



5.2

## END OF ARM TOOLING

COMPLEX GRIPPER FLEXIBLE ASSEMBLY

# PRODUCT CATALOGUE

## COMPANY INTRODUCTION

CRG is a high-tech enterprise dedicated to the design, development, sales and service of robot and manipulator end assembly fixture (EOAT). The main products are gripping, absorbing, cutting, quick change and other products, has been widely used in automotive, packaging, home appliances, food, medical, 3C and other industries. They can be put together like an installation kit, and it gives you infinite construction possibilities to easily build your robotic grippers.

## ABOUT US



## INNOVATION

Modular design, free assembly

## TECHNOLOGY ACCUMULATION

10,000+ sets of application cases  
3,000+ fixture accessories available

## SAFE AND RELIABLE

Reliable factory quality

# Enterprise development history



Kunshan YYB Automation Equipment CO., LTD.was established  
Introduce international advanced production equipment and establish a processing line



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Introduce international advanced production equipment and establish a processing line

2009

2017

Set up R&D center and laboratory  
Strategic cooperation with Haitian  
Establish overseas agents



2016

Suzhou CRG Robotics Technology Co., Ltd.was established  
Obtained high-tech enterprise certification  
Obtained ISO, IATF 16949 and other quality system certifications



2019

Robot automatic quick changer product



2023

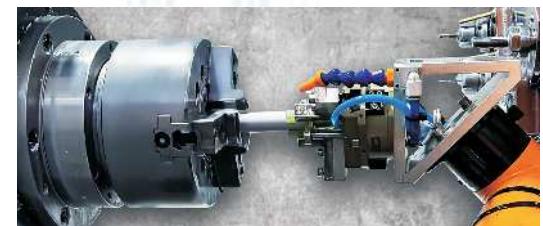
Obtained European Union CE certification  
Automatic quick changer  
pneumatic and power module  
with load of 800kgs are introduced

2020

Invested in Suzhou Xiaimu Intelligent  
Manufacturing CO., LTD  
Invested in the establishment of Wuhan EOAT  
Intelligent Manufacturing Co.,LTD  
Set up NINGBO Office

2022

Set up Qingdao, Wuhu, Dongguan offices  
Automate and intelligently upgrade the production line,  
and increase production capacity





## CORPORATE CULTURE

### Mission

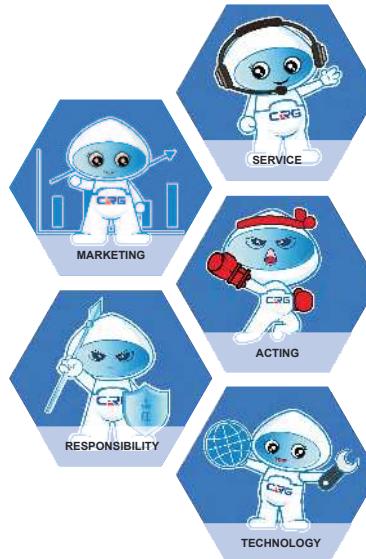
To provide customers with effective solutions and create together! Win win! Share!

### Vision

To create a global famous brand and build an international excellent enterprise!

## Operation Concept

Repeating simple things, repeating what you do attentively!



Serve customers from heart.

Start from future with sensitive mind.

Do all best to achieve target.

Work together and never give up.

Think out of box and open to any possibilities.

## BUSINESS SCOPE



📍 Sales Network

Base in China Service the world

CRG's business covers robot integration applications, automation equipment and robot end tools, and its products are exported to more than 100 countries and regions around the world.

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## Automotive A-pillar take out fixture case

### Product description:

1. Case display products for one mold with two cavities, four sprue.
2. The products displayed in the case mainly use vacuum adsorption products, GR20 series sprue gripper to take out the sprue.

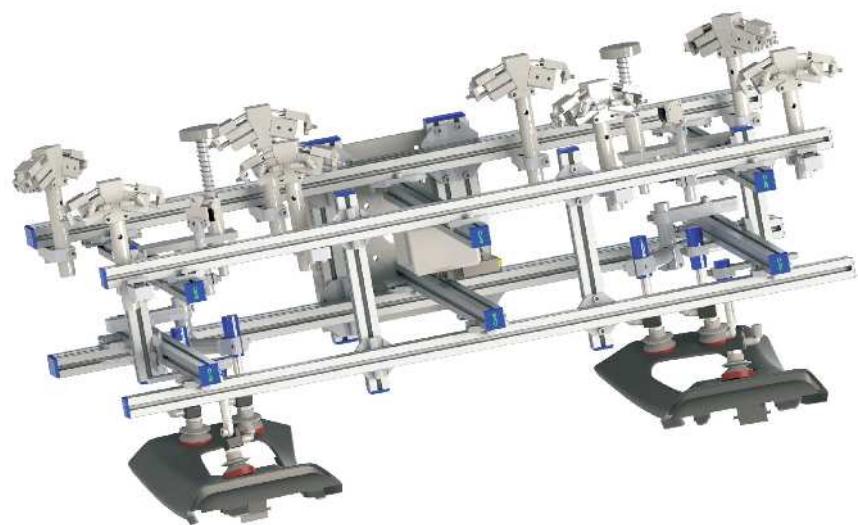


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## Automotive B-Pillar removal cloth fixture case

### Product description:

1. Case display products for one mold with two cavities, no sprue.
2. The products displayed in the case are taken out by vacuum adsorption, and the non-woven fabric is embedded by GN needle claw.
3. The case shows that the fixture uses a manual insert plate quick changer to achieve the purpose of quick changer.



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## Automotive CD pillar manually hanging cloth & take out fixture case

### Product description:

1. Case product display as one mold with four cavities, no sprue.
2. The products displayed in the case are mainly taken out by vacuum adsorption, and the hanging cloth is hung by GNS manual needle claw.
3. The case shows that the fixture uses QCA quick changer, which can realize the automatic replacement of the fixture.

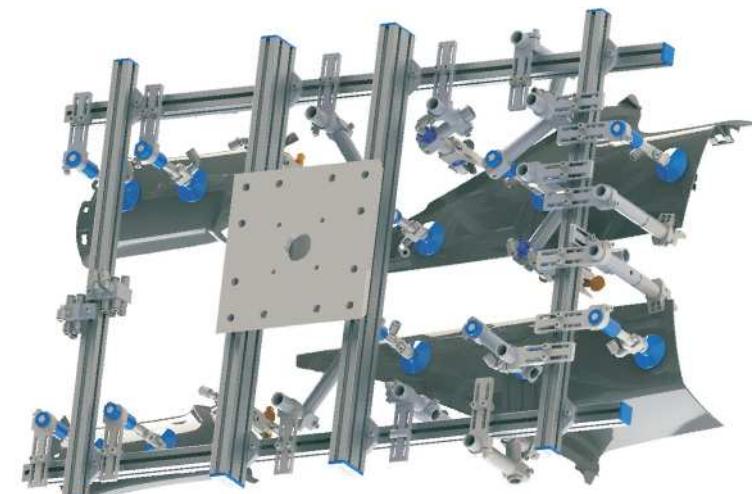


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## Automotive CD pillar take out fixture case

### Product description:

1. The case shows that the product is one mold with four cavities and no sprue.
2. The products displayed in the case mainly use vacuum adsorption products.
3. The case shows that the fixture uses a square manual quick changer to achieve the purpose of quick changer.





## Automotive center grill take out fixture case

### Product description:

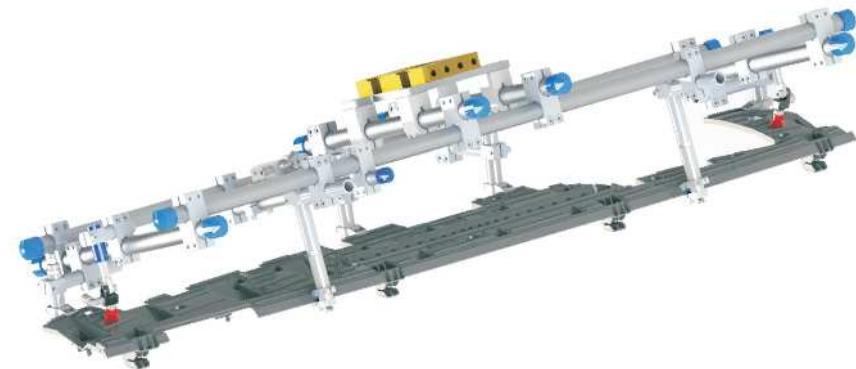
1. Case show product for one mold with one cavity, no sprue.
2. The products displayed in the case mainly use the introduction of adsorption, pneumatic finger-assisted extraction method.
3. The case shows that the fixture uses a square manual quick changer to achieve the purpose of quick changer.



## Automotive defroster grille take out fixture case

### Product description:

- 1.The case shows that the product is one mold with one cavity, no sprue.
- 2.The products displayed in the case mainly use the finger gripper, vacuum adsorption as a supplementary way to remove.
- 3.The case shows that the fixture uses automatic quick changer to achieve the purpose of quick changer.

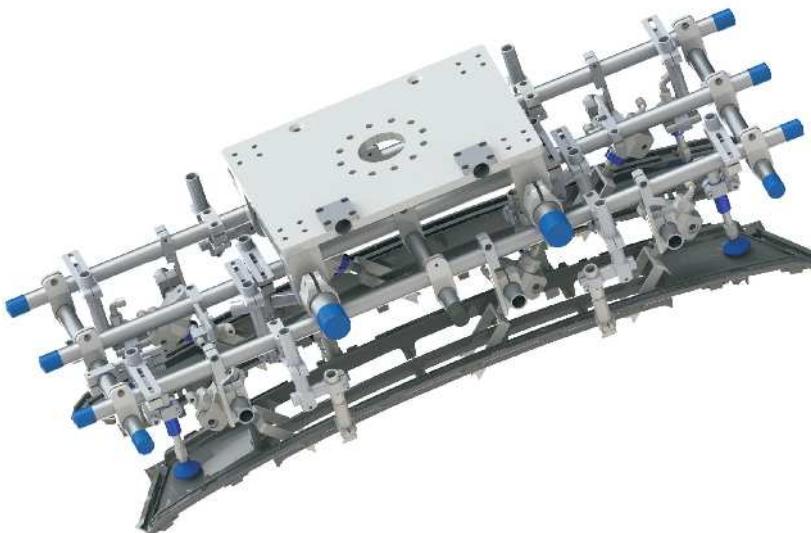


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## Automobile front bumper lower grill removal fixture case

### Product description:

1. The case shows that the product is a mold with two cavities and six sprue.
2. The products shown in the case are mainly took out by finger-operating, supplemented by vacuum adsorption.



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## Automobile front bumper lower grill removal fixture case

### Product description:

1. Case show product for one mold with one cavity, no sprue.
2. The products displayed in the case mainly use the finger gripper, vacuum adsorption as a supple mentary way to remove.
3. The case shows that the fixture uses QC manual quick changer to achieve the purpose of quick replacement.

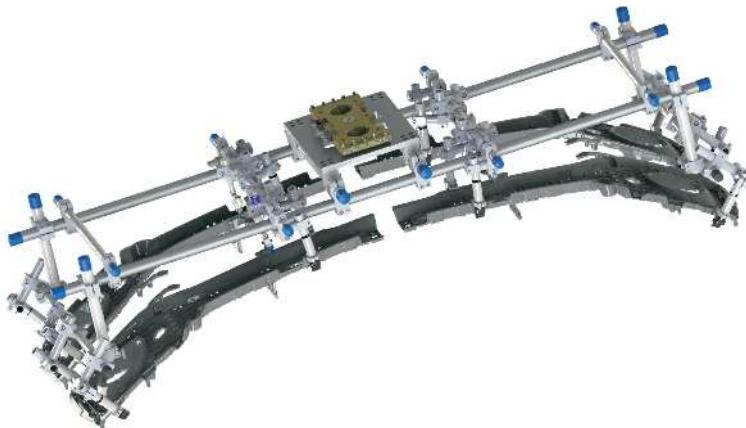


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## Automobile front bumper left and right lower grill removal fixture case

### Product description:

- 1.The case shows that the product is one mold with two cavities and no sprue.
- 2.The products displayed in the case mainly use the finger gripper, vacuum adsorption as a supplementary way to remove.
- 3.The case shows that the fixture uses automatic quick changer to achieve the purpose of quick change.

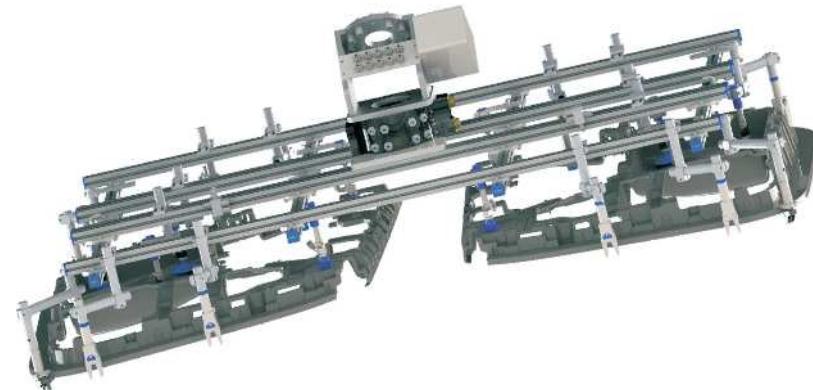


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## Automotive double door panel removal fixture case

### Product description:

- 1.The case shows that the product is one mold with two cavities and eight sprue.
- 2.The products displayed in the case mainly use vacuum adsorption, finger gripper extraction method, GRT series sprue gripper to remove the sprue.
- 3.The case shows that the fixture uses QC manual quick changer to achieve the purpose of quick replacement.

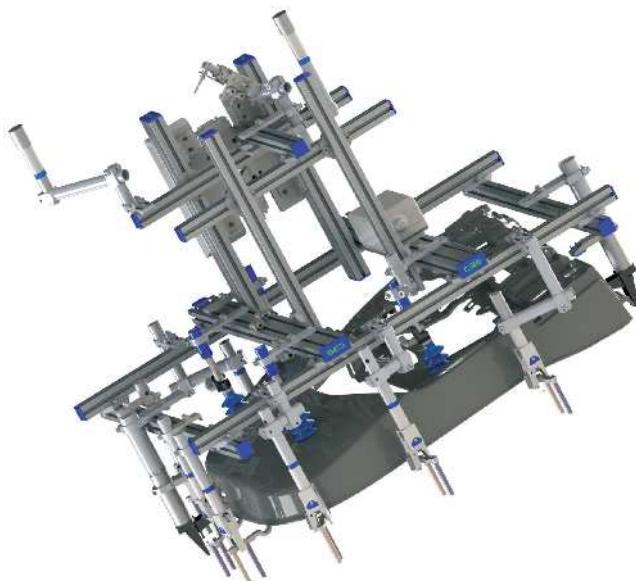


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## Front door manipulator insert fixture case

### Product description:

1. Case show products for one mold, one cavity, seven sprue.
2. The products displayed in the case mainly use vacuum adsorption, finger gripper extraction method, GRT series sprue gripper to remove the sprue.
3. The case shows that the fixture uses automatic quick changer to achieve the purpose of quick changer.



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## Bumper mold removal fixture case

### Product description:

1. Case show product for one mold with one cavity, no sprue.
2. The products displayed in the case are mainly extracted by means of strong clamping and vacuum adsorption.
3. The case is a fixed-mold pickup, which is more difficult than moving-mold pickup.



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## Automobile rear bumper body removal fixture case

### Product description:

1. Case show product for one mold with one cavity, no sprue.
2. The products displayed in the case mainly adopt the extraction method of pushing adsorption combination & vacuum adsorption combination.
3. The case shows that the fixture uses automatic quick changer to achieve the purpose of QCA quick changer.

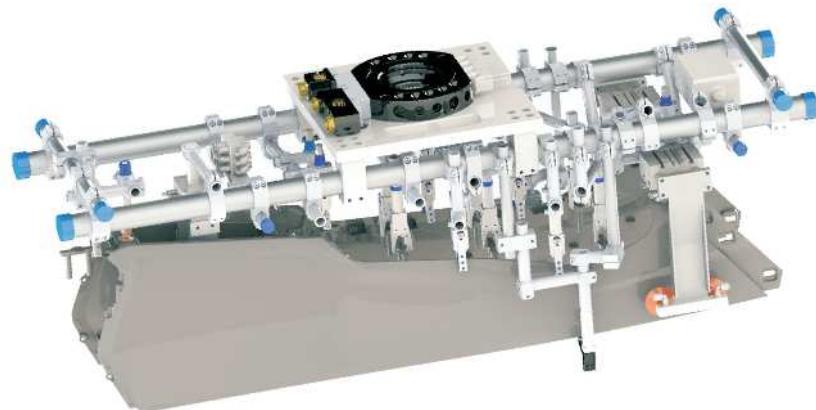


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## Instrument panel body removal fixture case

### Product description:

1. The case shows that the product is one mold with two cavities and ten sprue.
2. The products displayed in the case mainly adopt the extraction method of finger gripper & push adsorption, and the GRT series sprue gripper takes out the sprue.
3. The case shows that the fixture uses automatic quick changer to achieve the purpose of QCA quick changer.

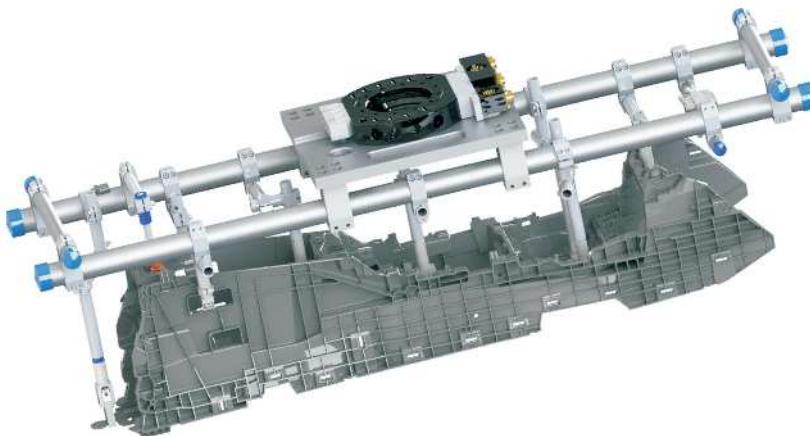


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## Automotive instrument panel skeleton removal fixture case

### Product description:

1. Case show product for one mold with one cavity and one sprue.
2. The products displayed in the case mainly use the way of finger-based, adsorption as a supplement to remove , GRT series sprue gripper to remove the sprue.
3. The case shows that the fixture uses automatic QCA quick changer to achieve the purpose of quick changer.

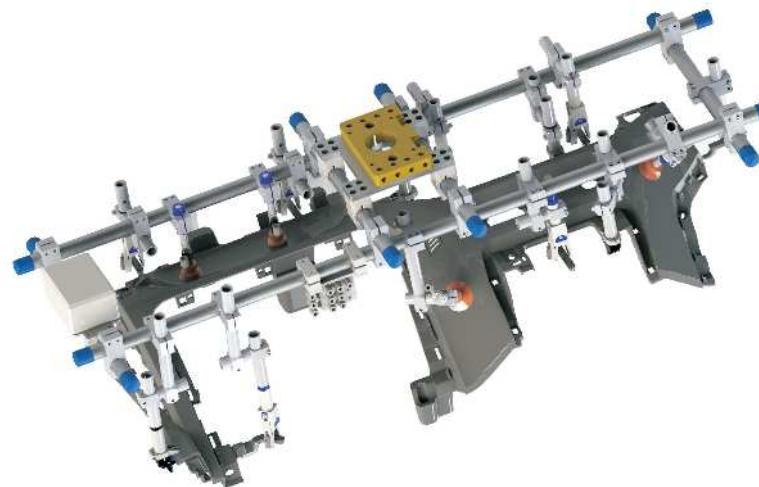


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## Instrument panel lower frame removal fixture example

### Product description:

1. Case show products for one mold with one cavity, seven sprue.
2. The products displayed in the case mainly use the way of finger-based, adsorption as a supplement to remove, GRT series gripper to remove the sprue.
3. The case shows that the fixture uses automatic quick changer to achieve the purpose of quick changer.



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## Automotive hubcap removal fixture case

### Product description:

- 1.The case shows that the product is one mold with one cavity and one sprue.
- 2.The products displayed in the case are mainly extracted by vacuum adsorption, and the GRT series sprue gripper is used to remove the sprue.

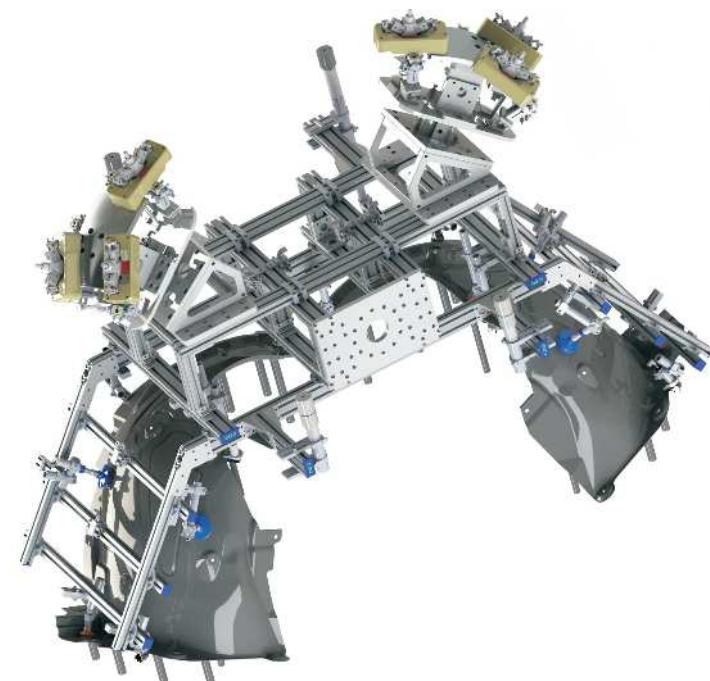


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## Hubcap removal and flush fixture case

### Product description:

- 1.Case show product for one mold with one cavity, no sprue.
- 2.The products displayed in the case are mainly extracted by vacuum adsorption, and pneumatic needle clip & 3D printing copy is embedded in the felt.
- 3.The case fixture is assisted by a high precision positioner.





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#### IN-DEEP CUSTOMIZED

Modular design is deeply customized on demand



#### SHORT DELIVERY

Have sufficient physical inventory industry



#### QUALITY ASSURANCE

Quality control system above the industry



#### POWERFUL FACTORY

With more than 10,000 successful cases

Profile  
SUS Tube



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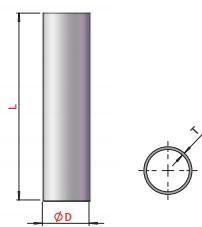
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Quick  
Changer



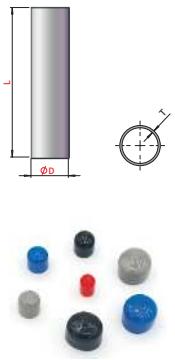
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## Sus Tube



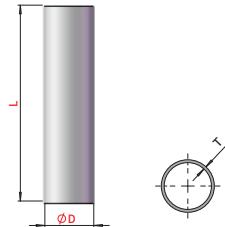
PN	Model	D(mm)	L(mm)	T(mm)	Weight	End Cap(PN)	End Cap(Model)
4.Y00040	PST8-1500	Ø8	1500	0.6	215g	1.Y03375(Red)	P08RD
4.Y00021	PST12-1500	Ø12	1500	0.6	339g	1.Y03636(Grey) 1.Y03638(Blue) 1.Y03640(Black)	P12GY P12BU P12BK
4.Y00022	PST20-1500	Ø20	1500	0.8	560g	1.Y03637(Grey) 1.Y03639(Blue) 1.Y03641(Black)	P20GY P20BU P20BK

## Carbon Fiber Tube

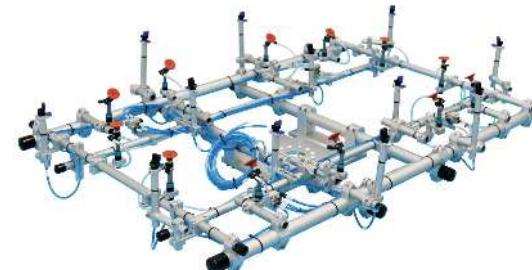


PN	Model	D(mm)	L(mm)	T(mm)	Weight	End Cap(PN)	End Cap(Model)
4.Y10960	PCT8-1000	Ø8	1000	0.8	31g	1.Y03375 (Red)	P08RD
4.Y10961	PCT8-2000	Ø8	2000	0.8	62g		
4.Y10962	PCT12-1000	Ø12	1000	1.0	59g	1.Y03636(Grey) 1.Y03638(Blue) 1.Y03640(Black)	P12GY P12BU P12BK
4.Y10963	PCT12-2000	Ø12	2000	1.0	118g		
4.Y10964	PCT20-1000	Ø20	1000	1.2	103g	1.Y03637(Grey) 1.Y03639(Blue) 1.Y03641(Black)	P20GY P20BU P20BK
4.Y10965	PCT20-2000	Ø20	2000	1.2	206g		
4.Y10966	PCT25-1000	Ø25	1000	1.5	169g	1.Y10988(Black)	P25BK
4.Y10967	PCT25-2000	Ø25	2000	1.5	339g		
4.Y10968	PCT30-1000	Ø30	1000	1.5	236g	1.Y20001(Black)	P30BK
4.Y10969	PCT30-2000	Ø30	2000	1.5	472g		
4.Y10970	PCT40-1000	Ø40	1000	2.5	431g	1.Y10987(Black)	P40BK
4.Y10971	PCT40-2000	Ø40	2000	2.5	861g		

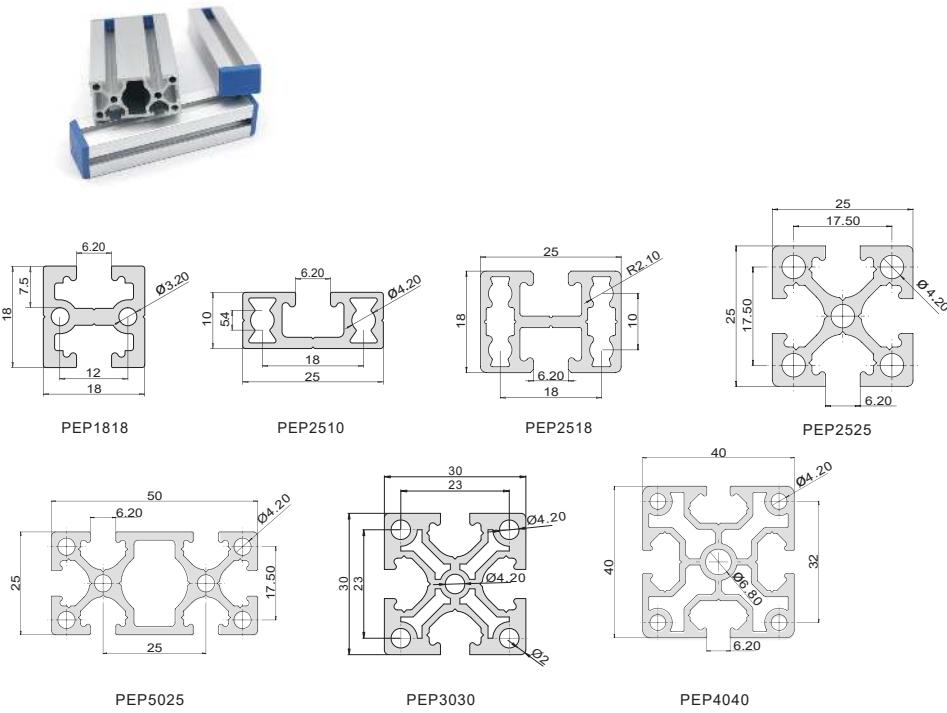
## Aluminium Tube



PN	Model	D(mm)	L(mm)	T(mm)	Weight	End Cap(PN)	End Cap(Model)
4.Y00468	PAT20-1000	Ø20	1000	2.0	308g	1.Y03637(Grey)	P20GY
4.Y10972	PAT20-2000	Ø20	2000	2.0	616g	1.Y03639(Blue) 1.Y03641(Black)	P20BU P20BK
4.Y10950	PAT25-1000	Ø25	1000	2.5	467g		
4.Y10974	PAT25-2000	Ø25	2000	2.5	934g	1.Y10988(Black)	P25BK
4.Y00469	PAT30-1000	Ø30	1000	2.5	558g	1.Y20001(Black)	P30BK
4.Y10973	PAT30-2000	Ø30	2000	2.5	1116g		
4.Y00538	PAT40-1000	Ø40	1000	2.5	799g	1.Y10987(Black)	P40BK
4.Y10975	PAT40-2000	Ø40	2000	2.5	1558g		



## Extruded Profiles



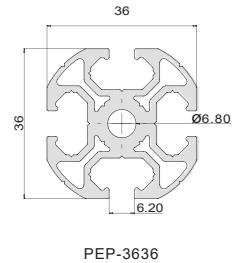
## Plugs for profile



PN	Model	Length	Weight	End Cap( PN)	End Cap(Model)
4.Y00075	PEP1818-1000	1.0m	425g	4.Y00517	P1818
4.Y00076	PEP2510-1000	1.0m	310g	4.Y00518	P2510
4.Y00455	PEP2518-1000	1.0m	400g	4.Y00069	P2518
4.Y00050	PEP2525-1000	1.0m	610g		
* 4.Y00051	PEP2525-2000	2.0m	1220g	4.Y00070	P2525
4.Y00056	PEP5025-1000	1.0m	1040g		
* 4.Y00057	PEP5025-2000	2.0m	2080g	4.Y00071	P5025
4.Y00052	PEP4040-1000	1.0m	1300g		
* 4.Y00053	PEP4040-2000	2.0m	2600g	4.Y00072	P4040
4.Y00540	PEP3030-1000	1.0m	650g		
* 4.Y00541	PEP3030-2000	2.0m	1300g	4.Y10972	P3030

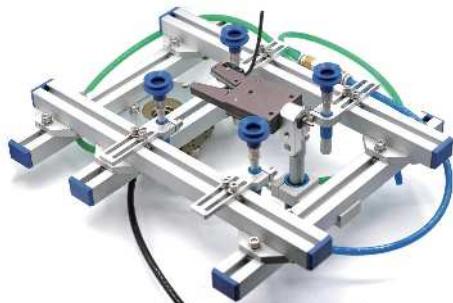
\* Optional

## Extruded Profiles



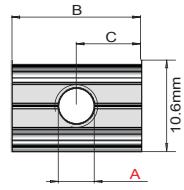
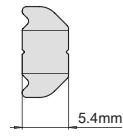
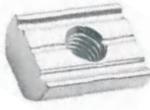
PN	Model	Length	Weight	End Cap(PN)	End Cap(Model)
4.Y00054	PEP3636-1000	1.0m	1168g		
4.Y00484	PEP3636-1500	1.5m	1752g	4.Y00073	P3636
*4.Y00055	PEP3636-2000	2.0m	2336g		

\* Optional

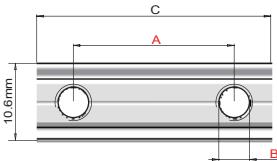
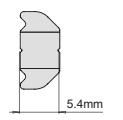
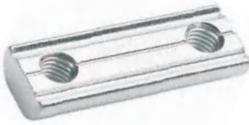


- Profile' SUS Tube  
Stents Module  
Quick Changer  
Grip Module  
Air Nipper  
Vacuum Module  
Accessory Components
- Profile' SUS Tube  
Stents Module  
Quick Changer  
Grip Module  
Air Nipper  
Vacuum Module  
Accessory Components

## T-Nuts

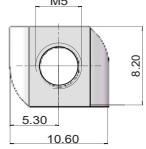
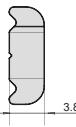


PN	Model	A(mm)	B(mm)	C(mm)	Weight
7.Y00651	PTN-M4	M4	15	7.5	5g
7.Y00425	PTN-M5	M5	15	7.5	5g
7.Y00652	PTN-M6	M6	15	7.5	5g



PN	Model	A(mm)	B(mm)	C(mm)	Weight
7.Y00653	PTN-M4P8	8	M4	16	5g
7.Y00654	PTN-M5P10	10	M5	20	7g
7.Y00655	PTN-M5P15	15	M5	25	9g
7.Y00656	PTN-M5P17	17	M5	25	9g
7.Y00657	PTN-M5P22	22	M5	32	11g
7.Y00658	PTN-M5P25	25	M5	35	13g
7.Y00659	PTN-M5P28	28	M5	38	14g
7.Y00660	PTN-M5P30	30	M5	40	15g
7.Y00661	PTN-M5P35	35	M5	45	16g
7.Y00662	PTN-M5P40	40	M5	50	18g
7.Y00663	PTN-M5P50	50	M5	60	22g
7.Y00664	PTN-M5P60	60	M5	70	26g
7.Y00665	PTN-M5P90	90	M5	100	38g

## Last-Minute Nut

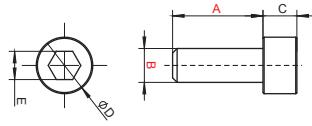


PN	Model	Weight
7.Y00805	PTN-M5R	2g

To be used when you need to add something to an already assembled EOAT.

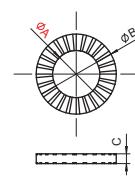


## Sus Screws



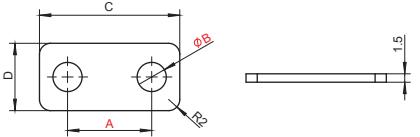
PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	Weight
1.Y03908	PTC-M4L10	10					1.6g
1.Y03848	PTC-M4L12	12					1.8g
1.Y02752	PTC-M4L14	14					1.9g
1.Y04073	PTC-M4L16	16					2.0g
1.Y05846	PTC-M4L18	18	M4	4	6.8	3.2	2.1g
1.Y04000	PTC-M4L20	20					2.2g
1.Y06307	PTC-M4L22	22					2.5g
1.Y05319	PTC-M4L25	25					2.7g
1.Y04294	PTC-M5L10	10					2.9g
1.Y03850	PTC-M5L12	12					3.1g
1.Y04528	PTC-M5L14	14					3.3g
1.Y03849	PTC-M5L16	16					3.6g
1.Y05925	PTC-M5L18	18					3.8g
1.Y03909	PTC-M5L20	20					4.0g
1.Y06257	PTC-M5L22	22	M5	5	8.3	4.1	4.3g
1.Y03851	PTC-M5L25	25					4.7g
1.Y04469	PTC-M5L30	30					5.3g
1.Y04580	PTC-M5L35	35					5.9g
1.Y04898	PTC-M5L40	40					6.5g
1.Y04968	PTC-M5L50	50					7.6g
1.Y05391	PTC-M5L60	60					10.0g
1.Y04288	PTC-M6L10	10					4.0g
1.Y03910	PTC-M6L12	12					4.6g
1.Y04153	PTC-M6L14	14					5.2g
1.Y02753	PTC-M6L16	16					5.5g
1.Y07729	PTC-M6L18	18	M6	6	10	5.3	5.7g
1.Y04076	PTC-M6L20	20					6.1g
1.Y06227	PTC-M6L25	25					6.9g
1.Y04001	PTC-M6L30	30					7.7g
1.Y03911	PTC-M6L35	35					8.6g

## Single Hole Shim



PN	Model	A(mm)	B(mm)	C(mm)	Weight
1.Y03853	PTS-M4	4.5	7	0.45	0.07g
1.Y03852	PTS-M5	5.5	9	0.55	0.17g
1.Y03854	PTS-M6	6.5	10	0.65	0.20g

## Double Holes Shim



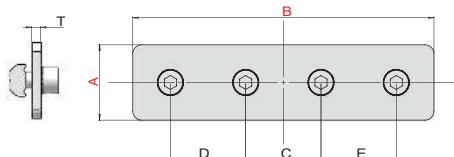
PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	Weight
4.Y00522	PTD-M4P8	8	4.5	16	12	1.8g
4.Y00523	PTD-M5P10	10	5.5	20	12	2.2g
4.Y00524	PTD-M5P15	15	5.5	25	12	2.5g
4.Y00525	PTD-M5P17	17	5.5	25	12	3.0g
4.Y00526	PTD-M5P22	22	5.5	32	12	3.3g
4.Y00527	PTD-M5P25	25	5.5	35	12	3.5g



## Straight Fixing Plate



(Kit With Screws Option)



PN	7.Y00641	7.Y00642	7.Y00643
Model	SFP-S2550	SFP-S25100	SFP-S40160
A(mm)	25	25	40
B(mm)	50	100	160
C(mm)	25	25	40
D(mm)	-	25	40
E(mm)	-	25	40
T(mm)	3	3	3
PEP2510	✓	✓	-
PEP2518	✓	✓	-
PEP2525	✓	✓	-
PEP5025	✓	✓	-
PEP4040	-	-	✓
<b>Accessoriere selection</b>			
Screws	PTC-M5L12*2	PTC-M5L12*4	PTC-M5L12*4
Single hole shim	PTS-M5*2	PTS-M5*4	PTS-M5*4
T-Nuts	PTN-M5*2	PTN-M5P25*2	PTN-M5P40*2
Weight	45g	95g	195g

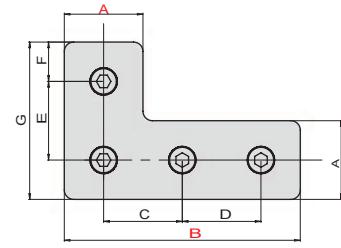
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SFP-S2550T Part number 7.Y00641-T.



## L-shaped Fixing Plate

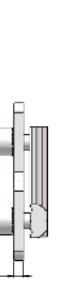


(Kit With Screws Option)



PN	7.Y00647	7.Y00648	7.Y00649
Model	SFP-L2550	SFP-L2575	SFP-L40120
A(mm)	25	25	40
B(mm)	50	75	120
C(mm)	25	25	40
D(mm)	-	25	40
E(mm)	25	25	40
F(mm)	12.5	12.5	20
G(mm)	50	50	80
T(mm)	3	3	3
PEP2510	✓	✓	-
PEP2518	✓	✓	-
PEP2525	✓	✓	-
PEP5025	✓	✓	-
PEP4040	-	-	✓
<b>Accessoriere selection</b>			
Screws	PTC-M5L12*3	PTC-M5L12*4	PTC-M5L12*4
Single hole shim	PTS-M5*3	PTS-M5*4	PTS-M5*4
T-Nuts	PTN-M5*1	PTN-M5P25*2	PTN-M5P40*2
Weight	70g	95g	200g

Note: If screw kits needed, add **T** to the part number and model number. eg: Model SFP-L2550T Part number 7.Y00647-T.



Profile, SUS Tube  
Stents Module

Quick Changer

Grip Module

Air Nipper

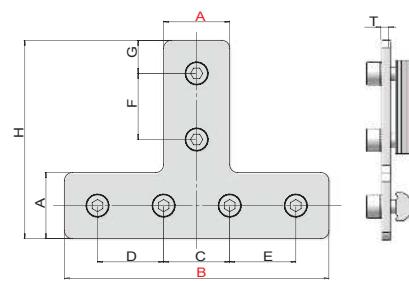
Vacuum Module

Accessory Components

## T-shaped Fixing Plate



(Kit With Screws Option)



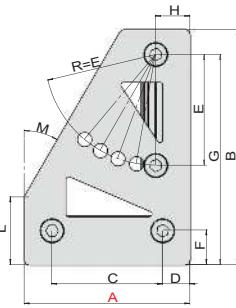
PN	7.Y00644	7.Y00645	7.Y00646
Model	SFP-T2550	SFP-T25100	SFP-T40120
A(mm)	25	25	40
B(mm)	50	100	120
C(mm)	25	25	90
D(mm)	-	25	-
E(mm)	-	25	-
F(mm)	25	25	40
G(mm)	12.5	12.5	15
H(mm)	75	75	110
T(mm)	3	3	3
PEP2510	✓	✓	-
PEP2518	✓	✓	-
PEP2525	✓	✓	-
PEP5025	✓	✓	-
PEP4040	-	-	✓
<b>Accessoriere selection</b>			
Screws	PTC-M5L12*4	PTC-M5L12*6	PTC-M5L12*4
Single hole shim	PTS-M5*4	PTS-M5*6	PTS-M5*4
T-Nuts	PTN-M5P25*2	PTN-M5P25*3	PTN-M5P40*1 PTN-M5P90*1
Weight	95g	145g	250g

Note: If screw kits needed, add **T** to the part number and model number. eg: Model SFP-T2550T Part number 7.Y00644-T.

## Fixing Plate With Adjustable Angle



(Kit With Screws Option)



PN	7.Y00637	7.Y00638	7.Y00639
Model	SFP-A60	SFP-A90	SFP-A70
A(mm)	60	90	70
B(mm)	85	95	100
C(mm)	40	60	50
D(mm)	10	15	10
E(mm)	40	50	40
F(mm)	12.5	12.5	20
G(mm)	76	86	90
H(mm)	12.5	12.5	20
L(mm)	25	25	40
M(mm)	30°	30°	27°
T(mm)	3	3	3
PEP2510	✓	✓	-
PEP2518	✓	✓	-
PEP2525	✓	✓	-
PEP5025	✓	✓	-
PEP4040	-	-	✓
<b>Accessoriere selection</b>			
Screws	PTC-M5L12*4	PTC-M5L12*5	PTC-M5L12*4
Single hole shim	PTS-M5*4	PTS-M5*5	PTS-M5*4
T-Nuts	PTN-M5P40*2	PTN-M5P60*1 PTN-M5P50*1	PTN-M5P50*1
Weight	130g	215g	175g

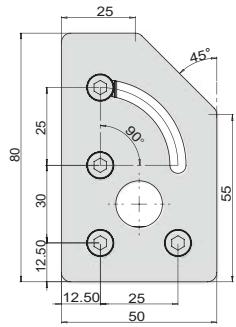
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SFP-A60T Part number 7.Y00637-T.



## Fixing Plate With Adjustable Angle



(Kit With Screws Option)



PN	7.Y00640
Model	SFP-A50
T	3mm
<b>Accessories selection</b>	
Screws	PTC-M5L12*4
Single hole shim	PTS-M5*4
T-Nuts	PTN-MSP25*2
Weight	115g

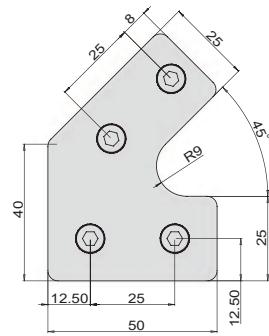
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SFP-A60T Part number 7.Y00637-T.



## 45° Fixing Plate



(Kit With Screws Option)



PN	7.Y00636
Model	SFP-50
T	3mm
<b>Accessories selection</b>	
Screws	PTC-M5L12*4
Single hole shim	PTS-M5*4
T-Nuts	PTN-MSP25*2
Weight	100g

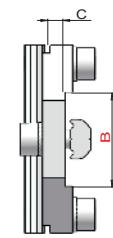
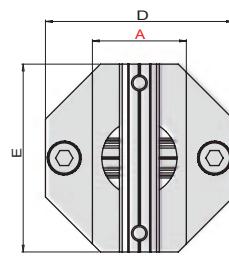
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SFP-50T Part number 7.Y00636-T.



## Cross Mounting Bracket For Profiles



(Kit With Screws Option)



PN	Model	A	B	C	D	E	PEP1818	PEP2510	PEP2518	PEP2525	PEP5025	PEP4040	PEP3030
7.Y00290	SMBA-1818	18	18	2	38	38	✓						
7.Y00291	SMBA-1825	18	25	4	38	45	✓		✓	✓			
7.Y00245	SMBA-2020	20	20	4	50	50							
7.Y00194	SMBA-2525	25	25	4	50	50		✓	✓	✓			
7.Y00193	SMBA-3030	30	30	4	50	50							✓
7.Y00011	SMBA-5050	50	50	4	70	70						✓	
7.Y00292	SMBA-2550	25	50	4	70	70		✓	✓	✓			
7.Y00246	SMBA-4040	40	40	4	60	60							
7.Y00355	SMBA-8080	80	80	4	100	100							
7.Y00293	SMBA-4080	40	80	4	60	100							✓
7.Y00294	SMBA-2580	25	80	4	45	100			✓	✓	✓	✓	
7.Y00356	SMBA-2540	25	40	4	45	60		✓	✓	✓	✓	✓	
7.Y00690	SMBA-3025	30	25	4	50	50		✓					

### Accessoriere selection

Model	Screws	Single hole shim	T-Nuts	Weight
SMBA-1818	PTC-M5L12*4	PTS-M5*4	PTN-M5P28*2	46g
SMBA-1825	PTC-M5L14*4	PTS-M5*4	PTN-M5P28*1, PTN-M5P35*1	60g
SMBA-2020	PTC-M5L14*4	PTS-M5*4	PTN-M5P40*2	75g
SMBA-2525	PTC-M5L14*4	PTS-M5*4	PTN-M5P40*2	75g
SMBA-3030	PTC-M5L14*4	PTS-M5*4	PTN-M5P40*2	74g
SMBA-5050	PTC-M5L14*8	PTS-M5*8	PTN-M5P60*4	170g
SMBA-2550	PTC-M5L14*6	PTS-M5*6	PTN-M5P60*3	155g
SMBA-4040	PTC-M5L16*4	PTS-M5*4	PTN-M5P50*2	85g
SMBA-8080	PTC-M5L16*8	PTS-M5*8	PTN-M5P90*4	255g
SMBA-4080	PTC-M5L16*6	PTS-M5*6	PTN-M5P50*2, PTN-M5P90*1	175g
SMBA-2580	PTC-M5L14*2 16*4	PTS-M5*6	PTN-M5P35*2, PTN-M5P90*1	140g
SMBA-2540	PTC-M5L14*2 16*2	PTS-M5*4	PTN-M5P35*1, PTN-M5P50*1	48g
SMBA-3025	PTC-M5L16*4	PTS-M5*4	PTN-M5P40*2	47g

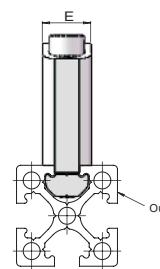
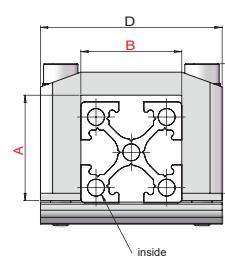
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SMBA-1818T Part number 7.Y00295-T



## Cross (Square) Joint Connector



(Kit With Screws Option)



PN	7.Y00295	7.Y00817	7.Y00012	7.Y00339	7.Y00340	7.Y00163
Model	SMBB-1818	SMBB-1825	SMBB-2525	SMBB-5025	SMBB-2550	SMBB-3030
A(mm)	18	18	25	50	25	30
B(mm)	18	25	25	57	50	30
C(mm)	25	25	32	33	38	
D(mm)	38	45	45	45	70	50
E(mm)	12	12	12	12	12	12
Inside	PEP1818	PEP1818	-	-	-	-
Extruded profile	-	-	PEP2525	PEP5025	PEP5025	PEP3030
	PEP2510	PEP2510	PEP2510	PEP2510	PEP2510	
	PEP2518	PEP2518	PEP2518	-	-	
	PEP2525	PEP2525	PEP2525	PEP2525	PEP2525	
	PEP5025	PEP5025	PEP5025	PEP5025	PEP5025	
	PEP4040	PEP4040	PEP4040	PEP4040	PEP4040	
	PEP3030	PEP3030	PEP3030	PEP3030	PEP3030	PEP3030
Accessory selection						
Screws	PTC-M5L25*2	PTC-M5L25*2	PTC-M5L35*2	PTC-M5L60*2	PTC-M5L35*2	PTC-M5L40*2
Single hole shim	PTS-M5*2	PTS-M5*2	PTS-M5*2	PTS-M5*2	PTS-M5*2	PTS-M5*2
T-Nuts	PTN-M5P28*1	PTN-M5P35*1	PTN-M5P35*1	PTN-M5P35*1	PTN-M5P60*1	PTN-M5P40*1
Weight	36g	42g	45g	65g	50g	51g

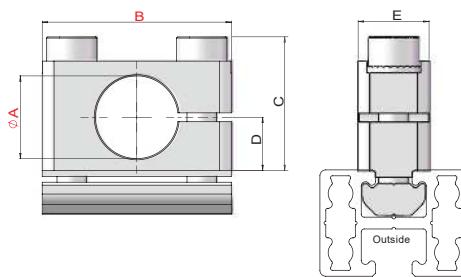
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SMBB-1818 Part number 7.Y00295-T



## Cross (Square) Joint Connector



(Kit With Screws Option)



PN	7.Y00296	7.Y00297	7.Y00013	7.Y00226	7.Y00225
Model	SMBC-1025	SMBC-1432	SMBC-2038	SMBC-3050	SMBC-5070
A(mm)	Ø10	Ø14	Ø20	Ø30	Ø50
B(mm)	25	32	38	50	70
C(mm)	18	22	25	34.5	56
D(mm)	6.5	9.25	12.5	17.5	28
E(mm)	10	12	15	20	25
Extruded profile	PEP1818	PEP1818	PEP1818	PEP1818	PEP1818
	PEP2510	PEP2510	PEP2510	PEP2510	PEP2510
	PEP2518	PEP2518	-	-	-
	PEP2525	PEP2525	PEP2525	PEP2525	PEP2525
	PEP5025	PEP5025	PEP5025	PEP5025	PEP5025
	PEP4040	PEP4040	PEP4040	PEP4040	PEP4040
	PEP3030	PEP3030	PEP3030	PEP3030	PEP3030
<b>Accessoriere selection</b>					
Screws	PTC-M5L20*2	PTC-M5L22*2	PTC-M5L25*2	PTC-M5L35*2	PTC-M5L50*2
Single hole shim	PTS-M5*2	PTS-M5*2	PTS-M5*2	PTS-M5*2	PTS-M5*2
T-Nuts	PTN-M5P17*1	PTN-M5P22*1	PTN-M5P28*1	PTN-M5P40*1	PTN-M5P60*1
Weight	15g	32g	45g	75g	150g

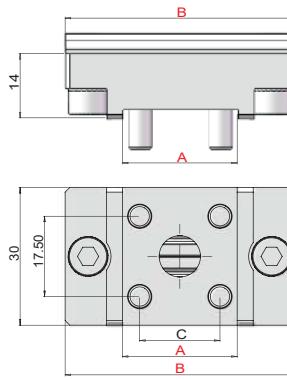
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SMBC-1025 Part number 7.Y00296-T



## Vertical Fastening Of The Profiles



(Kit With Screws Option)



PN	7.Y00227	7.Y00228
Model	SMBD-2550	SMBD-5070
A(mm)	25	50
B(mm)	50	70
C(mm)	17.5	42.5
PEP2525	✓	✓
PEP5025	✓	✓
<b>Accessoriere selection</b>		
Screws	PTC-M5L12*6	PTC-M5L12*6
Single hole shim	PTS-M5*2	PTS-M5*2
T-Nuts	PTN-M5P40*1	PTN-M5P60*1
Weight	65g	85g

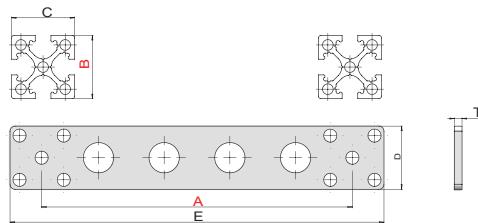
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SMBD-2550 Part number 7.Y00227-T



## Profiles Connector



(Not Including Kit With Screws)



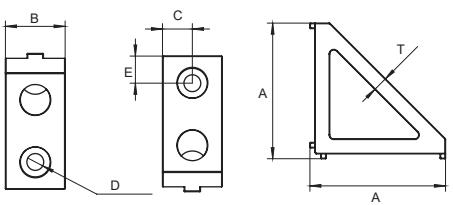
PN	7.Y00426	7.Y00427	7.Y00428	7.Y00429	7.Y00430	7.Y00431
Model	SMBD2-7625	SMBD2-12025	SMBD2-13025	SMBD2-7650	SMBD2-12050	SMBD2-13050
A(mm)	76	120	130	76	120	130
B(mm)	25	25	25	50	50	50
C(mm)	25	25	25	25	25	25
D(mm)	28	28	28	53	53	53
E(mm)	104	148	158	104	148	158
T(mm)	2	2	2	2	2	2
PEP2525	✓	✓	✓	-	-	-
PEP5025	-	-	-	✓	✓	✓
Weight	50g	60g	65g	75g	100g	110g



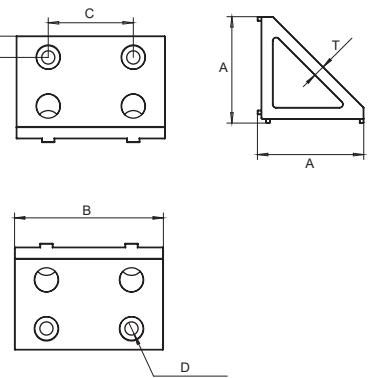
## Angle Bracket For Profiles



7.Y00812 7.Y00814



7.Y00813 7.Y00815  
(Kit With Screws Option)



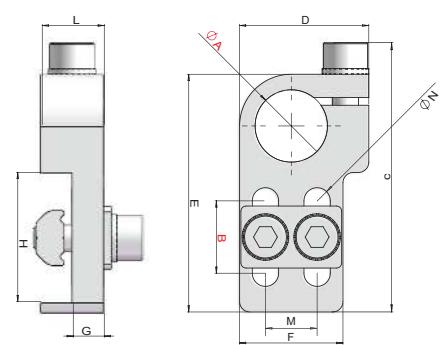
PN	7.Y00812	7.Y00813	7.Y00814	7.Y00815
Model	SMBD3-2525	SMBD3-2550	SMBD3-4040	SMBD3-4080
A(mm)	28	28	50	50
B(mm)	18	40	22	70
C(mm)	9	25	11	40
D(mm)	Ø5.2	Ø5.2	Ø6.2	Ø6.2
E(mm)	6	6	10	10
T(mm)	3.2	3.2	5.5	5.5
Extruded profile	PEP1818 PEP2510 PEP2518 PEP2525	PEP2550	PEP4040 PEP4080	PEP4080
<b>Accessories selection</b>				
Screws	PTC-M5L12*2	PTC-M5L12*4	PTC-M6L14*2	PTC-M6L16*4
Single hole shim	PTS-M5*2	PTS-M5*4	PTS-M6*2	PTS-M6*4
T-Nuts	PTN-M5*2	PTN-M5*4	PTN-M6*2	PTN-M6*4
Weight	27g	58g	63g	190g

Note: If screw kits needed, add T to the part number and model number. eg: Model SMBD3-2525T Part number 7.Y00812-T

## Flat Straight Connector



(Kit With Screws Option)



PN	7.Y00300	7.Y00301	7.Y00775	7.Y00864	7.Y00302	7.Y00014	7.Y00304
Model	SMBE-1010	SMBE-1014	SMBE-1210	SMBE-1214	SMBE-1414	SMBE-2014	SMBE-2022
A(mm)	Ø10	Ø10	Ø12	Ø12	Ø14	Ø20	Ø20
B(mm)	10	14	10	14	14	14	22
C(mm)	43	49	43	50	51.50	57	73.50
D(mm)	20	20	20.5	20.5	25	30	30
E(mm)	38	44	38	45	46	51.5	68
F(mm)	16	16	16	16	20	25	25
G(mm)	4.5	4.5	4.5	4.5	6	6	6
H(mm)	18	25	18	25	25	25	40
L(mm)	8	8	8	8	12	12	12
M(mm)	8	8	8	8	10	15	15
N(mm)	Ø4.2	Ø4.2	Ø4.2	Ø4.2	Ø5.2	Ø5.2	Ø5.2
PEP1818	✓	-	✓	-	-	-	-
PEP2510	-	✓	-	✓	✓	-	-
PEP2518	-	✓	-	-	✓	✓	-
PEP2525	-	✓	-	-	✓	✓	-
PEP5025	-	✓	-	-	✓	✓	-
PEP4040	-	-	-	-	-	-	✓

### Accessoires selection

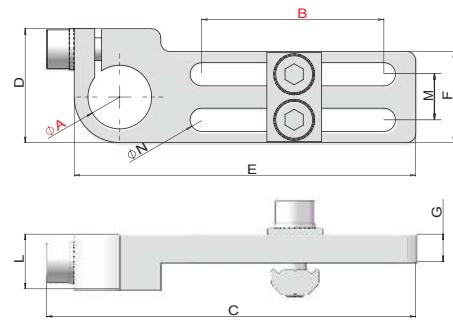
Screws	PTC-M4L14*2	PTC-M4L14*2	PTC-M4L14*3	PTC-M4L14*3	PTC-M5L16*2	PTC-M5L16*2	PTC-M5L16*2
	PTC-M4L12*1	PTC-M4L12*1	-	-	PTC-M5L14*1	PTC-M5L14*1	PTC-M5L14*1
Single hole shim	PTS-M4*3	PTS-M4*3	PTS-M4*3	PTS-M4*3	PTS-M5*3	PTS-M5*3	PTS-M5*3
T-Nuts	PTN-M4P8*1	PTN-M4P8*1	PTN-M4P8*1	PTN-M4P8*1	PTN-M5P10*1	PTN-M5P15*1	PTN-M5P15*1
Double holes shim	PTD-M4P8*1	PTD-M4P8*1	PTD-M4P8*1	PTD-M4P8*1	PTD-M5P10*1	PTD-M5P15*1	PTD-M5P15*1
Weight	20g	21g	22g	10g	34g	45g	48g

Note: If screw kits needed, add **T** to the part number and model number. eg: Model SMBE-1010T Part number 7.Y00300-T

## Mounting Bracket



(Kit With Screws Option)



PN	7.Y00694	7.Y00201	7.Y00695	7.Y00200	7.Y00199	7.Y00015	7.Y00724
Model	SMBE1-0840	SMBE1-1040	SMBE1-1240	SMBE1-1440	SMBE1-1450	SMBE1-2060	SMBE1-3060
A(mm)	Ø8	Ø10	Ø12	Ø14	Ø14	Ø20	Ø30
B(mm)	40	40	40	40	50	60	60
C(mm)	75	75	75	80.50	90.50	110.50	120.50
D(mm)	20	20	20	25	25	30	40
E(mm)	70	70	70	75	85	105	115
F(mm)	16	16	16	20	20	25	35
G(mm)	4.5	4.5	4.5	6	6	6	8
L(mm)	8	8	8	12	12	12	12
M(mm)	8	8	8	10	10	15	22
N(mm)	Ø4.2	Ø4.2	Ø4.2	Ø5.2	Ø5.2	Ø5.2	Ø5.2
PEP1818	✓	✓	✓	✓	✓	✓	✓
PEP2510	✓	✓	✓	✓	✓	✓	✓
PEP2518	✓	✓	✓	✓	✓	✓	✓
PEP2525	✓	✓	✓	✓	✓	✓	✓
PEP5025	-	-	-	-	-	-	-
PEP4040	-	-	-	-	-	-	✓

### Accessoires selection

Screws	PTC-M4L14*2	PTC-M4L14*2	PTC-M4L14*2	PTC-M5L16*2	PTC-M5L16*2	PTC-M5L16*2	PTC-M5L18*2
	PTC-M4L12*1	PTC-M4L12*1	PTC-M4L12*1	PTC-M5L12*1	PTC-M5L12*1	PTC-M5L12*1	PTC-M5L20*1
Single hole shim	PTS-M4*3	PTS-M4*3	PTS-M4*3	PTS-M5*3	PTS-M5*3	PTS-M5*3	PTS-M5*3
T-Nuts	PTN-M4P8*1	PTN-M4P8*1	PTN-M4P8*1	PTN-M4P8*1	PTN-M5P10*1	PTN-M5P15*1	PTN-M5P22*1
Double holes shim	PTD-M4P8*1	PTD-M4P8*1	PTD-M4P8*1	PTD-M4P8*1	PTD-M5P10*1	PTD-M5P15*1	PTD-M5P22*1
Weight	13g	23g	12g	38g	40g	55g	95g

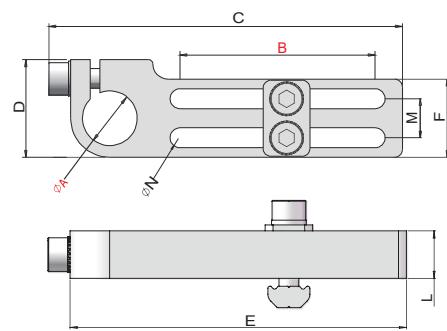
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SMBE1-0840T Part number 7.Y00694-T



## Heavy Duty Mounting Bracket



(Kit With Screws Option)



PN	7.Y00725	7.Y00777	7.Y00307	7.Y00308	7.Y00309
Model	SMBE2-1040	SMBE2-1240	SMBE2-1450	SMBE2-2060	SMBE2-3060
A(mm)	Ø10	Ø12	Ø14	Ø20	Ø30
B(mm)	40	40	50	60	60
C(mm)	75	75	91	111	122
D(mm)	20	20.5	25	30	42
E(mm)	70	70	85	105	115
F(mm)	16	16	20	25	35
L(mm)	8.3	8.3	12	15	20
M(mm)	8	8	10	15	22
N(mm)	Ø4.2	Ø4.2	Ø5.2	Ø5.2	Ø5.2
<b>Accessoriere selection</b>					
Screws	PTC-M4L18*2 PTC-M4L12*1	PTC-M4L18*2 PTC-M4L12*1	PTC-M5L22*2 PTC-M5L14*1	PTC-M5L25*2 PTC-M5L16*1	PTC-M5L30*2 PTC-M6L20*1
Single hole shim	PTS-M4*3	PTS-M4*3	PTS-M5*3	PTS-M5*3	PTS-M5*2 PTS-M6*1
T-Nuts	PTN-M4P8*1	PTN-M4P8*1	PTN-M5P10*1	PTN-M5P15*1	PTN-M5P22*1
Double holes shim	PTD-M4P8*1	PTD-M4P8*1	PTD-M5P10*1	PTD-M5P15*1	PTD-M5P22*1
Weight	30g	40g	60g	85g	175g

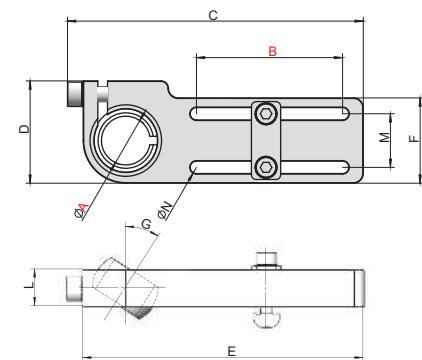
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SMBE2-1040T Part number 7.Y00725-T



## Heavy Duty Fixing Bracket With Ball Joint



(Kit With Screws Option)



PN	7.Y02014	7.Y02015	7.Y02012
Model	SMBE8-1050	SMBE8-1460	SMBE8-2060
A(mm)	Ø10	Ø14	Ø20
B(mm)	50	60	60
C(mm)	89.5	111.5	121.8
D(mm)	25	31	42
E(mm)	85	105	115
F(mm)	20	25	35
G(mm)	0-26°	0-26	0-26
L(mm)	8.3	12	15
M(mm)	10	15	22
<b>Accessoriere selection</b>			
Screws	PTC-M4L14*1 PTC-M5L18*2	PTC-M5L18*1 PTC-M5L22*2	PTC-M6L18*1 PTC-M5L25*2
Single hole shim	PTS-M5*2 PTS-M4*1	PTS-M5*3	PTS-M5*2 PTS-M6*1
T-Nuts	PTN-M5P10*1	PTN-M5P15*1	PTN-M5P22*1
Double holes shim	PTD-M5P10*1	PTD-M5P15*1	PTD-M5P22*1
Weight	85g	130g	170g

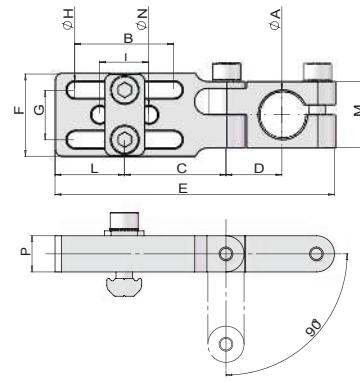
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SMBE8-1040T Part number 7.Y02014-T



## Slotted Angular Bracket



(Kit With Screws Option)



PN	7.Y00341	7.Y00795	7.Y00342	7.Y00343	7.Y02009	7.Y00344
Model	SMBE3-1020	SMBE3-1220	SMBE3-1430	SMBE3-2040	SMBE3-2060	SMBE3-3050
A(mm)	Ø10	Ø12	Ø14	Ø20	Ø20	Ø30
B(mm)	20	20	30	40	60	50
C(mm)	23	23	31	39	68	50
D(mm)	14	14	17	22	22	28
E(mm)	64.5	65.50	85	107	146	135.5
F(mm)	16	16	25	25	25	36
G(mm)	8	8	15	15	15	22
H(mm)	4.2	4.2	5.2	5.2	5.2	5.2
I(mm)	-	-	15	15	15	22
L(mm)	15	15	21	26	36	31
M(mm)	16	16	20	25	25	36
N(mm)	-	-	Ø5.2	Ø5.2	Ø5.2	Ø5.2
P(mm)	9	9	11	13	13	16
<b>Accessoriere selection</b>						
Screws	PTC-M4L18*2	PTC-M4L18*2	PTC-M5L20*4	PTC-M5L22*2	PTC-M5L22*2	PTC-M5L25*2
Single hole shim	PTS-M4*4	PTS-M4*4	PTS-M5*4	PTS-M5*4	PTS-M5*4	PTS-M5*4
T-Nuts	PTN-M4P8*1	PTN-M4P8*1	PTN-M5P15*1	PTN-M5P15*1	PTN-M5P15*1	PTN-M5P22*1
Double holes shim	PTD-M4P8*1	PTD-M4P8*1	PTD-M5P15*1	PTD-M5P15*1	PTD-M5P15*1	PTD-M5P22*1
Weight	30g	35g	50g	90g	117g	185g

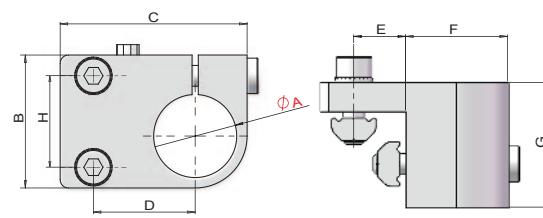
Note: If screw kits needed, add T to the part number and model number. eg: Model SMBE3-1020T Part number 7.Y00341-T



## Mounting Bracket



(Kit With Screws Option)



PN	7.Y00224	7.Y00223	7.Y00181	7.Y00222	7.Y00221
Model	SMBE4-1412	SMBE4-2012	SMBE4-2020	SMBE4-3012	SMBE4-3020
A(mm)	Ø14	Ø20	Ø20	Ø30	Ø30
B(mm)	25	32	35	40	45
C(mm)	40	45	54.5	55	65.5
D(mm)	22	24.5	33	29.5	39
E(mm)	12.5	12.5	20	12.5	20
F(mm)	19.5	24.5	26.5	34.5	37.5
G(mm)	25	30	35	30	40
H(mm)	15	22	25	30	35
PEP1818	✓	✓	-	✓	-
PEP2510	✓	✓	-	✓	-
PEP2518	✓	✓	-	✓	-
PEP2525	✓	✓	-	✓	-
PEP5025	✓	✓	-	✓	-
PEP4040	-	-	✓	-	✓
<b>Accessoriere selection</b>					
Screws	PTC-M5L14*2	PTC-M5L16*2	PTC-M5L16*2	PTC-M5L16*2	PTC-M5L16*2
Single hole shim	PTS-M5*3	PTS-M5*3	PTS-M5*3	PTS-M5*3	PTS-M5*3
T-Nuts	PTN-M5P15*1	PTN-M5P22*1	PTN-M5P25*1	PTN-M5P30*1	PTN-M5P35*1
Weight	50g	70g	95g	90g	150g

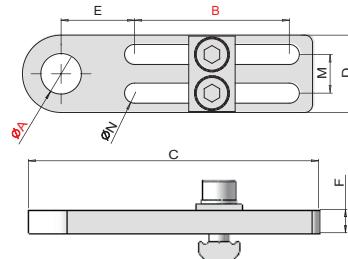
Note: If screw kits needed, add T to the part number and model number. eg: Model SMBE4-1412T Part number 7.Y00224-T



## Mounting Bracket



(Kit With Screws Option)



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	M(mm)	N(mm)	Weight
7.Y00310	SMBE5-G1840	G1/8	40	75	20	19	6	10	Ø5.2	25g
7.Y00311	SMBE5-G1860	G1/8	60	105	25	26.5	6	15	Ø5.2	42g
7.Y00312	SMBE5-M1040	M10×1	40	75	20	19	6	10	Ø5.2	30g
7.Y00313	SMBE5-M1060	M10×1	60	105	25	26.5	6	15	Ø5.2	40g
7.Y00314	SMBE5-M1240	M12×1	40	75	20	19	6	10	Ø5.2	30g
7.Y00315	SMBE5-M1260	M12×1	60	105	25	26.5	6	15	Ø5.2	47g
7.Y00316	SMBE5-M1440	M14×1	40	75	20	19	6	10	Ø5.2	20g
7.Y00317	SMBE5-M1460	M14×1	60	105	25	26.5	6	15	Ø5.2	40g
7.Y00320	SMBE5-M1640	M16×1	40	75	20	19	6	10	Ø5.2	20g
7.Y00321	SMBE5-M1660	M16×1	60	105	25	26.5	6	15	Ø5.2	40g
7.Y00322	SMBE5-M2040	M20×1	40	75	25	16.5	6	15	Ø5.2	30g
7.Y00323	SMBE5-M2060	M20×1	60	105	25	26.5	6	15	Ø5.2	35g

### Accessoriere selection

Screws	PTC-M5L16*2	SMBE5-G1840, SMBE5-M1040,
Single hole shim	PTS-M5*2	SMBE5-M1240, SMBE5-M1440,
T-Nuts	PTN-M5P10*1	SMBE5-M1640
Double holes shim	PTD-M5P10*1	

Screws	PTC-M5L16*2	SMBE5-G1860, SMBE5-M1060, SMBE5-M1260,
Single hole shim	PTS-M5*2	SMBE5-M1460, SMBE5-M1660, SMBE5-M2040,
T-Nuts	PTN-M5P15*1	SMBE5-M2060
Double holes shim	PTD-M5P15*1	

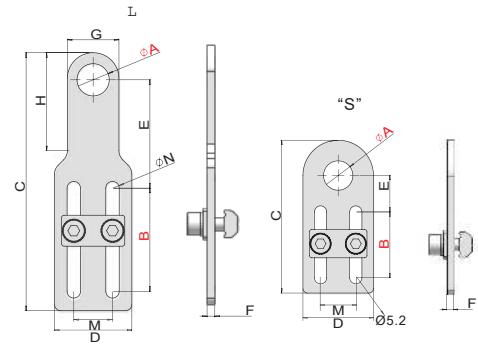
Note: If screw kits needed, add T to the part number and model number. eg: Model SMBE5-G1840T Part number 7.Y00310-T



## Mounting Bracket



(Kit With Screws Option)



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	M(mm)	N(mm)	Weight
7.Y00357	SMBE6-1040	Ø10.5	40	100	30	42.5	3	20	38	15	Ø5.2	60g
7.Y00358	SMBE6-1240	Ø12.5	40	100	30	42.5	3	20	38	15	Ø5.2	60g
7.Y00359	SMBE6-1440	Ø14.5	40	100	30	40.5	3	24	38	15	Ø5.2	60g
7.Y00360	SMBE6-1640	Ø16.5	40	100	30	37.5	3	30	-	15	Ø5.2	65g
7.Y00361	SMBE6-2040	Ø20.5	40	100	30	37.5	3	30	-	15	Ø5.2	60g
7.Y00362	SMBE6-2240	Ø22.5	40	100	30	35	5	35	-	15	Ø5.2	105g
7.Y00363	SMBE6-2540	Ø25.5	40	100	30	35	5	35	-	15	Ø5.2	100g
7.Y00364	SMBE6-1028	Ø10.5	28	65	30	15.5	3	-	-	15	Ø5.2	45g
7.Y00365	SMBE6-1228	Ø12.5	28	65	30	15.5	3	-	-	15	Ø5.2	45g
7.Y00366	SMBE6-1428	Ø14.5	28	65	30	15.5	3	-	-	15	Ø5.2	45g
7.Y00367	SMBE6-1628	Ø16.5	28	65	30	15.5	3	-	-	15	Ø5.2	45g
7.Y00368	SMBE6-2028	Ø20.5	28	65	30	15.5	3	-	-	15	Ø5.2	40g
7.Y00369	SMBE6-2228	Ø22.5	28	70	30	18	5	35	-	15	Ø5.2	75g
7.Y00370	SMBE6-2528	Ø25.5	28	70	30	18	5	35	-	15	Ø5.2	70g

### Accessoriere selection

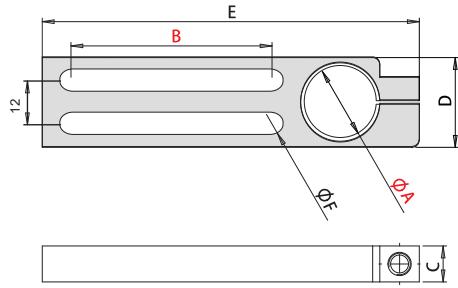
Screws	PTC-M5L12*2	SMBE6-1040, SMBE6-1240, SMBE6-1440
Single hole shim	PTS-M5*2	SMBE6-1640, SMBE6-2040, SMBE6-1028
T-Nuts	PTN-M5P15*1	SMBE6-1228, SMBE6-1428, SMBE6-1628
Double holes shim	PTD-M5P15*1	SMBE6-2028

Screws	PTC-M5L14*2	SMBE6-2240, MBE6-2540
Single hole shim	PTS-M5*2	SMBE6-2228, SMBE6-2528
T-Nuts	PTN-M5P15*1	
Double holes shim	PTD-M5P15*1	

Note: If screw kits needed, add T to the part number and model number. eg: Model SMBE6-1040T Part number 7.Y00357-T

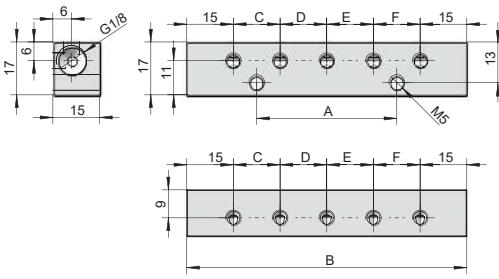


## Cylinder Bracket

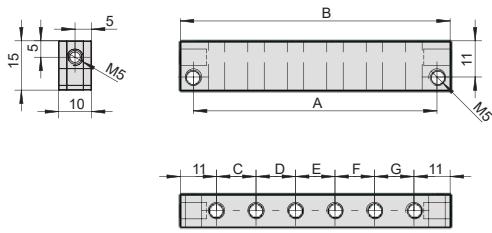
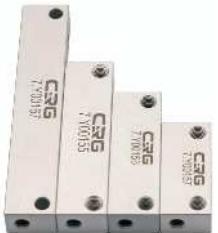


PN	Model	A	B	C	D	E	F	Weight
7.Y00062	SMBE7-0856	Ø8	56	10	25	90	6.5	40g
7.Y00021	SMBE7-1256	Ø12	56	10	25	95	6.5	43g
7.Y00006	SMBE7-2056	Ø20	56	10	25	105	6.5	47g

## Side Manifold Block



PN	Model	A	B	C	D	E	F	Weight
7.Y00153	SMB-10M5-02G18	45	90	15	15	15	15	51g
7.Y00154	SMB-08M5-02G18	30	75	15	15	15	-	42g



PN	Model	A	B	C	D	E	F	G	Weight
7.Y00157	SMB-06M5	26	34	12	-	-	-	-	10g
7.Y00156	SMB-08M5	38	46	12	12	-	-	-	14g
7.Y00155	SMB-10M5	50	58	12	12	12	-	-	18g
7.Y00167	SMB-14M5	74	82	12	12	12	12	12	26g

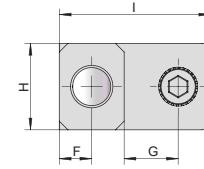
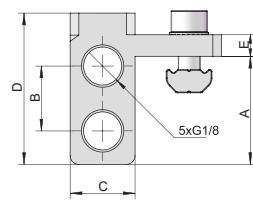


## Side Manifold Block

G1/8(x5)



(Kit With Screws Option)



PN	7.Y00229 Model	7.Y01020 SMB-5G18	7.Y01022 SMB1-5G18
A(mm)	25	25	25
B(mm)	15	15	15
C(mm)	15	15	15
D(mm)	35	35	35
E(mm)	5	5	5
F(mm)	7.50	7.50	7.50
G(mm)	12.50	15	20
H(mm)	20	20	20
I(mm)	35	40	45
PEP1818	✓		
PEP2510	✓		
PEP2518	✓		
PEP2525	✓		
PEP5025	✓		
PEP3030		✓	✓
PEP4040			
<b>Accessoriere selection</b>			
Screws	PTC-M5L14*1	PTC-M5L14*1	PTC-M5L14*1
Single hole shim	PTS-M5*1	PTS-M5*1	PTS-M5*1
T-Nuts	PTN-M5*1	PTN-M5*1	PTN-M5*1
Weight	30g	33g	34g

Note: If screw kits needed, add **T** to the part number and model number. eg: Model SMB-5G18T Part number 7.Y00229-T

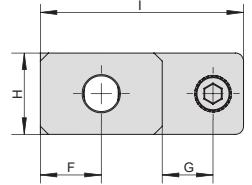
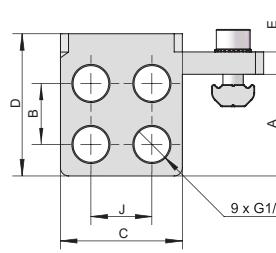


## Side Manifold Block

G1/8(x9)



(Kit With Screws Option)



PN	7.Y00231 Model	7.Y01021 SMB1-9G18	7.Y01023 SMB2-9G18
A(mm)	25	25	25
B(mm)	15	15	15
C(mm)	30	30	30
D(mm)	35	35	35
E(mm)	5.50	5.50	5.50
F(mm)	15	15	15
G(mm)	12.50	15	20
H(mm)	20	20	20
I(mm)	50	55	60
J(mm)	15	15	15
PEP1818	✓		
PEP2510	✓		
PEP2518	✓		
PEP2525	✓		
PEP5025	✓		
PEP3030		✓	✓
PEP4040			
<b>Accessoriere selection</b>			
Screws	PTC-M5L14*1	PTC-M5L14*1	PTC-M5L14*1
Single hole shim	PTS-M5*1	PTS-M5*1	PTS-M5*1
T-Nuts	PTN-M5*1	PTN-M5*1	PTN-M5*1
Weight	50g	52g	54g

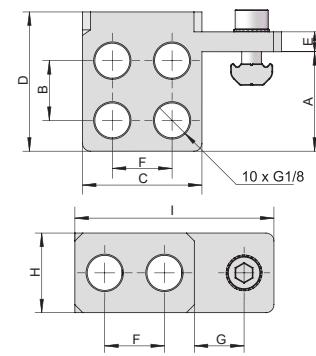
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SMB-9G18T Part number 7.Y00231-T



