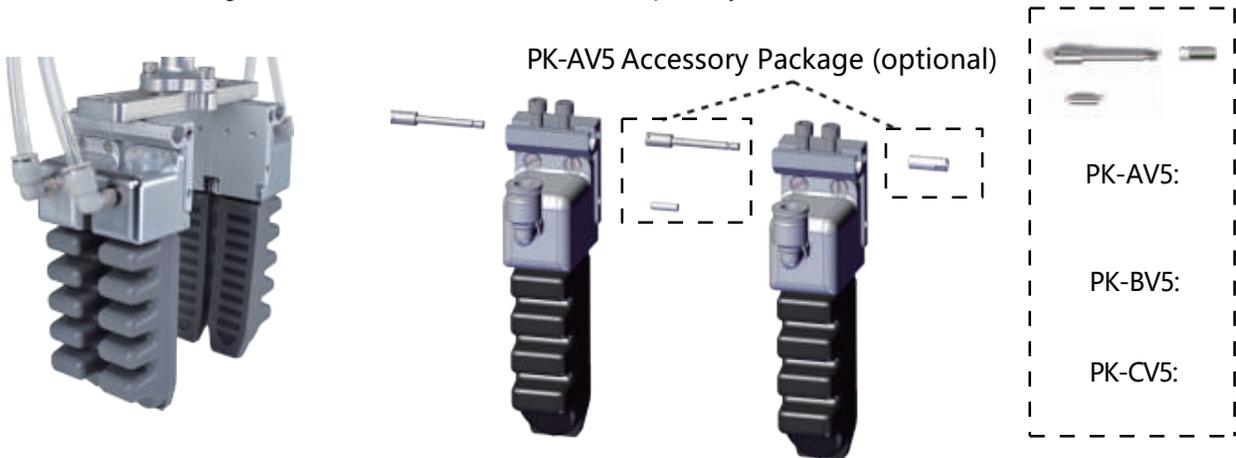
V5 Fixed Module: Series-finger Module

- **Features:** Series-finger Module, can be used in series. the minimum finger spacing of the installation module is only 10mm, which is suitable for clamping small and light workpieces. Compared with V4, each finger needs an independent air intake.
- **Fixation:** It is fixed with T-nut. When installed with a sliding mounting plate, it can adjust the front and rear, left and right, and rotation respectively.
- **Air intake:** Single air intake on finger backside.

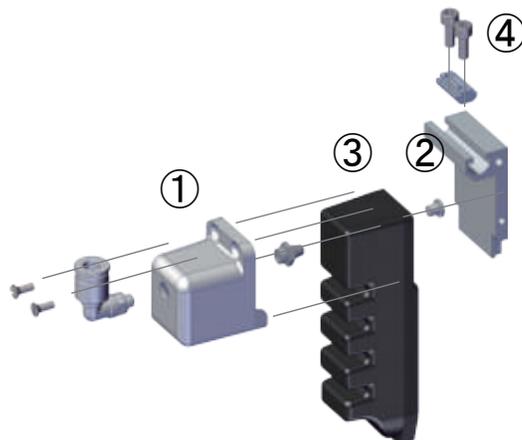


Series combination:

- Multiple fingers are combined in series to work at the same time to increase the gripping force
 - It can realize the seamless splicing between fingers and share the air inlet to save space.
- *Splicing finger modules requires a parts kit [PK] containing the bolts, nuts, sealings, and pins. The parts kit is not included in the finger module and needs to be ordered separately.



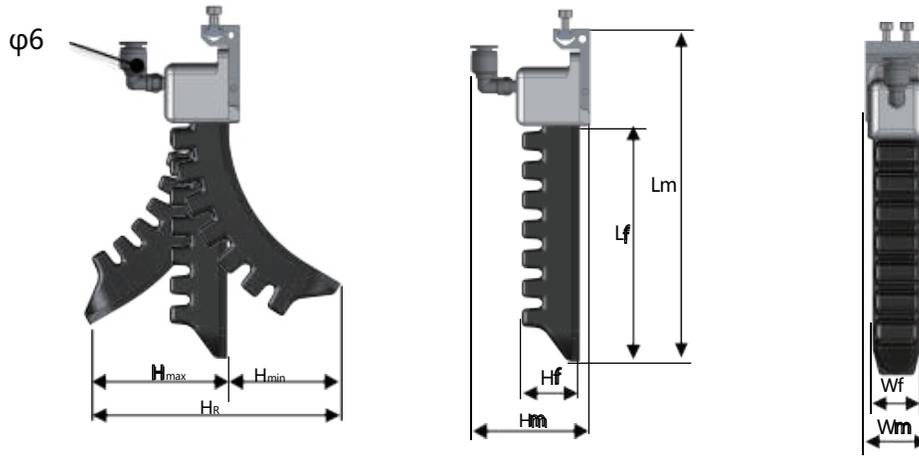
Assembly



Spare Part:

- ① Shell
- ② Plug
- ③ Finger
- ④ Mounting Block

V5 Fixed Module



Finger Size	Finger Module	Fingertip Stroke HR [mm]	Negative Pressure Fingertip Distance* Hmax [mm]		Positive Pressure Range** Hmin [mm]	Module-Height Hm [mm]	Finger-Height Hf [mm]	Module-Lenth Lm [mm]	Finger-Lenth Lf [mm]	Module-Width Wm [mm]	Finger-Width Wf [mm]	Weight [g]	Safe Pressure [kPa]	
			[P]/[PAS]	[H]/[HAS]									[P]/[PAS]	[H]/[HAS]
A3	FM-A3V5	16.5	8	7	8.5	58	28	88	41	31	24	76	120	300
A4	FM-A4V5	27	10	12	17	58	28	102	55	31	24	83	120	300
A5	FM-A5V5	43.5	19	16	24.5	58	28	116	69	31	24	90	120	300
A6	FM-A6V5	72	33	22	39	58	28	130	83	31	24	97	120	300
A7	FM-A7V5	90	39	27	51	58	28	144	97	31	24	104	120	300
A8	FM-A8V5	109	45	32	64	58	28	158	111	31	24	111	120	300
B3	FM-B3V5	19	10	6	9	51	21	71	31	25	18	44	120	260
B4	FM-B4V5	29	13	10	16	51	21	82	41.5	25	18	48	120	260
B5	FM-B5V5	40	16	14	24	51	21	92	52	25	18	52	120	260
B6	FM-B6V5	53	23	17	30	51	21	103	62.5	25	18	56	120	260
B7	FM-B7V5	75	30	21	45	51	21	113	73	25	18	60	120	260
B8	FM-B8V5	98	37	25	61	51	21	124	83.5	25	18	64	120	260
C3	FM-C3V5	10.5	5	1	5.5	44	14	53	21	18	12	28	120	220
C4	FM-C4V5	20	9	3	11	44	14	60	28	18	12	28	120	220
C5	FM-C5V5	27	12	8	15	44	14	67	35	18	12	29	120	220
C6	FM-C6V5	42	20	10	22	44	14	74	42	18	12	30	120	220
C7	FM-C7V5	63	29	13	34	44	14	81	49	18	12	31	120	220
C8	FM-C8V5	80	38	16	42	44	14	88	56	18	12	32	120	220

*: Negative Pressure Range Hmax : Measured when real working pressure is -80kPa.

**: Positive Pressure Range Hmin: For Normal Material Finger [P]/[PAS], working pressure is 100kPa. For Strong Material Finger[H]/[HAS], working pressure is 250kPa.

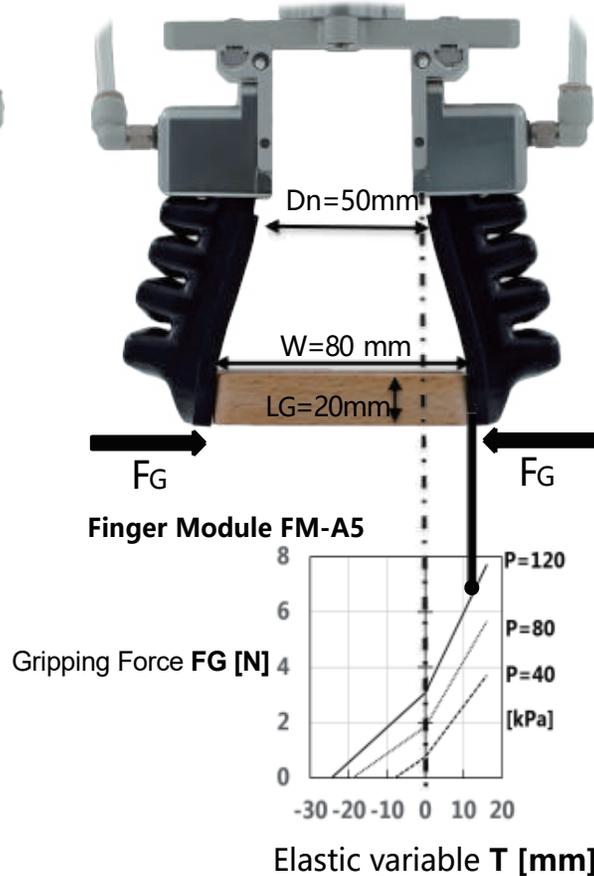
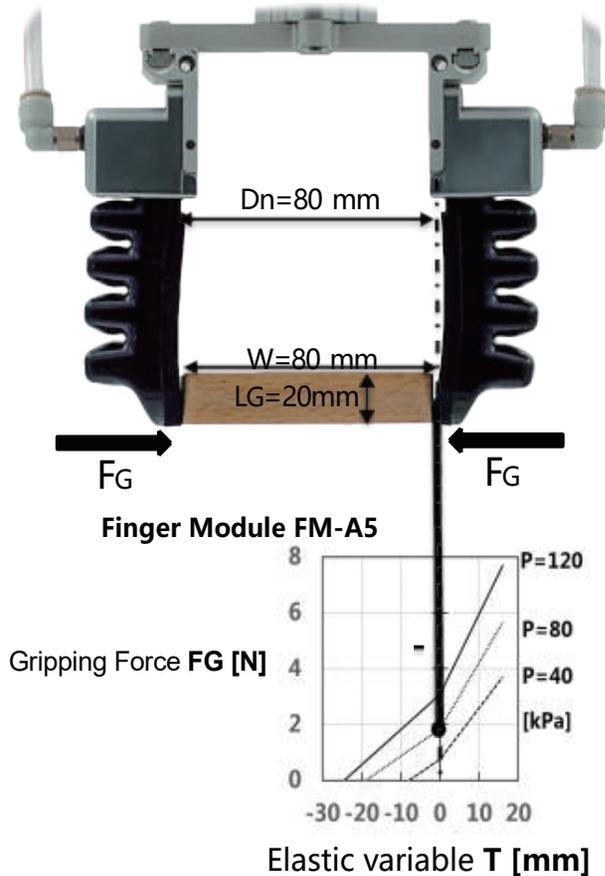
Characteristic parameter: Adjustment and calculation method of gripping force of finger module

When the finger module is inflated, it bends inward and generates a horizontal gripping force FG when contacting the gripped workpiece. This gripping force is related to the shape of the workpiece, the type of finger, the contact area between the finger and the workpiece, the installation fingertip distance Dn (page. 59), and the working air pressure P .

Take FM-A5 finger module (normal material) as an example to clamp a square workpiece under different working conditions. The width of the workpiece is $W = 80\text{mm}$, and the covering length of the fingertip is $LG = 20\text{mm}$:

Working condition 1:
Installation fingertip distance $Dn=80\text{[mm]}$
Working pressure $P=80\text{[kPa]}$

Working condition 2:
Installation fingertip distance $Dn=50\text{[mm]}$
Working pressure $P=120\text{[kPa]}$



Elastic variable $T=(W-Dn)/2=0$
Gripping Force $FG=1.85\text{[N]}$

When the workpiece width $W>$ installation fingertip distance Dn
Elastic variable $T=(W-Dn)/2=15\text{[mm]}$
Gripping force $FG=7.3\text{[N]}$

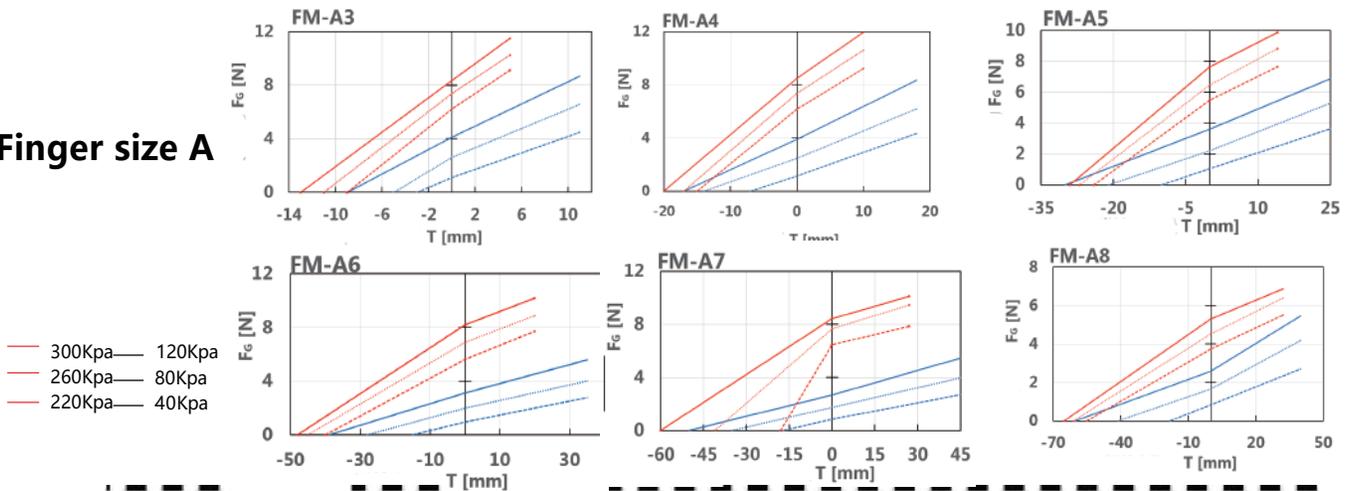
- 1, Higher working pressure P , higher Gripping force FG .
- 2, Shorter finger distance Dn , higher Gripping force FG .
- 3, Bigger finger size, higher Gripping force FG .
- 4, The strong material finger can hold higher air pressure and has a stronger force than the normal material finger.
- 5, Exceeding the safe working pressure will cause irreversible damage to the soft finger and a shorter lifetime, while shorter Dn may increase the abrasion of the finger bottom.
- 6, More fingers in series (Page. 37,39) can also improve the overall Gripping force.
- 7, Besides the Gripping force FG , the real handling load of the gripper is also related to the shape of the object, friction coefficient, finger bottom print, machine speed, etc.

Finger Module Gripping force diagram

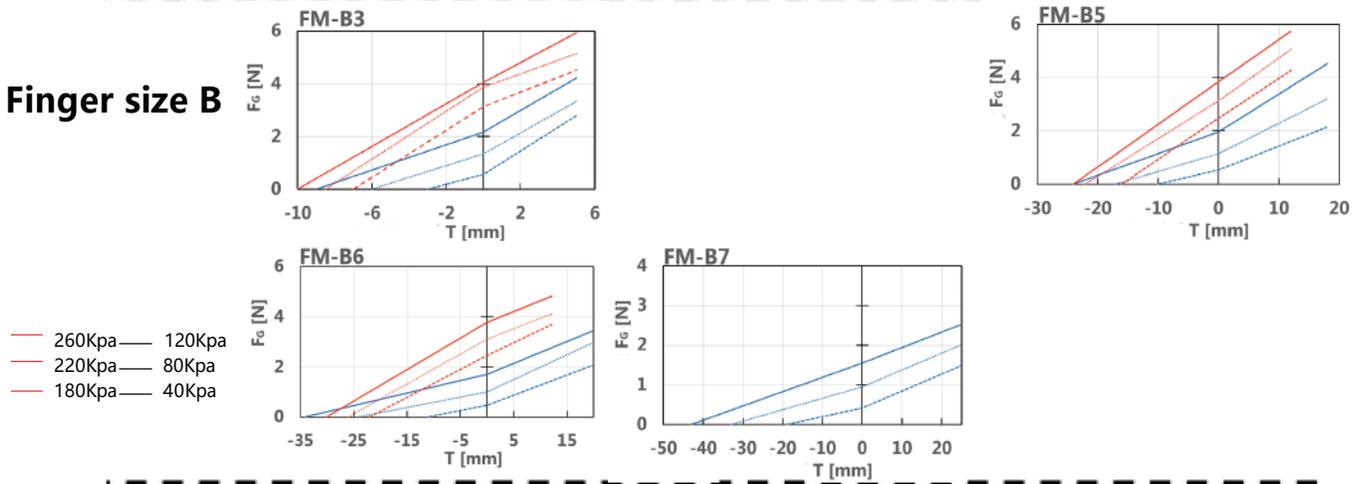
The relevant values in the curve are determined under the following conditions:

- Finger material: normal material, strong material
- Use square workpiece, finger pattern LS1
- Only the fingertip part is in contact with the workpiece, and the fingertip covering length $LG = 10\text{mm}$.
- The following data is for reference only. Under other working conditions, the values will be different

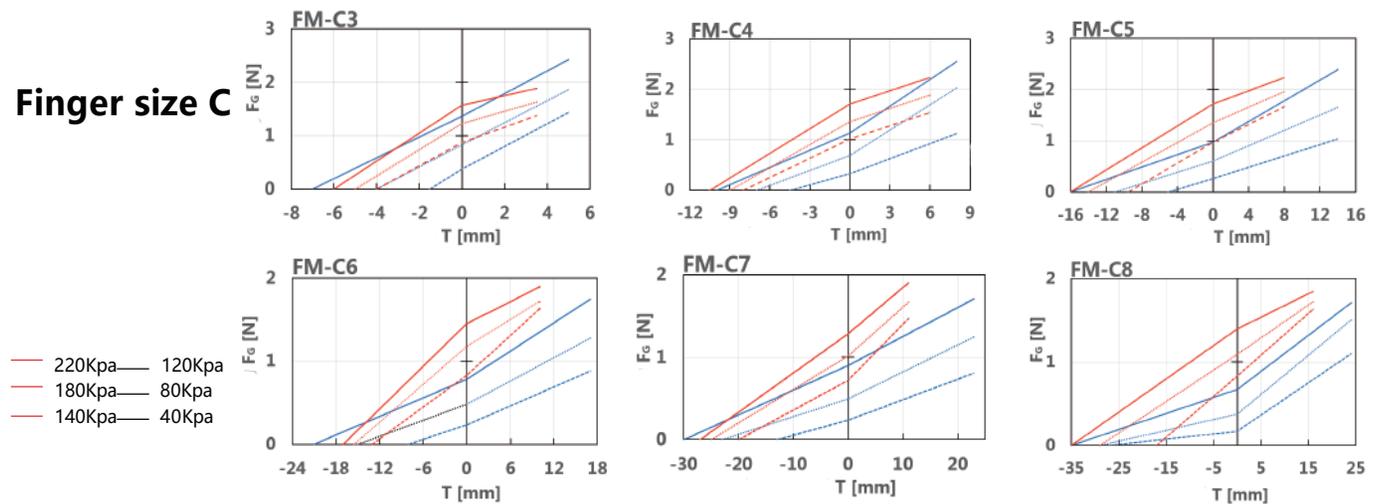
Finger size A



Finger size B



Finger size C



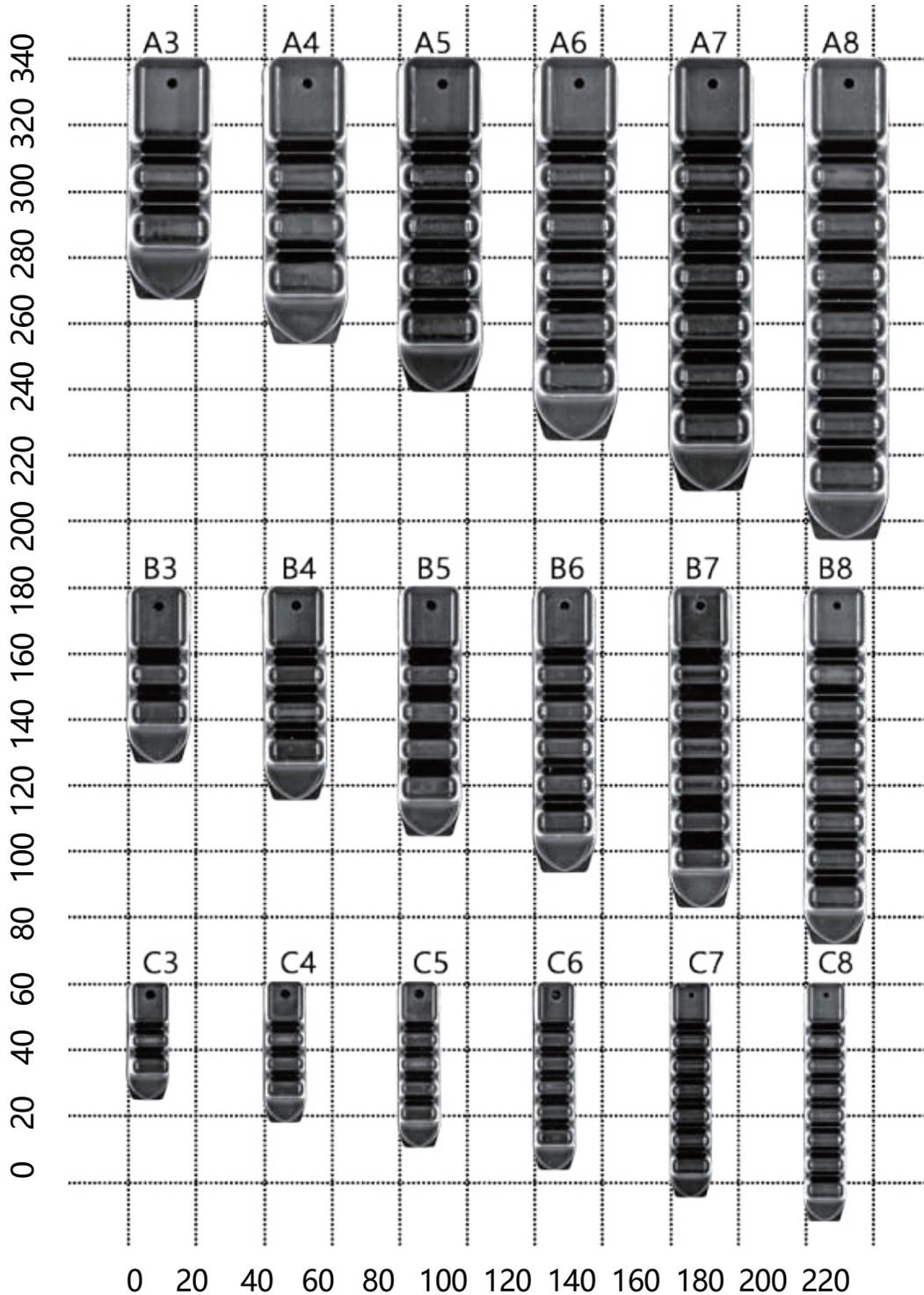
Rochu Finger [F] can be replaced independently.

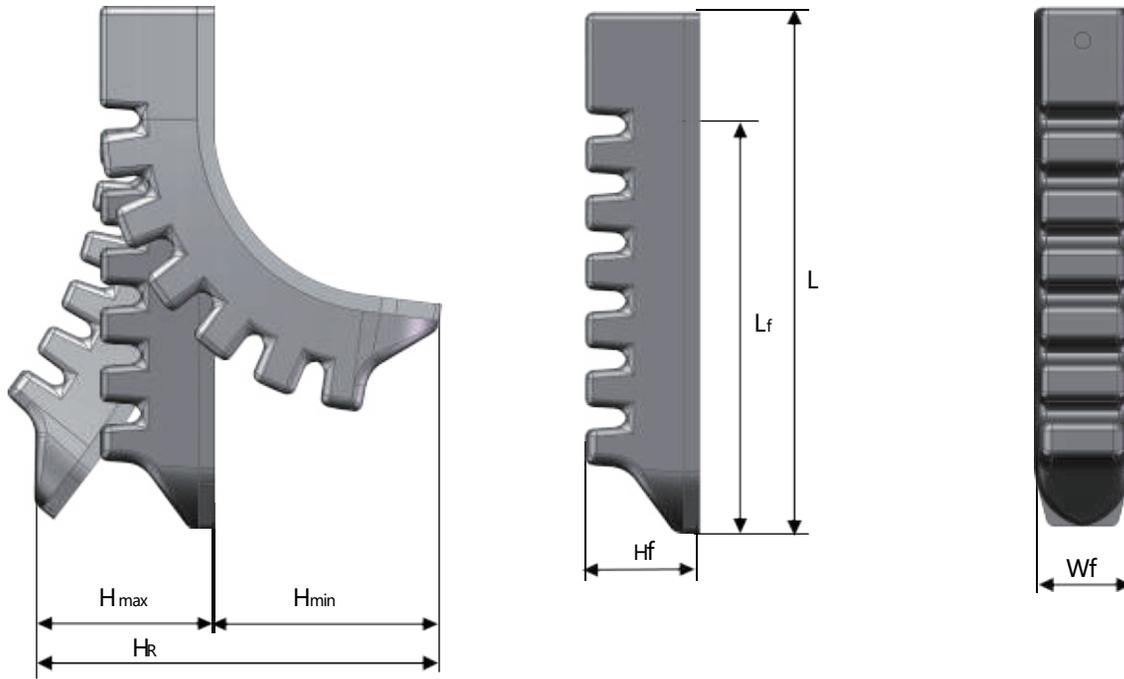
There are 18 finger sizes (A3, A4, A5, A6, A7, A8; B3, B4, B5, B6, B7, B8; C3, C4, C5, C6, C7, C8).