## Side Manifold Block



(Kit With Screws Option)



PN	7.Y00230	7.Y01024	7.Y01025
Model	SMB-D5G18	SMB1-D5G18	SMB2-D5G18
A(mm)	25	25	25
B(mm)	15	15	15
C(mm)	30	30	30
D(mm)	35	35	35
E(mm)	5	5	5
F(mm)	15	15	15
G(mm)	12.50	15	20
H(mm)	20	20	20
I(mm)	50	55	60
PEP1818	✓		
PEP2510	✓		
PEP2518	✓		
PEP2525	✓		
PEP5025	✓	✓	✓
PEP3030			
PEP4040			
<b>Accessoriere selection</b>			
Screws	PTC-M5L14*1	PTC-M5L14*1	PTC-M5L14*1
Single hole shim	PTS-M5*1	PTS-M5*1	PTS-M5*1
T-Nuts	PTN-M5*1	PTN-M5*1	PTN-M5*1
Weight	48g	51g	52g

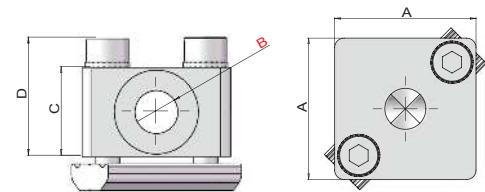
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SMB-D5G18T Part number 7.Y00230-T



## Manifold Block



(Kit With Screws Option)



PN	7.Y00240	7.Y00241
Model	SMB-A5G18	SMB-A5G14
A(mm)	30	40
B(mm)	(x5)G1/8	(x5)G1/4
C(mm)	18	20
D(mm)	24	23
<b>Accessoriere selection</b>		
Screws	PTC-M5L25*2	PTC-M5L25*2
Single hole shim	PTS-M5*2	PTS-M5*2
T-Nuts	PTN-M5P28*1	PTN-M5P35*1
Weight	50g	80g

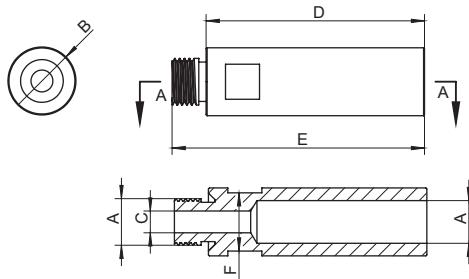
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SMB-A5G18T Part number 7.Y00240-T



## Extension Tube With Air Lead



**NEW**

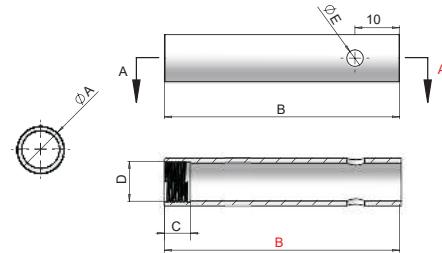


PN	Model	A	B	C	D	E	F	Weight
7.Y02063	SMBY-1050M5	M5	Ø10	Ø2	45	50	8	7.7g
7.Y02064	SMBY-1095M5	M5	Ø10	Ø2	90	95	8	16.4g
7.Y02065	SMBY-1452G18	G1/8	Ø14	Ø4.5	45	52	12	12.6g
7.Y02066	SMBY-1497G18	G1/8	Ø14	Ø4.5	90	97	12	23.8g
7.Y02067	SMBY-2053G14	G1/4	Ø20	Ø6.5	45	53	17	27.0g
7.Y02068	SMBY-2098G14	G1/4	Ø20	Ø6.5	90	98	17	51.9g

## Extension Tube

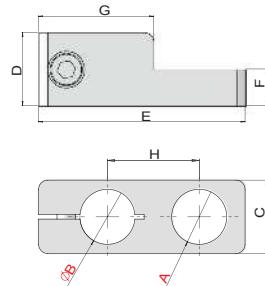


**NEW**



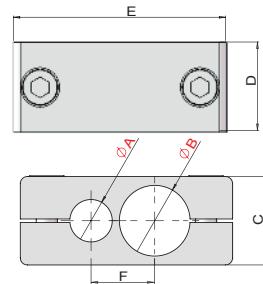
PN	Model	A	B	C	D	E	Weight
7.Y00736	SMBY12-50	Ø12	50	12	M10*1	5	9g
7.Y00735	SMBY12-100	Ø12	100	12	M10*1	5	17g
7.Y00733	SMBY14-50	Ø14	50	12	M12*1	5	10g
7.Y00734	SMBY14-100	Ø14	100	12	M12*1	5	20g
7.Y00732	SMBY20-50	Ø20	50	15	M17*1	8	16g
7.Y00731	SMBY20-100	Ø20	100	15	M17*1	8	31g
7.Y00462	SMBY20-150	Ø20	150	15	M17*1	8	47g
7.Y01027	SMBY25-100	Ø25	100	15	M22*1	8	43g
7.Y00729	SMBY30-50	Ø30	50	18	M27*1	9	29g
7.Y00730	SMBY30-100	Ø30	100	18	M27*1	9	58g
7.Y00463	SMBY30-150	Ø30	150	18	M27*1	9	87g

## Connector SSW



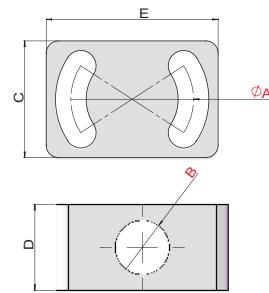
PN	Model	A	B	C	D	E	F	G	H	Weight
7.Y00028	SMBT1-M1412	M14*1	Ø12	16	16	45	8	25	20	16g

## Parallel Connector



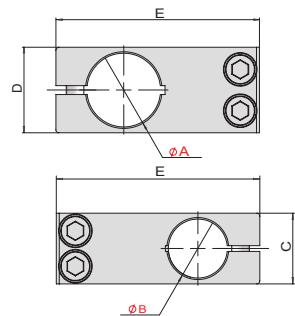
PN	Model	A	B	C	D	E	F	Weight
7.Y00042	SMBP-0808	Ø8	Ø8	12	12	35	10	11g
7.Y00043	SMBP-0812	Ø8	Ø12	16	16	43	12	23g
7.Y00044	SMBP-1212	Ø12	Ø12	16	16	44	14	21g
7.Y00045	SMBP-2012	Ø20	Ø12	25	25	60	18	75g
7.Y00046	SMBP-2020	Ø20	Ø20	25	25	66	24	71g

## || Swing Block



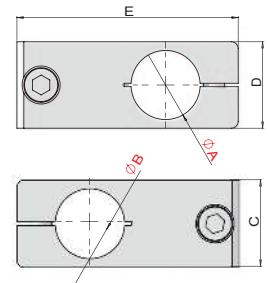
PN	Model	A	B	C	D	E	Weight
7.Y00048	SMBT4-G1820	Ø20	G1/8	19	14	28	11g

## || Cross Connector



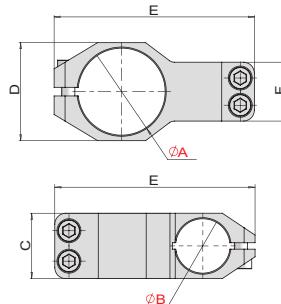
PN	Model	A	B	C	D	E	Weight
7.Y01002	SMBT-1414	Ø14	Ø14	18	18	46	25g
7.Y00998	SMBT-2520	Ø25	Ø20	24	29	69	79g
7.Y00999	SMBT-2525	Ø25	Ø25	30	30	78	114g

## || Cross Connector



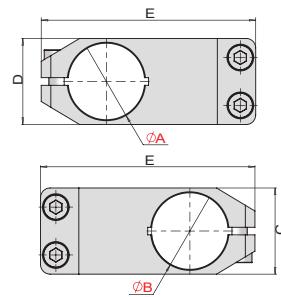
PN	Model	A	B	C	D	E	Weight
7.Y00025	SMBT-0808	Ø8	Ø8	12	12	35	10g
7.Y00026	SMBT-1208	Ø12	Ø8	12	16	43	16g
7.Y00020	SMBT-1212	Ø12	Ø12	16	16	47	22g
7.Y00794	SMBT-1214	Ø12	Ø14	18	18	48	29g
7.Y00027	SMBT-2012	Ø20	Ø12	25	25	59	72g
7.Y00005	SMBT-2020	Ø20	Ø20	25	25	64	68g

## || Cross Connector



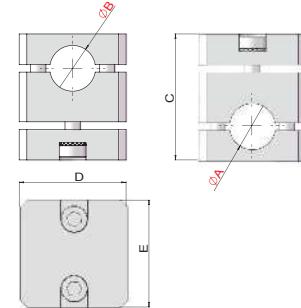
PN	Model	A	B	C	D	E	F	Weight
7.Y01059	SMBT-4020	Ø40	Ø20	25	45	88	27	101g
7.Y01004	SMBT-4025	Ø40	Ø25	30	45	92	27	107g
7.Y02058	SMBT-4030	Ø40	Ø30	35	45	97	32	142g

## Cross Connector



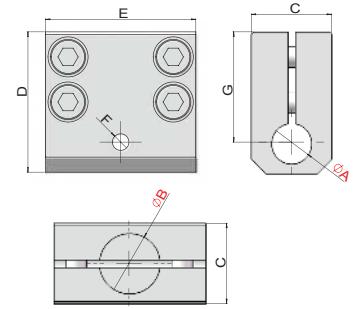
PN	Model	A	B	C	D	E	F	Weight
7.Y01003	SMBT-4040	Ø40	Ø40	45	45	112	112	259g

## Cross Connection Block



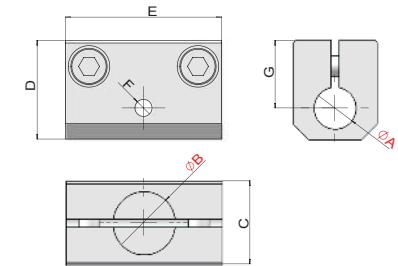
PN	Model	A	B	C	D	E	Weight
7.Y00192	SMBT2-1212	Ø12	Ø12	33	28	28	11g
7.Y00185	SMBT2-2020	Ø20	Ø20	48	42	42	30g
7.Y02020	SMBT2-4040	Ø40	Ø40	91	60	60	393g
7.Y02021	SMBT2-3030	Ø30	Ø30	71	50	50	252g
7.Y02022	SMBT2-2525	Ø25	Ø25	60	43	43	165g
7.Y02025	SMBT2-4025	Ø40	Ø25	75	60	45	271g
7.Y02026	SMBT2-4020	Ø40	Ø20	69	60	40	234g

## T Connector



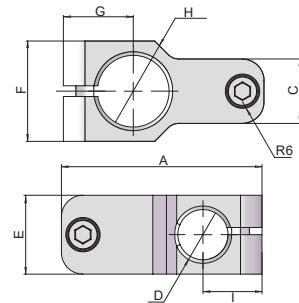
PN	Model	A	B	C	D	E	F	G	Weight
7.Y00036	SMBF1-0808	Ø8	Ø8	12	28	26	M4	22	15g
7.Y00037	SMBF1-0812	Ø8	Ø12	16	28	30	M4	22	31g
7.Y00038	SMBF1-1208	Ø12	Ø8	16	35	30	M4	25	29g
7.Y00003	SMBF1-1212	Ø12	Ø12	16	35	30	M4	25	26g
7.Y00039	SMBF1-1220	Ø12	Ø20	25	44	45	M4	34	88g
7.Y00040	SMBF1-2012	Ø20	Ø12	25	54	45	M4	39	111g
7.Y00041	SMBF1-2020	Ø20	Ø20	25	51.5	45	M4	39	78g

## T Connector



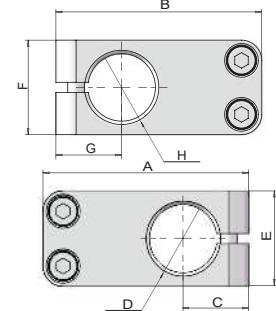
PN	Model	A	B	C	D	E	F	G	Weight
7.Y00029	SMBF-0808	Ø8	Ø8	12	20	30	M4	14	14g
7.Y00030	SMBF-0812	Ø8	Ø12	16	20	30	M4	14	23g
7.Y00031	SMBF-1208	Ø12	Ø8	16	26	30	M4	16	19g
7.Y00032	SMBF-1212	Ø12	Ø12	16	26	30	M4	16	18g
7.Y00033	SMBF-1220	Ø12	Ø20	25	30	45	M4	20	60g
7.Y00034	SMBF-2012	Ø20	Ø12	25	40	45	M4	25	63g
7.Y00035	SMBF-2020	Ø20	Ø20	25	40	45	M4	25	56g

## Cross Connection Block



PN	Model	A	C	D	E	F	G	H	I	Weight
7.Y00329	SCD-2010	54	14	Ø10	19	28	19.5	Ø20	14.50	41g
7.Y00330	SCD-2014	56	18	Ø14	22	28	19.5	Ø20	16.50	51g
7.Y01049	SCD-3020	75	18	Ø20	25	35	26	Ø30	20	78g

## Cross Connection Block



PN	Model	A	B	C	D	E	F	G	H	Weight
7.Y00233	SCD-2020	61	61	19.5	Ø20	28	28	19.5	Ø20	85g
7.Y01050	SCD-3030	84	84	26	Ø30	35	35	26	Ø30	98g



Profile' SUS Tube

Stents Module

Quick Changer

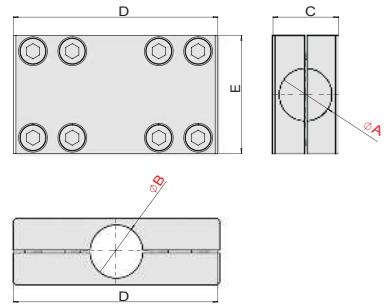
Grip Module

Air Nipper

Vacuum Module

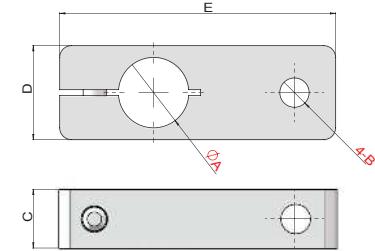
Accessory Components

## Swing Block#2



PN	Model	A	B	C	D	E	Weight
7.Y00047	SMBT3-2020	Ø20	Ø20	25	78	45	170g

## Suction Bracket



PN	Model	A	B	C	D	E	Weight
7.Y00057	SMBG1-8M5	Ø8	M5	12	12	33	9g
7.Y00058	SMBG1-8M6	Ø8	M6	10	12	33	9g
7.Y00059	SMBG1-12M5	Ø12	M5	10	16	47	16g
7.Y00060	SMBG1-12M6	Ø12	M6	10	16	47	16g
7.Y00061	SMBG1-12G18	Ø12	G1/8	16	16	47	25g

Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

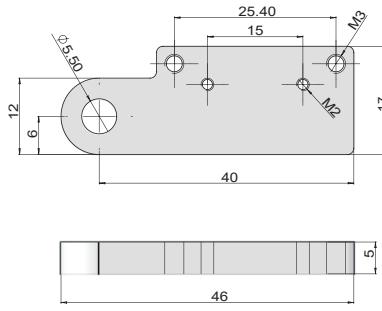
Vacuum Module

Accessory Components

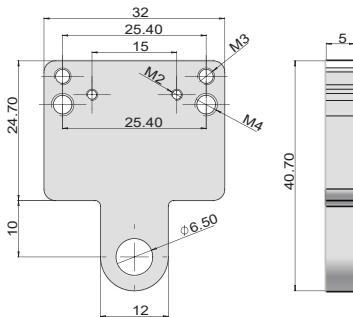
## Sensor Bracket



PN	Model	Weight
7.Y00070	SMBJ1-5	9g



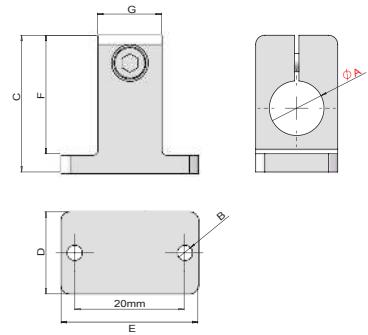
PN	Model	Weight
7.Y00071	SMBJ2-6	12g



## Chuck Bracket



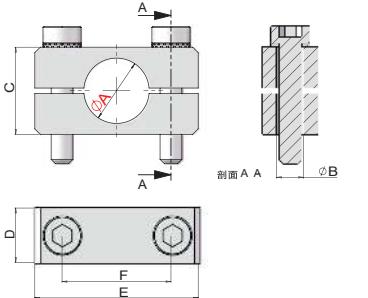
PN	Model	A	B	C	D	E	F	G	Weight
7.Y00072	SMBT5-8	Ø8	M4	25	12	27	22	12	10g
7.Y00073	SMBT5-12	Ø12	M4	30	18	30	26	14	19g



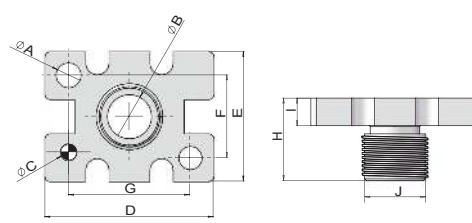
## Bracket



PN	Model	A	B	C	D	E	F	Weight
7.Y00074	SMBT6-12	Ø12	Ø6.5	16	16	40	30	35g



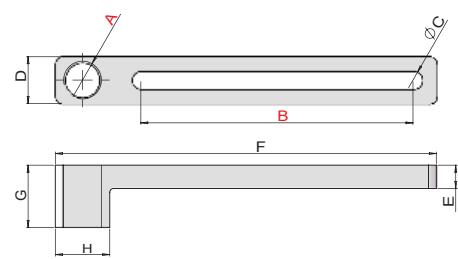
## Gripper Installation Bracket



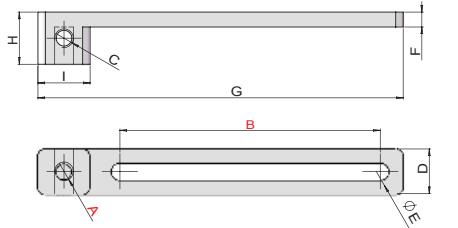
PN	Model	A	B	C	D	E	F	G	H	I	J	Weight
7.Y00740	SMBM-10	Ø3.2	Ø5	Ø2	23	16.4	12	18	14	4	M10*1	5g
7.Y00741	SMBM-16	Ø4.2	Ø6.5	Ø3	30.6	23.6	15	22	15	5	M12*1	10g
7.Y00728	SMBM-20	Ø5.5	Ø6.5	Ø4	42	27.6	18	32	15	5	M12*1	14g
7.Y00739	SMBM-25	Ø6.5	Ø7	Ø5	52	33.6	22	40	18	6	M17*1	27g
7.Y00738	SMBM-32	Ø6.5	Ø10	Ø5	60	40	26	46	18	6	M17*1	36g
7.Y00737	SMBM-40	Ø8.5	Ø16	Ø5	72	48	32	56	20	8	M27*1	67g



## Slide Bracket

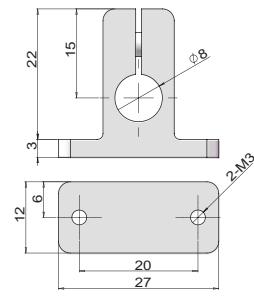
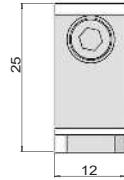


PN	Model	A	B	C	D	E	F	G	H	Weight
7.Y00115	SCF1-40M3	M3	40	4.5	12	5	56	10	8	7g
7.Y00118	SCF1-40G18	G1/8	40	4.5	12	6	68	16	14	12g
7.Y00129	SCF1-70M3	M3	70	4.5	12	5	86	10	8	10g
7.Y00132	SCF1-70G18	G1/8	70	4.5	12	6	98	16	14	15g

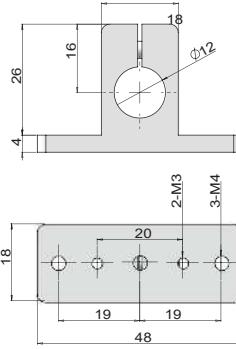
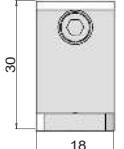


PN	Model	A	B	C	D	E	F	G	H	I	Weight
7.Y00173	SCF2-40M5	M5	40	M5	12	4.5	4	68	14	14	9g
7.Y00117	SCF2-40M6	M6	40	M6	12	4.5	4	68	14	14	10g
7.Y00130	SCF2-70M5	M5	70	M5	12	4.5	4	98	14	14	12g
7.Y00131	SCF2-70M6	M6	70	M6	12	4.5	4	98	14	14	13g

## Bracket TV

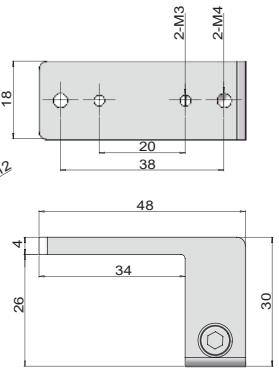
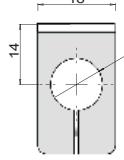


PN	Model	Weight
7.Y00088	SMBU6-8	10g



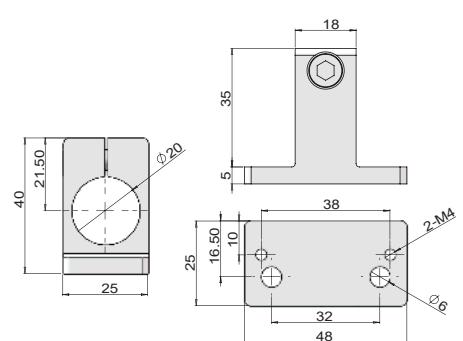
PN	Model	Weight
7.Y00089	SMBU7-12	26g

## Bracket L12



PN	Model	Weight
7.Y00081	SMBT9-12	23g

## Bracket TH



PN	Model	Weight
7.Y00087	SMBU5-20	44g

Profile, SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

Vacuum Module

Accessory Components

Profile, SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

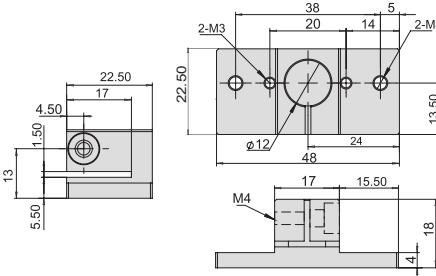
Vacuum Module

Accessory Components

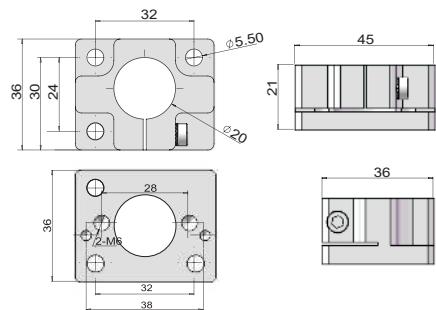
## Bracket T



PN	Model	Weight
7.Y00082	SMBU-12	21g



PN	Model	Weight
7.Y00255	SMBU2-20	49g



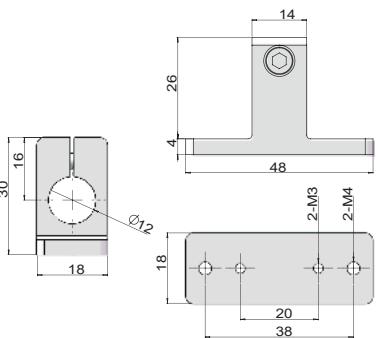
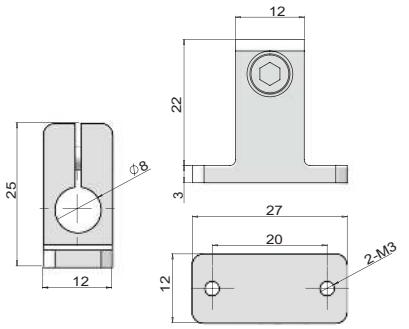
## Bracket TH



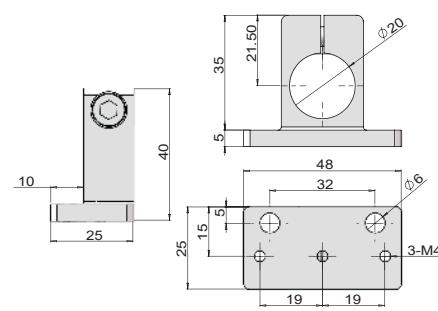
PN	Model	Weight
7.Y00085	SMBU3-8	10g



PN	Model	Weight
7.Y00086	SMBU4-12	22g

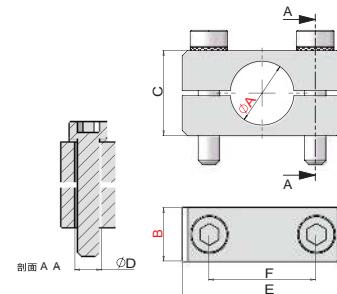


## Bracket T



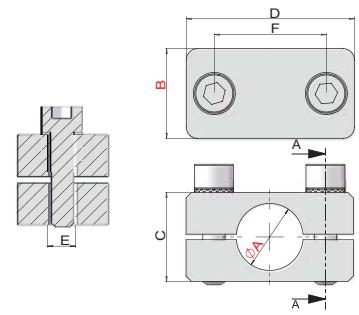
PN	Model	Weight
7.Y00090	SMBU8-20	39g

## Bracket



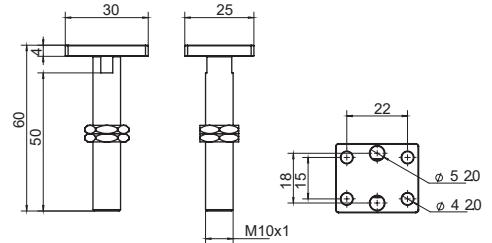
PN	Model	A	B	C	D	E	F	Weight
7.Y00091	SMBK1-8T10	Ø8	10	16	Ø5.5	30	20	20g
7.Y00092	SMBK1-12T10	Ø12	10	16	Ø5.5	30	20	14g
7.Y00093	SMBK1-20T10	Ø20	10	27	Ø6.5	40	30	36g
7.Y00094	SMBK1-8T16	Ø8	16	16	Ø6.5	30	20	32g
7.Y00095	SMBK1-12T16	Ø12	16	16	Ø4.5	30	20	20g
7.Y00096	SMBK1-20T16	Ø20	16	27	Ø6.5	40	30	48g

## Slide Bracket



PN	Model	A	B	C	D	E	F	Weight
7.Y00064	SMBS-8T10	Ø8	10	16	30	M4	20	16g
7.Y00065	SMBS-12T10	Ø12	10	16	30	M4	20	15g
7.Y00066	SMBS-20T10	Ø20	10	25	40	M6	30	33g
7.Y00067	SMBS-8T16	Ø8	16	16	30	M6	20	29g
7.Y00001	SMBS-12T16	Ø12	16	16	30	M6	20	29g
7.Y00068	SMBS-20T16	Ø20	16	25	40	M6	30	44g

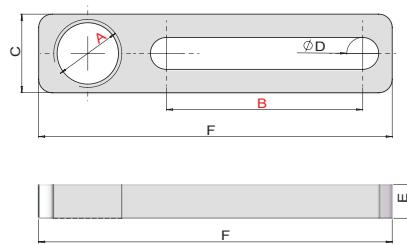
## Fixed Bracket



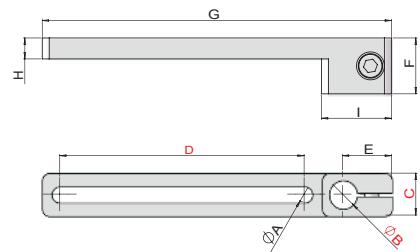
PN	Model	Weight
7.Y01051	SMBU9-M10	21g



## Slide Bracket

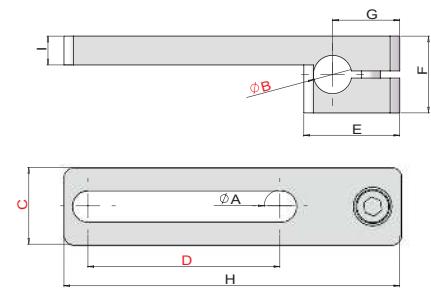


PN	Model	A	B	C	D	E	F	Weight
7.Y00119	SCF3-40M10	M10*1	40	16	6.5	5	70	10g
7.Y00120	SCF3-40M12	M12*1	40	16	6.5	5	72	10g
7.Y00121	SCF3-40M17	M17*1	40	25	6.5	5	80	20g
7.Y00133	SCF3-70M10	M10*1	70	16	6.5	5	100	14g
7.Y00134	SCF3-70M12	M12*1	70	16	6.5	5	102	14g
7.Y00135	SCF3-70M17	M17*1	70	25	6.5	5	110	28g



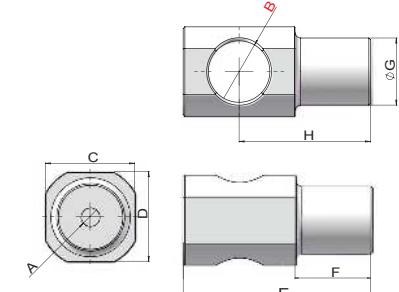
PN	Model	A	B	C	D	E	F	G	H	I	Weight
7.Y00122	SCF4-0840W12	4.5	Ø8	12	40	14	16	70	6	20	14g
7.Y00123	SCF4-0840W16	6.5	Ø8	16	40	14	16	70	6	20	20g
7.Y00004	SCF4-1240W16	6.5	Ø12	16	40	16	16	75	6	25	21g
7.Y00124	SCF4-2040W25	6.5	Ø20	25	40	20	16	86	6	34	39g
7.Y00136	SCF4-0870W12	4.5	Ø8	12	70	14	16	100	6	20	18g
7.Y00137	SCF4-0870W16	6.5	Ø8	16	70	14	16	100	6	20	25g
7.Y00138	SCF4-1270W16	6.5	Ø12	16	70	16	16	105	6	25	25g
7.Y00139	SCF4-2070W25	6.5	Ø20	25	70	20	16	116	6	34	49g

## Slide Bracket



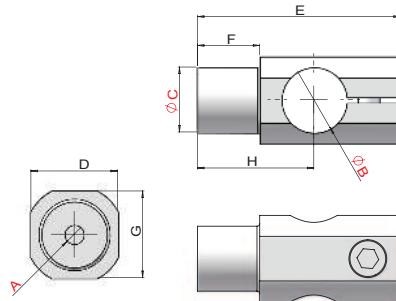
PN	Model	A	B	C	D	E	F	G	H	I	Weight
7.Y00125	SCF5-0840W16	6.5	Ø8	16	40	20	16	14	70	6	20g
7.Y00126	SCF5-0840W12	4.5	Ø8	12	40	20	16	14	70	6	15g
7.Y00127	SCF5-1240W16	6.5	Ø12	16	40	25	16	16	75	6	20g
7.Y00128	SCF5-2040W25	6.5	Ø20	25	40	34	25	20	86	6	53g
7.Y00140	SCF5-0870W16	6.5	Ø8	16	70	20	16	14	100	6	25g
7.Y00141	SCF5-0870W12	4.5	Ø8	12	70	20	16	14	100	6	19g
7.Y00142	SCF5-1270W16	6.5	Ø12	16	70	25	16	16	105	6	25g
7.Y00143	SCF5-2070W25	6.5	Ø20	25	70	34	25	20	116	6	48g

## Rotation Bracket

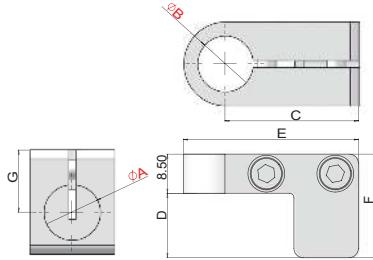


PN	Model	A	B	C	D	E	F	G	H	Weight
7.Y00099	SMBR2-M10	M4	M10	14	14	26.5	11.5	Ø8	19	6g
7.Y00100	SMBR2-M12	M4	M12	16	16	33.5	13.5	Ø12	23.5	12g

## Rotation Bracket

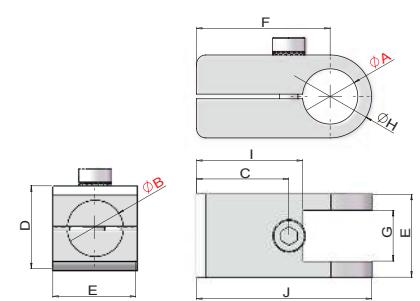


PN	Model	A	B	C	D	E	F	G	H	Weight
7.Y00103	SMBR4-0808M4	M4	Ø8	Ø8	12	32.5	11.5	12	17.5	7g
7.Y00110	SMBR4-1208M4	M4	Ø12	Ø8	16	37.5	11.5	16	21.5	13g
7.Y00019	SMBR4-1212M4	M4	Ø12	Ø12	16	39.5	13.5	16	23.5	15g
7.Y00268	SMBR4-1212M4L	M4	Ø12	Ø12	16	55	29	16	39	20g
7.Y00461	SMBR4-1420M6	M6	Ø14	Ø20	25	60	20	25	37	70g
7.Y00007	SMBR4-2020M6	M6	Ø20	Ø20	25	60	20	25	37	59g
7.Y00206	SMBR4-2020M6L	M6	Ø20	Ø20	25	85	45	25	62	81g

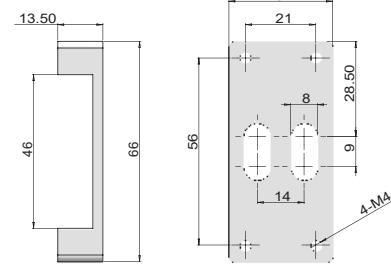


PN	Model	A	B	C	D	E	F	G	Weight
7.Y00111	SMBR5-1208	Ø12	Ø8	29	14	38	22.5	13.5	24g
7.Y00104	SMBR5-0808	Ø8	Ø8	29	11.5	36	20	13	16g
7.Y00112	SMBR5-1212	Ø12	Ø12	29	14	38	22.5	13.5	18g

## Rotation Bracket



PN	Model	A	B	C	D	E	F	G	H	I	J	Weight
7.Y00113	SMBR7-0808	Ø8	Ø8	16	15	15	25	10	15	21	32.5	13g
7.Y00114	SMBR7-1212	Ø12	Ø12	20	18	18	29	11	18	23	38	18g

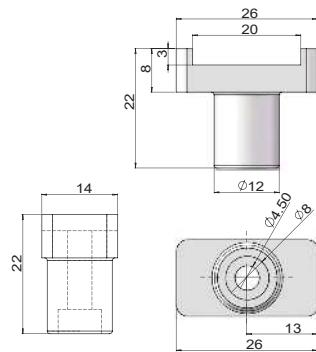


PN	Model	Weight
7.Y00063	SMBR-46	31g

## Rotation Bracket



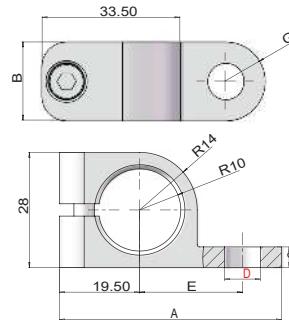
PN	Model	Weight
7.Y00098	SMBR1-12	9g



## Swivelling Support



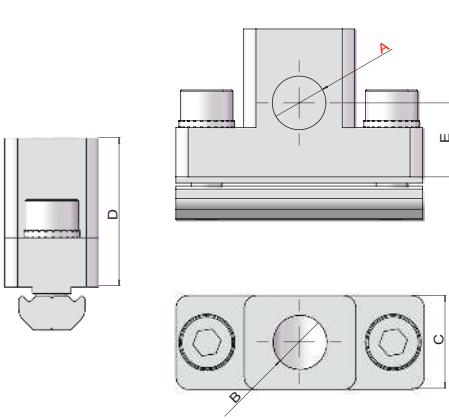
PN	7.Y00236	7.Y00234
Model	SCC-20G18	SCC-20M16
A(mm)	54	60.5
B(mm)	19	24
C(mm)	5	6
D(mm)	G1/8	M16×1
E(mm)	25	29
G(mm)	R9.5	R12
Weight	30g	40g



## Direct Connector For Vacuum Cup



(Kit with Screws included)



PN	7.Y00235	7.Y00237
Model	SVA-G18	SVA-G14
A(mm)	G1/8	G1/4
B(mm)	G1/8	G1/8
C(mm)	15	15
D(mm)	24	24
E(mm)	12	10
PEP2518	✓	✓
PEP2525	✓	✓
PEP5025	✓	✓
PEP4040	✓	✓
PEP3030	✓	✓
Accessories selection		
Screws	PTC-M5L16*2	PTC-M5L16*2
Single hole shim	PTS-M5*2	PTS-M5*2
T-Nuts	PTN-M5P30*1	PTN-M5P30*1
Weight	42g	40g

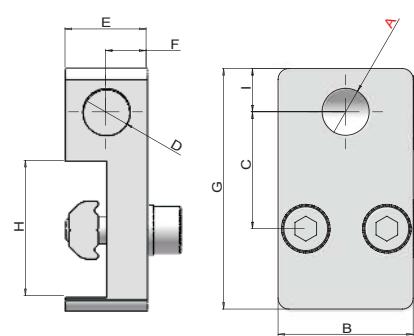
Note: If screw kits needed, add T to the part number and model number. eg: Model SVA-G18T Part number 7.Y00235-T



## Direct Connector For Vacuum Cup



(Kit With Screws Option)



PN	7.Y00242	7.Y00244	7.Y00243
Model	SVB-M5	SVB-G18	SVB-G14
A(mm)	M5	G1/8	G1/4
B(mm)	16	25	25
C(mm)	13.5	21.5	21.5
D(mm)	M5	G1/8	G1/8
E(mm)	8	15	15
F(mm)	4	7.5	7.5
G(mm)	29	44.5	46.5
H(mm)	18	25	25
I (mm)	4.3	8	10
PEP2518	-	✓	✓
PEP2525	-	✓	✓
PEP5025	-	✓	✓
<b>Accessoriere selection</b>			
Screws	PTC-M4L12*2	PTC-M5L16*2	PTC-M5L16*2
Single hole shim	PTS-M4*2	PTS-M5*2	PTS-M5*2
T-Nuts	PTN-M4P8*1	PTN-M5P15*1	PTN-M5P15*1
Weight	15g	45g	45g

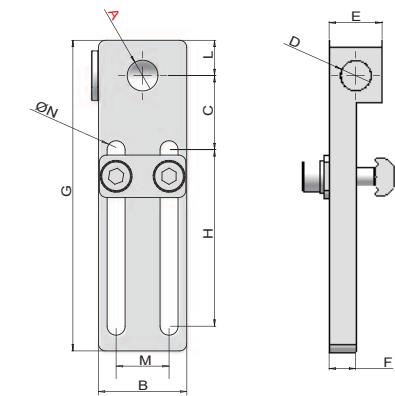
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SVB-M5T Part number 7.Y00242-T



## Mounting Bracket For Vacuum Cup



(Kit With Screws Option)



PN	7.Y00328	7.Y00238	7.Y00239
Model	SVC-M5	SVC-G18	SVC-G14
A(mm)	M5	G1/8	G1/4
B(mm)	16	25	25
C(mm)	14	21	21
D(mm)	M5	G1/8	G1/8
E(mm)	8	15	15
F(mm)	4	7.5	7.5
G(mm)	65	88	88
H(mm)	40	50	50
L(mm)	6	10	10
M(mm)	8	15	15
N(mm)	Ø4.2	Ø5.2	Ø5.2
PEP2518	✓	✓	✓
PEP2525	✓	✓	✓
PEP5025	✓	✓	✓
PEP4040	-	✓	✓
PEP3030	✓	✓	✓
<b>Accessoriere selection</b>			
Screws	PTC-M4L14*2	PTC-M5L16*2	PTC-M5L16*2
Single hole shim	PTS-M4*2	PTS-M5*2	PTS-M5*2
T-Nuts	PTN-M4P8*1	PTN-M5P15*1	PTN-M5P15*1
Double holes shim	PTD-M4P8*1	PTD-M5P15*1	PTD-M5P15*1
Weight	20g	60g	60g

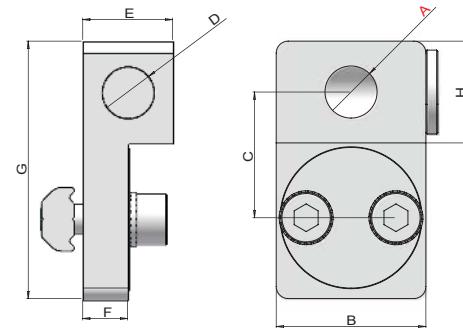
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SVC-M5T Part number 7.Y00328-T



## Mounting Bracket For Vacuum Cup



(Kit With Screws Option)

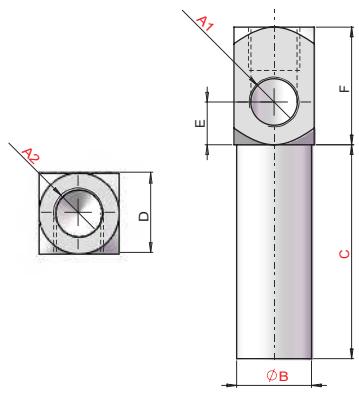


PN	7.Y00416	7.Y00417	7.Y00418
Model	SVD-M5	SVD-G18	SVD-G14
A(mm)	M5	G1/8	G1/4
B(mm)	16	25	25
C(mm)	13	21	21
D(mm)	M5	G1/8	G1/8
E(mm)	10	15	15
F(mm)	5	7.5	7.5
G(mm)	28	43	43
H(mm)	10	17	17
PEP2518	✓	✓	✓
PEP2525	✓	✓	✓
PEP5025	✓	✓	✓
PEP4040	-	✓	✓
PEP3030	✓	✓	✓
<b>Accessory selection</b>			
Screws	PTC-M4L12*2	PTC-M5L16*2	PTC-M5L16*2
Single hole shim	PTS-M4*2	PTS-M5*2	PTS-M5*2
T-Nuts	PTN-M4P8*1	PTN-M5P15*1	PTN-M5P15*1
Weight	15g	45g	42g

Note: If screw kits needed, add T to the part number and model number. eg: Model SVD-M5T Part number 7.Y00416-T



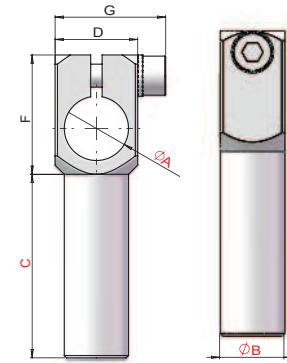
## Leg For Vacuum Cup



PN	Model	A1(mm)	A2(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	Weight
7.Y00410	SVE-M51030	M5	M5	Ø10	30	11	6	16	10g
7.Y00411	SVE-M51060	M5	M5	Ø10	60	11	6	16	13g
7.Y00412	SVE-M51090	M5	M5	Ø10	90	11	6	16	17g
7.Y00772	SVE-M51230	M5	M5	Ø12	30	13	7	17	12g
7.Y00773	SVE-M51260	M5	M5	Ø12	60	13	7	17	15g
7.Y00774	SVE-M51290	M5	M5	Ø12	90	13	7	17	19g
7.Y00413	SVE-G181440	G1/8	G1/8	Ø14	40	15	8	22	17g
7.Y00414	SVE-G181480	G1/8	G1/8	Ø14	80	15	8	22	25g
7.Y00415	SVE-G1814120	G1/8	G1/8	Ø14	120	15	8	22	32g
7.Y00008	SVE-G142050	G1/8	G1/4	Ø20	50	20	8	23	40g
7.Y00009	SVE-G1420100	G1/8	G1/4	Ø20	100	20	8	23	60g
7.Y00010	SVE-G1420150	G1/8	G1/4	Ø20	150	20	8	23	75g



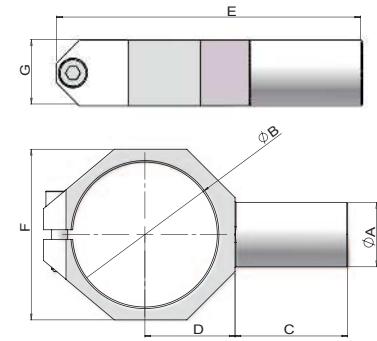
## Clamp Leg



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	F(mm)	G(mm)	Weight
7.Y00398	SCA1-1010L30	Ø10	Ø10	30	14	19	19	10g
7.Y00399	SCA1-1010L60	Ø10	Ø10	60	14	19	19	15g
7.Y00400	SCA1-1010L90	Ø10	Ø10	90	14	19	19	20g
7.Y00769	SCA1-1212L30	Ø12	Ø12	30	19	21	21	13g
7.Y00770	SCA1-1212L60	Ø12	Ø12	60	19	21	21	18g
7.Y00771	SCA1-1212L90	Ø12	Ø12	90	19	21	21	23g
7.Y00401	SCA1-1414L40	Ø14	Ø14	40	18	26	24	20g
7.Y00402	SCA1-1414L80	Ø14	Ø14	80	18	26	24	30g
7.Y00403	SCA1-1414L120	Ø14	Ø14	120	18	26	24	40g
7.Y00404	SCA1-2020L50	Ø20	Ø20	50	25	32	31	45g
7.Y00405	SCA1-2020L100	Ø20	Ø20	100	25	32	31	70g
7.Y00406	SCA1-2020L150	Ø20	Ø20	150	25	32	31	105g
7.Y00407	SCA1-3030L80	Ø30	Ø30	80	40	44	46	170g
7.Y00408	SCA1-3030L140	Ø30	Ø30	140	40	44	46	230g
7.Y00409	SCA1-3030L200	Ø30	Ø30	200	40	44	46	300g
7.Y00996	SCA2-2020L50	Ø20	Ø20	50	25	32	31	65g
7.Y01000	SCA2-2020L100	Ø20	Ø20	100	25	32	31	86g
7.Y00997	SCA2-2020L150	Ø20	Ø20	150	25	32	31	101g
7.Y02030	SCA2-2525L50	Ø25	Ø25	50	30	38	36	102g
7.Y02031	SCA2-2525L100	Ø25	Ø25	100	30	38	36	131g
7.Y02032	SCA2-2525L150	Ø25	Ø25	150	30	38	36	163g
7.Y01006	SCA2-3030L80	Ø30	Ø30	80	35	43	42	209g
7.Y01005	SCA2-3030L140	Ø30	Ø30	140	35	43	42	288g
7.Y01001	SCA2-3030L200	Ø30	Ø30	200	35	43	42	344g



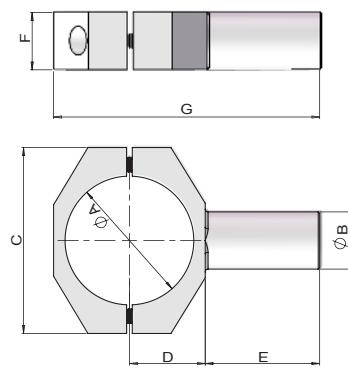
## NR Nipper Mounting Bracket



PN	Model	7.Y00470	7.Y00331	7.Y00261	7.Y00742
		SC-E-NR10	SC-E-NR20	SC-E-NR30	SC-E-NR50
A(mm)		Ø14	Ø20	Ø20	Ø30
B(mm)		Ø36	Ø45	Ø56	Ø75
C(mm)		255	35	40	48
D(mm)		22	28	33	41
E(mm)		72	94.5	111	138
F(mm)		43	53	65	83
G(mm)		15	20	25	40
Weight		29.7g	65g	110g	308g



## NS Nipper Mounting Bracket



PN	7.Y00692	7.Y00693
Model	SCE1-NS20	SCE1-NS30
A(mm)	Ø45	Ø56
B(mm)	Ø20	Ø20
C(mm)	65	76
D(mm)	27	33
E(mm)	40	40
F(mm)	20	25
G(mm)	94	106
Weight	111g	123g



Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

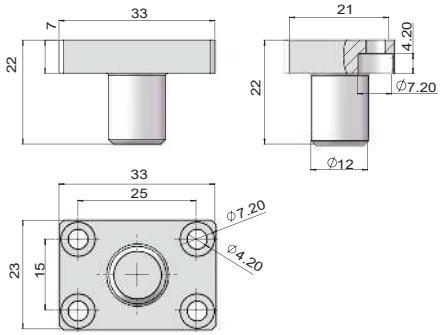
Vacuum Module

Accessory Components

## NY05 Fixing Block



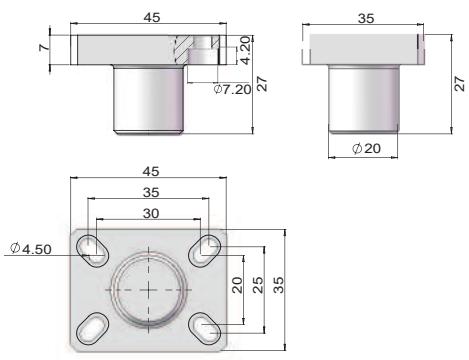
PN	Model	Weight
7.Y00796	SCE2-05	17g



## NY10/15 Fixing Block



PN	Model	Weight
7.Y00094	SCE2-1015	38g



Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

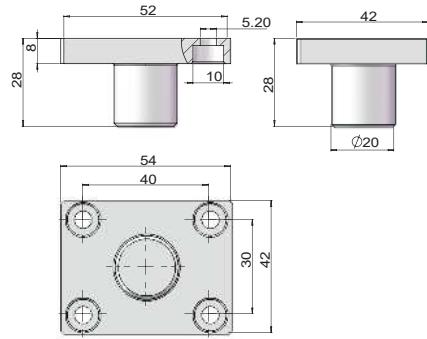
Vacuum Module

Accessory Components

## NY25 Fixing Block



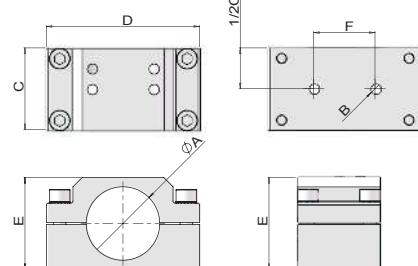
PN	Model	Weight
7.Y00633	SCE2-25	61g



## Nipper Bracket



PN	Model	A	B	C	D	E	F	Weight
7.Y00075	SCE3-N10	Ø36	M6	40	75	45	30	246g
7.Y00076	SCE3-N20	Ø45	M6	40	75	53	30	228g
7.Y00077	SCE3-N30	Ø56	M6	40	86	63	30	267g

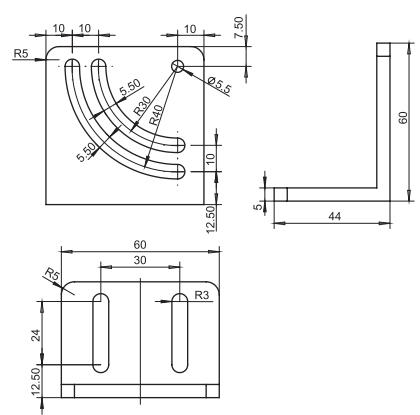


## Air Cut Bracket



PN	Model
7.Y00868	SCE4-NR(L.R)

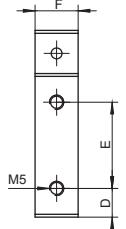
※L.R Use together  
※GT-N Use  
※Weight: 65.5g



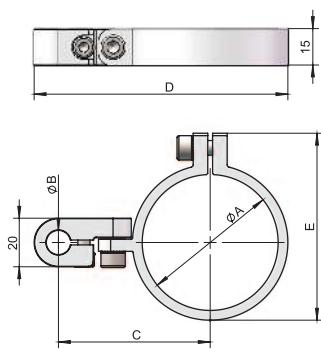
## Air Cut fixation



PN	Model	A	B	C	D	E	F	Weight
7.Y00146	SCE4-NR30	56	35	85	10	40	15	111g
7.Y00147	SCE4-NR20	45	30	75	10	40	15	93g
7.Y00148	SCE4-NR10	36	25	65	10	30	15	72g



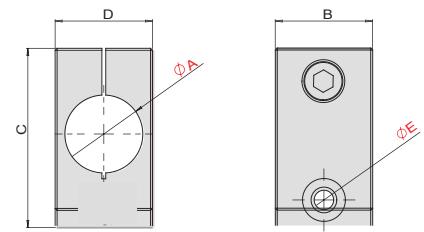
## Adjustable Nipper Mounting Clamps



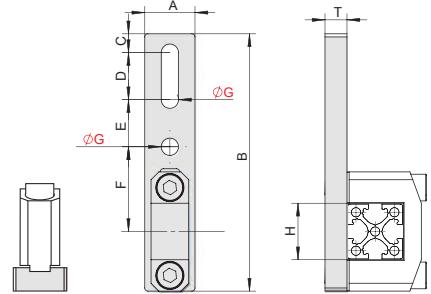
PN	Model	A	B	C	D	E	Weight
7.Y00946	SCE-NR20-D10	Ø45	Ø10	56.5	93	65	57.5
7.Y00947	SCE-NR20-D12	Ø45	Ø12	56.5	93	65	55.5
7.Y00948	SCE-NR30-D10	Ø56	Ø10	62.5	104.5	77	67.5
7.Y00949	SCE-NR30-D12	Ø56	Ø12	62.5	104.5	77	65.5



## Access Robot Bracket



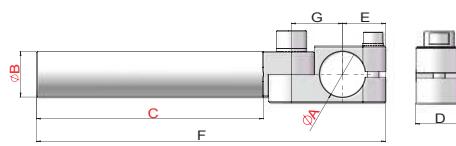
PN	Model	A	B	C	D	E	Weight
7.Y00051	SMBH1-8M5	Ø8	14	35	12	Ø5.5	15g
7.Y00052	SMBH1-8M6	Ø8	14	35	12	Ø6.5	12g
7.Y00053	SMBH1-12M5	Ø12	20	39	16	Ø5.5	30g
7.Y00002	SMBH1-12M6	Ø12	20	39	16	Ø6.5	25g
7.Y00054	SMBH1-12M8	Ø12	20	45	25	Ø9	42g
7.Y00055	SMBH1-20M6	Ø20	20	50	25	Ø6.5	48g
7.Y00056	SMBH1-20M8	Ø20	20	50	25	Ø9	51g



PN	Model	A	B	C	D	E	F	G	H	T	Weight
7.Y00869	SMBE7-18M5	16	82	6	15	15	27	Ø5.5	18	7	20.5g
7.Y00870	SMBE7-18M6	16	82	6	15	15	27	Ø6.5	18	7	20g
7.Y00871	SMBE7-25M5	16	90	7	15	15	30.5	Ø5.5	25	7	22.5g
7.Y00872	SMBE7-25M6	16	90	7	15	15	30.5	Ø6.5	25	7	22g



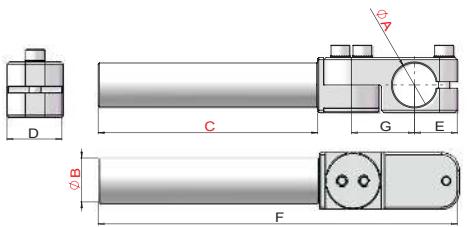
## Elbow Arm



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	Weight
7.Y00388	SEA-1010L60	Ø10	Ø10	60	10	13	93	12.5	20g
7.Y00776	SEA-1212L60	Ø12	Ø12	60	12	15	98	14.5	22g
7.Y00389	SEA-1414L40	Ø14	Ø14	40	14	16	82	16.5	32g
7.Y00390	SEA-1414L80	Ø14	Ø14	80	14	16	122	16.5	42g
7.Y00391	SEA-1414L120	Ø14	Ø14	120	14	16	162	16.5	50g
7.Y00392	SEA-2020L50	Ø20	Ø20	50	20	19	104	22.5	70g
7.Y00393	SEA-2020L100	Ø20	Ø20	100	20	19	154	22.5	90g
7.Y00394	SEA-2020L150	Ø20	Ø20	150	20	19	204	22.5	120g
7.Y00395	SEA-3030L80	Ø30	Ø30	80	30	27	160	34.8	235g
7.Y00396	SEA-3030L140	Ø30	Ø30	140	30	27	220	34.8	300g
7.Y00397	SEA-3030L200	Ø30	Ø30	200	30	27	280	34.8	360g



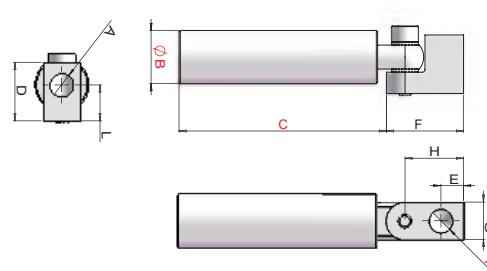
## Heavy Duty Elbow Arm



PN	7.Y00350	7.Y00351	7.Y00166	7.Y00352	7.Y00353	7.Y00354
Model	SEAH-2020L50	SEAH-2020L100	SEAH-2020L150	SEAH-3030L80	SEAH-3030L140	SEAH-3030L200
A(mm)	Ø20	Ø20	Ø20	Ø30	Ø30	Ø30
B(mm)	Ø20	Ø20	Ø20	Ø30	Ø30	Ø30
C(mm)	50	100	150	80	140	200
D(mm)	25	25	25	35	35	35
E(mm)	19.5	19.5	19.5	27.3	27.3	27.3
F(mm)	113.5	163.5	213.5	168.5	228.5	288.5
G(mm)	28.7	28.7	28.7	40.7	40.7	40.7
Weight	95g	115g	130g	330g	380g	435g



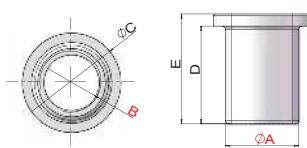
## Elbow Arm For Vacuum Cup



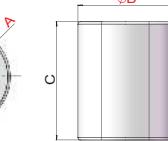
PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	L(mm)	Weight
7.Y00432	SEAV-M510L45	M5	Ø10	45	16.5	5.5	19	10	14	11	18g
7.Y00433	SEAV-M510L90	M5	Ø10	90	16.5	5.5	19	10	14	11	27g
7.Y00258	SEAV-G1814L60	G1/8	Ø14	60	22	8.5	29	14	22	13.5	33g
7.Y00434	SEAV-G1814L120	G1/8	Ø14	120	22	8.5	29	14	22	13.5	50g
7.Y00435	SEAV-G1820L78	G1/8	Ø20	78	22	8.5	29	14	22	13.5	60g
7.Y00247	SEAV-G1820L153	G1/8	Ø20	153	22	8.5	29	14	22	13.5	100g
7.Y00436	SEAV-G1420L75	G1/4	Ø20	75	27	12	38	20	28	15	75g
7.Y00437	SEAV-G1420L150	G1/4	Ø20	150	27	12	38	20	28	15	115g



## Bush Nut

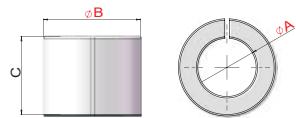


PN	Model	A	B	C	D	E	Weight
7.Y00271	SBNA-8M5	Ø8	M5x0.8	Ø12	8	10	1g
7.Y00272	SBNA-8M6	Ø8	M6x1.0	Ø12	8	10	1g
7.Y00273	SBNA-12M5	Ø12	M5x0.8	Ø16	16	18	5g
7.Y00274	SBNA-12M10	Ø12	M10x1.0	Ø16	16	18	3g
7.Y00276	SBNA-20M12	Ø20	M12x1.0	Ø24	16	18	11g
7.Y00277	SBNA-20M17	Ø20	M17x1.0	Ø24	16	18	5g



PN	Model	A	B	C	Weight
7.Y00275	SBNB-12PT18	PT1/8	Ø12	16	2g
7.Y00278	SBNB-20PT18	PT1/8	Ø20	25	17g

## Bush



PN	Model	A	B	C	Weight
7.Y00280	SBND-1208	Ø8	Ø12	16	6g
7.Y00281	SBND-2012	Ø12	Ø20	16	9g
7.Y00282	SBND-2008	Ø8	Ø20	16	11g

## A Quick Changer Device At The End Of A Robot

### Product Advantages

#### High-precision

The piston adjusting gripper side play the role of positioning, which provides high repeat positioning accuracy. One million cycle tests show that the actual accuracy is much higher than the recommended value.

#### High strength

The locking piston with large cylinder diameter has strong locking force, CRG robot end fast device has strong anti torque ability. When locking, there will be no shaking due to high-speed movement, thus avoiding locking failure and ensuring repeated positioning accuracy.

#### High performance

The locking mechanism with multi conical surface design, long life sealing components and high quality elastic contact probe are adopted to ensure the close contact of signal module.

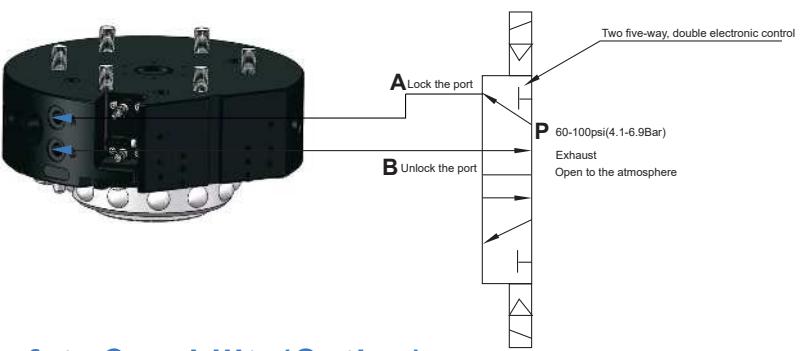
Quick Changer Installation example



## Installation Schematic

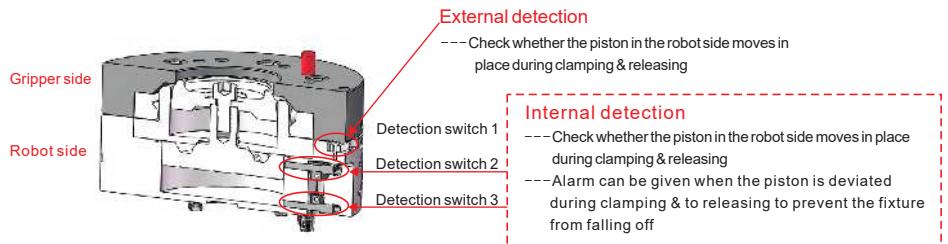


## Lock And Unlock Pneumatic Connections

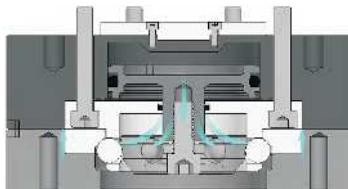


## Safety Capability(Option)

Three safety capability switch, multiple protection

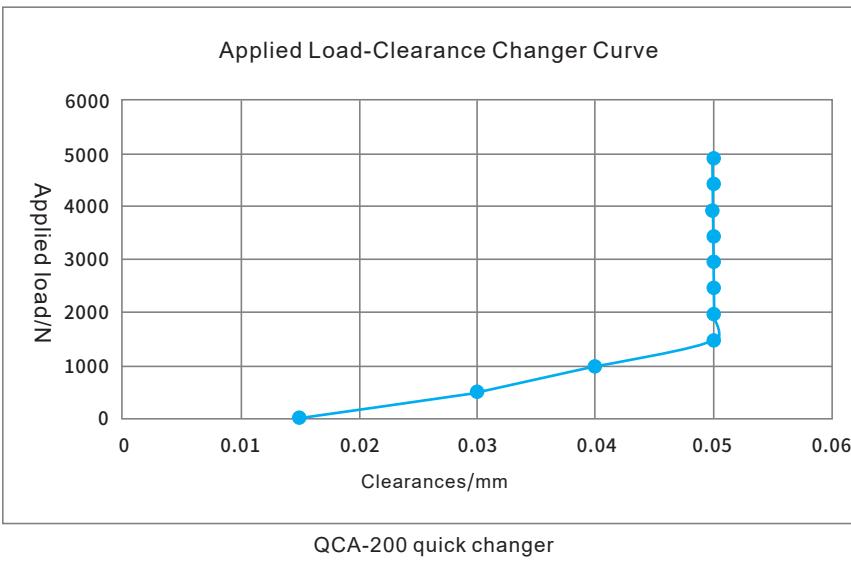


## Safe Way

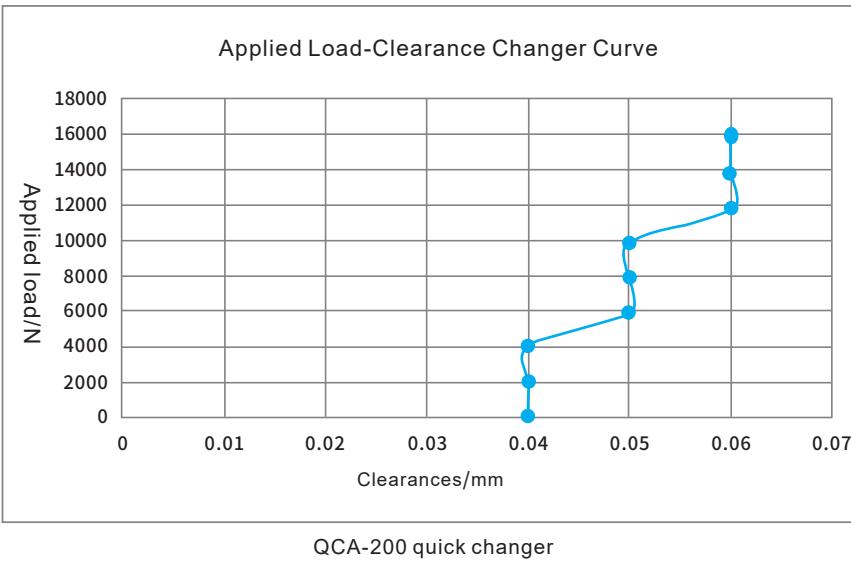


1. Multiple high-strength locking balls keep the robot and tools locked, making them safer and more stable.
2. Thanks to the precision of repetition, tools are brought to the precise operating position even if they are changed frequently.
3. Default self-locking design. The robot side and the tool side are not separated when the air pressure is stopped.

## Rated Load Test

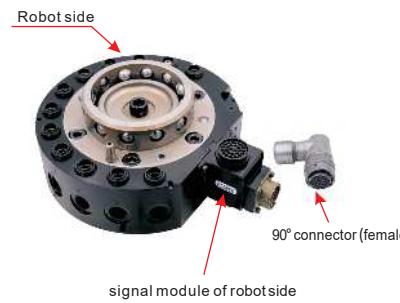


## Maximum Load Test



## Quick Changer Series

Model	Maxpayload	Gas path	Locking Force @80Psi ( 5.5Bar )	Product weight
QCA-05	5kg	6-M5	620N	0.4kg
QCA-05	5kg	6-M5	620N	0.3kg
QCA-15	15kg	6-M5	1150N	0.3kg
QCA-25	25kg	12-M5	2400N	1.0kg
QCA-35	35kg	8-G1/8	2900N	1.4kg
QCA-50	50kg	9-G1/8	4600N	1.7kg
QCA-S50	50kg	8-G1/8	5650N	1.9kg
QCA-100	100kg	7-G3/8	12000N	5.2kg
QCA-S100	100kg	5-G3/8	12000N	3.7kg
QCA-S150	150kg	8-G3/8	12000N	6.2kg
QCA-200	300kg	12-G3/8	16000N	9.0kg
QCA-200D1	300kg	8-G3/8	16000N	9.0kg
QCA-S350	350kg	/	31000N	9.4kg
QCA-S500	500kg	/	37800N	23.4kg



## Quick Changer

### QCA-05

\*Material: steel



PN	8.Y00355
Model	QCA-05R

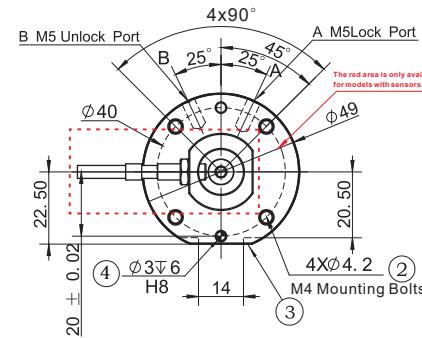
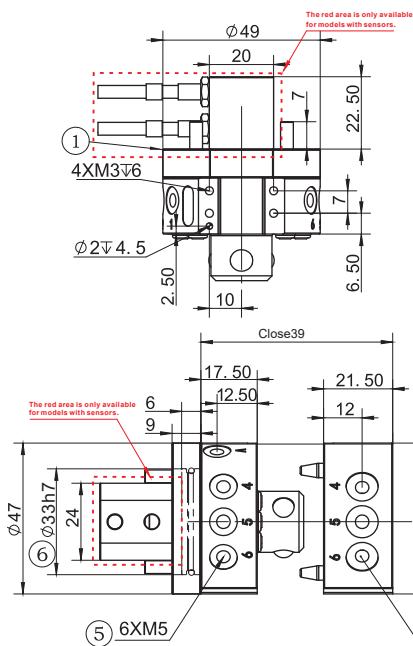


PN	8.Y00356
Model	QCA-05G



PN	8.Y00355-SP	8.Y00355-SN
Model	QCA-05R-SP	QCA-05R-SN
Signal Detection Category	PNP	NPN

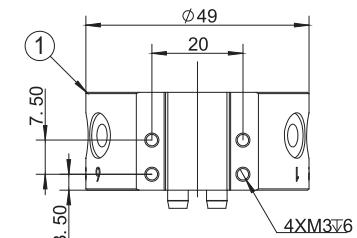
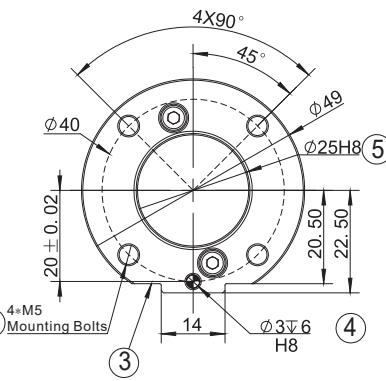
### Robot Side



- A. The air connection locked
- B. Air connection released
- 1. Robot side connection
- 2. Threaded through-holes
- 3. Optional mounting surface
- 4. Positioning pin
- 5. Straight through air hole
- 6. Central positioning
- 7. Protective base

## Quick Changer

### Gripper Side



- 1.Gripper side connection
- 2.Threaded holes
- 3.Optional mounting surface
- 4.Positioning pin
- 5.Central positioning

### Parameter

- 1.Max payload: 5kg
- 2.Locking force@80Psi ( 5.5Bar ) 620 N
- 3.Static load torque(X & Y): 23.4 Nm
- 4.Static load torque(Z): 31.5 Nm
- 5.Repeatability accuracy( X,Y&Z ): ±0.015 mm
- 6.Weight after locked: 0.4 kg
- 7.Robot side's weight: 0.3kg
- 8.Gripper side's weight: 0.1 kg
- 9.Maximum allowable angle deviation: ±1°
- 10.Size of straight air hole (quantity) : (6) M5

## Applicable Module

### Module Type

Product name	Model	PN	Voltage	Current	Connector	PN
Robot side signal module	QCSM-15R1	7.Y00965	24V	2.5A	DB15R1-1000 <sup>①</sup>	1.Y10163
Gripper side signal module	QCSM-15G1	7.Y00966	24V	2.5A	DB15G1-1000 <sup>①</sup>	1.Y10437

<sup>①</sup> The cable's length is 1 meter

### HF Module-straight Out Line

Product name	Model	PN
Robot side high frequency module	QCHFM-02R-1000	7.Y02086
Gripper side high frequency module	QCHFM-02G-1000	7.Y02087

### Power Module-straight Out Line

Product name	Model	PN
Robot side high frequency module	QCSM-08R-1000	7.Y02084
Gripper side high frequency module	QCSM-08G-1000	7.Y02085

### 15-core Electric Module-straight Out Line

Product name	Model	PN
Robot side 15-core electric module	QCSM-15R1-1000	7.Y02097
Gripper side 15-core electric module	QCSM-15G1-1000	7.Y02098

### RJ45S Network Cable Interface

Product name	Model	PN
Robot side RJ45S servo module	QCSM-RJ45*5M-06R	7.Y02129
Gripper side RJ45S servo module	QCSM-RJ45*5M-06G	7.Y02129

## Quick Changer

### QCA-05

\*Material: steel



Robot side strap switch

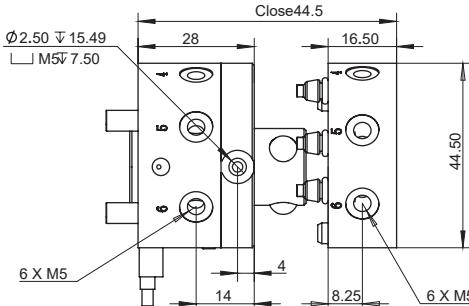
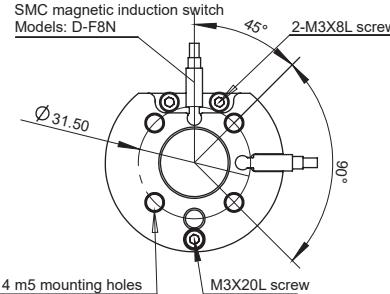
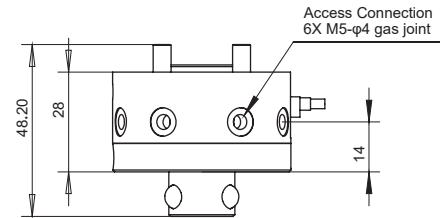
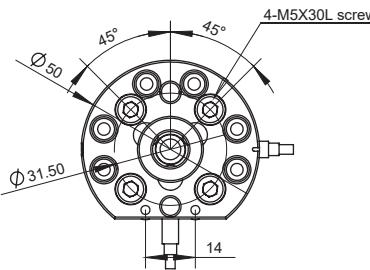
PN	8.Y01066
Model	QCA-05R1-SN
Signal Detection Category	NPN



Gripper side

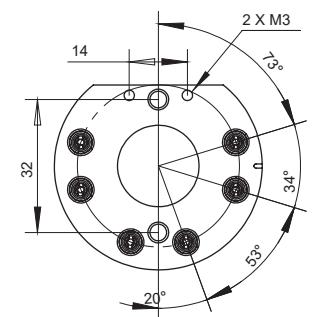
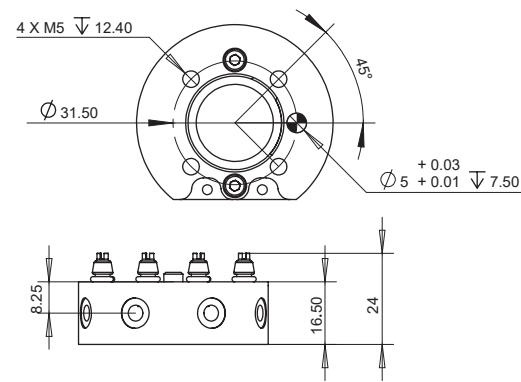
PN	8.Y01067
Model	QCA-05G1

### Robot Side



## Quick Changer

### Gripper Side



### Parameter

1. Max payload: 5kg
2. Locking force@80Psi ( 5.5Bar ) 620 N
3. Static load torque( X&Y ): 23.4 Nm
4. Static load torque( Z ): 31.5 Nm
5. Repeatability accuracy( X,Y&Z ):  $\pm 0.015$  mm
6. Weight after locked: 0.3 kg
7. Robot side's weight: 0.2kg
8. Gripper side's weight: 0.1 kg
9. Maximum allowable angle deviation:  $\pm 1^\circ$
10. Size of straight air hole (quantity) : (6) M5

### Technical Note

1. Mounting screws and magnetic switch sensor
2. There are no standard modules on the main disk side and tool disk side
3. Locking mode: steel ball locking

## Quick Changer

### QCA-15



Robot side

PN	8.Y00353
Model	QCA-15R



Gripper side

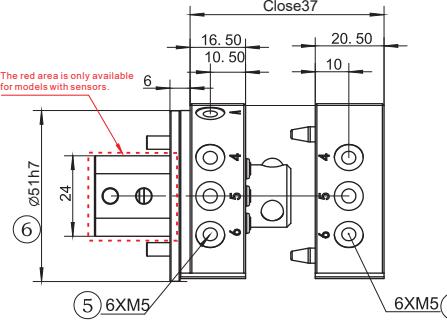
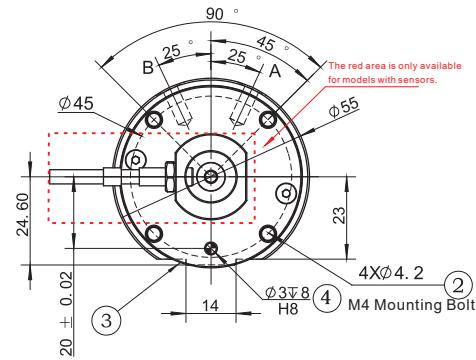
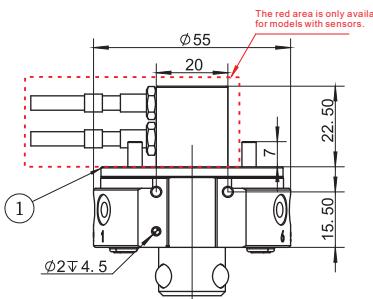
PN	8.Y00354
Model	QCA-15G



Robot side strap switch

PN	8.Y00353-SP	8.Y00353-SN
Model	QCA-15R-SP	QCA-15R-SN
Signal Detection Category	PNP	NPN

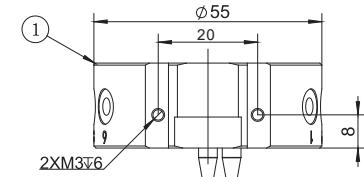
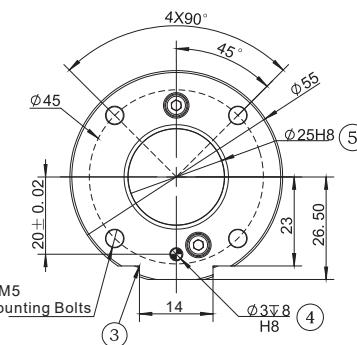
### Robot Side



- A. The air connection locked
- B. Air connection released
- 1. Robot side connection
- 2. Threaded through-holes
- 3. Optional mounting surface
- 4. Positioning pin
- 5. Straight through air hole
- 6. Central positioning

## Quick Changer

### Gripper Side



1. Gripper side connection
2. Threaded holes
3. Optional mounting surface
4. Positioning pin
5. Central positioning

### Parameter

1. Max payload: 15kg
2. Locking force@80Psi ( 5.5Bar ) 1150 N
3. Static load torque( X&Y ): 26.5 Nm
4. Static load torque( Z ): 35.03 Nm
5. Repeatability accuracy( X,Y&Z ):  $\pm 0.015$  mm
6. Weight after locked: 0.3 kg
7. Robot side's weight: 0.2 kg
8. Gripper side's weight: 0.1 kg
9. Maximum allowable angle deviation:  $\pm 1^\circ$
10. Size of straight air hole ( quantity ): (6) M5

## Applicable Module

### Module Type

Product name	Model	PN	Voltage	Current	Connector	PN
Robot side signal module	QCSM-15R1	7.Y00965	24V	2.5A	DB15R1-1000 <sup>①</sup>	1.Y10163
Gripper side signal module	QCSM-15G1	7.Y00966	24V	2.5A	DB15G1-1000 <sup>①</sup>	1.Y10437

<sup>①</sup> The cable's length is 1 meter

### HF Module-straight Out Line

Product name	Model	PN
Robot side high frequency module	QCHFM-02R-1000	7.Y02086
Gripper side high frequency module	QCHFM-02G-1000	7.Y02087

### Power Module-straight Out Line

Product name	Model	PN
Robot side high frequency module	QCSM-08R-1000	7.Y02084
Gripper side high frequency module	QCSM-08G-1000	7.Y02085

### 15-core Electric Module-straight Out Line

Product name	Model	PN
Robot side 15-core electric module	QCSM-15R1-1000	7.Y02097
Gripper side 15-core electric module	QCSM-15G1-1000	7.Y02098

### RJ45S Network Cable Interface

Product name	Model	PN
Robot side RJ45S servo module	QCSM-RJ45*5M-06R	7.Y02129
Gripper side RJ45S servo module	QCSM-RJ45*5M-06G	7.Y02129

## Quick Changer

### QCA-25



Robot side  
PN 8.Y00460  
Model QCA-25R

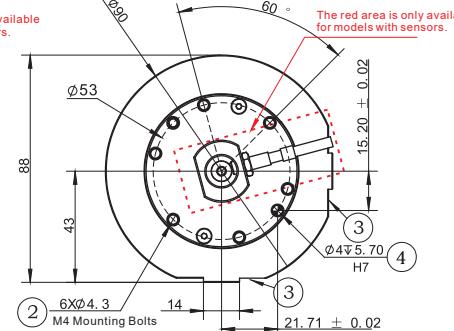
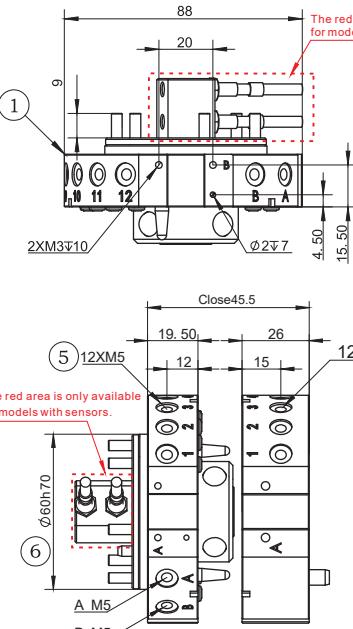


Gripper side  
PN 8.Y00461  
Model QCA-25G



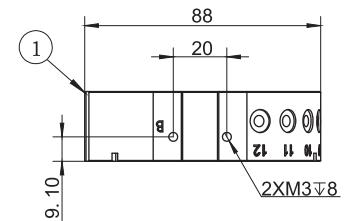
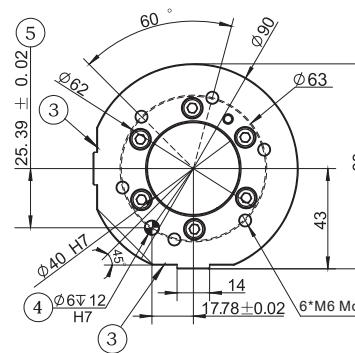
PN	8.Y00460-SP	8.Y00460-SN
Model	QCA-25R-SP	QCA-25R-SN
Signal Detection Category	PNP	
	NPN	

### Robot Side



## Quick Changer

### Gripper Side



1. Gripper side connection
2. Threaded holes
3. Optional mounting surface
4. Positioning pin
5. Central positioning

### Parameter

1. Max payload: 25kg
2. Locking force@80Psi (5.5Bar) 2400 N
3. Static load torque(X&Y): 59 Nm
4. Static load torque(Z): 80 Nm
5. Repeatability accuracy(X,Y&Z): ±0.015 mm
6. Weight after locked: 0.4kg
7. Robot side's weight: 0.3 kg
8. Gripper side's weight: 0.1 kg
9. Maximum allowable angle deviation: ±1°
10. Size of straight air hole (quantity) : (12) M5

## Applicable Module

### Module Type

Product name	Model	PN	Voltage	Current	Connector	PN
Robot side signal module	QCSM-15R1	7.Y00965	24V	2.5A	DB15R1-1000 <sup>①</sup>	1.Y10163
Gripper side signal module	QCSM-15G1	7.Y00966	24V	2.5A	DB15G1-1000 <sup>①</sup>	1.Y10437

<sup>①</sup> The cable's length is 1 meter

### HF Module-straight Out Line

Product name	Model	PN
Robot side high frequency module	QCHFM-02R-1000	7.Y02086
Gripper side high frequency module	QCHFM-02G-1000	7.Y02087

### Power Module-straight Out Line

Product name	Model	PN
Robot side high frequency module	QCSM-08R-1000	7.Y02084
Gripper side high frequency module	QCSM-08G-1000	7.Y02085

### 15-core Electric Module-straight Out Line

Product name	Model	PN
Robot side 15-core electric module	QCSM-15R1-1000	7.Y02097
Gripper side 15-core electric module	QCSM-15G1-1000	7.Y02098

### RJ45S Network Cable Interface

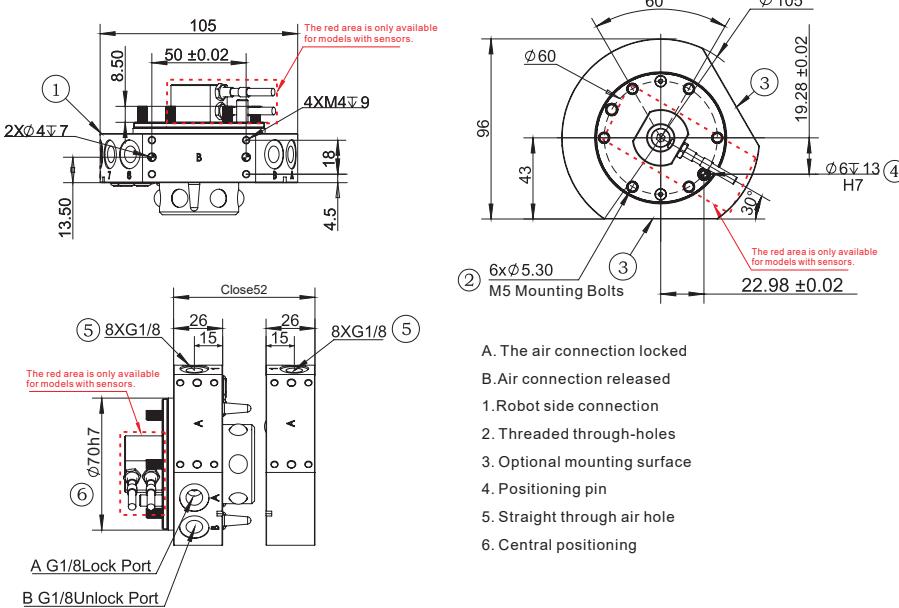
Product name	Model	PN
Robot side RJ45S servo module	QCSM-RJ45*5M-06R	7.Y02129
Gripper side RJ45S servo module	QCSM-RJ45*5M-06G	7.Y02129

## Quick Changer

### QCA-35

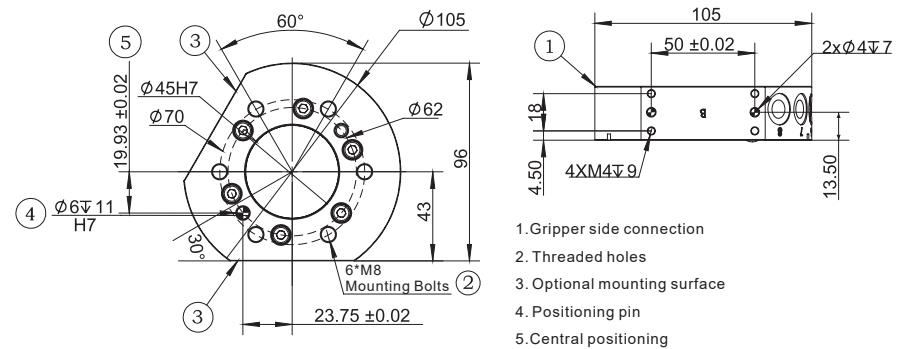


### Robot Side



## Quick Changer

### Gripper Side



### Parameter

- Max payload: 35kg
- Locking force@80Psi ( 5.5Bar ) 2900 N
- Static load torque ( X & Y ): 88.5 Nm
- Static load torque ( Z ): 105 Nm
- Repeatability accuracy ( X,Y&Z ) ±0.015 mm
- Weight after locked: 1.4 kg
- Robot side's weight: 0.9 kg
- Gripper side's weight: 0.5 kg
- Maximum allowable angle deviation: ±1°
- Size of straight air hole ( quantity ): ( 8 ) G1/8

## Applicable Module

### Module Type

Product name	Model	PN	Voltage	Current	Connector	PN
Robot side signal module	QCSM-15R2	7.Y00468	24V	2.5A	D-Sub15R2-1000 ①	1.Y10080
Gripper side signal module	QCSM-15G2	7.Y00469	24V	2.5A	D-Sub15G2-1000 ①	1.Y10081
Robot side signal module	QCSM-08R	7.Y00477	380V	30A	3108A22-23S ②	1.Y10710
Gripper side signal module	QCSM-08G	7.Y00478	380V	30A	3108A22-23P ②	1.Y10711
Robot side signal module	QCSM-19R	7.Y00954	220V	3A	MS3116F14-19S/Y ②	1.Y11420
					CMB08E-14-19S(072)SR-B ②	1.Y11863
Robot side signal module	QCSM-19R1	7.Y02123	220V	3A	MS3116F14-19S/Y ②	1.Y11420
					CMB08E-14-19S(072)SR-B ②	1.Y11863
Gripper side signal module	QCSM-19G	7.Y00955	220V	3A	MS3116F14-19P/Y ②	1.Y11419
					CMB08E-14-19P(072)SR-B ②	1.Y11864
Robot side signal module	QCSM-26R	7.Y00464	220V	3A	MS3116F16-26S/Y ②	1.Y11867
					CMB08E-16-26S(072)SR-B ②	1.Y11369
Gripper side signal module	QCSM-26G	7.Y00465	220V	3A	MS3116F16-26P/Y ②	1.Y11866
					CMB08E-16-26P(072)SR-B ②	1.Y11366
Gripper side signal module	QCSM-21/26G	7.Y02117	220V	3A	MS3116F16-26P/Y ②	1.Y11369
					CMB08E-16-26P(072)SR-B ②	1.Y11866
Robot side signal module	QCSM-32R	7.Y02095	220V	3A	MS3116F22-36S ②	1.Y13392
					MS3116F22-36P ②	1.Y13393
Gripper side signal module	QCSM-32G	7.Y02096	220V	3A	MS3118F22-36P ②	1.Y13395

① The cable's length is 1 meter

② Joint only, no wire

## Applicable Module

### Pneumatic Extension Module

Product name	Model	PN	Gas path	Threaded hole	Product name	Model	PN	Gaspath	Threaded hole
Robot side pneumatic extension module	QCAM-06G18R	7.Y01015	6	G1/8	Robot side pneumatic extension module	QCAM-14M5R	7.Y01055	14	M5
Gripper side pneumatic extension module	QCAM-06G18G	7.Y01016	6	G1/8	Gripper side pneumatic extension module	QCAM-14M5G	7.Y01056	14	M5
Robot side pneumatic extension module	QCAM-06G18R-E	7.Y01018	6	G1/8	Robot side self-proclaimed pneumatic extension module	QCAM-06G18R-F	7.Y02005	6	G1/8
Gripper side pneumatic extension module	QCAM-06G18G-E	7.Y01019	6	G1/8	Gripper side self-proclaimed pneumatic extension module	QCAM-06G18G-F	7.Y02006	6	G1/8
Robot side pneumatic extension module	QCAM-10M5R	7.Y01053	10	M5	Robot side pneumatic extension module	QCAM-04G38R	7.Y02043	4	G3/8
Gripper side pneumatic extension module	QCAM-10M5G	7.Y01054	10	M5	Gripper side pneumatic extension module	QCAM-04G38G	7.Y02044	4	G3/8

### High Frequency Module Type

Product name	Model	PN	Voltage	Current
Robot side signal module	QCHFM-E14-C1R	7.Y02003	1.4KV	5A
Gripper side signal module	QCHFM-E14-C1G	7.Y02004	1.4KV	5A

### Signal Module (network cable interface)

Product name	Model	PN
Robot side signal module	QCSM-RJ45-06R	7.Y02007
Gripper side signal module	QCSM-RJ45-06G	7.Y02008

### Servo Power Module

Product name	Model	PN
Robot side servo power module	QCSM-08R1	7.Y02080
Gripper side servo power module	QCSM-08G1	7.Y02081

### Servo Signal Module

Product name	Model	PN
Robot side servo signal module	QCSM-12R	7.Y02082
Gripper side servo signal module	QCSM-12G	7.Y02083

### Self-Sealing Fluid Air Module

Product name	Model	PN
Robot side signal module	QCWM-02R	7.Y02049
Gripper side signal module	QCWM-02G	7.Y02050

## Quick Changer

### QCA-50



Robot side

PN	8.Y00349
Model	QCA-50R

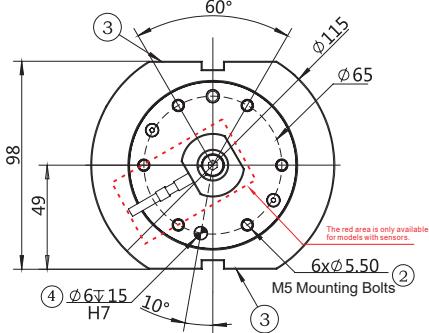
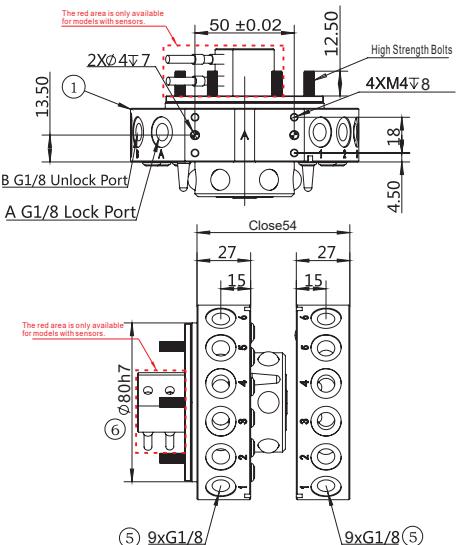
Gripper side

PN	8.Y00350
Model	QCA-50G

Robot side strap switch

PN	8.Y00349-SP	8.Y00349-SN
Model	QCA-50R-SP	QCA-50R-SN
Signal Detection Category	PNP	NPN

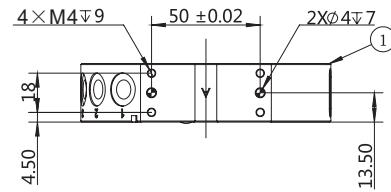
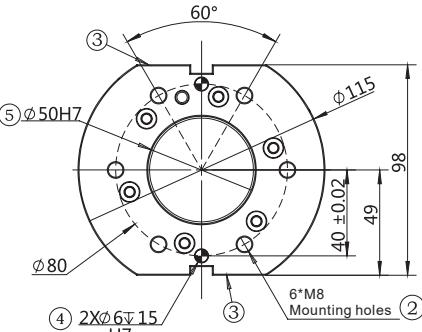
### Robot Side



- A. The air connection locked
- B. Air connection released
- 1. Robot side connection
- 2. Threaded through-holes
- 3. Optional mounting surface
- 4. Positioning pin
- 5. Straight through air hole
- 6. Central positioning

## Quick Changer

### Gripper Side



1. Gripper side connection
2. Threaded holes
3. Optional mounting surface
4. Positioning pin
5. Central positioning

### Parameter

- 1. Max payload: 50kg
- 2. Locking force@80Psi ( 5.5Bar ) 4600 N
- 3. Static load torque( X & Y ): 165 Nm
- 4. Static load torque( Z ): 226 Nm
- 5. Repeatability accuracy( X,Y&Z ): ±0.015 mm

- 6. Weight after locked: 1.7 kg
- 7. Robot side's weight: 1.1 kg
- 8. Gripper side's weight: 0.6 kg
- 9. Maximum allowable angle deviation: ±1°
- 10. Size of straight air hole(quantity):(9) 1/8

## Applicable Module

### Pneumatic Extension Module

Product name	Model	PN	Gas path	Threaded hole	Product name	Model	PN	Gas path	Threaded hole
Robot side pneumatic extension module	QCAM-06G18R	7.Y01015	6	G1/8	Robot side pneumatic extension module	QCAM-14M5R	7.Y01055	14	M5
Gripper side pneumatic extension module	QCAM-06G18G	7.Y01016	6	G1/8	Gripper side pneumatic extension module	QCAM-14M5G	7.Y01056	14	M5
Robot side pneumatic extension module	QCAM-06G18R-E	7.Y01018	6	G1/8	Robot side self-proclaimed pneumatic extension module	QCAM-06G18R-F	7.Y02005	6	G1/8
Gripper side pneumatic extension module	QCAM-06G18G-E	7.Y01019	6	G1/8	Gripper side self-proclaimed pneumatic extension module	QCAM-06G18G-F	7.Y02006	6	G1/8
Robot side pneumatic extension module	QCAM-10M5R	7.Y01053	10	M5	Robot side pneumatic extension module	QCAM-04G38R	7.Y02043	4	G3/8
Gripper side pneumatic extension module	QCAM-10M5G	7.Y01054	10	M5	Gripper side pneumatic extension module	QCAM-04G38G	7.Y02044	4	G3/8

### High Frequency Module Type

Product name	Model	PN	Voltage	Current
Robot side signal module	QCHFM-E14-C1R	7.Y02003	1.4KV	5A
Gripper side signal module	QCHFM-E14-C1G	7.Y02004	1.4KV	5A

### Signal Module (network cable interface)

Product name	Model	PN
Robot side signal module	QCSM-RJ45-06R	7.Y02007
Gripper side signal module	QCSM-RJ45-06G	7.Y02008

### Servo Signal Module

Product name	Model	PN
Robot side servo signal module	QCSM-12R	7.Y02082
Gripper side servo signal module	QCSM-12G	7.Y02083

### Servo Power Module

Product name	Model	PN
Robot side servo power module	QCSM-08R1	7.Y02080
Gripper side servo power module	QCSM-08G1	7.Y02081

### Self-Sealing Fluid Air Module

Product name	Model	PN
Robot side signal module	QCWM-02R	7.Y02049
Gripper side signal module	QCWM-02G	7.Y02050

## Applicable Module

### Module Type

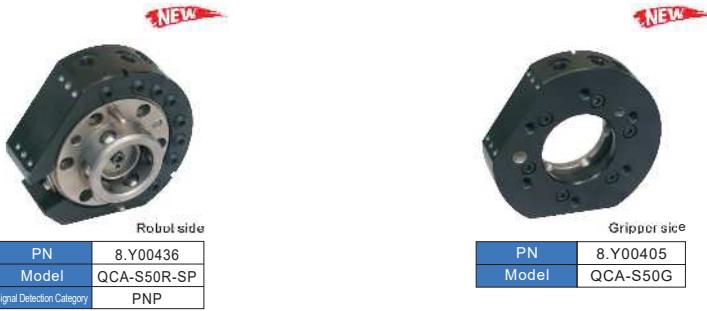
Product name	Model	PN	Voltage	Current	Connector	PN
Robot side signal module	QCSM-15R2	7.Y00468	24V	2.5A	D-Sub15R2-1000 ①	1.Y10080
Gripper side signal module	QCSM-15G2	7.Y00469	24V	2.5A	D-Sub15G2-1000 ①	1.Y10081
Robot side signal module	QCSM-08R	7.Y00477	380V	30A	3108A22-23S ②	1.Y10710
Gripper side signal module	QCSM-08G	7.Y00478	380V	30A	3108A22-23P ②	1.Y10711
Robot side signal module	QCSM-19R	7.Y00954	220V	3A	MS3116F14-19S/Y②	1.Y11420
					CMB08E-14-19S(072)SR-B②	1.Y11863
					MS3116F14-19S/Y②	1.Y11420
					CMB08E-14-19S(072)SR-B②	1.Y11863
					MS3116F14-19P/Y②	1.Y11419
					CMB08E-14-19P(072)SR-B②	1.Y11864
					MS3116F16-26S/Y②	1.Y11867
					CMB08E-16-26S(072)SR-B②	1.Y11865
					MS3116F16-26P/Y②	1.Y11369
					CMB08E-16-26P(072)SR-B②	1.Y11866
					MS3116F16-26P/Y②	1.Y11369
					CMB08E-16-26P(072)SR-B②	1.Y11866
					MS3116F22-36S②	1.Y13392
					MS3118F22-36S②	1.Y13393
					MS3116F22-36P②	1.Y13394
					MS3118F22-36P②	1.Y13395

① The cable's length is 1 meter

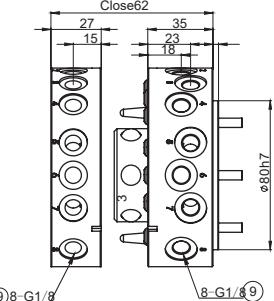
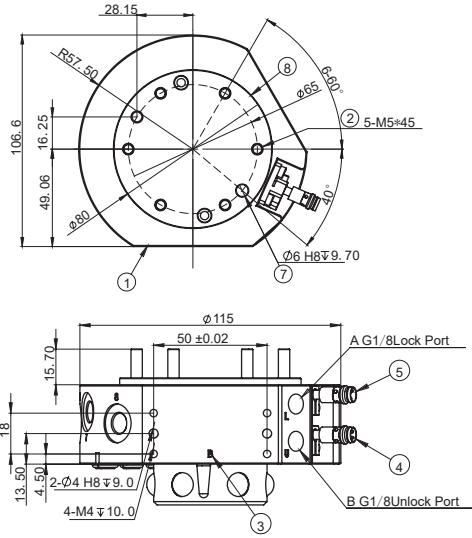
② Joint only, no wire

## Quick Changer

### QCA-S50

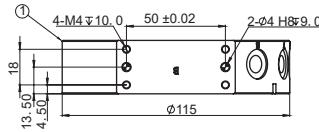
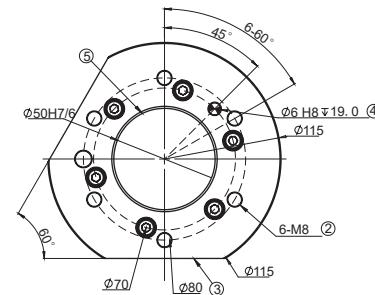


### Robot Side



## Quick Changer

### Gripper Side



1. Gripper side connection
2. Threaded holes
3. Optional mounting surface
4. Positioning pin
5. Central positioning

### Parameter

- 1. Max payload: 50kg
- 2. Locking force@80Psi ( 5.5Bar ) 5650 N
- 3. Static Load torque( X & Y ): 471 Nm
- 4. Static Load torque( Z ): 648 Nm
- 5. Repeatability accuracy( X, Y & Z ): ±0.015 mm
- 6. Weight after locked: 1.9 kg
- 7. Robot side's weight: 1.3 kg
- 8. Gripper side's weight: 0.6 kg
- 9. Maximum allowable angle deviation: ±2°
- 10. Size of straight air hole ( quantity ): ( 8 ) 1/8

## Applicable Module

### Module Type

Product name	Model	PN	Voltage	Current	Connector	PN
Robot side signal module	QCSM-15R2	7.Y00468	24V	2.5A	D-Sub15R2-1000 ①	1.Y10080
Gripper side signal module	QCSM-15G2	7.Y00469	24V	2.5A	D-Sub15G2-1000 ①	1.Y10081
Robot side signal module	QCSM-08R	7.Y00477	380V	30A	3108A22-23S ②	1.Y10710
Gripper side signal module	QCSM-08G	7.Y00478	380V	30A	3108A22-23P ②	1.Y10711
Robot side signal module	QCSM-19R	7.Y00954	220V	3A	MS3116F14-19S/(072)SR-B ②	1.Y11863
Robot side signal module	QCSM-19R1	7.Y02123	220V	3A	CM80E-14-19S/(072)SR-B ②	1.Y11420
Gripper side signal module	QCSM-19G	7.Y00955	220V	3A	MS3116F14-19P/(072)SR-B ②	1.Y11863
Robot side signal module	QCSM-26R	7.Y00464	220V	3A	MS3116F14-19P/(072)SR-B ②	1.Y11419
Robot side signal module	QCSM-26R	7.Y00464	220V	3A	CM80E-14-19P/(072)SR-B ②	1.Y11864
Gripper side signal module	QCSM-26G	7.Y00465	220V	3A	MS3116F16-26S/(072)SR-B ②	1.Y11865
Gripper side signal module	QCSM-26G	7.Y00465	220V	3A	CM80E-16-26P/(072)SR-B ②	1.Y11369
Gripper side signal module	QCSM-21/26G	7.Y02117	220V	3A	MS3116F16-26P/(072)SR-B ②	1.Y11866
Robot side signal module	QCSM-32R	7.Y02095	220V	3A	MS3116F22-36S ②	1.Y13392
Gripper side signal module	QCSM-32G	7.Y02096	220V	3A	MS3116F22-36P ②	1.Y13393
					MS3118F22-36P ②	1.Y13395

① The cable's length is 1 meter

② Joint only, no wire

## Applicable Module

### Pneumatic Extension Module

Product name	Model	PN	Gas path	Threaded hole	Product name	Model	PN	Gas path	Threaded hole
Robot side pneumatic extension module	QCAM-06G18R	7.Y01015	6	G1/8	Robot side pneumatic extension module	QCAM-14M5R	7.Y01055	14	M5
Gripper side pneumatic extension module	QCAM-06G18G	7.Y01016	6	G1/8	Gripper side pneumatic extension module	QCAM-14M5G	7.Y01056	14	M5
Robot side pneumatic extension module	QCAM-06G18R-E	7.Y01018	6	G1/8	Robot side self-proclaimed pneumatic extension module	QCAM-06G18R-F	7.Y02005	6	G1/8
Gripper side pneumatic extension module	QCAM-06G18G-E	7.Y01019	6	G1/8	Gripper side self-proclaimed pneumatic extension module	QCAM-06G18G-F	7.Y02006	6	G1/8
Robot side pneumatic extension module	QCAM-10M5R	7.Y01053	10	M5	Robot side pneumatic extension module	QCAM-04G38R	7.Y02043	4	G3/8
Gripper side pneumatic extension module	QCAM-10M5G	7.Y01054	10	M5	Gripper side pneumatic extension module	QCAM-04G38G	7.Y02044	4	G3/8

### High Frequency Module Type

Product name	Model	PN	Voltage	Current
Robot side signal module	QCHFM-E14-C1R	7.Y02003	1.4KV	5A
Gripper side signal module	QCHFM-E14-C1G	7.Y02004	1.4KV	5A

### Signal Module (network cable interface)

Product name	Model	PN
Robot side signal module	QCSM-RJ45-06R	7.Y02007
Gripper side signal module	QCSM-RJ45-06G	7.Y02008

### Servo Power Module

Product name	Model	PN
Robot side servo power module	QCSM-08R1	7.Y02080
Gripper side servo power module	QCSM-08G1	7.Y02081

### Servo Signal Module

Product name	Model	PN
Robot side servo signal module	QCSM-12R	7.Y02082
Gripper side servo signal module	QCSM-12G	7.Y02083

### Servo Power Module

Product name	Model	PN
Robot side servo power module	QCWM-02R	7.Y02049
Gripper side servo power module	QCWM-02G	7.Y02050

## Quick Changer

### QCA-100



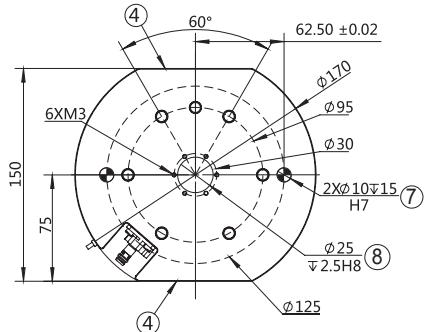
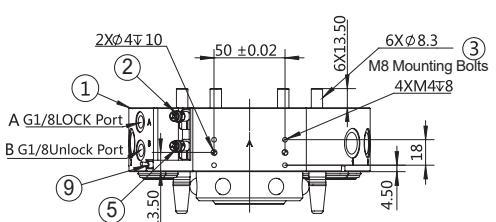
Robot side



Gripper side

PN	8.Y00362-SP	8.Y00362-SN
Model	QCA-100R-SP	QCA-100R-SN
Signal Detection Category	PNP	NPN

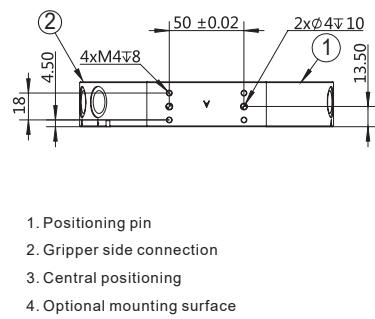
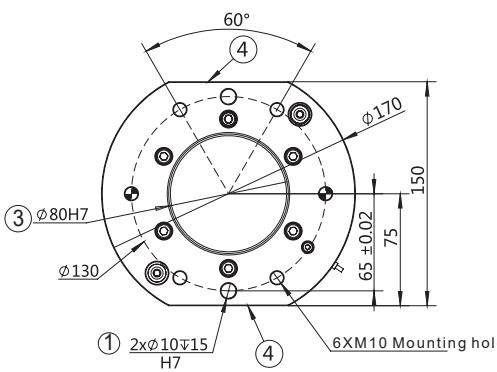
### Robot Side



- A. The air connection locked
- B. Air connection released
- 1. Robot side connection
- 2. Monitoring position locked
- 3. Threaded through-holes
- 4. Optional mounting surface
- 5. Monitor position released
- 7. Positioning pin
- 8. Central positioning
- 9. Proximity switch for robot side confirmation
- 10. Straight through air hole

## Quick Changer

### Gripper Side



1. Positioning pin
2. Gripper side connection
3. Central positioning
4. Optional mounting surface

### Parameter

- 1. Max payload: 100kg
- 2. Locking force@80Psi ( 5.5Bar ) 12000 N
- 3. Static Load torque( X&Y ): 538 Nm
- 4. Static Load torque( Z ): 720 Nm
- 5. Repeatability accuracy( X,Y&Z ):  $\pm 0.015$  mm
- 6. Weight after locked: 5.2 kg
- 7. Robot side's weight: 3.6 kg
- 8. Gripper side's weight: 1.6 kg
- 9. Maximum allowable angle deviation:  $\pm 1^\circ$
- 10. Size of straight air hole(quantity): ( 7 ) G3/8

## Applicable Module

### Module Type

Product name	Model	PN	Voltage	Current	Connector	PN
Robot side signal module	QCSM-15R2	7.Y00468	24V	2.5A	D-Sub15R2-1000 <sup>①</sup>	1.Y10080
Gripper side signal module	QCSM-15G2	7.Y00469	24V	2.5A	D-Sub15G2-1000 <sup>①</sup>	1.Y10081
Robot side signal module	QCSM-08R	7.Y00477	380V	30A	3108A22-23S <sup>②</sup>	1.Y10710
Gripper side signal module	QCSM-08G	7.Y00478	380V	30A	3108A22-23P <sup>②</sup>	1.Y10711
Robot side signal module	QCSM-19R	7.Y00954	220V	3A	MS3116F14-19S/-Y <sup>③</sup>	1.Y11420
					CMB08E-14-19S(072)SR-B <sup>③</sup>	1.Y11863
Robot side signal module	QCSM-19R1	7.Y02123	220V	3A	MS3116F14-19S/-Y <sup>③</sup>	1.Y11420
					CMB08E-14-19S(072)SR-B <sup>③</sup>	1.Y11863
Gripper side signal module	QCSM-19G	7.Y00955	220V	3A	MS3116F14-19P/-Y <sup>③</sup>	1.Y11419
					CMB08E-14-19P(072)SR-B <sup>③</sup>	1.Y11864
Robot side signal module	QCSM-26R	7.Y00464	220V	3A	MS3116F16-26S/-Y <sup>③</sup>	1.Y11867
					CMB08E-16-26S(072)SR-B <sup>③</sup>	1.Y11865
Gripper side signal module	QCSM-26G	7.Y00465	220V	3A	MS3116F16-26P/-Y <sup>③</sup>	1.Y11369
					CMB08E-16-26P(072)SR-B <sup>③</sup>	1.Y11866
Gripper side signal module	QCSM-21/26G	7.Y02117	220V	3A	MS3116F16-26P/-Y <sup>③</sup>	1.Y11369
					CMB08E-16-26P(072)SR-B <sup>③</sup>	1.Y11866
Robot side signal module	QCSM-32R	7.Y02095	220V	3A	MS3116F22-36S <sup>③</sup>	1.Y13392
					MS3118F22-36S <sup>③</sup>	1.Y13393
Gripper side signal module	QCSM-32G	7.Y02096	220V	3A	MS3116F22-36P <sup>③</sup>	1.Y13394
					MS3118F22-36P <sup>③</sup>	1.Y13395

<sup>①</sup> The cable's length is 1 meter

<sup>②</sup> Joint only, no wire

## Applicable Module

### Pneumatic Extension Module

Product name	Model	PN	Gas path	Threaded hole	Product name	Model	PN	Gas path	Threaded hole
Robot side pneumatic extension module	QCAM-06G18R	7.Y01015	6	G1/8	Robot side pneumatic extension module	QCAM-14M5R	7.Y01055	14	M5
Gripper side pneumatic extension module	QCAM-06G18G	7.Y01016	6	G1/8	Gripper side pneumatic extension module	QCAM-14M5G	7.Y01056	14	M5
Robot side pneumatic extension module	QCAM-06G18R-E	7.Y01018	6	G1/8	Robot side self-proclaimed pneumatic extension module	QCAM-06G18R-F	7.Y02005	6	G1/8
Gripper side pneumatic extension module	QCAM-06G18G-E	7.Y01019	6	G1/8	Gripper side self-proclaimed pneumatic extension module	QCAM-06G18G-F	7.Y02006	6	G1/8
Robot side pneumatic extension module	QCAM-10M5R	7.Y01053	10	M5	Robot side pneumatic extension module	QCAM-04G38R	7.Y02043	4	G3/8
Gripper side pneumatic extension module	QCAM-10M5G	7.Y01054	10	M5	Gripper side pneumatic extension module	QCAM-04G38G	7.Y02044	4	G3/8

### High Frequency Module Type

Product name	Model	PN	Voltage	Current
Robot side signal module	QCHFM-E14-C1R	7.Y02003	1.4KV	5A
Gripper side signal module	QCHFM-E14-C1G	7.Y02004	1.4KV	5A

### Signal Module (network cable interface)

Product name	Model	PN
Robot side signal module	QCSM-RJ45-06R	7.Y02007
Gripper side signal module	QCSM-RJ45-06G	7.Y02008

### Servo Signal Module

Product name	Model	PN
Robot side servo signal module	QCSM-12R	7.Y02082
Gripper side servo signal module	QCSM-12G	7.Y02083

### Servo Power Module

Product name	Model	PN
Robot side servo power module	QCSM-08R1	7.Y02080
Gripper side servo power module	QCSM-08G1	7.Y02081

### Self-Sealing Fluid Air Module

Product name	Model	PN
Robot side signal module	QCWM-02R	7.Y02049
Gripper side signal module	QCWM-02G	7.Y02050

## Quick Changer

### QCA-S100

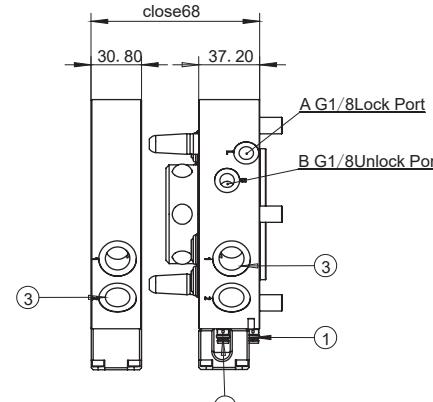
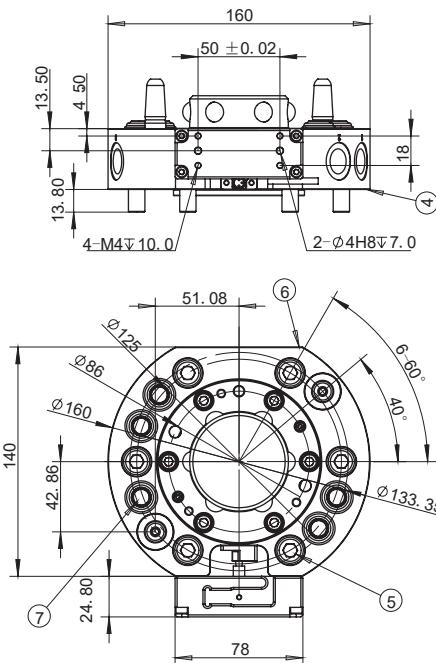


PN	8.Y00437
Model	QCA-S100R-SP
Signal Detection Category	PNP



PN	8.Y00426
Model	QCA-S100G

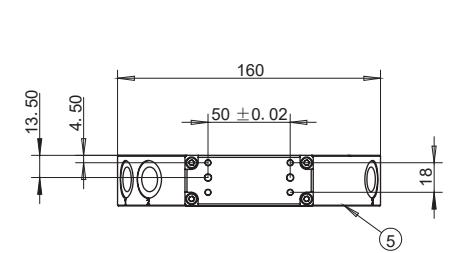
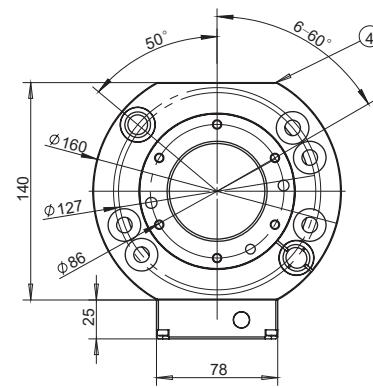
### Robot Side



- A. The air connection locked
- B. Air connection released
- 1. Monitoring position locked
- 2. Monitor position released
- 3. Straight through air hole G3/8
- 4. Robot side connection
- 5. Robot Side Mounting Screws M10
- 6. Optional mounting surface
- 7. Docking through-type air holes

## Quick Changer

### Gripper Side



4. Module mounting surface  
5. Gripper side connection

### Parameter

1. Max payload: 100kg
2. Locking force@80Psi ( 5.5Bar ) 12000 N
3. Static Load torque( X&Y ): 1626 Nm
4. Static Load torque( Z ): 2103 Nm
5. Repeatability accuracy( X,Y&Z ):  $\pm 0.015$  mm
6. Weight after locked: 3.7 kg
7. Robot side's weight: 2.3 kg
8. Gripper side's weight: 1.4 kg
9. Maximum allowable angle deviation:  $\pm 1^\circ$
10. Size of straight air hole ( quantity ): ( 5 ) G3/8

## Applicable Module

### Module Type

Product name	Model	PN	Voltage	Current	Connector	PN
Robot side signal module	QCSM-15R2	7.Y00468	24V	2.5A	D-Sub15R2-1000 ①	1.Y10080
Gripper side signal module	QCSM-15G2	7.Y00469	24V	2.5A	D-Sub15G2-1000 ①	1.Y10081
Robot side signal module	QCSM-08R	7.Y00477	380V	30A	3108A22-23S ②	1.Y10710
Gripper side signal module	QCSM-08G	7.Y00478	380V	30A	3108A22-23P ②	1.Y10711
Robot side signal module	QCSM-19R	7.Y00954	220V	3A	MS3116F14-19S/Y ②	1.Y11420
					CMB08E-14-19S(072)SR-B ②	1.Y11863
					MS3116F14-19S/Y ②	1.Y11420
					CMB08E-14-19S(072)SR-B ②	1.Y11863
					MS3116F14-19P/Y ②	1.Y11419
					CMB08E-14-19P(072)SR-B ②	1.Y11864
					MS3116F16-26S/Y ②	1.Y11867
					CMB08E-16-26S(072)SR-B ②	1.Y11865
					MS3116F16-26P/Y ②	1.Y11369
					CMB08E-16-26P(072)SR-B ②	1.Y11866
					MS3116F16-26P/Y ②	1.Y11369
					CMB08E-16-26P(072)SR-B ②	1.Y11866
					MS3116F22-36S ②	1.Y13392
					MS3118F22-36S ②	1.Y13393
					MS3116F22-36P ②	1.Y13394
					MS3118F22-36P ②	1.Y13395

① The cable's length is 1 meter

② Joint only, no wire

## Applicable Module

### Pneumatic Extension Module

Product name	Model	PN	Gas path	Threaded hole	Product name	Model	PN	Gas path	Threaded hole
Robot side pneumatic extension module	QCAM-06G18R	7.Y01015	6	G1/8	Robot side pneumatic extension module	QCAM-14M5R	7.Y01055	14	M5
Gripper side pneumatic extension module	QCAM-06G18G	7.Y01016	6	G1/8	Gripper side pneumatic extension module	QCAM-14M5G	7.Y01056	14	M5
Robot side pneumatic extension module	QCAM-06G18R-E	7.Y01018	6	G1/8	Robot side self-proclaimed pneumatic extension module	QCAM-06G18R-F	7.Y02005	6	G1/8
Gripper side pneumatic extension module	QCAM-06G18G-E	7.Y01019	6	G1/8	Gripper side self-proclaimed pneumatic extension module	QCAM-06G18G-F	7.Y02006	6	G1/8
Robot side pneumatic extension module	QCAM-10M5R	7.Y01053	10	M5	Robot side pneumatic extension module	QCAM-04G38R	7.Y02043	4	G3/8
Gripper side pneumatic extension module	QCAM-10M5G	7.Y01054	10	M5	Gripper side pneumatic extension module	QCAM-04G38G	7.Y02044	4	G3/8

### High Frequency Module Type

Product name	Model	PN	Voltage	Current
Robot side signal module	QCHFM-E14-C1R	7.Y02003	1.4KV	5A
Gripper side signal module	QCHFM-E14-C1G	7.Y02004	1.4KV	5A

### Signal Module (network cable interface)

Product name	Model	PN
Robot side signal module	QCSM-RJ45-06R	7.Y02007
Gripper side signal module	QCSM-RJ45-06G	7.Y02008

### Servo Power Module

Product name	Model	PN
Robot side servo power module	QCSM-08R1	7.Y02080
Gripper side servo power module	QCSM-08G1	7.Y02081

### Servo Signal Module

Product name	Model	PN
Robot side servo signal module	QCSM-12R	7.Y02082
Gripper side servo signal module	QCSM-12G	7.Y02083

### Self-Sealing Fluid Air Module

Product name	Model	PN
Robot side signal module	QCWM-02R	7.Y02049
Gripper side signal module	QCWM-02G	7.Y02050

## Quick Changer

### QCA-S150



NEW



NEW

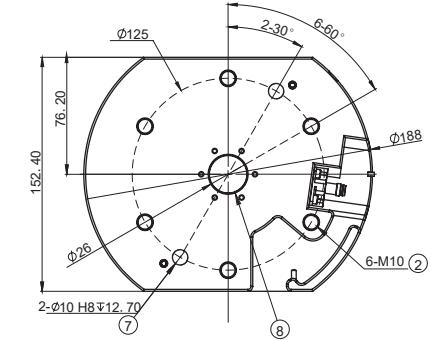
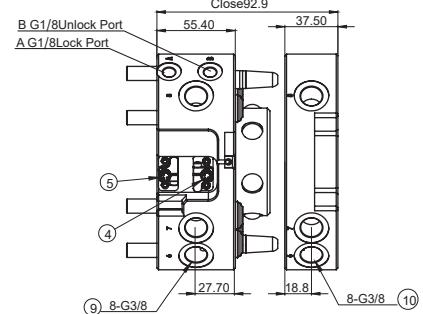
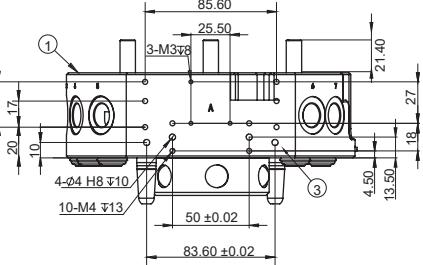
Robot side

PN	8.Y01013
Model	QCA-S150R-SP
Signal Detection Category	PNP

Gripper side

PN	8.Y01014
Model	QCA-S150G

### Robot Side



A. The air connection locked

B. Air connection released

1. Robot side connection

2. Threaded through-holes

3. Optional mounting surface

4. Monitoring position locked

5. Monitor position released

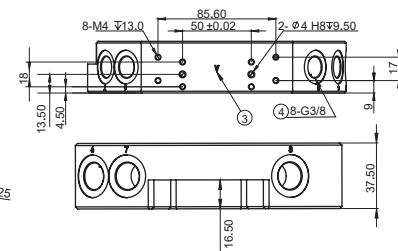
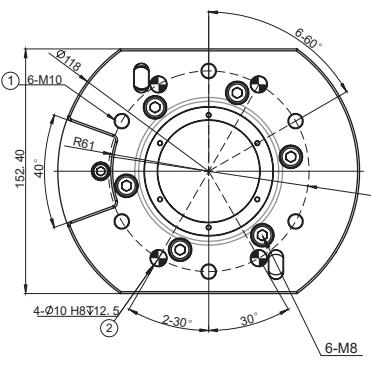
7. Positioning pin

8. Central positioning

9. Straight through air hole

## Quick Changer

### Gripper Side



1. Install the fixing screw hole
2. Install the fixed pin hole
3. Module mounting surface A
4. Air Vents
5. Module mounting surface B

### Parameter

- 1. Max payload: 150kg
- 2. Locking force@80Psi( 5.5Bar): 12000 N
- 3. Static Load torque( X&Y ): 2352 Nm
- 4. Static Load torque( Z ): 2352 Nm
- 5. Repeatability accuracy( X,Y&Z ): ±0.015 mm
- 6. Weight after locked: 6.2 kg
- 7. Robot side's weight: 4 kg
- 8. Gripper side's weight: 2.2 kg
- 9. Maximum allowable angle deviation: ±1°
- 10. Size of straight air hole ( quantity ): ( 8 )3/8

## Applicable Module

### Module Type

Product name	Model	PN	Voltage	Current	Connector	PN
Robot side signal module	QCSM-15R2	7.Y00468	24V	2.5A	D-Sub15R2-1000 ①	1.Y10080
Gripper side signal module	QCSM-15G2	7.Y00469	24V	2.5A	D-Sub15G2-1000 ①	1.Y10081
Robot side signal module	QCSM-08R	7.Y00477	380V	30A	3108A22-23S ②	1.Y10710
Gripper side signal module	QCSM-08G	7.Y00478	380V	30A	3108A22-23P ②	1.Y10711
Robot side signal module	QCSM-19R	7.Y00954	220V	3A	MS3116F14-19S/-Y② CB08E-14-19S(072)SR-B②	1.Y11420 1.Y11863
Robot side signal module	QCSM-19R1	7.Y02123	220V	3A	MS3116F14-19S/-Y② CB08E-14-19S(072)SR-B②	1.Y11420 1.Y11863
Gripper side signal module	QCSM-19G	7.Y00955	220V	3A	MS3116F14-19P/-Y② CB08E-14-19P(072)SR-B②	1.Y11419 1.Y11864
Robot side signal module	QCSM-26R	7.Y00464	220V	3A	MS3116F16-26S/-Y② CB08E-16-26S(072)SR-B②	1.Y11867 1.Y11865
Gripper side signal module	QCSM-26G	7.Y00465	220V	3A	MS3116F16-26P/-Y② CB08E-16-26P(072)SR-B②	1.Y11369 1.Y11866
Gripper side signal module	QCSM-21/26G	7.Y02117	220V	3A	MS3116F16-26P/-Y② CB08E-16-26P(072)SR-B②	1.Y11369 1.Y11866
Robot side signal module	QCSM-32R	7.Y02095	220V	3A	MS3116F22-36S ② MS3118F22-36S ②	1.Y13392 1.Y13393
Gripper side signal module	QCSM-32G	7.Y02096	220V	3A	MS3116F22-36P ② MS3118F22-36P ②	1.Y13394 1.Y13395

① The cable's length is 1 meter

② Joint only, no wire

## Applicable Module

### Pneumatic Extension Module

Product name	Model	PN	Gas path	Threaded hole	Product name	Model	PN	Gas path	Threaded hole
Robot side pneumatic extension module	QCAM-06G18R	7.Y01015	6	G1/8	Robot side pneumatic extension module	QCAM-14M5R	7.Y01055	14	M5
Gripper side pneumatic extension module	QCAM-06G18G	7.Y01016	6	G1/8	Gripper side pneumatic extension module	QCAM-14M5G	7.Y01056	14	M5
Robot side pneumatic extension module	QCAM-06G18R-E	7.Y01018	6	G1/8	Robot side self-proclaimed pneumatic extension module	QCAM-06G18R-F	7.Y02005	6	G1/8
Gripper side pneumatic extension module	QCAM-06G18G-E	7.Y01019	6	G1/8	Gripper side self-proclaimed Pneumatic Extension Module	QCAM-06G18G-F	7.Y02006	6	G1/8
Robot side pneumatic extension module	QCAM-10M5R	7.Y01053	10	M5	Robot side pneumatic extension module	QCAM-04G38R	7.Y02043	4	G3/8
Gripper side pneumatic extension module	QCAM-10M5G	7.Y01054	10	M5	Gripper side pneumatic extension module	QCAM-04G38G	7.Y02044	4	G3/8

### High Frequency Module Type

Product name	Model	PN	Voltage	Current
Robot side signal module	QCHFM-E14-C1R	7.Y02003	1.4KV	5A
Gripper side signal module	QCHFM-E14-C1G	7.Y02004	1.4KV	5A

### Signal Module (network cable interface)

Product name	Model	PN
Robot side signal module	QCSM-RJ45-06R	7.Y02007
Gripper side signal module	QCSM-RJ45-06G	7.Y02008

### Servo Signal Module

Product name	Model	PN
Robot side servo signal module	QCSM-12R	7.Y02082
Gripper side servo signal module	QCSM-12G	7.Y02083

### Servo Power Module

Product name	Model	PN
Robot side servo power module	QCSM-08R1	7.Y02080
Gripper side servo power module	QCSM-08G1	7.Y02081

### Self-Sealing Fluid Air Module

Product name	Model	PN
Robot side signal module	QCWM-02R	7.Y02049
Gripper side signal module	QCWM-02G	7.Y02050

## Quick Changer

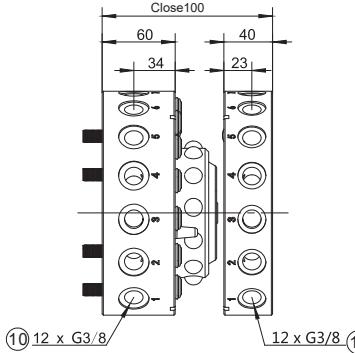
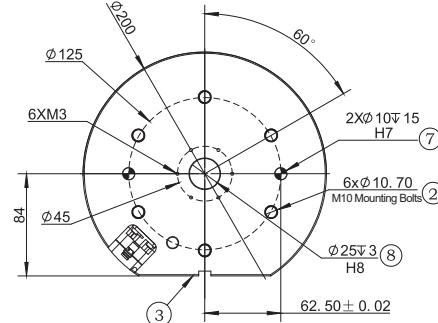
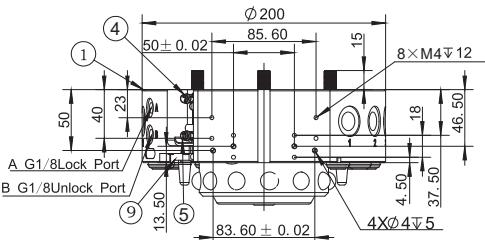
### QCA-200



PN	8.Y00272-SP	8.Y00272-SN
Model	QCA-200R-SP	QCA-200R-SN
Signal Detection Category	PNP	NPN

PN	8.Y00357
Model	QCA-200G

### Robot Side



- A. The air connection locked  
 B. Air connection released  
 1. Robot side connection  
 2. Threaded through-holes  
 3. Optional mounting surface  
 4. Monitoring position locked  
 5. Monitor position released  
 6. Positioning pin  
 7. Central positioning  
 8. Proximity switch for robot side confirmation  
 9. Straight through air hole  
 10. 12 x G3/8

Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

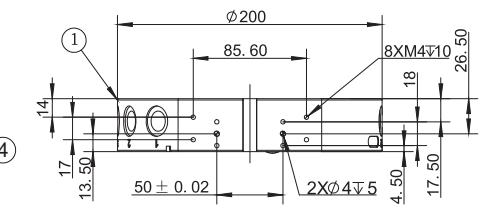
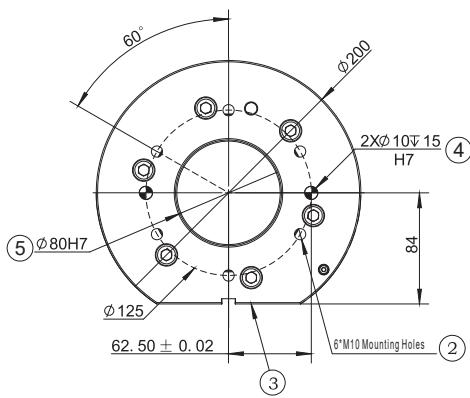
Air Nipper

Vacuum Module

Accessory Components

## Quick Changer

### Gripper Side



1. Gripper side connection
2. Threaded through-holes
3. Optional mounting surface
4. Positioning pin
5. Central positioning

### Parameter

1. Max payload: 300kg
2. Locking force@80Psi(5.5Bar) 16000N
3. Static Load torque( X&Y ):1360 Nm
4. Static Load torque( Z ): 1130 Nm
5. Repeatability accuracy( X,Y&Z ): ± 0.015mm
6. Weight after locked: 9.0 kg
7. Robot side's weight: 6.2 kg
8. Gripper side's weight: 2.8 kg
9. Maximum allowable angle deviation: ± 1°
10. Size of straight air hole( quantity): ( 12 ) 3/8

## Applicable Module

### Module Type

Product name	Model	PN	Voltage	Current	Connector	PN
Robot side signal module	QCSM-15R2	7.Y00468	24V	2.5A	D-Sub15R2-1000 ①	1.Y10080
Gripper side signal module	QCSM-15G2	7.Y00469	24V	2.5A	D-Sub15G2-1000 ①	1.Y10081
Robot side signal module	QCSM-08R	7.Y00477	380V	30A	3108A22-23S ②	1.Y10710
Gripper side signal module	QCSM-08G	7.Y00478	380V	30A	3108A22-23P ②	1.Y10711
Robot side signal module	QCSM-19R	7.Y00954	220V	3A	MS3116F14-19S/1-Y②	1.Y11420
					CMB08E-14-19S(072)SR-B②	1.Y11863
					MS3116F14-19S/1-Y②	1.Y11420
Robot side signal module	QCSM-19R1	7.Y02123	220V	3A	CMB08E-14-19S(072)SR-B②	1.Y11863
Gripper side signal module	QCSM-19G	7.Y00955	220V	3A	MS3116F14-19P/1-Y②	1.Y11419
					CMB08E-14-19P(072)SR-B②	1.Y11864
Robot side signal module	QCSM-26R	7.Y00464	220V	3A	MS3116F16-26S/1-Y②	1.Y11867
					CMB08E-16-26S(072)SR-B②	1.Y11865
Gripper side signal module	QCSM-26G	7.Y00465	220V	3A	MS3116F16-26P/1-Y②	1.Y11369
					CMB08E-16-26P(072)SR-B②	1.Y11866
Gripper side signal module	QCSM-21/26G	7.Y02117	220V	3A	MS3116F16-26P/1-Y②	1.Y11369
					CMB08E-16-26P(072)SR-B②	1.Y11866
Robot side signal module	QCSM-32R	7.Y02095	220V	3A	MS3116F22-36S②	1.Y13392
Gripper side signal module	QCSM-32G	7.Y02096	220V	3A	MS3116F22-36P②	1.Y13393
					MS3116F22-36F②	1.Y13395

① The cable's length is 1 meter

② Joint only, no wire

Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

Vacuum Module

Accessory Components

## Applicable Module

### Pneumatic Extension Module

Product name	Model	PN	Gas path	Threaded hole	Product name	Model	PN	Gas path	Threaded hole
Robot side pneumatic extension module	QCAM-06G18R	7.Y01015	6	G1/8	Robot side pneumatic extension module	QCAM-14M5R	7.Y01055	14	M5
Gripper side pneumatic extension module	QCAM-06G18G	7.Y01016	6	G1/8	Gripper side pneumatic extension module	QCAM-14M5G	7.Y01056	14	M5
Robot side pneumatic extension module	QCAM-06G18R-E	7.Y01018	6	G1/8	Robot side self-proclaimed pneumatic extension module	QCAM-06G18R-F	7.Y02005	6	G1/8
Gripper side pneumatic extension module	QCAM-06G18G-E	7.Y01019	6	G1/8	Gripper side self-proclaimed pneumatic extension module	QCAM-06G18G-F	7.Y02006	6	G1/8
Robot side pneumatic extension module	QCAM-10M5R	7.Y01053	10	M5	Robot side pneumatic extension module	QCAM-04G38R	7.Y02043	4	G3/8
Gripper side pneumatic extension module	QCAM-10M5G	7.Y01054	10	M5	Gripper side pneumatic extension module	QCAM-04G38G	7.Y02044	4	G3/8

### High Frequency Module Type

Product name	Model	PN	Voltage	Current
Robot side signal module	QCHFM-E14-C1R	7.Y02003	1.4KV	5A
Gripper side signal module	QCHFM-E14-C1G	7.Y02004	1.4KV	5A

### Signal Module (network cable interface)

Product name	Model	PN
Robot side signal module	QCSM-RJ45-06R	7.Y02007
Gripper side signal module	QCSM-RJ45-06G	7.Y02008

### Servo Power Module

Product name	Model	PN
Robot side servo power module	QCSM-08R1	7.Y02080
Gripper side servo power module	QCSM-08G1	7.Y02081

### Servo Signal Module

Product name	Model	PN
Robot side servo signal module	QCSM-12R	7.Y02082
Gripper side servo signal module	QCSM-12G	7.Y02083

### Self-Sealing Fluid Air Module

Product name	Model	PN
Robot side signal module	QCWM-02R	7.Y02049
Gripper side signal module	QCWM-02G	7.Y02050

## Quick Changer

### QCA-200-D1



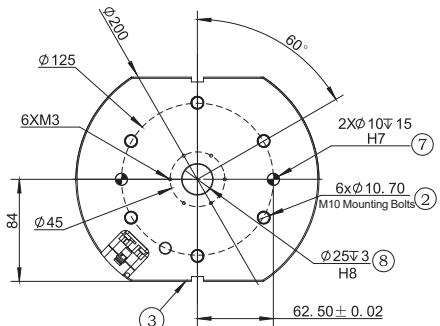
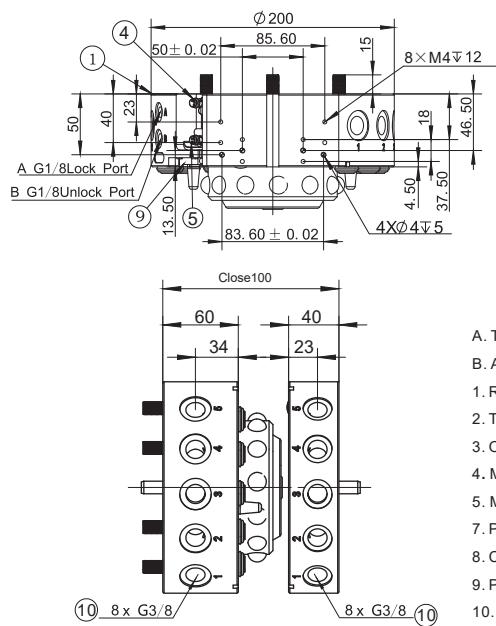
Robot side



Gripper side

PN	8.Y00272-SP-D1	8.Y00272-SN-D1
Model	QCA-200R-SP-D1	QCA-200R-SN-D1
Signal Detection Category	PNP	NPN

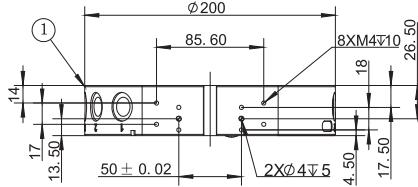
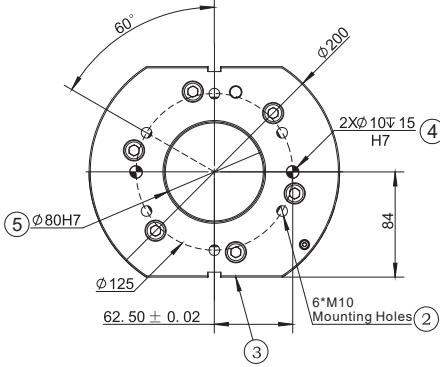
### Robot Side



- A. The air connection locked
- B. Air connection released
- 1. Robot side connection
- 2. Threaded through-holes
- 3. Optional mounting surface
- 4. Monitoring position locked
- 5. Monitor position released
- 6. Central positioning
- 7. Positioning pin
- 8. Proximity switch for robot side confirmation
- 10. Straight through air hole
- 11. Straight through air hole

## Quick Changer

### Gripper Side



1. Gripper side connection
2. Threaded through-holes
3. Optional mounting surface
4. Positioning pin
5. Central positioning

### Parameter

- 1. Max payload: 300kg
- 2. Locking force@80Psi( 5.5Bar ) 16000 N
- 3. Static Load torque( X&Y ): 1360 Nm
- 4. Static Load torque( Z ): 1130 Nm
- 5. Repeatability accuracy( X,Y&Z ):  $\pm 0.015\text{ mm}$
- 6. Weight after locked: 9.0 kg
- 7. Robot side's weight: 6.2 kg
- 8. Gripper side's weight: 2.8 kg
- 9. Maximum allowable angle deviation:  $\pm 1^\circ$
- 10. Size of straight air hole ( quantity ): ( 8 ) 3/8

## Applicable Module

### Module Type

Product name	Model	PN	Voltage	Current	Connector	PN
Robot side signal module	QCSM-15R2	7.Y00468	24V	2.5A	D-Sub15R2-1000 Ⓜ	1.Y10080
Gripper side signal module	QCSM-15G2	7.Y00469	24V	2.5A	D-Sub15G2-1000 Ⓜ	1.Y10081
Robot side signal module	QCSM-08R	7.Y00477	380V	30A	3108A22-23S Ⓜ	1.Y10710
Gripper side signal module	QCSM-08G	7.Y00478	380V	30A	3108A22-23P Ⓜ	1.Y10711
Robot side signal module	QCSM-19R	7.Y00954	220V	3A	MS3116F14-19S/-Y Ⓜ CMB08E-14-19S(072)SR-B Ⓜ	1.Y11420 1.Y11863
Robot side signal module	QCSM-19R1	7.Y02123	220V	3A	MS3116F14-19S/-Y Ⓜ CMB08E-14-19S(072)SR-B Ⓜ	1.Y11420 1.Y11863
Gripper side signal module	QCSM-19G	7.Y00955	220V	3A	MS3116F14-19P/-Y Ⓜ CMB08E-14-19P(072)SR-B Ⓜ	1.Y11419 1.Y11864
Robot side signal module	QCSM-26R	7.Y00464	220V	3A	MS3116F16-26S/-Y Ⓜ CMB08E-16-26S(072)SR-B Ⓜ	1.Y11867 1.Y11865
Gripper side signal module	QCSM-26G	7.Y00465	220V	3A	MS3116F16-26P/-Y Ⓜ CMB08E-16-26P(072)SR-B Ⓜ	1.Y11369 1.Y11866
Gripper side signal module	QCSM-21/26G	7.Y02117	220V	3A	MS3116F16-26P/-Y Ⓜ CMB08E-16-26P(072)SR-B Ⓜ	1.Y11369 1.Y11866
Robot side signal module	QCSM-32R	7.Y02095	220V	3A	MS3116F22-36S Ⓜ MS3118F22-36S Ⓜ	1.Y13392 1.Y13393
Gripper side signal module	QCSM-32G	7.Y02096	220V	3A	MS3116F22-36P Ⓜ MS3118F22-36P Ⓜ	1.Y13394 1.Y13395

① The cable's length is 1 meter

② Joint only, no wire

## Applicable Module

### Pneumatic Extension Module

Product name	Model	PN	Gas path	Threaded hole	Product name	Model	PN	Gas path	Threaded hole
Robot side pneumatic extension module	QCAM-06G18R	7.Y01015	6	G1/8	Robot side pneumatic extension module	QCAM-14M5R	7.Y01055	14	M5
Gripper side pneumatic extension module	QCAM-06G18G	7.Y01016	6	G1/8	Gripper side pneumatic extension module	QCAM-14M5G	7.Y01056	14	M5
Robot side pneumatic extension module	QCAM-06G18R-E	7.Y01018	6	G1/8	Robot side self-proclaimed pneumatic extension module	QCAM-06G18R-F	7.Y02005	6	G1/8
Gripper side pneumatic extension module	QCAM-06G18G-E	7.Y01019	6	G1/8	Gripper side self-proclaimed pneumatic extension module	QCAM-06G18G-F	7.Y02006	6	G1/8
Robot side pneumatic extension module	QCAM-10M5R	7.Y01053	10	M5	Robot side pneumatic extension module	QCAM-04G38R	7.Y02043	4	G3/8
Gripper side pneumatic extension module	QCAM-10M5G	7.Y01054	10	M5	Gripper side pneumatic extension module	QCAM-04G38G	7.Y02044	4	G3/8

### High Frequency Module Type

Product name	Model	PN	Voltage	Current
Robot side signal module	QCHFM-E14-C1R	7.Y02003	1.4KV	5A
Gripper side signal module	QCHFM-E14-C1G	7.Y02004	1.4KV	5A

### Signal Module (network cable interface)

Product name	Model	PN
Robot side signal module	QCSM-RJ45-06R	7.Y02007
Gripper side signal module	QCSM-RJ45-06G	7.Y02008

### Servo Signal Module

Product name	Model	PN
Robot side servo signal module	QCSM-12R	7.Y02082
Gripper side servo signal module	QCSM-12G	7.Y02083

### Servo Power Module

Product name	Model	PN
Robot side servo power module	QCSM-08R1	7.Y02080
Gripper side servo power module	QCSM-08G1	7.Y02081

### Self-Sealing Fluid Air Module

Product name	Model	PN
Robot side signal module	QCWM-02R	7.Y02049
Gripper side signal module	QCWM-02G	7.Y02050

## Module Type



Gold-plated stitching

### Electrical module: used for bus signal and servo power transmission

- The needle-like protrusions in the connection to ensure contact stability anti-interference.
- Rated voltage and current: 24V 2.5A~380V 200A(the highest standard parameters)
- Material: gold-platedpin
- Elastic pressure contact number: more than 300,000 times

## Installation Method

### Module Mounting mode on gripper side



### Module Mounting mode on robot side



## Module Type



Gold-plated stitching

### Electrical module: used for bus signal and servo power transmission

- The needle-like protrusions in the connection to ensure contact stability anti-interference.
- Rated voltage and current: 24V 2.5A~380V 200A(the highest standard parameters)
- Material: gold-platedpin
- Elastic pressure contact number: more than 300,000 times

## Installation Method

### Module Mounting mode on gripper side



### Module Mounting mode on robot side



## Module Type

Description		15 pins		15 pins	
Signal module	Robot side	Robot side	Gripper side	Robot side	Gripper side
	QCSM-15R1	QCSM-15G1	QCSM-15R2	QCSM-15G2	
Signal connector or cable	Connector(female)	Connector(male)	Connector(female)	Connector(male)	
	DB15R1-1000 <sup>①</sup>	DB15G1-1000 <sup>①</sup>	D-Sub15R2-1000 <sup>①</sup>	D-Sub15G2-1000 <sup>①</sup>	
QCA-05	QCA-05R	√			
	QCA-05G		√		
QCA-15	QCA-15R	√			
	QCA-15G		√		
QCA-25	QCA-25R	√			
	QCA-25G		√		
QCA-35	QCA-35R			√	
	QCA-35G				√
QCA-50	QCA-50R			√	
	QCA-50G				√
QCA-S50	QCA-S50R			√	
	QCA-S50G				√
QCA-100	QCA-100R			√	
	QCA-100G				√
QCA-S100	QCA-S100R			√	
	QCA-S100G				√
QCA-S150	QCA-S150R			√	
	QCA-S150G				√
QCA-200	QCA-200R			√	
	QCA-200G				√
QCA-200-D1	QCA-200R-D1			√	
	QCA-200G-D1				√
Electrical characteristics	Voltage	50V		50V	
	Current	2.5A		2.5A	

<sup>①</sup> The wire's length is 1 meters <sup>②</sup> Joint only, no wire

## Module Type

8 pins		19 pins		26 pins	
Robot side	Gripper side	Robot side	Gripper side	Robot side	Gripper side
QCSM-08R	QCSM-08G	QCSM-19R	QCSM-19G	QCSM-26R	QCSM-26G
Connector(female)	Connector(male)	Connector(female)	Connector(male)	Connector(female)	Connector(male)
3108A22-23S <sup>②</sup>	3108A22-23P <sup>②</sup>	MS3116F14-19S <sup>②</sup> MS3116F14-19S-Y CMB08E-14-19S(072)SR-B <sup>②</sup>	MS3116F14-19P <sup>②</sup> MS3116F14-19P-Y CMB08E-14-19P(072)SR-B <sup>②</sup>	MS3116F16-26S <sup>②</sup> MS3116F16-26P-Y CMB08E-16-26S(072)SR-B <sup>②</sup>	MS3116F16-26P <sup>②</sup> MS3116F16-26P-Y CMB08E-16-26P(072)SR-B <sup>②</sup>
		√		√	
			√	√	√
		√		√	√
			√	√	√
		√		√	√
			√	√	√
		√		√	√
			√	√	√
		√		√	√
			√	√	√
		√		√	√
			√	√	√
		√		√	√
			√	√	√
		380V		220V	
		30A		3A	

## Signal Module

**QCSM-15R1**

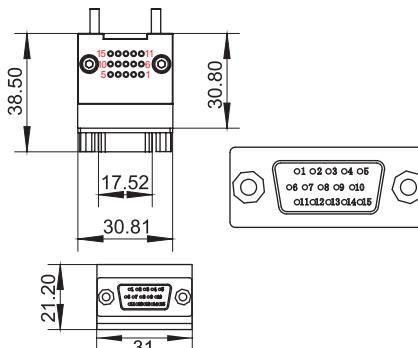
Robot side module



PN	7.Y00965
Model	QCSM-15R1

- ※ Voltage: 24V
- ※ Current: 2.5A
- ※ Weight: 30.5g

※ Suitable for: QCA05、QCA15、QCA25



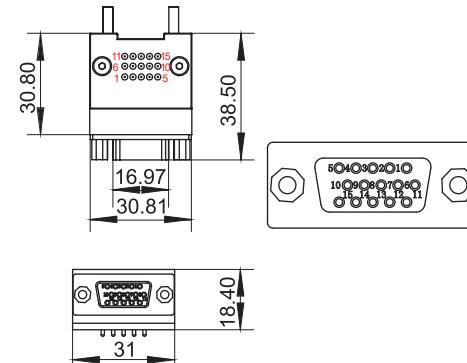
**QCSM-15G1**

Gripper side module



PN	7.Y00966
Model	QCSM-15G1

- ※ Voltage: 24V
- ※ Current: 2.5A
- ※ Weight: 29.8g



## Signal Module-Straight Out Line

**QCSM-15R1-1000**

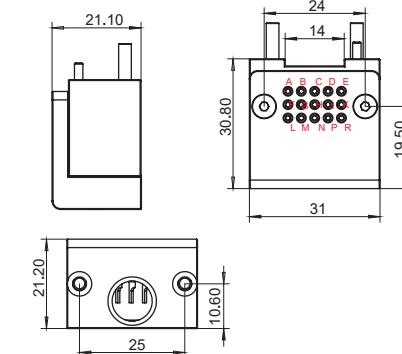
Robot side module



PN	7.Y02097
Model	QCSM-15R1-1000

- ※ Voltage: 24V
- ※ Current: 2.5A
- ※ Weight: 152g
- ※ The wire's length is 1 meters(Customizable)

※ Suitable for: QCA05、QCA15、QCA25



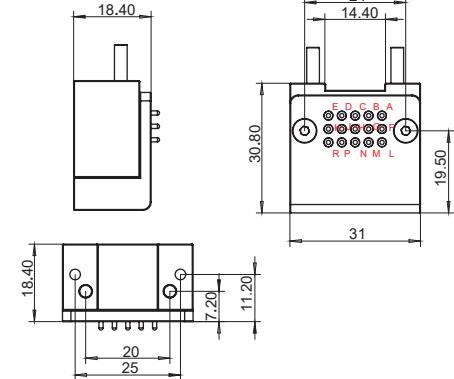
**QCSM-15G1-1000**

Gripper side module



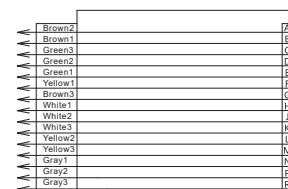
PN	7.Y02098
Model	QCSM-15G1-1000

- ※ Voltage: 24V
- ※ Current: 2.5A
- ※ Weight: 158g
- ※ The wire's length is 1 meters(Customizable)

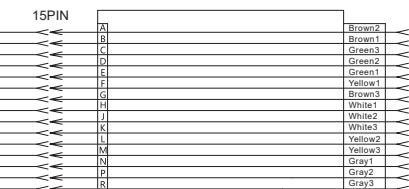


## Wiring diagram

R side



G side



Sketch of cross section of wire rod

## Signal Module

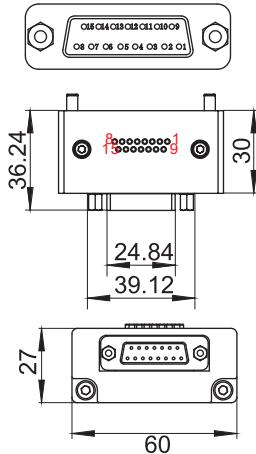
**QCSM-15R2**

Robot side module



PN	7.Y00468
Model	QCSM-15R2

- ※ Voltage: 24V
- ※ Current: 2.5A
- ※ Weight: 68g
- ※ Suitable for: QCA35, QCA50, QCAS50, QCA100, QCAS100, QCAS150, QCA200, QCA200-D1



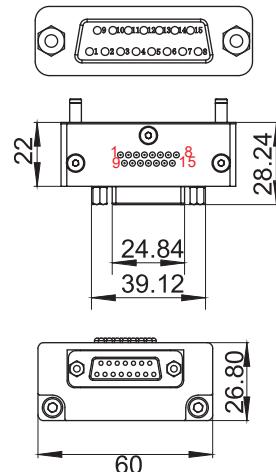
**QCSM-15G2**

Gripper side module



PN	7.Y00469
Model	QCSM-15G2

- ※ Voltage: 24V
- ※ Current: 2.5A
- ※ Weight: 48.5g



## Signal Module

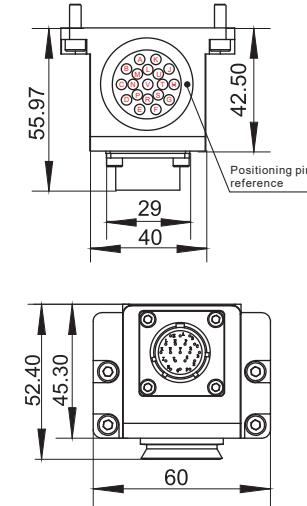
**QCSM-19R**

Robot side module



PN	7.Y00954
Model	QCSM-19R

- ※ Voltage: 220V
- ※ Current: 3A
- ※ Weight: 178.3g
- ※ Suitable for: QCA35, QCA50, QCAS50, QCA100, QCAS100, QCAS150, QCA200, QCA200-D1



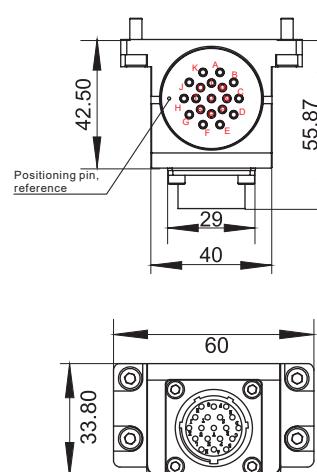
**QCSM-19G**

Gripper side module



PN	7.Y00955
Model	QCSM-19G

- ※ Voltage: 220V
- ※ Current: 3A
- ※ Weight: 130.7g



Profile, SUS Tube  
Stents Module

Quick Changer

Grip Module

Air Nipper

Vacuum Module

Accessory Components

Profile, SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

Vacuum Module

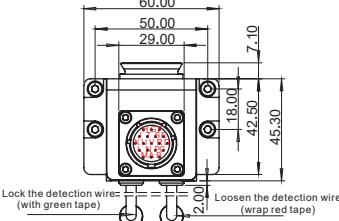
Accessory Components

## Signal Module

### QCSM-19R1

Robot side module

**NEW**

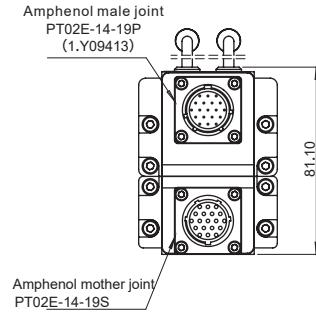


### Points to note

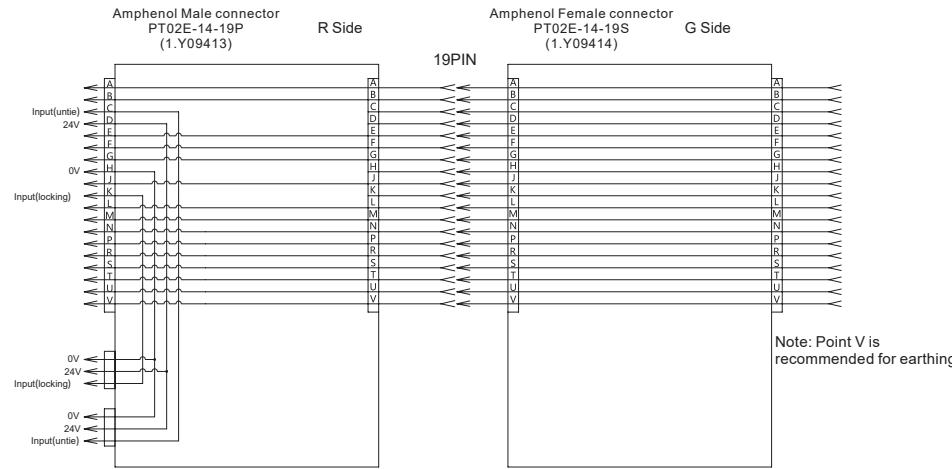
- Module installation, must be fixed in place, to avoid causing damage to the needle lead to poor signal transmission
- Module replacement, must ensure that the power cut after the operation
- Do not disconnect the signal connector during signal transmission
- Module maintenance, regular use of brush clean contact surface

PN	7.Y02123
Model	QCSM-19R1

※ Voltage: 220V  
※ Current: 3A  
※ Weight: 30g  
※ Suitable for: QCA35, QCA50, QCAS50, QCA100, QCAS100, QCAS150, QCA200, QCA200-D1