With the same working pressure, the wider fingers have higher gripping force, and the shorter fingers have better positioning accuracy and stability.

For customized finger sizes, please contact our customer service.

Finger Sizes

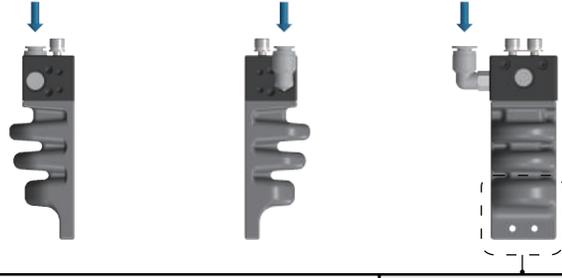




Finger Size	Fingertip Range	Negative Pressure Fingertip Distance* Hmax [mm]		Positive Pressure Range**	Width	Length	Length	Width	Weight [g]	Safe Pressure [kPa]	
	HR [mm]	[P]/[PAS]	[H]/[HAS]	Hmin [mm]	Hf [mm]	Lf [mm]	L[mm]	Wf [mm]		[P]/[PAS]	[H]/[HAS]
F-A3	16.5	8	7	8.5	28	41	69	24	33	120	300
F-A4	27	10	12	17	28	55	83	24	40	120	300
F-A5	43.5	19	16	24.5	28	69	97	24	47	120	300
F-A6	72	33	22	39	28	83	111	24	55	120	300
F-A7	90	39	27	51	28	97	125	24	62	120	300
F-A8	109	45	32	64	28	111	139	24	69	120	300
F-B3	19	10	6	9	21	31	52	18	11	120	260
F-B4	29	13	10	16	21	42	62	18	16	120	260
F-B5	40	16	14	24	21	52	73	18	20	120	260
F-B6	53	23	17	30	21	63	83	18	24	120	260
F-B7	75	30	21	45	21	73	94	18	28	120	260
F-B8	98	37	25	61	21	84	104	18	32	120	260
F-C3	10.5	5	1	5.5	14	21	34	12	4	120	220
F-C4	20	9	3	11	14	28	41	12	5	120	220
F-C5	27	12	8	15	14	35	48	12	6	120	220
F-C6	42	20	10	22	14	42	55	12	7	120	220
F-C7	63	29	13	34	14	49	62	12	7	120	220
F-C8	80	38	16	42	14	56	69	12	8	120	220

*: Negative Pressure Range Hmax : Measured when real working pressure is -80kPa.

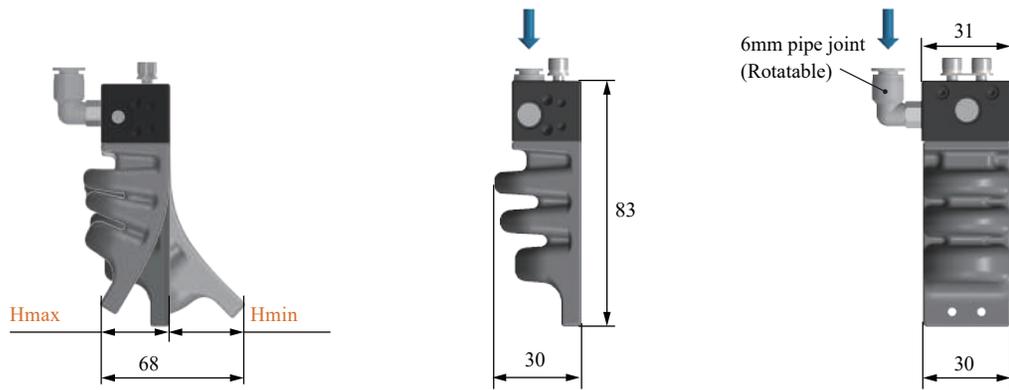
** : Positive Pressure Range Hmin: For Normal Material Finger [P]/[PAS], working pressure is 100kPa. For Strong Material Finger[H]/[HAS], working pressure is 250kPa.



H Type FM-D4[H]		Dust-free H Type FM-D4[HAS]		Fingertips shape	
Delivery date: 1 day		Delivery date: 10 days		Double threaded holes inside, which can be used for installing profiling block	
Gray					
Positive pressure stroke (P=250kPa) Hmin[mm]	Negative pressure stroke (P=-80kPa) Hmax[mm]	Safe working air pressure [kPa]	Suggested load[g]	Self-weight[g]	
42	26	250	1000	62	

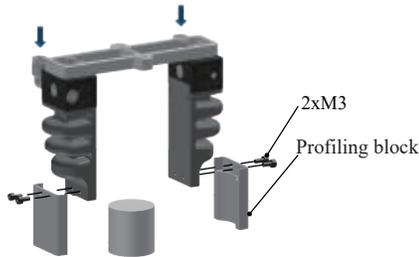
Do not connect the gripper directly to high-pressure gas. Working under excessive pressure will cause irreversible damage to the product, resulting in a sharp reduction in the product's lifespan or direct damage.

The suggested load is for model-selection reference only. Actual-condition load depends on module type, workpiece shape, clamping coverage, motion acceleration, surface friction coefficient, etc. For specific clamping results, consult professional model-selection tech support.

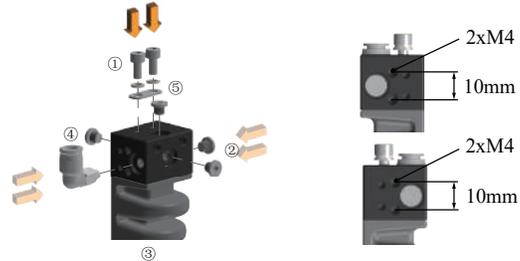


Unit: [mm]

Profiling block installation

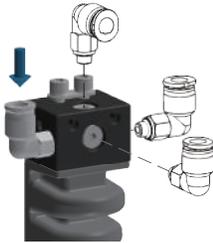


Fixing method

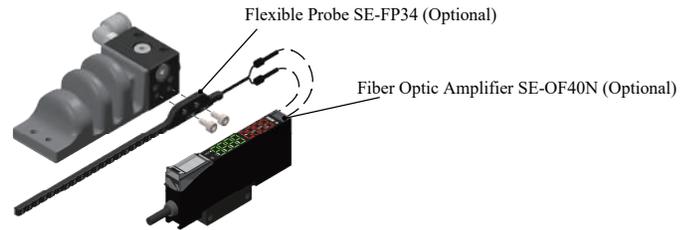


- Accessories:
- ① Installation screws
 - ② Plug
 - ③ Soft finger
 - ④ Air pipe joint
 - ⑤ Gasket

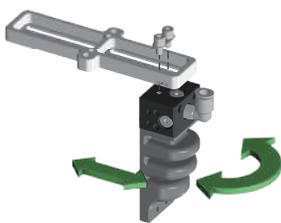
Air intake mode



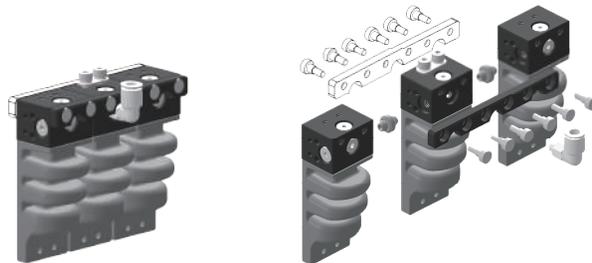
Sensor installation



Attitude adjustment



Serial assembly



CU

Control Unit



LCU-S
Light Control Unit



LCU-H
Light Control Unit



iPCU2
Integrated Passive Control Unit



ACU2-B
Active Control Unit



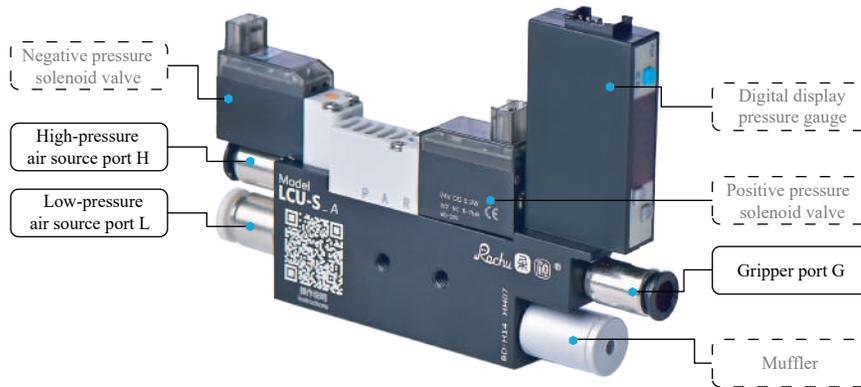
ACU2-H
Active Control Unit



PCU2
Passive Control Unit

LCU-S Lightweight Drive Module (Standard Type)

- Compatible with the full series of soft beaks and soft fingers, and can precisely adjust the clamping force in conjunction with a precision pressure regulating valve.
- Small in size, light in weight, with a response speed of 5ms, and can be driven asynchronously in multiple channels.
- Equipped with a flat mounting bracket and filter.



Model table

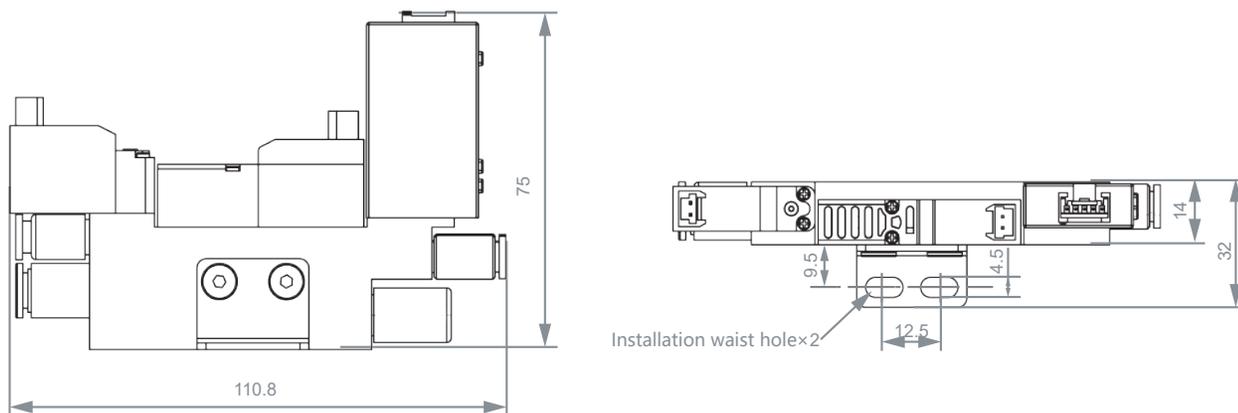
Model	Air pressure output signal	Noise[dB]	Net Weight[g]	Size[mm]
LCU-S_A	I/O signal	80	127	110.8×14×76.5

Working parameters

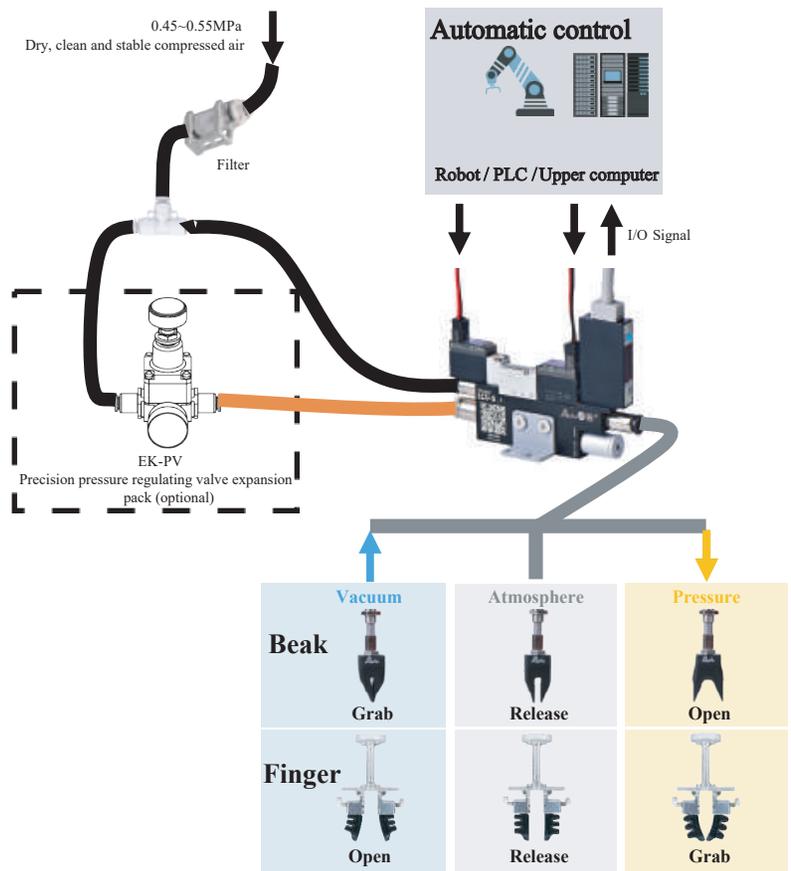
Item	Range	Item	Range
Output pressure	-90~300kPa	Drive mode	24V I/O drive
Response speed of solenoid valve	5ms	Lifetime	2000 million times
Pressure flow rate*	35L/min	Vacuum flow rate*	30L/min
High-pressure air source H input	0.45 - 0.55 MPa, dry, clean and stable, flow rate > 40 L/min	Low-pressure air source L input	0~300kPa, dry, clean and stable

* : The test conditions for this flow parameter are: the pressure at high-pressure gas source port H=0.5 MPa, and the pressure at low-pressure gas source port L=100 kPa.

Appearance & Size

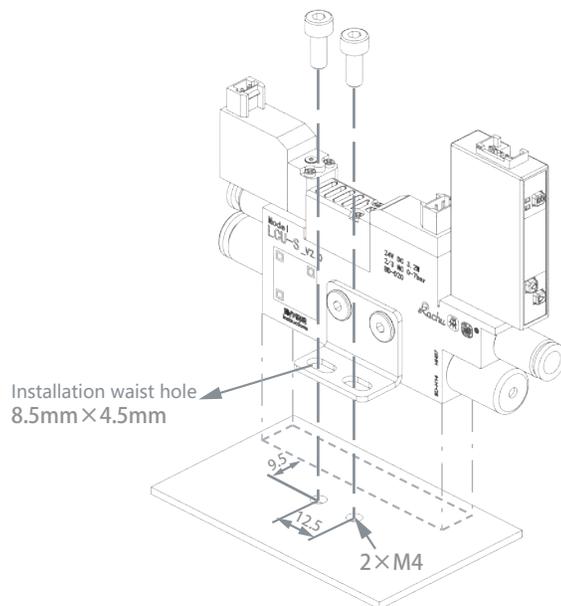


Usage method



Air circuit characteristics	Gripper status	Vacuum	Atmosphere	Pressure
	Positive pressure solenoid valve	Power off	Power off	Power on
	Vacuum solenoid valve	Power on	Power off	Power off

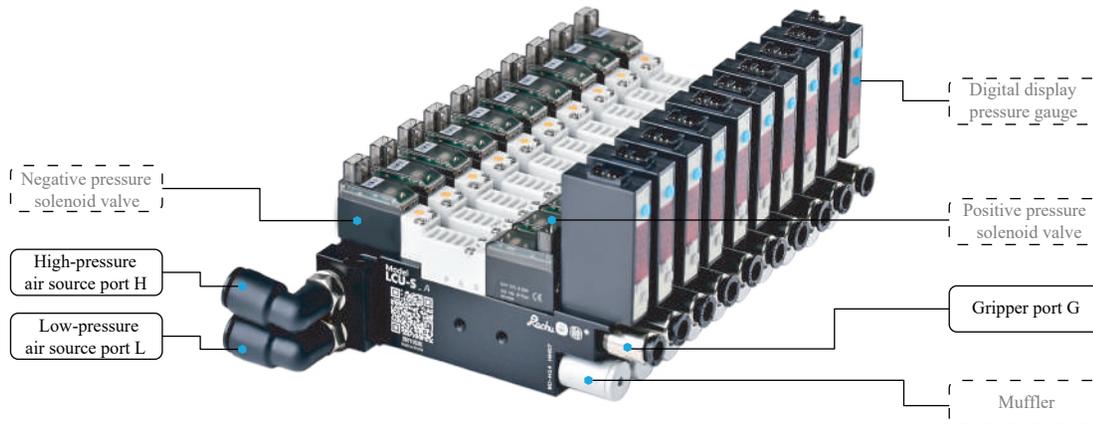
Installation method



Control Unit

LCU-S (2~10) Lightweight drive module (combined type)

- Compatible with the full series of soft claws and soft fingers, and can precisely adjust the clamping force in conjunction with a precision pressure regulating valve.
- Asynchronous drive in multiple channels, with a response speed of 5ms.
- Equipped with a filter.



Model table

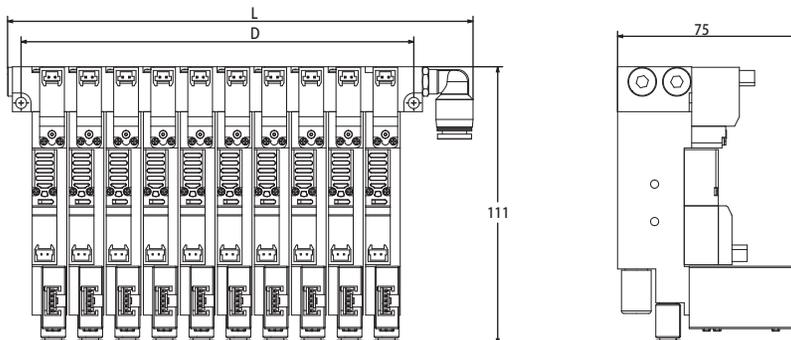
Model	Quantity of models	D[mm]	L[mm]	Noise[dB]	Air pressure output signal	Pressure flow rate* [L/min]	Vacuum flow rate* [L/min]	High-pressure air source H input flow [L/min]
LCU-S2_A	2	39	74	82.5	I/O Signal	70	57	>60
LCU-S3_A	3	54	89	83	I/O Signal	97	83	>85
LCU-S4_A	4	69	104	84	I/O Signal	127	105	>105
LCU-S5_A	5	84	119	85	I/O Signal	154	135	>140
LCU-S6_A	6	99	134	86.2	I/O Signal	175	162	>165
LCU-S7_A	7	114	149	86.5	I/O Signal	192	186	>190
LCU-S8_A	8	129	164	86.5	I/O Signal	205	208	>210
LCU-S9_A	9	144	179	87	I/O Signal	220	233	>235
LCU-S10_A	10	159	194	89	I/O Signal	230	252	>255

* : The test conditions for this flow parameter are: the pressure at high-pressure gas source port H=0.54 MPa, and the pressure at low-pressure gas source port L=100 kPa.

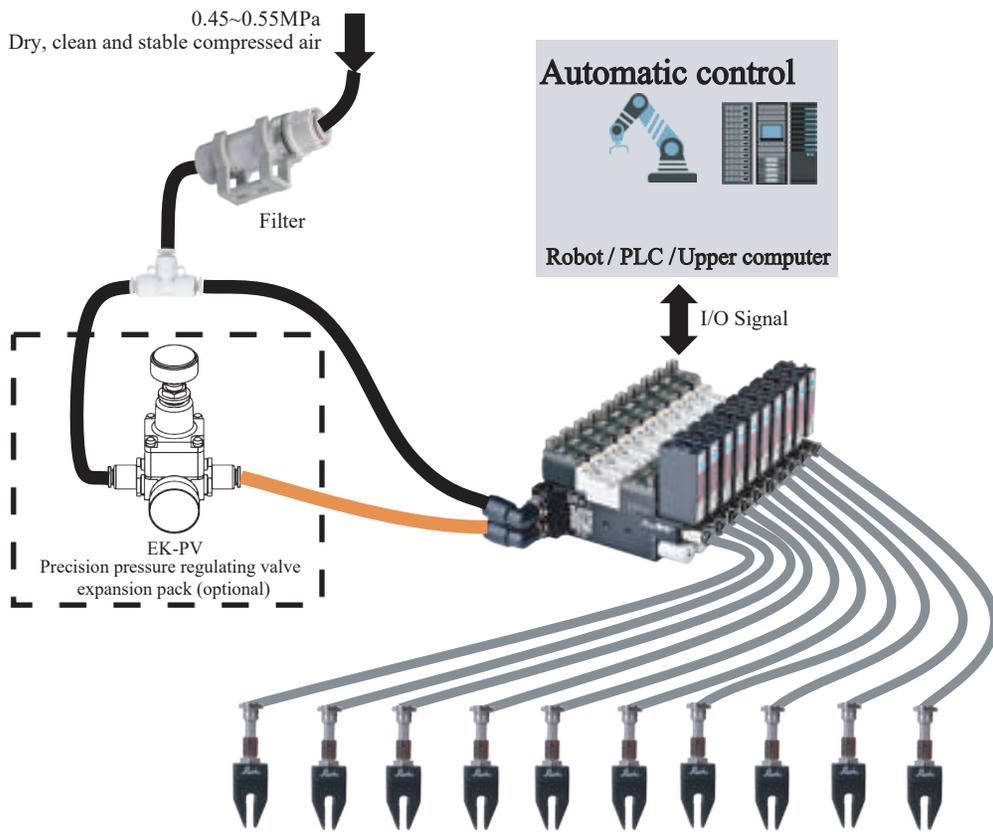
Working parameters

Item	Range	Item	Range
Output pressure	-90~300kPa	Drive mode	24V I/O drive
Response speed of solenoid valve	5ms	Lifetime	2000 million times
Response speed of solenoid valve	0.45 - 0.55 MPa, dry, clean and stable	Low-pressure air source L input	0~300kPa, dry, clean and stable

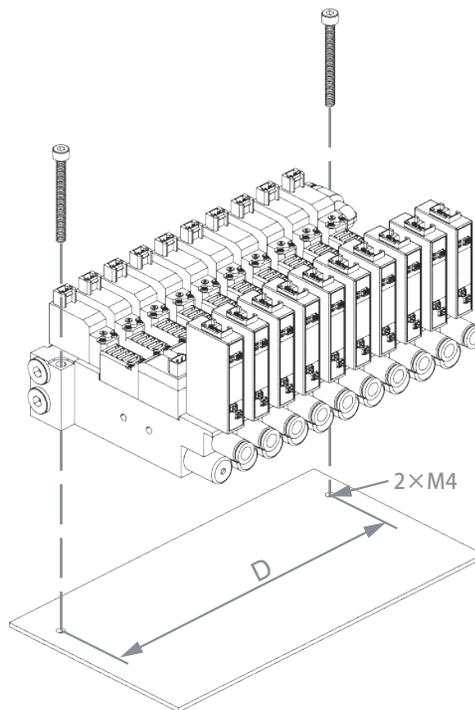
Appearance & Size



Usage method

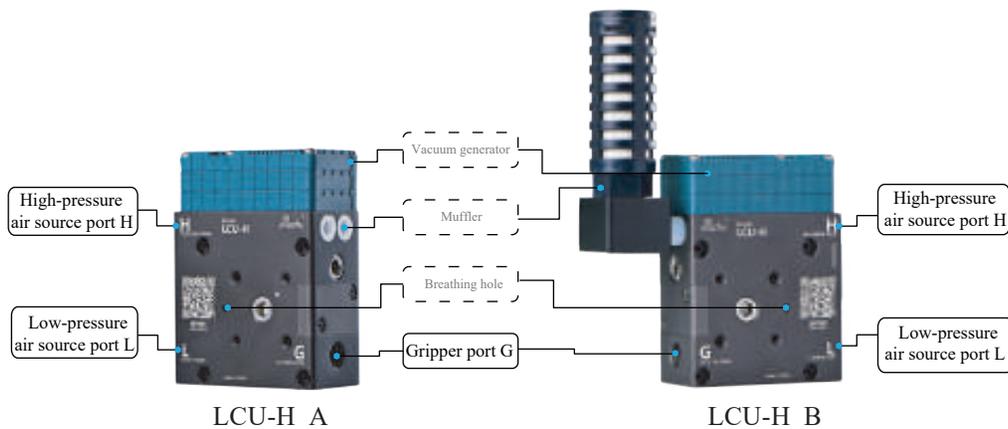


Installation method



LCU-H Lightweight Drive Module (High-Speed Type)

- Output air pressure range of -85~300kPa, suitable for driving the full series of soft claws and soft fingers.
- Cylinder-type pneumatic control method, simple operation and convenient replacement.
- Small in size and light in weight, it can be flexibly combined in multiple channels to form an asynchronous driving mode.
- Equipped with flat and flange mounting holes and industrial rail buckles, with multiple installation methods.