### Wiring diagram



## Signal Module

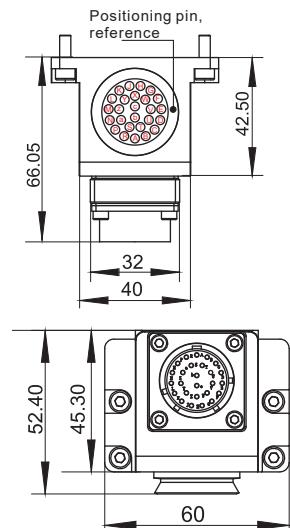
### QCSM-26R

Robot side module



PN	7.Y00464
Model	QCSM-26R

※ Voltage: 220V  
※ Current: 3A  
※ Weight: 198.5g  
※ Suitable for: QCA35, QCA50, QCAS50, QCA100, QCAS100, QCAS150, QCA200, QCA200-D1



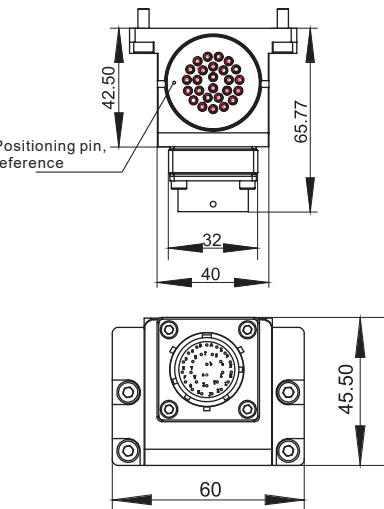
### QCSM-26G

Gripper side module



PN	7.Y00465
Model	QCSM-26G

※ Voltage: 220V  
※ Current: 3A  
※ Weight: 178.2g

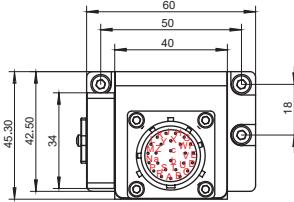


## Signal Module

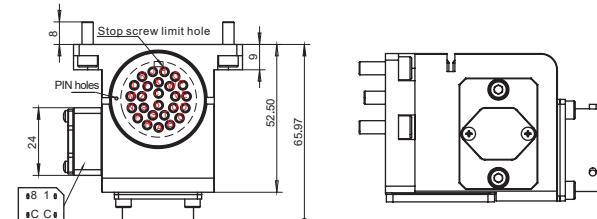
### QCSM-21/26G

Gripper side module

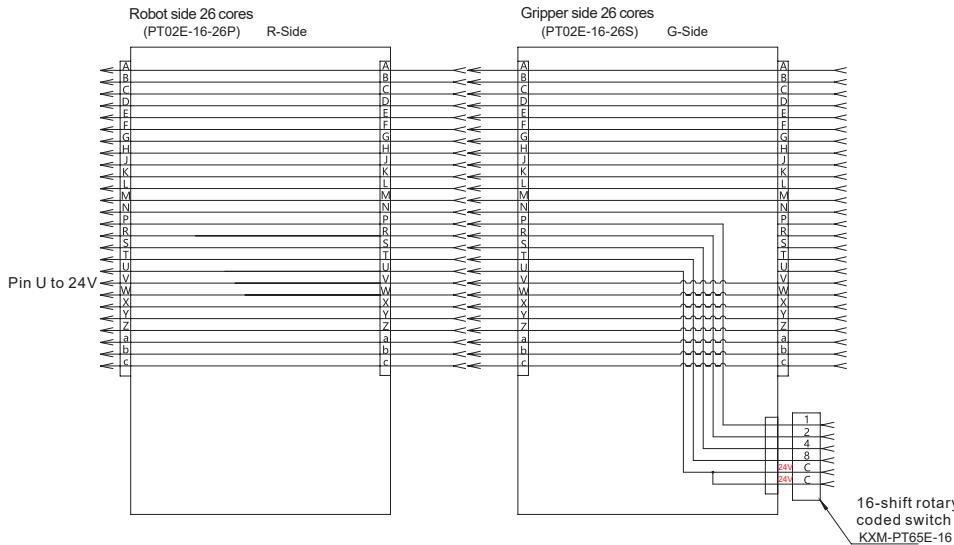
**NEW**



Rotary coded switch



### Wiring diagram



## Signal Module

### QCSM-32R

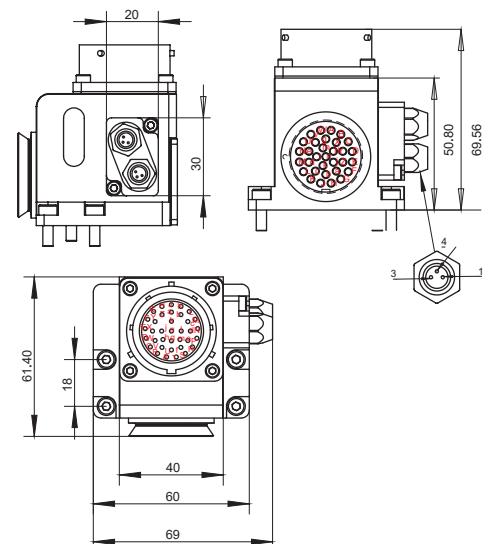
Robot side module

**NEW**



PN	7.Y02095
Model	QCSM-32R

※ Aluminum alloy protective housing  
※ Master disc tension detection sensor  
※ Voltage: 220V  
※ Current: 3A  
※ Weight: 284g  
※ Suitable for: QCA35, QCA50, QCAS50, QCA100, QCAS100, QCAS150, QCA200, QCA200-D1



### QCSM-32G

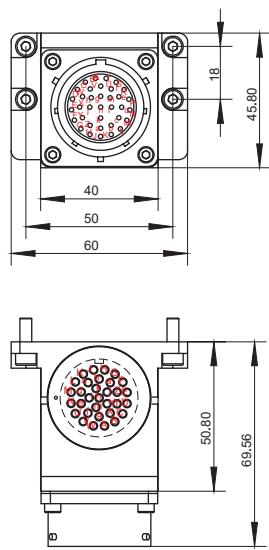
Gripper side module

**NEW**



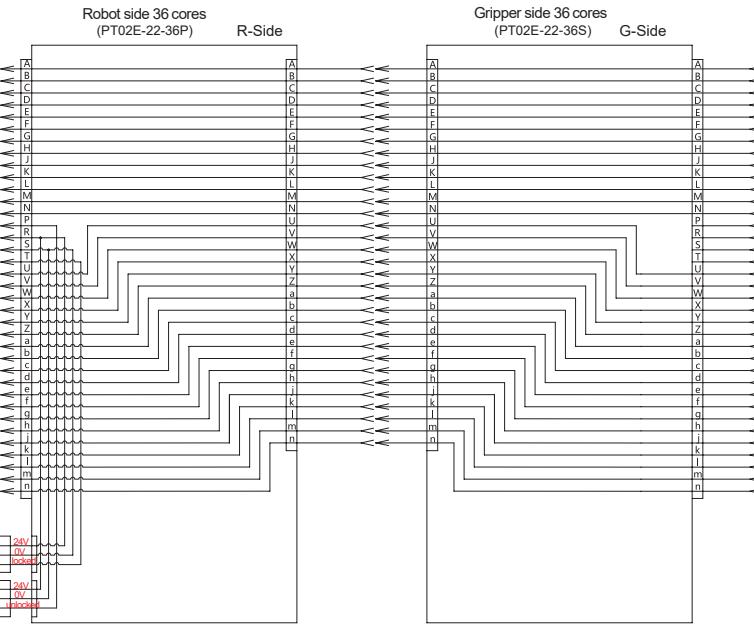
PN	7.Y02096
Model	QCSM-32G

※ Aluminum alloy protective housing  
※ Master disc tension detection sensor  
※ Voltage: 220V  
※ Current: 3A  
※ Weight: 207g



## Signal Module

### Wiring diagram



## Power Module

### QCSM-08R-1000

Robot side module



PN	7.Y02084
Model	QCSM-08R-1000

- ※ Voltage: 380V
- ※ Current: 24A
- ※ Weight: 468g
- ※ The wire's length is 1 meters(Customizable)
- ※ Suitable for: QCA05, QCA15, QCA25

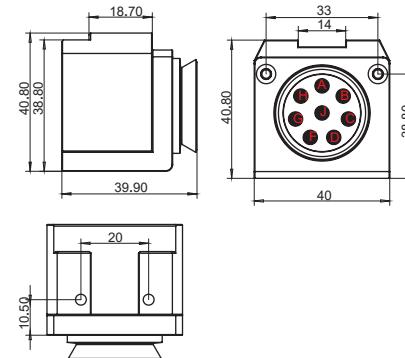
### QCSM-08G-1000

Gripper side module

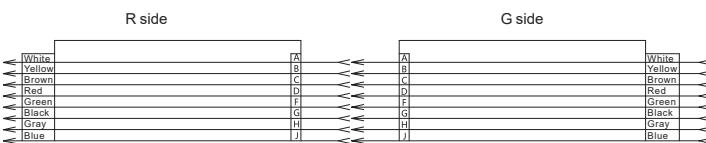


PN	7.Y02085
Model	QCSM-08G-1000

- ※ Voltage: 380V
- ※ Current: 24A
- ※ Weight: 487g
- ※ The wire's length is 1 meters(Customizable)



### Wiring diagram



Sketch of cross section of wire rod

## Power Module

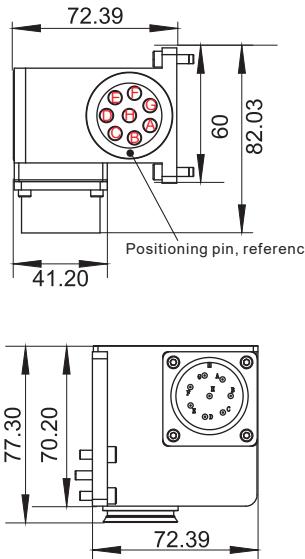
### QCSM-08R

Robot side module



PN	7.Y00477
Model	QCSM-08R

※ Voltage: 380V  
※ Current: 30A  
※ Weight: 434.7g  
※ Suitable for: QCA35、QCA50、QCAS50、QCA100、QCAS100、QCAS150、QCA200、QCA200-D1



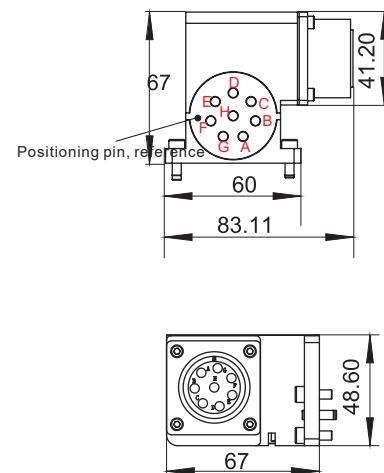
### QCSM-08G

Gripper side module



PN	7.Y00478
Model	QCSM-08G

※ Voltage: 380V  
※ Current: 30A  
※ Weight: 330g



## Power Module

### QCHFM-02R-1000

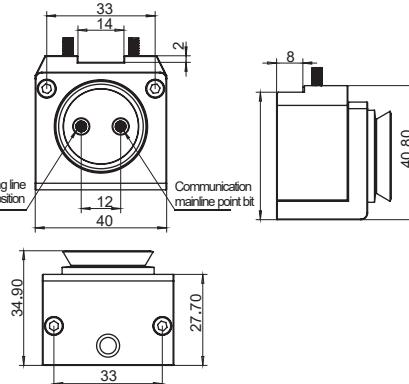
Robot side module

**NEW**



PN	7.Y02086
Model	QCHFM-02R-1000

※ Voltage: 1.4KV  
※ Current: 5A  
※ Weight: 138g  
※ The wire's length is 1 meters(Customizable)  
※ Suitable for: QCA05、QCA15、QCA25



### QCHFM-02G-1000

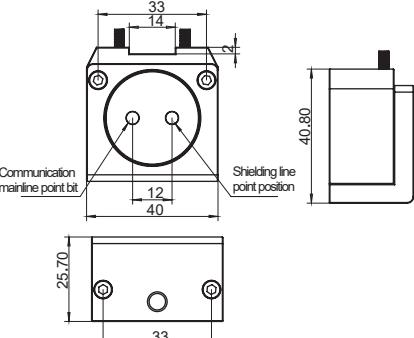
Gripper side module

**NEW**

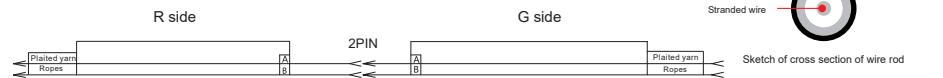


PN	7.Y02087
Model	QCHFM-02G-1000

※ Voltage: 1.4KV  
※ Current: 5A  
※ Weight: 122g  
※ The wire's length is 1 meters(Customizable)



## Wiring diagram



## Power Module

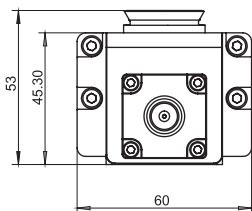
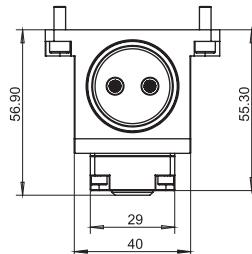
**QCHFM-E14-C1R**

Robot side module



PN	7.Y02003
Model	QCHFM-E14-C1R

※ Voltage: 1.4KV  
※ Current: 5A  
※ Weight: 194.5g  
※ Suitable for: QCA35, QCA50, QCAS50, QCA100, QCAS100, QCAS150, QCA200, QCA200-D1



**QCHFM-E14-C1G**

Gripper side module



PN	7.Y02004
Model	QCHFM-E14-C1G

※ Voltage: 1.4KV  
※ Current: 5A  
※ Weight: 151g

## Servo Module

**QCSM-08R1**

Robot side module

**NEW**



PN	7.Y02080
Model	QCSM-08R1

※ 20A\* 4-core current transmission  
※ 2A\*2 core lock signal  
※ Voltage: 24V  
※ Weight: 310.5g  
※ Suitable for: QCA35, QCA50, QCAS50, QCA100, QCAS100, QCAS150, QCA200, QCA200-D1

**QCSM-08G1**

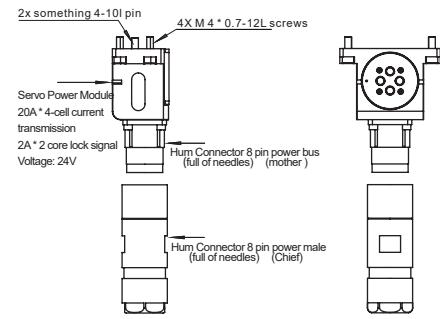
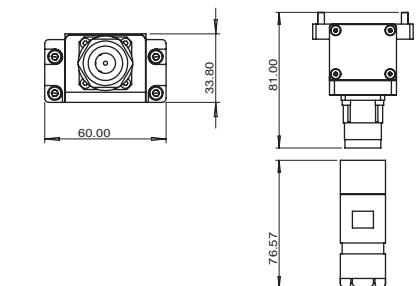
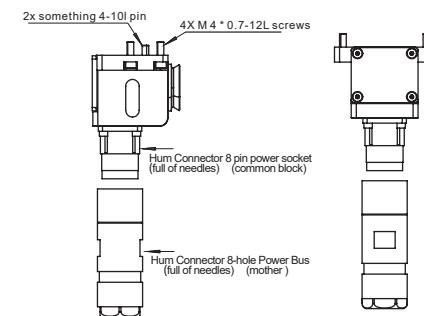
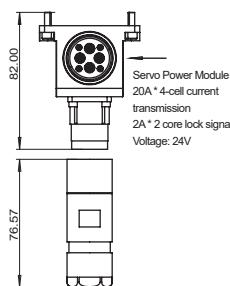
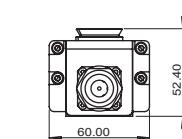
Gripper side module

**NEW**



PN	7.Y02081
Model	QCSM-08G1

※ 20A\* 4-core current transmission  
※ 2A\*2 core lock signal  
※ Voltage: 24V  
※ Weight: 262.2g



## Servo Module

### QCSM-12R

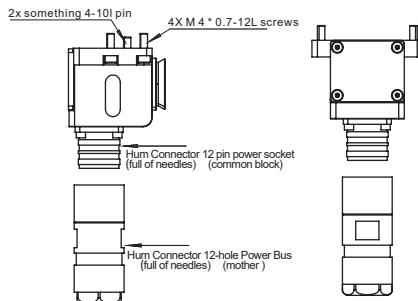
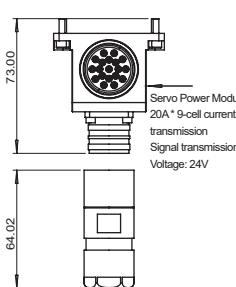
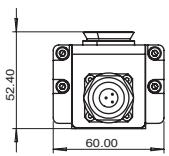
Robot side module

**NEW**



PN	7.Y02082
Model	QCSM-12R

- ※ Voltage: 24V
- ※ 2A \* 9 cores
- ※ Encoder signal transmission
- ※ Weight: 274.4g
- ※ Suitable for: QCA35, QCA50, QCAS50, QCA100, QCAS100, QCAS150, QCA200, QCA200-D1



### QCSM-12G

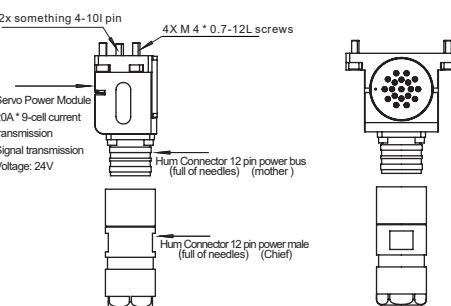
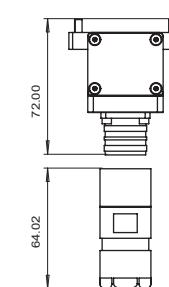
Gripper side module

**NEW**



PN	7.Y02083
Model	QCSM-12G

- ※ Voltage: 24V
- ※ 2A \* 9 cores
- ※ Encoder signal transmission
- ※ Weight: 219.4g



## Communication Module

### QCSM-RJ45\*5M-06R

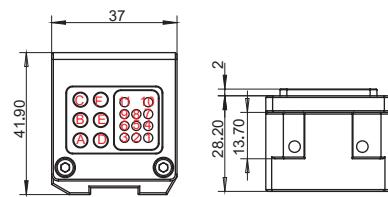
Robot side module

**NEW**



PN	7.Y02129
Model	QCSM-RJ45*5M-06R

- ※ Voltage: 220V
- ※ Current: 3A
- ※ Weight: 135g
- ※ The wire's length is 1 meters(Customizable)
- ※ Suitable for: QCA05, QCA15, QCA25



### QCSM-RJ45\*5M-06G

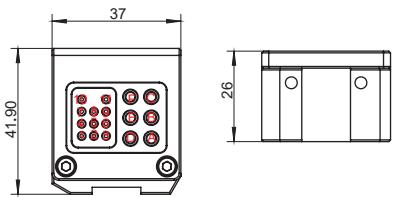
Gripper side module

**NEW**

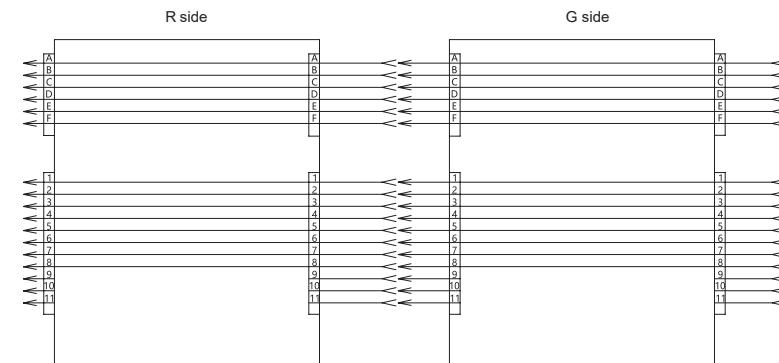


PN	7.Y02130
Model	QCSM-RJ45*5M-06G

- ※ Voltage: 220V
- ※ Current: 3A
- ※ Weight: 119g
- ※ The wire's length is 1 meters(Customizable)



## Wiring diagram



## Communication Module

### QCSM-RJ45-06R

Robot side module

**NEW**

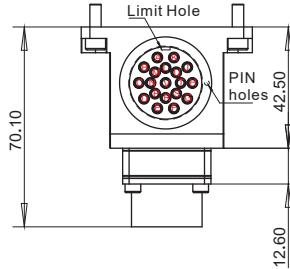
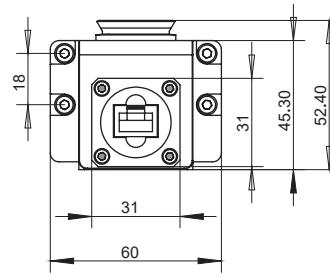


PN	7.Y02007
Model	QCSM-RJ45-06R

※ RJ45100 megabit network port

※ Weight: 194.5g

※ Suitable for: QCA35, QCA50, QCAS50, QCA100, QCAS100, QCAS150, QCA200, QCA200-D1



- 1, RJ45 interface
- 2, RD stable connection technology
- 3, Aluminum alloy protective shell

### QCSM-RJ45-06G

Gripper side module

**NEW**



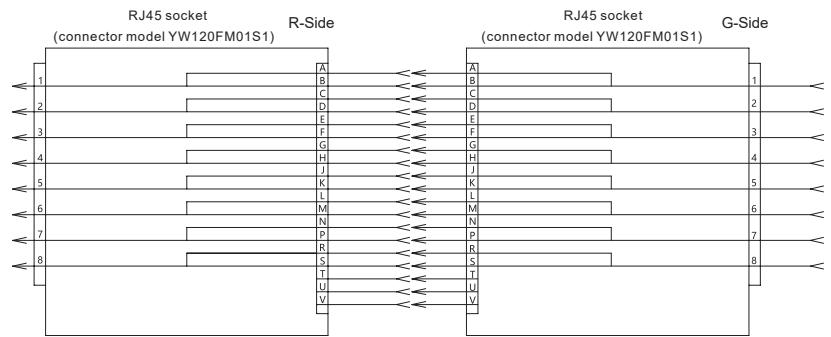
PN	7.Y02008
Model	QCSM-RJ45-06G

※ RJ45100 megabit network port

※ Weight: 151g

## Communication Module

### Wiring Diagram



### Optional



### Rj45 Network Interface

PN	1.Y13396
Model	YM110Fm01S1-01

## Pneumatic Module

**QCAM-06G18R**

Robot side module



PN	7.Y01015
Model	QCAM-06G18R

※ Weight: 141.4g

※ Suitable for: QCA35、QCA50、QCAS50、QCA100、QCAS100、QCAS150、QCA200、QCA200-D1

**QCAM-06G18G**

Gripper side module



PN	7.Y01016
Model	QCAM-06G18G

※ Weight: 140.9g

## Pneumatic Module

**QCAM-06G18R-E**

Robot side module



PN	7.Y01018
Model	QCAM-06G18R-E

※ Weight: 145g

※ Suitable for: QCA35、QCA50、QCAS50、QCA100、QCAS100、QCAS150、QCA200、QCA200-D1

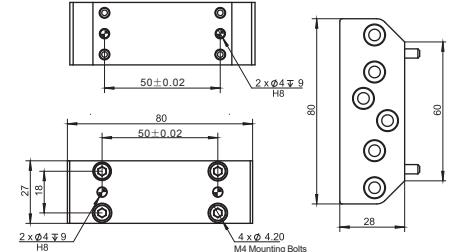
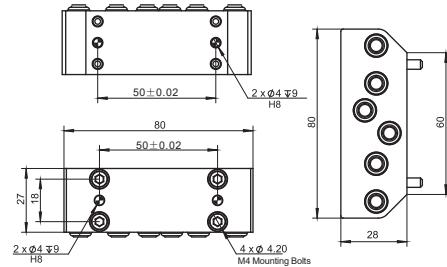
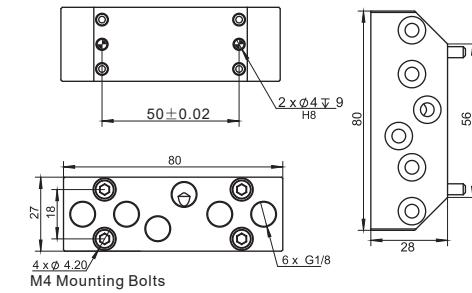
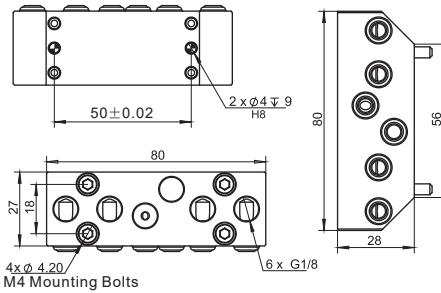
**QCAM-06G18G-E**

Gripper side module



PN	7.Y01019
Model	QCAM-06G18G-E

※ Weight: 148g



## Pneumatic Module-Self-sealing

**QCAM-06G18R-F**

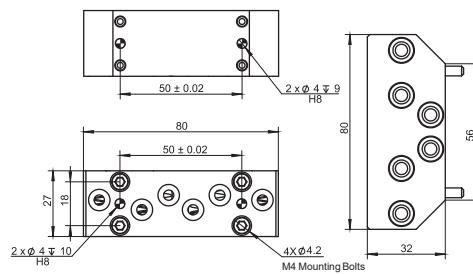
Robot side module



PN	7.Y02005
Model	QCAM-06G18R-F

※ Weight: 150g

※ Suitable for: QCA35, QCA50, QCAS50, QCA100, QCAS100, QCAS150, QCA200, QCA200-D1



**QCAM-06G18G-F**

Gripper side module



PN	7.Y02006
Model	QCAM-06G18G-F

※ Weight: 152g

## Pneumatic Module

**QCAM-10M5R**

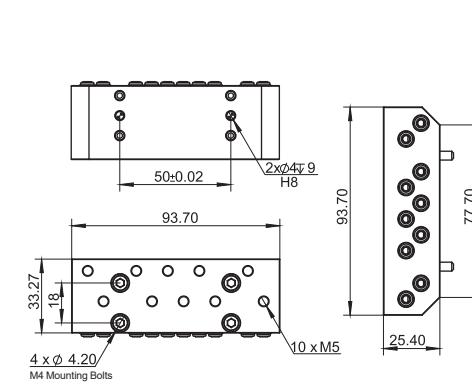
Robot side module



PN	7.Y01053
Model	QCAM-10M5R

※ Weight: 263.9g

※ Suitable for: QCA35, QCA50, QCAS50, QCA100, QCAS100, QCAS150, QCA200, QCA200-D1



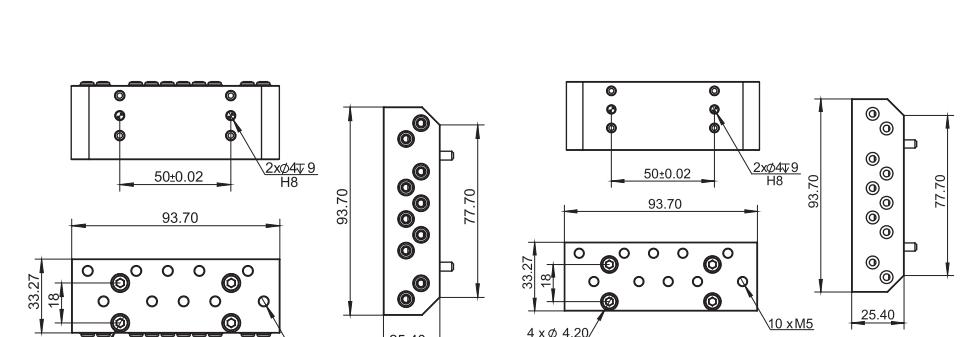
**QCAM-10M5G**

Gripper side module



PN	7.Y01054
Model	QCAM-10M5G

※ Weight: 267.9g



## Pneumatic Module

**QCAM-14M5R**

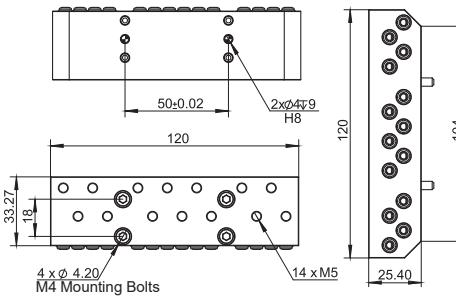
Robot side module



PN	7.Y01055
Model	QCAM-14M5R

※ Weight: 207.4g

※ Suitable for: QCA35、QCA50、QCAS50、QCA100、QCAS100、QCAS150、QCA200、QCA200-D1



**QCAM-14M5G**

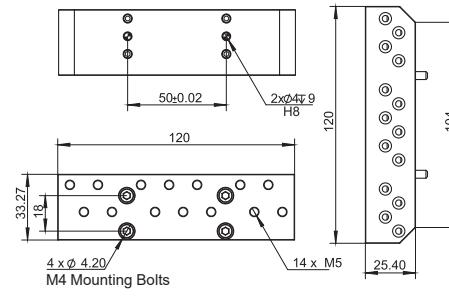
Gripper side module



PN	7.Y01056
Model	QCAM-14M5G

※ Weight: 210.3g

※ Suitable for: QCA35、QCA50、QCAS50、QCA100、QCAS100、QCAS150、QCA200、QCA200-D1



## Pneumatic Module

**QCAM-04G38R**

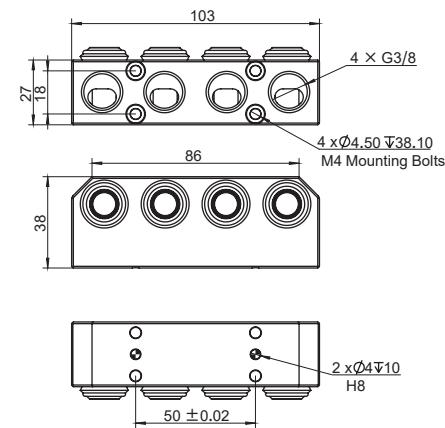
Robot side module



PN	7.Y02043
Model	QCAM-04G38R

※ Weight: 242g

※ Suitable for: QCA35、QCA50、QCAS50、QCA100、QCAS100、QCAS150、QCA200、QCA200-D1



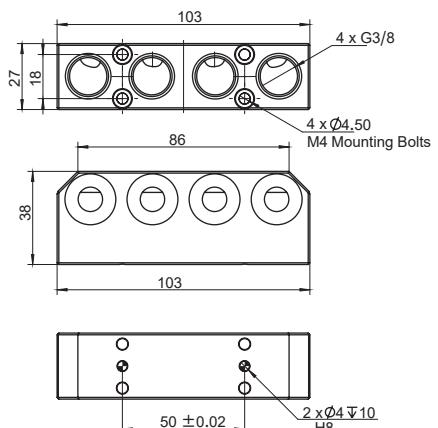
**QCAM-04G38G**

Gripper side module



PN	7.Y02044
Model	QCAM-04G38G

※ Weight: 213.4g



## Water-Pneumatic Module

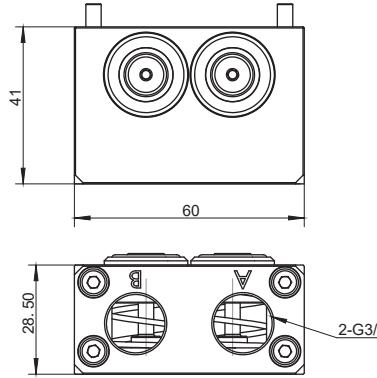
**QCWM-02R**

Robot side module



PN	7.Y02049
Model	QCWM-02R

※ Material: Stainless steel housing  
※ Weight: 393.6g  
※ Suitable for: QCA35, QCA50, QCAS50, QCA100, QCAS100, QCAS150, QCA200, QCA200-D1



**QCWM-02G**

Gripper side module



PN	7.Y02050
Model	QCWM-02G

※ Material: Stainless steel housing  
※ Weight: 379g

## Quick Changer Signal Cable

**DB15R1-1000**

15 core quick changer signal cable (female head)



PN	1.Y10163
Model	DB15R1-1000

※ Weight: 125.7g  
※ The wire's length is 1 meters

**DB15G1-1000**

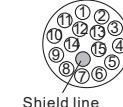
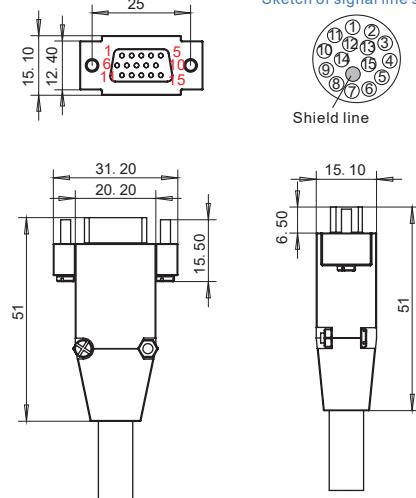
15 core quick changer signal cable (male head)



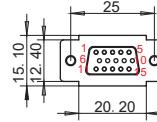
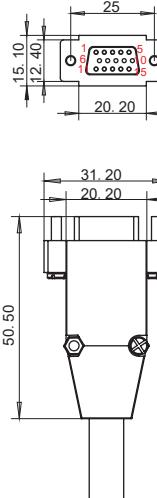
PN	1.Y10437
Model	DB15G1-1000

※ Weight: 123.7g  
※ The wire's length is 1 meters

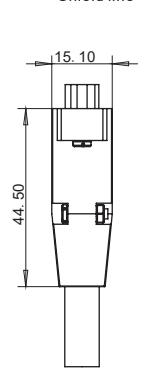
Sketch of signal line section



Shield line



Sketch of signal line section



## Quick Changer Signal Cable

### D-Sub15R2-1000

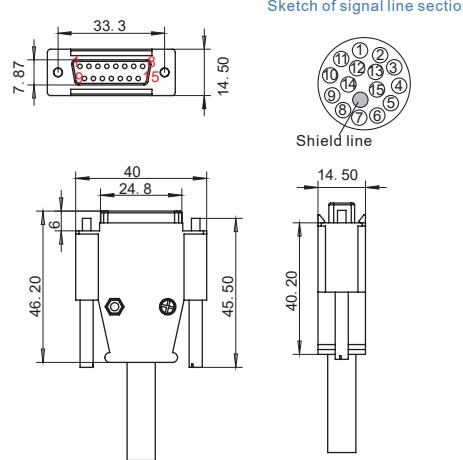
15 core quick changer signal cable (female head)



PN	1.Y10080
Model	D-Sub15R2-1000

※ Weight: 142g

※ The wire's length is 1 meters



### D-Sub15G2-1000

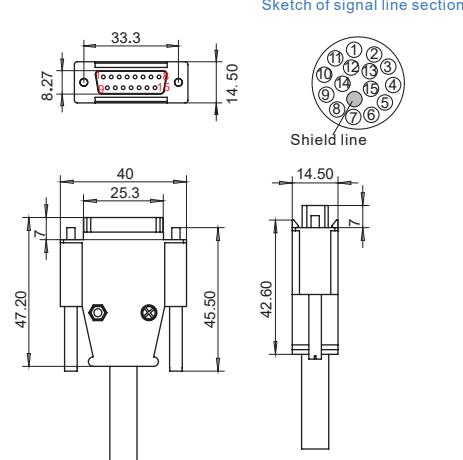
15 core quick changer signal cable (male head)



PN	1.Y10081
Model	D-Sub15G2-1000

※ Weight: 141.4g

※ The wire's length is 1 meters



## 90°Connector

### 3108A22-23S

8 core 90° connector (female head)



PN	1.Y10710
Model	3108A22-23S

※ Weight: 149.3g

※ Suitable for: QCSM-08R

### 3108A22-23P

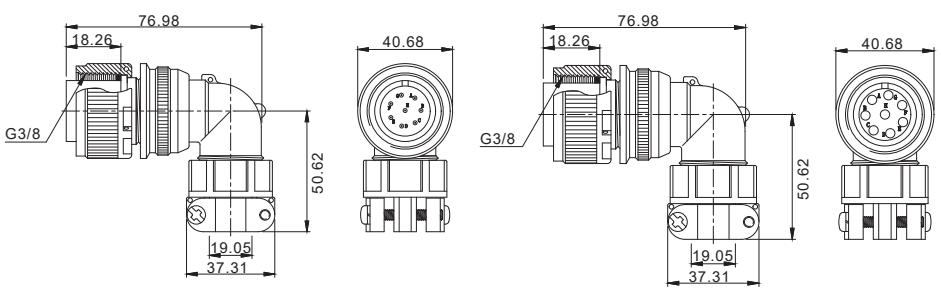
8 core 90° connector (male head)



PN	1.Y10711
Model	3108A22-23P

※ Weight: 119.2g

※ Suitable for: QCSM-08G



## 90°Connector

**CMB08E-14-19S(072)SR-B**

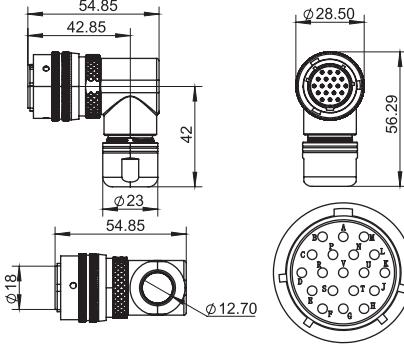
19 core 90° connector (female head)



PN	1.Y11863
Model	CMB08E-14-19S(072)SR-B

※ Weight: 81.1g

※ Suitable for: QCSM-19R



**CMB08E-14-19P(072)SR-B**

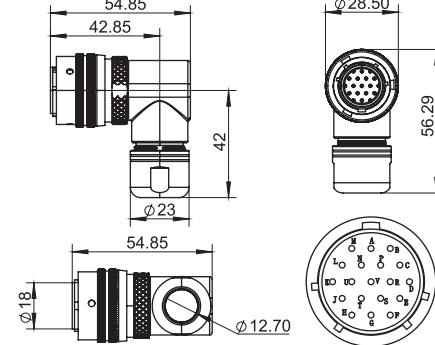
19 core 90° connector (male head)



PN	1.Y11864
Model	CMB08E-14-19P(072)SR-B

※ Weight: 79.2g

※ Suitable for: QCSM-19G



## 90°Connector

**CMB08E-16-26S(072)SR-B**

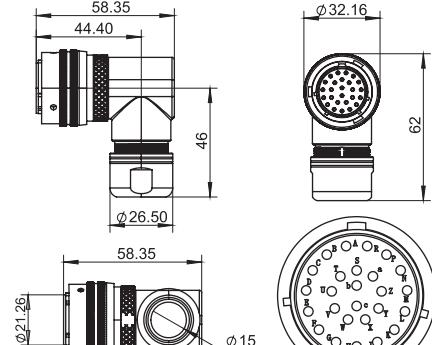
26 core 90° connector (female head)



PN	1.Y11865
Model	CMB08E-16-26S(072)SR-B

※ Weight: 99.5g

※ Suitable for: QCSM-21/26R



**CMB08E-16-26P(072)SR-B**

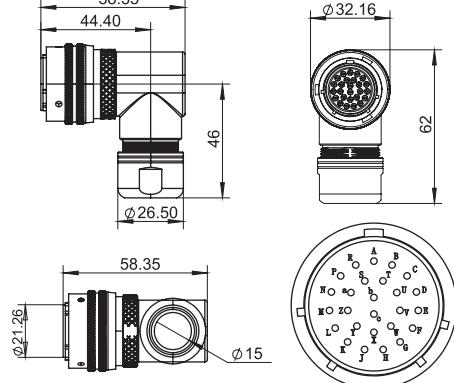
26 core 90° connector (male head)



PN	1.Y11866
Model	CMB08E-16-26P(072)SR-B

※ Weight: 96.4g

※ Suitable for: QCSM-21/26G



## Connector

**MS3116F14-19S**

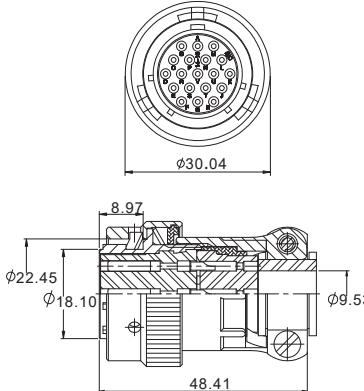
19 core straight connector (female head)



PN	1.Y11420	1.Y11420-Y
Model	MS3116F14-19S	MS3116F14-19S-Y

※ Weight: 36.8g

※ Suitable for: QCSM-19R



**MS3116F14-19P**

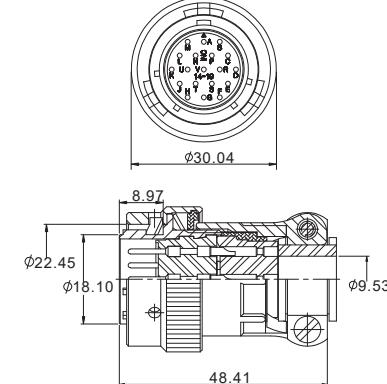
19 core straight connector (male head)



PN	1.Y11419	1.Y11419-Y
Model	MS3116F14-19P	MS3116F14-19P-Y

※ Weight: 36.8g

※ Suitable for: QCSM-19G



## Connector

**MS3116F16-26S**

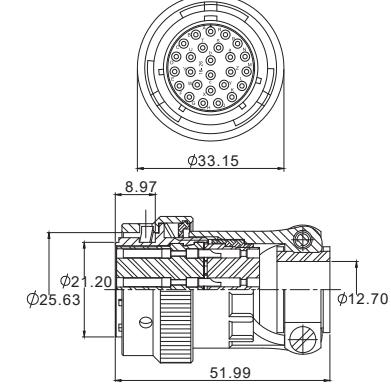
26 core straight connector (female head)



PN	1.Y11867	1.Y11867-Y
Model	MS3116F16-26S	MS3116F16-26S-Y

※ Weight: 44.8g

※ Suitable for: QCSM-21/26R



**MS3116F16-26P**

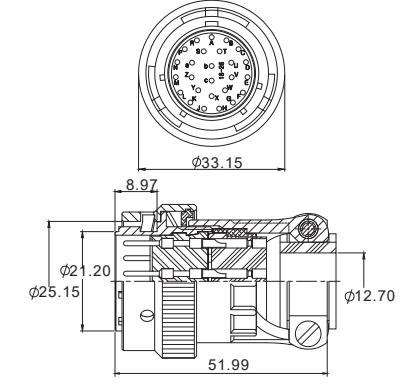
26 core straight connector (male head)



PN	1.Y11369	1.Y11369-Y
Model	MS3116F16-26P	MS3116F16-26P-Y

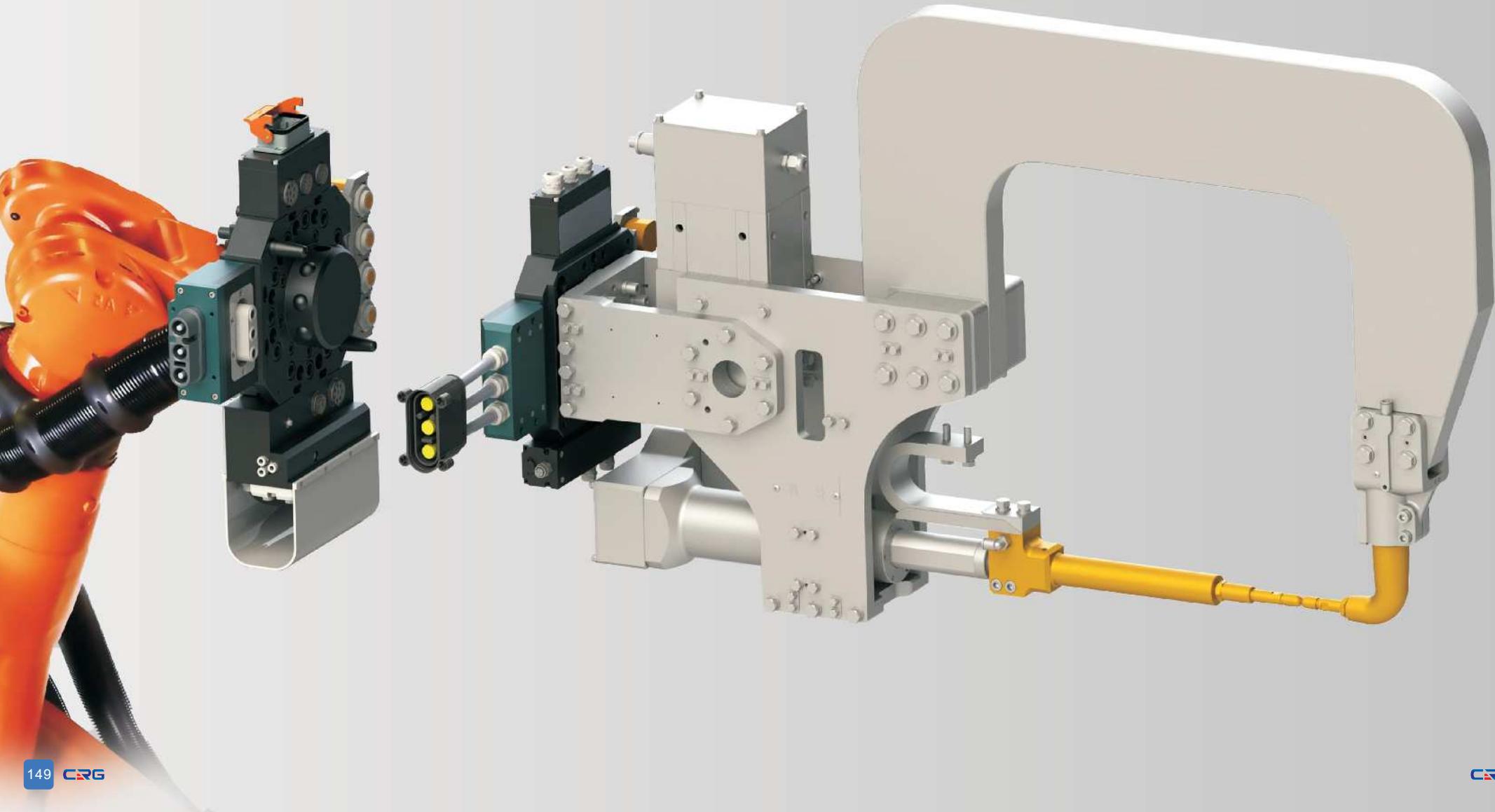
※ Weight: 44.8g

※ Suitable for: QCSM-21/26G



## A Quick Changer Device At The End Of A Robot

- Quick changer applied in the automotive industry for spot welding, high current docking switching, handling of large pay loads, payloads up to 500kgs.

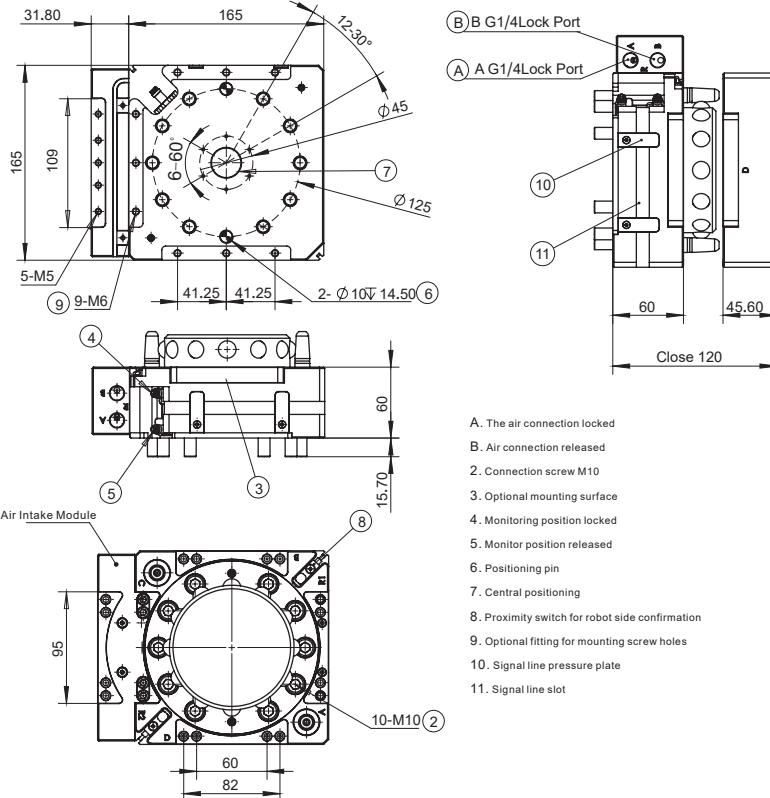


## Quick Changer

### QCA-S350

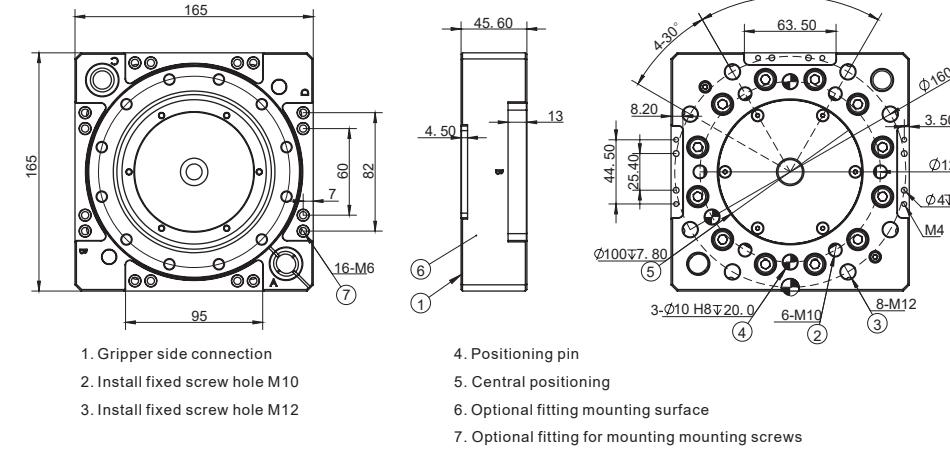


### Robot Side



## Quick Changer

### Gripper Side



### Parameter

1. Max payload: 350kg
2. Locking force@80Psi ( 5.5Bar ) 31000 N
3. Static load torque ( X & Y ): 2710 Nm
4. Static load torque ( Z ): 2260 Nm
5. Repeatability accuracy( X,Y&Z ): ±0.015 mm
6. Weight after locked: 9.4kg
7. Robot side's weight: 6.5 kg
8. Gripper side's weight: 2.9 kg
9. Maximum allowable angle deviation: ±1°

## Applicable Module

### Welding Power Module

Product name	Model	PN
Robot side welding power module	QCSM-03R	7.Y02069
Gripper side welding power module	QCSM-03G	7.Y02070

### Waterway Module

Product name	Model	PN
Robot side waterway module	QCWM-04R1	7.Y02071
Gripper side waterway module	QCWM-04G1	7.Y02072

### Pneumatic Extension Module

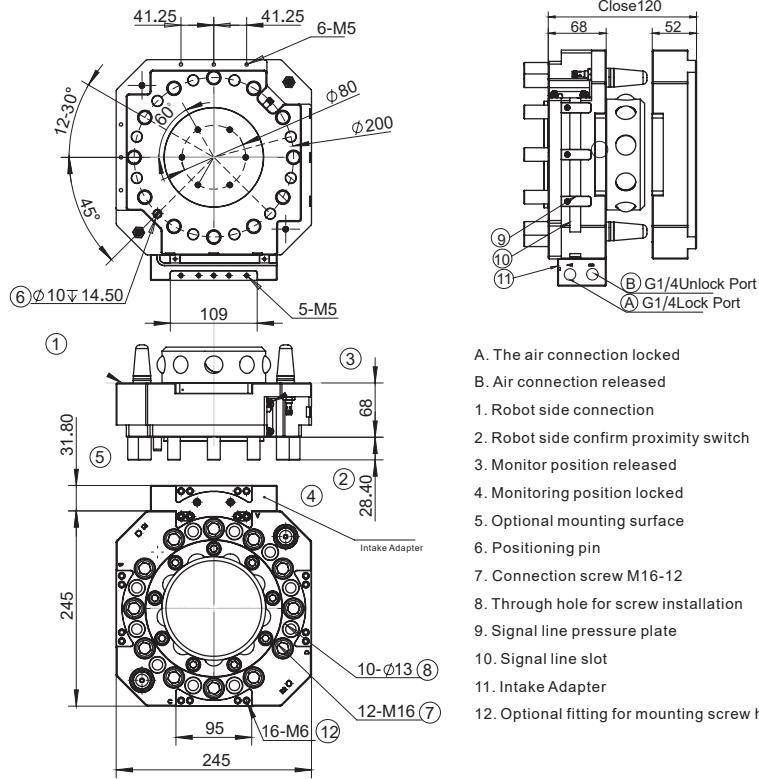
Product name	Model	PN
Robot side self-proclaimed pneumatic extension module	QCAM-08G38R	7.Y02051
Gripper side self-proclaimed pneumatic extension module	QCAM-08G38G	7.Y02052

## Quick Changer

### QCA-S500

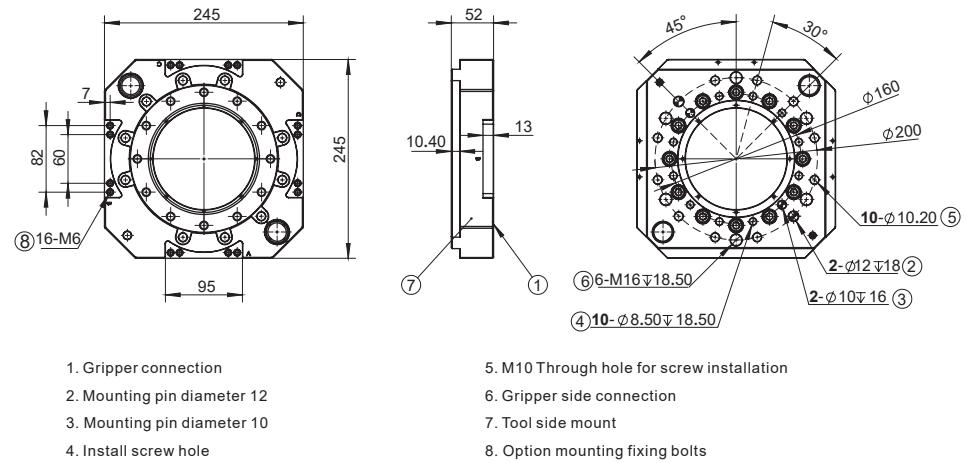


### Robot Side



## Quick Changer

### Gripper Side



### Parameter

- Max payload: 500kg
- Locking force@80Psi ( 5.5Bar ) 38000 N
- Static load torque( X&Y ): 3290 Nm
- Static load torque( Z ): 3160 Nm
- Repeatability accuracy( X,Y&Z ):  $\pm 0.015$  mm
- Weight after locked: 23.4kg
- Robot side's weight: 15.9 kg
- Gripper side's weight: 7.5 kg
- Maximum allowable angle deviation:  $\pm 1^\circ$

## Applicable Module

### Welding Power Module

Product name	Model	PN
Robot side welding power module	QCSM-03R	7.Y02069
Gripper side welding power module	QCSM-03G	7.Y02070

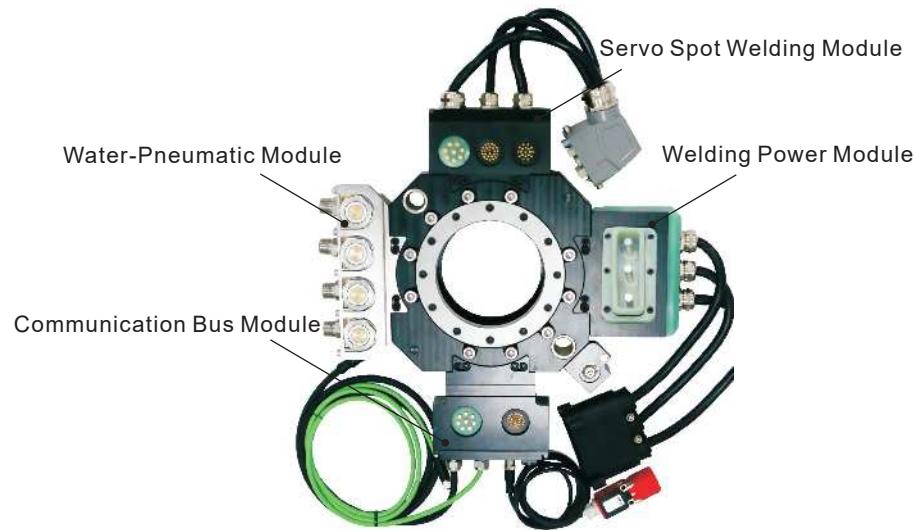
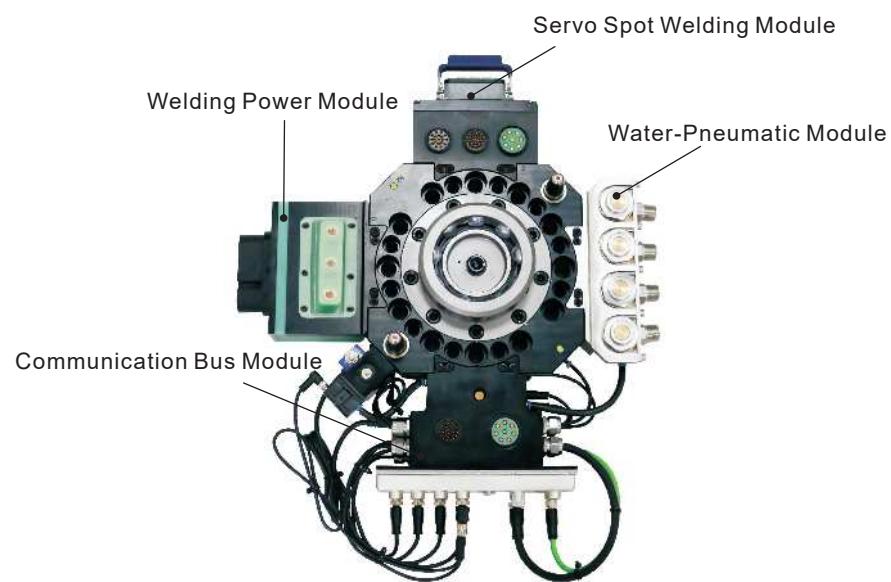
### Waterway Module

Product name	Model	PN
Robot side waterway module	QCWM-04R1	7.Y02071
Gripper side waterway module	QCWM-04G1	7.Y02072

### Pneumatic Extension Module

Product name	Model	PN
Robot side self-proclaimed pneumatic extension module	QCAM-08G38R	7.Y02051
Gripper side self-proclaimed pneumatic extension module	QCAM-08G38G	7.Y02052

Can be adapted to more modules by adding addition intake adapter module



## Water-Pneumatic Module

**QCWM-04R1**

Robot side module



PN	7.Y02071
Model	QCWM-04R1

※ Weight: 3.25Kg

※ Suitable for : QCAS350、QCAS500

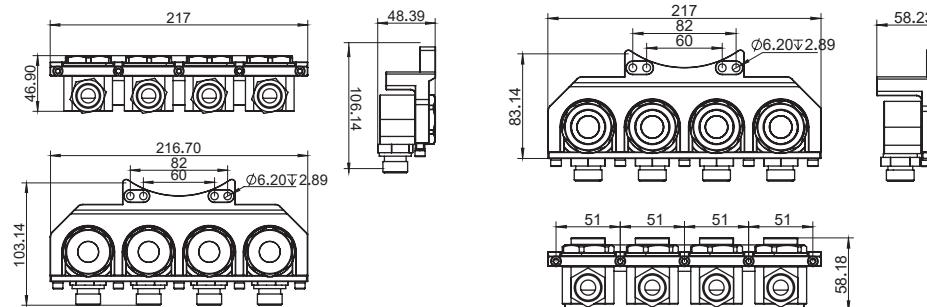
**QCWM-04G1**

Gripper side module



PN	7.Y02072
Model	QCWM-04G1

※ Weight: 2.96Kg



## Welding Power Module

**QCSM-03R**

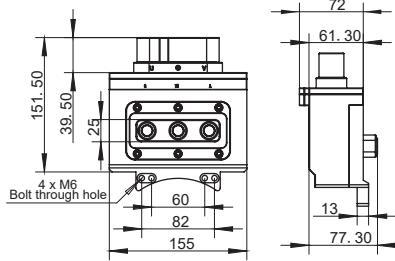
Robot side module



PN	7.Y02069
Model	QCSM-03R

※ Weight: 2.6Kg

※ Suitable for: QCAS350、QCAS500



**QCSM-03G**

Gripper side module



PN	7.Y02070
Model	QCSM-03G

※ Weight: 1.85Kg

## Pneumatic Module

**QCAM-08G38R**

Robot side module



PN	7.Y02051
Model	QCAM-08G38R

※ Weight: 1.25Kg

※ Suitable for: QCAS350、QCAS500

**QCAM-08G38G**

Gripper side module

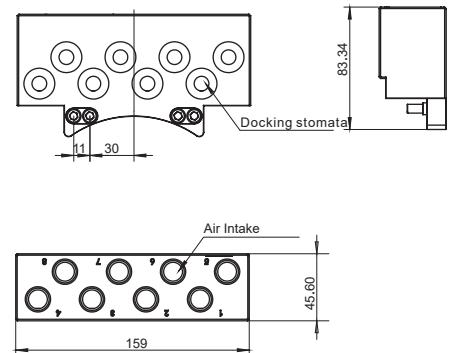
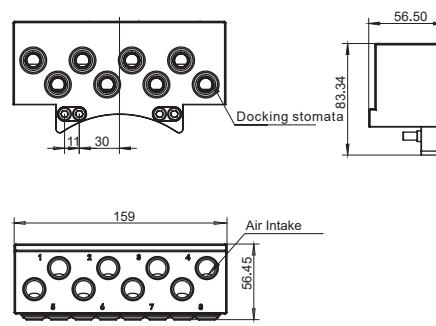
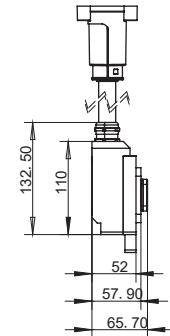


PN	7.Y02052
Model	QCAM-08G38G

※ Weight: 1.1Kg

Profile' SUS Tube  
Stents Module  
Quick Changer  
Grip Module  
Air Nipper  
Vacuum Module  
Accessory Components

Profile' SUS Tube  
Stents Module  
Quick Changer  
Grip Module  
Air Nipper  
Vacuum Module  
Accessory Components



## Communication Module

**QCSM-05G7/8-04M12-10R**

Robot side module



PN	7.Y02118
Model	QCSM-05G7/8-04M12-10R

※ Weight: 0.5KG

※ Suitable for : QCAS350、QCAS500

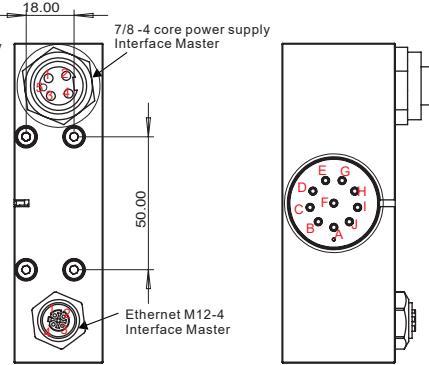
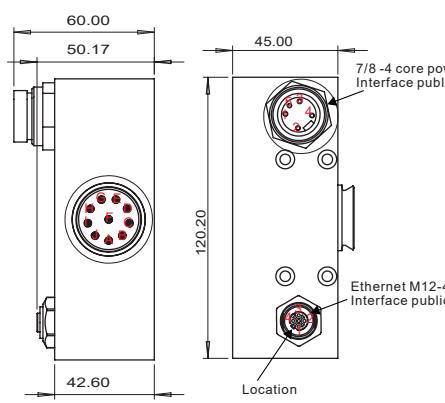
**QCSM-05G7/8-04M12-10G**

Gripper side module



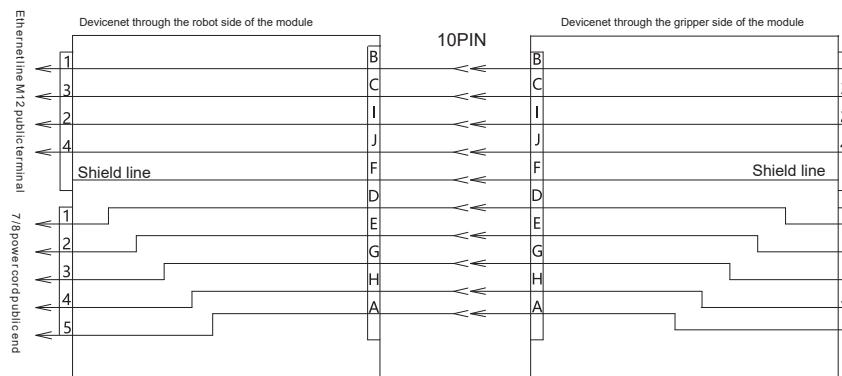
PN	7.Y02119
Model	QCSM-05G7/8-04M12-10G

※ Weight: 0.5KG



## Communication Module

**Wiring diagram**



## II Round Manual Quick Changer



- Easy replacement of the EOAT on the robot.
- Suitable also with vacuum ports.
- Avoid mistakes in pneumatic and electrical connections.
- 4, 8, 10 or 12 pneumatic connections.
- The two parts (robot side and gripper side) are supplied separately.

Model	QC50	QC90	QC150	QC160	QC200
Medium	Filtered compressed air				
Pressure range	5~6 bar				
Temperature range	5 ~ 60 °C				
Robot side quick changer	QC-R50K	QC-R90K	QC-R150K	QC-R160K	QC-R200K
Robot side quick changer weight	103 g	318 g	1159 g	1200 g	2640 g
Gripper side quick changer	QC-G50	QC-G90	QC-G150	QC-G160	QC-G200
Gripper side quick changer weight	65 g	227 g	837g	900 g	1890 g
Vertical pull F	150N	400N	1000N	1000N	2000N
Rotation torque Mt	20Nm	100Nm	250Nm	250Nm	600Nm
Flip torque Mb	10Nm	60Nm	150Nm	150Nm	300Nm
Recomended payload	5kgs	15kgs	35kgs	35kgs	75kgs
Colour	Brass	Brass	Black	Brass	Black

### Installation and use example

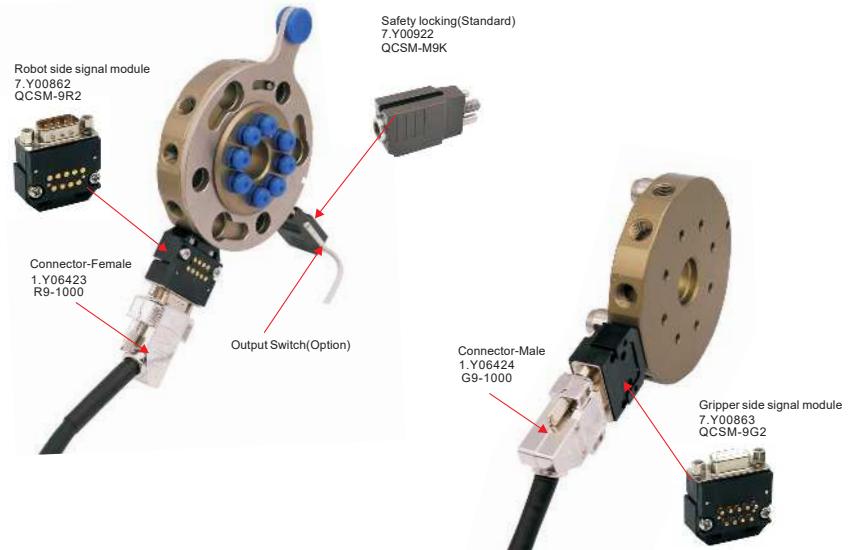


## II Round Manual Quick Changer

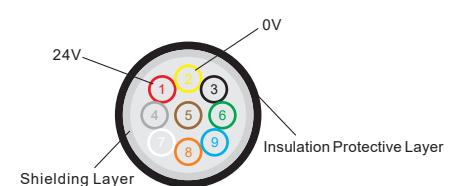
### Accessories

#### Electrical connection module

- I/O quick change by D-SUB 9 pins connector.
  - The two parts are supplied separately.
- QCSM-9R2 robot side signal module.  
QCSM-9G2 gripper side signal module.  
R9-1000 45 degree metal female fitting.  
G9-1000 45 degree metal male fitting.



### Singal Wire Cross-sectional Sketch Map



Output Switch

## || Round Manual Quick Changer

### QC-50



Robot side

PN	8.Y00402
Model	QC-R50K



Gripper side

PN	8.Y00055
Model	QC-G50

### Parameter

- 1. Recommended rated load: 5kg
- 2. Medium: Filtered compressed air
- 3. Pressure Range: 5-6bar
- 4. Temperature Range: 5-60°C
- 5. Vertical Pulling Force F: 150N
- 6. Rotating Torque Mt: 20Nm
- 7. Reversal Torque Mb: 10Nm
- 8. Robot side weight: 103g
- 9. Gripper side weight: 65g
- 10. Repeatability accuracy(X,Y&Z): ±0.05mm
- 11. Colour: Brass
- 12. Size of straight air hole(quantity): (4)M5

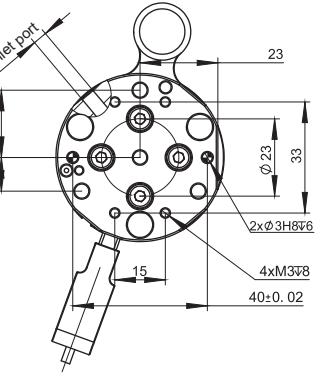
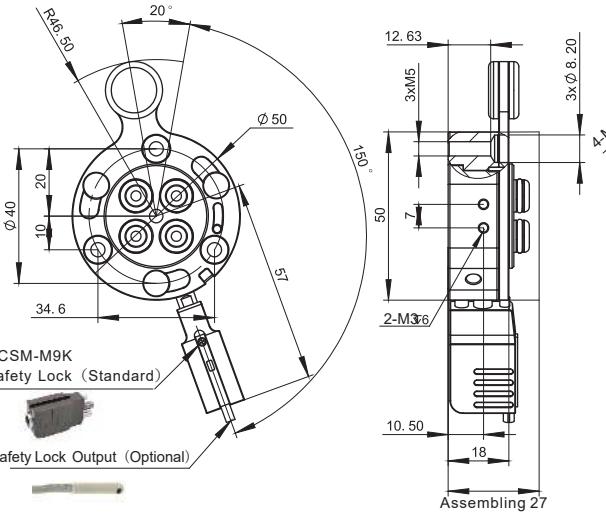
### Module Type

Product	Product name	Model	PN	I/O connection type	Working current	Cable
	Robot side signal module	QCSM-9R1	7.Y00823	9PIN D-SUB	MAX3A	R9-1000 (1.Y06423)
	Gripper side signal module	QCSM-9G1	7.Y00824	9PIN D-SUB	MAX3A	G9-1000 (1.Y06424)

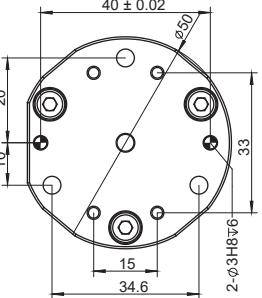
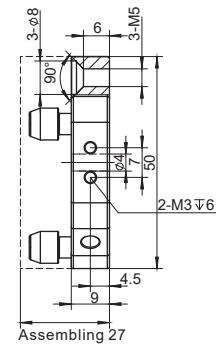
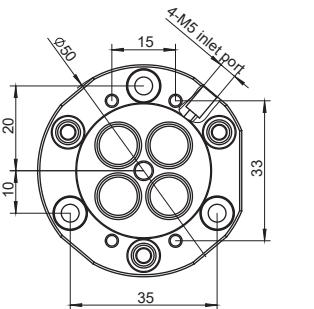
\*R9-1000,G9-1000 option, the cable's length is 1 meter

## || Round Manual Quick Changer

### Robot Side



### Gripper Side



## Round Manual Quick Changer

QC-90



PN 8.Y00359  
Model QC-R90K



PN 8.Y00033  
Model QC-G90

### Parameter

1. Recommended rated load: 15kg
2. Medium: Filtered compressed air
3. Pressure Range: 5-6bar
4. Temperature Range: 5-60°C
5. Vertical Pulling Force F: 400N
6. Rotating Torque Mt: 100Nm
7. Reversal Torque Mb: 60Nm
8. Robot side weight: 318g
9. Gripper side weight: 227g
10. Repeatability accuracy(X,Y&Z): ±0.05mm
11. Colour: Brass
12. Size of straight air hole(quantity): (8)G1/8

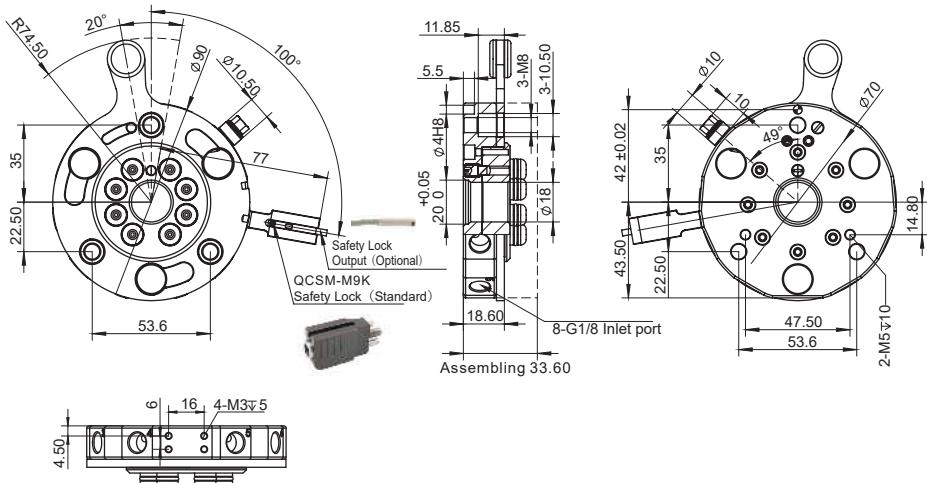
### Module Type

Product	Product name	Model	PN	I/O connection type	Working current	Cable
	Robot side signal module	QCSM-9R2	7.Y00862	9PIN D-SUB	MAX 3A	R9-1000 (1.Y06423)
	Gripper side signal module	QCSM-9G2	7.Y00863	9PIN D-SUB	MAX 3A	G9-1000 (1.Y06424)

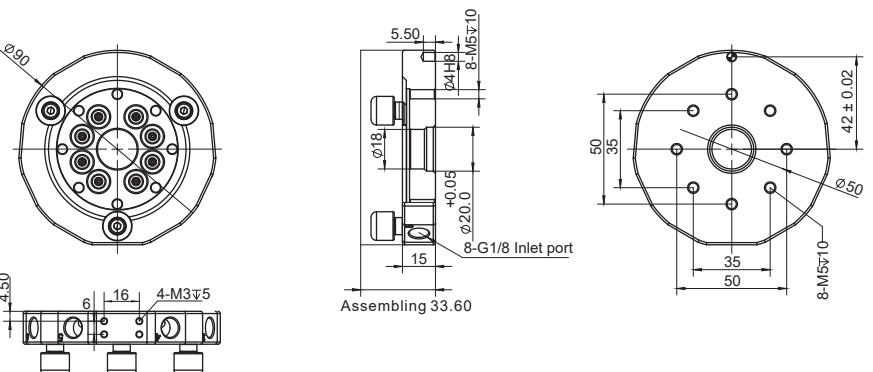
\*R9-1000,G9-1000 option, the cable's length is 1 meter

## Round Manual Quick Changer

Robot Side



Gripper Side



Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

Vacuum Module

Accessory Components

Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

Vacuum Module

Accessory Components

## II Round Manual Quick Changer

### QC-150



PN	8.Y00376
Model	QC-R150K



PN	8.Y00377
Model	QC-G150

### Parameter

- 1. Recommended rated load: 35kg
- 2. Medium: Filtered compressed air
- 3. Pressure Range: 5-6bar
- 4. Temperature Range: 5-60°C
- 5. Vertical Pulling Force F: 1000N
- 6. Rotating Torque Mt: 250Nm
- 7. Reversal Torque Mb: 150Nm
- 8. Robot side weight: 1159g
- 9. Gripper side weight: 837g
- 10. Repeatability accuracy(X,Y&Z): ±0.05mm
- 11. Colour: Black
- 12. Size of straight air hole(quantity): (10)G1/4

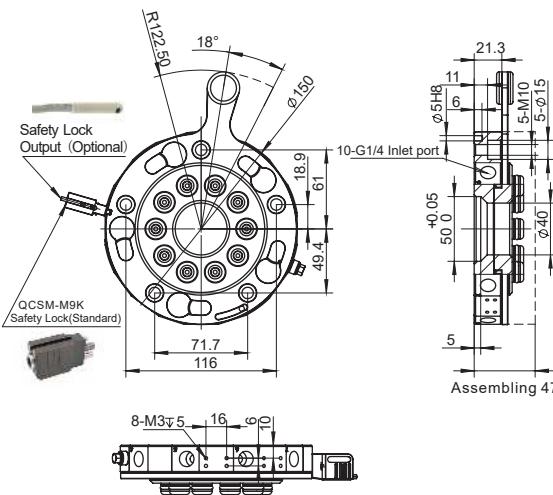
### Module Type

Product	Product name	Model	PN	I/O connection type	Working current	Cable
	Robot side signal module	QCSM-9R3	7.Y00819	9PIN D-SUB	MAX 3A	R9-1000 (1.Y06423)
	Gripper side signal module	QCSM-9G3	7.Y00820	9PIN D-SUB	MAX 3A	G9-1000 (1.Y06424)

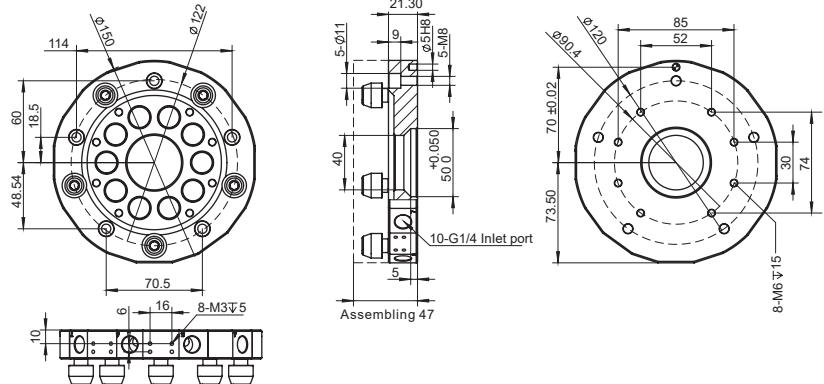
\*R9-1000,G9-1000 option, the cable's length is 1 meter

## II Round Manual Quick Changer

### Robot Side



### Gripper Side



## Round Manual Quick Changer

QC-160



PN	8.Y00360
Model	QC-R160K



PN	8.Y00053
Model	QC-G160

### Parameter

- 1. Recommended rated load: 35kg
- 2. Medium: Filtered compressed air
- 3. Pressure Range: 5-6bar
- 4. Temperature Range: 5-60°C
- 5. Vertical Pulling Force F: 1000N
- 6. Rotating Torque Mt: 250Nm
- 7. Reversal Torque Mb: 150Nm
- 8. Robot side weight: 1200g
- 9. Gripper side weight: 900g
- 10. Repeatability accuracy(X,Y&Z): ±0.05mm
- 11. Colour: Brass
- 12. Size of straight air hole(quantity): (12)G1/8

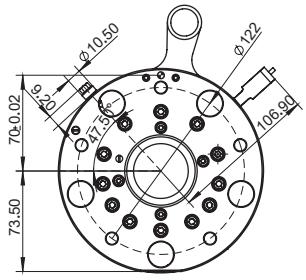
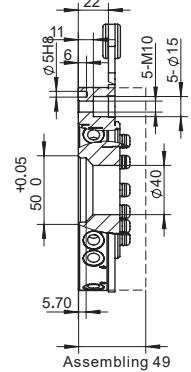
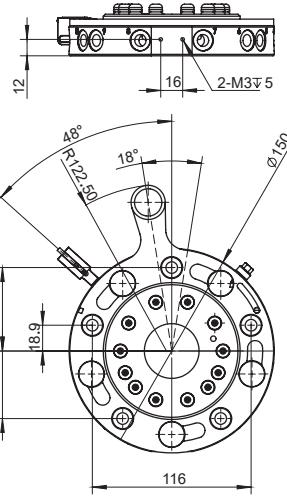
### Module Type

Product	Product name	Model	PN	I/O connection type	Working current	Cable
	Robot side signal module	QCSM-9R2	7.Y00862	9PIN D-SUB	MAX3A	R9-1000 (1.Y06423)
	Gripper side signal module	QCSM-9G2	7.Y00863	9PIN D-SUB	MAX3A	G9-1000 (1.Y06424)

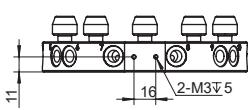
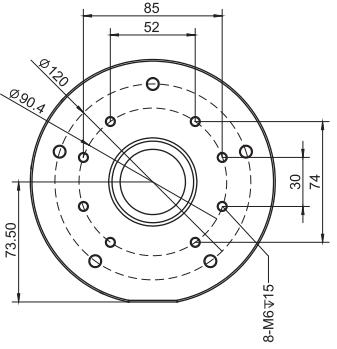
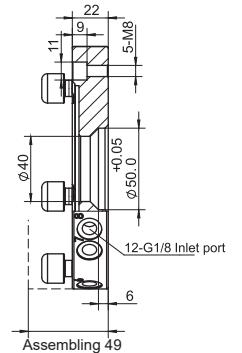
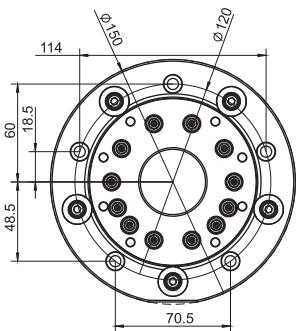
\*R9-1000,G9-1000 option, the cable's length is 1 meter

## Round Manual Quick Changer

Robot Side



Gripper Side



## II Round Manual Quick Changer

### QC-200



Robot side

PN	8.Y00209
Model	QC-R200K



Gripper side

PN	8.Y00208
Model	QC-G200

### Parameter

- 1. Recommended rated load: 75kg
- 2. Medium: Filtered compressed air
- 3. Pressure Range: 5-6bar
- 4. Temperature Range: 5-60°C
- 5. Vertical Pulling Force F: 2000N
- 6. Rotating Torque Mt: 600Nm
- 7. Reversal Torque Mb: 300Nm
- 8. Robot side weight: 2640g
- 9. Gripper side weight: 1890g
- 10. Repeatability accuracy(X,Y&Z): ±0.05mm
- 11. Colour: Black
- 12. Size of straight air hole(quantity): (12)G1/4

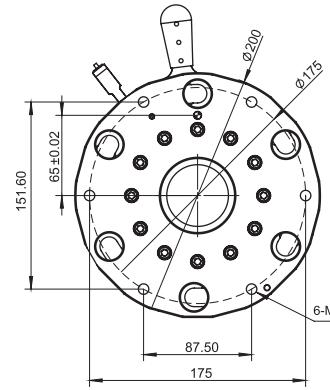
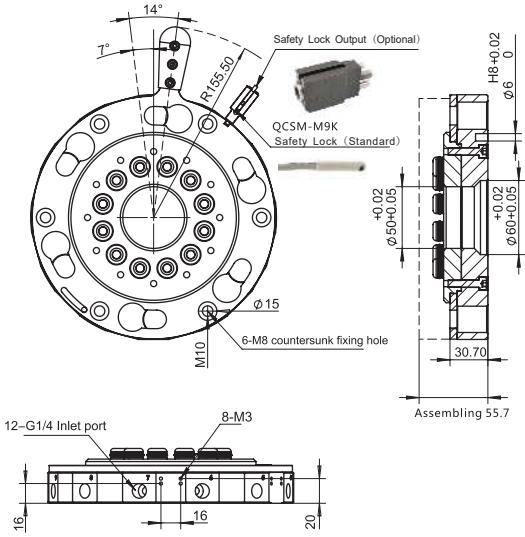
### Module Type

Product	Product name	Model	PN	I/O connection type	Working current	Cable
	Robot side signal module	QCSM-9R4	7.Y00821	9PIN D-SUB	MAX 3A	R9-1000 (1.Y06423)
	Gripper side signal module	QCSM-9G4	7.Y00822	9PIN D-SUB	MAX 3A	G9-1000 (1.Y06424)

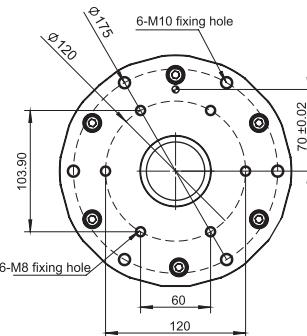
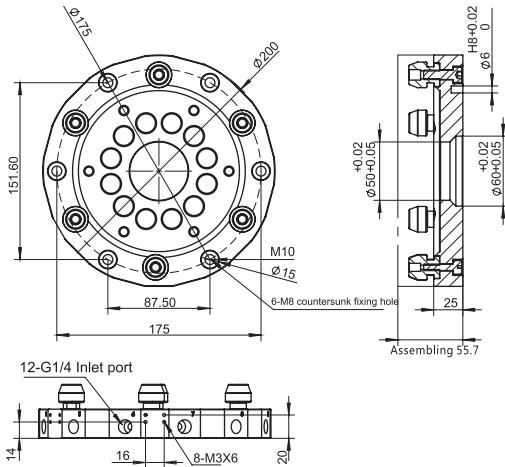
\*R9-1000,G9-1000 option, the cable's length is 1 meter

## II Round Manual Quick Changer

### Robot Side



### Gripper Side

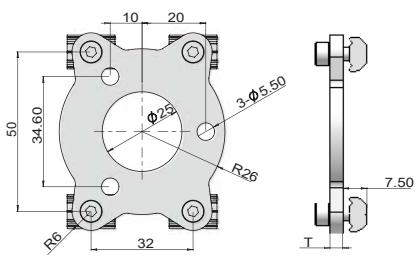


## Interface

### SIP-50B



(Kit With Screws Option)



PN	7.Y00650
Model	SIP-50B
For quick changer	QC-G50
Thickness	4mm
Accessoriere selection	
Screws	PTC-M5L12*4
Single hole shim	PTS-M5*4
T-Nuts	PTN-M5*4
Weight	90g

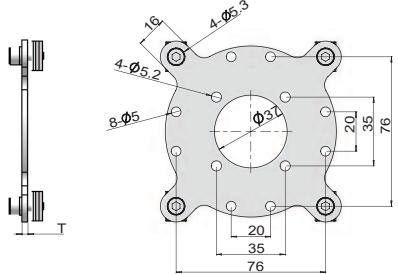


Note: If screw kits needed, add **T** to the part number and model number. eg: Model SIP-50BT Part number 7.Y00650-T.