Model table

Model	Noise [dB]	Net weight [g]	Size [mm]
LCU-H_A	92	350	85×63.6×31
LCU-H_B	72	380	137.3×97.9×31

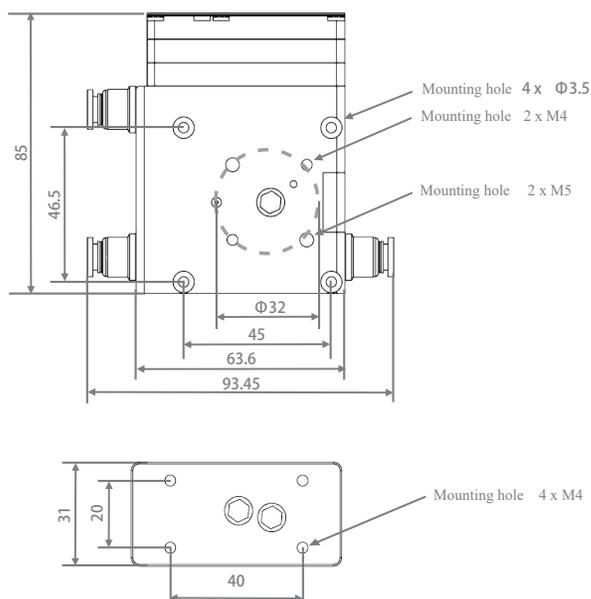
Working parameters

Item	Range	Item	Range
Output pressure	-85~300kPa	Drive mode	Pneumatic drive
Valve body material	Aluminum alloy anodic oxidation	Lifetime	5000 million times
Pressure flow rate*	165L/min	Vacuum flow rate*	55L/min
High-pressure air source H input	0.45 - 0.8 MPa, dry, clean and stable, flow rate > 200 L/min	Low-pressure air source L input	0~300kPa, dry, clean and stable

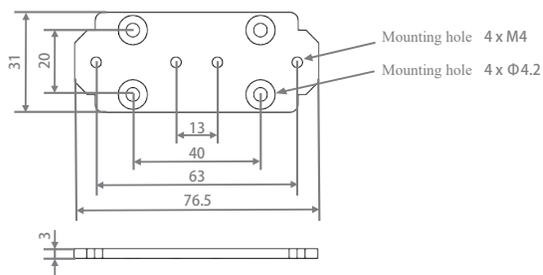
* The test conditions for this flow parameter are: the pressure at the high-pressure gas source port H = 0.6 MPa, and the pressure at the low-pressure gas source port L = 100 kPa.

Appearance & Size

Drive body

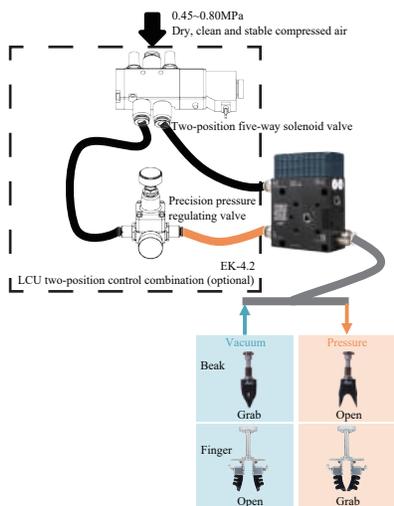


Guide rail buckle adapter plate

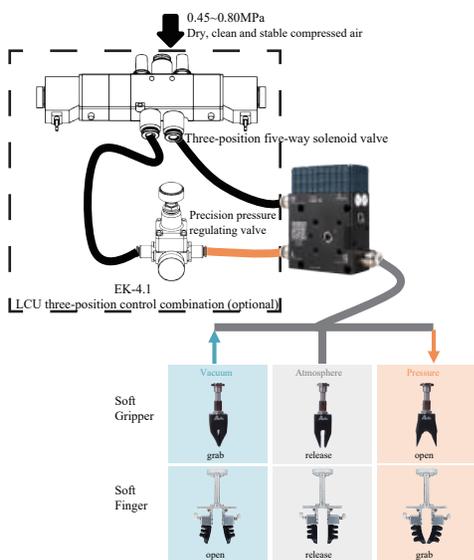


Usage

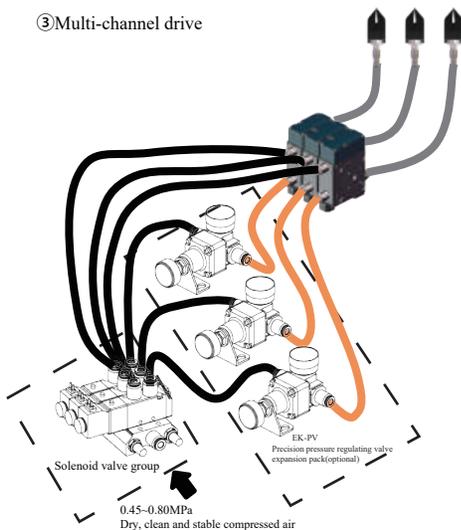
① Two single-channel drives



② Three single-channel drives

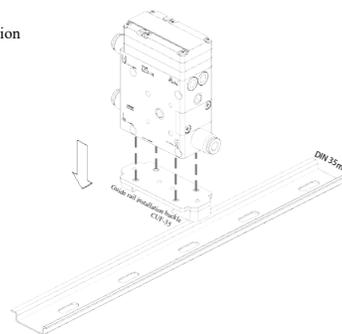


③ Multi-channel drive

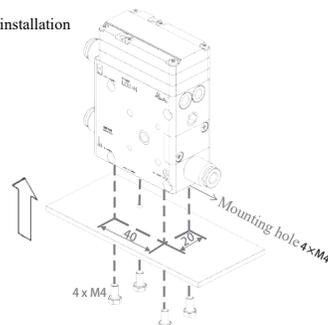


Installation method

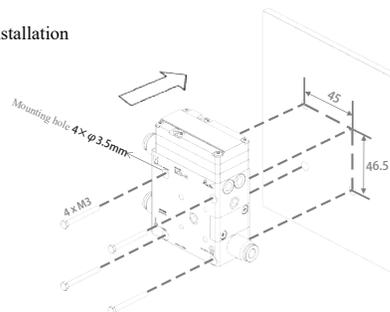
① Guide rail installation



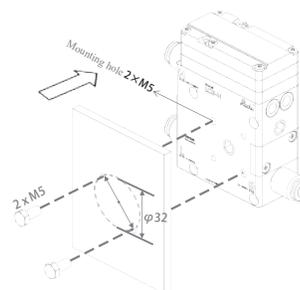
② Bottom surface installation



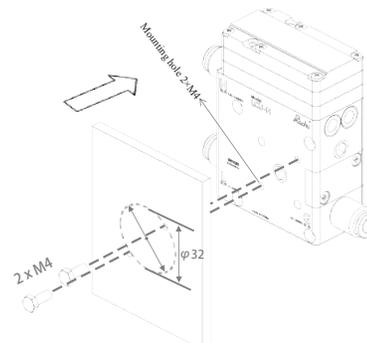
③ Side installation



④ Side installation



⑤ Side installation



iPCU2 Integrated Passive Control Unit

- 90~300kPa three levels can adjust the output pressure range, fully support from soft Beak to soft finger drive.
- Manual knob type pressure regulating.
- Integrated panel with digital display and operation buttons.
- With manual (button) and automatic (I/O level signal) two control modes, with all kinds of mechanical arm, PLC and others.

- Equipped with Installation bracket and industrial rail buckle, a variety of Installation.
- Intelligent alarm function, safe and stable, no need to worry about misoperation.
- with European CE safety certification.



Model

Model		Adjust Vacuum	Output pressure	Max pressure	Vacuum flow*	Working noise	N.W.
iPCU2-SMV	Standard vacuum pressure regulating type	Manual	-85 ~ 300[kPa]	-85kPa	40L/min	76dB	2.1kg
iPCU2-SMN	Passive driver standard type	Not supported	-90 ~ 300[kPa]	-90kPa	40L/min]	75dB	2.0kg
iPCU2-HMV	High-speed vacuum pressure regulating type	Manual	-85 ~ 300[kPa]	-85kPa	80L/min	73dB	2.1kg
iPCU2-HMN	Passive driver high-speed type	Not supported	-80 ~ 300[kPa]	-80kPa	80L/min	72dB	2.0kg

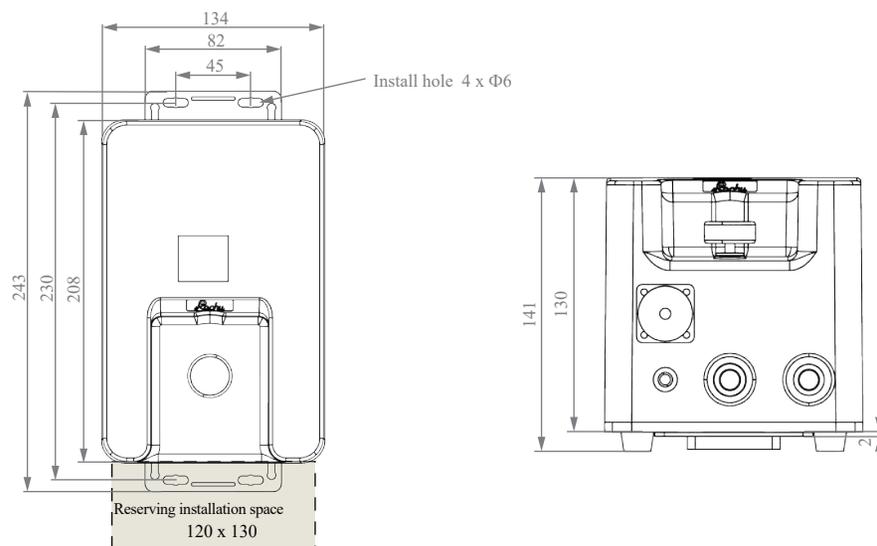
iPCU2 has two options: standard type and high-speed type. The high-speed type has a larger vacuum flow and is suitable for high-speed handling.
 *Test conditions for negative pressure flow parameter: pressure at the air source end = 0.6 MPa.

Parameter

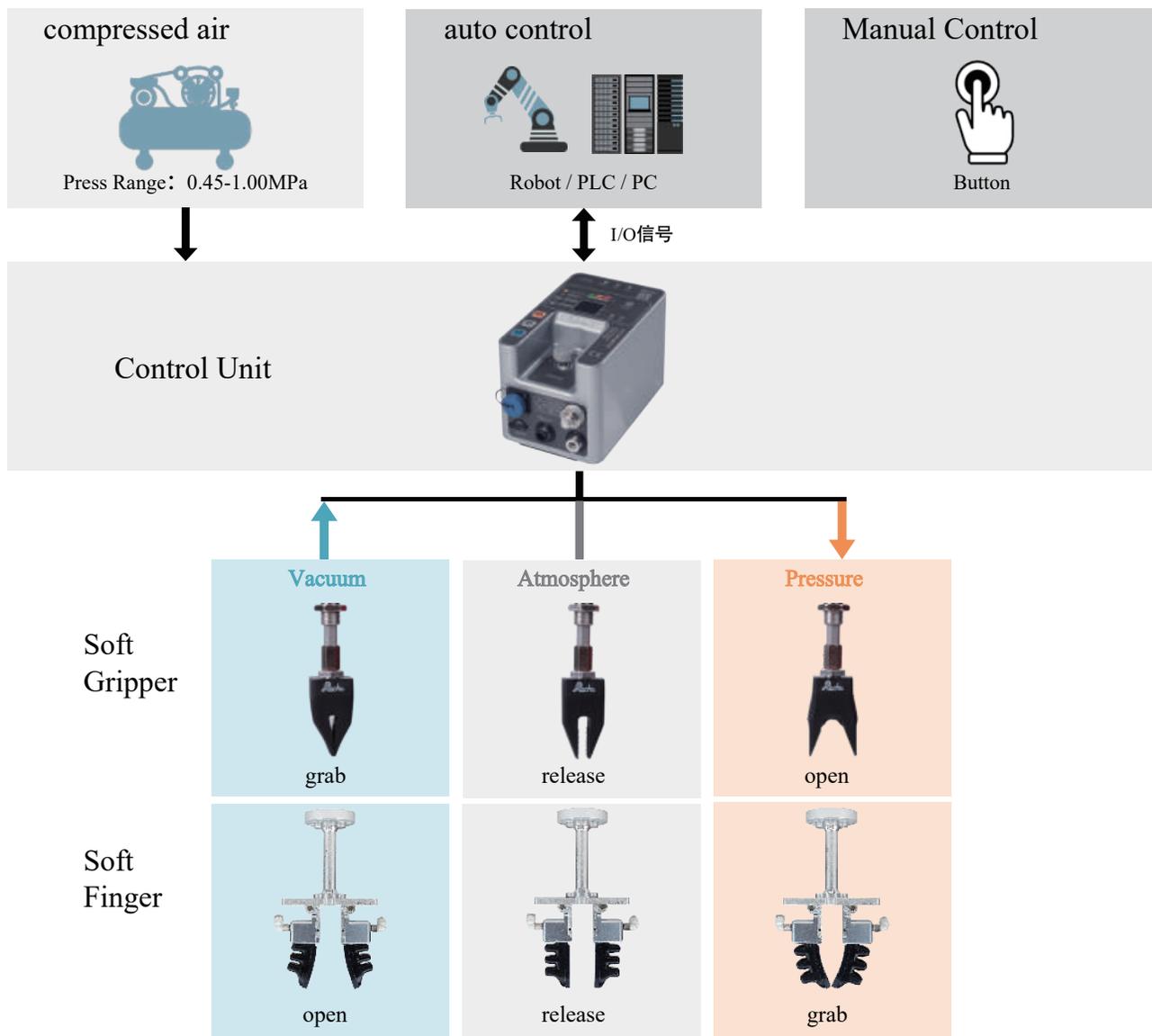
Item	Range	Item	Range
Nominal Voltage	24V± 10%	Frame Material	engineering plastics
Rated Power	12W	Size	208 × 134 × 141mm
Life time	50 million times	Protection grade	IP54
Positive pressure regulation	Manual	Control mode	1. Manual button
Safe pressure	Adjustable		2. I/O, level signal
Input air	0.45~1.00MPa Dry, Clear, Stable flow > 200L/min	Working mode	Continuous drive mode
		Vacuum flow*	260L/min

*The flow parameters test conditions: air source port Pressure= 0.6mpa, gripper set Pressure=100kPa

Size

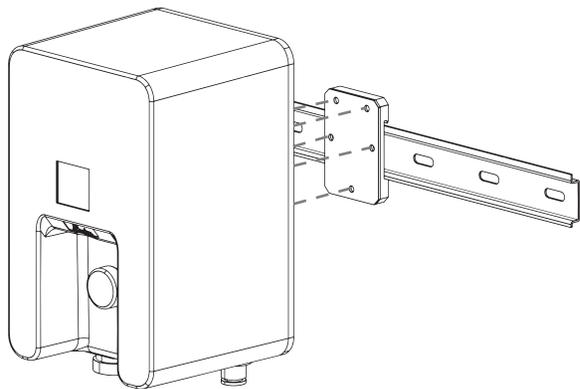


Use-pattern for iPCU2

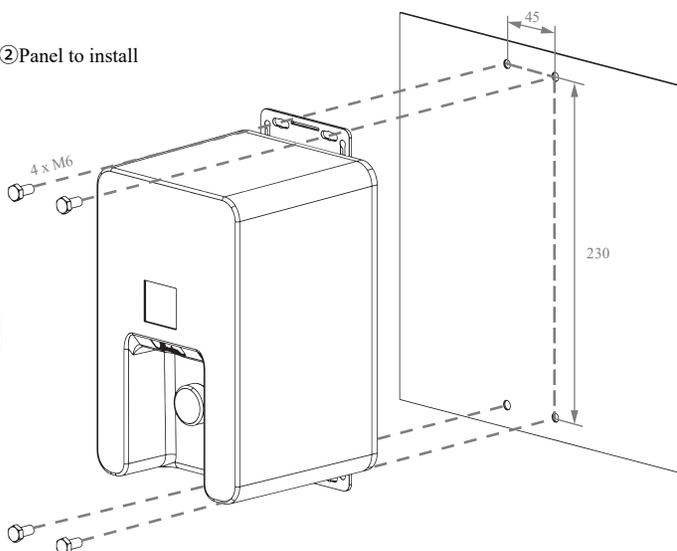


Installation

① Slot to install



② Panel to install



ACU2-B Active Control Unit

Compact rochu active driver

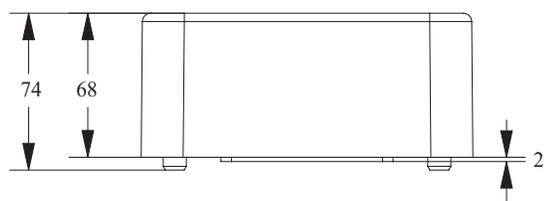
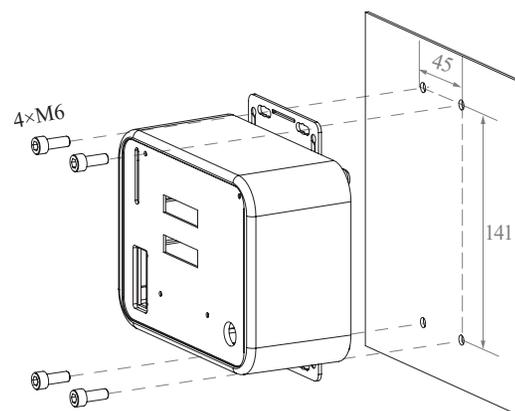
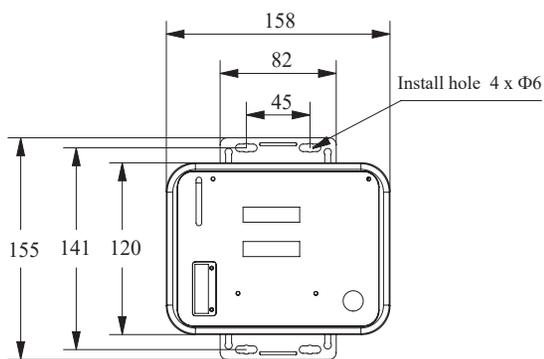
- Built-in air source, small and lightweight.
- Suitable for driving some soft beaks and soft fingers made of conventional materials.
- Six positive pressure levels and four vacuum pressure levels are output. They can be adjusted in real time through panel buttons. The output accuracy is ± 10 kPa.

- The integrated panel integrates digital display and operation buttons.
- It has two control modes: manual (button) and automatic (I/O level signal), and is compatible with various robotic arms and PLC terminals.
- The product has passed the EU CE safety certification.

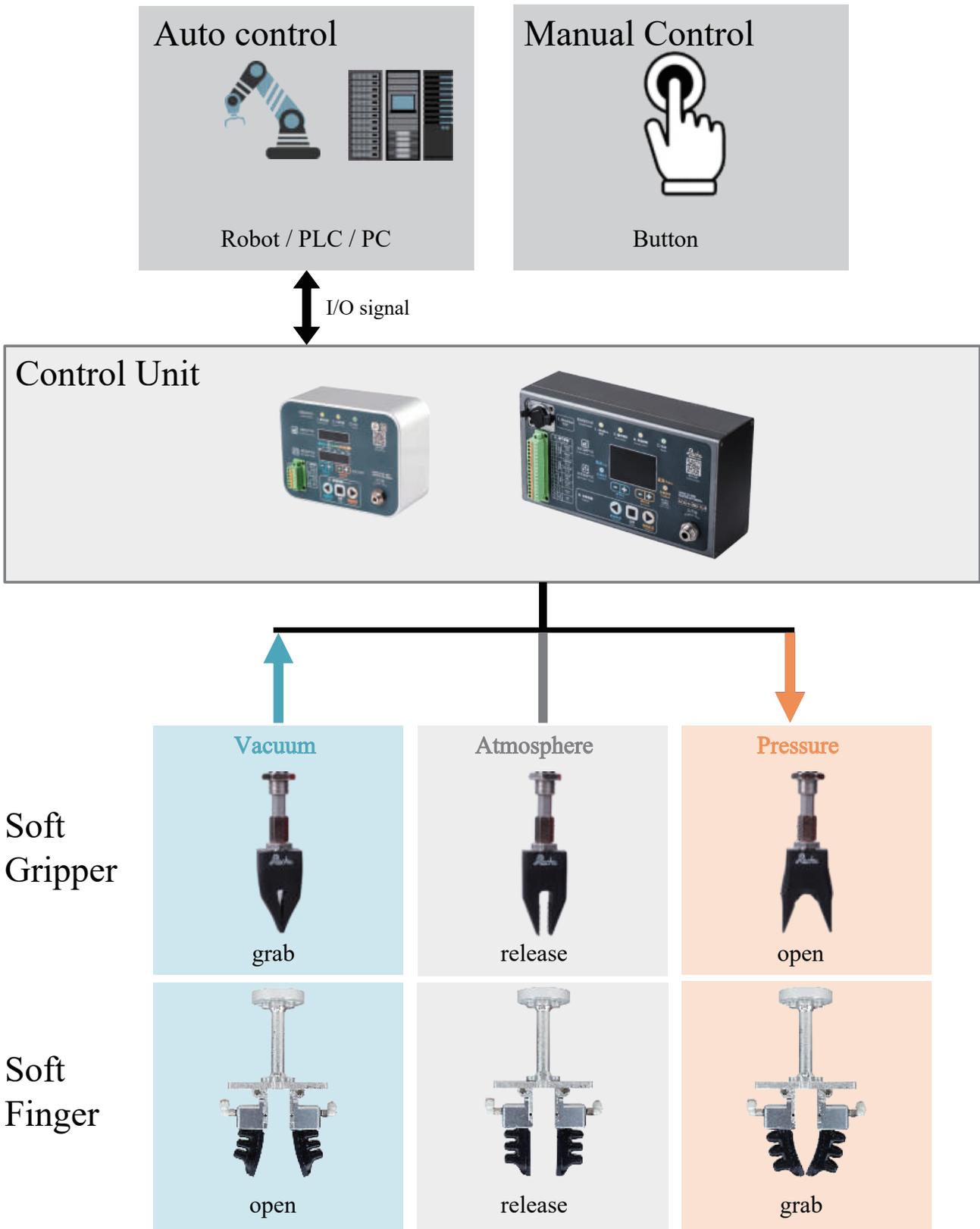


Parameter

Item	Range	Item	Range
Nominal Voltage	24VDC \pm 10%	Frame Material	engineering plastics
Rated Power	18W	Size	158x120x74mm
Life time	50 million times	Net Weight	870g
Output pressure	Ten-level setting -80/-60/-40/-20/0/20/40/60/80/100/120[kPa]	Protect grade	IP54
Output accuracy	± 10 kPa	Mode	1. Manual button
Pressure Flow	4L/min		2. I/O, level signal
Vacuum Flow	4L/min	working mode	Continuous signal drive
working noise	50dB		



Use-pattern for ACU2-B & ACU2-H



Control Unit

Control Unit

ACU2-H Active Control Unit

All-in-one flexible active Control Unit.

- Built-in air source, full interface.
- 80~280kPa Output pressure Range, suitable for all series of soft gripper drive.
- Work Pressure, work Vacuum can be real-time digital Adjust through the panel button, Output accuracy \pm 3kPa.

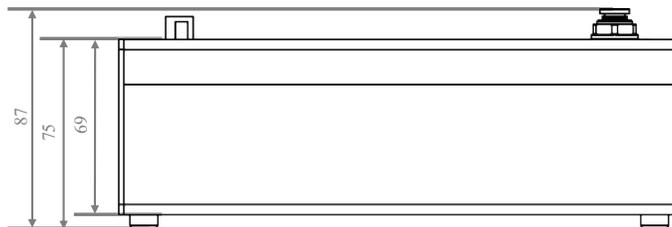
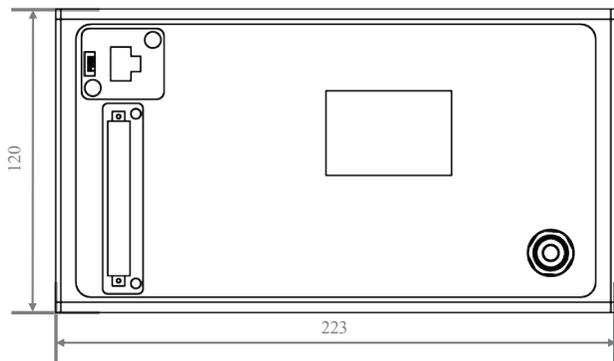
- Integrated panel with digital display and operation buttons.
- With manual (button), I/O, analog and MODBUS control modes, suit for all kinds of mechanical arm, PLC terminal.
- Products through the European CE safety certification.



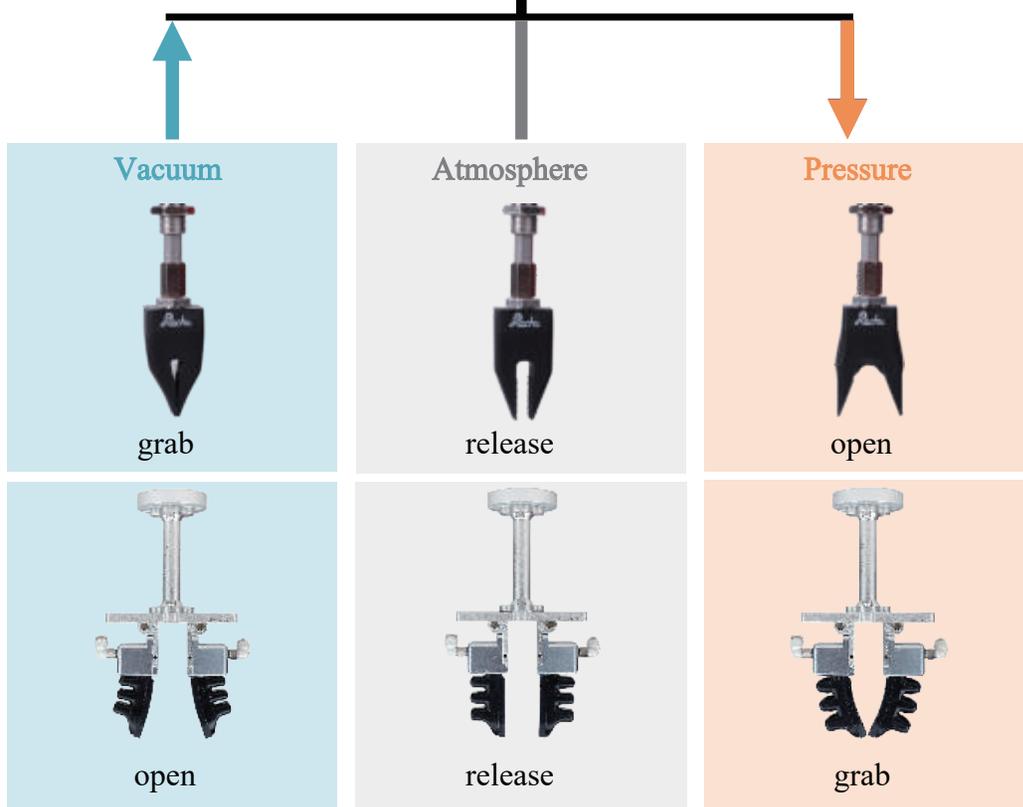
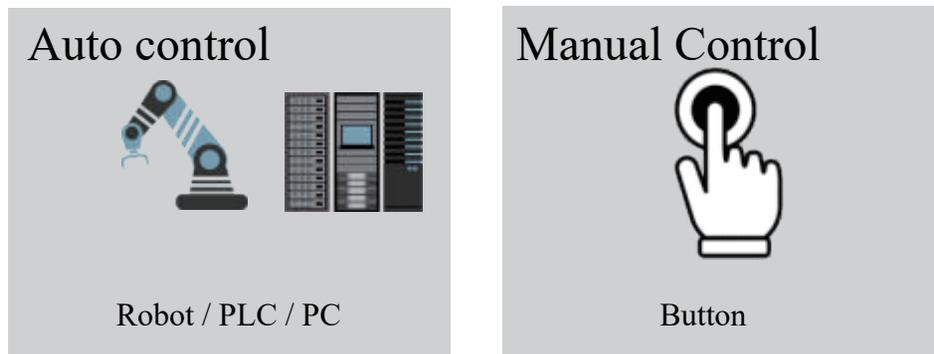
Parameter

Item	Range	Item	Range
Nominal Voltage	24VDC \pm 10%	Frame Material	Anodic oxidation of aluminum alloy
Rated Power	48W	Size	120x223x75mm
Life time	50 million times	Net Weight	1.8kg
Output pressure	-80~280kPa	Protect grade	IP54
Output accuracy	\pm 3kPa	Mode	1. Manual button
PressureFlow	8L/min		2. I/O, level signal
VacuumFlow	8L/min		3. Voltage analog regulating pressure
working noise	50dB		4. MODBUS TCP/RTU
working mode	Continuous signal drive		

Size



Use-pattern for ACU2-B & ACU2-H



Control Unit

PCU2-M Passtive Control Unit

All-round Manual passive control unit

-80~300kPa digital Adjust Output pressure Range, suit for all kinds of Beak & Finger.

-It can precisely adjust the working Pressure or Vacuum, and can choose the manual knob pressure regulating type PCU2-M or the electronic analog pressure regulating type PCU2-V.

-It has various control modes of manual (button), I/O and MODBUS, and is compatible with various mechanical arms and PLC terminals.

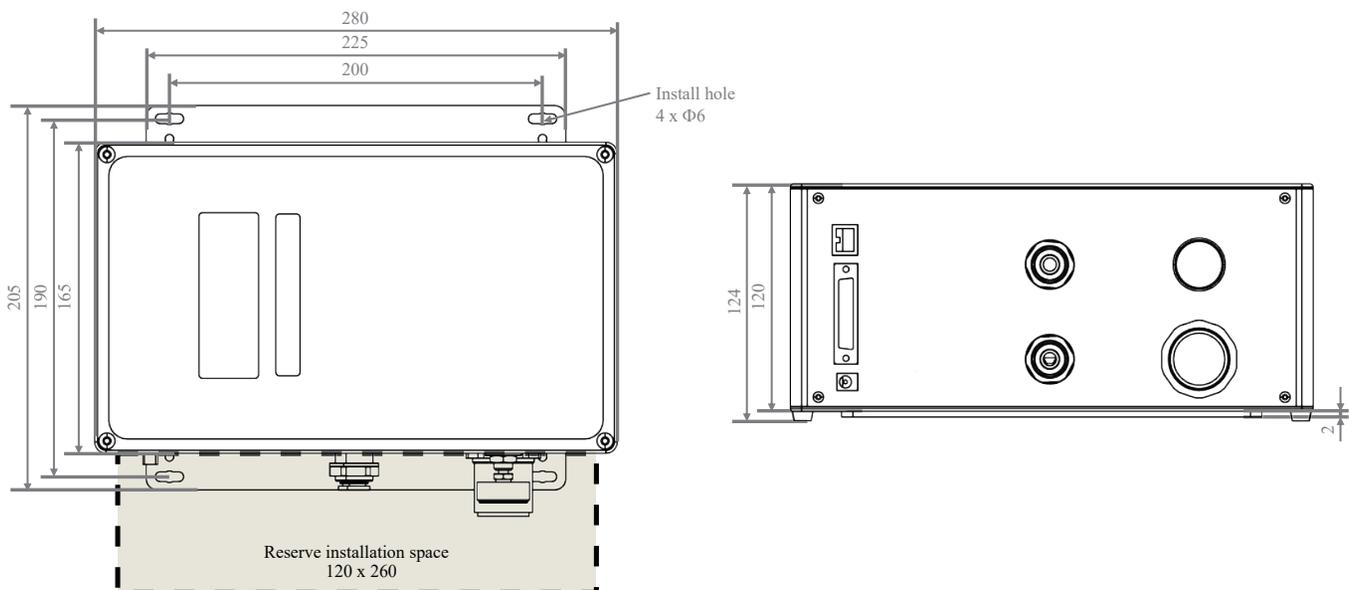
-With an intelligent output alarm signal, it is safe, and there is no need to worry about misoperation.



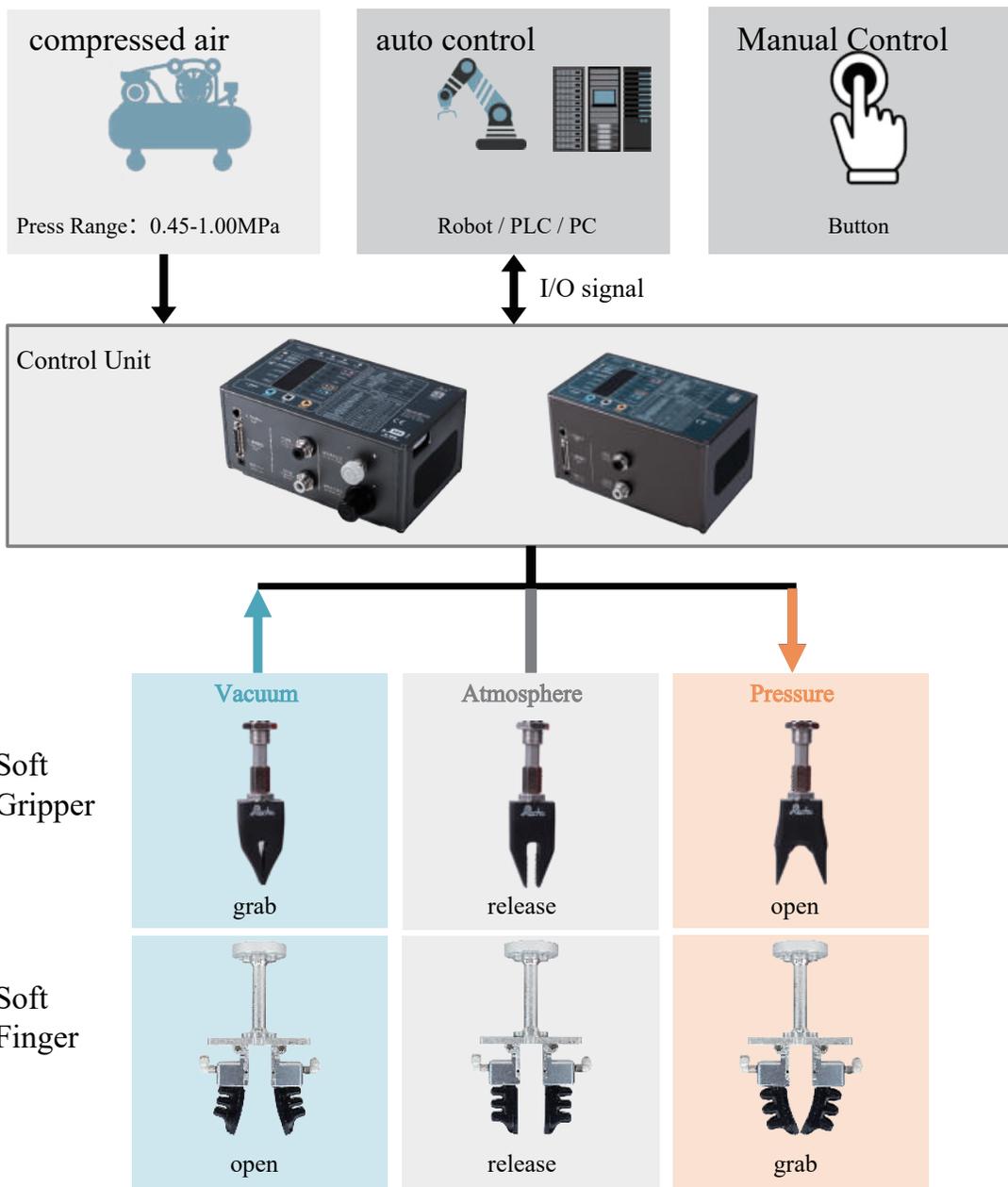
Parameter

Item	Range	Item	Range
Nominal Voltage	24VDC ±10%	Frame Material	Anodic oxidation of aluminum alloy
Rated Power	24W	Net Weight	3.85kg
Life time	50 million times	Protect grade	IP54
input air	0.45~1.00MPa dry, clean, stable Flow>200L/min	Mode	1. Manual button 2. I/O, level signal 3. remote (PCU2-M) 4. Modbus TCP/RTU
Output pressure	-80~300kPa	working mode	Continuous signal drive
Pressure Flow	260L/min	working noise	50db
Vacuum Flow	80L/min	Size	165x280x124mm
Positive pressure regulation	Manual	Wireless remote control	Support
Negative pressure regulation	Manual	Attitude feedback	Support
Safe pressure	Adjustable		

Size

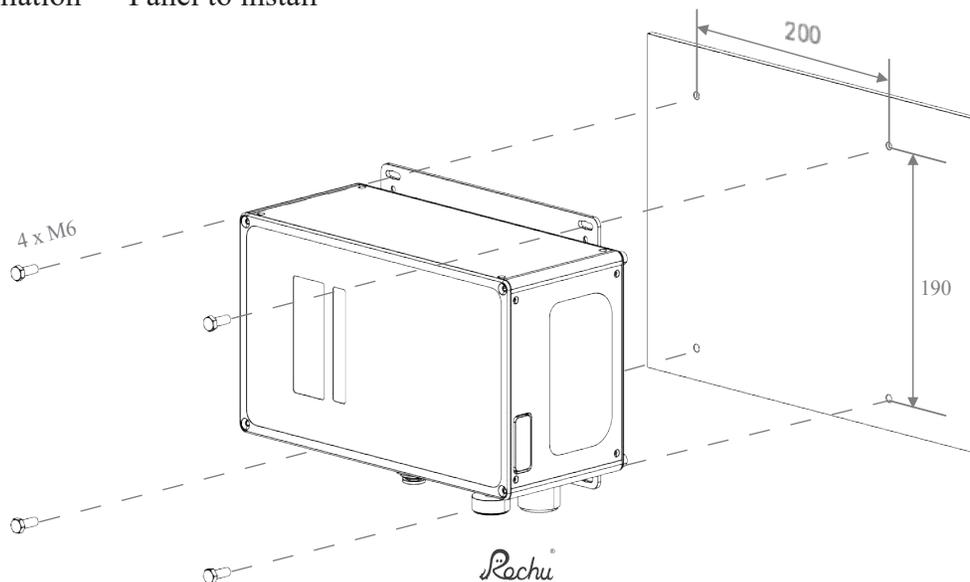


Use-pattern for PCU2



Control Unit

PCU2 Installation Panel to install



Control Unit

PCU2-V Passtive Control Unit

All-round Electronic passive control unit

-80~300kPa digital Adjust Output pressure Range, suit for all kinds of Beak & Finger.

·It can precisely adjust the working Pressure or Vacuum, and can choose the manual knob pressure regulating type PCU2-M or the electronic analog pressure regulating type PCU2-V.

·It has various control modes of manual (button), I/O and MODBUS, and is compatible with various mechanical arms and PLC terminals.

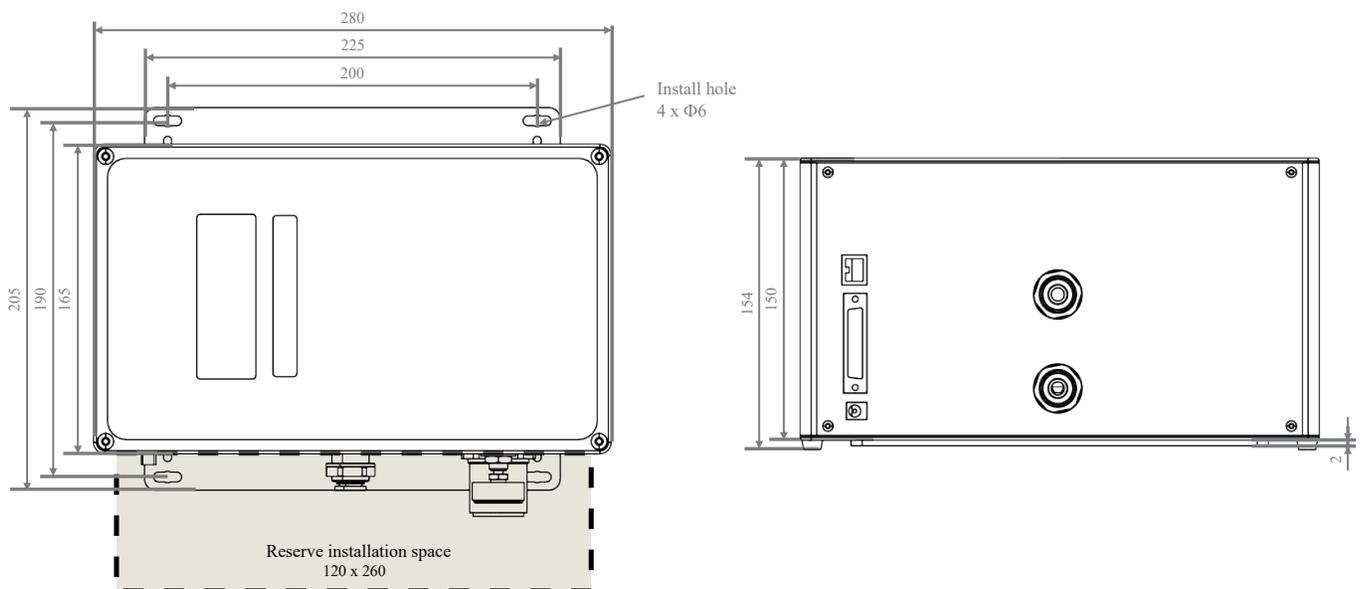
·With an intelligent output alarm signal, it is safe, and there is no need to worry about misoperation.



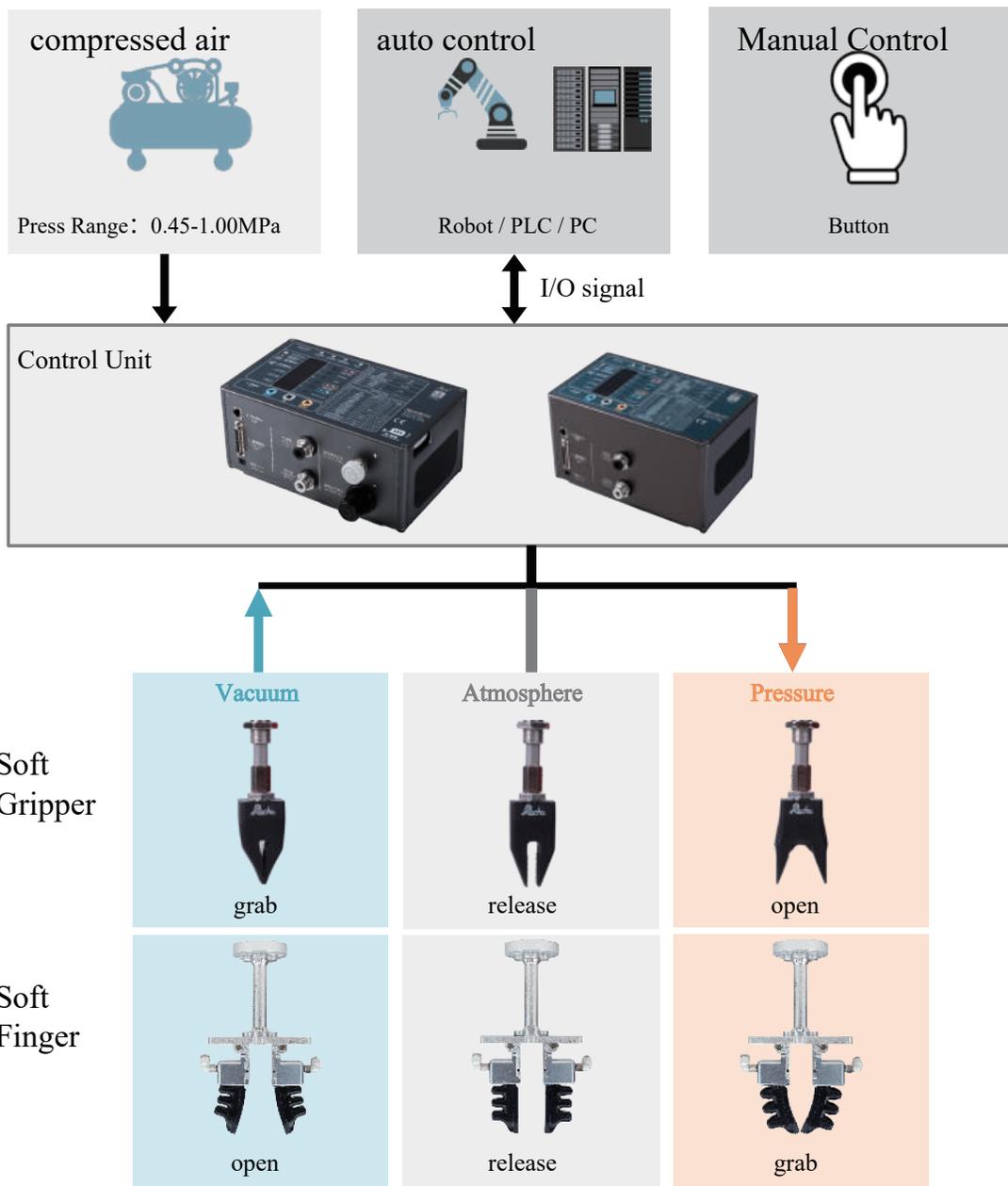
Parameter

Item	Range	Item	Range
Nominal Voltage	24VDC ±10%	Frame Material	Anodic oxidation of aluminum alloy
Rated Power	24W	Net Weight	4.4kg
Life time	50 million times	Protect grade	IP54
input air	0.45~1.00MPa dry, clean, stable Flow > 200L/min	Mode	1. Manual button 2. I/O, level signal 3. Modbus TCP/RTU
Output pressure	-80~300kPa	working mode	Continuous signal drive
Pressure Flow	260L/min	working noise	50dB
Vacuum Flow	80L/min	Size	165x280x124mm
Positive pressure regulation	Electronic	Wireless remote control	Not supported
Negative pressure regulation	Electronic	Attitude feedback	Support
Safe pressure	Adjustable		

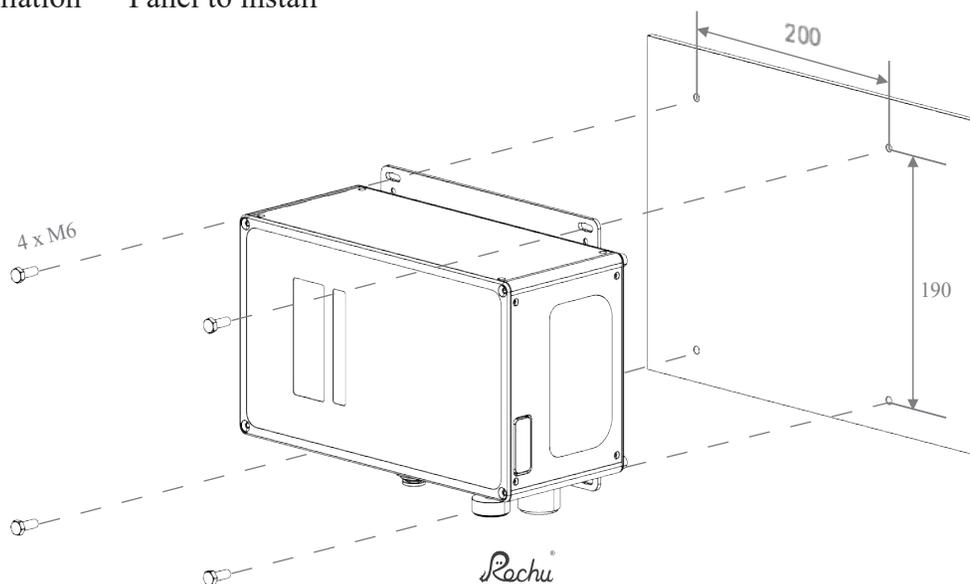
Size



Use-pattern for PCU2



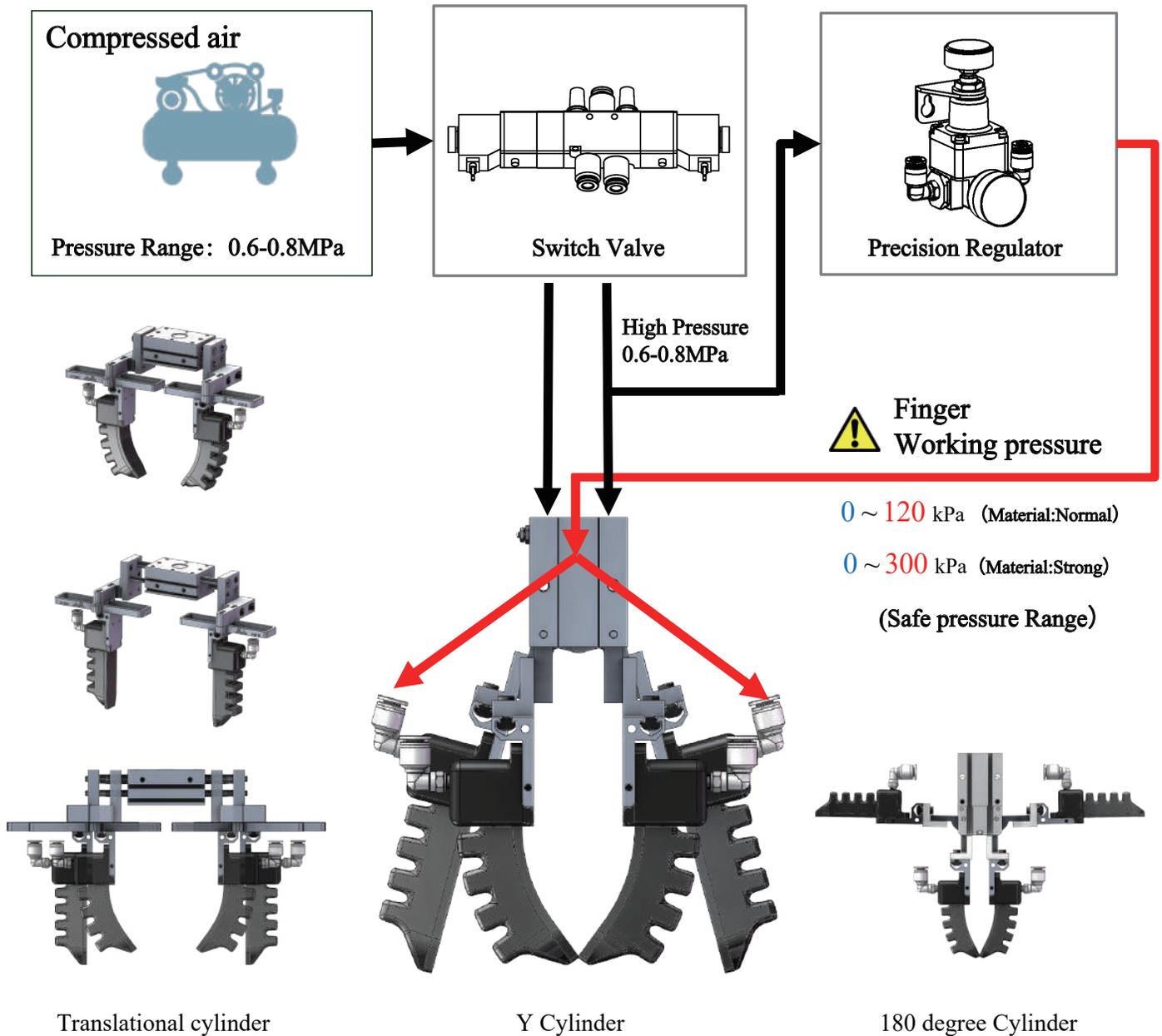
PCU2 Installation Panel to install



Combined driving mode

Controlling of Cylinder & Finger module combination

- The combination of cylinder and finger module is a specific combination of the basic control mode
- It has the advantages of large clamping force of traditional clamping cylinder and soft and self-adaptive of flexible fingers, and the clamping force can reach up to 70N
- Independent solenoid valve control, simple structure, small size, low deployment cost.
- Grasp a wider range, can be combined with various brands of cylinder, Y cylinder, 180 degree cylinder



The air pressure must be strictly controlled within the Safe limit. Overloading may cause irreversible damage to the product.