### SIP-90B



(Kit With Screws Option)



PN	7.Y00634
Model	SIP-90B
For quick changer	QC-G90
Thickness	3mm
Accessoriere selection	
Screws	PTC-M5L12*4
Single hole shim	PTS-M5*4
T-Nuts	PTN-M5*4
Weight	190g

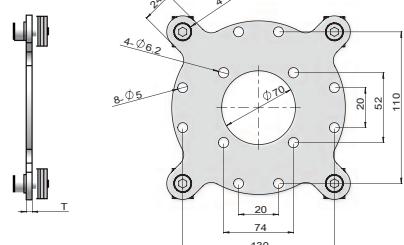
Note: If screw kits needed, add **T** to the part number and model number. eg: Model SIP-50BT Part number 7.Y00650-T.

## Interface

### SIP-50B



(Kit With Screws Option)



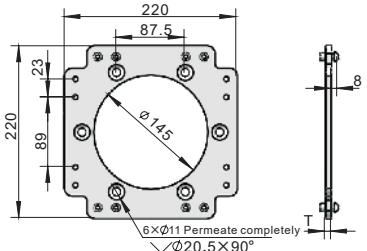
PN	7.Y00635
Model	SIP-160B
For quick changer	QC-G150/QC-G160
Thickness	4mm
Accessoriere selection	
Screws	PTC-M5L12*4
Single hole shim	PTS-M5*4
T-Nuts	PTN-M5*4
Weight	540g

Note: If screw kits needed, add **T** to the part number and model number. eg: Model SIP-50BT Part number 7.Y00650-T.

### SIP-90B



(Kit With Screws Option)



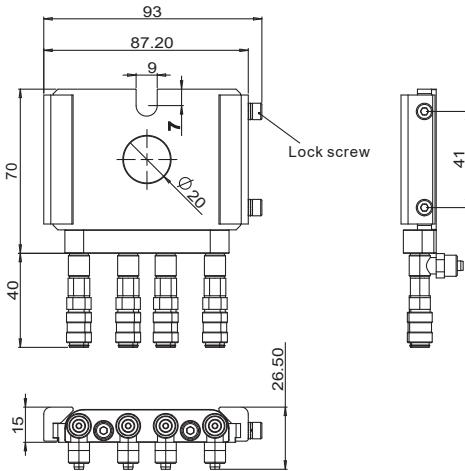
PN	7.Y00855
Model	SIP-200B
For quick changer	QC-G200
Thickness	8mm
Weight	578g
Accessoriere selection	
Screws	PTC-M5L16*16
Single hole shim	PTS-M5*16
T-Nuts	PTN-M5*16

Note: If screw kits needed, add **T** to the part number and model number. eg: Model SIP-50BT Part number 7.Y00650-T.

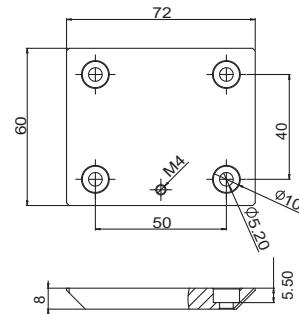
## Square Manual Quick Changer



**QCS-R60**



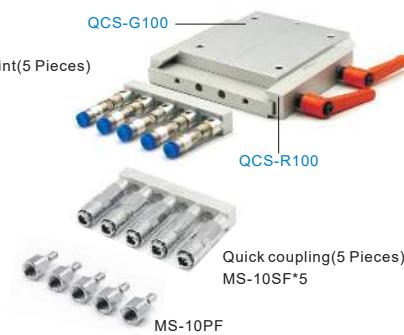
**QCS-G60**



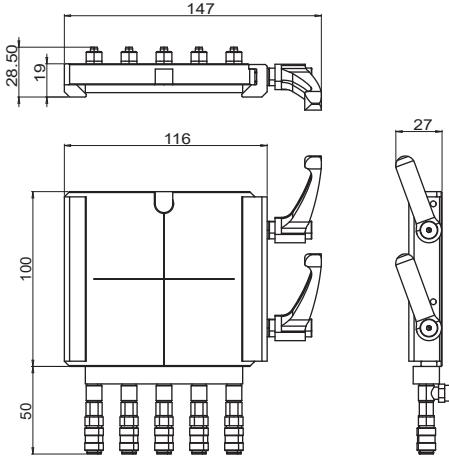
Threaded Hose Module(Option)

PN	8.Y00081	8.Y00082	1.Y03525	1.Y03524
Model	QCS-R60	QCS-G60	KCH04-M5	KCH06-M5
Load	70N	-	-	-
Weight	148g	79g	7g	9g

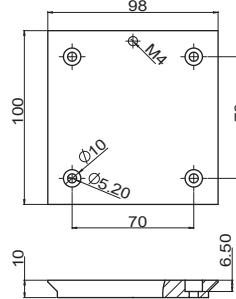
## Square Manual Quick Changer



**QCS-R100**



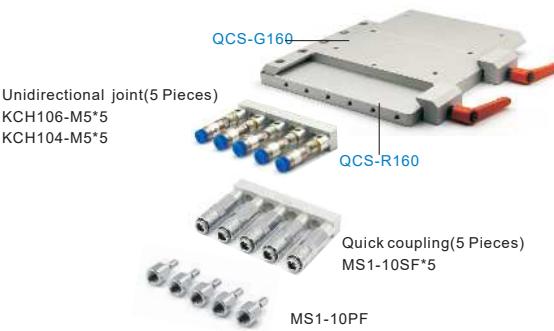
**QCS-G100**



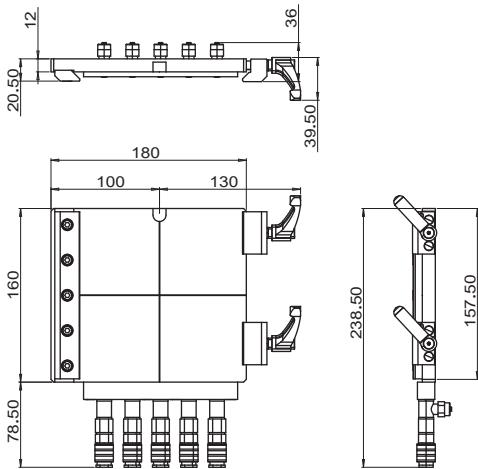
Threaded Hose Module(Option)

PN	7.Y00332	7.Y00175	7.Y00860	7.Y00861	7.Y00334	1.Y04667
Model	QCS-R100	QCS-G100	KCH04-M5*5	KCH06-M5*5	MS-10SF*5	MS-10PF
Load	300N	-	-	-	-	-
Weight	463g	240g	86g	96g	196g	11g

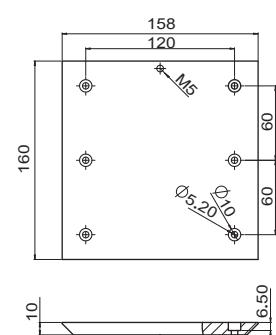
## Square Manual Quick Changer



**QCS-R160**



**QCS-G160**



Threaded Hose Module(Option)

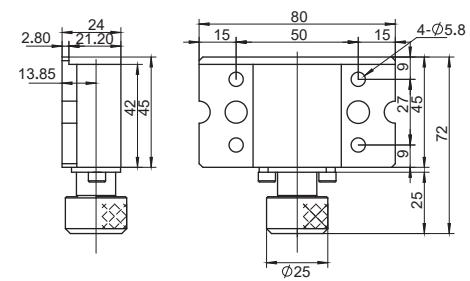
PN	7.Y00160	7.Y00161	7.Y02016	7.Y02017	7.Y02018	1.Y20004
Model	QCS-R160	QCS-G160	KCH104-M5*5	KCH106-M5*5	MS1-10SF*5	MS1-10PF
Load	800N	-	-	-	-	-
Weight	1198g	634g	86g	96g	196g	11g

## L-Type Manual Quick Changer



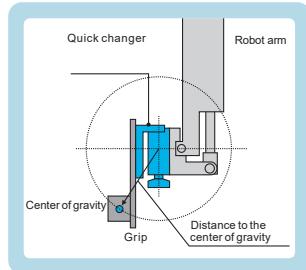
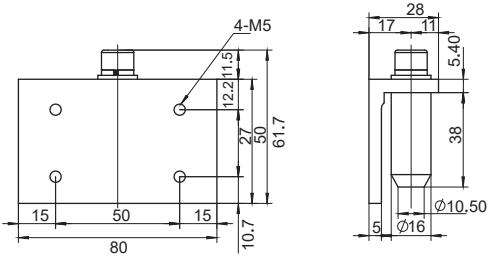
※Superhard aluminum  
※Weight: 185g  
※Installation location: Robot side  
※Load weight: ~15kg

PN	1.Y01275
Model	QCL15R-Y



※Steel  
※Weight: 294g  
※Installation location: Grip side  
※Load weight: ~15kg

PN	1.Y01276
Model	QCL15G-Y

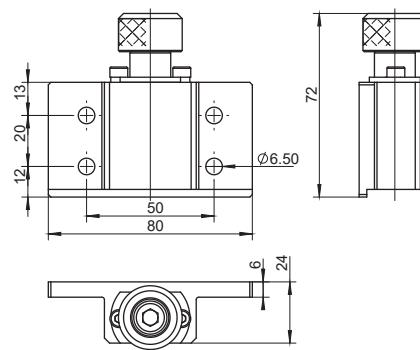


## L-Type Manual Quick Changer



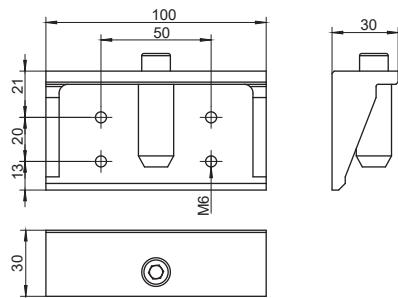
※Superhard aluminum  
※Weight: 190g  
※Installation location: Robot side  
※Load weight: ~15kg

PN	8.Y00236
Model	QCL15R-S



※Superhard aluminum  
※Weight: 197g  
※Installation location: Grip side  
※Load weight: ~15kg

PN	8.Y00235
Model	QCL15G-S

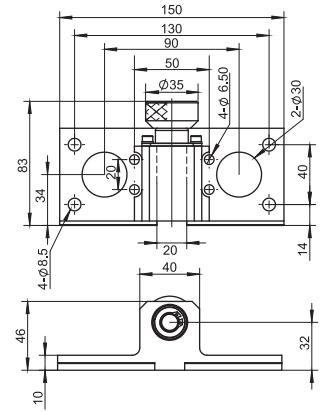


## L-Type Manual Quick Changer



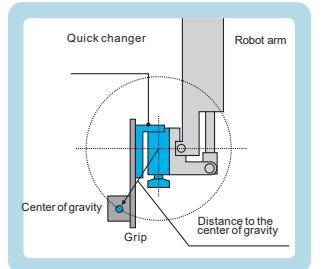
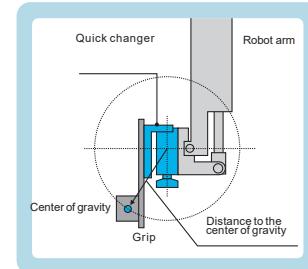
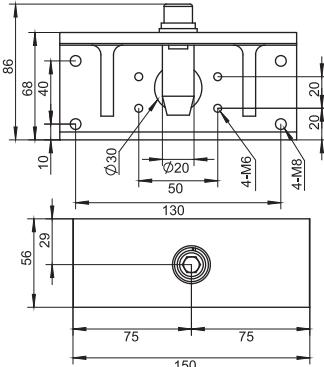
※Superhard aluminum  
※Weight: 505g  
※Installation location: Robot side  
※Load weight: ~35kg

PN	8.Y00101
Model	QCL35R-S



※Superhard aluminum  
※Weight: 565g  
※Installation location: Grip side  
※Load weight: ~35kg

PN	8.Y00102
Model	QCL35G-S



## FPT Two-finger Translational Gripper

### Features

- T-tooth guide rail. Compact structure and reliable
- Magnetic switch interface
- Proximity switch interface
- Pipeless connection interface
- Ten million maintenance-free operations



Basic version



Dustproof version



High temperature version

### Optional Accessories



Proximity switch M8



Magnetic switch M8



90° bend angle  
Rotatable hose fitting

## FPT Two-finger Translational Gripper

PN	Model	Single finger stroke (mm)	Gripping force (N)	Self weight (kg)	Workpiece weight (kg)	Longest finger length (mm)	Maximum single finger weight (kg)	Repeat positioning accuracy (mm)	IP rating
1.Y13289	FPT-40A-1	2.5	123	0.08	0.68	50	0.1	0.01	40
1.Y13290	FPT-40A-1-SD	2.5	123/132	0.11	0.68	50	0.1	0.01	64
1.Y13291	FPT-40A-1-TEM	2.5	123/132	0.08	0.68	50	0.1	0.01	40
1.Y13292	FPT-50A-1	4	140/145	0.15	0.77	64	0.18	0.01	40
1.Y13293	FPT-50A-2	2	290/310	0.15	1.60	58	0.18	0.01	40
1.Y13294	FPT-50A-1-SD	4	140/145	0.18	0.77	64	0.18	0.01	64
1.Y13295	FPT-50A-2-SD	2	290/310	0.18	1.60	58	0.18	0.01	64
1.Y13296	FPT-50A-1-TEM	4	140/145	0.15	0.77	64	0.18	0.01	40
1.Y13297	FPT-50A-2-TEM	2	290/310	0.15	1.60	58	0.18	0.01	40
1.Y13298	FPT-64A-1	6	250/270	0.28	1.38	80	0.35	0.01	40
1.Y13299	FPT-64A-2	3	520/565	0.28	2.86	72	0.35	0.01	40
1.Y13300	FPT-64A-1-SD	6	250/270	0.35	1.38	80	0.35	0.01	64
1.Y13301	FPT-64A-2-SD	3	520/565	0.35	2.86	72	0.35	0.01	64
1.Y13302	FPT-64A-1-TEM	6	250/270	0.28	1.38	80	0.35	0.01	40
1.Y13303	FPT-64A-2-TEM	3	520/565	0.28	2.86	72	0.35	0.01	40
1.Y13304	FPT-80A-1	8	415-465	0.5	2.31	100	0.6	0.01	40
1.Y13305	FPT-80A-2	4	860/960	0.5	4.73	90	0.6	0.01	40
1.Y13306	FPT-80A-1-SD	8	415/465	0.6	2.31	100	0.6	0.01	64
1.Y13307	FPT-80A-2-SD	4	860/960	0.6	4.73	90	0.6	0.01	64
1.Y13308	FPT-80A-1-TEM	8	415/465	0.5	2.31	100	0.6	0.01	40
1.Y13309	FPT-80A-2-TEM	4	860-960	0.5	4.73	90	0.6	0.01	40
1.Y13310	FPT-100A-1	10	660/725	0.81	3.63	125	1.1	0.01	40
1.Y13311	FPT-100A-2	5	1370/1500	0.81	7.54	115	1.1	0.01	40
1.Y13312	FPT-100A-1-SD	10	660/725	0.99	3.63	125	1.1	0.01	64
1.Y13313	FPT-100A-2-SD	5	1370/1500	0.99	7.54	115	1.1	0.01	64
1.Y13314	FPT-100A-1-TEM	10	660-725	0.81	3.63	125	1.1	0.01	40
1.Y13315	FPT-100A-2-TEM	5	1370-1500	0.81	7.54	115	1.1	0.01	40
1.Y13316	FPT-110A-1	20	1050-1150	2	5.25	150	2	0.01	40
1.Y13317	FPT-125A-1	13	1080/1170	1.35	5.94	160	2.1	0.01	40
1.Y13318	FPT-125A-2	6	2240/2420	1.35	12.32	145	2.1	0.01	40
1.Y13319	FPT-125A-1-SD	13	1080/1170	1.55	5.94	160	2.1	0.01	64
1.Y13320	FPT-125A-2-SD	6	2240/2420	1.55	12.32	145	2.1	0.01	64
1.Y13321	FPT-125A-1-TEM	13	1080/1170	1.35	5.94	160	2.1	0.01	40
1.Y13322	FPT-125A-2-TEM	6	2240/2420	1.35	12.32	145	2.1	0.01	40
1.Y13323	FPT-160A-1	16	1640/1770	2.6	9.02	200	3.5	0.01	40
1.Y13324	FPT-160A-2	8	3200/3460	2.6	17.60	190	3.5	0.01	40
1.Y13325	FPT-160A-1-SD	16	1640/1770	3	9.02	200	3.5	0.01	64
1.Y13326	FPT-160A-2-SD	8	3200/3460	3	17.60	190	3.5	0.01	64
1.Y13327	FPT-160A-1-TEM	16	1640/1770	2.6	9.02	200	3.5	0.01	40
1.Y13328	FPT-160A-2-TEM	8	3200/3460	2.6	17.60	190	3.5	0.01	40
1.Y13329	FPT-200A-1	25	2700/2870	5.2	14.85	240	6.5	0.02	40
1.Y13330	FPT-200A-1-SD	25	2700/2870	5.8	14.85	240	6.5	0.02	64
1.Y13331	FPT-200A-1-TEM	25	2700/2870	5.2	14.85	240	6.5	0.02	40
1.Y13332	FPT-240A-1	30	4200/4440	8	21.50	280	8.5	0.04	40
1.Y13333	FPT-240A-1-SD	30	4200/4440	11	21.50	280	8.5	0.04	64
1.Y13334	FPT-240A-1-TEM	30	4200/4440	8	21.50	280	8.5	0.04	40
1.Y13335	FPT-300A-1	35	6000/6260	13.5	33.00	300	11.5	0.05	40
1.Y13336	FPT-300A-1-SD	35	6000/6260	17.5	33.00	300	11.5	0.05	64
1.Y13337	FPT-300A-1-TEM	35	6000/6260	13.5	33.00	300	11.5	0.05	40

## FPT Three-finger Translational Gripper

### Features

- T-tooth guide rail. Compact structure and reliable
- Magnetic switch interface
- Proximity switch interface
- Pipeless connection interface
- Ten million maintenance-free operations



Basic version



Dustproof version



High temperature version

## FPT Three-finger Translational Gripper

PN	Model	Single finger stroke (mm)	Gripping force (N)	Self weight (kg)	Workpiece weight (kg)	Longest finger length (mm)	Maximum single finger weight (kg)	Repeat positioning accuracy (mm)	IP rating
1.Y13338	FCT-40A-1	2.5	255/270	0.12	1.38	50	0.1	0.01	40
1.Y13339	FCT-40A-1-SD	2.5	255/270	0.15	1.38	50	0.1	0.01	64
1.Y13340	FCT-40A-1-TEM	2.5	255/270	0.12	1.38	50	0.1	0.01	40
1.Y13341	FCT-50A-1	4	325/355	0.25	1.76	64	0.18	0.01	40
1.Y13342	FCT-50A-1-SD	4	325/355	0.31	1.76	64	0.18	0.01	64
1.Y13343	FCT-50A-1-TEM	4	325/355	0.25	1.76	64	0.18	0.01	40
1.Y13344	FCT-64A-1	6	580/640	0.43	3.19	80	0.35	0.01	40
1.Y13345	FCT-64A-1-SD	6	580/640	0.6	3.19	80	0.35	0.01	64
1.Y13346	FCT-64A-1-TEM	6	580/640	0.43	3.19	80	0.35	0.01	40
1.Y13347	FCT-80A-1	8	1000/1080	0.79	5.50	100	0.6	0.01	40
1.Y13348	FCT-80A-1-SD	8	1000/1080	1	5.50	100	0.6	0.01	64
1.Y13349	FCT-80A-1-TEM	8	1000/1080	0.79	5.50	100	0.6	0.01	40
1.Y13350	FCT-100A-1	10	1800/1920	1.41	9.90	125	1.1	0.01	40
1.Y13351	FCT-100A-1-SD	10	1800/1920	1.9	9.90	125	1.1	0.01	64
1.Y13352	FCT-100A-1-TEM	10	1800/1920	1.41	9.90	125	1.1	0.01	40
1.Y13353	FCT-125A-1	13	3100/3330	2.8	17.05	160	2.1	0.01	40
1.Y13354	FCT-125A-1-SD	13	3100/3330	3.23	17.05	160	2.1	0.01	64
1.Y13355	FCT-125A-1-TEM	13	3100/3330	2.8	17.05	160	2.1	0.01	40
1.Y13356	FCT-160A-1	16	3100/3330	5.6	33.00	200	3.5	0.02	40
1.Y13357	FCT-160A-1-SD	16	6000/6390	6.5	33.00	200	3.5	0.02	64
1.Y13358	FCT-160A-1-TEM	16	6000/6390	5.6	33.00	200	3.5	0.02	40
1.Y13359	FCT-200A-1	25	7100/1540	11	39.05	240	6.5	0.05	40
1.Y13360	FCT-200A-1-SD	25	7100/7540	12	39.05	240	6.5	0.05	64
1.Y13361	FCT-200A-1-TEM	25	7100/7540	11	39.05	240	6.5	0.05	40
1.Y13362	FCT-240A-1	30	9500/10400	20	55.00	280	8.5	0.05	40
1.Y13363	FCT-240A-1-SD	30	9500/10400	21.5	55.00	280	8.5	0.05	64
1.Y13364	FCT-240A-1-TEM	30	9500/10400	20	55.00	280	8.5	0.05	40
1.Y13365	FCT-300A-1	35	14500/15200	33	79.75	250	11.5	0.05	40
1.Y13366	FCT-300A-1-SD	35	14500/15200	35.5	79.75	250	11.5	0.05	64
1.Y13367	FCT-300A-1-TEM	35	14500/15200	33	79.75	250	11.5	0.05	40

### Optional Accessories



Proximity switch M8



Magnetic switch M8



90° bend angle rotatable hose fitting

## FPT Three-finger Translational Gripper

### Optional Accessories

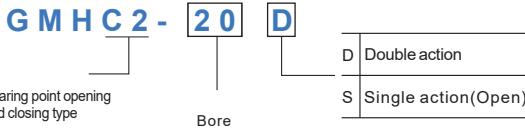
Product image	PN	Product model	Description	
	1.Y01631	E2E-XIR5E12M	Wire length is 2m, the end is bare	
Proximity switch M8	1.Y06553	E2E-XIR5F12M	Wire length is 2m, the end is bare	
Product image	PN	Product model	Description	
	1.Y00307	D-M9BL	Wire length is 3m, the end is bare	
Product image	PN	Product model	Description	
	1.Y06722	M8-M03T	3 pins M8 Field wirable connector	
Product image	PN	Product model	Description	Product image
			90 degree elbow, G1/8 threaded connector, 6mm Hose Fitting output	
1.Y13156 KQ2V06-01AS				1.Y13381 SL-040
				1.Y13382 SL-050
				1.Y13383 SL-064
				1.Y13384 SL-080
				1.Y13385 SL-100
				1.Y13386 SL-120
				1.Y13387 SL-160
				1.Y13388 SL-200
				1.Y13389 SL-240
				1.Y13390 SL-300
90° bend angle Rotatable Hose Fitting	1.Y13158 KQ2V08-01AS		90 degree elbow, G1/8 threaded connector, 8mm Hose Fitting output	
1.Y13157 KQ2V06-02AS			90 degree elbow, G1/4 threaded connector, 6mm Hose Fitting output	

## Y Type Gripper

### Model representation methods

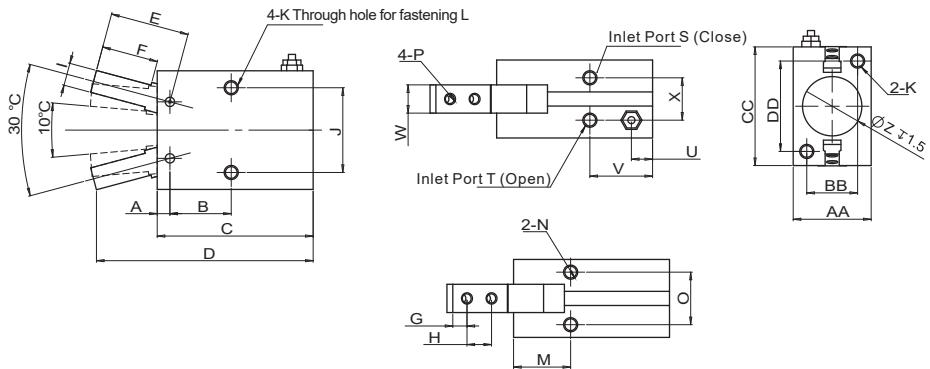


#### Standard type



PN	Model	Bore	Pressure Range (c.p.m.)		Temperature range	Repetition accuracy	Maximum frequency of use (c.p.m.)	Nozzle diameter	Weight
			Single action	Double action					
1.Y02014	GMHC2-16S	16	0.1~0.6	/	-10~60°C	±0.01	180	M5*0.8	99g
1.Y05738	GMHC2-16D	16	/	0.25~0.6	-10~60°C	±0.01	180	M5*0.8	108g
1.Y02730	GMHC2-20S	20	0.1~0.6	/	-10~60°C	±0.01	180	M5*0.8	167g
1.Y04328	GMHC2-20D	20	/	0.25~0.6	-10~60°C	±0.01	180	M5*0.8	177g

Notes:  
1, Air Fluid  
2, action mode single-acting double-acting (optional)



Bore (mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Pipe Size S T U V W X Z AA BB CC DD									
	16	3.9	16.2	44.6	62.5	22.6	16	4	7	7	24	M4X0.7T8	3.4	10.7	M4X0.7T8	16	M3X0.5	MSX0.8	7	18.3	8	13	17	23.6	15	30.6
20	4.5	21.7	55.2	78.7	28	20	5.2	9	8	30	M5X0.8T10	4.3	15.7	MSX0.8T8	8.6	M4X0.7	MSX0.8	7.5	22.2	10	15	21	27.6	18	42	32

## Three Jaws Gripper



### Model Representation Methods

Standard type

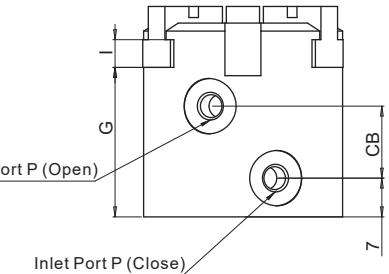
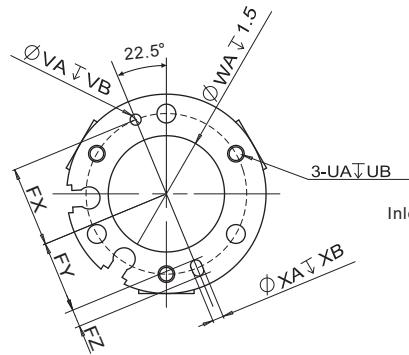
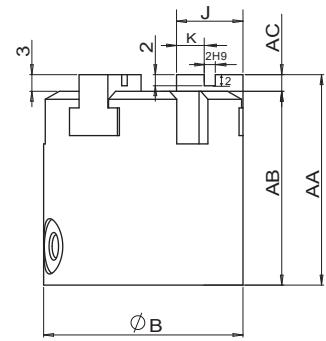
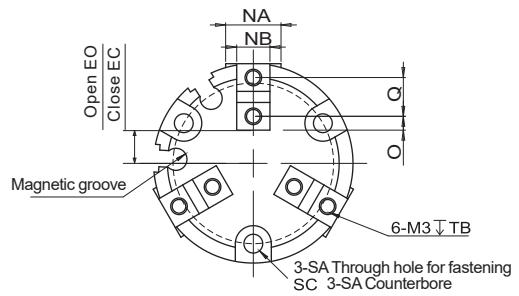
**G M H S 2- 25 D**

Bore  
D Double action  
S Single action(Open)

PN	1.Y04529	1.Y04764	1.Y05750
Model	GMHS3-16D	GMHS3-20D	GMHS3-25D
Bore	16	20	25
Fluid	Air		
Operating pressure range	0.2~0.6MPa		
Environment and fluid temperature	-10~60°C		
Repeatability accuracy (mm)	$\pm 0.01$		
Maximum frequency of use (c.p.m.)	120c.p.m		
Action mode	Double action		
Note) gripping force N Pressure 0.5MPa	External diameter clamping 14	25	42
Internal diameter clamping	16	28	47
External diameter clamping with dust cover	9	21	36
Standard finger stroke with hood	4	4	6
Long stroke finger stroke	10	10	12
Rc Pipe Size	M3×0.5	M5×0.8	M5×0.8
Magnetic switch	Built in magnetic ring type		
Weight	59g	96.7g	138g

Note)Clamping force when holding the outside diameter.  
The value of the holding point of  $\varnothing 16\text{-}025$  is L=20mm.

## Three Jaws Gripper



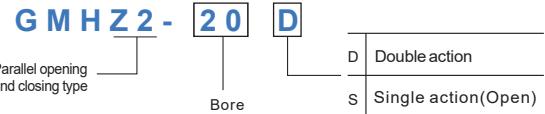
Bore	AA	AB	B	CB	EC	EO	FX	FY	FZ	G	I	J	K	NA	NB
16	35	32	30	11	5	7	12.5	11	3	25	4	10	4	8	5h9
20	38	35	36	13	6	8	14.5	13	3	27	5	12	5	10	6h9
25	40	37	42	15	7	10	17	14.5	5	28	5	14	6	12	6h9
Bore	O	P	Q	SA	SB	SC	TB	UA	UB	VA	VB	WA	XA	XB	
16	2	M3x0.5	6	3.4	6.5	8	5	M3x0.5	4.5	2H9	2	17H9	2H9	2	
20	2.5	M5x0.8	7	3.4	6.5	9.5	6	M3x0.5	6	2H9	2	21H9	2H9	2	
25	3	M5x0.8	8	4.5	8	10	6	M4x0.7	6	3H9	3	26H9	3H9	3	

## Parallel Gripper



### Model Representation Methods

Standard type

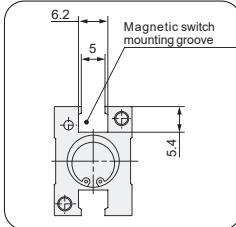


PN	Model	Bore	Pressure Range (Mpa)		Temperature range	Repetition accuracy	Maximum frequency of use (c.p.m)	Nozzle diameter	Weight	Gripping force (N)			Opening and closing stroke on both sides (mm)
			Single action	Double action						External	External	Internal	
1.Y00258	GMHZ2-10S	10	0.35~0.7	/	-10~60°C	±0.01	180	M3*0.5	53g	7.1	11	17	4
1.Y00252	GMHZ2-10D	10	/	0.2~0.7	-10~60°C	±0.01	180	M3*0.5	52.5g	7.1	11	17	4
1.Y00257	GMHZ2-16S	16	0.25~0.7	/	-10~60°C	±0.01	180	M5*0.8	123g	27	34	45	6
1.Y00256	GMHZ2-16D	16	/	0.1~0.7	-10~60°C	±0.01	180	M5*0.8	120g	27	34	45	6
1.Y03080	GMHZ2-20S	20	0.25~0.7	/	-10~60°C	±0.01	180	M5*0.8	227g	33	42	66	10
1.Y02703	GMHZ2-20D	20	/	0.1~0.7	-10~60°C	±0.01	180	M5*0.8	225g	33	42	66	10
1.Y09884	GMHZ2-25S	25	0.25~0.7	/	-10~60°C	±0.01	180	M5*0.8	309g	45	65	104	14
1.Y09338	GMHZ2-25D	25	/	0.1~0.7	-10~60°C	±0.01	180	M5*0.8	314g	45	65	104	14
1.Y09885	GMHZ2-32S	32	0.25~0.7	/	-10~60°C	±0.02	60	M5*0.8	415g	131	158	193	22
1.Y09886	GMHZ2-32D	32	/	0.1~0.7	-10~60°C	±0.02	60	M5*0.8	410g	131	158	193	22
1.Y09887	GMHZ2-40S	40	0.25~0.7	/	-10~60°C	±0.02	60	M5*0.8	543g	217	254	318	30
1.Y09888	GMHZ2-40D	40	/	0.1~0.7	-10~60°C	±0.02	60	M5*0.8	537g	217	254	318	30

- Notes:  
1. Air Fluid  
2. action mode single-acting double-acting (optional)  
3. optional non-contact magnetic switch

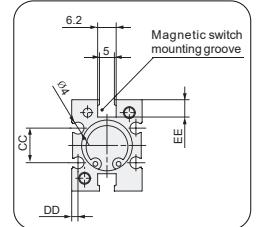
### Dimensions Table (mm)

GMHZ2-10□ Magnetic Switch Mounting Groove Dimensions



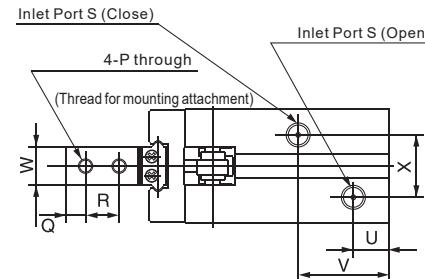
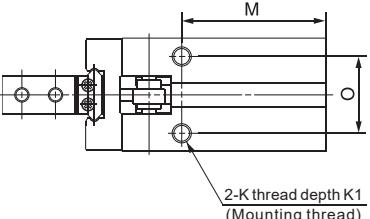
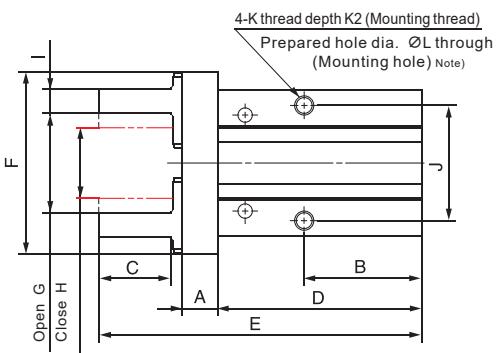
Note) When using Magnetic switches, throughhole mounting is not possible.

GMHZ2-□□ Magnetic Switch Mounting Groove Dimensions



Note) When using Magnetic switches D-Y59, D-Y69, D-Y7, throughhole mounting is not possible.

## Parallel Gripper



\* For single action, the port on one side is a breathing hole.

Bore	A	B	C	D	E	F	G	H	I	J	K	K1	K2	K3	oL	M	N
10	6	23	12	37.8	57	29	15.2 <sup>0.2</sup>	11.2 <sup>0.2</sup>	4 <sup>0.2</sup>	16	M3x0.5	6	5.5	6	2.6	27	Ø11H9 <sup>0.2</sup>
16	7.5	24.5	15	42.5	67.3	38	20.9 <sup>0.2</sup>	14.9 <sup>0.2</sup>	5 <sup>0.2</sup>	24	M4x0.7	4.5	8	8	3.4	30	Ø17H9 <sup>0.2</sup>
20	9.5	29	20	52.8	84.8	50	26.3 <sup>0.2</sup>	16.3 <sup>0.2</sup>	8 <sup>0.2</sup>	30	M5x0.8	8	10	4.3	35	Ø21H9 <sup>0.3</sup>	
25	11	30	25	63.6	102.7	63	33.3 <sup>0.2</sup>	19.3 <sup>0.2</sup>	10 <sup>0.2</sup>	36	M6x1	10	12	12	5.1	36.5	Ø26H9 <sup>0.3.5</sup>
32	12	40(49)	29	67(76)	113(122)	97	48 <sup>0.2</sup>	26 <sup>0.2</sup>	12 <sup>0.2</sup>	46	M6x1	10	13	13	5.1	48(57)	Ø34H9 <sup>0.4</sup>
40	15	49(62)	36	83(96)	139(152)	119	60 <sup>0.2</sup>	30 <sup>0.2</sup>	14 <sup>0.2</sup>	56	M8x1.25	13	16	17	6.6	58(71)	Ø42H9 <sup>0.4</sup>

Bore	O	P	Q	R	S	T	U	V	W	X	Y	Z	Y1	Y2	AA	BB	CC	DD	EE
10	11.4	M2.5x0.45	3	5.7	M3x0.5	23	9	19	5 <sup>1.0</sup>	11	Ø2H9 <sup>0.3</sup>	16.4 <sup>0.05</sup>	5.2 <sup>0.05</sup>	7.6 <sup>0.05</sup>	18	12	-	-	
16	16	M3x0.5	4	7	M5x0.8	30.6	7.5	19	8 <sup>1.0</sup>	13	Ø3H9 <sup>0.3</sup>	23.6 <sup>0.05</sup>	6.5 <sup>0.05</sup>	11 <sup>0.05</sup>	22	15	11.6	2.1	5.8
20	18.6	M4x0.7	5	9	M5x0.8	42	10	23	10 <sup>1.0</sup>	15	Ø4H9 <sup>0.4</sup>	27.6 <sup>0.05</sup>	7.5 <sup>0.05</sup>	16.8 <sup>0.05</sup>	32	18	14	2.1	9
25	22	M5x0.8	6	12	M5x0.8	52	10.7	23.5	12 <sup>1.0</sup>	20	Ø4H9 <sup>0.4</sup>	33.6 <sup>0.05</sup>	10 <sup>1.0</sup>	21.8 <sup>0.05</sup>	40	22	19	3.5	11.5
32	26	M6x1	7	14	M5x0.8	60	11	31(37)	15 <sup>1.0</sup>	24	Ø5H9 <sup>0.5</sup>	40 <sup>0.1</sup>	12 <sup>0.05</sup>	23 <sup>0.05</sup>	46	26	24	3.3	11.5
40	32	M8x1.25	9	17	M5x0.8	72	12	38(45)	18 <sup>1.0</sup>	28	Ø5H9 <sup>0.5</sup>	48 <sup>0.1</sup>	14 <sup>0.05</sup>	29 <sup>0.05</sup>	56	32	29.4	3.7	13

The size of the single action is within ( )

## Parallel Gripper



### Model representation methods

**Standard type**

**G M H Z L 2 - 20 D**

Long Stroke type

Bore

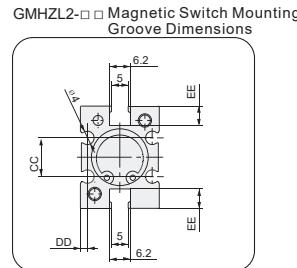
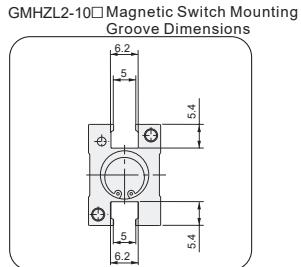
D Double action  
S Single action(Open)

PN	Model	Bore	Pressure Range (Mpa)		Temperature range	Repetition accuracy	Maximum frequency of use (c.p.m.)	Nozzle diameter	Weight	Gripping force (N)			Opening and closing stroke on both sides (mm)
			Single action	Double action						External	External	Internal	
1.Y09405	GMHZL2-10S	10	0.35~0.7	/	-10~60°C	±0.01	120	M3*0.5	63g	7.1	11	17	8
1.Y07974	GMHZL2-10D	10	/	0.2~0.7	-10~60°C	±0.01	120	M3*0.5	59g	7.1	11	17	8
1.Y08175	GMHZL2-16S	16	0.25~0.7	/	-10~60°C	±0.01	120	M5*0.8	139g	27	34	45	12
1.Y08146	GMHZL2-16D	16	/	0.1~0.7	-10~60°C	±0.01	120	M5*0.8	130g	27	34	45	12
1.Y09882	GMHZL2-20S	20	0.25~0.7	/	-10~60°C	±0.01	120	M5*0.8	218g	33	42	66	18
1.Y07975	GMHZL2-20D	20	/	0.1~0.7	-10~60°C	±0.01	120	M5*0.8	211g	33	42	66	18
1.Y09883	GMHZL2-25S	25	0.25~0.7	/	-10~60°C	±0.01	120	M5*0.8	302g	50	65	104	22
1.Y08802	GMHZL2-25D	25	/	0.1~0.7	-10~60°C	±0.01	120	M5*0.8	293g	50	65	104	22

Notes:

1. Air Fluid
2. action mode single-acting double-acting (optional)
3. optional non-contact magnetic switch

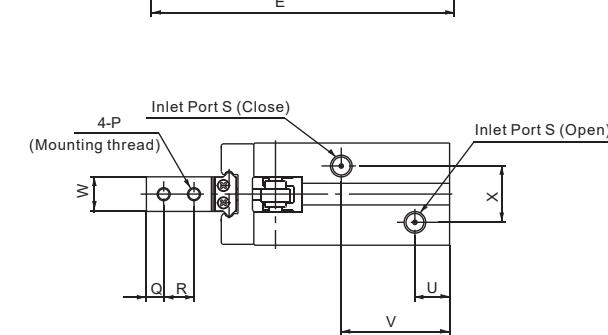
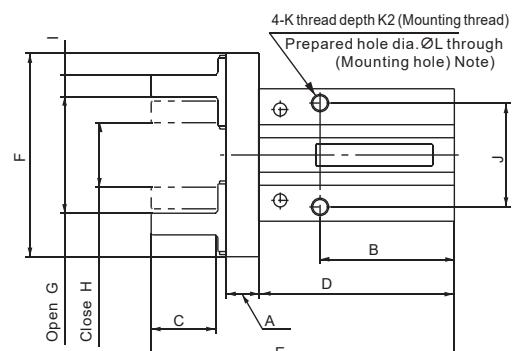
### Dimensions table (mm)



Note) When using Magnetic switches, throughhole mounting is not possible.

Note) When using Magnetic switches D-Y59, D-Y69, D-Y7, throughhole mounting is not possible.

## Parallel Gripper



\* For single action, the port on one side is a breathing hole.

Bore	A	B	C	D	E	F	G	H	I	J	K	K1	K2	K3	oL	M	N
10	6	25(35)	12	37.8(47.8)	57(67)	35	19.2 <sup>0.2</sup>	11.2 <sup>0.2</sup>	4 <sup>0.2</sup>	16	M3x0.5	6	5.5	6	2.6	29(39)	Ø11H9 <sup>0.2</sup>
16	7.5	31(36)	15	45.2(50.2)	70(75)	47	26.9 <sup>0.2</sup>	14.9 <sup>0.2</sup>	5 <sup>0.2</sup>	24	M4x0.7	4.5	8	8	3.4	36(41)	Ø17H9 <sup>0.2</sup>
20	9.5	36(42)	20	58(64)	90(96)	62	34.3 <sup>0.2</sup>	16.3 <sup>0.2</sup>	8 <sup>0.2</sup>	30	M5x0.5	8	10	10	4.3	43(49)	Ø21H9 <sup>0.2</sup>
25	11	40(50)	25	66.9(76.9)	108(116)	75	41.3 <sup>0.2</sup>	19.3 <sup>0.2</sup>	10 <sup>0.2</sup>	36	M6x1	10	12	12	5.1	48(58)	Ø26H9 <sup>0.2</sup>

Bore	O	P	Q	R	S	T	U	V	W	X	Y	Z	Y1	Y2	AA	BB	CC	DD	EE
10	11.4	M2.5x0.45	3	5.7	M3x0.5	23	8	21(31)	5 <sup>1.2</sup>	11	Ø2H9 <sup>0.2</sup>	16.4 <sup>0.2</sup>	5.2 <sup>0.2</sup>	7.6 <sup>0.2</sup>	18	12	-	-	
16	16	M3x0.5	4	7	M5x0.8	30.6	8	25(30)	8 <sup>1.2</sup>	13	Ø2H9 <sup>0.2</sup>	23.6 <sup>0.2</sup>	6.5 <sup>0.2</sup>	11 <sup>0.2</sup>	22	15	11.6	2.1	
20	18.6	M4x0.7	5	9	M5x0.8	42	10	30(36)	10 <sup>1.2</sup>	15	Ø4H9 <sup>0.2</sup>	27.6 <sup>0.2</sup>	7.5 <sup>0.2</sup>	16.8 <sup>0.2</sup>	32	18	14	2.1	
25	22	M5x0.8	6	12	M5x0.8	52	10	33(43)	12 <sup>1.2</sup>	20	Ø4H9 <sup>0.2</sup>	33.6 <sup>0.2</sup>	10 <sup>1.2</sup>	21.8 <sup>0.2</sup>	40	22	19	3.5	

The size of the single action is within (-).

Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

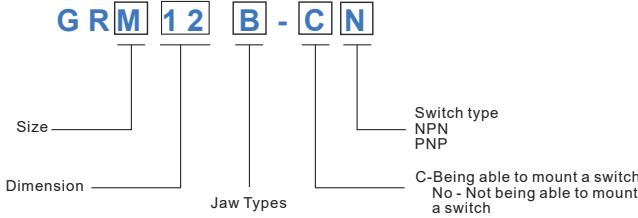
Vacuum Module

Accessory Components

## Sprue Gripper

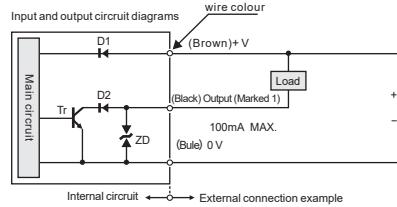
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.

### Model representation methods

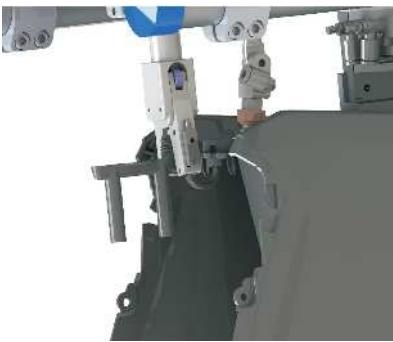
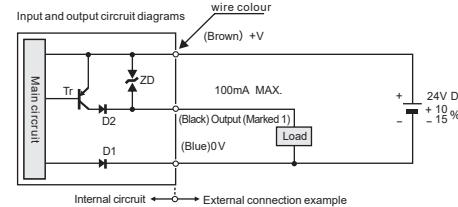


### Switch wiring instructions

#### NPN output type



#### PNP output type



### Accessories selection



- 1.Sensor
- 2.PNP

PN	Model
7.Y00800	PNP
7.Y00801	NPN

Note: The length is 1 meter

## Sprue Gripper

### Series GR-Sprue Gripper (Without Sensor)



### Series GR -Sprue Gripper (With Sensor)



PN	Model	Switch type	Gripping force(F)	Weight
8.Y00214	GRS08	-	5N	18g
8.Y00011	GRS08-CN	NPN	5N	40g
8.Y00012	GRS08-CP	PNP	5N	40g
8.Y00103	GRM12A	-	28N	46g
8.Y00009	GRM12A-CN	NPN	28N	60g
8.Y00010	GRM12A-CP	PNP	28N	60g
8.Y00107	GRM12B	-	28N	46g
8.Y00104	GRM12B-CN	NPN	28N	60g
8.Y00105	GRM12B-CP	PNP	28N	60g
8.Y00108	GRL12A	-	45N	94g
8.Y00001	GRL12A-CN	NPN	45N	100g
8.Y00002	GRL12A-CP	PNP	45N	100g
8.Y00213	GRX20	-	80N	180g
8.Y00013	GRX20-CN	NPN	80N	192g
8.Y00014	GRX20-CP	PNP	80N	192g

## GRS08 Series

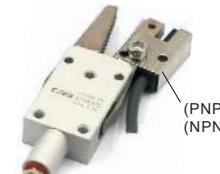
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



GRS08  
Without Sensor

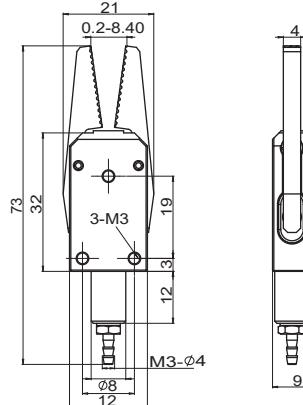


Diamond tooth

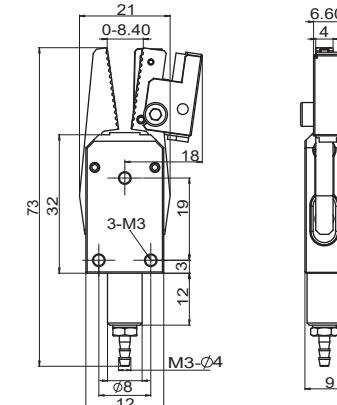


GRS08-CN(CP)  
With Sensor

(PNP)  
(NPN)



Without Sensor



With Sensor



Technical drawing of GRS08 With Sensor

Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

Vacuum Module

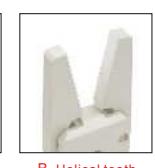
Accessory Components

## GRM12 Series

Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



A Diamond tooth

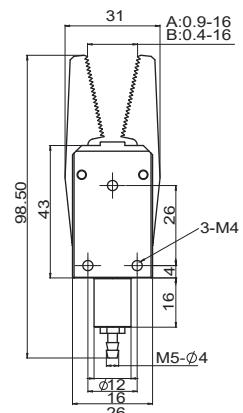


B Helical tooth



GRM12A-CN(CP)  
With Sensor

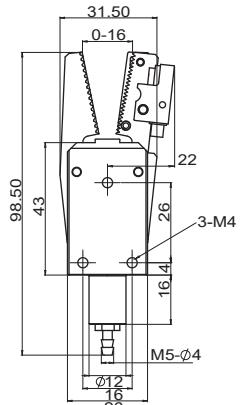
(PNP)  
(NPN)



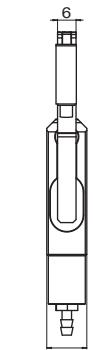
Without Sensor



Technical drawing of GRM12A With Sensor



Without Sensor



Technical drawing of GRM12B With Sensor

Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

Vacuum Module

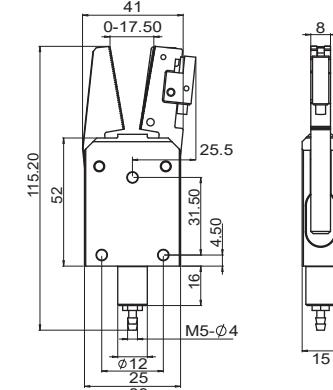
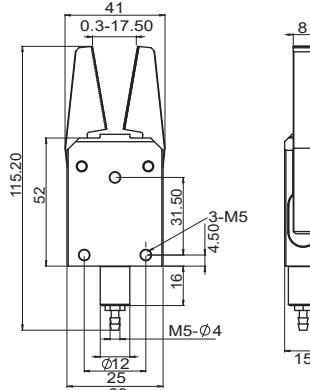
Accessory Components

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00214	GRS08	-	5N	18g
8.Y00111	GRS08-CN	NPN	5N	40g
8.Y00112	GRS08-CP	PNP	5N	40g

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00103	GRM12A	-	28N	46g
8.Y00107	GRM12B	-	28N	46g
8.Y00009	GRM12A-CN	NPN	28N	60g
8.Y00010	GRM12A-CP	PNP	28N	60g
8.Y00104	GRM12B-CN	NPN	28N	60g
8.Y00105	GRM12B-CP	PNP	28N	60g

## GRL12 Series

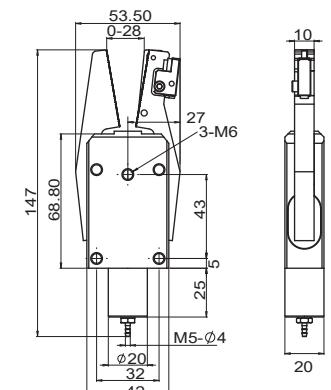
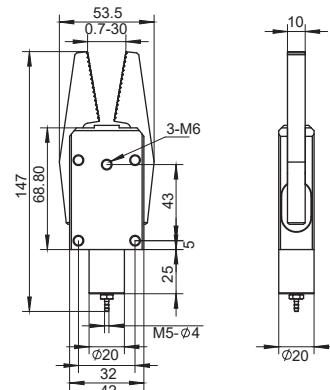
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



PN	Model	Sensor	Gripping force(F)	Weight
8.Y00108	GRL12A	-	45N	94g
8.Y00001	GRL12A-CN	NPN	45N	100g
8.Y00002	GRL12A-CP	PNP	45N	100g

## GRX20 Series

Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.

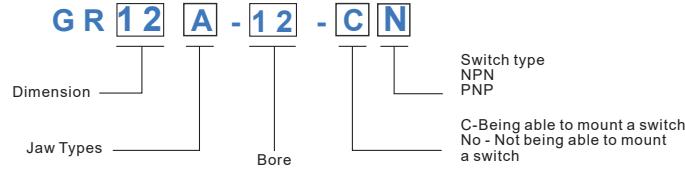


PN	Model	Sensor	Gripping force(F)	Weight
8.Y00213	GRX20	-	80N	180g
8.Y00013	GRX20-CN	NPN	80N	192g
8.Y00014	GRX20-CP	PNP	80N	192g

## Sprue Gripper

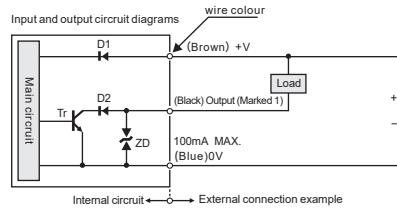
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.

### Model representation methods



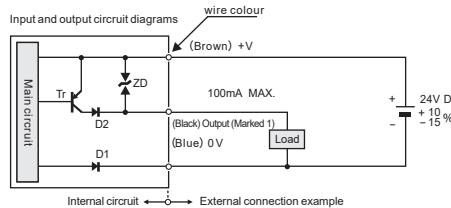
### Switch wiring instructions

#### NPN output type



(Marked 1 )Output is not equipped with short-circuit protection circuit.  
Do not connect directly to power or capacitive loads

#### PNP output type



(Marked 1 )Output is not equipped with short-circuit protection circuit.  
Do not connect directly to power or capacitive loads



### Accessories selection



Sensor  
1.PNP  
2.NPN

PN	Model
1.Y07261	MAP-8S2P1/F(PNP)
1.Y07405	MAP-8S2N1/F(NPN)

Note: The length is 1 meter

## Sprue Gripper



GR05A-10  
Without Sensor

GR10A-12  
GR12A-12  
GR12M-12(steel jaws)  
Without Sensor

GR12B-12  
Without Sensor



GR12L-12  
Without Sensor



GR10A-12-CP  
GR12A-12-CN(CP)  
GR12M-12-CN(CP)(steel jaws)  
Without Sensor



GR12B-12-CN(CP)  
With Sensor

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00348	GR05A-10	-	12N	9.6g
8.Y00268	GR10A-12	-	28N	44g
8.Y00267	GR10A-12-CP	PNP	28N	70g
8.Y00305	GR10A-12-CN	NPN	28N	70g
8.Y00370	GR10D-12	-	28N	42g
8.Y00369	GR10D-12-CP	PNP	28N	61g
8.Y01034	GR10D-12-CN	NPN	28N	61g
8.Y00048	GR12A-12	-	28N	44g
8.Y00050	GR12A-12-CP	PNP	28N	70g
8.Y00091	GR12A-12-CN	NPN	28N	70g
8.Y00245	GR12B-12	-	28N	44g
8.Y00261	GR12B-12-CP	PNP	28N	70g
8.Y00262	GR12B-12-CN	NPN	28N	70g
8.Y00307	GR10L-12	-	28N	50g
8.Y00308	GR12L-12	-	28N	50g
8.Y01053	GR10L-12-CP	PNP	28N	116g
8.Y01054	GR10L-12-CN NEW	NPN	28N	116g
8.Y01020	GR12L-12-CP NEW	PNP	28N	116g
8.Y01021	GR12L-12-CN NEW	NPN	28N	116g
8.Y00419 (steel jaws)	GR12M-12	-	28N	66.2g
8.Y00421 (steel jaws)	GR12M-12-CP	PNP	28N	82.5g
8.Y00420 (steel jaws)	GR12M-12-CN	NPN	28N	82.5g
8.Y01011	GR10N-12	-	28N	42g
8.Y01012	GR12N-12	-	28N	42g
8.Y01018	GR12N-12-CP NEW	PNP	28N	74.3g
8.Y01083	GR12N-12-CN NEW	NPN	28N	74.3g

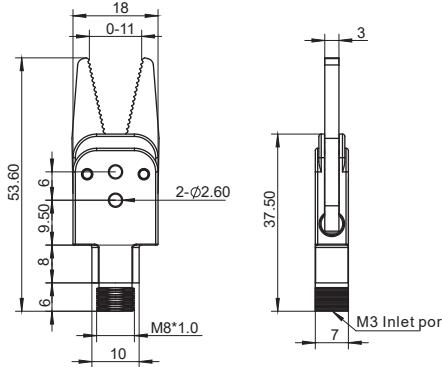
## GR05A Series

Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



GR05A-10  
Without Sensor

Jagged



PN	Model	Sensor	Gripping force(F)	Weight
8.Y00348	GR05A-10	-	12N	9.6g

## GR10A Series

Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



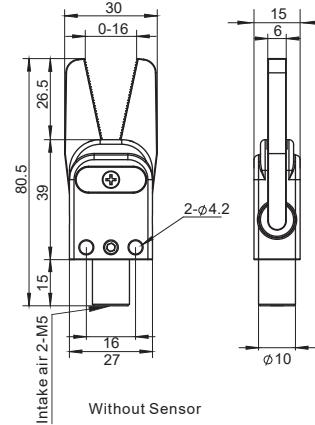
GR10A-12  
Without Sensor



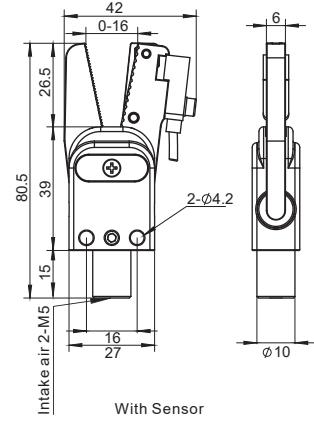
GR10A-12-CN(CP)  
With Sensor



MAP-8S2P1/F(PNP)  
MAP-8S2N1/F(NPN)



Without Sensor

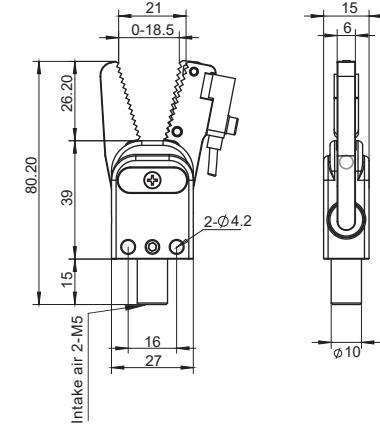
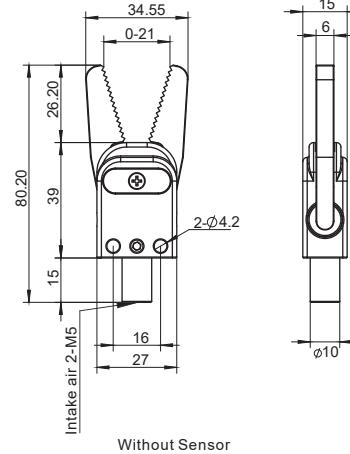


With Sensor

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00268	GR10A-12	-	28N	44g
8.Y00267	GR10A-12-CP	PNP	28N	70g
8.Y00305	GR10A-12-CN	NPN	28N	70g

## GR10D Series

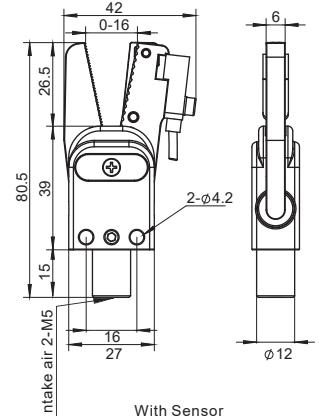
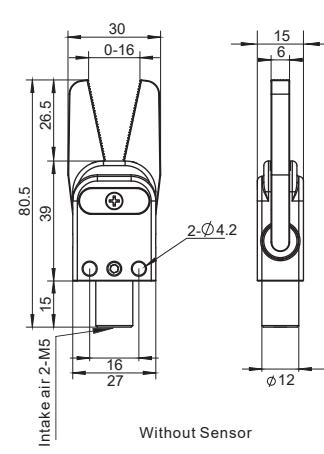
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



PN	Model	Sensor	Gripping force(F)	Weight
8.Y00370	GR10D-12	-	28N	42g
8.Y00369	GR10D-12-CP	PNP	28N	61g
8.Y01034	GR10D-12-CN	NPN	28N	61g

## GR12A Series

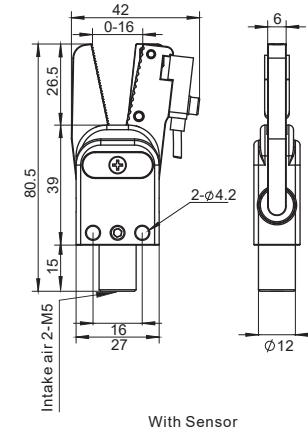
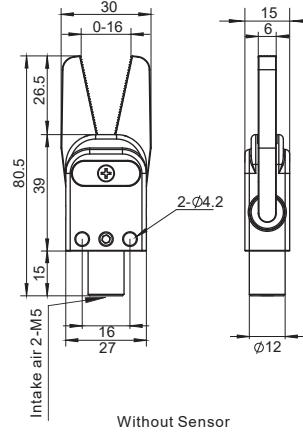
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



PN	Model	Sensor	Gripping force(F)	Weight
8.Y00048	GR12A-12	-	28N	44g
8.Y00050	GR12A-12-CP	PNP	28N	70g
8.Y00091	GR12A-12-CN	NPN	28N	70g

## GR12B Series

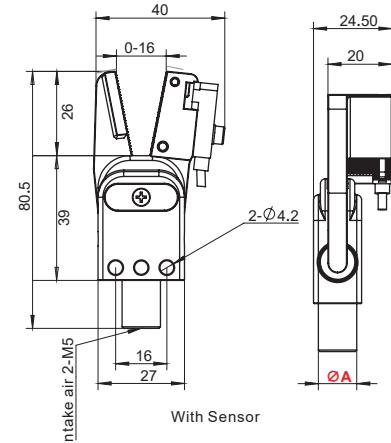
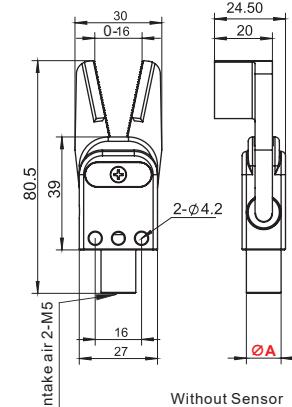
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



PN	Model	Sensor	Gripping force(F)	Weight
8.Y00245	GR12B-12	-	28N	44g
8.Y00261	GR12B-12-CP	PNP	28N	70g
8.Y00262	GR12B-12-CN	NPN	28N	70g

## GR10/12L Series

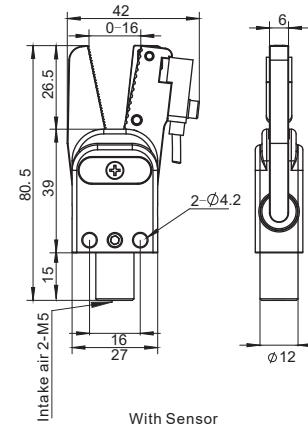
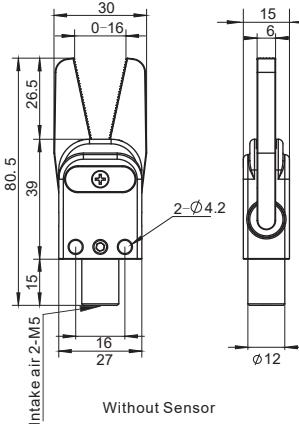
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.  
Wider Jaws, hold more stable and firm.



PN	Model	A	Sensor	Gripping force(F)	Weight
8.Y00307	GR10L-12	Ø10	-	28N	50g
8.Y00308	GR12L-12	Ø12	-	28N	50g
8.Y01053	GR10L-12-CP	Ø10	PNP	28N	116g
8.Y01054	GR10L-12-CN	Ø10	NPN	28N	116g
8.Y01020	GR12L-12-CP	Ø12	PNP	28N	116g
8.Y01021	GR12L-12-CN	Ø12	NPN	28N	116g

## GR12M Series

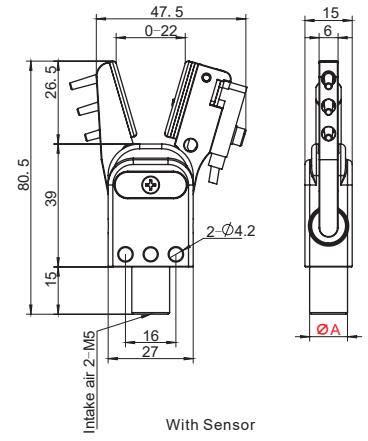
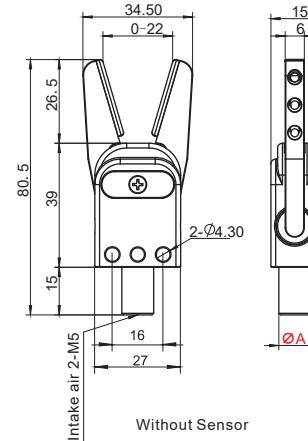
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



PN	Model	Sensor	Gripping force(F)	Weight
8.Y00419	GR12M-12	-	28N	66.2g
8.Y00421	GR12M-12-CP	PNP	28N	82.5g
8.Y00420	GR12M-12-CN	NPN	28N	82.5g

## GR10/12N Series

Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



PN	Model	A	Sensor	Gripping force(F)	Weight
8.Y01011	GR10N-12	Ø10	-	28N	42g
8.Y01012	GR12N-12	Ø12	-	28N	42g
8.Y01018	GR12N-12-CP	Ø12	PNP	28N	74.3g
8.Y01083	GR12N-12-CN	Ø12	NPN	28N	74.3g

## Sprue Gripper

1. Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.
2. Using threaded components or CRG's components when to assemble.
3. GR series of sprue gripper can choose different types of jaws to satisfy the clamping of various sprue gate.



GR20A-20  
Without Sensor

GR20B-20  
Without Sensor

GR20D-20  
Without Sensor

GR20C-20  
Without Sensor



GR20A-20-CN(CP)  
With Sensor

GR20B-20-CN(CP)  
With Sensor

GR20D-20-CN(CP)  
With Sensor

GR20E-20  
Without Sensor



GR20G-20  
Without Sensor

GR20H-20  
Without Sensor

GR20I-20  
Without Sensor

GR20F-20  
Without Sensor



GR20G-20-CN(CP)  
With Sensor

GR20H-20-CN(CP)  
With Sensor

GR20I-20-CN(CP)  
With Sensor

GR20D-20M  
Optional Sensors

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00224	GR20A-20	-	80N	112g
8.Y00226	GR20A-20-CP	PNP	80N	137g
8.Y00051	GR20A-20-CN	NPN	80N	137g
8.Y00234	GR20B-20	-	80N	112g
8.Y00232	GR20B-20-CP	PNP	80N	137g
8.Y00233	GR20B-20-CN	NPN	80N	137g
8.Y00342	GR20C-20	-	80N	140g
8.Y00343	GR20D-20	-	80N	149g
8.Y00442	GR20D-20-CP	PNP	80N	173.1g
8.Y00479	GR20D-20-CN	NPN	80N	173.1g
8.Y00343-D1	GR20D-20-D1	PNP/NPN	80N	205g
8.Y00344	GR20E-20	-	80N	129g

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00345	GR20F-20	-	80N	128g
8.Y00433	GR20G-20	-	80N	131.1g
8.Y00472	GR20G-20-CP	PNP	80N	153.7g
8.Y00473	GR20G-20-CN	NPN	80N	153.7g
8.Y00422	[steel jaws] GR20H-20	-	80N	193.1g
8.Y00422	[steel jaws] GR20H-20-CP	PNP	80N	220.5g
8.Y00423	[steel jaws] GR20H-20-CN	NPN	80N	220.5g
8.Y00450	[steel jaws] GR20I-20	-	80N	191.6g
8.Y00470	[steel jaws] GR20I-20-CP	PNP	80N	219g
8.Y00471	[steel jaws] GR20I-20-CN	NPN	80N	219g
8.Y01099	GR20D-20M	-	80N	163.6g
8.Y01100	GR20D-20M-CP	PNP	80N	170g
8.Y01101	GR20D-20M-CN	NPN	80N	170g

Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

Vacuum Module

Accessory Components

Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

Vacuum Module

Accessory Components

## GR20A Series

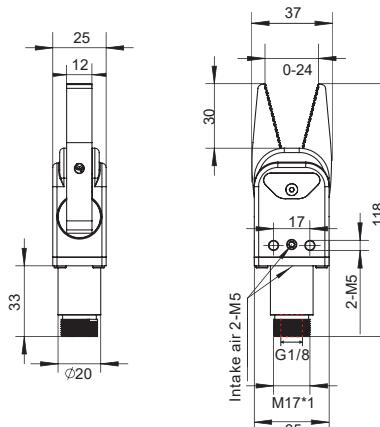
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



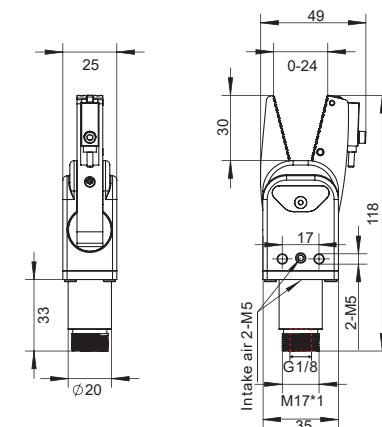
GR20A-20  
Without Sensor



GR20A-20-CN(CP)  
With Sensor



Without Sensor

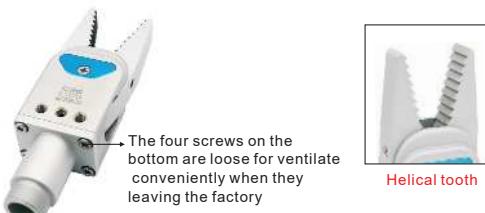


With Sensor

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00224	GR20A-20	-	80N	112g
8.Y00226	GR20A-20-CP	PNP	80N	137g
8.Y00051	GR20A-20-CN	NPN	80N	137g

## GR20B Series

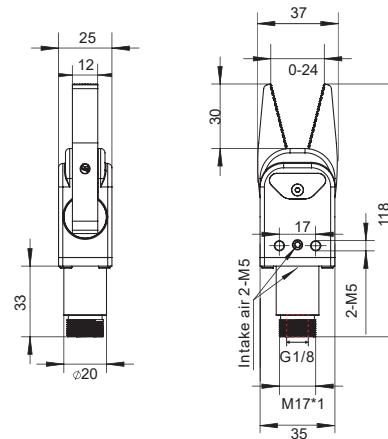
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



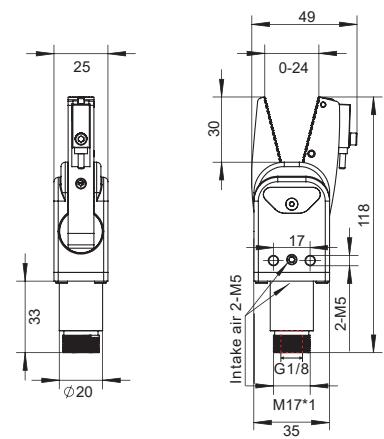
GR20B-20  
Without Sensor



GR20B-20-CN(CP)  
With Sensor



Without Sensor

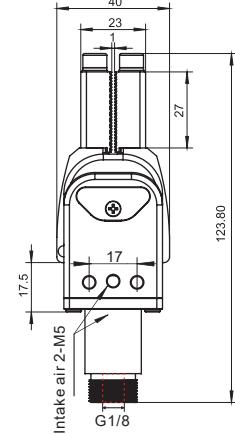
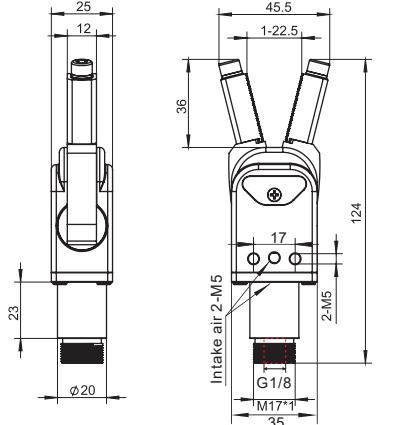


With Sensor

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00234	GR20B-20	-	80N	112g
8.Y00232	GR20B-20-CP	PNP	80N	137g
8.Y00233	GR20B-20-CN	NPN	80N	137g

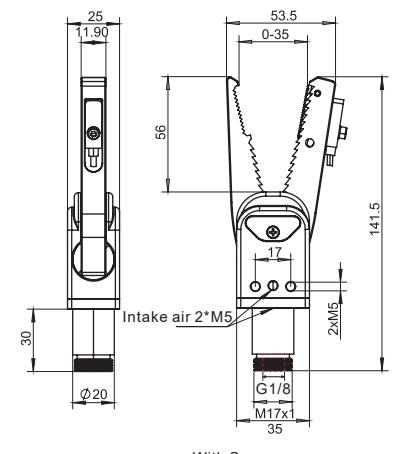
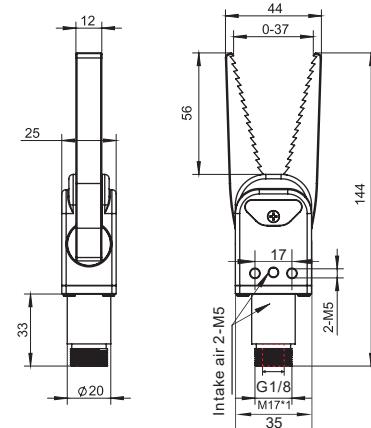
## GR20C Series

Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



## GR20D Series

Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



PN	Model	Sensor	Gripping force(F)	Weight
8.Y00342	GR20C-20	-	80N	140g

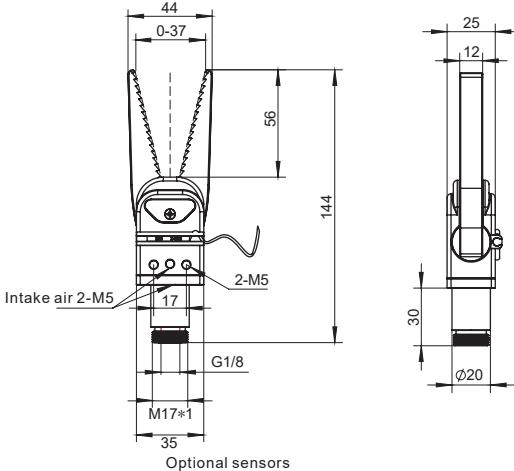
PN	Model	Sensor	Gripping force(F)	Weight
8.Y00343	GR20D-20	-	80N	149g
8.Y00442	GR20D-20-CP	PNP	80N	173.1g
8.Y00479	GR20D-20-CN	NPN	80N	173.1g

## GR20D-20M Series

The position of the sensor can be adjusted to detect whether the clamp is in place when the product is clamped.  
The closed-loop function can be realized in automatic production.