AF

Assembling Fittings



QCM

Quick changer Module



FCM

Flange Connection Module



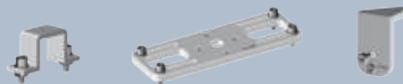
RF

Robot flange



SMP

Slide Mounting Plate



CP

Connector Part



P

Profile



CM

Connection Module



SE

Sensor



PN

Pneumatic Fittings

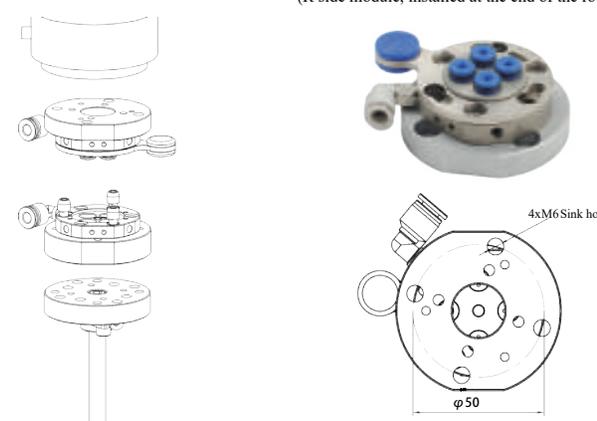
Quick changer Module

Quick-change Module [QCM] is used for automatic and quick replacement of grippers. The Quick-change Module [QCM] is installed between the Flange Connection Module [FCM] and the end of the robot arm, and is divided into the robot side (R side) and the gripper side (G side).

QCM-01 Manual quick change module

- Conform to ISO 9409-1:2004 (i.e. GB/T14468.1:2006)
- Manual locking/unlocking
- Recommended Load 5kg, Vertical tension

QCM-01R
(R side module, installed at the end of the robot)



4xM6 Sink hole
φ50

QCM-01G
(G side module, mounted on the gripper end)



4xM5
φ50

QCM-01R Weight	146g	QCM-01G Weight	135g
Vertical tension F[N]	150	Tracheal tube diameter[mm]	φ 6
Rotary torque Mt[Nm]	20	Recommended Load[kg]	5
Flip torque Mb[Nm]	10		

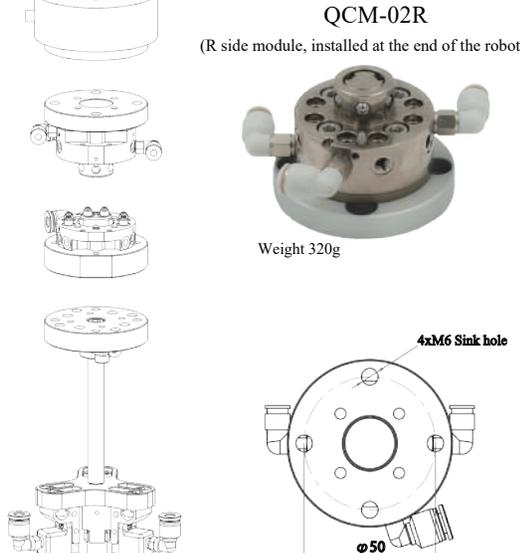


Lock Max 2Nm

QCM-02 Pneumatic Quick-change Module

- Conform to ISO 9409-1:2004 (i.e. GB / T 14468.1:2006)
- Pneumatic control, air-out self-locking protection
- Recommended Load 5kg

QCM-02R
(R side module, installed at the end of the robot)



Weight 320g
4xM6 Sink hole
φ50

QCM-02G
(G side module, mounted on the gripper end)

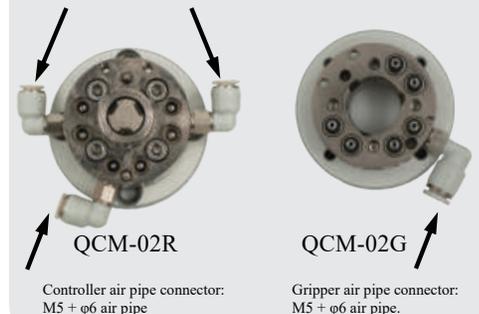


Weight 200g
4xM5
φ50

Installation/control mode

- Quick change is controlled by pneumatic valve
- The air pipe connector on the R side is connected to the Rochu drive, and the G side is connected to the gripper.
- When installing the R-side flange module, the flange plate should be installed on the robotic arm first, and then the quick change should be connected to the flange plate.

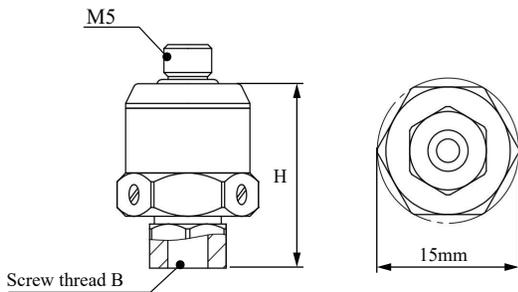
Quick change engagement control connector: M5 + φ6 air pipe



QC-15 Soft beak plug-in quick change

- Paired mounting modules for connecting the grippers, including manipulator side modules and gripper side modules, which can be locked, rotated or quickly replaced.
- Rotation Angle: gently and easily open the locking screw, rotate the soft claw to the appropriate working Angle, after locking the screw, the soft claw is fixed, and the coaxial degree is less than 0.15mm.
- Quick-change Function: completely loosen the locking screw, can pull out the side module of the soft claw, to achieve quick replacement of the soft claw.

	QC-15W5N5	QC-15W5W5	QC-15W5N18	QC-15W5W18
Manipulator side module	 QC-15W5R	 QC-15W5R	 QC-15W5R	 QC-15W5R
Soft Gripper side module	 QC-15N5G	 QC-15W5G	 QC-15N18G	 QC-15W18G



Model	Screw thred B	H	Weight
QC-15W5N5	M5 inner teeth	18.8mm	12.53g
QC-15W5W5	M5 external teeth	18.8mm	13.25g
QC-15W5N18	G1/8 inner teeth	23.3mm	17.75g
QC-15W5W18	G1/8 external teeth	18.8mm	17.41g

Installation

Rotation Angle

Lock screw

Quick-change Function

Lock screw

Rigid Connection Installation

CM-RM558M5 (optional)
QC-15W5N5
BMC-20006[P] (optional)

Buffer Installation

CM-S04 (optional)
BMC-20006[P] (optional)

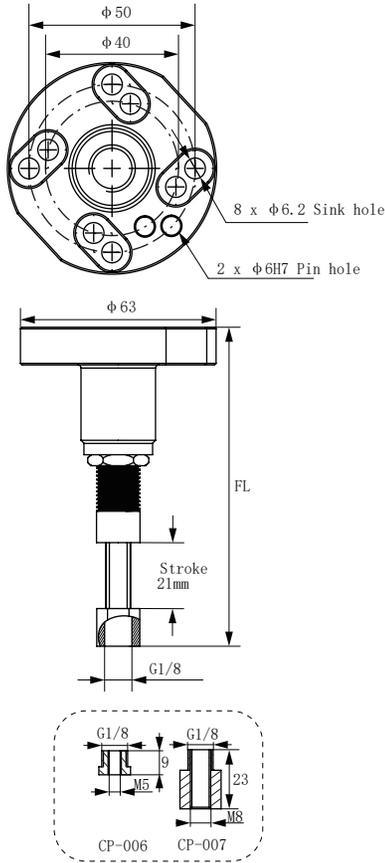
Matrix Installation

≥15
M5 Threaded hole
Minimum column spacing ≥15mm

The Flange Connection Module [FCM] connects the robotic arm end to the Slip Mounting Plate [SMP] and can be used with the Quick Change Module [QCM].

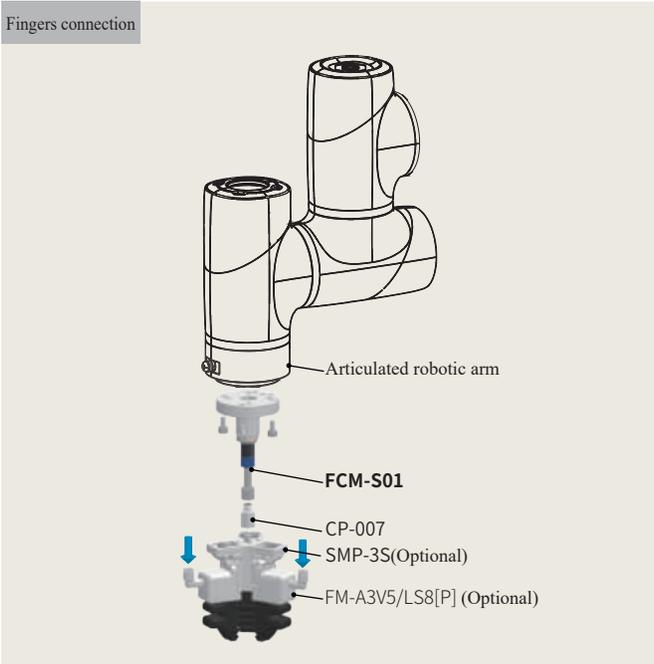
FCM-S01 Spring rod flange connection module

- Meet ISO 9409-1:2004 robot flange standard. Suitable for most robot flanges
- It is used for the connection between the flexible gripper module [BM] or the flexible finger module [FM] and the articulated robotic arm.
- The elastic force ranges from 0 to 8N, which can improve the vertical adaptability of the gripper and is suitable for grasping workpieces with large dimensional differences.



Model	Full length FL	Weight	Load
FCM-S01	95± 1	112g	500g

Fingers connection

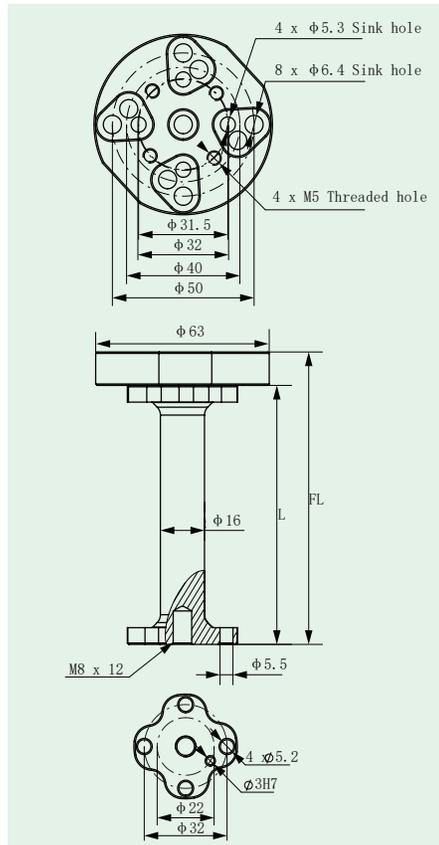
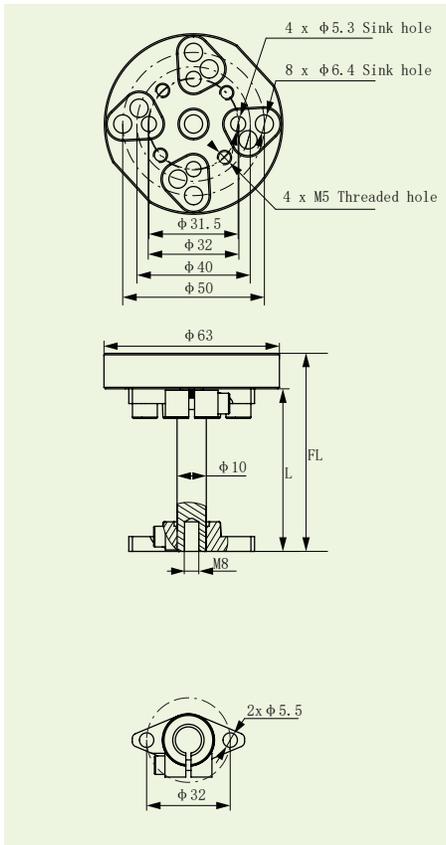


Beak connection



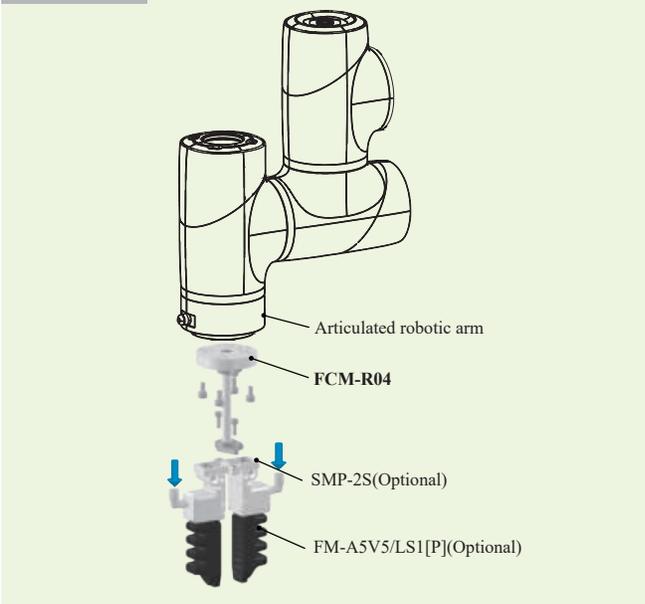
FCM-R series Rigid flange connection module

- Conform to ISO 9409-1:2004 standard (GB/T 14468.1-2006/), suitable for most robot flanges
- Used for the connection between the flexible finger modules [FM] and the articulated robotic arms
- Can be used in scenarios such as high-precision handling and assembly
- Different lengths are optional



Model	Length L	Full length FL	Weight	Load
FCM-R01	30mm	42mm	112g	5kg
FCM-R02	55mm	67mm	116g	5kg
FCM-R03	70mm	82mm	120g	5kg
FCM-R04	90mm	102mm	125g	5kg
FCM-R05	110mm	122mm	129g	5kg
FCM-R08	93mm	105mm	158g	20kg

Installation method

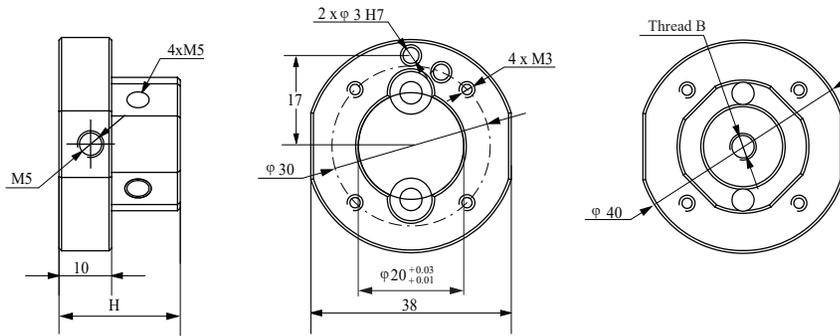


Installation method



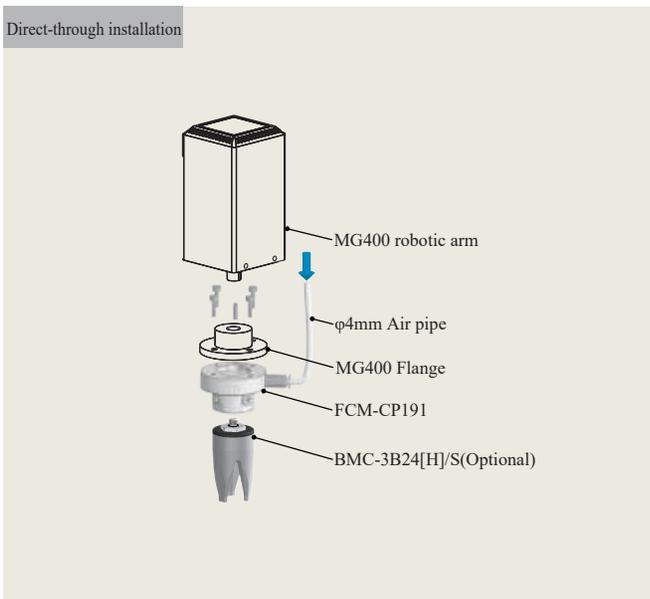
FCM-CP series MG400 flange connection module

- For connecting the flexible gripper module [BMC] or flexible finger module [FM] to the MG400 robotic arm
- Internal multi-channel ventilation

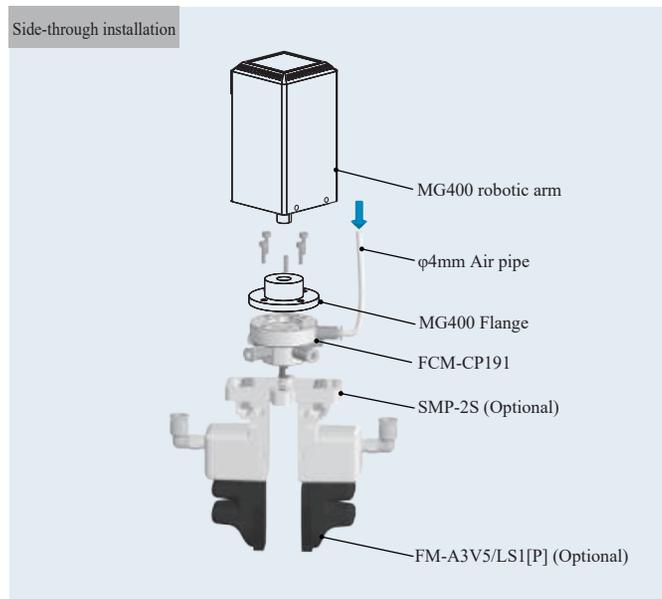


Model	Thread B	Height H	Weight
FCM-CP191	M5	23mm	40g
FCM-CP192	G1/8	24mm	40g

Direct-through installation

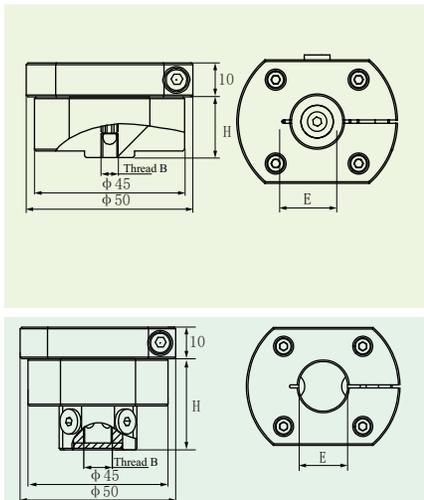


Side-through installation



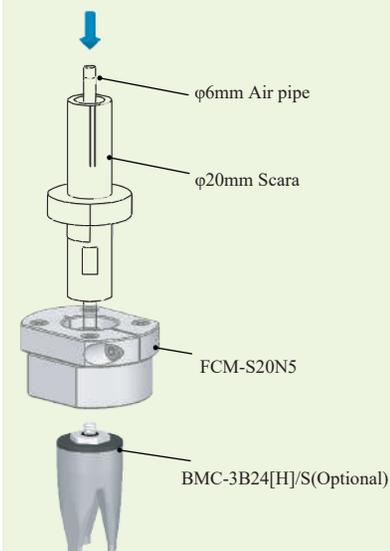
FCM -S series Scara flange module

- Used for connecting the soft gripper module [BMC] or the soft finger module [FM] to the Scara robot.
- Internal multi-channel ventilation.
- The coaxiality can reach 0.04mm.

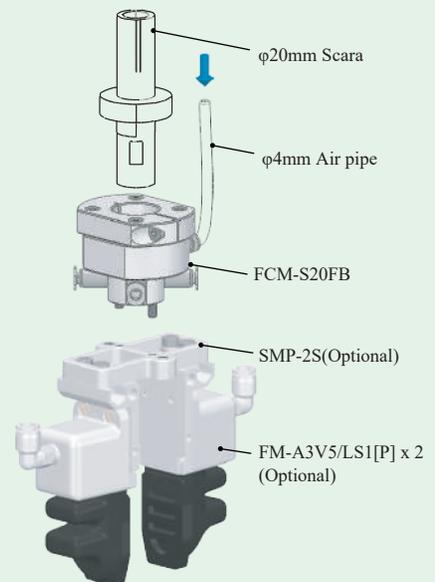
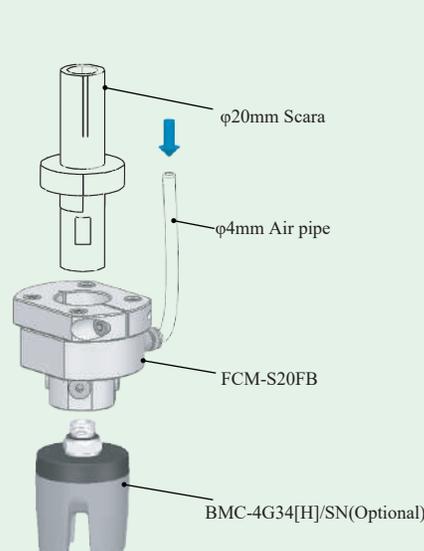


Model	Adaptable lead screw diameter E	Thread B	Height H	Weight [g]	Beak Module [BMC]	Finger Module [FM]
FCM-S16N5	φ16mm	M5	18mm	92g	·	
FCM-S20N5	φ20mm	M5	18mm	89g	·	
FCM-S25N5	φ25mm	M5	18mm	84g	·	
FCM-S16N18	φ16mm	G1/8	19mm	92g	·	
FCM-S20N18	φ20mm	G1/8	19mm	89g	·	
FCM-S25N18	φ25mm	G1/8	19mm	84g	·	
FCM-S16FB	φ16mm	G1/8	29mm	97g	·	·
FCM-S20FB	φ20mm	G1/8	29mm	94g	·	·
FCM-S25FB	φ25mm	G1/8	29mm	89g	·	·

Installation method

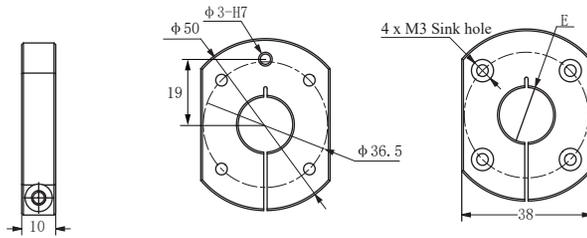


Installation method



RF-S Transfer Flange

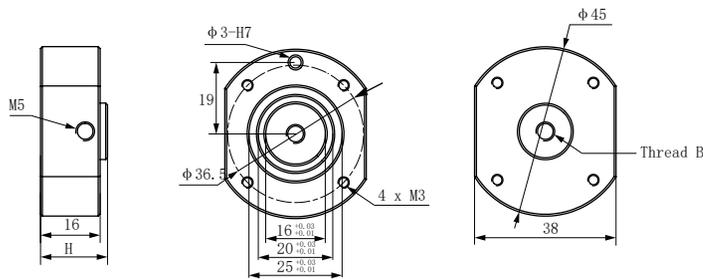
- Used in combination with RF-SCB or RF-SFB to connect to the Scara



Model	Adapted lead screw diameter E	Weight
RF-S16	φ 16mm	36g
RF-S20	φ 20mm	33g
RF-S25	φ 25mm	28g

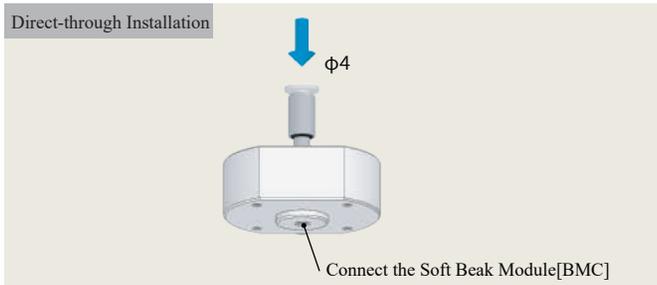
RF-SCB Transfer Flange

- Used for the connection between the soft beak module [BMC] and the Scara robot



型号	螺纹B	高度H	自重
RF-SCBN5	M5	18mm	55g
RF-SCBN18	G1/8	19mm	56g

Direct-through Installation

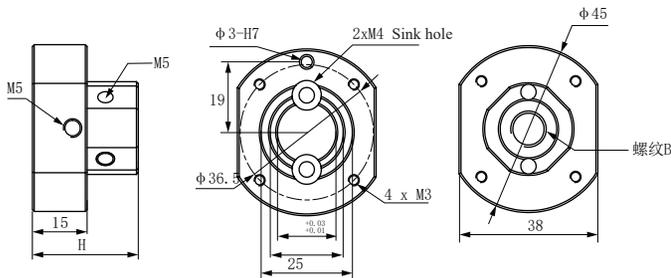


Side-through Installation



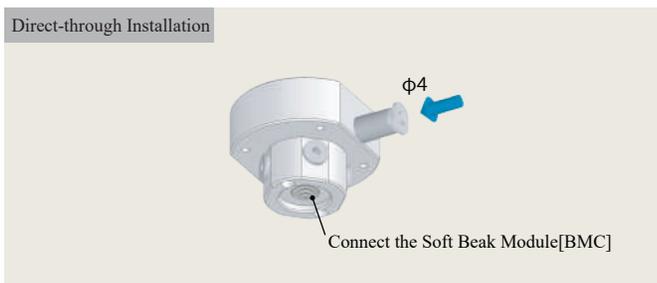
RF-SFB Transfer Flange

- Used for the connection between the soft beak module [BMC] and the Scara robot
- Can also be connected to the slip mounting plate [SMP] and install the flexible finger module [FM].

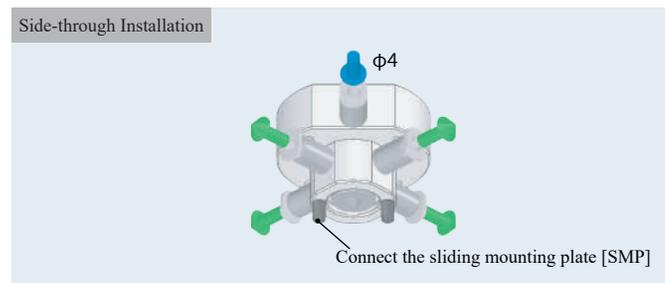


Model	Thread B	Height H	Weight
RF-SFB	G1/8	29mm	60g

Direct-through Installation

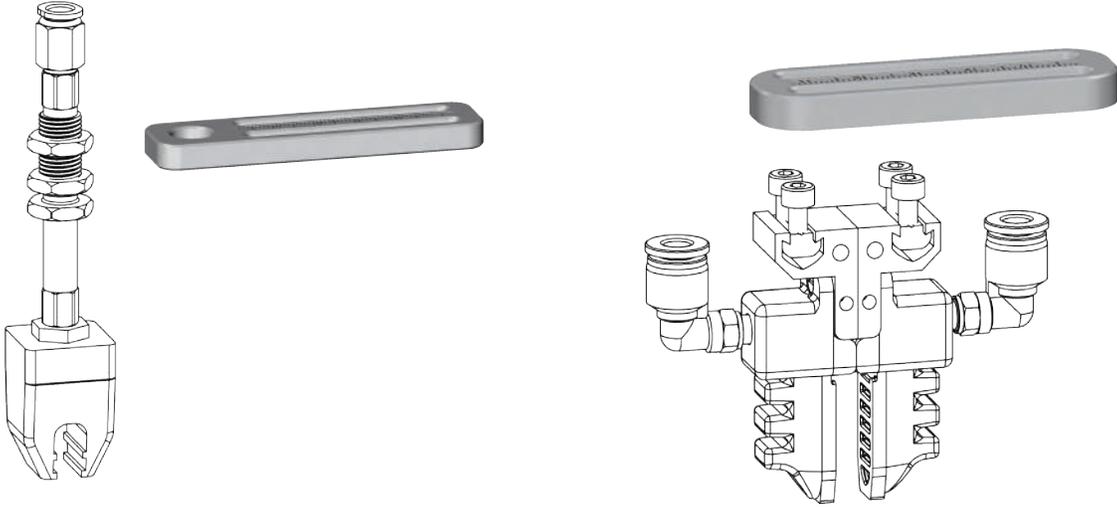


Side-through Installation

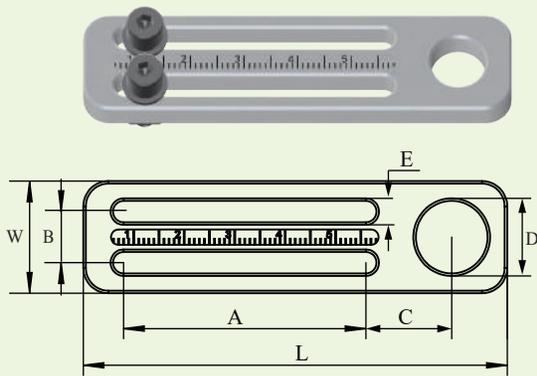


SMP-One-way series

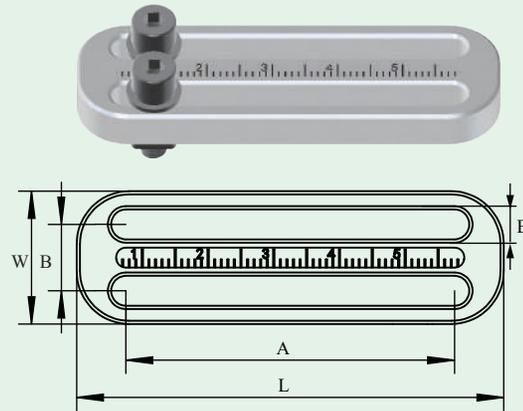
- Can be used for the assembly between the soft finger module [FM] or the connection module [CM] and the aluminum profile [P].
- The installation angle and position can be adjusted freely.
- Contains the accessory kit PK-SMP01.



One-way soft beak series



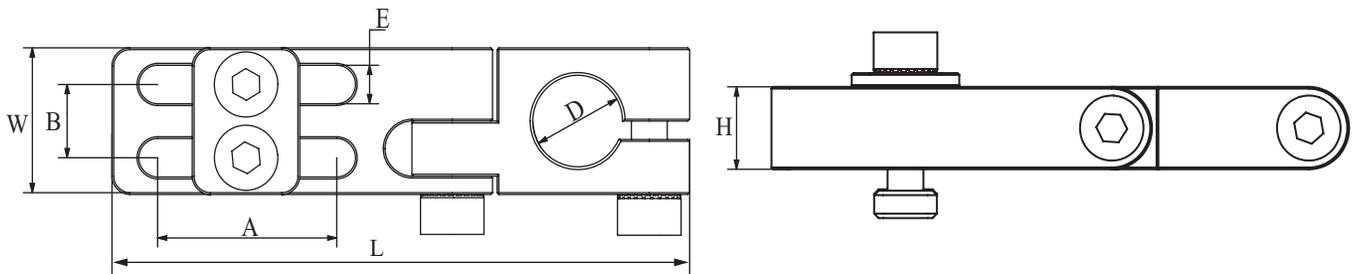
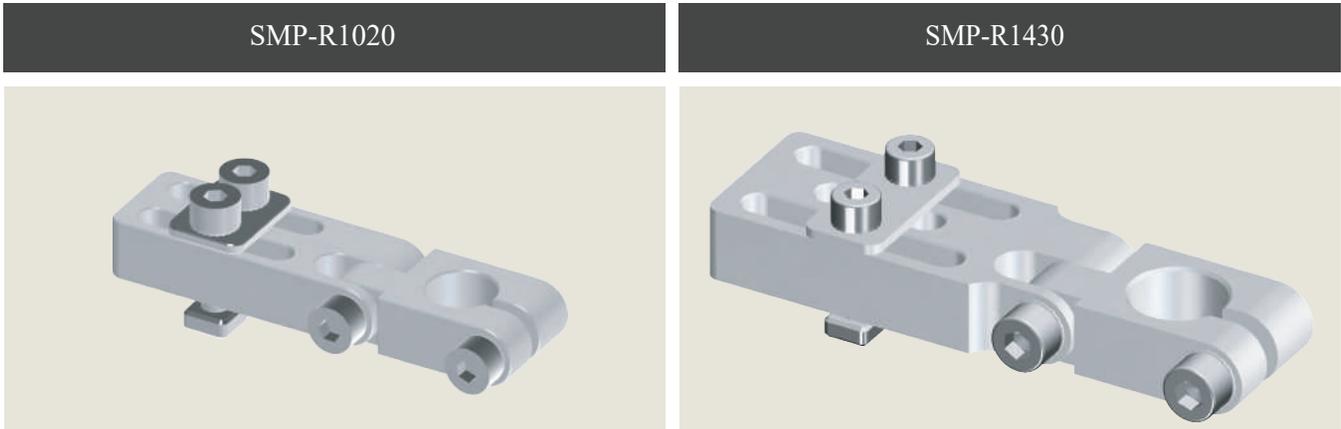
One-way soft finger series



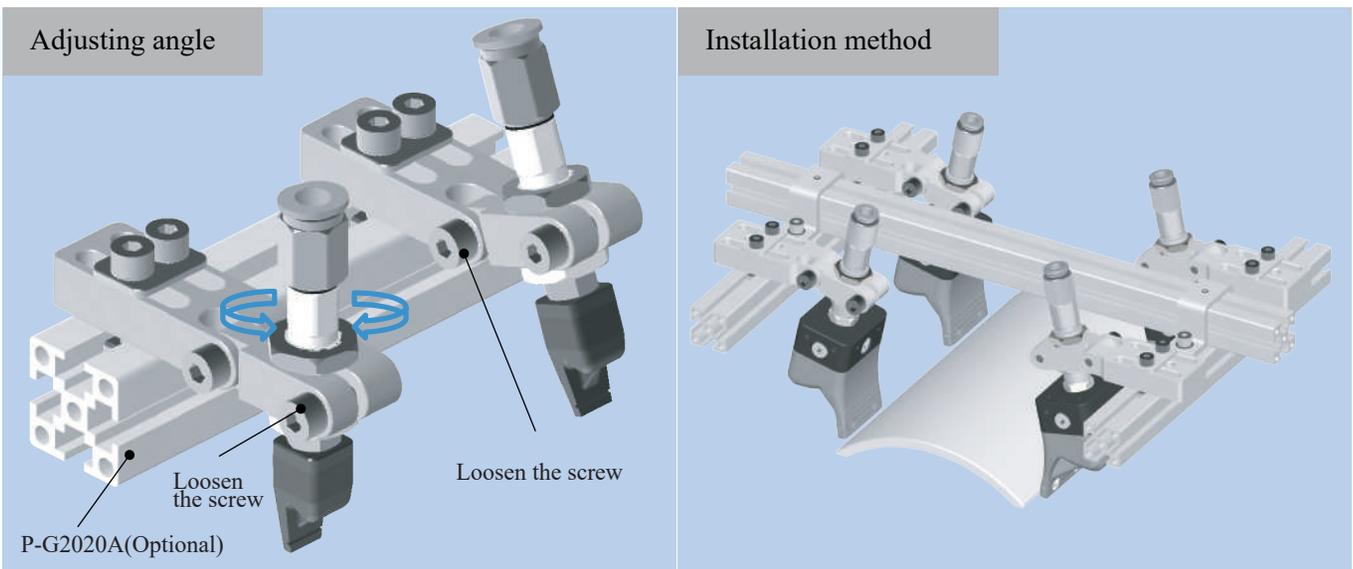
	Model	Slot Length A [mm]	Slot Space B [mm]	Slot Width E [mm]	Length L [mm]	Width W [mm]	Thickness H [mm]	Slot Spacing C [mm]	Mounting hole D [mm]	Weight [g]
One-way soft beak series	SMP-13	20	10	4.2	50	20	6	14	10.2	10.7
	SMP-14	48	10	4.2	80	20	6	14	10.2	16.2
	SMP-15	80	10	4.2	110	20	6	14	10.2	21.6
	SMP-16	110	10	4.2	140	20	6	14	10.2	27.1
	SMP-1420	20	10	4.2	56	22	6	17	14.2	14
	SMP-1448	48	10	4.2	84	22	6	17	14.2	20
One-way soft finger series	SMP-01	50	10	4.5	65	20	6			10.8
	SMP-02	75	10	4.5	90	20	6			16.1
	SMP-03	100	10	4.5	115	20	6			18.5

SMP-R unidirectional rotation series

- Can be used for the assembly between the soft beak module [BM], the connection module [CM] and the aluminum profile [P].
- Adjusting angle: Adjusting the screw can loosen or lock the installation block, and adjust the angle of the soft beak in all directions.



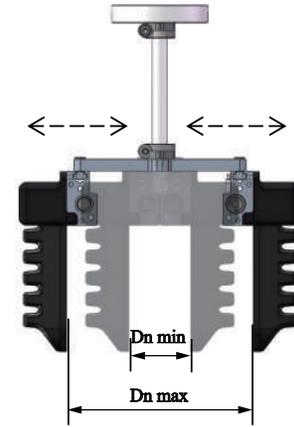
Model	Mounting hole D [mm]	Width W [mm]	Length L [mm]	Thickness H [mm]	Slot Length A [mm]	Slot Space B [mm]	Slot Width E [mm]	Weight [g]
SMP-R1020	10	16	64.5	9	20	8	4.2	30
SMP-R1430	14	25	85	11	30	15	5.2	50



SMP-Multidirection series

- Divided into different styles according to shape and groove length.
- Can be used for the assembly between the finger module [FM] and the flange connection module [FCM].
- The installation angle and position of the finger module [FM] can be freely adjusted.

	Model	Slot Length A [mm]	Thickness [mm]	Atmosphere Fingertip Distance Dn [mm]		Weight [g]
				Dnmin~Dnmax		
				V2,V4 Finger Modul	V3,V5 Finger Modul	
Two-way	SMP-2S	20	8	40~69	10~37	18.2
	SMP-2L	45	8	40~119	10~87	28.2
Three-way	SMP-3S	15	8	58~82	28~50	34.6
	SMP-3L	50	8	58~152	28~120	54.1
Four-way	SMP-4S	22	8	72~104	41~72	55
	SMP-4L	67	8	72~194	41~162	89.5
Five-way	SMP-5S	23	10	91~112	53~80	95.4
	SMP-5L	78	10	91~222	53~109	181



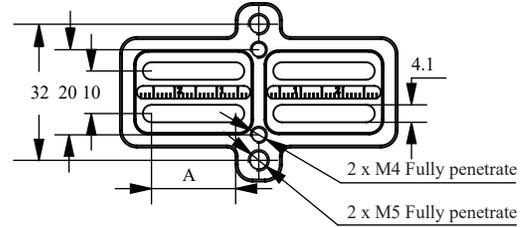
The maximum clamping range of the gripper combination is $G_{max} = D_{nmax} + 2H_{max}$.
For H_{max} , please refer to the parameter page of the finger module.



SMP-2S



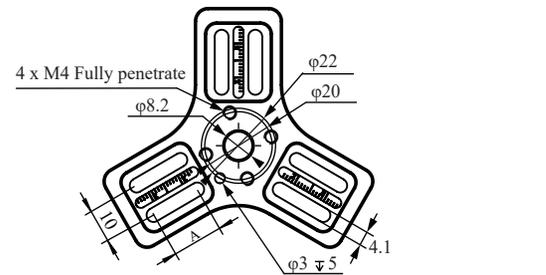
SMP-2L



SMP-3S



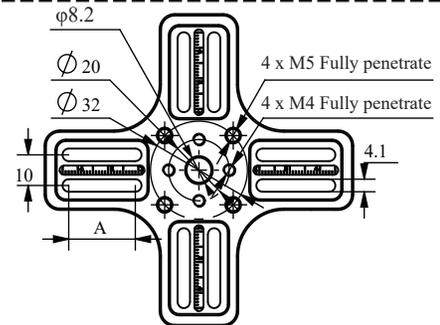
SMP-3L



SMP-4S



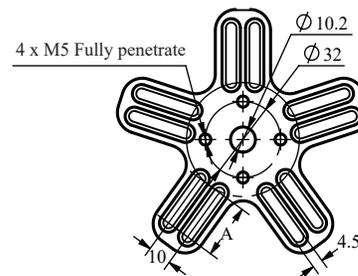
SMP-4L



SMP-5S

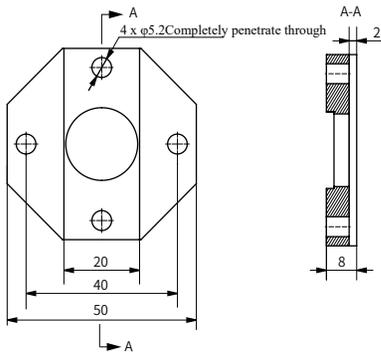


SMP-5L



CP-194 Connector Part

- Cross mounting bracket for the profile P-G2020A



Suitable for the P-G2020A series of profiles

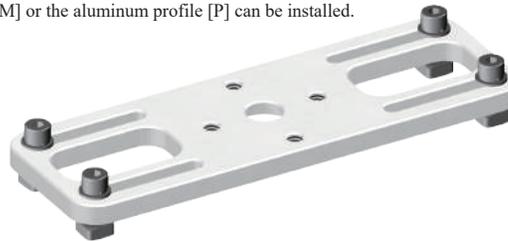
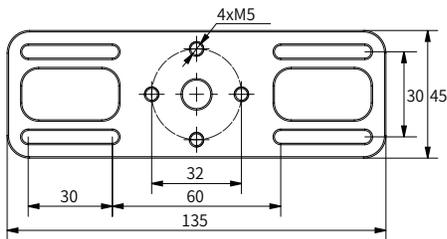


Self-weight 46g



CP-004 Connector Part

- A multi-purpose mounting plate on which the finger module [FM] or the aluminum profile [P] can be installed.
- Installed at the end of the Flange Connection Module [FCM]

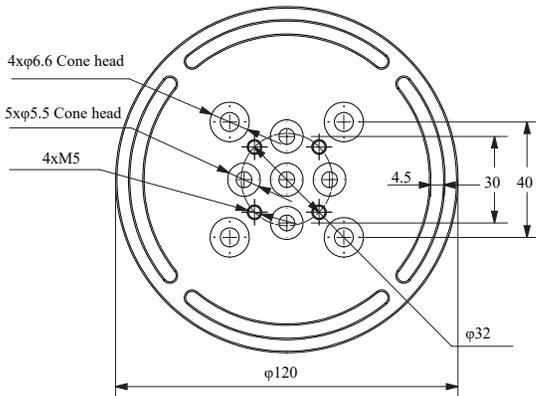


Self-weight 65g



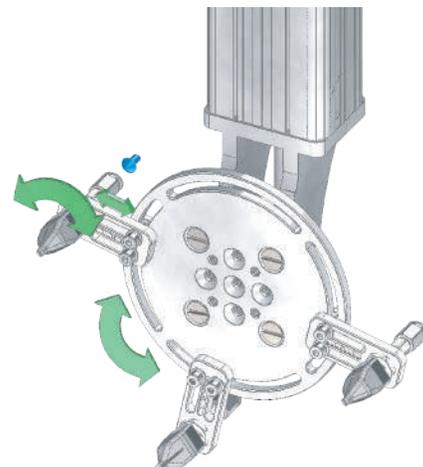
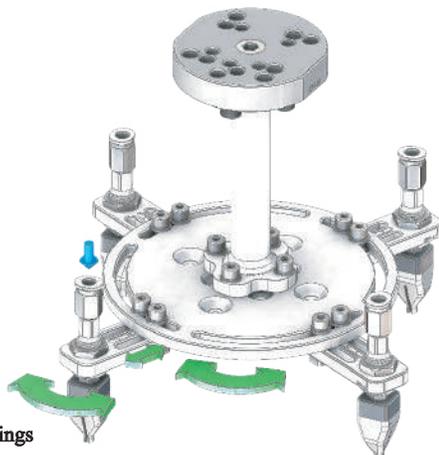
CP-195 Connector Part

- Multiple [SMP] sliding plates & [BM] gripper modules can be installed in a circular layout with adjustable spacing, position & angle.
- Installed at the end of the Flange Connection Module [FCM] or at the end of a commonly used injection molding robotic arm.



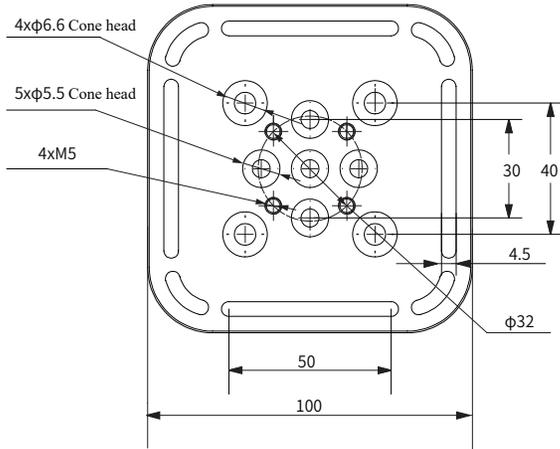
Self-weight 127g

Air intake mode & Attitude adjustment



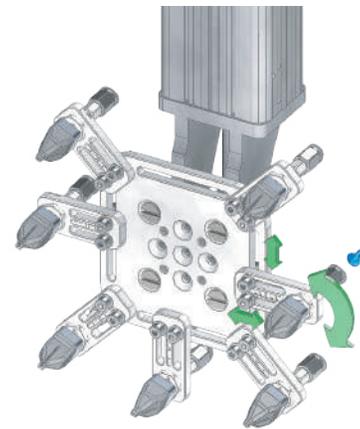
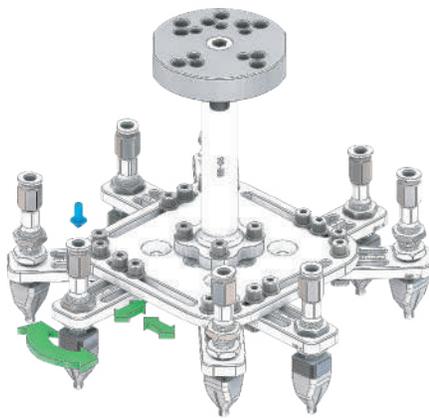
CP-196 Connector Part

- Multiple [SMP] sliding plates & [BM] gripper modules can be installed in a square layout with adjustable spacing, position & angle.
- Installed at the end of the Flange Connection Module [FCM] or at the end of a commonly used injection molding robotic arm.



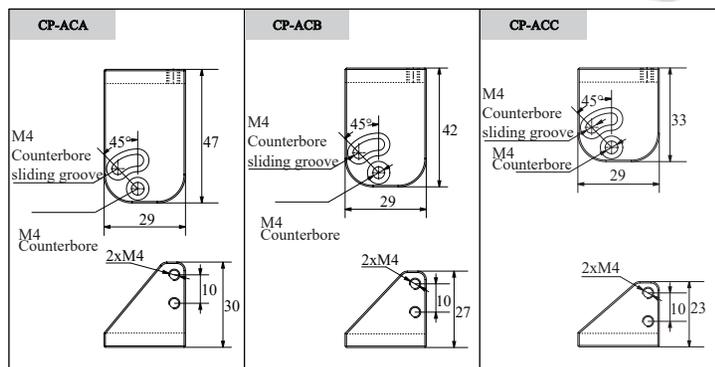
Self-weight 106g

Air intake mode & Attitude adjustment

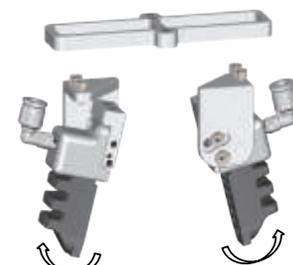
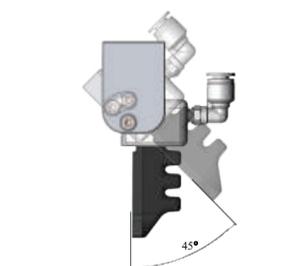
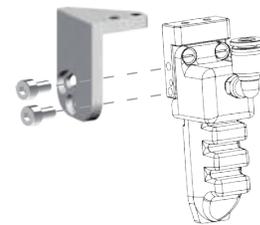


CP-AC Series Soft Fingers Rotary Installation Module

- Used to adjust the installation angle of the flexible finger module [FM]
- Installed between the flexible finger module [FM] and the sliding mounting plate [SMP].