GR20D-20M  
Optional sensors



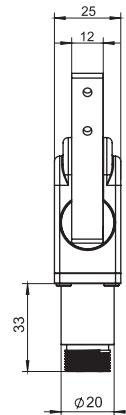
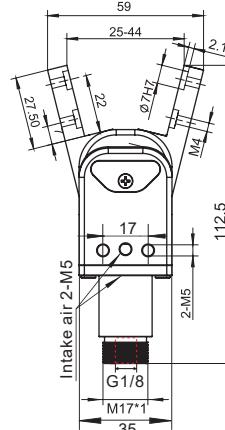
PN	Model	Sensor	Gripping force(F)	Weight
8.Y01099	GR20D-20M	-	80N	163.6g
8.Y01100	GR20D-20M-CP	PNP	80N	170g
8.Y01101	GR20D-20M-CN	NPN	80N	170g

## GR20E Series

Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



GR20E-20  
Without Sensor



With Sensor

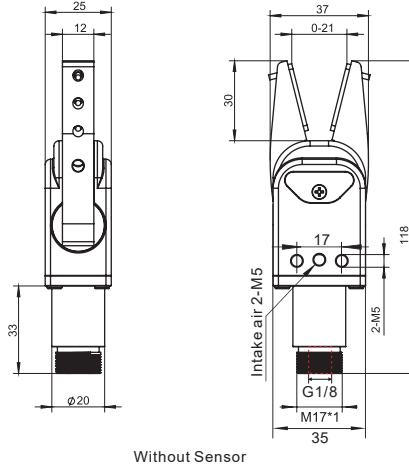
PN	Model	Sensor	Gripping force(F)	Weight
8.Y00344	GR20E-20	-	80N	129g

## GR20F Series

Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



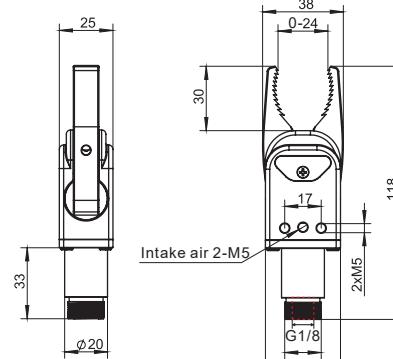
PN	4.Y00513
Model	SIL-1026
Weight	1.7g



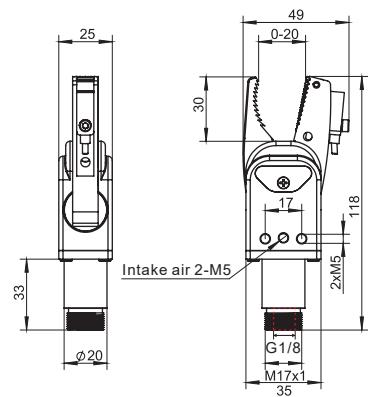
PN	Model	Sensor	Gripping force(F)	Weight
8.Y00345	GR20F-20	-	80N	128g

## GR20G Series

Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



PN	Model	Sensor	Gripping force(F)	Weight
8.Y00433	GR20G-20	-	80N	131.1g
8.Y00472	GR20G-20-CP	PNP	80N	153.7g
8.Y00473	GR20G-20-CN	NPN	80N	153.7g

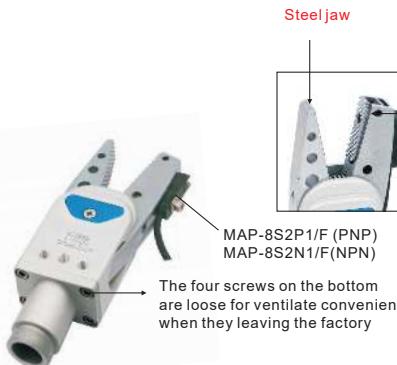
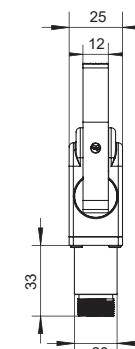


## GR20H Series

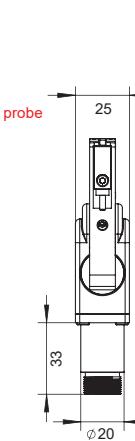
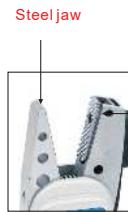
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



GR20H-20  
Without Sensor



GR20H-20-CN(CP)  
With Sensor



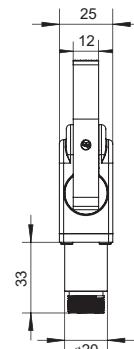
PN	Model	Sensor	Gripping force(F)	Weight
8.Y00422	GR20H-20	-	80N	193.1g
8.Y00424	GR20H-20-CP	PNP	80N	220.5g
8.Y00423	GR20H-20-CN	NPN	80N	220.5g

## GR20I Series

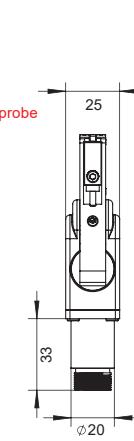
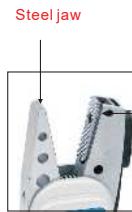
Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.  
Using threaded components or CRG's components when to assemble.



GR20I-20  
Without Sensor



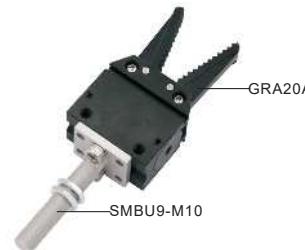
GR20I-20-CN(CP)  
With Sensor



PN	Model	Sensor	Gripping force(F)	Weight
8.Y00450	GR20I-20	-	80N	191.6g
8.Y00470	GR20I-20-CP	PNP	80N	219.1g
8.Y00471	GR20I-20-CN	NPN	80N	219.1g

## Sprue Gripper

1. Double acting or spring open (-NO).
2. Very high gripping force related to the weight and dimensions.
3. Different options for fastening.
4. Optional magnetic sensors.



GRA20A  
Without Sensor



GRA20A-CN(CP)  
With Sensor



GRA20C-CN(CP)  
With Sensor

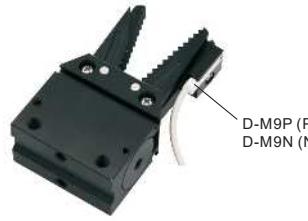
PN	Model	Sensor	Gripping force(F)	Weight
8.Y00391	GRA20A	-	80N	110g
8.Y00392	GRA20A-CP	PNP	80N	115g
8.Y00393	GRA20A-CN	NPN	80N	115g
8.Y00434	GRA20C-CP	PNP	80N	135g
8.Y00435	GRA20C-CN	NPN	80N	135g

## GRA20A Series

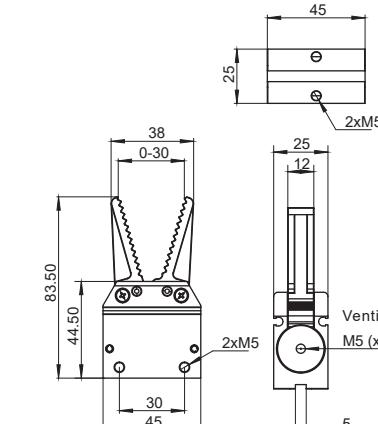
1. Double acting or spring open (-NO).
2. Very high gripping force related to the weight and dimensions.
3. Different options for fastening.
4. Optional magnetic sensors.



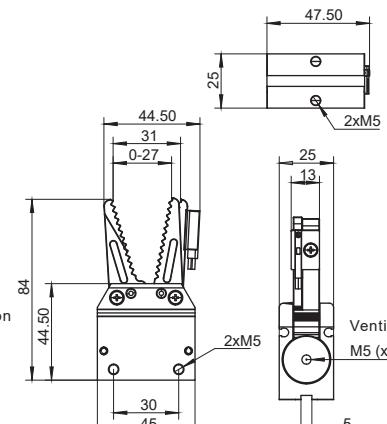
GRA20A  
Without Sensor



GRA20A-CN(CP)  
With Sensor



Without Sensor

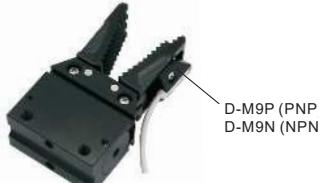


With Sensor

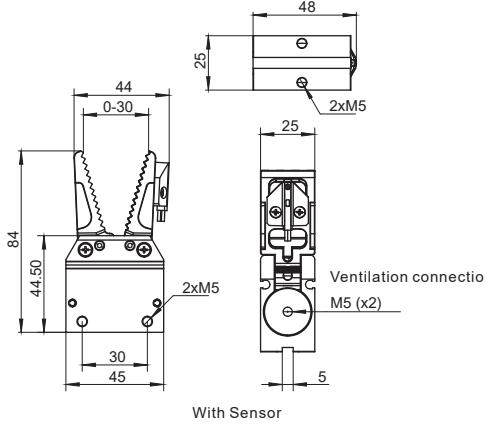
PN	Model	Sensor	Gripping force(F)	Weight
8.Y00391	GRA20A	-	80N	110g
8.Y00392	GRA20A-CP	PNP	80N	115g
8.Y00393	GRA20A-CN	NPN	80N	115g

## GRA20C Series

1. Double acting or spring open (-NO).
2. Very high gripping force related to the weight and dimensions.
3. Different options for fastening.
4. Optional magnetic sensors.



GRA20C-CN(CP)  
With Sensor



With Sensor

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00434	GRA20C-CP	PNP	80N	135g
8.Y00435	GRA20C-CN	NPN	80N	135g

## Sprue Gripper

1. Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.
2. Using threaded components or CRG's components when to assemble.
3. GR series of sprue gripper can choose different types of jaws to satisfy the clamping of various sprue gate.



GRT20A  
Without Sensor

GRT20B  
Without Sensor

GRT20C  
Without Sensor

GRT20E  
Without Sensor



GRT20A-CN(CP)  
With Sensor

GRT20B-CN(CP)  
With Sensor

GRT20D  
Without Sensor

GRT20E-CN(CP)  
With Sensor

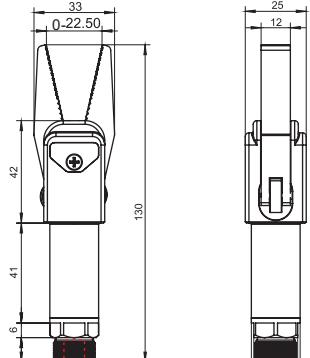
PN	Model	Switch type	Gripping force(F)	Weight
8.Y00257	GRT20A	-	100N	111g
8.Y00258	GRT20A-CN	NPN	100N	130g
8.Y00259	GRT20A-CP	PNP	100N	130g
8.Y00279	GRT20B	-	100N	162.8g
8.Y00281	GRT20B-CN	NPN	100N	158.4g
8.Y00282	GRT20B-CP	PNP	100N	158.4g
8.Y00316	GRT20C	-	100N	144g
8.Y00317	GRT20D	-	100N	160g
8.Y01004	GRT20D-CP	PNP	100N	145g
8.Y00458	GRT20D-CN	NPN	100N	145g
8.Y00318	GRT20E	-	100N	161g
8.Y00339	GRT20E-CN	NPN	100N	165g
8.Y00340	GRT20E-CP	PNP	100N	165g
8.Y01008	GRT20F	-	100N	111g

## GRT20A Series

1. Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.
2. Using threaded components or CRG's components when to assemble.
3. GR series of sprue gripper can choose different types of jaws to satisfy the clamping of various sprue gate.



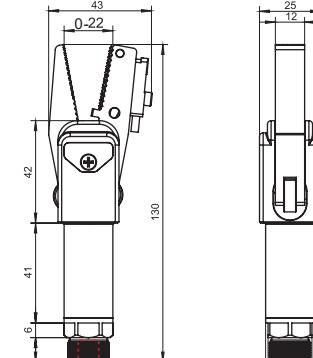
GRT20A  
Without Sensor



Without Sensor



GRT20A-CN(CP)  
With Sensor



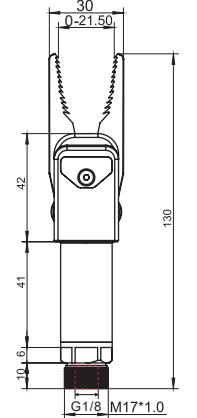
With Sensor

## GRT20B Series

1. Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.
2. Using threaded components or CRG's components when to assemble.
3. GR series of sprue gripper can choose different types of jaws to satisfy the clamping of various sprue gate.



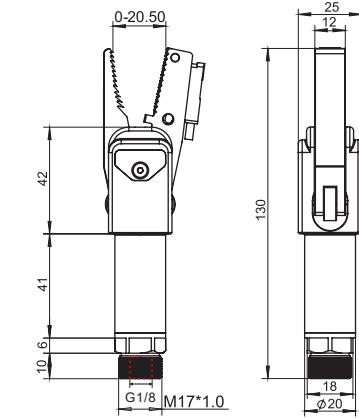
GRT20B  
Without Sensor



Without Sensor



GRT20B-CN(CP)  
With Sensor



With Sensor

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00257	GRT20A	-	100N	111g
8.Y00258	GRT20A-CN	NPN	100N	130g
8.Y00259	GRT20A-CP	PNP	100N	130g

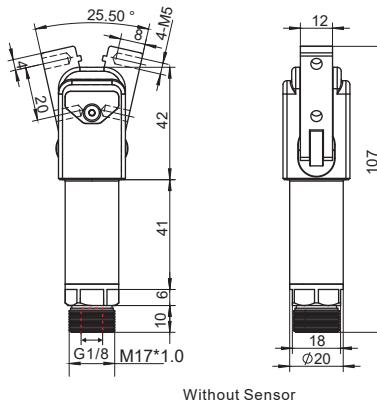
PN	Model	Sensor	Gripping force(F)	Weight
8.Y00279	GRT20B	-	100N	162.8g
8.Y00281	GRT20B-CN	NPN	100N	158.4g
8.Y00282	GRT20B-CP	PNP	100N	158.4g

## GRT20C Series

1. Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.
2. Using threaded components or CRG's components when to assemble.
3. GR series of sprue gripper can choose different types of jaws to satisfy the clamping of various sprue gate.



GRT20C  
Without Sensor



Without Sensor

## GRT20D Series

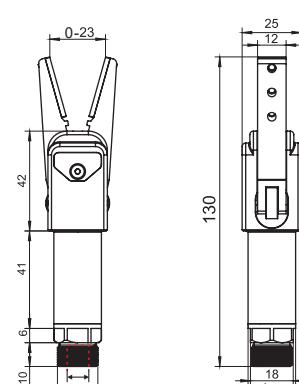
1. Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.
2. Using threaded components or CRG's components when to assemble.
3. GR series of sprue gripper can choose different types of jaws to satisfy the clamping of various sprue gate.



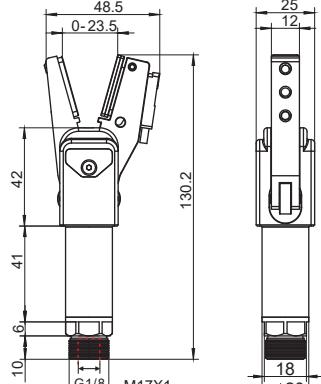
GRT20D  
Without Sensor



GRT20D-CN(CP)  
With Sensor



Without Sensor



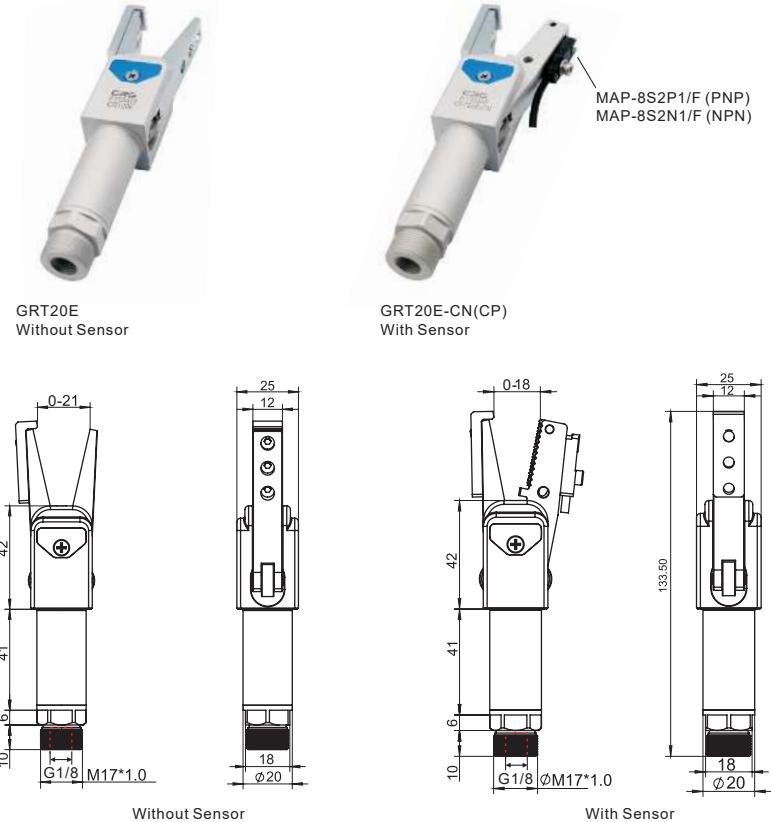
With Sensor

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00316	GRT20C	-	100N	144g

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00317	GRT20D	-	100N	160g
8.Y01004	GRT20D-CP	PNP	100N	145g
8.Y00458	GRT20D-CN	NPN	100N	145g

## GRT20E Series

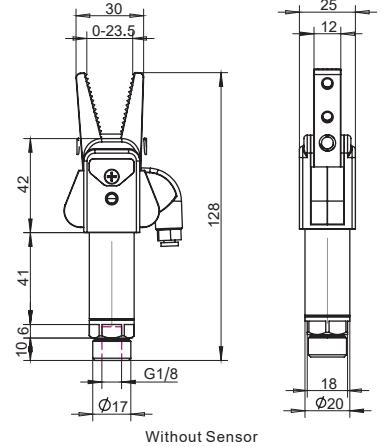
1. Main body being made of high-strength Aluminium , light weight , strong rigidity and long life cycle.
2. Using threaded components or CRG's components when to assemble.
3. GR series of sprue gripper can choose different types of jaws to satisfy the clamping of various sprue gate.



PN	Model	Sensor	Gripping force(F)	Weight
8.Y00318	GRT20E	-	100N	161g
8.Y00339	GRT20E-CN	NPN	100N	165g
8.Y00340	GRT20E-CP	PNP	100N	165g

## GRT20F Series

1. When the Sprue gripper the product, the baffle rotates to block the air passage of the vacuum detector, so that the external detector can detect whether the Sprue gripper the product or not.
2. The cylinder body is provided with a first reset spring, and a third reset spring is arranged on the A face of the stopper, and a third reset spring is arranged between the upper gripper and the lower gripper, so that the piston can quickly reset when the Sprue gripper lowers the clamping object.
3. The air outlet of the vacuum test piece is provided with a cushion, which can enhance the air tightness between the barrier piece and the vacuum test piece, and can avoid the abrasion when the hard material resists.



PN	Model	Sensor	Gripping force(F)	Weight
8.Y01008	GRT20F	-	100N	111g

## Sprue Gripper

Standard jaws with teeth, Double action function.  
Fully compatible with CRG's modular EOAT/gripper system.  
Shaft diameter 25mm, optional 30mm.  
Requirements:  
Working air pressure 6 bar.  
Requires filtered dry air.



GRP32A  
Without Sensor



GRP32B  
Without Sensor



GRP32A-30  
Without Sensor



GRP32B-30  
Without Sensor



GRP32A-CN(CP)  
With Sensor



GRP32B-CN(CP)  
With Sensor



GRP32A-30CN(CP)  
With Sensor



GRP32B-30CN(CP)  
With Sensor

## Sprue Gripper

Standard jaws with teeth, Double action function.  
Fully compatible with CRG's modular EOAT/gripper system.  
Shaft diameter 25mm, optional 30mm.  
Requirements:  
Working air pressure 6 bar.  
Requires filtered dry air.



GRP32C  
Without Sensor



GRP32A-3020  
Without Sensor



GRP32B-3020  
Without Sensor



GRP32C-3020  
Without Sensor



GRP32C-30  
Without Sensor



GRP32A-3020CN(CP)  
With Sensor



GRP32B-3020CN(CP)  
With Sensor

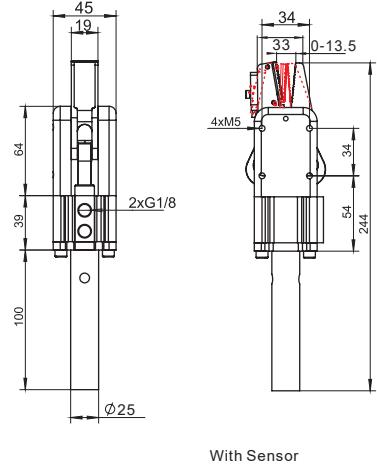
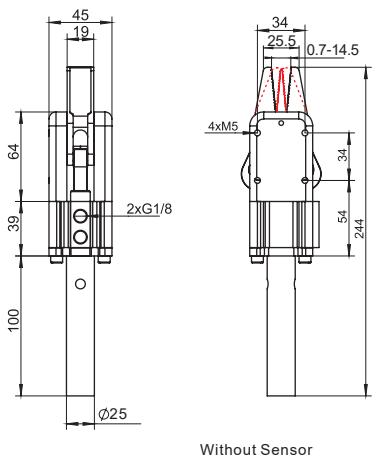
PN	Model	Sensor	Gripping force(F)	Weight
8.Y00278	GRP32A	-	200N	604g
8.Y00462	GRP32A-CP	PNP	200N	658g
8.Y00463	GRP32A-CN	NPN	200N	658g
8.Y00388	GRP32B	-	200N	608g
8.Y00466	GRP32B-CP	PNP	200N	662.4g
8.Y00467	GRP32B-CN	NPN	200N	662.4g
8.Y00315	GRP32A-30	-	200N	1276g
8.Y00464	GRP32A-30CP	PNP	200N	1330g
8.Y00465	GRP32A-30CN	NPN	200N	1330g
8.Y00387	GRP32B-30	-	200N	1282g
8.Y00399	GRP32B-30CP	PNP	200N	1336g
8.Y00411	GRP32B-30CN	NPN	200N	1336g

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00468	GRP32A-3020	-	200N	1600g
8.Y00469	GRP32A-3020CP	PNP	200N	1654g
8.Y00477	GRP32A-3020CN	NPN	200N	1654g
8.Y00478	GRP32B-3020	-	200N	1604g
8.Y00416	GRP32B-3020CP	PNP	200N	1658g
8.Y00417	GRP32B-3020CN	NPN	200N	1658g
8.Y00412	GRP32C	-	200N	614g
8.Y00415	GRP32C-30	-	200N	1286g
8.Y00418	GRP32C-3020	-	200N	1610g

## GRP32A Series

Standard jaws with teeth, Double action function.  
Fully compatible with CRG's modular EOAT/gripper system.  
Shaft diameter 25mm, optional 30mm.

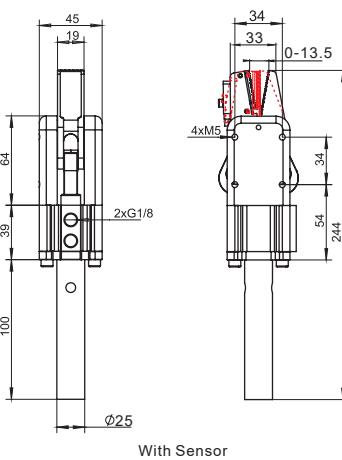
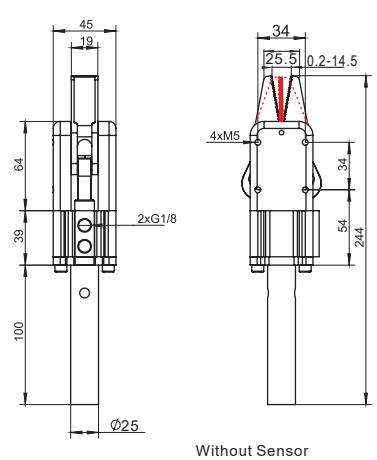
Requirements:  
Working air pressure 6 bar.  
Requires filtered dry air.



## GRP32B Series

Standard jaws with teeth, Double action function.  
Fully compatible with CRG's modular EOAT/gripper system.  
Shaft diameter 25mm, optional 30mm.

Requirements:  
Working air pressure 6 bar.  
Requires filtered dry air.



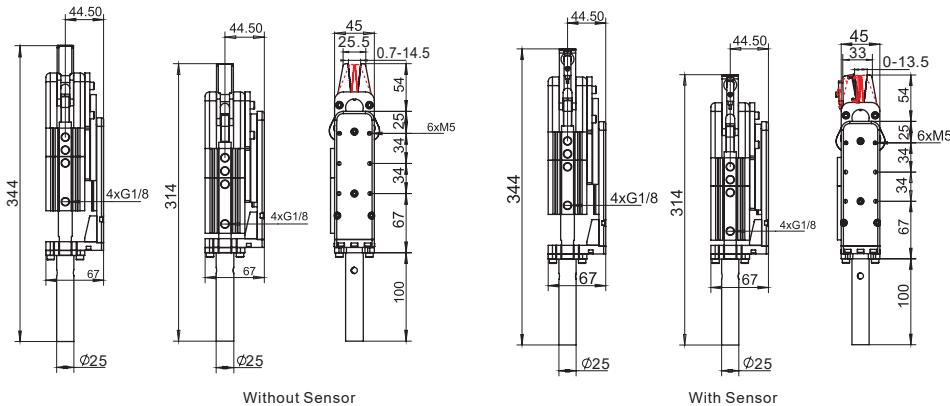
PN	Model	Sensor	Gripping force(F)	Weight
8.Y00278	GRP32A	-	200N	604g
8.Y00462	GRP32A-CP	PNP	200N	658g
8.Y00463	GRP32A-CN	NPN	200N	658g

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00388	GRP32B	-	200N	608g
8.Y00466	GRP32B-CP	PNP	200N	662.4g
8.Y00467	GRP32B-CN	NPN	200N	662.4g

## GRP32A-30 Series

Standard jaws with teeth, Double action function.  
Fully compatible with CRG's modular EOAT/gripper system.  
Shaft diameter 25mm, optional 30mm.

Requirements:  
Working air pressure 6 bar.  
Requires filtered dry air.

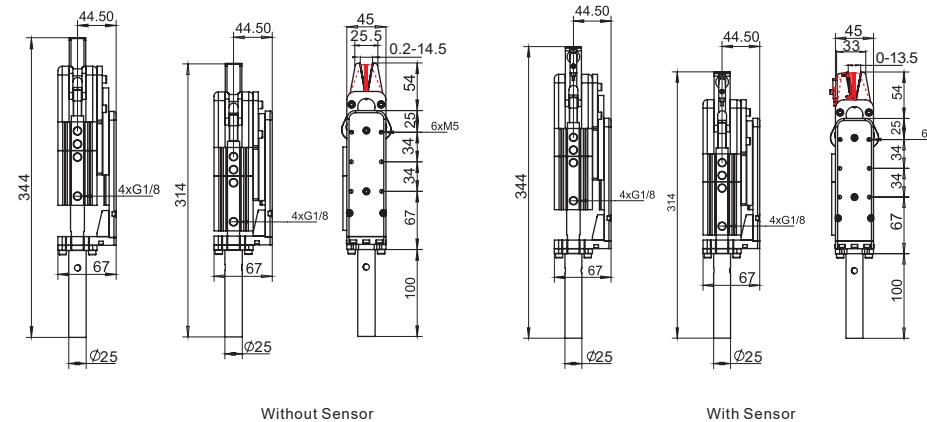


PN	Model	Sensor	Gripping force(F)	Weight
8.Y00315	GRP32A-30	-	200N	1276g
8.Y00464	GRP32A-30CP	PNP	200N	1330g
8.Y00465	GRP32A-30CN	NPN	200N	1330g

## GRP32B-30 Series

Standard jaws with teeth, Double action function.  
Fully compatible with CRG's modular EOAT/gripper system.  
Shaft diameter 25mm, optional 30mm.

Requirements:  
Working air pressure 6 bar.  
Requires filtered dry air.



PN	Model	Sensor	Gripping force(F)	Weight
8.Y00387	GRP32B-30	-	200N	1282g
8.Y00399	GRP32B-30CP	PNP	200N	1336g
8.Y00411	GRP32B-30CN	NPN	200N	1336g

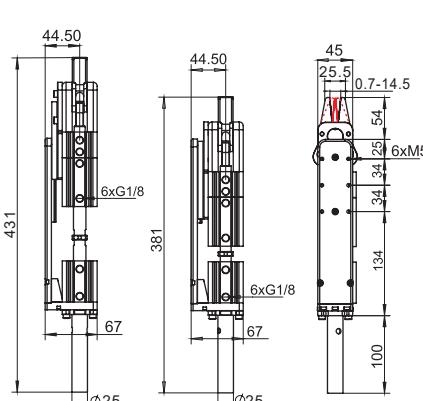
## GRP32A-3020 Series

Standard jaws with teeth, Double action function.  
Fully compatible with CRG's modular EOAT/gripper system.  
Shaft diameter 25mm, optional 30mm.

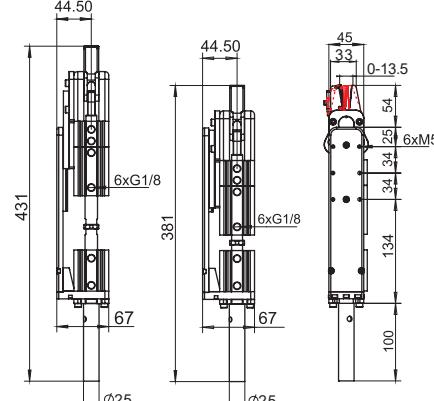
Requirements:  
Working air pressure 6 bar.  
Requires filtered dry air.



GRP32A-3020  
Without Sensor



GRP32A-3020CN(CP)  
With Sensor



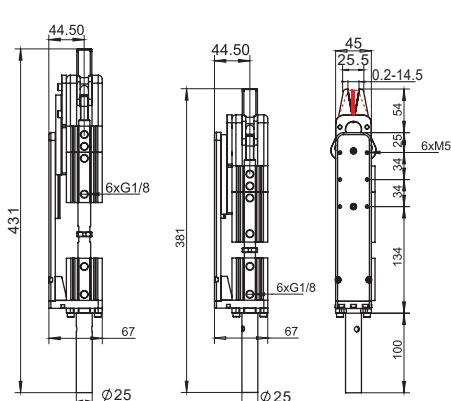
## GRP32B-3020 Series

Standard jaws with teeth, Double action function.  
Fully compatible with CRG's modular EOAT/gripper system.  
Shaft diameter 25mm, optional 30mm.

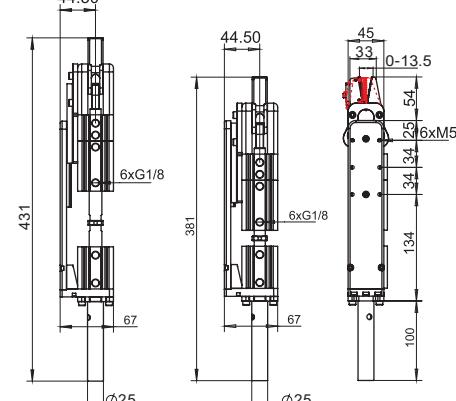
Requirements:  
Working air pressure 6 bar.  
Requires filtered dry air.



GRP32B-3020  
Without Sensor



GRP32B-3020CN(CP)  
With Sensor



PN	Model	Sensor	Gripping force(F)	Weight
8.Y00468	GRP32A-3020	-	200N	1600g
8.Y00469	GRP32A-3020CP	PNP	200N	1654g
8.Y00477	GRP32A-3020CN	NPN	200N	1654g

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00478	GRP32B-3020	-	200N	1604g
8.Y00416	GRP32B-3020CP	PNP	200N	1658g
8.Y00417	GRP32B-3020CN	NPN	200N	1658g

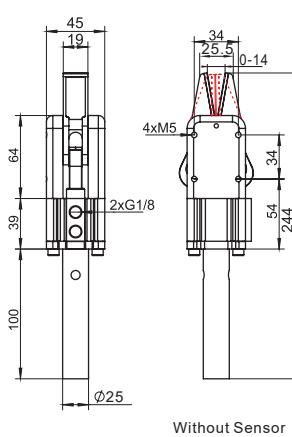
## GRP32C Series

Standard jaws with teeth, Double action function.  
Fully compatible with CRG's modular EOAT/gripper system.  
Shaft diameter 25mm, optional 30mm.

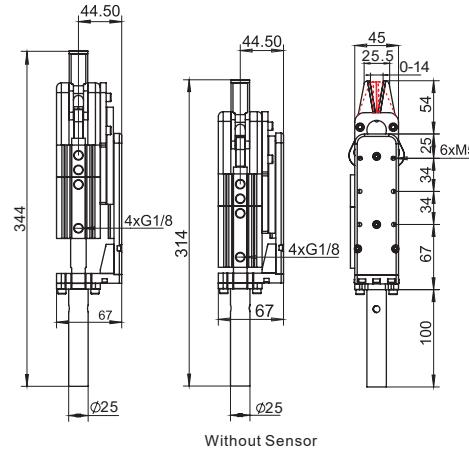
Requirements:  
Working air pressure 6 bar.  
Requires filtered dry air.



GRP32C  
Without Sensor



GRP32C-30  
Without Sensor



Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

Vacuum Module

Accessory Components

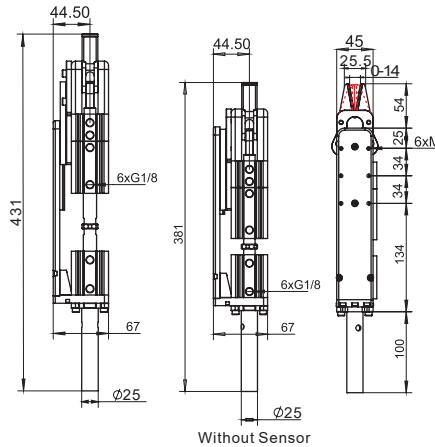
## GRP32C-3020 Series

Standard jaws with teeth, Double action function.  
Fully compatible with CRG's modular EOAT/gripper system.  
Shaft diameter 25mm, optional 30mm.

Requirements:  
Working air pressure 6 bar.  
Requires filtered dry air.



GRP32C-3020  
Without Sensor



Profile' SUS Tube

Stents Module

Quick Changer

Grip Module

Air Nipper

Vacuum Module

Accessory Components

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00412	GRP32C	-	200N	614g
8.Y00415	GRP32C-30	-	200N	1286g

PN	Model	Sensor	Gripping force(F)	Weight
8.Y00418	GRP32C-3020	-	200N	1610g

## Rochu Gripper Introduction

Flexible soft grippers uses the principle of bionics to imitate the action of Octopus tentacle wrapping the captured object, so as to grasp the object in a wrapping way.

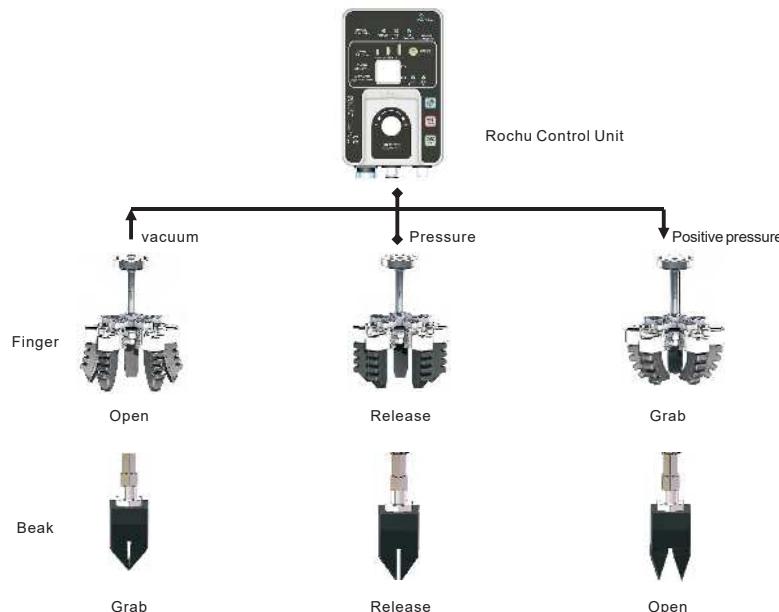
Traditional fixture often can't provide a successful grasping scheme because of the limitations of object shape, material, grasping requirements and so on. Flexible soft grippers, made of flexible materials, will not damage the object to be caught. At the same time, due to its centimeter level adaptive ability, it has high versatility. One claw is omnipotent, suitable for different shapes of objects, and users do not need to replace the fixture frequently. Flexible soft grippers fills the gap of the End-Of-Arm-Tooling, and greatly expands the application of industrial robot.

## Working Principle

Flexible soft grippers adopt pneumatic drive technology, through positive and negative pressure transform to achieve fingers opening and closing movement. Then realize flexible gripping or outrigger action. The gripper grab strength is adjusted by air pressure. Then achieve flexible gripping of different objects while avoiding damage objects.



The working pressure must be kept within a safe range, overload may cause irreversible damage of the finger. It is recommended to use our "Rochu control unit" to ensure the life time and stability of the soft finger and beak. Please refer to the product page or packaging mark for the air pressure of the product.



## Application

The grasping action of flexible fingers is inspired by the tentacles of octopus, which can wrap the captured object in a soft way, without damaging the object or leaving scratches on the surface of the object. And widely used in auto parts, 3C electronics, food, medical, clothing, daily chemical and other industries. The flexible gripper can be used in assembly, sorting, handling and other industrial occasions, and can also be used in new retail industries such as vending machines. It has the advantages of high safety, good versatility, simple and convenient installation, and makes up for the vacancy that the mechanical clamping claw and vacuum cup can not be applied in some occasions.



### Food

Food safe materials. FDA and EC-1935 certification. Used for pick and place of fruits, dough, candies, pastry and vegetables.



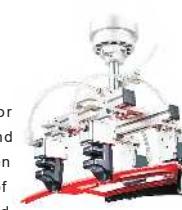
### 3C

It is used for high-precision plug and pull of small electronic parts. Assembling, sorting, testing and packaging of ceramic and plastic parts in mobile phone, PCBs, silicon wafers, optic glasses.



### Clothing fabric

It's suitable for layer grabbing or multi-layer grabbing of knitted and woven fabrics at the same time. When layer grabbing, only the top layer of stacked materials can be grabbed, and it can also be used for stacking and handling of stacked pieces.



### Auto mobile

Used for sorting, transporting, loading and unloading of automobile lamps, metal special-shaped parts and appearance parts, especially suitable for small batch and multi batch flexible production.



### Smart picking

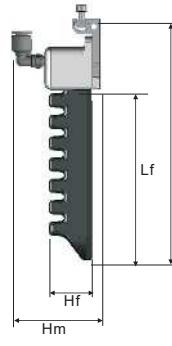
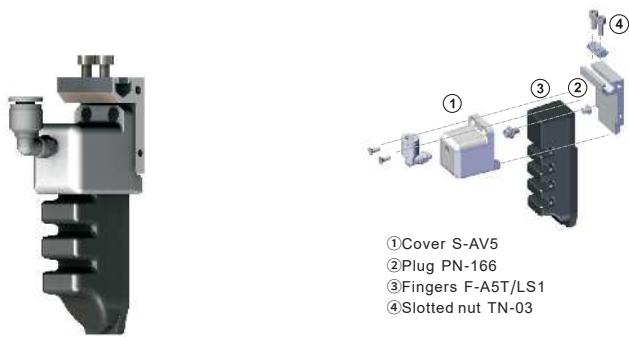
Smart picking based on artificial intelligence technology. It can be used for sorting and logistics packaging under disorderly stacking and complex scenes.



### Medical supplies

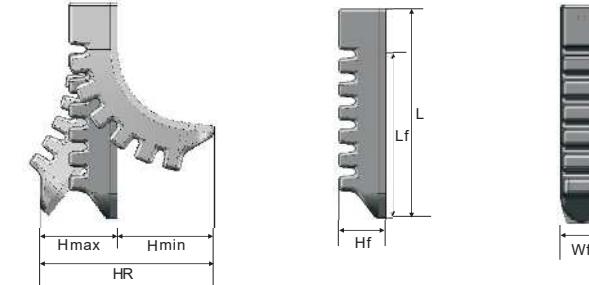
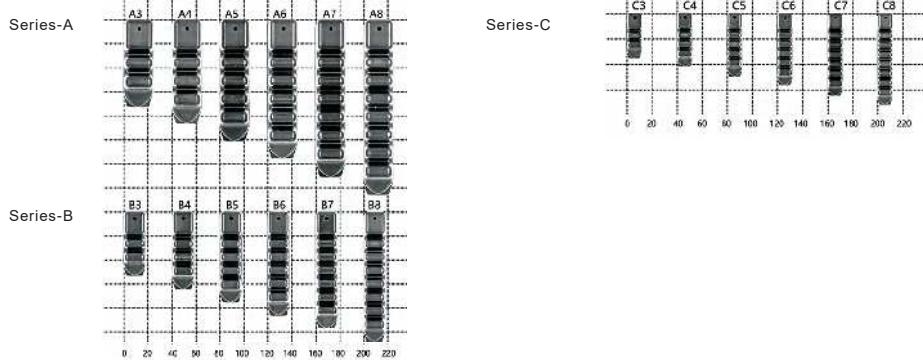
It is used for grasping medical consumables such as infusion tube, test tube and ampoule bottle, as well as bottled and bagged reagents, including the production and disinfection of medical devices.

## Series-GFM-V5 Finger Module



Series	PN	Model	HR [mm]	Negative pressure stroke* Hmax [mm]		Positive pressure stroke** Hmin [mm]	Module height Hm [mm]	Height Hf [mm]	Module length Lm [mm]	Length Lf [mm]	Module width Wm [mm]	Width Wf [mm]	Self-respect [g]	Safe working air pressure [Kpa]	
				Conventional type	Enhanced									Conventional type	Enhanced
Paragraph A	4.Y00500	GFM-A3V5	16.5	8	7	8.5	58	24	88	41	120	300	76	120	300
	4.Y00501	GFM-A4V5	27	10	12	17			102	55			83		
	4.Y00502	GFM-A5V5	43.5	19	16	24.5			116	69			90		
	4.Y10951	GFM-A6V5	72	33	22	39			130	83			97		
	4.Y10952	GFM-A7V5	90	39	27	51			144	97			104		
	4.Y10953	GFM-A8V5	109	45	32	64			158	111			111		
Paragraph B	4.Y00503	GFM-B3V5	19	10	6	9	51	21	71	31	120	260	44	120	260
	4.Y00504	GFM-B4V5	29	13	10	16			82	41.5			48		
	4.Y00505	GFM-B5V5	40	16	14	24			92	52			52		
	4.Y10954	GFM-B6V5	53	23	17	30			103	62.5			56		
	4.Y10955	GFM-B7V5	75	30	21	45			113	73			60		
	4.Y10956	GFM-B8V5	98	37	25	61			124	83.5			64		
Paragraph C	4.Y00506	GFM-C3V5	10.5	5	1	5.5	44	14	53	21	120	220	28	120	220
	4.Y00507	GFM-C4V5	20	9	3	11			60	28			28		
	4.Y00508	GFM-C5V5	27	12	8	15			67	35			29		
	4.Y10957	GFM-C6V5	42	20	10	22			74	42			30		
	4.Y10958	GFM-C7V5	63	29	13	34			81	49			31		
	4.Y10959	GFM-C8V5	80	38	16	42			88	56			32		

## Flexible Finger



Profile' SUS Tube      Stents Module      Quick Changer      Grip Module      Air Nipper      Vacuum Module      Accessory Components

## Roro Beak Suit

### GBS-4B-S01 4 pieces Beak Suit



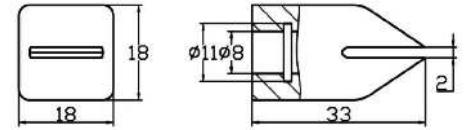
PN	Model	Maximum Load	Maximum Working Frequency	Precision Range
4.Y00509	GBS-2B-S01	5 g	200 times/min	0.1 mm
4.Y00510	GBS-3B-S01	5 g	200 times/min	0.1 mm
4.Y00511	GBS-4B-S01	5 g	200 times/min	0.1 mm

## Roro Beak

### Roro Beak B-2B



PN	1.Y08430
Model	B-2B

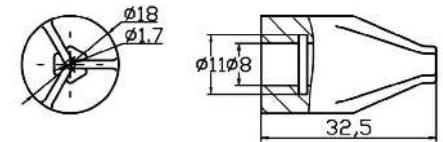


2 pieces Roro Beak Gripping Range: 1-5mm, Application: fibrous, striped small objects

### Roro Beak B-3B



PN	1.Y08431
Model	B-3B

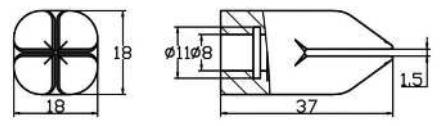


3 pieces Roro Beak Gripping Range: 7-12mm, Application: gripping small rings by external bracing

### Roro Beak B-4B



PN	1.Y08432
Model	B-4B



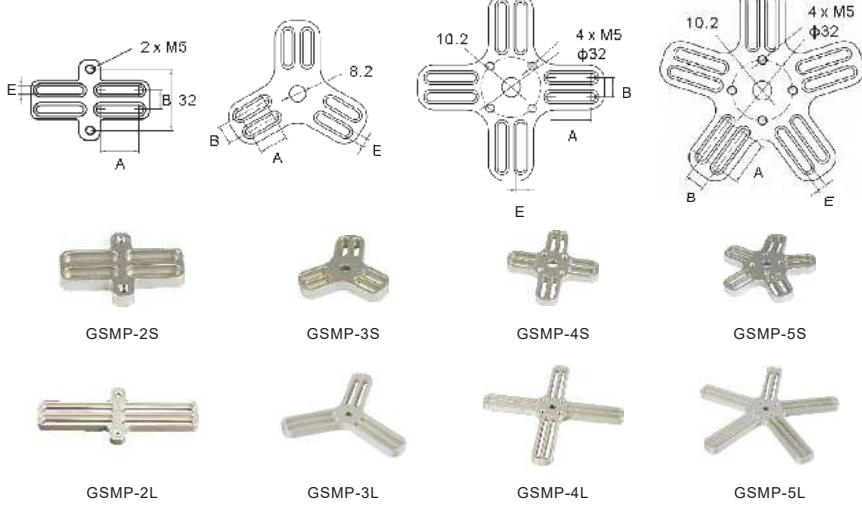
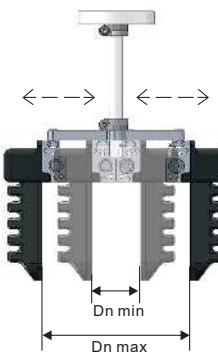
4 pieces Roro Beak Gripping Range: 1-5mm, Application: spherical, irregular small objects, the best universality

## Slide Mounting Platte

### GSMP- Multidirection

#### Features

- Different styles according to shape and slot length
- Can be used for assembly between finger module [FM] and flange connection module [FCM]
- The installation angle and position of finger module [FM] can be adjusted freely



Series	PN	Model	Slot length A [mm]	Slot spacing B [mm]	Slot width E [mm]	Thickness [mm]	Normal pressure fingertip distance Dn [mm] Dnmin-Dnmax		Self-respect [g]
							V2,V4 Finger module	V3,V5 Finger module	
<b>Two-way</b>	7.Y01028	GSMP-2S	20	10	4.2	8	40~69	10~37	18.9
	7.Y01029	GSMP-2L	45	10	4.2	8	40~119	10~87	25.4
<b>Three-way</b>	7.Y01030	GSMP-3S	15	10	4.2	10	58~82	28~50	42.4
	7.Y01031	GSMP-3L	50	10	42	10	58~152	28~120	73.9
<b>Four-way</b>	7.Y01032	GSMP-4S	22	10	4.2	10	72~104	41~72	52.3
	7.Y01033	GSMP-4L	67	10	4.2	10	72~194	41~162	86.2
<b>Five-way</b>	7.Y01034	GSMP-5S	23	10	4.2	10	91~112	53~80	94.8
	7.Y01035	GSMP-5L	78	10	4.2	10	91~222	53~109	179.7

## iPCU 2 Integrated Passive Control Unit

- Compact special controller for flexible soft grippers . Small size, light weight, easy installation.
- With three adjustable output pressure range, it fully supports the drive from soft beak to enhanced finger.
- Manual knob pressure regulation.
- The integrated panel integrates digital display and operation button.
- With manual (button) and automatic (I / O level signal) two control modes, equipped with a variety of mechanical arm, PLC terminal.
- Equipped with mounting block and industrial rail slot, a variety of installation methods.
- IP54 electrical protection grade, waterproof and dustproof, suitable for all kinds of bad working conditions, with intelligent alarm function, safe and stable, no need to worry about misoperation, the product has passed the EU CE safety certification.

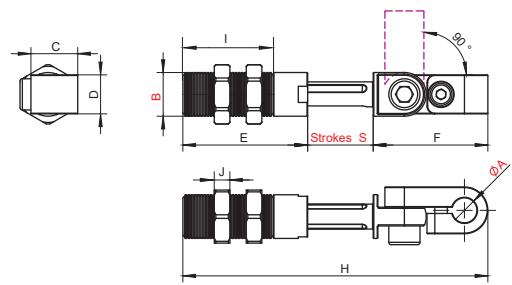


### Work Parameter

Parameter	Range	Parameter	Range
Rated Voltage	24 VDC ± 10%	Fuselage shell	ABS
Rated power	12 W	Size	207x132x141 mm
Input Air Source	0.45~1.00 Mpa, Traffic>200 L/min	Net weight	2.0 kg
Output Air Pressure	-90~60kPa (Low)	Life span	5000 A million times
	-90~120kPa (Mid-range)	Control mode	a. Manual button
	-90~300kPa (Upscale)		b.I/O,Level signal
Protection Grade	Ip54	Work mode	Continuous signal drive

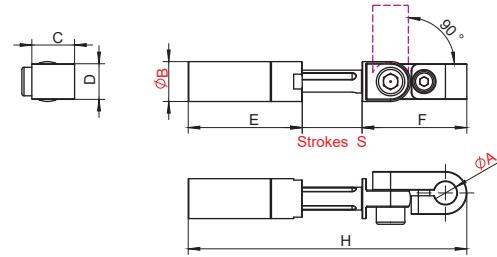
Model	PN	Manual voltage regulation	Electronic voltage regulator	Wireless remote control	Wireless attitude feedback	Speed adjustment	Safety air pressure	Positive pressure flow [L/min]	Negative pressure flow [L/min]
Standard Model	iPCU 2-SMN	●					Adjustable	200	40

## Buffer Support



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	H(mm)	I(mm)	J(mm)	S(mm)	Weight
8.Y00242	GSRT1421-08	8	M14	15	12.5	40	36.75	97.75	29	2.7	21	43g
8.Y00332	GSRT2026-10	10	M20	20	15	50	45.5	121.5	39	3.9	26	92g
8.Y00244	GSRT2026-12	12	M20	20	15	50	45.5	121.5	39	3.9	26	91g
8.Y00333	GSRT2051-10	10	M20	20	15	84	45.5	180.5	39	3.9	51	129g
8.Y00334	GSRT2051-12	12	M20	20	15	84	45.5	180.5	39	3.9	51	128g

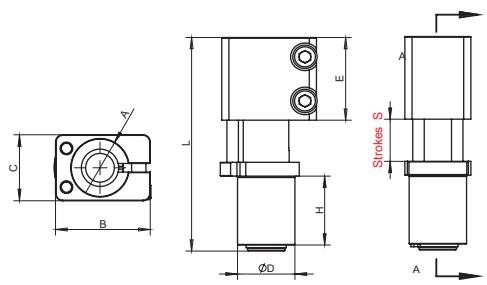
Dimensions (mm)



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	H(mm)	I(mm)	J(mm)	S(mm)	Weight
8.Y00241	GSR1421-08	8	14	15	12.5	40	36.75	97.75	21	2.7	21	36g
8.Y00373	GSR1436-10	10	14	20	15	60	45.5	139	36.5	2.7	54g	
8.Y00329	GSR2026-10	10	20	20	15	50	45.5	121.5	26	2.7	74g	
8.Y00243	GSR2026-12	12	20	20	15	50	45.5	121.5	26	2.7	73g	
8.Y00330	GSR2051-10	10	20	20	15	84	45.5	180.5	51	2.7	51	111g
8.Y00331	GSR2051-12	12	20	20	15	84	45.5	180.5	51	2.7	51	110g

Dimensions (mm)

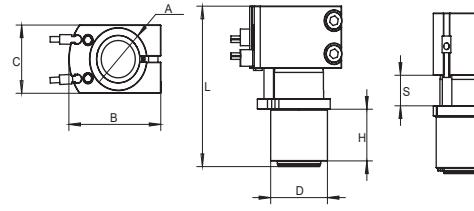
## Buffer Support



Without Sensor

PN	Model	A	B	C	D	E	F	G	H	I	K	Strokes S	Weight
8.Y00238	GSP20-14	14	31	20	20	30	10	13	25	77.5	28	15	57g
8.Y00239	GSP20-20	20	33	23	20	30	10	13	25	77.5	28	15	65g
8.Y01032	GSP30-30	30	43	33	30	30	18	22	25	77.5	28	15	108g

Dimensions (mm)



Sensor optional

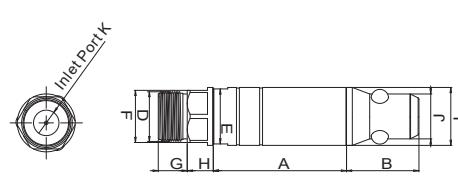
1. The position of the sensor can be adjusted to detect whether the buffer is in place or not.
2. The closed-loop function can be realized in automatic production.

PN	Model	A	B	C	D	E	F	G	H	I	K	S	Weight
8.Y01079	GSP20-20C	20	38.5	23	20	28	Ø10	Ø12.5	25	77.5	15	80g	
8.Y01081	GSP30-30C	30	48.6	33	30	30	Ø18	Ø22	25	77.5	15	103g	

Dimensions (mm)

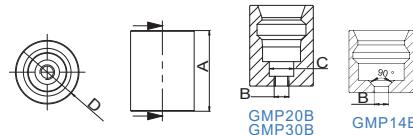
Product colour is based on the actual product

## Mould Positioner



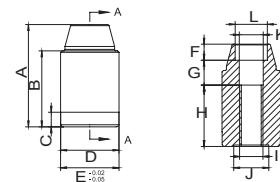
PN	Model	A	B	D	E	F	G	H	I	J	K	Maximum locking force	Weight
8.Y00408	GMP14A	38	14	M12*1	-	12	5	4	Ø14	Ø11	M5	90N	62g
8.Y00088	GMP20A	46	25	M17*1	19	18	10	9	Ø20	Ø15.5	G1/8	190N	78g
8.Y00089	GMP30A	75	38	M27*1	28	27	11	10	Ø30	Ø25.5	G1/8	280N	303g

Dimensions (mm)



PN	Model	A	B	C	D	Repetition accuracy	Weight
7.Y00968	GMP14B	15	M4(orM3)	-	15.5h7	±0.015	46g
7.Y00726	GMP20B	33	M6(orM5)	10	26h7	±0.015	87g
7.Y00789	GMP30B	43.5	M8(orM6)	11	40h7	±0.015	264g

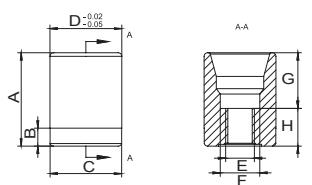
Dimensions (mm)



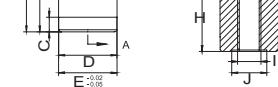
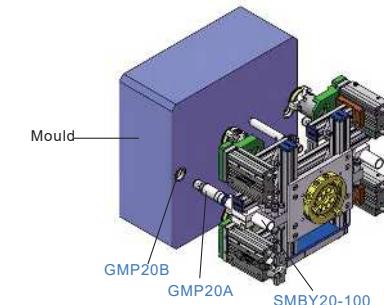
PN	Model	A	B	C	D	E	F	G	H	I	J	K	L	Weight
7.Y00894	GLU20A	35	26	5	Ø19.92	Ø20	5.50	8.50	21	M8	Ø12	Ø8.20	Ø11	61g

Dimensions (mm)

## Mould Positioner



PN	Model	A	B	C	D	E	F	G	H	Weight
7.Y00895	GLU20B	26	5	Ø19.92	Ø20	M8	Ø11	15.50	10.50	42g



# Pneumatic Needle Gripper(Series GN)

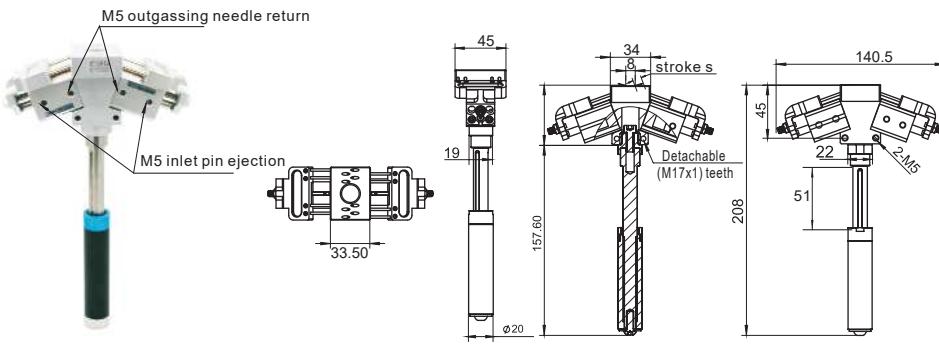
Being used for embedding and taking out nonwoven fabric, net cloth and sponge. The length of the steel needle can be not only adjustable, but also customized according to the requirements of the customer.

## Technical Parameters

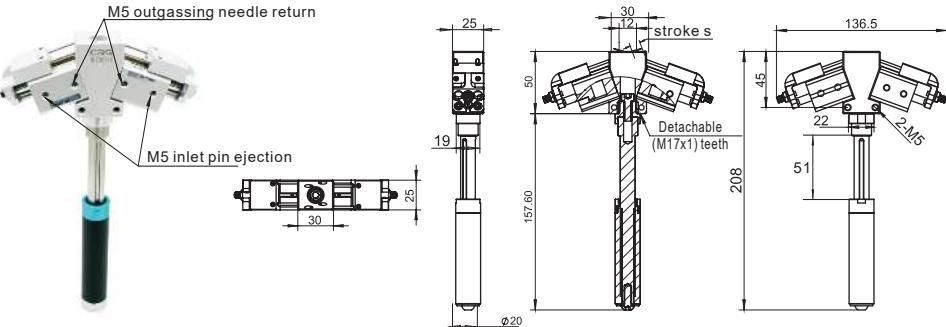
Pressure range	Temperature range	Opening total gripping force at 6 bar	Needle stroke s	Cycle air consumption
3 ~ 8 bar	-10° ~ 70 °C.	90 N	0 ~ 10 mm	3.5 cm <sup>3</sup>



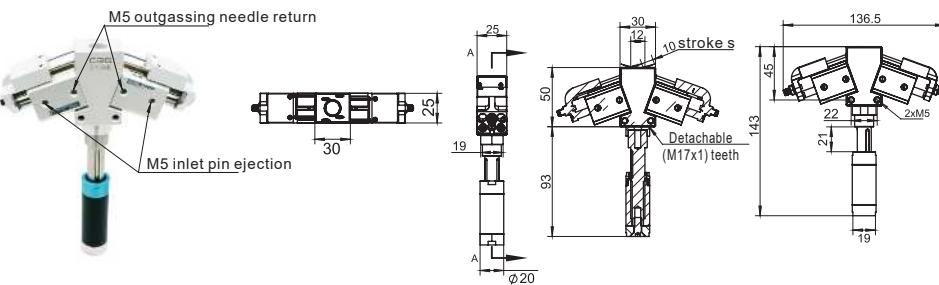
**GN2010-8S51  
8 Pins**



**GN2010-S51  
4 Pins**



**GN2010-S21  
4 Pins**

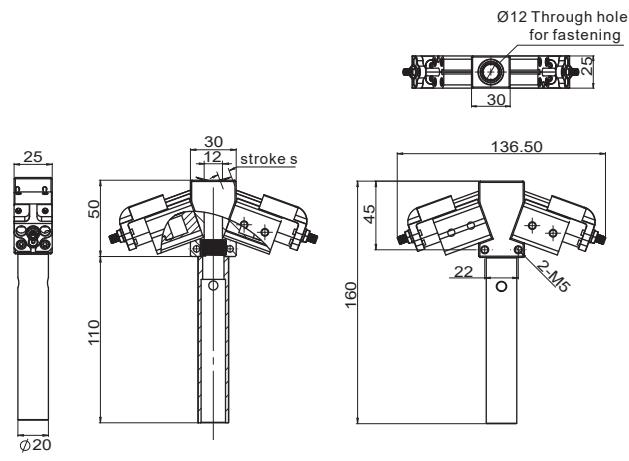


PN	8.Y00341	8.Y00440	8.Y00385
Model	GN2010-S51	GN2010-S21	GN2010-8S51
Weight	240g	220g	480g

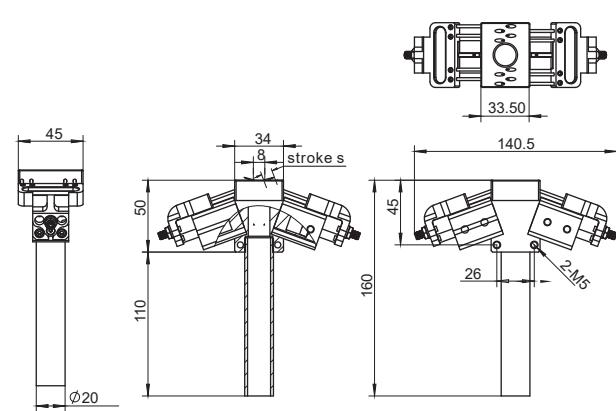
## Pneumatic Needle Gripper(Series GN)

Being used for embedding and taking out nonwoven fabric, net cloth and sponge. The length of the steel needle can be not only adjustable, but also customized according to the requirements of the customer.

**GN2010  
4 Pins**



**GN2010-8  
8 Pins**



PN	8.Y00025	8.Y00347
Model	GN2010	GN2010-8
Weight	274g	317g

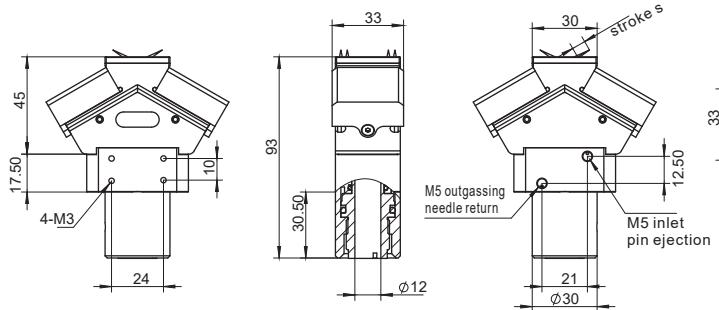
## Pneumatic Needle Gripper(Series GN)

Small needle insertion depth is shallow  
Can quickly release, transport thin breathable workpiece,  
Can adjust the needle stroke,  
Processing difficult to vacuum adsorption of materials,  
such as composite textiles, wool, filters, woven glass or carbon fiber,  
woven aramid, foam, etc.

**GN3003-4  
4 Pins**



Copper material is more wear-resistant,  
to prevent needle movement caused by wear.



PN	8.Y01005
Model	GN3003-4
Weight	188g

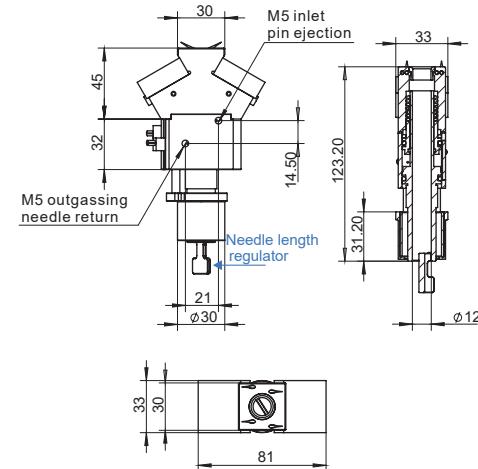
## Pneumatic Needle Gripper(Series GN)

Small needle insertion depth is shallow  
 Can quickly release, transport thin breathable workpiece  
 Can adjust the needle stroke  
 Processing difficult to vacuum adsorption of materials such as composite textiles, wool, filters, woven glass or carbon fiber woven aramid, foam, etc.  
 The position of the sensor can be adjusted to detect whether the buffer is in place or not.  
 The closed-loop function can be realized in automatic production.

**GN3003-4-15**  
4 Pins



PN	8.Y01082
Model	GN3003-4-15
Weight	259g



### Technical Parameters

Spring force	Fixed locking force	Needle stroke s	Buffer trip
18.7N	8.2N.m	0 ~ 10 mm	0~15mm

## Pneumatic Needle Gripper(Series GN)

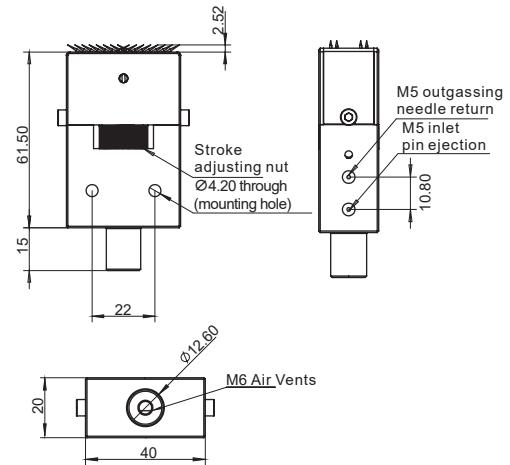
Small needle insertion depth is shallow  
 Can quickly release, transport thin breathable workpiece  
 Can adjust the needle stroke  
 Processing difficult to vacuum adsorption of materials, such as composite textiles, wool, filters, woven glass or carbon fiber, woven aramid, foam, etc.

**GN2002-32**  
32 Pins



The Needles can be changed row by row

PN	8.Y01035
Model	GN2002-32
Weight	110g



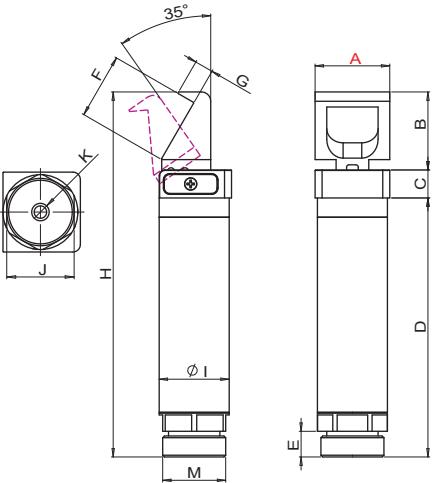
### Technical Parameters

Number of steel needles	Needle diameter	Working pressure	Operating temperature	stroke
32	0.7mm	3~6Bar	5-60°C	2mm

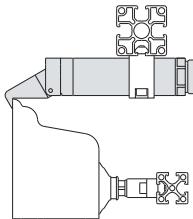
## One Finger Angular Pneumatic Grippers (Series GFA)

For product with small surface position that are unfavourable for absorption and clamping.  
The embedded fixture is matched with the mould locator, so it can locate with higher precision,  
Reduce the precision requirement of manipulator in automation project.  
Single action, built-in Magnetic Loop.

**GFA...-35**



**Product Samples**



**Technical Parameters**

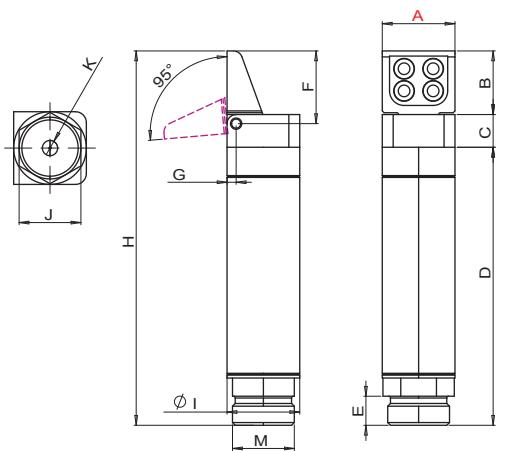
PN	Model	Pressure range	Temperature range	Stroke	Piston bore	Closing torque at 6 bar	Cycle air consumption	Built-in magnetic ring
8.Y00117	GFA14-35				Ø10 mm	26 Ncm	0.4 cm <sup>3</sup>	Yes
8.Y00118	GFA20-35	2.5 ~ 8 bar	-10 ~ 70 °C	35°	Ø16 mm	100 Ncm	1.24 cm <sup>3</sup>	Yes
8.Y00119	GFA30-35				Ø25 mm	430 Ncm	4.56 cm <sup>3</sup>	Yes

PN	Model	Weight	A	B	C	D	E	F	G	H	I	J	K	M
8.Y00117	GFA14-35	25g	14	14	10.5	49.5	5.5	13.5	4.5	74	Ø14	12	M5	M12X1
8.Y00118	GFA20-35	65g	20	20.5	9	76.5	8	20.2	6	106	Ø20	17	M5	M17X1
8.Y00119	GFA30-35	206g	30	30	12	111	11	30.5	8	153	Ø30	27	G1/8	M27X1

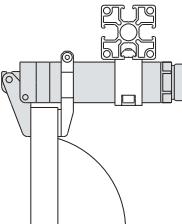
## One Finger Angular Pneumatic Grippers (Series GFR)

For product with small surface position that are unfavourable for absorption and clamping.  
The embedded fixture is matched with the mould locator, so it can locate with higher precision,  
Reduce the precision requirement of manipulator in automation project.  
Single action, built-in Magnetic Loop.

**GFR...-95**



**Product Samples**



**Technical Parameters**

PN	Model	Pressure range	Temperature range	Stroke	Piston bore	Closing torque at 6 bar	Cycle air consumption	Built-in magnetic ring
8.Y00042	GFR14-95				Ø10 mm	19 Ncm	1 cm <sup>3</sup>	Yes
8.Y00311	GFR20-95E	2.5 ~ 8 bar	-10 ~ 70 °C	95°	Ø16 mm	70 Ncm	3.52 cm <sup>3</sup>	Yes
8.Y00095	GFR30-95				Ø25 mm	300 Ncm	12.9 cm <sup>3</sup>	Yes

PN	Model	Weight	A	B	C	D	E	F	G	H	I	J	K	M
8.Y00042	GFR14-95	25g	14	12	10.5	49.5	5.5	14	2	72	Ø14	12	M5	M12X1
8.Y00311	GFR20-95E	60g	20	17.5	9	76.5	8	20	2.5	103	Ø20	17	M5	M17X1
8.Y00095	GFR30-95	193g	30	25	12	111	11	29	4	148	Ø30	27	G1/8	M27X1

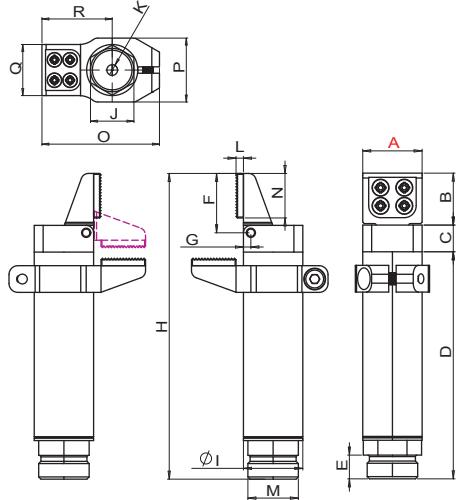
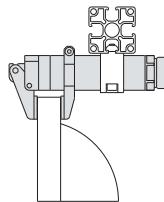
## One Finger Angular Pneumatic Grippers (Series GFR)

For product with small surface position that are unfavourable for absorption and clamping.  
The embedded fixture is matched with the mould locator, so it can locate with higher precision,  
Reduce the precision requirement of manipulator in automation project.  
Single action, built-in Magnetic Loop.

**GFR...-95G**



**Product Samples**



**Technical Parameters**

PN	Model	Pressure range	Temperature range	Stroke	Piston bore	Closing torque at 6 bar	Cycle air consumption	Built-in magnetic ring
8.Y00084	GFR14-95G				Ø10 mm	19 Ncm	1 cm <sup>3</sup>	Yes
8.Y00312	GFR20-95EG	2.5 ~ 8 bar	-10 ~ 70 °C	95°	Ø16 mm	70 Ncm	3.52 cm <sup>3</sup>	Yes
8.Y00096	GFR30-95G				Ø25 mm	300 Ncm	12.9 cm <sup>3</sup>	Yes

PN	Model	Weight	A	B	C	D	E	F	G	H	I	J	K	M	N	O	P	Q	R
8.Y00084	GFR14-95G	36g	14	12	10.5	49.5	5.5	14	2	72	Ø14	12	M5	M12×1	11	32	19	14	19
8.Y00312	GFR20-95EG	87g	20	17.5	9	76.5	8	20	2.5	103	Ø20	17	M5	M17×1	15	46	25	20	27.5
8.Y00096	GFR30-95G	300g	30	25	12	111	11	29	4	148	Ø30	27	G1/8	M27×1	20	63	37	30	40

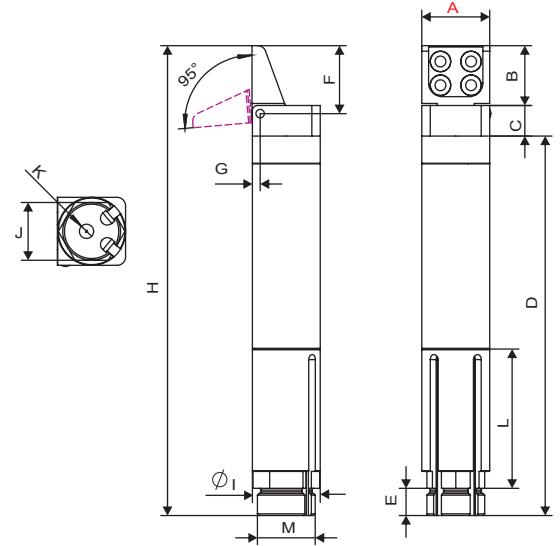
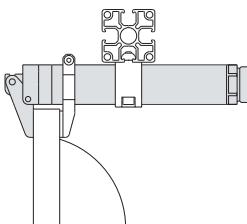
## One Finger Angular Pneumatic Grippers (Series GFR)

For product with small surface position that are unfavourable for absorption and clamping.  
The embedded fixture is matched with the mould locator, so it can locate with higher precision,  
Reduce the precision requirement of manipulator in automation project.  
Single action, built-in Magnetic Loop.

**GFR...-95S**



**Product Samples**



**Technical Parameters**

PN	Model	Pressure range	Temperature range	Stroke	Piston bore	Closing torque at 6 bar	Cycle air consumption	Built-in magnetic ring
8.Y00335	GFR20-95S	2.5 ~ 8 bar	-10 ~ 70 °C	95°	Ø16 mm	70 Ncm	3.52 cm <sup>3</sup>	Yes

PN	Model	Weight	A	B	C	D	E	F	G	H	I	J	K	L	M
8.Y00335	GFR20-95S	89g	20	17.5	9	111.5	8	20	2.3	138	Ø20	17	M5	41	M17×1

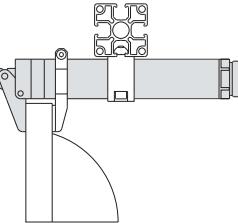
## One Finger Angular Pneumatic Grippers (Series GFR)

For product with small surface position that are unfavourable for absorption and clamping. The embedded fixture is matched with the mould locator, so it can locate with higher precision, Reduce the precision requirement of manipulator in automation project. Single action, built-in Magnetic Loop.