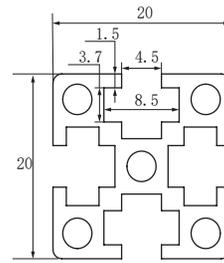
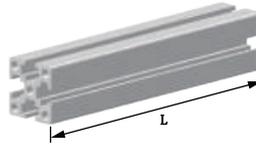
Model	CP-ACA	CP-ACB	CP-ACC
Compatibility of FM	V1		
	V2	○	○
	V3	○	○
	V4		
	V5		
Self-weight[g]	22	19	15



P-G2020A Series Profile

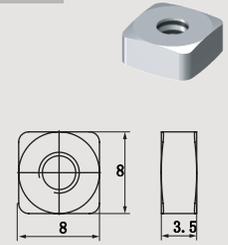
- Compatibility of the Flexible Finger Module FM

Model	Length L[mm]	Self-weight[g]
P-G2020A<100>	100	47
P-G2020A<150>	150	70.5
P-G2020A<200>	200	94
P-G2020A<300>	300	141
P-G2020A<400>	400	188
P-G2020A<500>	500	235



Nut

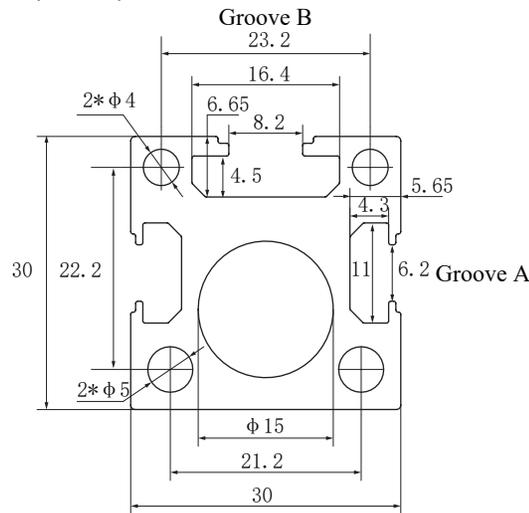
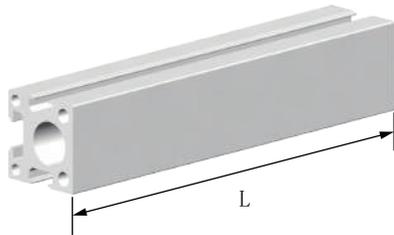
SF-340



P-C3030A Series Profile

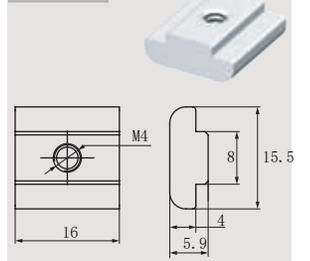
- The air-conducting aluminum profile for the arrangement and installation of multiple soft grippers.
- It can be matched with standard installation end caps and flanges and assembled at the end of the robotic arm for use.
- The air circuit is built into the profile, which improves the assembly accuracy and saves the installation time.

Model	Length L[mm]	Self-weight[g]
P-C3030A<100>	100	120
P-C3030A<200>	200	240
P-C3030A<300>	300	360
P-C3030A<400>	400	480
P-C3030A<500>	500	600



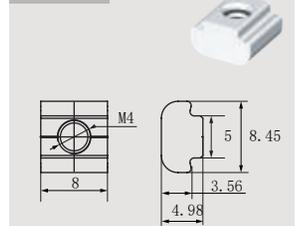
Nut for Groove B

SF-312



Nut for Groove A

SF-314

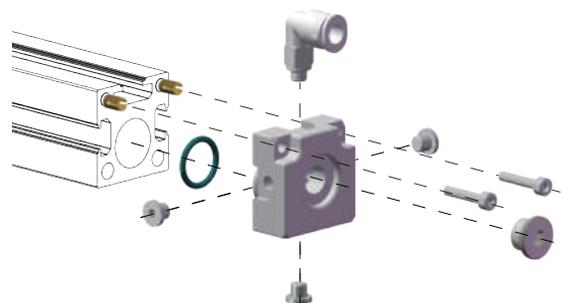
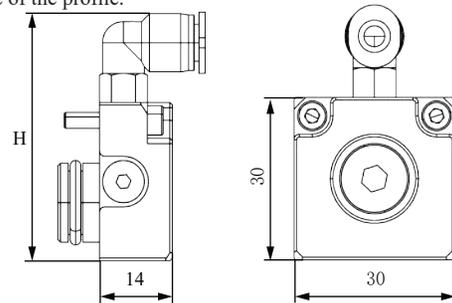


CM-PC3030A Series Profile

- The special end cap for the profile P-C3030A can be equipped with an air vent connector or a plug
- When in use, the copper nut should be cold-pressed and installed into the hole on the end face of the profile.

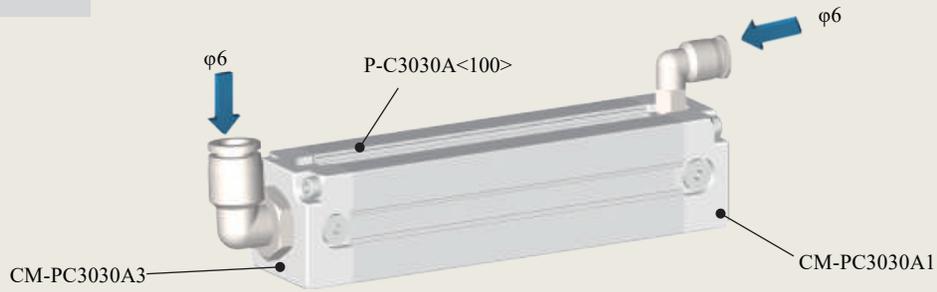


Model	CM-PC3030A1	CM-PC3030A2	CM-PC3030A3
Air tube connector	φ6mm	None	φ6mm
Height H[mm]	49.5	30	30.7

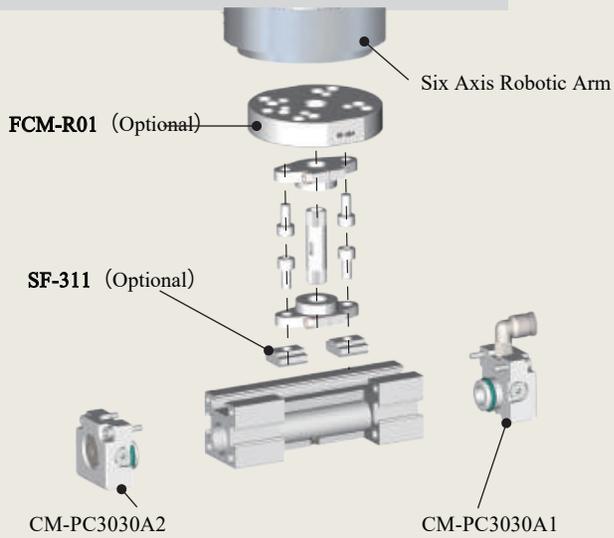


Profile P-C3030A + connection module CM-PC3030A

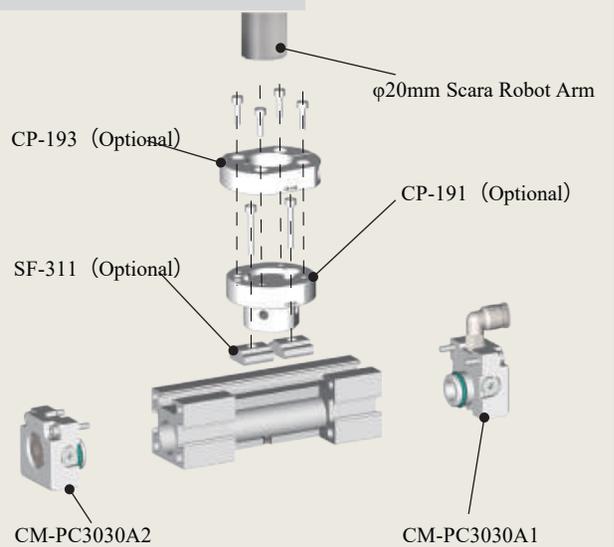
Combination method



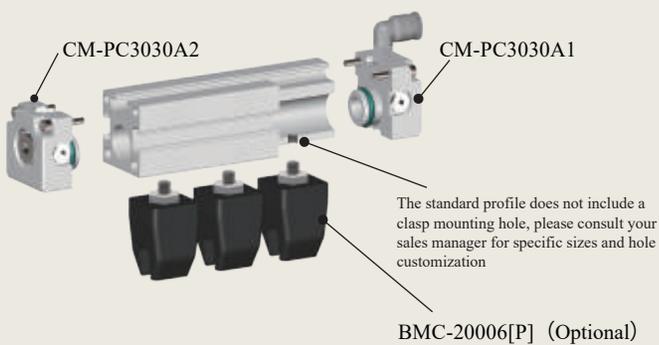
Robotic Arm Flange Side Fitting Installation



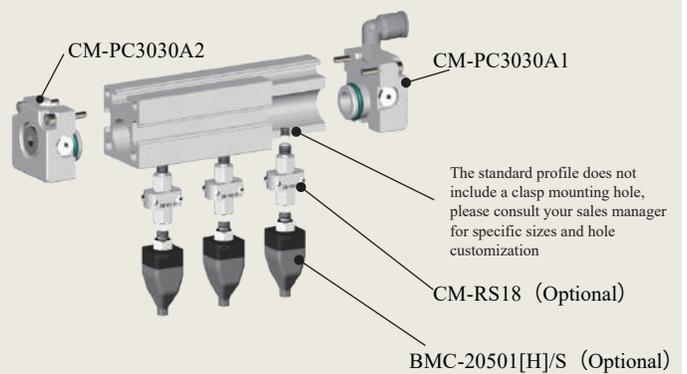
Scara Robotic Arm Installation



Soft Beak Row Installation

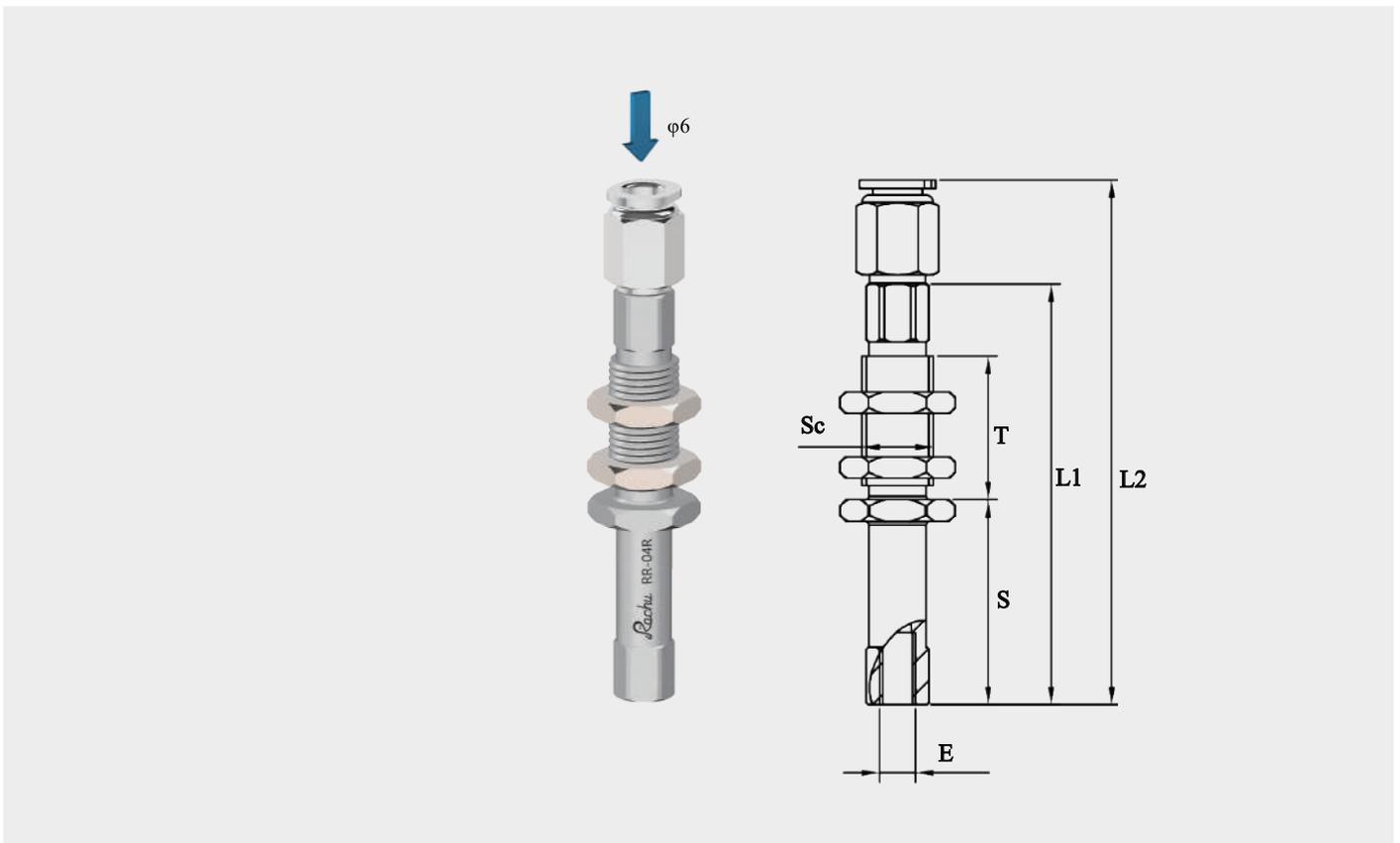
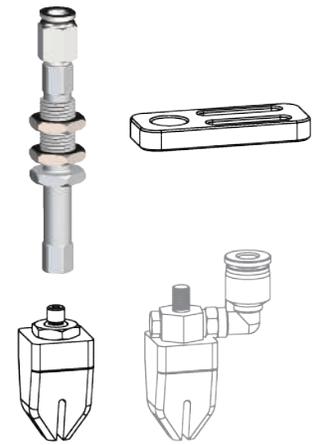


Adjustable Angle Soft Beak installation



CM-R Soft Beak rigid connection module series

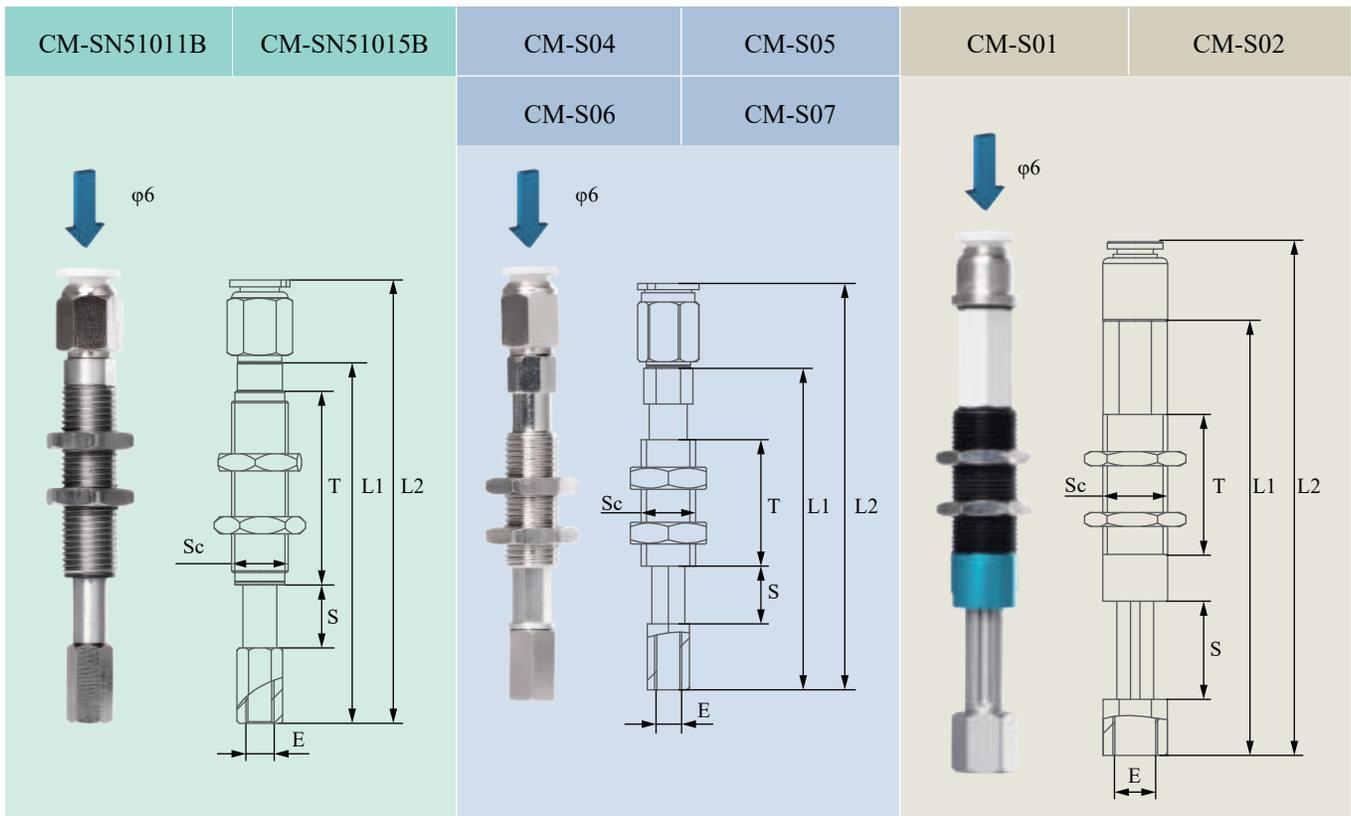
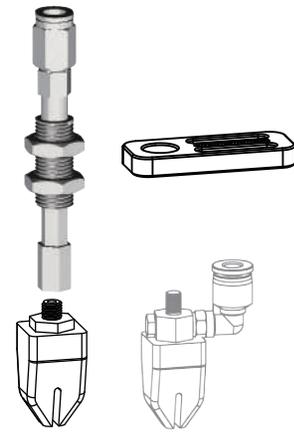
- Aluminum alloy rigid structure design, can be used for high positioning accuracy scenes.
- Soft Beak Module [BMC/BML] can be installed at the end.
- Can be installed with Slide Mounting Plate [SMP].



Model	S	T	L1	L2	Weight	E	Sc	Recommend-ed load	SMP Adaptive	Pipe Diameter	Positioning accuracy	Rotation accuracy
CM-RM525M5	3mm	12mm	25mm	39.5mm	11g	M5	M10x1	500g	YES	6mm	±0.01mm	±0.01°
CM-RM558M5	28.5mm	20mm	58mm	73mm	17g	M5	M10x1	500g	YES	6mm	±0.01mm	±0.01°
CM-RG1840G18	9.5mm	16.5mm	40mm	57mm	33g	G1/8	M14x1	1500g	NO	6mm	±0.01mm	±0.01°
CM-RG18128G18	59mm	47mm	128mm	145mm	58g	G1/8	M14x1	1500g	NO	6mm	±0.01mm	±0.01°

CM -S Soft Beak buffer connection module series

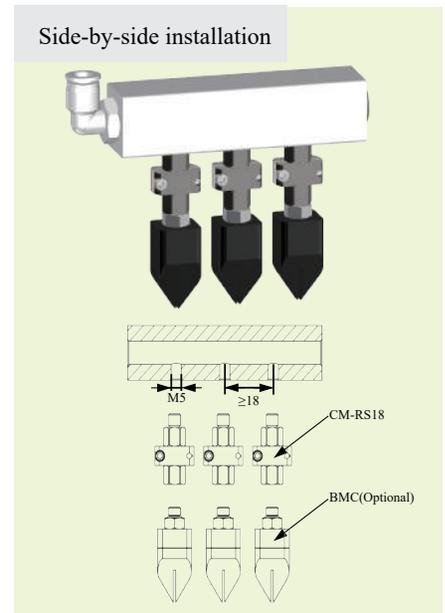
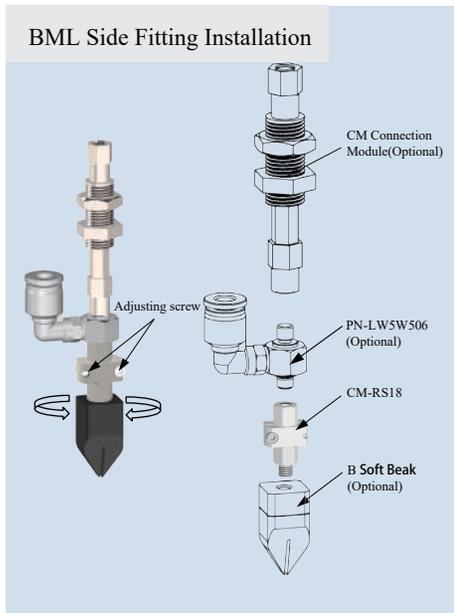
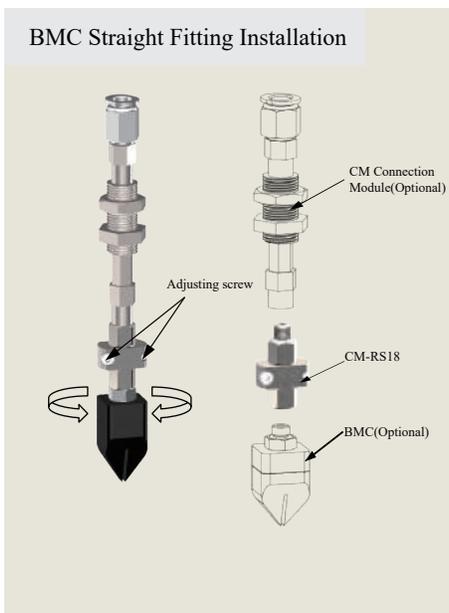
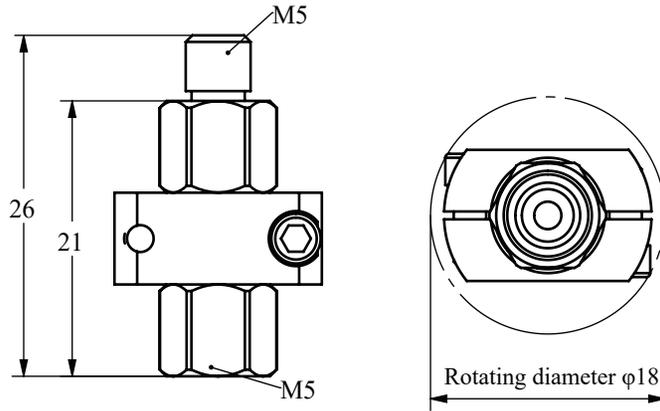
- It has elastic cushioning function. We do not recommend it to be used in scenarios requiring high Positioning accuracy
- Soft Beak Module [BMC/BML] can be installed at the end.
- Some Models can be installed with Slide Mounting Plate[SMP]



Model	S	T	L1	L2	Weight	E	Sc	Elastic buffer force	Recommend-ed load	Pipe Diameter	Positioning accuracy	Rotation accuracy
CM-SN51011B	11mm	33.9mm	63.1mm	77.7mm	25.5g	M5	M10x1	0~3N	300g	6mm	± 0.2 mm	± 0.4 °
CM-SN51015B	15mm	39mm	72.8mm	87.4mm	27.7g	M5	M10x1	0~3N	300g	6mm	± 0.2 mm	± 0.4 °
CM-S04	10.5mm	23mm	58.5mm	73.9mm	28g	M5	M10x1	0~3N	300g	6mm	± 0.5mm	± 1.5 °
CM-S05	20mm	51mm	96mm	111.4mm	43g	M5	M10x1	0~3N	200g	6mm	± 0.5mm	± 1.5 °
CM-S06	30mm	51mm	106mm	121.4mm	50g	M5	M10x1	0~3N	200g	6mm	± 0.5mm	± 1.5 °
CM-S07	40mm	77mm	142mm	157.4mm	56g	M5	M10x1	0~3N	200g	6mm	± 0.5mm	± 1.5 °
CM-S01	21mm	30mm	93mm	110mm	38.4g	G1/8	M14x1	0~10N	800g	6mm	± 0.5mm	± 0.8 °
CM-S02	36mm	50mm	128mm	145mm	45.4g	G1/8	M14x1	0~10N	800g	6mm	± 0.5mm	± 0.8 °

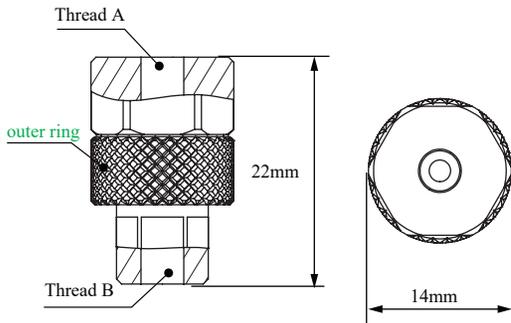
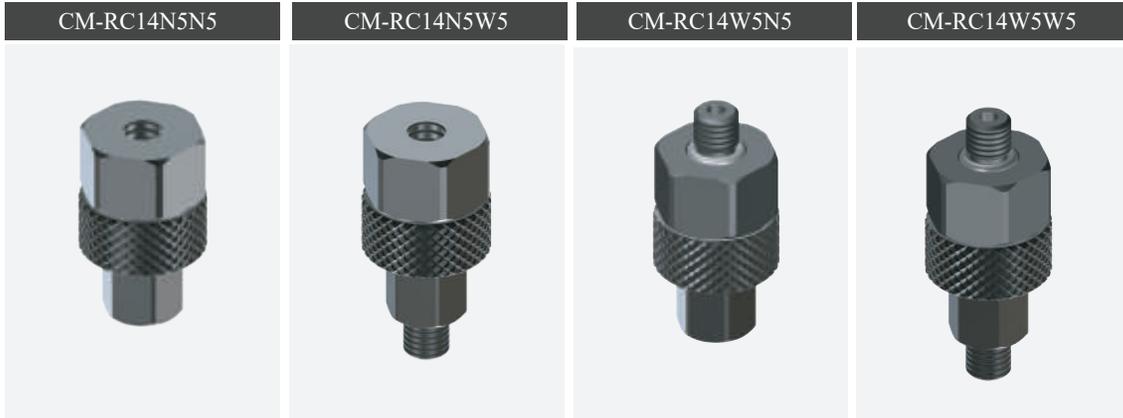
CM-RS18 Rotary Joint

- The weight of the product is only 13g, small and lightweight
- Suitable for multiple Connection Modules: CM-RM525M5, CM-RM558M5, CM-S04, CM-S05, CM-S06, CM-S07
- The swivel can be locked or relaxed by adjusting the screws on one side of the swivel
- When the rotary joint is relaxed, the freedom of rotation in the Z-axis direction is unlocked and the rotation Angle can be adjusted
- When the rotary joint is locked, the rotation degree of freedom in the Z-axis direction is locked, and the rotation Angle cannot be adjusted

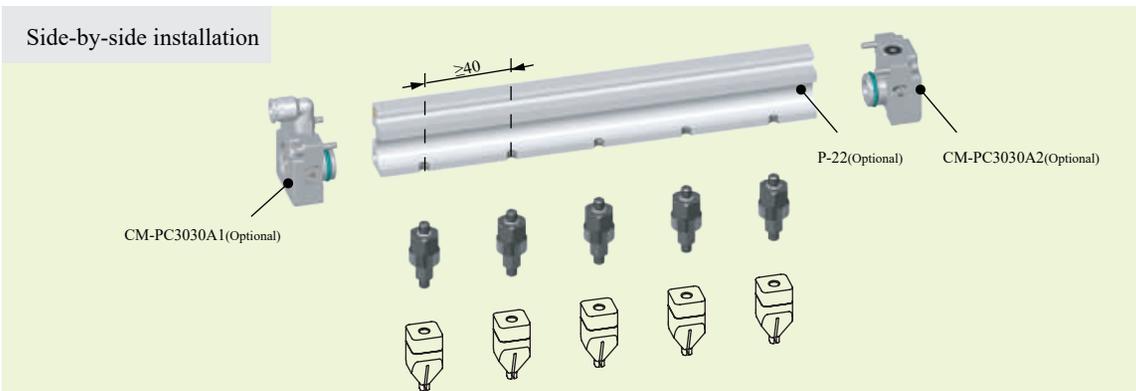
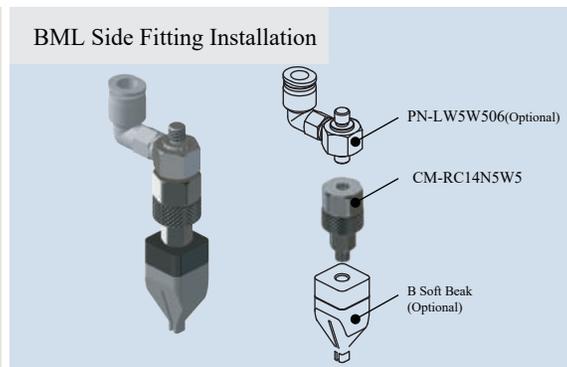
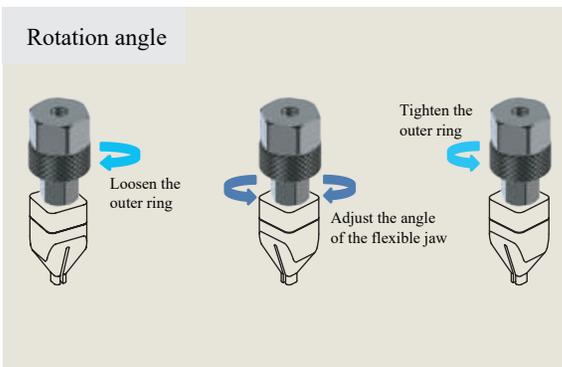


CM-RC14 Rotary Joint series

- Rotation angle: Rotate the outer ring to loosen or tighten the joint and adjust the angle of the soft beak.
- Compact size: The maximum rotating diameter is 14mm.