**GFR...-95SG**



**Product Samples**



**Technical Parameters**

PN	Model	Pressure range	Temperature range	Stroke	Piston bore	Closing torque at 6 bar	Cycle air consumption	Built-in magnetic ring
8.Y00336	GFR20-95SG	2.5 ~ 8 bar	-10 ~ 70 °C	95°	Ø16 mm	70 Ncm	3.52 cm³	Yes

PN	Model	Weight	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	T
8.Y00336	GFR20-95SG	104.8g	20	17.5	9	111.5	8	20	2.3	138	Ø20	17	M5	41	M17×1	15	46	25	20	27.5	2.5

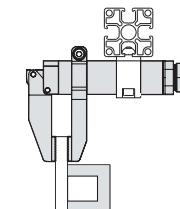
## One Finger Angular Pneumatic Grippers (Series GFR)

For product with small surface position that are unfavourable for absorption and clamping. The embedded fixture is matched with the mould locator, so it can locate with higher precision, Reduce the precision requirement of manipulator in automation project. Single action, built-in Magnetic Loop.

**GFR...-95L**



**Product Samples**



**Technical Parameters**

PN	Model	Pressure range	Temperature range	Stroke	Piston bore	Closing torque at 6 bar	Cycle air consumption	Built-in magnetic ring
8.Y00309	GFR20-95L	2.5 ~ 8 bar	-10 ~ 70 °C	95°	Ø16 mm	70 Ncm	3.52 cm³	Yes

PN	Model	Weight	A	B	C	D	E	F	G	H	I	J	K	M
8.Y00309	GFR20-95L	81.4g	20	40	9	76.3	8	42.5	2.5	125.5	Ø20	17	M5	M17×1

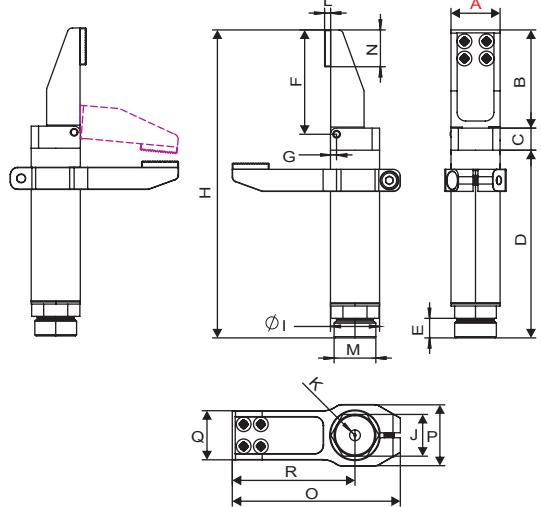
## One Finger Angular Pneumatic Grippers (Series GFR)

For product with small surface position that are unfavourable for absorption and clamping.  
The embedded fixture is matched with the mould locator, so it can locate with higher precision,  
Reduce the precision requirement of manipulator in automation project.  
Single action, built-in Magnetic Loop.

### GFR...-95LG



**Product Samples**



### Technical Parameters

PN	Model	Pressure range	Temperature range	Stroke	Piston bore	Closing torque at 6 bar	Cycle air consumption	Built-in magnetic ring
8.Y00310	GFR20-95LG	2.5 ~ 8 bar	-10 ~ 70 °C	95°	Ø16 mm	70 Ncm	3.52 cm³	Yes

PN	Model	Weight	A	B	C	D	E	F	G	H	I	J	K	M	N	O	P	Q	R
8.Y00310	GFR20-95LG	104.8g	20	40	9	76.5	8	42.5	2.5	125.5	Ø20	17	M5	M17×1	15	68.5	25	20	50

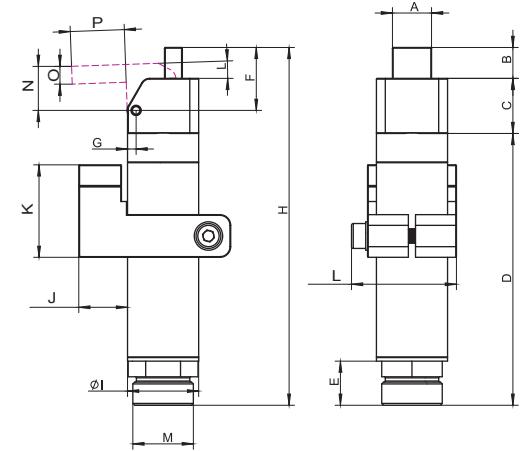
## One Finger Angular Pneumatic Grippers (Series GFS)

For product with small surface position that are unfavourable for absorption and clamping.  
The embedded fixture is matched with the mould locator, so it can locate with higher precision,  
Reduce the precision requirement of manipulator in automation project.  
Single action, built-in Magnetic Loop.

### GFS...-90G



**Product Samples**



### Technical Parameters

PN	Model	Pressure range	Temperature range	Stroke	Piston bore	Closing torque at 6 bar	Cycle air consumption	Built-in magnetic ring
8.Y01001	GFS14-90G				Ø10 mm	19 Ncm	1 cm³	Yes
8.Y01002	GFS20-90G	2.5 ~ 8 bar	-10 ~ 70 °C	90°	Ø16 mm	70 Ncm	3.52 cm³	Yes
8.Y01003	GFS30-90G				Ø25 mm	300 Ncm	12.9cm³	Yes

PN	Model	Weight	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
8.Y01001	GFS14-90G	34g	8	6.7	10.5	49.5	5.5	6	2	66.8	Ø14	9	12	22.5	M17×1	8.5	4	10.8
8.Y01002	GFS20-90G	83g	11	8.7	15.5	76.4	8	17.7	2.4	100.6	Ø20	13.7	26	29.5	M17×1	12.4	5	15.2
8.Y01003	GFS30-90G	296g	14	13.7	23.5	111	11	29.5	4	139.2	Ø30	23.7	26	66	M27×1	20	6	25.2

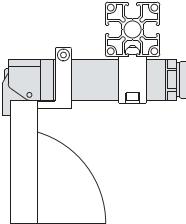
## One Finger Angular Pneumatic Grippers (Series GFS)

For product with small surface position that are unfavourable for absorption and clamping. The embedded fixture is matched with the mould locator, so it can locate with higher precision. Reduce the precision requirement of manipulator in automation project. Single action, built-in Magnetic Loop.

### GFS...-90SG



#### Product Samples



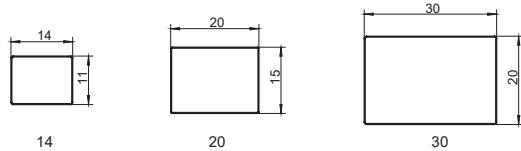
#### Technical Parameters

PN	Model	Pressure range	Temperature range	Stroke	Piston bore	Closing torque at 6 bar	Cycle air consumption	Built-in magnetic ring
8.Y01030	GFS20-90SG	2.5 ~ 8 bar	-10 ~ 70 °C	90°	Ø16 mm	70 Ncm	3.52 cm³	Yes
8.Y01031	GFS30-90SG				Ø25 mm	300 Ncm	12.9cm³	

PN	Model	Weight	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
8.Y01030	GFS20-90SG	99g	11	8.7	15.5	112	8	17.7	2.4	136.2	Ø20	13.7	26	29.5	M17×1	12.37	5	15.2	36
8.Y01031	GFS30-95SG	312g	14	13.7	23.5	147	11	29.2	4	184.2	Ø30	23.7	26	66	M27×1	20	6	25.2	49

## Finger Grippers Options

### Silicone Gasket



PN	Model	Applicable Products	4.Y00486	4.Y00485	4.Y00514
			SIL-14G	SIL-20G	SIL-30G
			GFR14-95G	GFR20-95EG GFR20-95LG	GFR30-95G

### Material Selection Of Gasket NEW

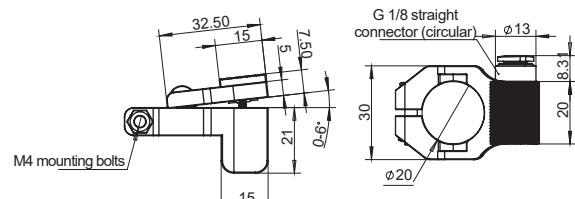
PN	Model	Materials	Color	Temperature range
4.Y00486-HNBR	SIL-14G-HNBR	HNBR	Black	-40°-150°
4.Y00485-HNBR	SIL-20G-HNBR			
4.Y00514-HNBR	SIL-30G-HNBR			
4.Y00486-NBR	SIL-14G-NBR	NBR	Green	-40°-120°
4.Y00485-NBR	SIL-20G-NBR			
4.Y00514-NBR	SIL-30G-NBR			
4.Y00486-TPU	SIL-14G-TPU	TPU	White	-60°-100°
4.Y00485-TPU	SIL-20G-TPU			
4.Y00514-TPU	SIL-30G-TPU			
4.Y00486-EPDM	SIL-14G-EPDM	EPDM	Yellow	-60°-150°
4.Y00485-EPDM	SIL-20G-EPDM			
4.Y00514-EPDM	SIL-30G-EPDM			

## Finger Grippers Options

### Clamp bolts



Vacuum detection

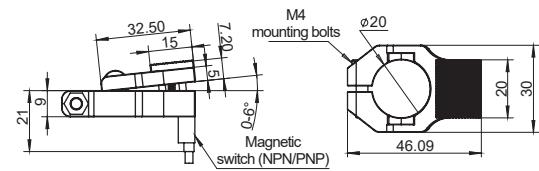


1. Use a vacuum test to determine if the finger is holding the object.
2. Lightweight design.
3. Up and down stroke adjustable.

PN	Model	Detection method	Operating temperature	Opening and closing angle	Weight
7.Y02104	GP3-20V	Vacuum detection	-40~70°C	0~6°	25.2g



Magnetic sensor detection



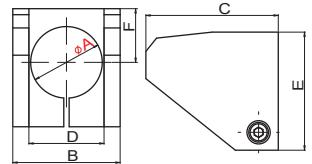
1. A magnetic sensor is used to determine whether a finger is holding an object.
2. Lightweight design.
3. Up and down stroke adjustable.

PN	Model	Detection method	Operating temperature	Opening and closing angle	Weight
7.Y02102	GP3-20P(PNP)	Magnetic induction testing	-40~70°C	0~6°	20.4g
7.Y02103	GP3-20N(NPN)				20.4g

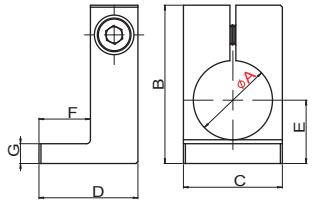


## Finger Grippers Options

### Clamp bolts



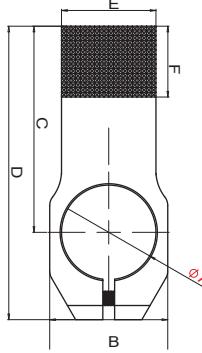
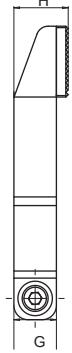
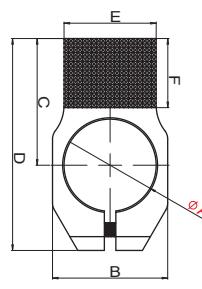
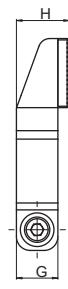
PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	Weight
7.Y00778	GP1-20	Ø20	30	37	21	33	15	20g
7.Y00779	GP1-30	Ø30	45	65	32	44	20	60g



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	Weight
7.Y00780	GP2-14	Ø14	24	19	12	11	6	3.5	5g
7.Y00781	GP2-20	Ø20	35	25	25	16	13	5	14g
7.Y00782	GP2-30	Ø30	45	35	25	21	13	5.5	23g

## Finger Grippers Options

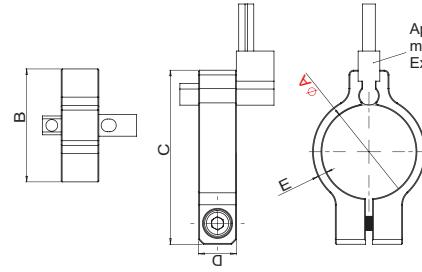
### Clamp bolts



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	H(mm)	G(mm)	Weight
7.Y00783	GP3-14	Ø14	19	19	32	14	11	8.5	6	6g
7.Y00700	GP3-20	Ø20	25	27.5	46	20	15	11.5	9	12g
7.Y00908	GP3-20L	Ø20	25	50	68.5	20	15	11.5	9	19.8g
7.Y00785	GP3-30	Ø30	37	40	63	30	20	14.1	10	30g

## Finger Grippers Options

### Clamp bolts



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	Weight
7.Y00786	GS-14	Ø14	18	30	8	2	14g
7.Y00787	GS-20	Ø20	24	37	8	2	17g
7.Y00788	GS-30	Ø30	34	47	8	2	25g



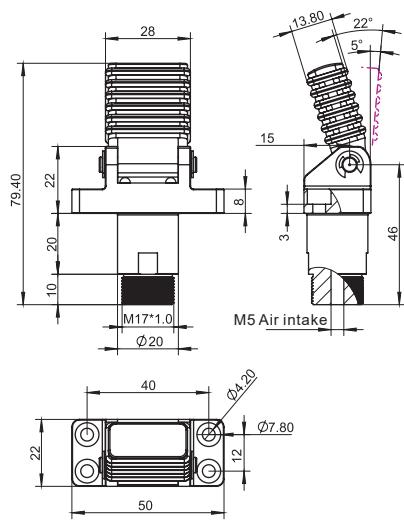
## One Finger Angular Pneumatic Grippers (Series GO)



GOF20-20-VMQ



GOF20-20-NBR



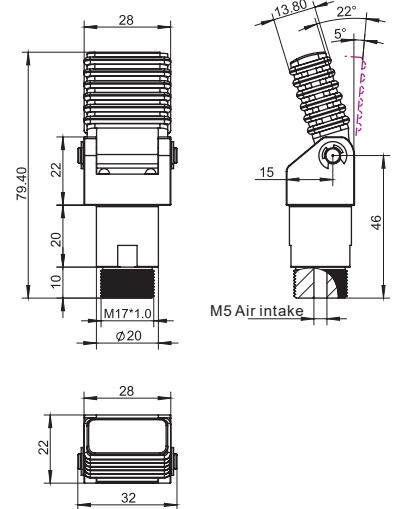
PN	Model	Weight	Heatresistance (in °C)
8.Y00396	GOF20-20-NBR	57.4g	-20 to 80
8.Y00395	GOF20-20-VMQ	57.4g	-40 to 160



GOP20-20-VMQ



GOP20-20-NBR



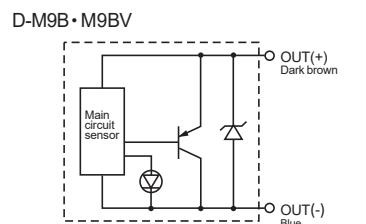
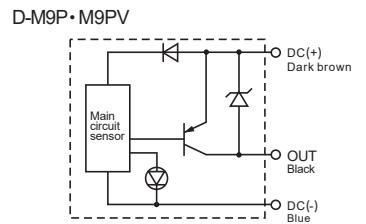
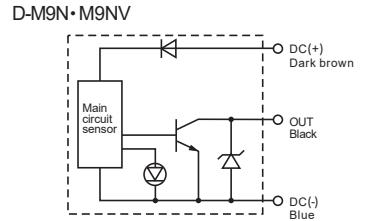
PN	Model	Weight	Heatresistance (in °C)
8.Y00398	GOP20-20-NBR	50g	-20 to 80
8.Y00397	GOP20-20-VMQ	50g	-40 to 160

## Optional Magnetic Sensors

The operating position is detected by magnetic proximity sensors (optional) through a magnet placed on the piston.

The use of magnetic proximity sensors is to be avoided in the vicinity of large masses of ferromagnetic material or intense magnetic fields as this may cause detection problems.

The sensors that can be used are:



PN	Model	Switch Type	L(mm)
1.Y00310	D-M9B	NPN	/
1.Y00307	D-M9BL	NPN	/
1.Y02565	D-M9BV	NPN	/
1.Y03843	D-M9BVL	NPN	/
1.Y00311	D-M9N	NPN	/
1.Y00295	D-M9NL	NPN	/
1.Y00298	D-M9NV	NPN	cable 0.5m cable 3.0m
1.Y03598	D-M9NVL	NPN	cable 0.5m cable 3.0m
1.Y00309	D-M9P	PNP	cable 0.5m
1.Y02301	D-M9PL	PNP	cable 3.0m
1.Y00296	D-M9PV	PNP	cable 0.5m
1.Y02964	D-M9PVL	PNP	cable 3.0m

## Posture Set Accessories



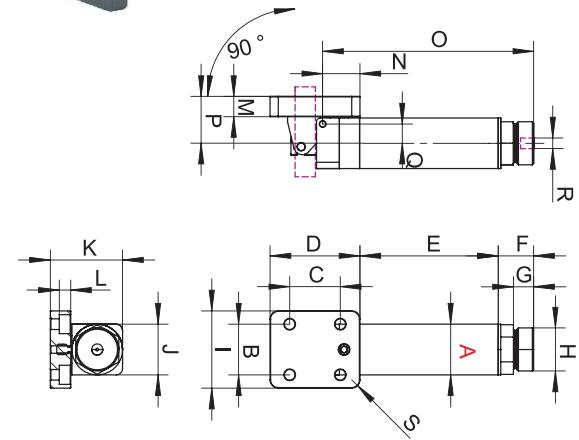
- 90° rotation
- Single-acting
- Lifting by compressed air, spring reset
- Several mounting accessories
- Optional magnetic sensors

PN	8.Y01007
Model	GFT60-90
Medium	Filtered, lubricated / non lubricated compressed air
Pressure range	2~8 bar
Unlock pressure	> 3.5 bar
Temperature range	5 ~ 60 °C.
Tilt angle	90°
End stroke adjustment	± 2°
Cycle air consumption	462 cm³
Lift torque at 6 bar (90° → 0°)	> 78 Nm
Drop torque at 6 bar (0° → 90°)	> 42 Nm
Allowed load	300 N
Allowed moment	30 Nm
Weight	2520g

## Min Posture Gripper



- 90° rotation
- Single-acting
- Lifting by compressed air, spring reset
- Several mounting accessories
- Optional magnetic sensors



## Technical Parameters

PN	Model	Medium	Pressure range	Temperature range	Tilt angle	Lift torque at 6 bar	Weight
8.Y00094	GFN20-90	Filtered, lubricated non lubricated compressed air	2 ~ 8 bar	-10 ~ 70 °C	90°	120 Ncm	65g
8.Y00116	GFN30-90					300 Ncm	210g

PN	Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
8.Y00094	GFN20-90	Ø20	20	20	35.5	54.6	14	8	17	30.5	20	28.5	4.5	8	14.74	83.34	18.5	7.6	M5	3.25
8.Y00116	GFN30-90	Ø30	25	25	46	81.5	19	11	M27*1	37	30	40	5.5	10	18.5	119	25	11	M5	3

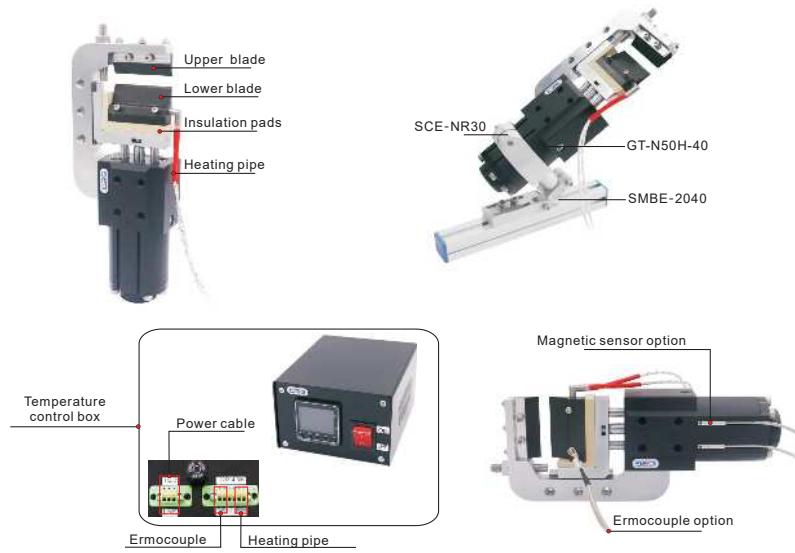
## Thrust Cut Nippers

Double-acting operation with tandem cylinders.

Optional magnetic sensors .

blade heating system.

Optional (upper/lower blade) and spare parts such as thermal pads are available.

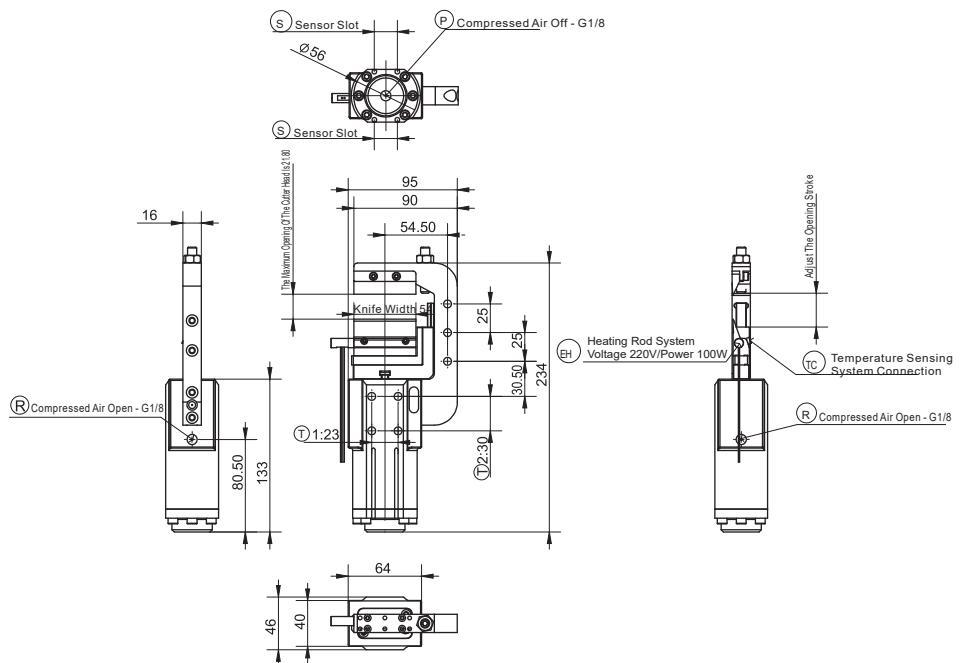


## Technical Parameters

PN	Model	Medium	Pressure range	Temperature range	Piston bore	Closing torque at 6 bar	Cycle air consumption	Weight
8.Y00367	GT-N50H-40	Filtered, lubricated / non lubricated compressed air	2~6 bar	5~60 °C	Ø40 mm	1470 Ncm	75 cm³	1570g

Upper blade	lower blade	Insulation pads	Ermocouple	Heating pipe	Temperature range	Power	Ater control box	Operating voltage
PN	7.Y00441	7.Y00442	2.Y05202	1.Y20002	1.Y20003	-	-	8.Y01026
Model	N54-T	N54-D	L54-5	-	D6-L55	-	-	GTC-001
Describe	-	-	-	220V/100W, cable L 1.5M	220V/100W, cable L 1.5M	0-200°C	100W	-
								100~240Vac 50/60Hz

## Thrust Cut Nippers



(P) Compressed air connection: CLOSING

(R) Compressed air connection: OPENING

(S) Sensor slot

(T) Threaded hole for fastening

(EH) Heating system housing Ø6.1

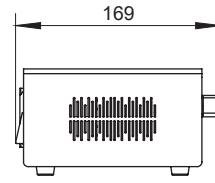
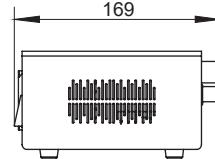
(TC) Thermocouple temperature sensing system

## Temperature Regulator

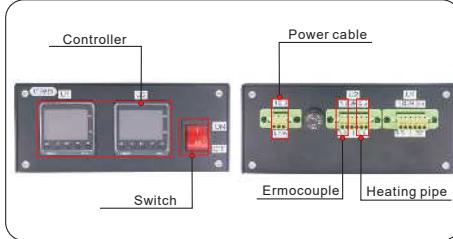
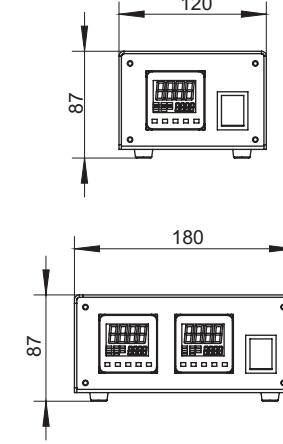
Process temperature monitoring and control is possible.  
Switching configuration and programming is easy.  
Capable of controlling several heating tubes connected in series.  
Easy to carry and change the workplace, easy to connect.



GTC-001



GTC-002



### Technical Parameters

PN	Model	Temperature range-Thermocouple K	Power supply	Ambient/Storage temperature	Protection fuse	Weight
8.Y01026	GTC-001	0° ~ 200 °C	AC100-240V	0-50°C/10-65°C (Avoid icing or condensation)	One built-in 15A	1268g
8.Y01027	GTC-002					1820g

## Heating Tube/Termocouple

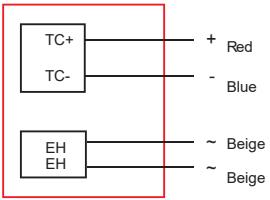
Heating tube power is 100W.  
Heating tube φ 6.  
Thermocouple (TC): K type.  
Easy to carry and change the workplace, easy to connect.



Heating pipe



Ermocouple



PN	Model	Describe
Thermocouple	1.Y20002	- 220V / 100W cable L 1.5m
Heating pipe	1.Y20003	D6-L55 220V / 100W cable L 1.5m

## GT-NS30-N30PF\_H Heat Air Nipper

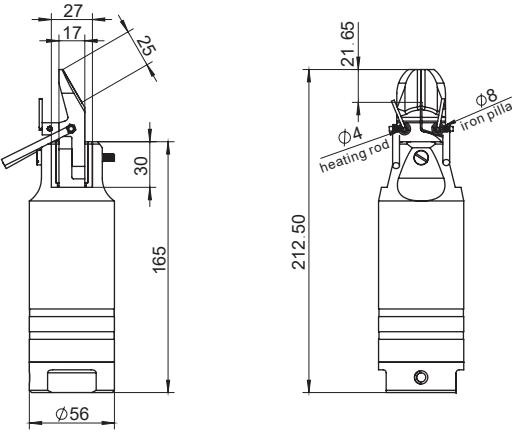


This product is suitable for cutting some transparent products, which can effectively suppress cracks and make the cutting surface more beautiful  
Recommended temperature 0-150° C for use with product temperature controller.  
Maximum opening distance 15mm Shearable

### Advantages:

- 1.The increase of heat insulation pad, the maximum possible reduction of the temperature of the product itself
- 2.The heating rod and temperature control line can be used with other products
- 3.Simple appearance

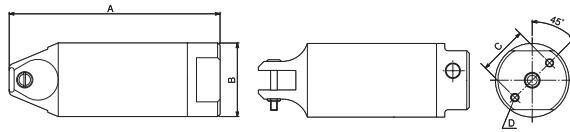
PN	Model
7.Y02260	GT-NR30-N3OPF_H



## NR20-P/NR30-P Air Nipper Round-Type without Lever



- The main body end is 180° rotatable.
- Two suction (intake) ports are provided, the suction can be optionally changed depending on the mounting plate.

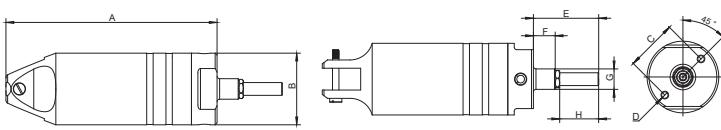


Soft Plastic	Hard Plastic	Copper	Steel	PN	Model	A	B	C	D	Size (mm)	Air Consumption (cm³/min.)	Air Pressure (MPa)	Weight (g)	Hose coupling
7.0	5.0	2.6	2.0	8.Y00113	NR20-P	129	45	30	M5 Depth12	230	0.5~0.6	280		
10.0	6.5	3.3	2.8	8.Y00237	NR30-P	165	56	40	M6 Depth12	584	0.5~0.6	505	Rc1/8	

- Air hose inner dia:5mm
- Overall length/Weight:Accessories not included.
- \* Before mounting of exclusive/automatic machines,check the following product dimensions.  
(Frame O.D., screw dia.(screw to screw)dimensions,etc.)



- The main body end is 180° rotatable.
- Two suction (intake) ports are provided, the suction can be optionally changed depending on the mounting plate.



Soft Plastic	Hard Plastic	Copper	Steel	PN	Model	A	B	C	D	E	F	G	H	Size (mm)	Air Consumption (cm³/min.)	Air Pressure (MPa)	Weight (g)	Hose coupling
7.0	5.0	2.6	2.0	8.Y00113-D1	NR20-P-D1	129	45	30	M5 Depth12	46	17	15	strokes20mm	230	0.5~0.6	508		
10.0	6.5	3.3	2.8	8.Y00237-D1	NR30-P-D1	165	56	40	M6 Depth12	51	17	16	strokes20mm	584	0.5~0.6	533	Rc1/8	

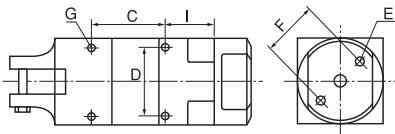
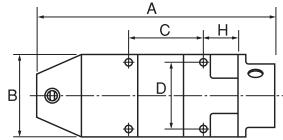
- Air hose inner dia:5mm
- Overall length/Weight:Accessories not included.
- \* Before mounting of exclusive/automatic machines,check the following product dimensions.  
(Frame O.D., screw dia.(screw to screw)dimensions,etc.)

## NR20-P/NR30-P Square Air Nipper



VESSEL provides a generous selection of blades for all wire cutting needs, including resin product gate cuts and automatic welding equipment.

- The main body end is 180° rotatable.
- Two suction (intake) ports are provided, the suction can be optionally changed depending on the mounting plate.



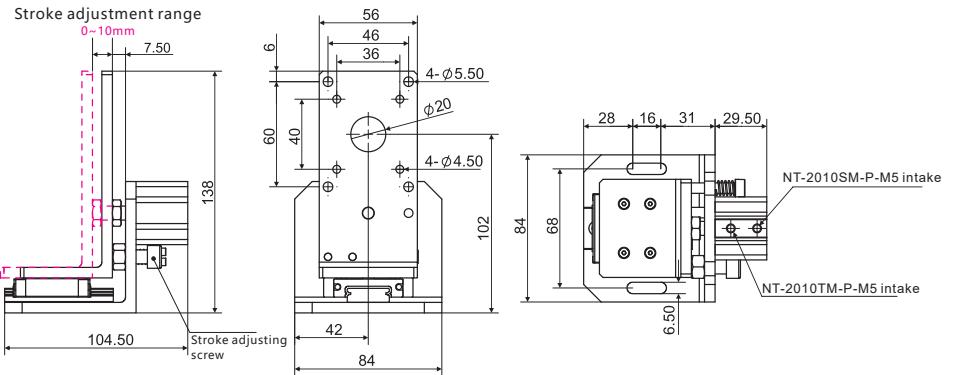
Capacity $\phi$ (mm)	PN	Model	A	B	C	D	E	F	G	H	I	Air Consumption (cm <sup>3</sup> /str.)	Air Pressure (MPa)	Weight (g)	Hose coupling
Soft Plastic 7.0	8.Y00079	NS20-P	129	45	40	36	M5Depth12	30	M4Depth7	19	24	230	0.5~0.6	370	Rc1/8
Hard Plastic 10.0	8.Y00080	NS30-P	170	56	60	46	M6Depth12	40	M5Depth10	20	30	584	0.5~0.6	685	

- Air hose inner dia:5mm
- Overall length/Weight:Accessories not included.
- Before mounting of exclusive/automatic machines,check the following product dimensions.  
(Frame O.D., screw dia,(screw to screw)dimensions,etc.)
- Model GT-NS50 is a special order item,Please contact VESSEL for details

## Slide-Off Air Nipper Bracket-Type



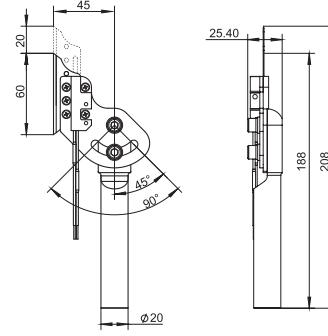
It has achieved smooth,continuous slide movement even for large diameter gate cuts, which produce a large shock at each cut.



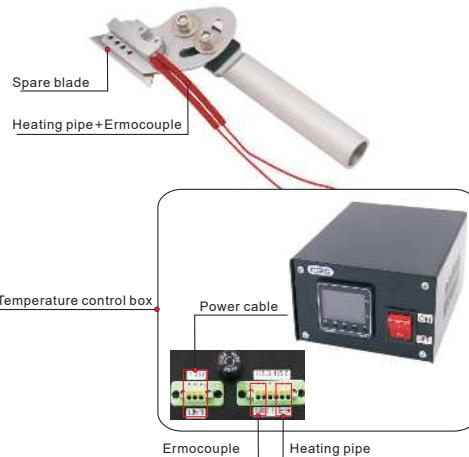
PN	8.Y00006	8.Y00003
Model	NT-2010TM-P	NT-2010SM-P
	pull by compressed air	push by compressed air
Weight	612g	617.3g

## Heating Cutter

Remove sprue, deburr and trim.

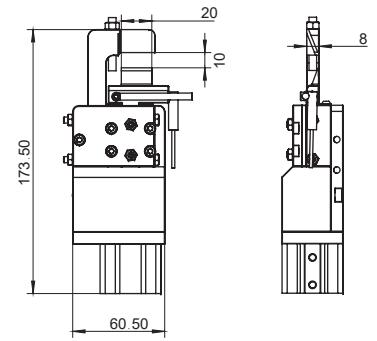


PN	Model	Weight
8.Y00346	GT-BH2060	186g



	PN	Model	Describe
Spare blade (10 pieces package)	7.Y02019	NBH2060	-
Temperature control box	8.Y01026	GTC-001	-

## GT-N2010H-10 Heat Air Nippers



Heated scissors are used to cut some things that pneumatic scissors can not cut, and can increase the beauty of the shear surface.  
PC material with a maximum height of 3mm and a width of 15mm can be cut. Temperatures can reach up to 240°C degrees.  
The method of oil pressure is adopted, and the cutting force is greater. When cutting transparent products, cracks can be effectively suppressed to make the cutting surface more beautiful.

PN	Model
8.Y01070	GT-N2010H-10

## Gas-liquid Converter



PN	Model
8.Y02005	AHC32X50



# Vacuum Cups

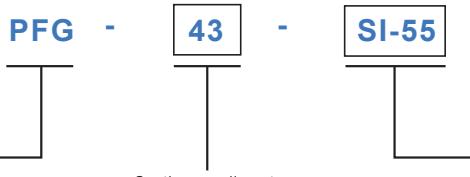
## Highlights

Various sizes and materials are available  
Soft and tapered sealing lip  
Rib structure on the top of the suction cup  
Optimum structural design  
Bottom support structure

## Advantage

Suitable for workpieces of different sizes and shapes  
Strong adaptability to curved surfaces and uneven workpieces  
Strong horizontal and lateral grabbing force when moving at high speed  
Small size and high suction  
Handling thin-walled workpieces without permanent deformation

## Model Representation Methods



HT1-60 traceless rubber



NBR-55 nitrile rubber



SI-55 silicone rubber



packaging industry

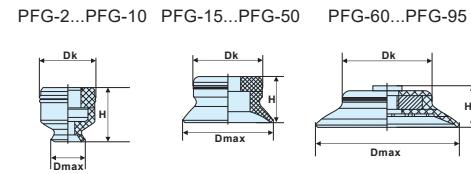


Electronics industry



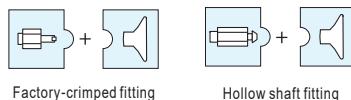
Injection molding industry

# Vacuum Cups PFG Series(Flat type)



Model	Suction force (N) <sup>(1)</sup>	Recommended Vacuum Tubes Inner Diameter(mm)	Dk (mm)	Dmax (mm)	H (mm)	NBR-55 (Black)	SI-55 (Translucent)	HT1-60 (Blue)	Weight
PFG-2...	0.12	2	4.2	3.0	4.0	1.Y12953	1.Y12972	1.Y12991	0.02g
PFG-3.5...	0.42	2	4.2	4.0	4.0	1.Y12954	1.Y12973	1.Y12992	0.03g
PFG-5...	0.75	2	7.7	5.5	6.5	1.Y12955	1.Y12974	1.Y12993	0.15g
PFG-6...	1.2	2	7.7	6.5	6.5	1.Y12956	1.Y12975	1.Y12994	0.17g
PFG-8...	2.3	2	8.2	9.0	7.0	1.Y12957	1.Y12976	1.Y12995	0.23g
PFG-10...	4.0	2	8.7	11.5	7.5	1.Y12958	1.Y12977	1.Y12996	0.30g
PFG-15...	9.0	4	12.2	17.5	8.0	1.Y12959	1.Y12978	1.Y12997	1g
PFG-20...	15.5	4	15.2	23.0	10.0	1.Y12960	1.Y12979	1.Y12998	1g
PFG-25...	26.5	4	16.2	27.5	14.0	1.Y12961	1.Y12980	1.Y12999	3g
PFG-30...	34.0	4	15.1	31.5	12.0	1.Y12962	1.Y12981	1.Y13000	3g
PFG-35...	44.0	4	20.5	38.0	14.0	1.Y12963	1.Y12982	1.Y13001	6g
PFG-40...	57.7	4	24.3	43.0	14.0	1.Y12964	1.Y12983	1.Y13002	7g
PFG-50...	91.0	4	29.1	53.5	15.0	1.Y12965	1.Y12984	1.Y13003	11g
PFG-60...	125.0	6	38.7	64.0	18.0	1.Y12966	1.Y12985	1.Y13004	25g
PFG-80...	260.0	6	52.3	86.0	20.5	1.Y12967	1.Y12986	1.Y13005	52g
PFG-95...	350.0	6	68.2	102.0	19.0	1.Y12968	1.Y12987	1.Y13006	93g

(1) The suction specified above is the theoretical value when the vacuum degree is -0.6bar. For smooth and dry workpieces, the safety factor is not included.



Vacuum Cup Fitting	Vacuum Cups
VM14-M5	PFG-2~PFG-3.5
VM29-M5,VM30-G18	PFG-5~PFG-10
VM31-M5,VM32-G18	PFG-15
VM33-M5,VM34-G18	PFG-20
VM35-M5,VM36-G18	PFG-25~PFG-40
VM37-M5,VM38-G18	PFG-50
VM-G14M-M10M,VM-G18M-M10M	PFG-60~PFG-95

## Technical Parameters

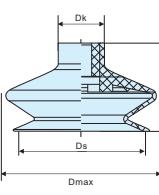
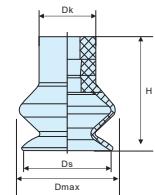
Materials	Shore Hardness	A Flexibility	Abrasion resistance	UV & weather resistance	Oil resistance	Heat resistance (in °C)
SI-55: Translucent Silicone	50	+++	-	-	-	-40 to 220 Translucent
HT1-60: Siton® Specialized composites (non-marking)	60	+	++	-	++	-25 to 170 Blue
NBR-55: Nitrile Nitrile rubber	60	+	+	-	++	-30 to 120 Black

## Vacuum Cups FGA Series(Bellows type/2 layers)



FGA-6...FGA-25

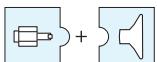
FGA-33...FGA-78



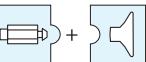
Model	Suction force (N) <sup>(1)</sup>	Pull-off force (N) <sup>(1)(2)</sup>	Recommended Vacuum Tubes Inner Diameter(mm)	Dk (mm)	Dmax(S) (mm)	Ds (mm)	H (mm)	NBR-55 (Black)	SI-55 (Translucent)	HT1-60 (Blue)	Weight
FGA-6...	0.4	1.4	4	7	8.0	5.7	9.0	1.Y12937	1.Y12949	1.Y12951	1g
FGA-11...	0.95	3.8	4	10	13.0	10.4	16.0	1.Y12938	1.Y12288	1.Y12298	1g
FGA-14...	1.2	5.0	4	10	14.5	12.5	15.5	1.Y12939	1.Y12289	1.Y12299	1g
FGA-16...	2.3	6.7	4	10	18.5	15.6	19.2	1.Y12940	1.Y12290	1.Y12300	1g
FGA-20...	4.7	10.7	4	10	21.0	18.1	15.2	1.Y12941	1.Y12291	1.Y12301	2g
FGA-22...	5.7	15.2	4	10	25.0	21.5	19.0	1.Y12942	1.Y12292	1.Y12302	2g
FGA-25...	5.3	17.3	4	10	26.5	22.5	23.0	1.Y12943	1.Y12293	1.Y12303	3g
FGA-33...	13.6	39.6	6	18	38.0	30.0	27.0	1.Y12944	1.Y12294	1.Y12304	7g
FGA-43...	22.8	64.5	6	18	47.5	38.0	27.6	1.Y12945	1.Y12295	1.Y12305	11g
FGA-53...	51.3	95.0	6	18	60.0	50.0	34.0	1.Y12946	1.Y12296	1.Y12306	19g
FGA-63...	85.0	135.0	6	18	68.0	60.0	34.0	1.Y12947	1.Y12297	1.Y12307	24g
FGA-78...	137.4	218.0	6	25	84.5	74.0	47.0	1.Y12948	1.Y12950	1.Y12952	56g

(1) The suction specified above is the theoretical value when the vacuum degree is -0.6bar. For smooth and dry workpieces, the safety factor is not included.

(2) The pull-off force of the vacuum cup made of natural rubber is reduced by about 40%.



Factory-crimped fitting



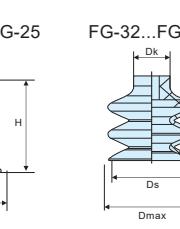
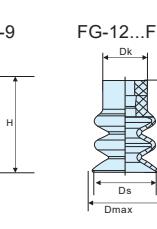
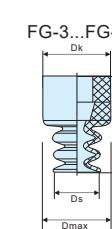
Hollow shaft fitting

Vacuum Cup Fitting	Vacuum Cups
VM21-M5	FGA-6
VM18-M5,VM02-G18	FGA-11~FGA-25
VM24-G18,VM42-G14	FGA-33~FGA-63
VM41-G14	FGA-78

## Technical Parameters

Materials	Shore Hardness	A Flexibility	Abrasion resistance	UV & weather resistance	Oil resistance	Heat resistance (in °C)
SI-55: Translucent Silicone	50	+++	-	-	-	-40 to 220 Translucent
HT1-60: Siton® Specialized composites (non-marking)	60	+	++	-	++	-25 to 170 Blue
NBR-55: Nitrile Nitrile rubber	60	+	+	-	++	-30 to 120 Black

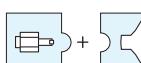
## Vacuum Cups FG Series(Bellows type/3 layers)



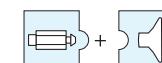
Model	Suction force (N) <sup>(1)</sup>	Pull-off force (N) <sup>(1)(2)</sup>	Recommended Vacuum Tubes Inner Diameter(mm)	Dk (mm)	Dmax(S) (mm)	Ds (mm)	H (mm)	NBR-55 (Black)	SI-55 (Translucent)	HT1-60 (Blue)	Weight
FG-3...	0.2	0.4	2	4	4.0	3.0	6.7	1.Y12929	1.Y12931	1.Y12934	1g
FG-4...	0.3	0.6	2	7	7.0	3.8	14.0	1.Y12930	1.Y12932	1.Y12935	1g
FG-5...	0.2	0.8	2	7	7.0	5.0	14.0	1.Y12308	1.Y12319	1.Y12331	1g
FG-7...	0.1	0.9	4	9	9.0	5.9	14.0	1.Y12309	1.Y12320	1.Y12332	1g
FG-9...	0.7	2.3	4	9	9.5	9.0	15.0	1.Y12310	1.Y12321	1.Y12333	1g
FG-12...	0.9	3.5	4	10	13.0	12.0	21.0	1.Y12311	1.Y12322	1.Y12334	1g
FG-14...	1.2	5.7	4	10	15.5	14.5	22.8	1.Y12312	1.Y12323	1.Y12335	2g
FG-18...	2.3	8.5	4	10	19.0	17.2	22.6	1.Y12313	1.Y12324	1.Y12336	2g
FG-20...	3.8	12.1	4	10	21.0	20.0	22.1	1.Y12314	1.Y12325	1.Y12337	2g
FG-25...	4.5	19.0	4	10	26.0	23.0	34.0	1.Y12315	1.Y12326	1.Y12338	4g
FG-32...	12.0	36.9	6	18	33.5	32.0	37.5	1.Y12284	1.Y12327	1.Y11797	10g
FG-42...	13.6	44.0	6	18	45.0	42.6	46.0	1.Y12316	1.Y12328	1.Y12340	18g
FG-52...	27.0	96.0	6	18	55.0	52.5	48.7	1.Y12317	1.Y12329	1.Y12341	24g
FG-62...	39.6	137.0	6	18	65.0	62.2	54.0	1.Y12318	1.Y12330	1.Y12342	39g
FG-88...	45.2	286.0	9	25	95.5	89.0	86.5	1.Y12928	1.Y12933	1.Y12936	166g

(1) The suction specified above is the theoretical value when the vacuum degree is -0.6bar. For smooth and dry workpieces, the safety factor is not included.

(2) The pull-off force of the vacuum cup made of natural rubber is reduced by about 40%.



Factory-crimped fitting



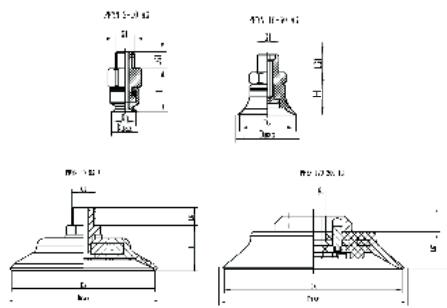
Hollow shaft fitting

Vacuum Cup Fitting	Vacuum Cups
VM14-M5	FG-3
VM21-M5	FG-4~FG-5
VM39-M5,VM40-G18	FG-7~FG-25
VM24-G18	FG-32~FG-62
VM41-G14	FG-88

## Technical Parameters

Materials	Shore Hardness	A Flexibility	Abrasion resistance	UV & weather resistance	Oil resistance	Heat resistance (in °C)
SI-55: Translucent Silicone	50	+++	-	-	-	-40 to 220
HT1-60: Siton® Specialized composites (non-marking)	60	+	++	-	++	-25 to 170
NBR-55: Nitrile Nitrile rubber	60	+	+	-	++	-30 to 120

## Vacuum Cups PFYN Series(Flat type)



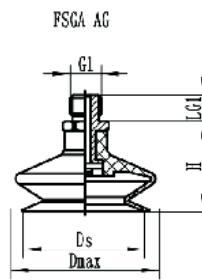
Model	Suction force (N) <sup>(1)</sup>	Recommended Vacuum Tubes Inner Diameter(mm)	G1 (mm)	Ds (mm)	Dmax (mm)	H (mm)	LG1 (mm)	NBR-55 (Black)	SI-55 (Translucent)	HT1-60 (Blue)	Weight
PFYN-2...	0.12	2	M5-M	2.0	2.5	6.0	3.0	7.Y02131	7.Y02147	7.Y02163	1g
PFYN-3...	0.42	2	M5-M	3.5	4.0	6.0	3.0	7.Y02132	7.Y02148	7.Y02164	1g
PFYN-5...	0.75	2	M5-M	5.0	5.5	11.5	4.5	7.Y02133	7.Y02149	7.Y02165	1g
PFYN-6...	1.2	2	M5-M	6.0	6.5	11.5	4.5	7.Y02134	7.Y02150	7.Y02166	1g
PFYN-8...	2.3	2	M5-M	8.0	9.0	12.0	4.5	7.Y02135	7.Y02151	7.Y02167	1g
PFYN-10...	4.0	2	M5-M	10.0	11.5	12.5	4.5	7.Y02136	7.Y02152	7.Y02168	4g
PFYN-15...	9.0	4	G1/8-M	15.0	17.5	13.0	8.0	7.Y02137	7.Y02153	7.Y02169	5g
PFYN-20...	15.5	4	G1/8-M	20.0	23.0	15.0	8.0	7.Y02138	7.Y02154	7.Y02170	6g
PFYN-25...	26.5	4	G1/8-M	25.0	27.5	19.0	8.0	7.Y02139	7.Y02155	7.Y02171	7g
PFYN-30...	34.0	4	G1/8-M	28.8	31.5	17.0	8.0	7.Y02140	7.Y02156	7.Y02172	8g
PFYN-35...	44.0	4	G1/8-M	35.0	38.0	19.0	8.0	7.Y02141	7.Y02157	7.Y02173	11g
PFYN-40...	57.7	4	G1/8-M	40.0	43.0	19.0	8.0	7.Y02142	7.Y02158	7.Y02174	12g
PFYN-50...	91.0	4	G1/8-M	50.0	53.5	20.0	8.0	7.Y02143	7.Y02159	7.Y02175	15g
PFYN-60...	125.0	6	G1/4-M	60.0	64.0	230.	10.0	7.Y02144	7.Y02160	7.Y02176	34g
PFYN-80...	260.0	6	G1/4-M	80.0	86.0	25.0	10.0	7.Y02145	7.Y02161	7.Y02177	63g
PFYN-95...	350.0	6	G1/4-M	95.0	102.0	25.5	10.0	7.Y02146	7.Y02162	7.Y02178	102g
PFYN-120...	540.0	9	G1/2-F	120.0	124.0	36.5	13.0	1.Y12969	1.Y12988	-	353g
PFYN-150...	842.0	9	G1/2-F	147.5	158.0	45.5	13.0	1.Y12970	1.Y12989	1.Y13008	521g
PFYN-200...	1498.0	9	G1/2-F	193.0	222.0	50.5	13.0	1.Y12971	1.Y12990	-	785g

(1) The suction specified above is the theoretical value when the vacuum degree is -0.6bar. For smooth and dry workpieces, the safety factor is not included.

### Technical Parameters

Materials	Shore Hardness	A flexibility	Abrasion resistance	UV & weather resistance	Oil resistance	Heat resistance(°C)
SI-55: Translucent Silicone	50	+++	-	-	-	-40 to 220 Translucent
HT1-60: Siton® Specialized composites (non-marking)	60	+	++	-	++	-25 to 170 Blue
NBR-55: Nitrile Nitrile rubber	60	+	+	-	++	-30 to 120 Black

## Vacuum Cups FSGA Series(Bellows type/2 layers)



Model	Suction force (N) <sup>(1)</sup>	Pull-off force (N) <sup>(1)(2)</sup>	Recommended Vacuum Tubes Inner Diameter(mm)	G1 (mm)	Ds (mm)	Dmax(S) (mm)	H (mm)	LG1 (mm)	NBR-55 (Black)	SI-55 (Translucent)	HT1-60 (Blue)	Weight
FSGA-6...	0.4	1.4	4	M5-M	5.7	8.0	14.0	4.5	7.Y02179	7.Y02191	7.Y02203	2g
FSGA-11...	0.95	3.8	4	M5-M	10.1	13.0	21.0	5.0	7.Y02180	7.Y02192	7.Y02204	2g
FSGA-14...	1.2	5.0	4	M5-M	12.5	14.5	20.5	5.0	7.Y02181	7.Y02193	7.Y02205	2g
FSGA-16...	2.3	6.7	4	G1/8-M	15.6	18.5	25.2	7.5	7.Y02182	7.Y02194	7.Y02206	5g
FSGA-20...	4.7	10.7	4	G1/8-M	18.1	21.0	21.2	7.5	7.Y02183	7.Y02195	7.Y02207	5g
FSGA-22...	5.7	15.2	4	G1/8-M	21.5	25.0	25.0	7.5	7.Y02184	7.Y02196	7.Y02208	6g
FSGA-25...	5.3	17.3	4	G1/8-M	22.5	26.5	29.0	7.5	7.Y02185	7.Y02197	7.Y02209	6g
FSGA-33...	13.6	39.6	6	G1/4-M	30.0	38.0	31.0	11.0	7.Y02186	7.Y02198	7.Y02210	16g
FSGA-43...	22.8	64.5	6	G1/4-M	38.0	47.5	31.6	11.0	7.Y02187	7.Y02199	7.Y02211	19g
FSGA-53...	51.3	95.0	6	G1/4-M	50.0	60.0	38.0	11.0	7.Y02188	7.Y02200	7.Y02212	27g
FSGA-63...	85.0	135.0	6	G1/4-M	60.0	68.0	38.0	11.0	7.Y02189	7.Y02201	7.Y02213	34g
FSGA-78...	137.4	218.0	6	G1/4-M	74.0	84.5	53.0	11.0	7.Y02190	7.Y02202	7.Y02214	71g

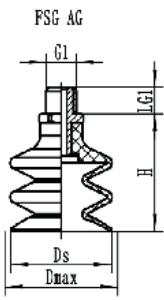
(1) The suction specified above is the theoretical value when the vacuum degree is -0.6bar. For smooth and dry workpieces, the safety factor is not included.

(2) The pull-off force of the vacuum cup made of natural rubber is reduced by about 40%.

### Technical Parameters

Materials	Shore Hardness	A flexibility	Abrasion resistance	UV & weather resistance	Oil resistance	Heat resistance(°C)
SI-55: Translucent Silicone	50	+++	-	-	-	-40 to 220 Translucent
HT1-60: Siton® Specialized composites (non-marking)	60	+	++	-	++	-25 to 170 Blue
NBR-55: Nitrile Nitrile rubber	60	+	+	-	++	-30 to 120 Black

## Vacuum Cups FSG Series(Bellows type/2 layers)



Model	Suction force (N) <sup>(1)</sup>	Pull-off force (N) <sup>(1)(2)</sup>	Recommended Vacuum Tubes Inner Diameter(mm)	G1 (mm)	Dmax(S) (mm)	Ds (mm)	H (mm)	LG1 (mm)	NBR-55 (Black)	SI-55 (Translucent)	HT1-60 (Blue)	Weight
FSG-3...	0.2	0.4	2	M5-M	4.0	3.0	8.7	3.0	7.Y02215	7.Y02230	7.Y02245	1g
FSG-4...	0.3	0.6	2	M5-M	7.0	3.8	19.0	5.0	7.Y02216	7.Y02231	7.Y02246	2g
FSG-5...	0.2	0.8	2	M5-M	7.0	5.0	19.0	5.0	7.Y02217	7.Y02232	7.Y02247	2g
FSG-7...	0.1	0.9	4	M5-M	9.0	5.9	19.0	5.0	7.Y02218	7.Y02233	7.Y02248	2g
FSG-9...	0.7	2.3	4	M5-M	9.5	9.0	20.0	5.0	7.Y02219	7.Y02234	7.Y02249	2g
FSG-12...	0.9	3.5	4	M5-M	13.0	12.0	26.0	5.0	7.Y02220	7.Y02235	7.Y02250	2g
FSG-14...	1.2	5.7	4	M5-M	15.5	14.5	27.8	5.0	7.Y02221	7.Y02236	7.Y02251	3g
FSG-18...	2.3	8.5	4	G1/8-M	19.0	17.2	28.6	7.5	7.Y02222	7.Y02237	7.Y02252	6g
FSG-20...	3.8	12.1	4	G1/8-M	21.0	20.0	28.1	7.5	7.Y02223	7.Y02238	7.Y02253	6g
FSG-25...	4.5	19.0	4	G1/8-M	26.0	23.0	40.0	7.5	7.Y02224	7.Y02239	7.Y02254	8g
FSG-32...	12.0	36.9	6	G1/8-M	33.5	32.0	41.5	11.0	7.Y02225	7.Y02240	7.Y02255	17g
FSG-42...	13.6	44.0	6	G1/8-M	45.0	42.6	50.0	11.0	7.Y02226	7.Y02241	7.Y02256	27g
FSG-52...	27.0	96.0	6	G1/8-M	55.0	52.5	52.7	11.0	7.Y02227	7.Y02242	7.Y02257	32g
FSG-62...	39.6	137.0	6	G1/8-M	65.0	62.2	58.0	11.0	7.Y02228	7.Y02243	7.Y02258	60g
FSG-88...	45.2	286.0	9	G1/4-M	95.5	89.0	92.5	11.0	7.Y02229	7.Y02244	-	173g

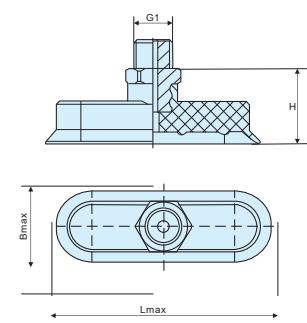
(1) The suction specified above is the theoretical value when the vacuum degree is -0.6bar. For smooth and dry workpieces, the safety factor is not included.

(2) The pull-off force of the vacuum cup made of natural rubber is reduced by about 40%.

## Technical Parameters

Materials	Shore Hardness	A flexibility	Abrasion resistance	UV & weather resistance	Oil resistance	Heat resistance (in °C)
SI-55: Translucent Silicone	50	+++	-	-	-	-40 to 220 Translucent
HT1-60: Siton® Specialized composites (non-marking)	60	+	++	-	++	-25 to 170 Blue
NBR-55: Nitrile Nitrile rubber	60	+	+	-	++	-30 to 120 Black

## Vacuum Cups SGON Series(Flat Rectangular)



Model	Suction force (N) <sup>(1)</sup>	Recommended Vacuum Tubes Inner Diameter(mm)	G1 (mm)	Bmax (mm)	Lmax (mm)	H (mm)	NBR-55 (Black)	SI-55 (Translucent)	HT1-60 (Blue)	Weight
SGON-4x2...	0.42	2	M3-M	2.5	4.5	8	1.Y13068	1.Y13079	1.Y13090	2g
SGON-7x3.5...	1.0	2	M3-M	4.5	7.5	8	1.Y13069	1.Y13080	1.Y13091	2g
SGON-12x4...	1.8	2	M5-M	5.0	13.0	18	1.Y13070	1.Y13081	1.Y13092	3g
SGON-15x5...	3.1	2	M5-M	5.5	15.5	17	1.Y13071	1.Y13082	1.Y13093	3g
SGON-18x6...	4.5	2	M5-M	7.0	18.5	17	1.Y13072	1.Y13083	1.Y13094	3g
SGON-24x8...	8.0	4	G1/8-M	9.0	24.5	17	1.Y13073	1.Y13084	1.Y13095	7g
SGON-30x10...	12.2	4	G1/8-M	11.5	30.5	17	1.Y13074	1.Y13085	1.Y13096	7g
SGON-45x15...	28.2	6	G1/4-M	16.5	46.0	26	1.Y13075	1.Y13086	1.Y13097	15g
SGON-60x20...	50.1	6	G1/4-M	22.0	61.0	26	1.Y13076	1.Y13087	1.Y13098	19g
SGON-75x25...	78.3	6	G1/4-M	27.5	77.0	26	1.Y13077	1.Y13088	1.Y13099	27g
SGON-90x30...	112.6	6	G1/4-M	33.0	92.5	26	1.Y13078	1.Y13089	1.Y13100	35g

(1) The suction specified above is the theoretical value when the vacuum degree is -0.6bar. For smooth and dry workpieces, the safety factor is not included.

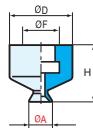
\* SGON-24x8 and larger replacement vacuum cup pads are equipped with special fixing clips.

## Technical Parameters

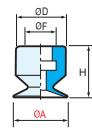
Materials	Shore Hardness	A flexibility	Abrasion resistance	UV & weather resistance	Oil resistance	Heat resistance (in °C)
SI-55: Translucent Silicone	50	+++	-	-	-	-40 to 220 Translucent
HT1-60: Siton® Specialized composites (non-marking)	60	+	++	-	++	-25 to 170 Blue
NBR-55: Nitrile Nitrile rubber	60	+	+	-	++	-30 to 120 Black

## Vacuum Cups VSH Series(Flat type)

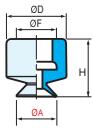
VSH-S2...VSH-S10



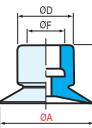
VSH-S12...VSH-S30



VSH-M4...VSH-M10



VSH-M12...VSH-M50



	$\Delta$ (N) <sup>(1)</sup>	$\Delta$ (N) <sup>(1)</sup>	ØA(mm)	H(mm)	ØD(mm)	ØF(mm)	SI(Translucent)	SP(Sponge)
VSH-S2	0.5	0.1	2	13	11	7	1.Y07282	-
VSH-S4	0.7	0.2	4	10	10	7	1.Y07283	-
VSH-S6	0.9	0.3	6	10	10	7	1.Y07284	-
VSH-S8	1.1	0.5	8	10	10	7	1.Y07285	-
VSH-S10	1.6	0.8	10	10	10	7	1.Y07286	-
VSH-S12	2.0	1.5	12	12	10	7	1.Y07287	-
VSH-S15	3.7	1.8	15	12.5	11	7	1.Y07288	-
VSH-S20	6.1	3.0	20	13	12	7	1.Y07289	-
VSH-S25	9.4	4.7	25	13	13	7	1.Y07290	-
VSH-S30	15.9	7.9	30	13	13	7	1.Y07291	-
VSH-M4	0.7	0.2	4	15	15	11	1.Y07292	-
VSH-M6	0.9	0.3	6	15	15	11	1.Y07293	-
VSH-M8	1.1	0.5	8	15	15	11	1.Y07294	-
VSH-M10	1.6	0.8	10	15	15	11	1.Y07295	1.Y12885
VSH-M12	2.0	1.5	12	15	15	11	1.Y07296	1.Y12886
VSH-M15	3.7	1.8	15	15	15	11	1.Y07297	1.Y12887
VSH-M20	6.1	3.0	20	15	15	11	1.Y07298	1.Y07530
VSH-M25	9.4	4.7	25	15	15	11	1.Y07299	1.Y12888
VSH-M30	15.9	7.9	30	15	16	11	1.Y07300	1.Y07758
VSH-M40	26.7	13.4	40	15	17	11	1.Y07301	1.Y07894
VSH-M50	38.3	19.1	50	15	20	11	1.Y07302	1.Y07895

(1) Actual force of the suction cup in use with 65% vacuum and including a safety factor of 2 for horizontal handling and a factor of 4 for vertical handling.



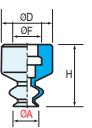
Vacuum Cup Fitting	Vacuum Cups
VM11-M5, VM11-G18 VFS Series Stem VFST Series Stem	VSH-S2~VSH-S30
VM10-G 1/8, VM27-M5 VFM Series Stem VFMT Series Stem	VSH-M4~VSH-M50
+	Factory-crimped fitting + Hollow shaft fitting

## Technical Parameters

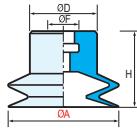
Materials	Shore Hardness	A Flexibility	Abrasion resistance	UV & weather resistance	Oil resistance	Heat resistance (in °C)
SI: Translucent Silicone	50	+++	-	-	-40 to 220	Translucent

## Vacuum Cups VSH2 Series(Bellows type/2 layers)

VSH2-S4...VSH2-S20



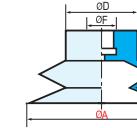
VSH2-S25...VSH2-S30



VSH2-M6...VSH2-M25



VSH2-M30...VSH2-M50



	$\Delta$ (N) <sup>(1)</sup>	$\Delta$ (N) <sup>(1)</sup>	ØA(mm)	H(mm)	ØD(mm)	ØF(mm)	SI(Translucent)	SP(Sponge)
VSH2-S4	0.3	0.1	4	15	12	7	1.Y07303	-
VSH2-S6	0.5	0.2	6	15	12	7	1.Y07304	-
VSH2-S8	1.2	0.7	8	15	12	7	1.Y07305	-
VSH2-S10	1.7	0.9	10	15	12	7	1.Y07306	-
VSH2-S12	2.5	1.3	12	15	12	7	1.Y07307	-
VSH2-S15	2.7	1.3	15	17	15	7	1.Y07308	-
VSH2-S20	5.6	2.8	20	16.5	15	7	1.Y07309	-
VSH2-S25	7.9	4.0	25	18	15	7	1.Y07310	-
VSH2-S30	12.0	6.0	30	20	15	7	1.Y07311	-
VSH2-M6	0.5	0.2	6	18	15	11	1.Y07312	-
VSH2-M8	1.2	0.7	8	17	15	11	1.Y07313	-
VSH2-M10	1.7	0.9	10	17	15	11	1.Y07314	1.Y08294
VSH2-M12	2.5	1.3	12	17	15	11	1.Y07315	1.Y08295
VSH2-M15	2.7	1.3	15	18	15	11	1.Y07316	1.Y08296
VSH2-M20	5.6	2.8	20	18	15	11	1.Y07317	1.Y07929
VSH2-M25	7.9	4.0	25	18	15	11	1.Y07318	1.Y08349
VSH2-M30	12	6.0	30	19	18	11	1.Y07319	1.Y08056
VSH2-M35	13.9	6.9	35	24	18	11	1.Y07320	-
VSH2-M40	20.2	10.1	40	22	23	11	1.Y07321	1.Y08104
VSH2-M50	40.0	20.0	50	22	22	11	1.Y07322	1.Y08105

(1) Actual force of the suction cup in use with 65% vacuum and including a safety factor of 2 for horizontal handling and a factor of 4 for vertical handling.



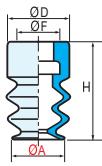
Vacuum Cup Fitting	Vacuum Cups
VM11-M5, VM11-G18 VFS Series Stem VFST Series Stem	VSH2-S4~VSH2-S30
VM10-G 1/8, VM27-M5 VFM Series Stem VFMT Series Stem	VSH2-M6~VSH2-M50
+	Factory-crimped fitting + Hollow shaft fitting

## Technical Parameters

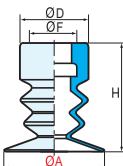
Materials	Shore Hardness	A Flexibility	Abrasion resistance	UV & weather resistance	Oil resistance	Heat resistance (in °C)
SI: Translucent Silicone	50	+++	-	-	-40 to 220	Translucent

## Vacuum Cups VSH3 Series(Bellows type/3 layers)

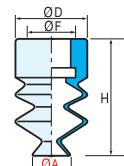
VSH3-S6...VSH3-S8



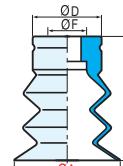
VSH3-S10...VSH3-S15



VSH3-M8...VSH3-M30

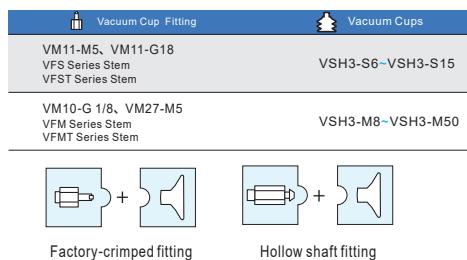


VSH3-M40...VSH3-M50



	$\Delta$ (N) <sup>(1)</sup>	$\varnothing A$ (mm)	H(mm)	$\varnothing D$ (mm)	$\varnothing F$ (mm)	SI(Translucent)	SP(Sponge)
VSH3-S6	0.5	6	15	10	7	1.Y07323	-
VSH3-S8	1.0	8	15	10	7	1.Y07324	-
VSH3-S10	1.5	10	15	10	7	1.Y07325	-
VSH3-S12	2.8	12	15	10	7	1.Y07326	-
VSH3-S15	3.0	15	15	10	7	1.Y07327	-
VSH3-M8	1.0	8	20	15	11	1.Y07328	-
VSH3-M10	1.5	10	18	15	11	1.Y07329	1.Y09163
VSH3-M12	2.8	12	21	15	11	1.Y07330	1.Y09162
VSH3-M15	3.0	15	21	15	11	1.Y07331	1.Y09161
VSH3-M20	4.6	20	24	15	11	1.Y07332	1.Y08134
VSH3-M25	6.5	25	19	15	11	1.Y07333	1.Y09065
VSH3-M30	12.1	30	25	15	11	1.Y07334	1.Y08167
VSH3-M40	20.5	40	43	20	11	1.Y07335	1.Y08168
VSH3-M50	25.0	50	42	20	11	1.Y07336	1.Y08234

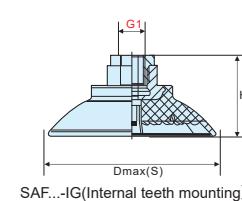
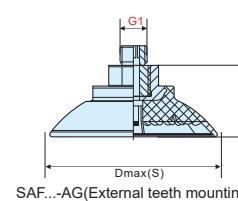
(1) Actual force of the suction cup in use with 65% vacuum and including a safety factor of 2 for horizontal handling and a factor of 4 for vertical handling.



## Technical Parameters

Materials	Shore Hardness	Flexibility	Abrasion resistance	UV & weather resistance	Oil resistance	Heat resistance(in °C)
SI: Translucent Silicone	50	+++	-	-	-	-40 to 220 Translucent

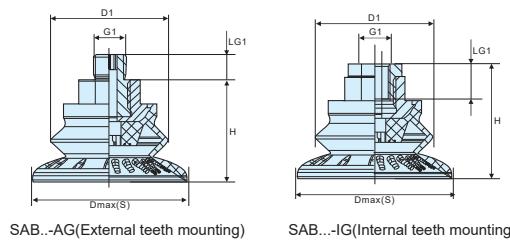
## Vacuum Cups SAF Series(Flat type)



PN	Model	Suction force (N) <sup>(1)</sup>	Lateral force (N) <sup>(2)</sup>	Recommended Vacuum Tubes Inner Diameter(mm)	Dmax(S) (mm)	G1 (mm)	H (mm)	LG1 (mm)	Weight
1.Y13010	SAF-30-G3/8AG	38	30	4	34	G3/8-M	20	10	17g
1.Y13011	SAF-30-G3/8IG	38	30	4	34	G3/8-F	36	9	43g
1.Y13012	SAF-40-G3/8AG	69	52	4	46	G3/8-M	22	10	19g
1.Y13013	SAF-40-G3/8IG	69	52	4	46	G3/8-F	38	9	45g
1.Y13014	SAF-50-G3/8AG	100	80	4	56	G3/8-M	28	10	40g
1.Y13015	SAF-50-G3/8IG	100	80	4	56	G3/8-F	28	15	31g
1.Y13016	SAF-60-G3/8AG	150	105	6	67	G3/8-M	31	10	46g
1.Y13017	SAF-60-G3/8IG	150	105	6	67	G3/8-F	31	15	37g
1.Y13018	SAF-80-G3/8AG	272	205	6	89	G3/8-M	35	10	65g
1.Y13019	SAF-80-G3/8IG	272	205	6	89	G3/8-F	35	15	56g
1.Y13020	SAF-100-G3/8AG	430	310	6	110	G3/8-M	36	10	76g
1.Y13021	SAF-100-G3/8IG	430	310	6	110	G3/8-F	36	15	67g
1.Y13023	SAF-125-G3/8IG	660	475	9	135	G3/8-F	43	15	146g

Functions: anti-skid, oil-proof and water-proof(mostly used for adsorption of automobile sheet metal, glass, etc.)

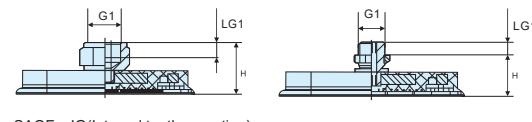
## Vacuum Cups SAB Series(Bellows type/2 layers)



PN	Model	Suction force (N) <sup>(1)</sup>	Pull-off force (N) <sup>(1)</sup>	Lateral force (N) <sup>(2)</sup>	Recommended Vacuum Tubes Inner Diameter(mm)	Dmax(S) (mm)	G1 (mm)	D1 (mm)	H (mm)	LG1 (mm)	Weight
1.Y13038	SAB-22-G3/8AG	16	24	18	4	24	G3/8-M	22	25	10	15g
1.Y13039	SAB-22-G3/8IG	16	24	18	4	24	G3/8-F	22	41	9.5	41g
1.Y13040	SAB-30-G3/8AG	22	33	30	4	34	G3/8-M	32	28	10	19g
1.Y13041	SAB-30-G3/8IG	22	33	30	4	34	G3/8-F	32	44	9.5	45g
1.Y13042	SAB-40-G3/8AG	38	59	36	4	45	G3/8-M	32	28.8	10	20g
1.Y13043	SAB-40-G3/8IG	38	59	36	4	45	G3/8-F	32	44.8	9.5	45g
1.Y13044	SAB-50-G3/8AG	53	87	55	4	56	G3/8-M	40	36.9	10	41g
1.Y13045	SAB-50-G3/8IG	53	87	55	4	56	G3/8-F	40	36.9	15	32g
1.Y13046	SAB-60-G3/8AG	82	130	82	6	67	G3/8-M	48	41.3	10	49g
1.Y13047	SAB-60-G3/8IG	82	130	82	6	67	G3/8-F	48	41.3	15	40g
1.Y13048	SAB-80-G3/8AG	135	221	145	6	89	G3/8-M	64	49.9	10	72g
1.Y13049	SAB-80-G3/8IG	135	221	145	6	89	G3/8-F	64	49.9	15	63g
1.Y13050	SAB-100-G3/8AG	190	357	220	6	110	G3/8-M	77	56.6	10	97g
1.Y13051	SAB-100-G3/8IG	190	357	220	6	110	G3/8-F	77	56.6	15	88g
1.Y13052	SAB-125-G3/8AG	250	558	352	9	135	G3/8-M	94	67.8	10	179g
1.Y13053	SAB-125-G3/8IG	250	558	352	9	135	G3/8-F	94	67.8	15	170g

Functions:anti-skid, oil-proof and water-proof(mostly used for adsorption of automobile sheet metal, glass, etc.)

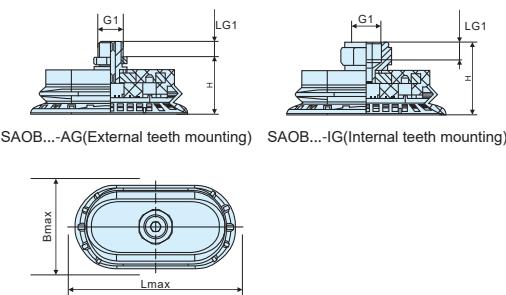
## Vacuum Cups SAOF Series(Flat type)



PN	Model	Suction force (N) <sup>(1)</sup>	Lateral force (N) <sup>(2)</sup>	Recommended Vacuum Tubes Inner Diameter(mm)	Dmax(S) (mm)	G1 (mm)	H (mm)	LG1 (mm)	Lmax(S) (mm)	Weight
1.Y13024	SAOF-50x16-G3/8AG	31	24	4	18	G3/8-M	26	8	52	24g
1.Y13025	SAOF-50x16-G3/8IG	31	24	4	18	G3/8-F	34	9	52	45g
1.Y13026	SAOF-60x23-G3/8AG	57	37	4	25	G3/8-M	18	8	64	21g
1.Y13027	SAOF-60x23-G3/8IG	57	37	4	25	G3/8-F	26	9	64	42g
1.Y13028	SAOF-90x30-G3/8AG	122	96	4	34	G3/8-M	19	8	94	39g
1.Y13029	SAOF-90x30-G3/8IG	122	96	4	34	G3/8-F	27	9	94	60g
1.Y13030	SAOF-80x40-G3/8AG	140	110	4	43	G3/8-M	20	8	85	34g
1.Y13031	SAOF-80x40-G3/8IG	140	110	4	43	G3/8-F	28	9	85	55g
1.Y13032	SAOF-100x50-G3/8AG	217	181	6	54	G3/8-M	22	8	106	63g
1.Y13033	SAOF-100x50-G3/8IG	217	181	6	54	G3/8-F	31	9	106	85g
1.Y13034	SAOF-120x60-G3/8AG	312	254	6	65	G3/8-M	24	8	128	77g
1.Y13035	SAOF-120x60-G3/8IG	312	254	6	65	G3/8-F	33	9	128	99g
1.Y13037	SAOF-140x70-G3/8IG	425	344	6	76	G3/8-F	34	9	149	107g

Functions:anti-skid, oil-proof and water-proof(mostly used for adsorption of automobile sheet metal, glass, etc.)

## Vacuum Cups SAOB Series(Bellows type/2 layers)

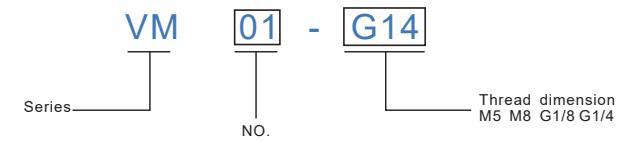


PN	Model	Suction force (N) <sup>(1)</sup>	Pull-off force (N) <sup>(1)</sup>	Lateral force (N) <sup>(2)</sup>	Recommended Vacuum Tubes Inner Diameter(mm)	Bmax(S) (mm)	Lmax(S) (mm)	G1 (mm)	H (mm)	Lg1 (mm)	Weight
1.Y13054	SAOB-60x30-G3/8AG	38	70	73	4	33	63	G3/8-M	27.0	8	49g
1.Y13055	SAOB-60x30-G3/8IG	38	70	73	4	33	63	G3/8-F	35.0	9	70g
1.Y13056	SAOB-80x40-G3/8AG	65	132	153	6	43	83	G3/8-M	29.7	8	67g
1.Y13057	SAOB-80x40-G3/8IG	65	132	153	6	43	83	G3/8-F	37.7	9	88g
1.Y13058	SAOB-110x55-G3/8AG	110	234	299	6	59	114	G3/8-M	35.5	8	87g
1.Y13059	SAOB-110x55-G3/8IG	110	234	299	6	59	114	G3/8-F	43.5	9	109g
1.Y13061	SAOB-140x70-G3/8IG	165	355	473	6	75	146	G3/8-F	47.5	9	142g

Functions:anti-skid, oil-proof and water-proof(mostly used for adsorption of automobile sheet metal, glass, etc.)