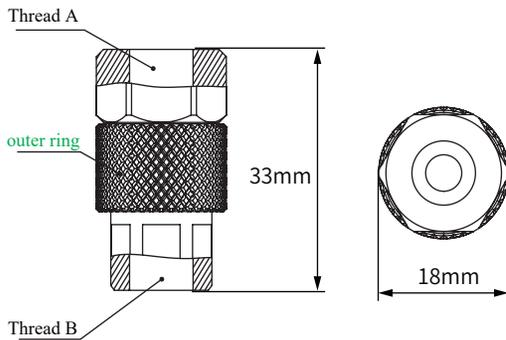
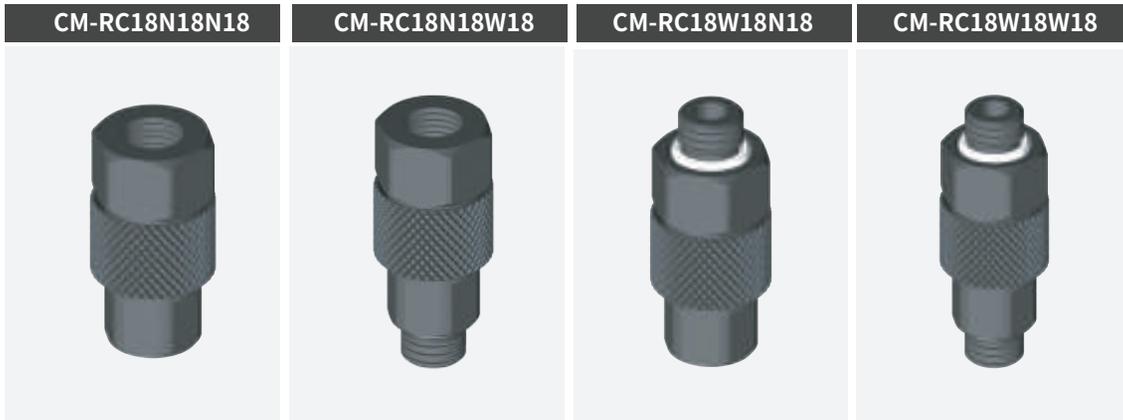


Model	Thread A	Thread B	Weight
CM-RC14N5N5	Internal thread M5	Internal thread M5	6.1g
CM-RC14N5W5	Internal thread M5	External thread M5	6.6g
CM-RC14W5N5	External thread M5	Internal thread M5	6.8g
CM-RC14W5W5	External thread M5	External thread M5	7.2g

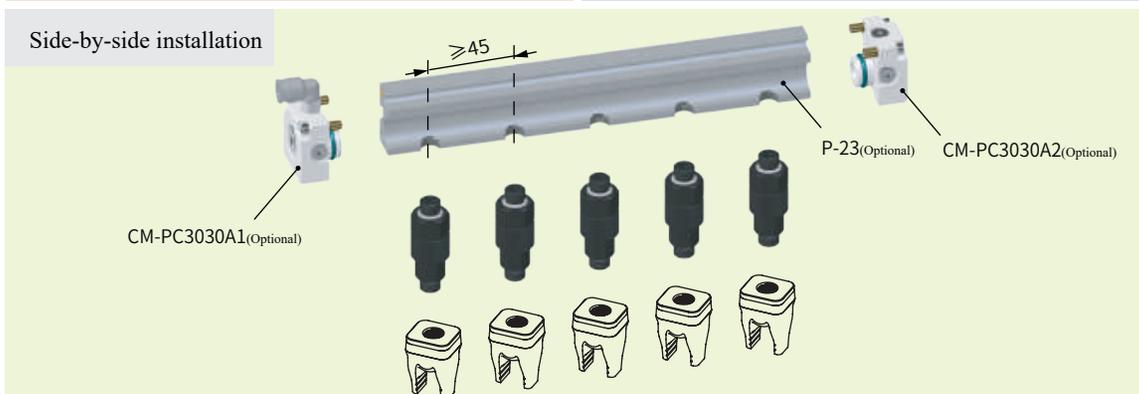
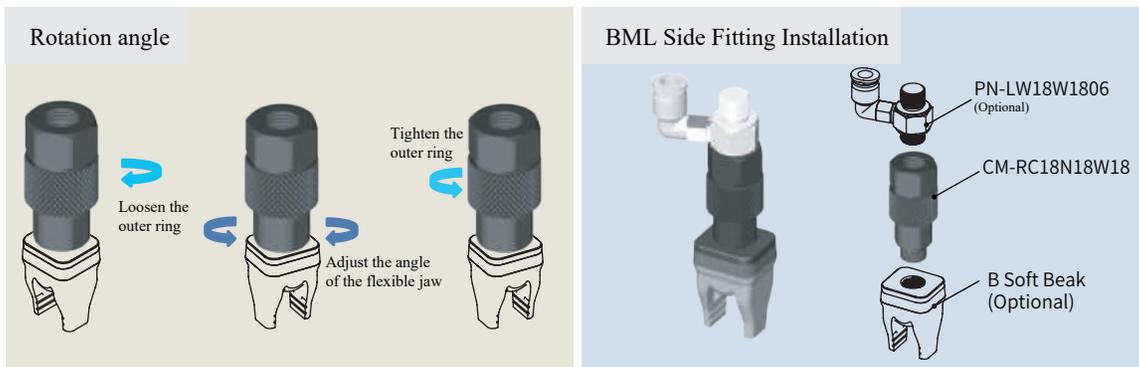


CM-RC18 Rotary Joint series

- Rotation angle: Rotate the outer ring to loosen or tighten the joint and adjust the angle of the soft beak.
- Compact size: The maximum rotating diameter is 18mm.



Model	Thread A	Thread B	Weight [g]
CM-RC18N18N18	Internal thread G1/8	Internal thread G1/8	14.1
CM-RC18N18W18	Internal thread G1/8	External thread G1/8	15.8
CM-RC18W18N18	External thread G1/8	Internal thread G1/8	15.9
CM-RC18W18W18	External thread G1/8	External thread G1/8	17.6



SE-FP Series Flexible probe

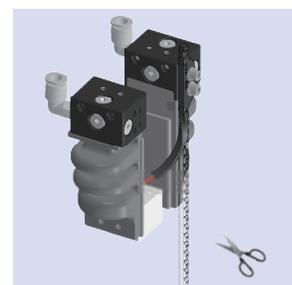
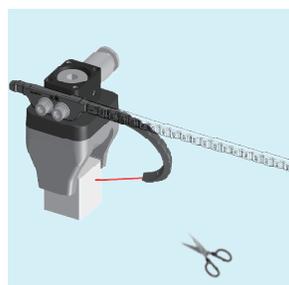
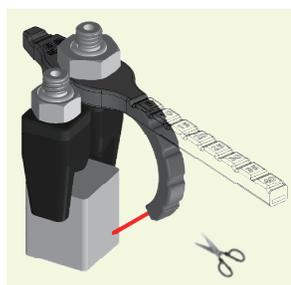
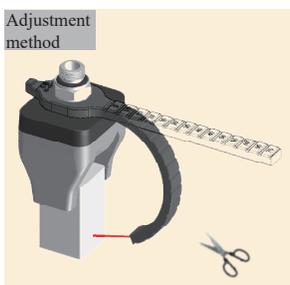
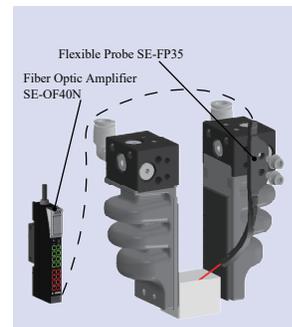
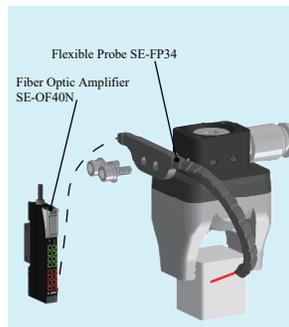
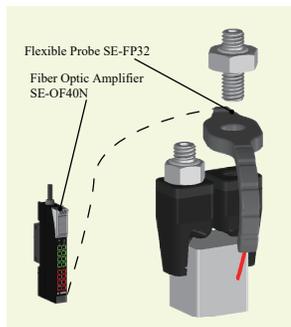
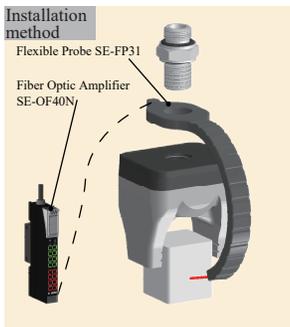
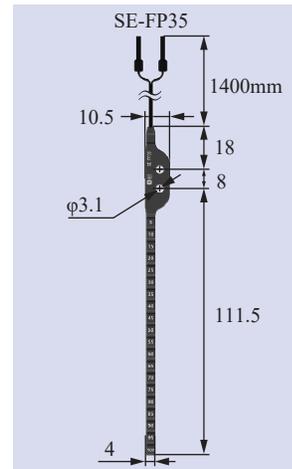
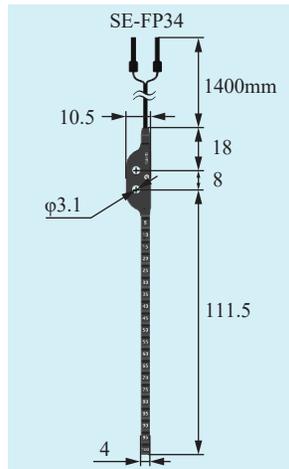
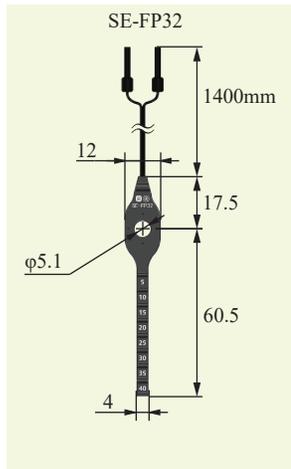
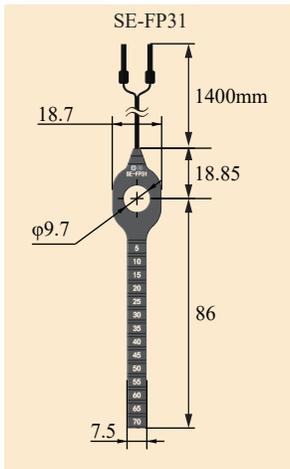
- The end of the non-contact diffuse reflection infrared optical sensor is used for detecting the presence or absence of workpieces.
- It can be installed on the soft beak module [BM].
- The probe angle can be bent and the length can be trimmed.



Scan to watch video

Model	SE-FP31	SE-FP32	SE-FP34	SE-FP35
Installation aperture	G1/8	M5	M3	M3
Adapter joint PN *	PN-CW18W18L	PN-CW5W5L	—	—
Probe thickness D	4mm	3mm	3.6mm	3.6mm
Probe width W	7.5mm	4mm	4mm	4mm
Probe length L	86mm	60.5mm	111.5mm	111.5mm
Self-weight	7.7g	4.4g	7.3g	7.3g

*: For other models of adaptable installation joints, please consult the account manager.



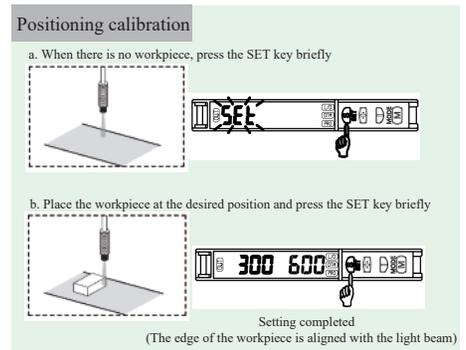
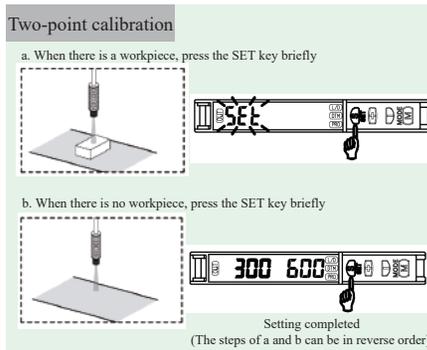
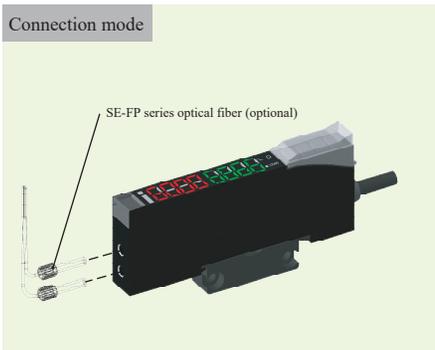
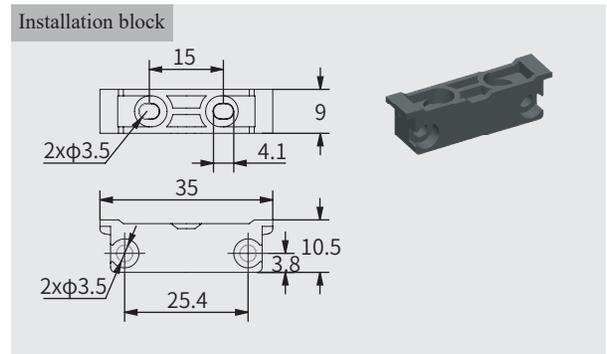
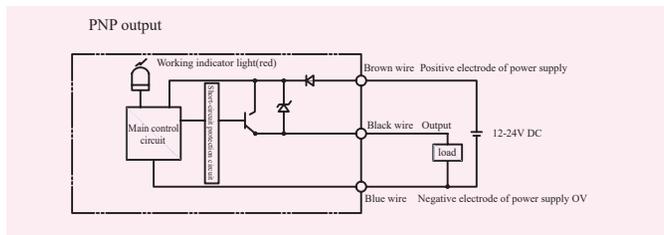
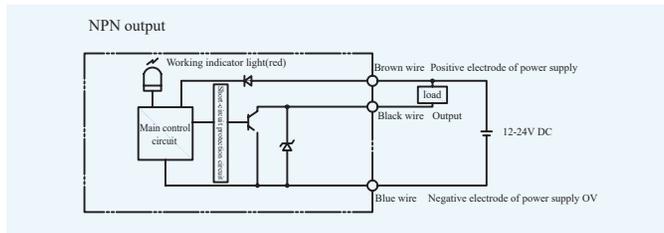
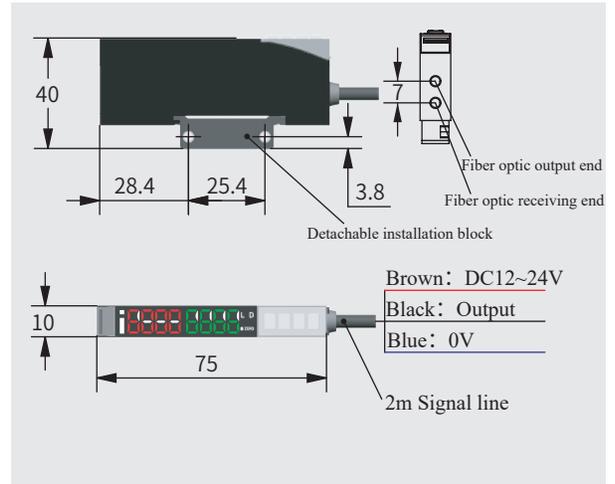
- Bend the probe by hand and point it at the workpiece (the bending radius is not less than 10mm). It is recommended that the distance between the end of the probe and the workpiece is 6-30mm.
- When the probe is too long, it can be cut with scissors. For the cut probe, the illuminance may attenuate and affect the detection distance. At this time, it should be corrected by secondary trimming or adjusting the trigger threshold of the fiber amplifier.
- Black and transparent workpieces will produce a lower diffuse reflection light value. The distance from the end of the probe to the workpiece should be appropriately shortened.

SE-OF series Optical fiber signal amplifier

- High-precision double digital display, NPN or PNP output
- Compatible with SE-FP series flexible probes
- One-click setting for workpiece presence detection



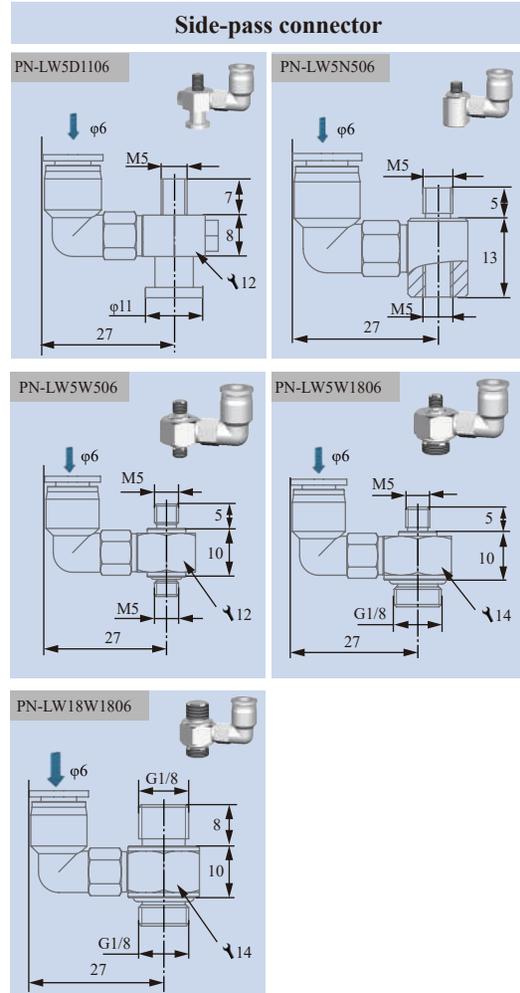
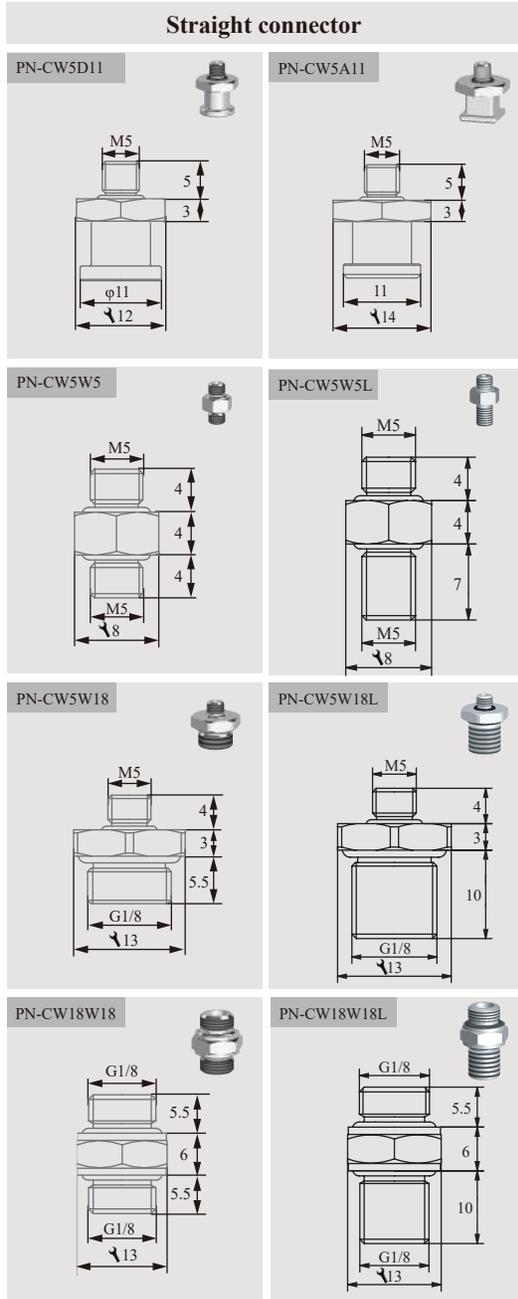
Model	SE-OF40N	SE-OF40P
Type	NPN output, 1 output port, lead wire extraction type.	PNP output, 1 output port, lead wire extraction type.
Light source	Red, four-element light-emitting diode body	
Reaction time	According to different power modes HSP: 10 μS, FINE: 30 μS, SUPR: 100 μS, MEGA: 200 μS.	
Output selection	Normally open LIGHT-ON / Normally close DARK-ON(Switch selection)	
Detection method	Light intensity (capable of area detection and providing automatic sensitivity tracking function).	
Control output	NPN/PNP open collector 24V, maximum 100mA (only for main components) Maximum 20mA (when expansion components are connected. Residual voltage: 1V)	
Power supply	Between 12 to 24VDC +10%, floating ratio (P-P): maximum 10% level 2	
Working environment brightness	Incandescent lamp: Maximum: 20,000 lux. Daylight: Maximum: 30,000 lux	
Power consumption	Standard mode: Maximum 300mW. Maximum voltage: 24V	
Vibration resistance	10 to 55Hz, double amplitude: 1.5mm. For X, Y, and Z axes respectively, it is 2 hours	
Ambient temperature	-10°C to +55 °C, without freezing.	



- This product is only for the detection of target objects. Do not use this product for purposes such as protecting the human body or body parts.
- This product must not be used as an explosion-proof product. Do not use this product in a hazardous location or an environment with potentially explosive gases.
- This product is a DC power supply type sensor. Do not use an AC power supply. Otherwise, the product may explode or catch fire.
- Do not wire the amplifier along power lines or high-voltage lines. Otherwise, the sensor may malfunction or be damaged due to noise.
- Do not use outdoors or in a location where external light can directly enter the light receiving surface.

PN-Pneumatic joint series

- The plug used for connecting or disconnecting pneumatic circuits with soft beaks is divided into two types of connection threads: M5 and G1/8.
- This series is divided into two types: straight plug and side plug (quick insertion).



Installation and usage method