## Vacuum Cups Fitting

### Model Representation Methods

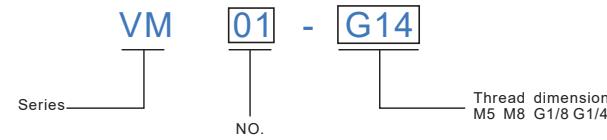


Vacuum Cup Fitting			
Dimension			
PN	7.Y00703	7.Y00709	7.Y00768
Model	VM02-G18	VM04-G14	VM06-G14
Weight	3.5g	7.0g	9.7g

Vacuum Cup Fitting			
Dimension			
PN	7.Y00767	1.Y05275	1.Y05274
Model	VM07-G18	VM08-M8	VM09-M5
Weight	3.3g	8.3g	1.4g

## Vacuum Cups Fitting

### Model Representation Methods

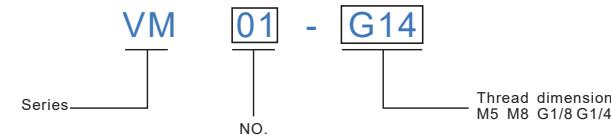


Vacuum Cup Fitting			
Dimension			
PN	7.Y00902	1.Y05327	1.Y12762
Model	VM10-G18	VM11-M5	VM11-G18
Weight	3.7g	2.0g	2.0g

Vacuum Cup Fitting			
Dimension			
PN	7.Y00762	7.Y00761	7.Y00760
Model	VM12-M5	VM13-M5	VM14-M5
Weight	1.2g	0.7g	0.5g

## Vacuum Cups Fitting

### Model Representation Methods

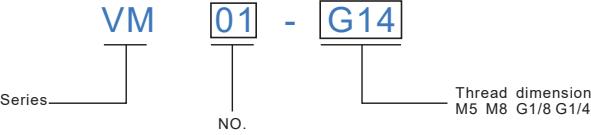


Vacuum Cup Fitting			
Dimension			
PN	7.Y00759	7.Y00758	7.Y00757
Model	VM15-G18	VM16-G18	VM17-G18
Weight	17.8g	3.8g	2.9g

Vacuum Cup Fitting			
Dimension			
PN	1.Y05314	4.Y00058	1.Y01986
Model	VM18-M5	VM20-G14	VM21-M5
Weight	4.6g	9.5g	1.8g

## Vacuum Cups Fitting

### Model Representation Methods

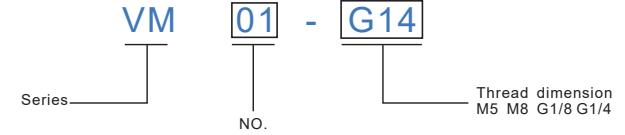


Vacuum Cup Fitting			
Dimension			
PN	1.Y05790	7.Y00900	7.Y00898
Model	VM22-M5	VM23-G18	VM24-G18
Weight	2.9g	8.9g	5.5g

Vacuum Cup Fitting			
Dimension			
PN	7.Y00928	1.Y01097	7.Y00475
Model	VM25-M3	VM27-M5	VM28-M8
Weight	0.2g	6.2g	1.9g

## Vacuum Cups Fitting

### Model Representation Methods

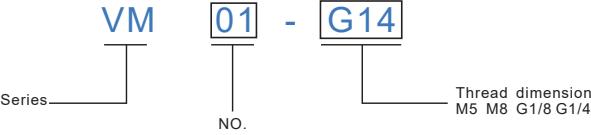


Vacuum Cup Fitting			
Dimension			
PN	7.Y01036	7.Y01037	7.Y01038
Model	VM29-M5	VM30-G18	VM31-M5
Weight	1.1g	1.3g	3.8g

Vacuum Cup Fitting			
Dimension			
PN	7.Y01039	7.Y01040	7.Y01041
Model	VM32-G18	VM33-M5	VM34-G18
Weight	4.1g	4.0g	4.3g

## Vacuum Cups Fitting

### Model Representation Methods

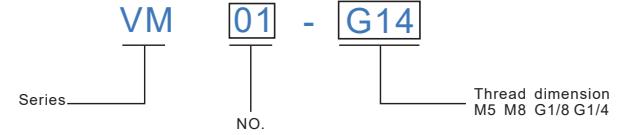


Vacuum Cup Fitting			
Dimension			
PN	7.Y01042	7.Y01043	7.Y01044
Model	VM35-M5	VM36-G18	VM37-M5
Weight	3.4g	3.7g	4.3g

Vacuum Cup Fitting			
Dimension			
PN	7.Y01045	7.Y01046	7.Y01047
Model	VM38-G18	VM39-M5	VM40-G18
Weight	4.7g	2.6g	4.0g

## Vacuum Cups Fitting

### Model Representation Methods



Vacuum Cup Fitting			
Dimension			
PN	7.Y01048	7.Y02013	
Model	VM41-G14	VM10-G18-F	
Weight	14g	5.7g	

## Vacuum Cup Connector

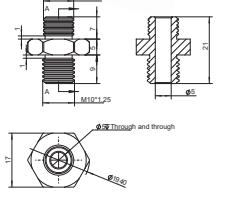
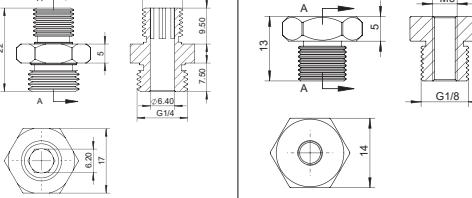
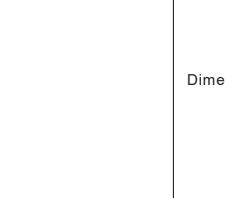
### Model Representation Methods

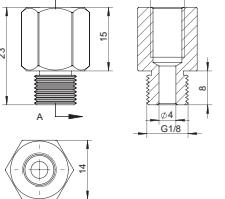
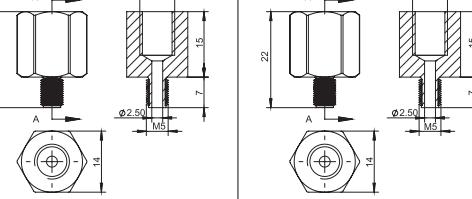
VM - **G18** **M** - **M8** **F**

Series  
Thread dimension  
G1/8 G1/4 M5

Inner tooth F-Female  
External tooth M-Male

Thread dimension  
M5 M8 M10  
Inner tooth F-Female  
External tooth M-Male

Vacuum Cup Connector			
Dimension			
PN	7.Y00808	7.Y00756	7.Y00755
Model	VM-G18M-M10M	VM-G14M-M10M	VM-G18M-M5F
Weight	4.5g	4.7g	2.9g

Vacuum Cup Connector			
Dimension			
PN	7.Y00754	7.Y00473	7.Y00474
Model	VM-G18M-M8F	VM-M5M-M8F	VM-M5M-G18F
Weight	6.2g	5.6g	4.9g

## Vacuum Cup Connector

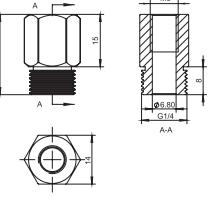
### Model Representation Methods

VM - **G18** **M** - **M8** **F**

Series  
Thread dimension  
G1/8 G1/4 M5

Inner tooth F-Female  
External tooth M-Male

Thread dimension  
M5 M8 M10  
Inner tooth F-Female  
External tooth M-Male

Vacuum Cup Connector			
Dimension			
PN	7.Y00476		
Model	VM-G14M-M8F		
Weight	6.7g		

## Vacuum Cup Suspensions

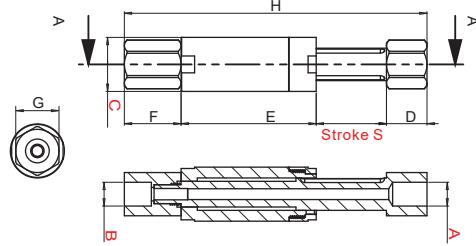
The suspensions (or buffers, or level compensators) are used to keep the suction cups in position as the robot approaches. CRG offers a range specifically designed for Plastics applications. They are typically mounted on EAOTs (End Of Arm Toolings) with Mounting brackets.

### Model Representation Methods

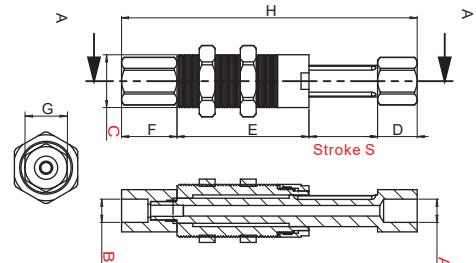


## Non-rotative Suspensions

Body and rod in anodized aluminum. Non-rotative rod with high load capability. Pressure range: -1 ~ 8 bar.



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	S(mm)	Weight(g)
8.Y00064	VFN1011-M5	M5	M5	Ø10	10	22	17	8	60	11	7g
8.Y00321	VFN1021-M5	M5	M5	Ø10	10	41	17	8	89	21	11g
8.Y00065	VFN1421-G18	G1/8	G1/8	Ø14	12	40	20	12	93	21	24g
8.Y00322	VFN1436-G18	G1/8	G1/8	Ø14	12	60	20	12	128	36	44g
8.Y00066	VFN2026-G18	G1/8	G1/8	Ø20	15	50	21	16	112	26	54g
8.Y00067	VFN2051-G18	G1/8	G1/8	Ø20	15	84	21	16	171	51	80g



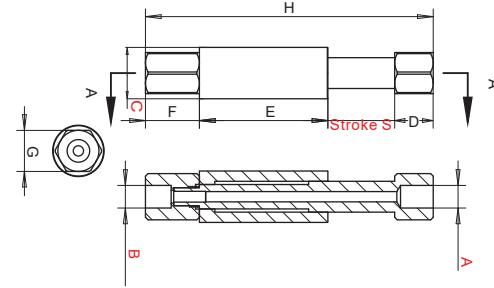
PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	S(mm)	Weight(g)
8.Y00068	VFNT1011-M5	M5	M5	M10*1	10	22	17	8	60	11	12g
8.Y00323	VFNT1021-M5	M5	M5	M10*1	10	41	17	8	89	21	39g
8.Y00204	VFNT1421-G18	G1/8	G1/8	M14*1	12	40	20	12	93	21	51g
8.Y00383	VFNT1621-G18	G1/8	G1/8	M16*1	12	40	20	12	93	21	64g
8.Y00324	VFNT1436-G18	G1/8	G1/8	M14*1	12	60	20	12	128	36	72g
8.Y00384	VFNT1636-G18	G1/8	G1/8	M16*1	12	60	20	12	128	36	76g
8.Y00205	VFNT2026-G18	G1/8	G1/8	M20*1	15	50	21	16	112	26	82g
8.Y00206	VFNT2051-G18	G1/8	G1/8	M20*1	15	84	21	16	171	51	120g

## Rotative Suspensions

Body and rod in anodized aluminum.  
Non-rotative rod with high load capability.  
Pressure range: -1 ~ 8 bar.



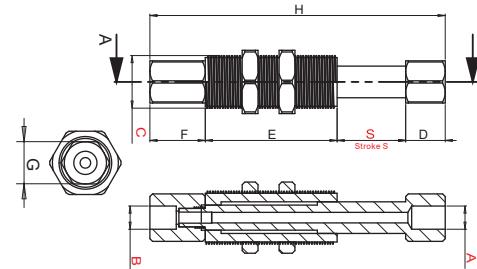
M5 is blue      G1/8 is black



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	S(mm)	Weight(g)
8.Y00060	VFR1011-M5	M5	M5	Ø10	3	22	17	8	53	11	11g
8.Y00325	VFR1021-M5	M5	M5	Ø10	3	41	17	8	82	21	17g
8.Y00061	VFR1421-G18	G1/8	G1/8	Ø14	12	40	20	12	93	21	23g
8.Y00326	VFR1436-G18	G1/8	G1/8	Ø14	12	60	20	12	128	36	40g
8.Y00062	VFR2026-G18	G1/8	G1/8	Ø20	15	50	21	16	112	26	50g
8.Y00063	VFR2051-G18	G1/8	G1/8	Ø20	15	84	21	16	171	51	77g



M5 is blue      G1/8 is black



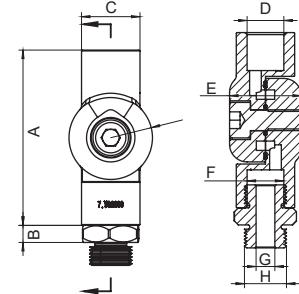
PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	S(mm)	Weight(g)
8.Y00074	VFRT1011-M5	M5	M5	M10*1	3	22	17	8	53	11	14g
8.Y00327	VFRT1021-M5	M5	M5	M10*1	3	41	17	8	82	21	26g
8.Y00075	VFRT1421-G18	G1/8	G1/8	M14*1	12	40	20	12	93	21	32g
8.Y00381	VFRT1621-G18	G1/8	G1/8	M16*1	12	40	20	12	93	21	36g
8.Y00328	VFRT1436-G18	G1/8	G1/8	M14*1	12	60	20	12	128	36	60g
8.Y00382	VFRT1636-G18	G1/8	G1/8	M16*1	12	60	20	12	128	36	65g
8.Y00076	VFRT2026-G18	G1/8	G1/8	M20*1	15	50	21	16	112	26	70g
8.Y00077	VFRT2051-G18	G1/8	G1/8	M20*1	15	84	21	16	171	51	104g

## Adjustable Elbow Arm

After the rotation of ventilation, according to different customer needs to adjust the different angle.  
Mount this vacuum elbow between the vacuum cup and suspension of the extension tube.



Physical Includes Air Fittings



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	Weight(g)
7.Y02101	VM-05F05F	33	4.10	Ø10	M5	14	M5	Ø2	G1/8	26g
7.Y02100	VM-14F14F	56	4.10	Ø15.9	G1/4	18.4	G1/4	Ø5	G1/8	49g
7.Y02099	VM-18F18F	42	4.10	Ø14	G1/8	17.2	G1/8	Ø4.5	G1/8	135g

## Non-rotative Suspensions With Integral Elbow Arms

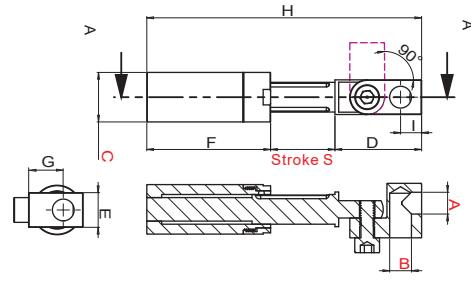
It is possible to set continuously the angle between 0° and +/-90°.

External air feeding.

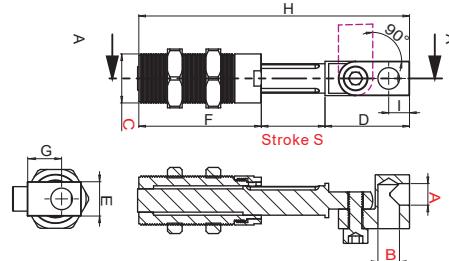
Body and rod in anodized aluminum.

Non-rotative rod with high load capability.

Pressure range: -1 ~ 8 bar.



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	S(mm)	Weight(g)
8.Y00070	VFE1011-M5	M5	M5	Ø10	20	8	22	8	53	11	12g
8.Y00371	VFE1021-M5	M5	M5	Ø10	20	8	41	8	81	21	16g
8.Y00071	VFE1421-G18	G1/8	G1/8	Ø14	32	14	40	14	93	21	45g
8.Y00372	VFE1436-G18	G1/8	G1/8	Ø14	32	14	60	14	128	36	48g
8.Y00072	VFE2026-G18	G1/8	G1/8	Ø20	35	14	50	14	111	26	70g
8.Y00073	VFE2051-G18	G1/8	G1/8	Ø20	35	14	84	14	169.5	51	105g



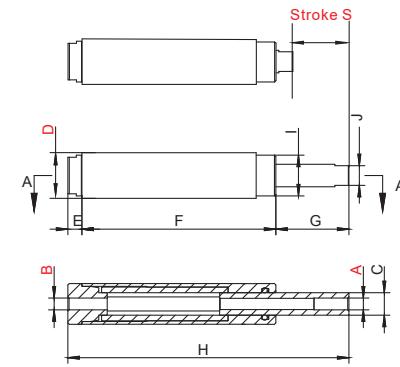
PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	S(mm)	Weight(g)
8.Y00069	VFET1011-M5	M5	M5	M10*1	20	8	22	8	53	11	15g
8.Y00374	VFET1021-M5	M5	M5	M10*1	20	8	41	8	81	21	24g
8.Y00228	VFET1421-G18	G1/8	G1/8	M14*1	32	14	40	14	93	21	57g
8.Y00379	VFET1621-G18	G1/8	G1/8	M16*1	32	14	40	14	93	21	64g
8.Y00375	VFET1436-G18	G1/8	G1/8	M14*1	32	14	60	14	128	36	80g
8.Y00380	VFET1636-G18	G1/8	G1/8	M16*1	32	14	60	14	128	36	85g
8.Y00229	VFET2026-G18	G1/8	G1/8	M20*1	35	14	50	14	111	26	88g
8.Y00230	VFET2051-G18	G1/8	G1/8	M20*1	35	14	84	14	169.5	51	125g

## Non-rotating Suspension For Fixed Piping

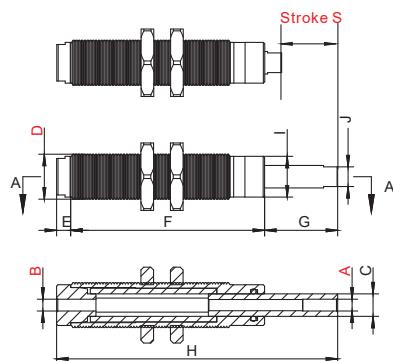
The product is made of anodic aluminium.

Built-in anti-rotation plastic piston.

Built-in telescopic function of spring reset, tail vacuum intake fixed design.

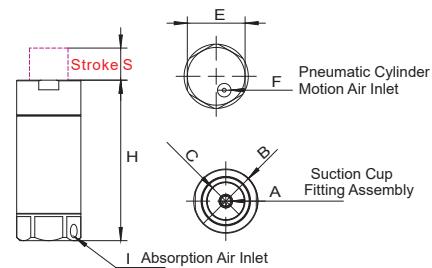


PN	Model	A	B	C	D	E	F	G	H	I	J	S	Weight(g)
8.Y00313	VFC2030-G18	G1/8	G1/8	Φ13	Φ20	8	85	40	133	Φ18	12	30	60



PN	Model	A	B	C	D	E	F	G	H	I	J	S	Weight(g)
8.Y00277	VFCT1620-M5	M5	M5	Φ8	M16X1.0	5	69	26	100	Φ14.5	7	20	42.7
8.Y00314	VFCT2030-G18	G1/8	G1/8	Φ13	M20X1.0	8	85	40	133	Φ18	12	30	80

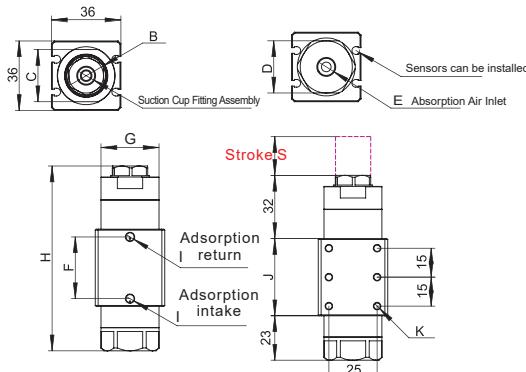
## The Adsorption Of Pneumatic Fittings



Product does not contain suction cup and suction cup fitting

PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	H(mm)	I(mm)	S(mm)	Weight
8.Y00207	VFG20-10	M5	Φ20	Φ12	19	18	M5	50	M5	10	35g
8.Y00337	VFG20-20	M5	Φ20	Φ12	19	18	M5	65	M5	20	45g
8.Y00338	VFG30-20	G1/8	Φ30	Φ20	27	27	G1/8	72	G1/8	20	70g

## Double action adsorption fittings

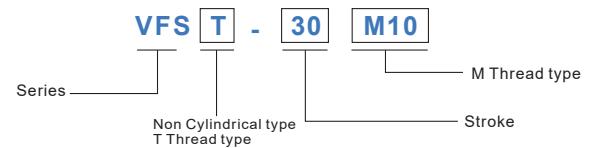


Product does not contain suction cup and suction cup fitting

PN	Model	A	B	C	D	E	F	G	H	I	J	K	S	Weight
8.Y00451	VFGD30-20	G1/8	Φ20	27	27	G1/8	32	Φ30	95	M5	40	M4	20	198.2g

## Suction Stems

### Model Representation Methods



VFST



VFS



VFMT



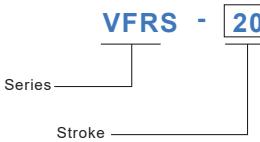
VFM

PN	Model	B(mm)	C(mm)	E(mm)	F(mm)	G(mm)	H(mm)	S(mm)	Weight(g)
8.Y00283	VFST-5M10	M10*1	18	5.5	Ø7	Ø3.4	49	5	14g
8.Y00284	VFST-10M10	M10*1	18	5.5	Ø7	Ø3.4	54	10	15g
8.Y00285	VFST-20M10	M10*1	18	5.5	Ø7	Ø3.4	64	20	15g
8.Y00286	VFST-30M10	M10*1	18	5.5	Ø7	Ø3.4	74	30	16g
8.Y00287	VFS-0508	Ø8	18	5.5	Ø7	Ø3.4	49	5	9g
8.Y00288	VFS-0512	Ø12	18	5.5	Ø7	Ø3.4	49	5	13g
8.Y00289	VFS-1008	Ø8	18	5.5	Ø7	Ø3.4	54	10	9g
8.Y00007	VFS-1012	Ø12	18	5.5	Ø7	Ø3.4	54	10	14g
8.Y00290	VFS-2008	Ø8	18	5.5	Ø7	Ø3.4	64	20	10g
8.Y00008	VFS-2012	Ø12	18	5.5	Ø7	Ø3.4	64	20	14g
8.Y00291	VFS-3008	Ø8	18	5.5	Ø7	Ø3.4	74	30	11g
8.Y00292	VFS-3012	Ø12	18	5.5	Ø7	Ø3.4	74	30	15g
8.Y00293	VFMT-5M12	M12*1	18	9	Ø11	Ø4.6	52.5	5	20g
8.Y00294	VFMT-10M12	M12*1	18	9	Ø11	Ø4.6	57.5	10	21g
8.Y00295	VFMT-20M12	M12*1	18	9	Ø11	Ø4.6	67.5	20	22g
8.Y00296	VFMT-30M12	M12*1	18	9	Ø11	Ø4.6	77.5	30	24g
8.Y00297	VFM-0512	Ø12	18	9	Ø11	Ø4.6	52.5	5	15g
8.Y00298	VFM-0520	Ø20	18	9	Ø11	Ø4.6	52.5	5	29g
8.Y00299	VFM-1012	Ø12	18	9	Ø11	Ø4.6	57.5	10	16g
8.Y00300	VFM-1020	Ø20	18	9	Ø11	Ø4.6	57.5	10	29g
8.Y00301	VFM-2012	Ø12	18	9	Ø11	Ø4.6	67.5	20	18g
8.Y00302	VFM-2020	Ø20	18	9	Ø11	Ø4.6	67.5	20	31g
8.Y00303	VFM-3012	Ø12	18	9	Ø11	Ø4.6	77.5	30	19g
8.Y00304	VFM-3020	Ø20	18	9	Ø11	Ø4.6	77.5	30	32g

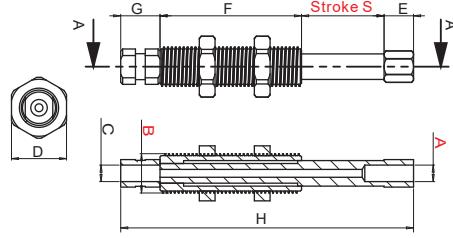
## Suction Stems

### Model Representation Methods

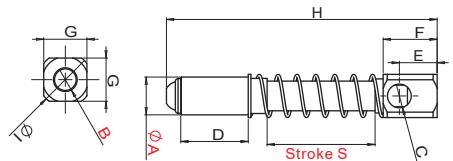
VFRS - 20



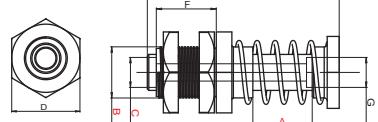
M10 - M5



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)	S(mm)	Weight(g)
4.Y00026	VFRS-20M10-M5	M5	M10*1	M5	14	7	36	10	73.5	20	27g	
4.Y00023	VFRS-20M16-G18	G1/8	M16*1	G1/8	21	4	36	15	77	20	76g	

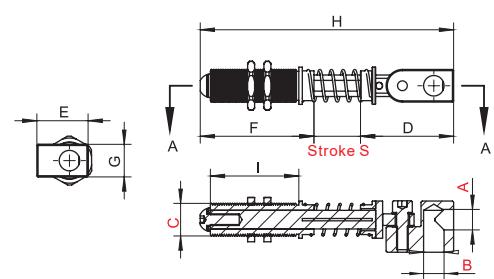


PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)	S(mm)	Weight(g)
1.Y01452	VFM-4014-G18	Ø14	G1/8	G1/8	25	14	20	16	100	Ø20	40	48g
1.Y01451	VFM-2020-G14	Ø20	G1/4	G1/8	48	15	26	22	113	Ø27	20	136g

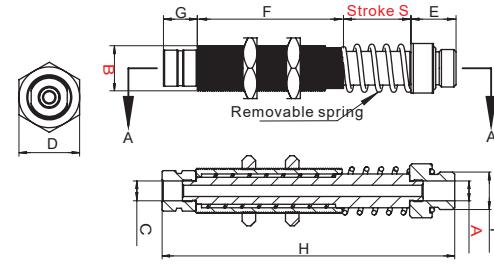


PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)	S(mm)	Weight(g)
1.Y01453	VFL-20M17-G18	20	M17*1	G1/8	27	64	20	G1/8			119g	

## Suction Stems

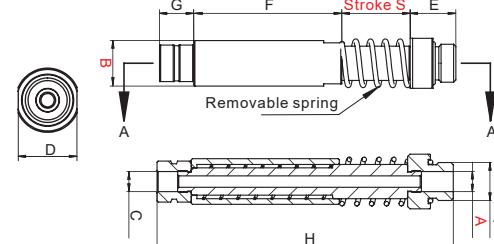


PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)	S(mm)	Weight(g)
8.Y00319	VFMT-20M14-G18	G1/8	G1/8	M14X1.0	40	22	49	14	109	38	20	97g
8.Y00320	VFMT-40M14-G18	G1/8	G1/8	M14X1.0	40	22	64	14	144	50	40	123g



PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)	S(mm)	Weight(g)
8.Y00409	VFHT-30M20-G38F-G18M	G1/8	M20*1	G1/8	27	20	65	15	130	G3/8	30	260g

\*When installing a single spring, the pressure it can bear is 7N-18N. When installing the double spring, the pressure that can bear is 60N-150N.

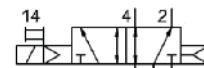
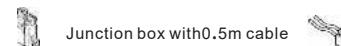


PN	Model	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)	S(mm)	Weight(g)
8.Y00410	VFH-30M20-G38F-G18M	G1/8	Ø20	G1/8	22	20	65	15	130	G3/8	30	235g

\*When installing a single spring, the pressure it can bear is 7N-18N. When installing the double spring, the pressure that can bear is 60N-150N.

## Solenoid Valve VUVG-LK

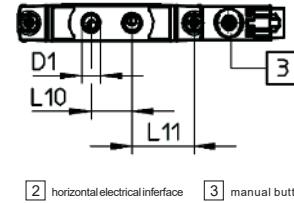
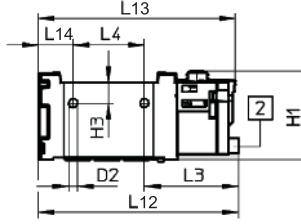
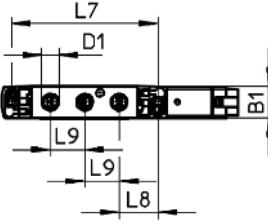
Single pipe valve VUVG-LK, 24VDC, Inner leader H2



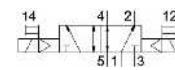
M52 Two-position five-way  
single electronic control air reset



accessory  
seal a pack of ten



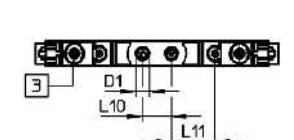
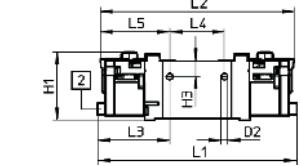
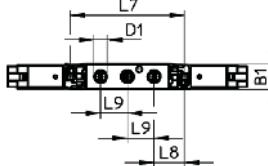
PN	Model	B1	D2	H1	H3	L3	L4	L7	L8	L9	L10	L11	L12	L13	L14	Flow parameters (l/min)
1.Y0640	VUVG-LK14-M52-AT-G18-1H2L-S	14.4	3.3	34.8	3.2	40.1	37	66.5	18.4	14.9	17	24.8	95.6	94.4	17.7	660



B52 Two-position double  
electronic control

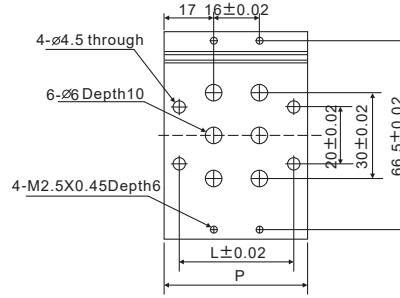
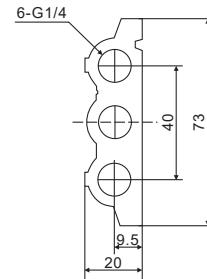


accessory  
seal a pack of ten



PN	Model	B1	D2	H1	H3	L1	L2	L3	L4	L5	L7	L8	L9	L10	L11	Flow parameters (l/min)
1.Y06288	VUVG-LK14-B52-T-G18-1H2L-W1-S	14.4	3.3	34.8	3.2	118.9	116.4	40.1	37	39.7	66.5	18.4	14.9	17	24.8	660

## Solenoid Valve Base



PN	1.Y06289	1.Y06290	1.Y06291	1.Y06292	1.Y06293	1.Y06294	1.Y06042	1.Y07453	1.Y06295	
Model	VUVG18-LK-2F	VUVG18-LK-3F	VUVG18-LK-4F	VUVG18-LK-5F	VUVG18-LK-6F	VUVG18-LK-7F	VUVG18-LK-8F	VUVG18-LK-9F	VUVG18-LK-10F	
Row	2	3	4	5	6	7	8	9	10	
L	40	56	72	88	104	120	136	152	168	
P	50	66	82	98	114	130	146	162	178	
PN	1.Y09872	1.Y09873	1.Y09874	1.Y09875	1.Y09876	1.Y09877	1.Y09878	1.Y09879	1.Y09880	1.Y09881
Model	VUVG18-LK-11F	VUVG18-LK-12F	VUVG18-LK-13F	VUVG18-LK-14F	VUVG18-LK-15F	VUVG18-LK-16F	VUVG18-LK-17F	VUVG18-LK-18F	VUVG18-LK-19F	VUVG18-LK-20F
Row	11	12	13	14	15	16	17	18	19	20
L	184	200	216	232	248	264	280	296	312	328
P	194	210	226	242	258	274	290	306	322	338



## VLCLASSIC XI x 2 Vacuum Generator



High efficiency and energy saving generator technology.  
The vacuum generating tube can provide high flow rate under the vacuum degree up to 95 - kPa.  
Suitable for non permeable applications requiring high vacuum.  
Large capacity range, 1 to 6 vacuum tubes can be provided. If necessary, viaclassic can be easily upgraded from smaller capacity to larger capacity.  
Lightweight, configurable and modular design.  
Easy to disassemble and maintain.

PN	Model
1.Y13065	VLCLASSIC XI x 2

### Summary

Materiel	CuZn, NBR (FKM), PA, SS, Al
Noise level	64-69 dBA
Temperature	-10-80 °C
Weight	550 g
Muffler weight	120 g

### Vacuum Flow (NI/s)

Feed pressure	Gas consumption	Vacuum flow(NI/s) @ vacuum (- kPa)										Max vacuum
Mpa	NI/s	0	10	20	30	40	50	60	70	80	90	-kPa
0.45	3.66	11.8	6	4	2.6	1.46	1.16	0.86	0.64	0.36	0.06	95

### Exhaust Time (s/l)

Feed pressure	Gas consumption	Exhaust time (s / L) Vacuum (- kPa)										Max vacuum
Mpa	NI/s	10	20	30	40	50	60	70	80	90	-kPa	95
0.45	3.66	0.011	0.031	0.06	0.11	0.19	0.29	0.42	0.6	1.1		

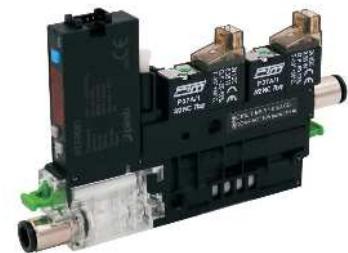
### The Values Indicated In The Data Sheet Can Be Tested:

Room temperature	(20 °C [68 F] ± 3 °C [5.5 F])
Standard atmosphere	(101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg])
Relative humidity	0-100%
Compressed air quality	DIN ISO 8573-1 class 4

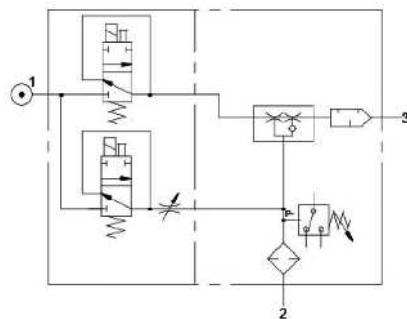
## Compact 10CE Integrated Vacuum Generator

### Values specified in the data sheet are tested at:

Room temperature(20 C [68 F] ±3 C [5.5 F])  
Standard atmosphere 101.3[29.9 inHg] 1.0 kPa [0.3inHg])  
Relative humidity:35-85%,non condensation  
Compressed air quality DIN ISO 8573-1 class 4 standard



### Gas Circuit Diagram



PN	Model	Type
1.Y13064	COMPACT10E PNP	PNP
1.Y13279	COMPACT10E NPN	NPN

### Technical Data

Description	Unit	Value
Recommended feed pressure	Mpa	0.5
Feed pressure, max.	Mpa	0.7
Temperature range	°C	0-50
Weight*	g	74
Material	-	PA, AL, CuZn, PE, NBR, PC, SS, TPV, FKM, Steel, Glass epoxy
Noise level range of 1-8 vacuum channels	dB	46-60
Connection, compressed air	-	ø6 push-in connector
Connection, vacuum	-	ø6 push-in connector

\*) Note! The weight does not include the cables that are included in the shipping.

# Compact 10CE Integrated Vacuum Generator

## Valve Module

Description	Unit	Value
Valve function	-	NC vacuum normally closed + NC blowing normally closed
Supply voltage	VDC	24 (21.6 – 26.4)
Power	W	3.5
Response time	ms	≤ 3
Electrical connection	-	Supplied cable, Red (+) Black (-)

## Vacuum Flow

Feed pressure vacuum pump/nozzle	Air consumption per pump /nozzle	Vacuum flow (Nl/s) under different vacuum degrees (-kPa)							Max vacuum	
Mpa	Nl/s	0	10	20	30	40	50	60	70	-kpa
0.50/0.40	0.23	0.26	0.24	0.19	0.14	0.088	0.063	0.045	0.023	84

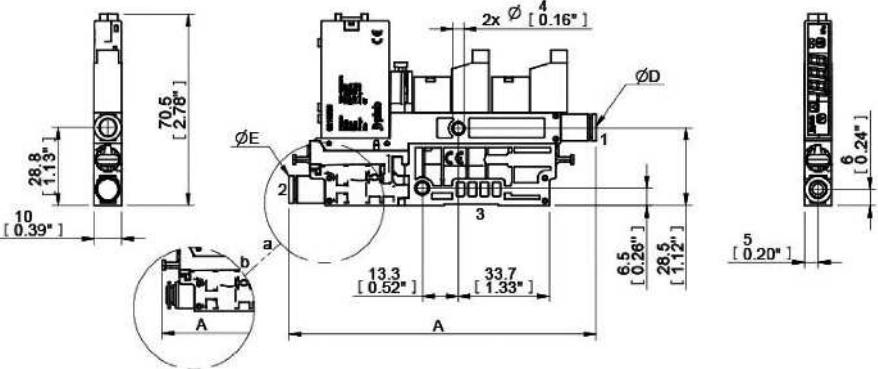
## Vacuum Time

Feed pressure vacuum pump/nozzle	Air consumption per pump /nozzle	Pumping time to different vacuum (- kPa)							Max vacuum	
Mpa	Nl/s	10	20	30	40	50	60	70	80	-kpa
0.50/0.40	0.23	0.40	0.87	1.49	2.38	3.71	5.57	8.52	15.44	84

## Vacuum Sensor

Description	Unit	Value
Supply voltage	VDC	12-24 ±10%, Fluctuation P-P 10% or less
Current consumption (with no load)	mA	≤ 40
Switch output	-	NPN
Response time	ms	≤ 2,5
Analog output	VDC	1-5 ±2.5% F.S.
Electrical connection	-	JST PAP-05V

# Compact 10CE Integrated Vacuum Generator



Description	Unit	Value
A	mm	113.6
ΦD	mm	Φ6
ΦE	mm	Φ6

Configuration	Value
a	ø6 push-in connector

## Ordering Information

Description	Product code
COMPACT10E, ultra high vacuum flow (micro), display screen, analog and digital output, NPN, ø6 push in connector, 1 channel, ø6 push in connector, integrated muffler, NC vacuum normally closed + NC blowing normally closed	C10E.T.BB.6.1.6.EJ.CC

## Compact 20CE Vacuum Generator

### Vacuum Generator

Configure Piab multistage vacuum generator

### valve

Integrated electric vacuum and blow-off valve

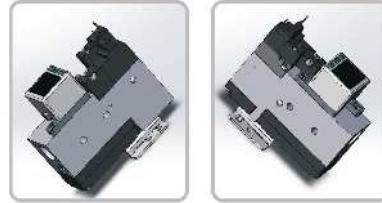
Blowing flow control valve

### Quick connector

8mm or 10mm quick connector can be configured.

### Vacuum sensor

Vacuum sensor with user-friendly interface or reserved vacuum detection port is optional.



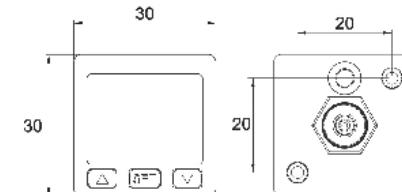
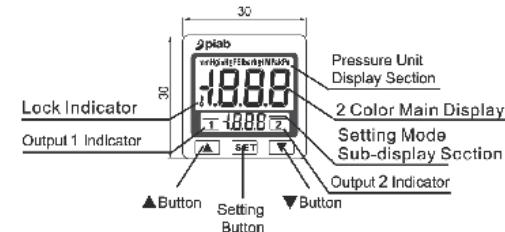
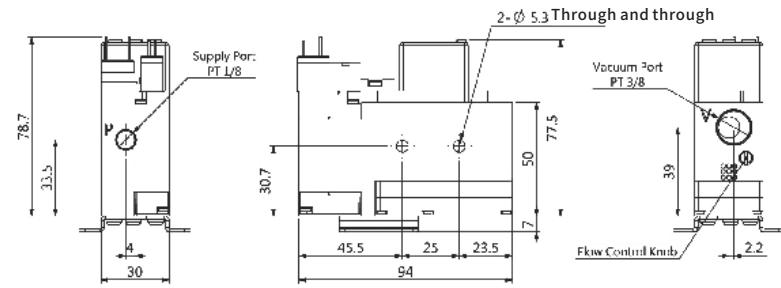
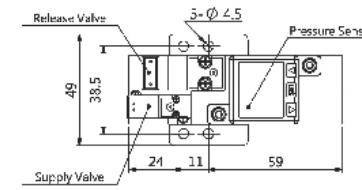
\*The wire's length is 2 meters

PN	Model	Type
1.Y13062	COMPACT 20CE PNP	PNP
1.Y13063	COMPACT 20CE NPN	NPN

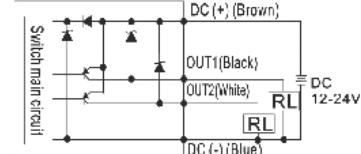
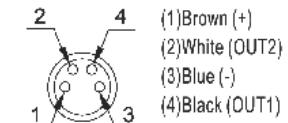
### Compact 20CE technical parameter

Vacuum technology	Multistage vacuum generator
(Mpa) Working air pressure	0.38~0.6
(NL/s) Maximum Vacuum flow	2.4
(-Kpa) Maximum Vacuum level	84
(NL/s) Air consuption	1.5~2.2
(°C) Working temperature	-5~50
(mm) Size	94x78x30
(dBA) Noise level	57~68
Vacuum port size	G3/8"
(g) Net Weight	370
Vacuum Sensor	PNP/NPN
Solenoid Valve	NC/NO
Power consumption	24V±10% VDC,2W

## Compact 20CE Vacuum Generator



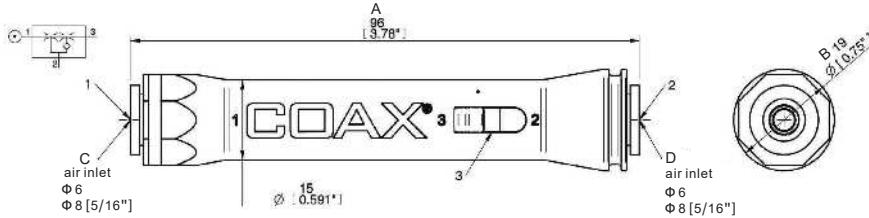
### PINOUT



## PiINLINE® Vacuum Generator MINI Si



Patented COAX® cartridge technology.  
High vacuum flow capacity in relation to energy consumption.  
Low weight inline design with push-in fittings for vacuum and compressed air.  
Quick and easy installation directly on the hose.  
Si cartridge for extra vacuum flow.  
Pi cartridge for high performance at low feed pressures.  
Xi cartridge when high flow and deep vacuum is needed.



### Product Specifications

Model	PiINLINE® vacuum generator MINI Si, 6-6 mm	PiINLINE® vacuum generator MINI Si, 8-8 mm
PN	1.Y13066	1.Y13067
Diameter	19 mm(B)	19 mm(B)
Air inlet diameter	6 mm(C)	8 mm(C)
Air outlet diameter	6 mm(D)	8 mm(D)
Length	96 mm(A)	96 mm(A)

### Summary

Product number (optional)	E12842188
Materiel	CuZn, PA, SS, Nitrile rubber
Weight	21.8 g

### Performance

Gas consumption	25.7 l/m (.9 scfm) Ni/s
Feed pressure, max.	0.7 MPa

## PiINLINE® Vacuum Generator MINI Si

### Vacuum Flow(Ni/s)

Feed pressure	Gas consumption	Vacuum flow(Ni/s) @ vacuum (- kPa)								Max vacuum
		0	10	20	30	40	50	60	70	
Mpa	Ni/s	0.69	0.55	0.42	0.28	0.23	0.16	0.12	0.08	75

### Exhaust Time (s/l)

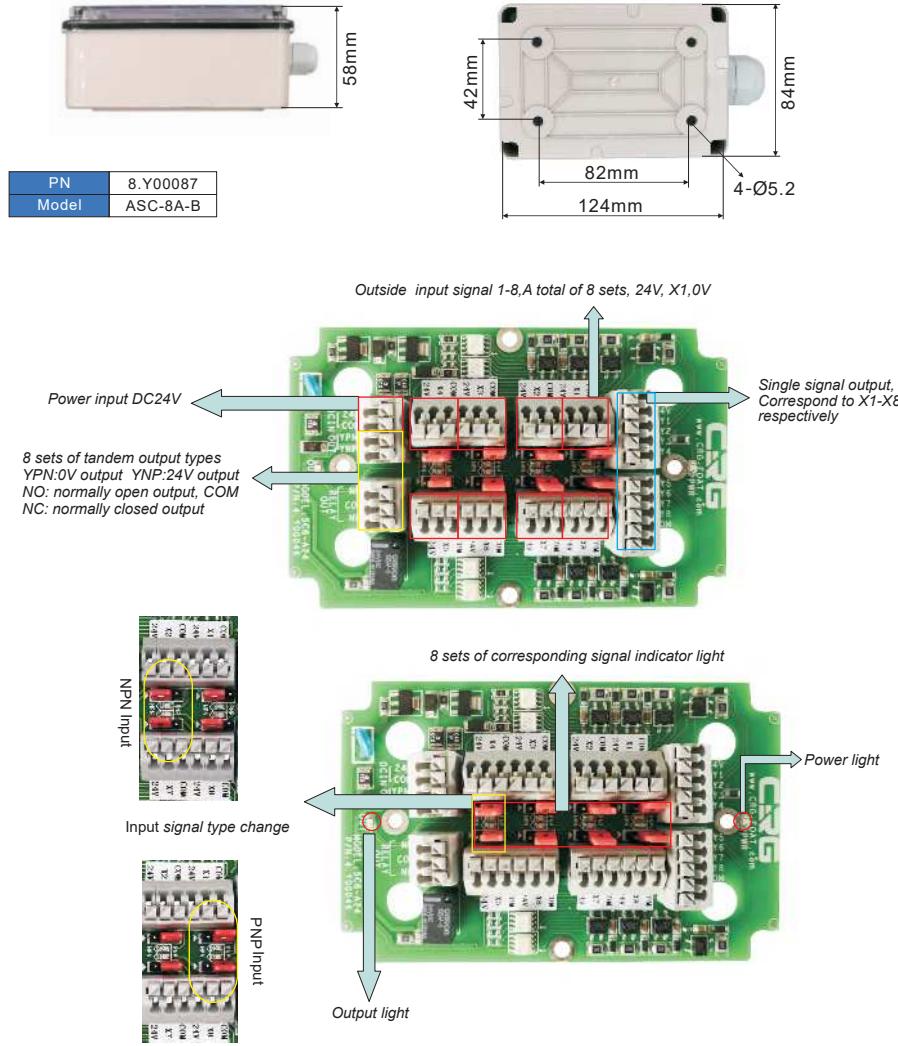
Feed pressure	Gas consumption	Exhaust time (s / L) Vacuum (- kPa)							Max vacuum
		10	20	30	40	50	60	70	
Mpa	Ni/s	0.16	0.37	0.66	1.1	1.4	2.1	3.1	75

### The Values Indicated In The Data Sheet Can Be Tested:

Room temperature	(20 °C [68 °F] ± 3 °C [5.5 °F])
Standard atmosphere	(101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg])
Relative humidity	0-100%
Compressed air quality	DIN ISO 8573-1 class 4

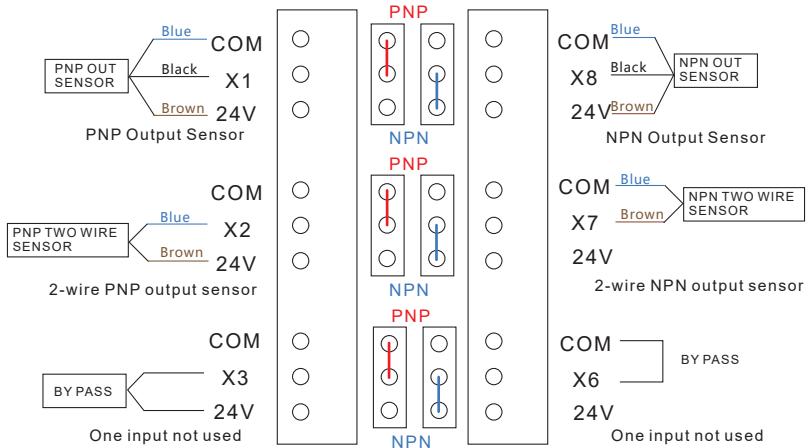
# I/O Module Signal Boxes

## Structure description



# I/O Module Signal Boxes

## Operation description



## Electrical parameters

	Minimum	Recommend	Maximum	Unit
supply voltage	20	24	28	V
Value of effective current at input	5	7	10	mA
Transistor Output Maximum Load			100	mA
Relay Output Load Capability (Resistive Load)			0.5A@125VAC 1A@24VDC	
Maximum switching frequency		TBD		Hz

## Function description

1. To solve the problem that the power supply of multiple sensors is not connected as one line, the problem of space occupation is cancelled. The maximum 8 groups can be used, and less than 8 groups need to be shorted.
2. Output types can be changed at present for NPN, PNP, NC, NO, and four output forms.
3. You can also crawl the signal individually, and grab the signal type for the actual type of sensor.
4. Observe the induction state of each inductor and the status of the output.
5. Types of sensors and output is not available, skipping type conversion, minus the replacement work of the sensor.

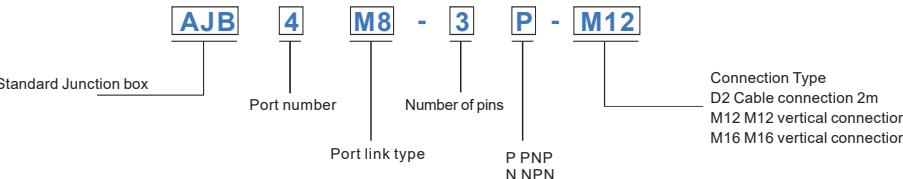
## Junction Box

Housing material:Nylon/Black  
Coupling nut:Brass/Nickel  
Contact carrier:TPU/Black  
Pin:Brass/Gold

IP degree:IP67  
Load:10~30VDC,2 A/port, 6 A total,LED 10mA  
Temperature range:-30...+80°C  
Single channel PNP or NPN



### Model Representation Methods

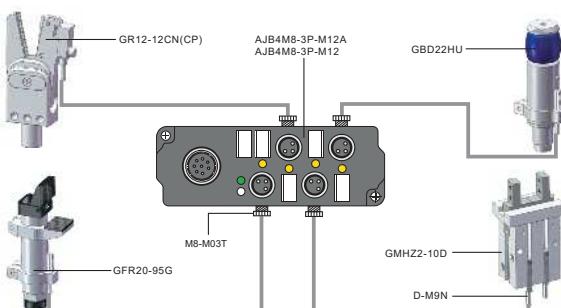


### Product Specifications

PN	Model	Type	Weight
4.Y00487	AJB4M8-3P-M12	PNP	110g
4.Y00488	AJB4M8-3N-M12	NPN	110g
4.Y00491	AJB8M8-3P-M16	PNP	120g
4.Y00492	AJB8M8-3N-M16	NPN	120g
4.Y00495	AJB8M8-3P-D2	PNP	300g
4.Y00496	AJB8M8-3N-D2	NPN	300g

### Application example

1. Single channel PNP or NPN
2. The four way input is effective at the same time, and outputs a set of signals to realize the output function of "and circuit".



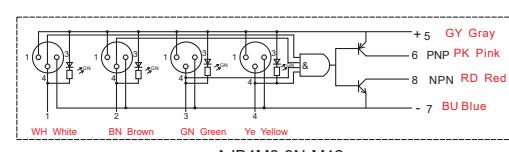
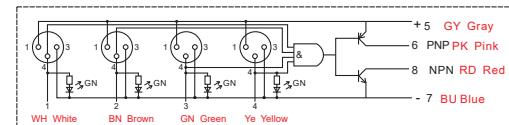
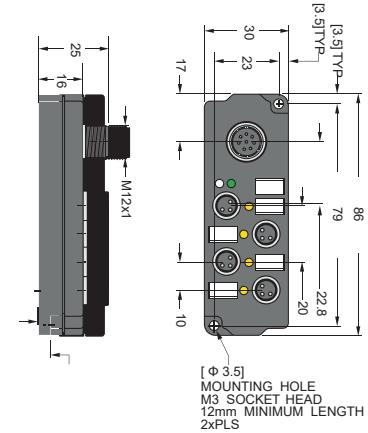
## M8 4 Ports Junction Box

Housing material:Nylon/Black  
Coupling nut:Brass/Nickel  
Contact carrier:TPU/Black  
Pin:Brass/Gold

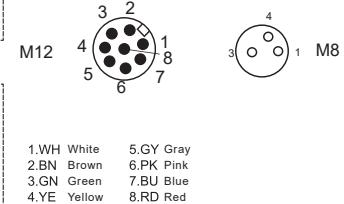
IP degree:IP67  
Load:10~30VDC,2 A/port, 6 A total,LED 10mA  
Temperature range:-30...+80°C



Single channel PNP or NPN  
1 signal per port  
LED  
M12 vertical connector



### Pin Arrangement/Pinout



### Joint



PN	Model	PN	Model	PN	Model	PN	Model
1.Y07461		1.Y06722		1.Y13391		1.Y07462	
Model	ELK8112-0/9	Model	M8-M03T	Model	M8-M03L	Model	ELK8-2M/P00

\* The wire length is 2 meters

Female

### Product Specifications

PN	Model	Type	Weight
4.Y00487	AJB4M8-3P-M12	PNP	110g
4.Y00488	AJB4M8-3N-M12	NPN	110g

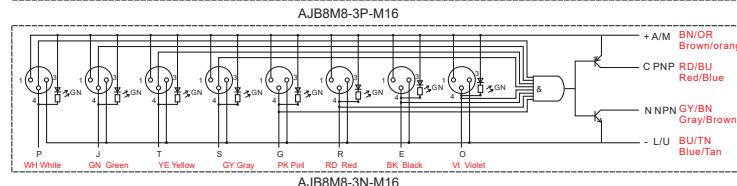
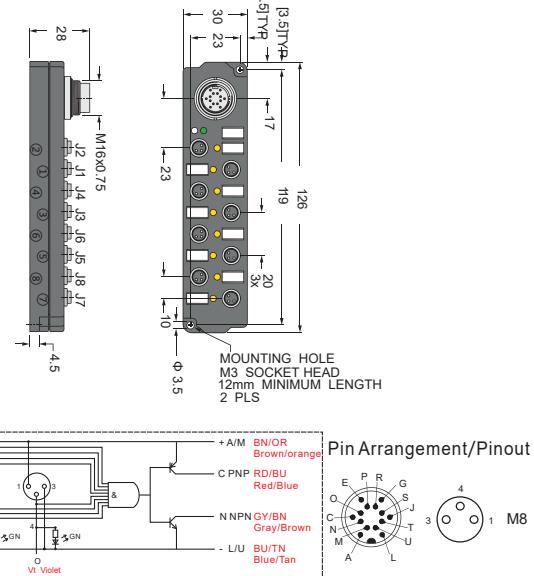
## M8 8 Ports Junction Box

Housing material:Nylon/Black  
Coupling nut:Brass/Nickel  
Contact carrier:TPU/Black  
Pin:Brass/Gold



Single channel PNP or NPN  
1 signal per port  
LED  
M16 vertical connector

IP degree:IP67  
Load:10~30VDC,2 A/port, 6 A total,LED 10mA  
Temperature range:-30...+80°C



## Joint



14 pins M16 pre-moulding Cable  
PN 1.Y07463  
Model DNLK14-14-2M/P00

3 pins M8 Field wirable connector  
PN 1.Y06722  
Model M8-M03T

## Perforation/Female



## Product specifications

PN	Model	Type	Weight
4.Y00491	AJB8M8-3P-M16	PNP	120g
4.Y00492	AJB8M8-3N-M16	NPN	120g

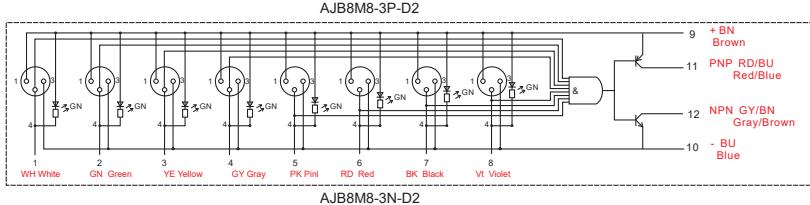
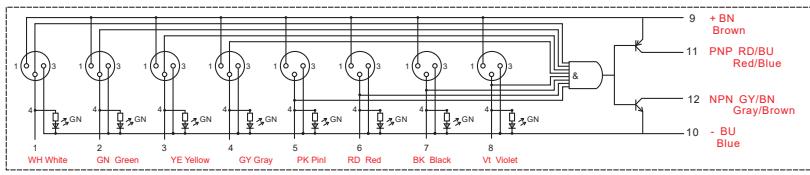
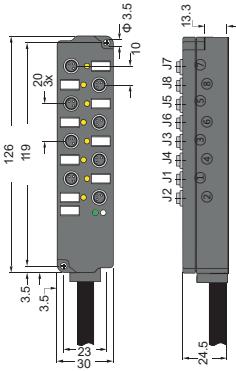
## M8 8 Ports Junction Box

Housing material:Nylon/Black  
Coupling nut:Brass/Nickel  
Contact carrier:TPU/Black  
Pin:Brass/Gold



Single channel PNP or NPN  
1 signal per port  
LED  
Black PVC wire with 10 cores in 2m

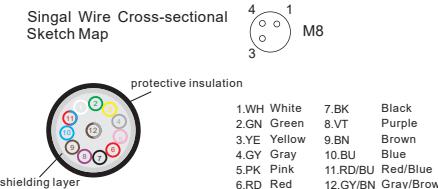
IP degree:IP67  
Load:10~30VDC,2 A/port, 6 A total,LED 10mA  
Temperature range:-30...+80°C



## Joint



3 pins M8 Field wirable connector  
PN 1.Y06722  
Model M8-M03T



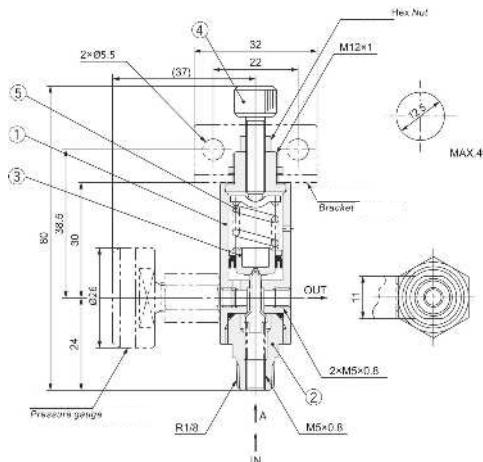
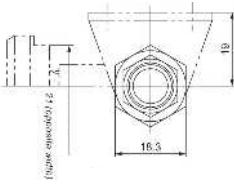
## Product specifications

PN	Model	Type	Weight
4.Y00495	AJB8M8-3P-D2	PNP	300g
4.Y00496	AJB8M8-3N-D2	NPN	300g

\*The standard length is 2 meters, which can be customized.

## Miniature Regulator ARJ210 Series

The body is made of aluminum, lightweight (60g)  
IN side pipe connections are made with 1/8 (external thread)  
M5 (internal thread) 2 types



PN	1.Y05877
Model	ARJ210-M5BG
Pipe Siz	IN Side 1/8 (F-external thread)or M5×0.8(M-female thread)
	OUT Side M5×0.8(F-2 female threads)
Fluid	Air
Proof pressure	1.2MPa
MaximumOperating pressure	0.8MPa
	0.2~0.7MPa
Set pressure range	0.2MPa: 0.05~0.2MPa
Pressure gauge connecting caliber	M5×0.8(M-female thread)
Environment and fluid temperature	-5~60°C
(kg) Weight	0.06

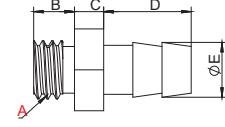
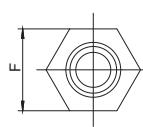
## Tube Cutter



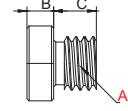
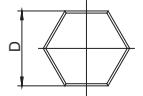
Special tool for cutting copper tube  
Ease to use  
Improve work efficiency  
Durable,high-quality,weight (248g)

PN 1.Y02592

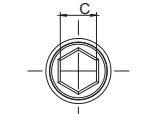
## Connector



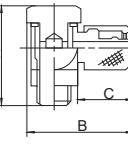
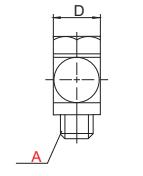
PN	Model	A	B	C	D	E	F	Weight
1.Y03145	APB-M3- Ø 4	M3	4	2	5.5	3.5	4.5	0.6g
1.Y05008	APB-M5- Ø 4	M5	5	2	6.5	3.5	7	1.4g
1.Y01986	APB-M5- Ø 6	M5	4.5	2.5	7	4.8	7	1.7g



PN	Model	A	B	C	D	Weight
1.Y06794	APF-M3	M3	2	3	4.9	0.5g
1.Y02510	APF-M5	M5	2.5	4.5	7	1.4g



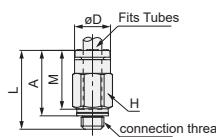
PN	Model	A	B	C	Weight
1.Y00462	APF-G18	G1/8	8	5	3.0g
1.Y00463	APF-G14	1/4	9	6	6.2g



PN	Model	A	B	C	D	H	Weight
1.Y13282	APBL-M3- Ø 4	M3	9.5	4.5	5	9.5	0.8g
1.Y13283	APBL-M5- Ø 4	M5	15.5	8.5	7	15	4.5g
1.Y13284	APBL-M5- Ø 6	M5	17.5	9.5	8	16	6.6g
1.Y13285	APBL-G18- Ø 6	G1/8	20	9	10	21.5	13g

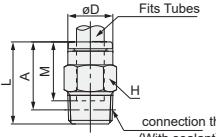
## Connector

### Kq2 series Straight connector :KQ2H(gasket seal)



Fits Tubes Outside diameter (mm)	PN	Model	Connection thread (M)	H (hexagonal)	øD	L	A	M	Effective cross-sectional area (mm)		Minimum Hole Diameter	Weight
									Nylon	Organosilicon		
ø2	1.Y13101	KQ2H02-M3G	M3×0.5	7	5.5	15.6	13	11.9	0.9	0.9	1.2	1.5g
	1.Y13102	KQ2H02-M5A	M5×0.8	7	5.5	13.8	10.8	11.9	0.9	0.9	1.4	2g
ø3.2	1.Y13103	KQ2H23-M3G	M3×0.5	7	6.7	17	14.4	13.3	0.9	0.9	1.2	2.4g
	1.Y13104	KQ2H23-M5A	M5×0.8	7	6.7	17.3	14.3	13.3	3	2.5	2.5	2.7g
ø4	1.Y13105	KQ2H04-M3G	M3×0.5	8	7.7	17.1	14.5	13.3	0.9	0.9	1.2	2.9g
	1.Y04451	KQ2H04-M5A	M5×0.8	8	7.7	17.7	14.7	13.3	4	4	2.5	3.3g
	1.Y13106	KQ2H04-M6A	M6×1.0	8	7.7	18.7	14.7	13.3	4	4	3	3.6g
ø6	1.Y04452	KQ2H06-M5A	M5×0.8	10	9.7	17.7	14.7	13.3	4	4	2.5	4.1g
	1.Y13107	KQ2H06-M6A	M6×1.0	10	9.7	18.8	14.8	13.3	4	4	3	4.4g

### Kq2 series Straight connector :KQ2H(sealant)

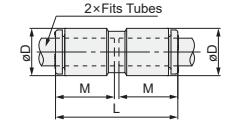


Fits Tubes Outside diameter (mm)	PN	Model	Connection thread (M)	H (hexagonal)	øD	L	A	M	Effective cross-sectional area (mm)		Minimum Hole Diameter	Weight
									Nylon	Organosilicon		
ø3.2	1.Y13108	KQ2H23-01AS	1/8	10	6.7	14	10.9	13.3	3.4	2.9	2.5	6g
	1.Y13109	KQ2H23-02AS	1/4	14	6.7	16.7	12	13.3	3.4	2.9	2.5	15.3g
ø4	1.Y03599	KQ2H04-01AS	1/8	10	7.7	14.3	11.2	13.3	5.6	4	3	5.6g
	1.Y05147	KQ2H04-02AS	1/4	14	7.7	16.7	12	13.3	5.6	4	3	14.6g
ø6	1.Y13110	KQ2H06-01AS	1/8	10	9.7	18.4	15.3	13.3	13.1	10.4	4.5	5.8g
	1.Y07090	KQ2H06-02AS	1/4	14	9.7	16.7	12	13.3	13.1	10.4	4.5	12.5g
	1.Y05164	KQ2H06-03AS	3/8	17	9.7	18.1	13	13.3	13.1	10.4	4.5	24.5g
ø8	1.Y07162	KQ2H08-01AS	1/8	14	12.2	22.5	19.4	14.2	26.1	18	6	11.9g
	1.Y05101	KQ2H08-02AS	1/4	14	12.2	22	17.3	14.2	26.1	18	6	13.9g
	1.Y02228	KQ2H08-03AS	3/8	17	12.2	18.1	13	14.2	26.1	18	6	21g
ø10	1.Y13111	KQ2H10-01AS	1/8	17	14.6	23.8	20.7	15.6	26.1	26.1	6	16.9g
	1.Y07142	KQ2H10-02AS	1/4	17	14.6	27.3	22.6	15.6	41.5	29.5	7.5	22.1g
	1.Y07632	KQ2H10-03AS	3/8	17	14.6	23.5	18.4	15.6	41.5	29.5	7.5	22.5g
	1.Y13112	KQ2H10-04AS	1/2	22	14.6	22.3	15.9	15.6	41.5	29.5	7.5	44.7g
ø12	1.Y13113	KQ2H12-02AS	1/4	19	17	28.7	24	17	58.3	46.1	9	24.3g
	1.Y13114	KQ2H12-03AS	3/8	19	17	25.9	20.8	17	58.3	46.1	9	25.2g
	1.Y13115	KQ2H12-04AS	1/2	22	17	22.3	15.9	17	58.3	46.1	9	37.7g
ø16	1.Y13116	KQ2H16-02AS	1/4	24	21.8	32.5	27.8	20.6	58.3	46.1	9	42.4g
	1.Y13117	KQ2H16-03AS	3/8	24	21.8	33.1	28	20.6	81	67	11	42.4g
	1.Y13118	KQ2H16-04AS	1/2	24	21.8	32.1	25.7	20.6	113	67	13	44.6g

\* R reference dimension of R thread after screwing in

## Connector

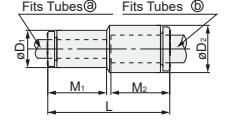
### Kq2 series Straight joint : KQ2H



Fits Tubes Outside diameter (mm)	PN	Model	øD*	L	M	Effective cross-sectional area (mm)		Minimum Hole Diameter	Weight
						Nylon	Organosilicon		
ø2	1.Y13119	KQ2H02-00A	5.8	24.8	11.9	-	0.9	1.4	0.8g
ø3.2	1.Y13120	KQ2H23-00A	7.1	27.6	13.3	3.4	2.9	2.5	1.4g
ø4	1.Y13121	KQ2H04-00A	8.2	27.6	13.3	5.6	4	3	1.6g
ø6	1.Y13122	KQ2H06-00A	10.4	27.6	13.3	13.1	10.4	4.5	2.1g
ø8	1.Y13123	KQ2H08-00A	13.2	29.4	14.2	26.1	18	6	3.7g
ø10	1.Y13124	KQ2H10-00A	15.9	32.2	15.6	41.5	29.5	7.5	5.5g
ø12	1.Y13125	KQ2H12-00A	18.5	35	17	58.3	46.1	9	8.2g
ø16	1.Y13126	KQ2H16-00A	23.8	42.2	20.6	113	67	13	15.2g

\* øD are maximum diameters.

### Kq2 series Special type through connection: KQ2H

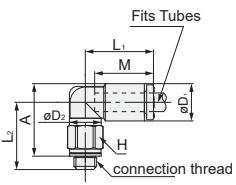


Fits Tubes Outside diameter (mm)	PN	Model	øD <sub>1</sub> *	øD <sub>2</sub> *	L	M <sub>1</sub>	M <sub>2</sub>	Effective cross-sectional area (mm)		Minimum Hole Diameter	Weight	
								Nylon	Organosilicon			
ø2	ø3.2	1.Y13127	KQ2H02-23A	5.8	7.1	26.2	11.9	13.3	-	0.9	1.4	1.1g
ø2	ø4	1.Y13128	KQ2H02-04A	5.8	8.2	26.2	11.9	13.3	-	0.9	1.4	1.2g
ø3.2	ø4	1.Y13129	KQ2H23-04A	7.1	8.2	27.6	13.3	13.3	3.4	2.9	2.5	1.5g
ø3.2	ø6	1.Y13130	KQ2H23-06A	7.1	10.4	27.6	13.3	13.3	3.4	2.9	2.5	1.8g
ø4	ø6	1.Y13131	KQ2H04-06A	8.2	10.4	27.6	13.3	13.3	5.6	5.6	3	2g
ø6	ø8	1.Y13132	KQ2H06-08A	10.4	13.2	28.5	13.3	14.2	13.1	10.4	4.5	2.9g
ø8	ø10	1.Y13133	KQ2H08-10A	13.2	15.9	30.8	14.2	15.6	26.1	18	6	4.9g
ø10	ø12	1.Y13134	KQ2H10-12A	15.9	18.5	33.6	15.6	17	41.5	29.5	7.5	7.2g
ø12	ø16	1.Y13135	KQ2H12-16A	18.5	23.8	38.6	17	20.6	58.3	46.1	9	12.4g

\* øD<sub>1</sub>、 øD<sub>2</sub> are maximum diameters.

## Connector

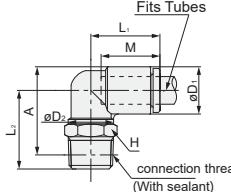
### Kq2 series Elbow : KQ2L(gasket seal)



Fits Tubes Outside diameter (mm)	PN	Model	Connection thread (M)	H (hexagonal)	øD*	øD <sub>z</sub>	L <sub>1</sub>	L <sub>2</sub>	A	M	Effective cross-sectional area (mm)		Minimum Hole Diameter	Weight
											Nylon	Organosilicon		
ø2	1.Y13136	KQ2L02-M3G	M3×0.5	5.5	5.8	5.5	12.6	12.5	12.8	11.9	-	0.8	1.2	1.6g
	1.Y13137	KQ2L02-M5A	M5×0.8	7	5.8	5.5	12.6	13	12.9	11.9	-	0.8	1.4	2.7g
ø3.2	1.Y13138	KQ2L23-M3G	M3×0.5	7	7.1	7	15.3	13.8	14.8	13.3	13.3	0.8	1.2	2.7g
	1.Y13139	KQ2L23-M5A	M5×0.8	7	7.1	7	15.3	14.3	14.9	13.3	13.3	2.2	2.5	3.1g
ø4	1.Y13140	KQ2L04-M3G	M3×0.5	7	8.2	7	15.4	14.3	15.8	13.3	13.3	0.8	1.2	2.7g
	1.Y02599	KQ2L04-M5A	M5×0.8	7	8.2	7	15.4	14.8	15.9	13.3	13.3	3.5	2.5	3.1g
ø6	1.Y13141	KQ2L04-M6A	M6×1.0	8	8.2	7	15.4	15.8	15.9	13.3	13.3	3.5	2.5	4.2g
	1.Y02345	KQ2L06-M5A	M5×0.8	7	10.4	7	14.5	16.5	18.7	13.3	13.3	3.5	2.5	3.2g
	1.Y13142	KQ2L06-M6A	M6×1.0	8	10.4	7	14.5	17.5	18.7	13.3	13.3	3.5	2.5	4.3g

\* øD<sub>z</sub> are maximum diameters.

### Kq2 series Elbow:KQ2L(sealant)



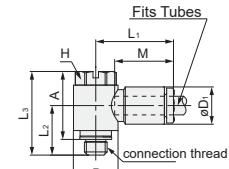
Fits Tubes Outside diameter (mm)	PN	Model	Connection thread (M)	H (hexagonal)	øD*	øD <sub>z</sub>	L <sub>1</sub>	L <sub>2</sub>	A <sup>※</sup>	M	Effective cross-sectional area (mm)		Minimum Hole Diameter	Weight
											Nylon	Organosilicon		
ø3.2	1.Y13143	KQ2L23-01AS	1/8	10	7.1	10	14.5	16.7	17.2	13.3	3	2.5	2.5	4.6g
	1.Y13144	KQ2L23-02AS	1/4	14	7.1	10	14.5	21.2	20.1	13.3	3	2.5	2.5	14.1g
ø4	1.Y05151	KQ2L04-01AS	1/8	10	8.2	10	14.8	16.2	17.2	13.3	4.2	4.2	3	4.8g
	1.Y05751	KQ2L04-02AS	1/4	14	8.2	10	14.8	21.7	19.3	13.3	4.2	4.2	3	14.3g
ø6	1.Y02343	KQ2L06-01AS	1/8	10	10.4	10	15.5	17.3	19.4	13.3	11.4	9	4.5	5.2g
	1.Y11935	KQ2L06-02AS	1/4	14	10.4	10	15.5	22.8	23.3	13.3	11.4	9	4.5	14.7g
ø8	1.Y10180	KQ2L08-03AS	3/8	17	10.4	10	15.5	24.1	23.2	13.3	11.4	9	4.5	26.5g
	1.Y07560	KQ2L08-01AS	1/8	10	13.2	10	16.4	18.7	22.2	14.2	11.4	11.4	4.5	6.1g
ø10	1.Y04922	KQ2L08-02AS	1/4	14	13.2	12	17.2	25.4	27.3	14.2	21.6	14.9	6	17.7g
	1.Y05070	KQ2L08-03AS	3/8	17	13.2	12	17.2	25.5	27.0	14.2	21.6	14.9	6	24.7g
ø12	1.Y13145	KQ2L10-01AS	1/8	12	15.9	12	18.6	23.6	28.4	15.6	21.6	14.9	6	11.1g
	1.Y06994	KQ2L10-02AS	1/4	17	15.9	17	19.3	28.7	31.9	15.6	35.2	25	7.5	21.7g
ø14	1.Y08074	KQ2L10-03AS	3/8	17	15.9	17	19.3	29.6	32.4	15.6	35.2	25	7.5	22.2g
	1.Y13146	KQ2L10-04AS	1/2	22	15.9	17	19.3	33.6	35.1	15.6	35.2	25	7.5	44.6g
ø16	1.Y13147	KQ2L12-02AS	1/4	17	18.5	17	21.5	30.0	34.5	17	50.2	39.7	9	23.5g
	1.Y13148	KQ2L12-03AS	3/8	17	18.5	17	21.5	30.9	35.0	17	50.2	39.7	9	24.1g
ø18	1.Y13149	KQ2L12-04AS	1/2	22	18.5	17	21.5	34.9	37.7	17	50.2	39.7	9	46.5g
	1.Y13150	KQ2L16-02AS	1/4	17	23.8	17	25.1	32.6	39.8	20.6	50.2	50.2	9	27.8g
ø20	1.Y13151	KQ2L16-03AS	3/8	22	23.8	21	27.1	35.4	42.2	20.6	71	58.9	11	40.8g
	1.Y13152	KQ2L16-04AS	1/2	22	23.8	21	27.1	34.1	39.6	20.6	100	58.9	13	44.5g

\* R reference dimension of R thread after screwing in

\* øD<sub>z</sub> are maximum diameters.

## Connector

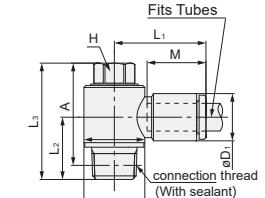
### Kq2 series Universal elbow :KQ2V(gasket seal)



Fits Tubes Outside diameter (mm)	PN	Model	Connection thread (M)	H (hexagonal)	øD*	øD <sub>z</sub>	L <sub>1</sub>	L <sub>2</sub>	A	M	Effective cross-sectional area (mm)		Minimum Hole Diameter	Weight	
											Nylon	Organosilicon			
ø4	1.Y13153	KQ2V04-M5A	M5×0.8	8	8.2	9.8	17.5	10.9	18.4	14.9	13.3	2.9	2.9	2.5	5.4g
	06	1.Y13154	KQ2V06-M5A	M5×0.8	8	10.4	9.8	18.3	10.9	18.4	14.9	13.3	3.8	3.8	2.5

\* øD<sub>z</sub> are maximum diameters.

### Kq2 series Universal elbow:KQ2V(sealant)



Fits Tubes Outside diameter (mm)	PN	Model	Connection thread (M)	H (hexagonal)	øD*	øD <sub>z</sub>	L <sub>1</sub>	L <sub>2</sub>	A <sup>※</sup>	M	Effective cross-sectional area (mm)		Minimum Hole Diameter	Weight	
											Nylon	Organosilicon			
ø4	1.Y13155	KQ2V04-01AS	1/8	8	8.2	13.4	19.3	13.7	25.6	22.5	13.3	2.9	2.9	3	13.2g
	1.Y13156	KQ2V06-01AS	1/8	8	10.4	13.4	20.5	13.7	25.6	22.5	13.3	7.5	5.9	4.5	13.5g
ø8	1.Y13159	KQ2V08-02AS	1/4	10	10.4	15.3	19.9	17.9	30.5	25.8	13.3	7.5	5.9	4.5	24.9g
	1.Y13157	KQ2V08-02AS	1/4	12	13.2	17.6	23.5	18.5	31	26.3	14.2	16	11.2	6	29.1g
ø10	1.Y13160	KQ2V10-03AS	3/8	14	13.2	20.6	23.1	19.5	35.3	30.2	14.2	16	11.2	6	44.4g
	1.Y13161	KQ2V10-02AS	1/4	14	15.9	20.6	25.9	19.9	34.9	30.2	15.6	27	20.3	7.5	38.1g
ø12	1.Y13162	KQ2V10-03AS	3/8	14	15.9	20.6	25.9	20.3	35.3	30.2	15.6	27	20.3	7.5	45.7g
	1.Y13163	KQ2V12-03AS	3/8	17	18.5	25.2	28.5	21.4	37.6	32.5	17	39	30.8	9	59.6g
ø16	1.Y13164	KQ2V12-04AS	1/2	17	18.5	25.2	28.5	24.6	40.8	34.4	17	39	30.8	9	78.2g
	1.Y13165	KQ2V16-03AS	3/8	21	23.8	32.3	34.2	25.1	45.4	40.3	20.6	55	46	11	99.5g
	1.Y13166	KQ2V16-04AS	1/2	21	23.8	32.3	34.2	28.3	48.6	42.2	20.6	78	46	13	107.9g

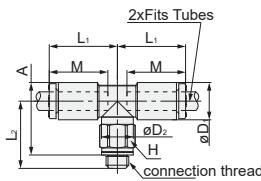
\* R reference dimension of R thread after screwing in

\* øD<sub>z</sub> are maximum diameters.

## Connector

### Kq2 series

#### Double tube T-joint:KQ2T(gasket seal)

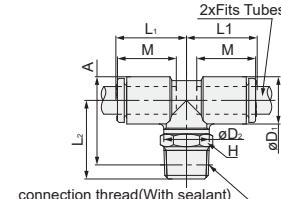


Fits Tubes Outside diameter (mm)	PN	Model	Connection thread (M)	H (hexagonal)	øD*	øD <sub>z</sub>	L <sub>1</sub>	L <sub>2</sub>	A	M	Effective cross-sectional area (mm)		Minimum Hole Diameter	Weight
											Nylon	Organosilicon		
ø2	1.Y13167	KQ2T02-M3G	M3x0.5	5.5	5.8	5.5	12.6	12.5	12.8	11.9	-	0.9	1.2	1.9g
	1.Y13168	KQ2T02-M5A	M5x0.8	7	5.8	5.5	12.6	13	12.9	11.9	-	0.9	1.4	3g
ø3.2	1.Y13169	KQ2T23-M3G	M3x0.5	7	7.1	7	15.3	13.8	14.7	13.3	0.9	0.9	1.2	3.1g
	1.Y13170	KQ2T23-M5A	M5x0.8	7	7.1	7	15.3	14.3	14.8	13.3	3.2	2.7	2.5	3.5g
ø4	1.Y13171	KQ2T04-M3G	M3x0.5	7	8.2	7	15.4	14.3	15.8	13.3	0.9	0.9	1.2	3.4g
	1.Y01536	KQ2T04-M5A	M5x0.8	7	8.2	7	15.4	14.8	15.9	13.3	4.5	4.5	2.5	3.9g
ø6	1.Y13172	KQ2T04-M6A	M6x1.0	8	8.2	7	15.4	15.8	15.9	13.3	4.5	4.5	2.5	4.9g
	1.Y03052	KQ2T06-M5A	M5x0.8	7	10.4	7	14.5	16.5	18.7	13.3	4.5	4.5	2.5	4.4g
ø8	1.Y13173	KQ2T06-M6A	M6x1.0	8	10.4	7	14.5	17.5	18.7	13.3	4.5	4.5	2.5	5.4g

\* øD are maximum diameters.

### Kq2 series

#### Double tube T-joint:KQ2T(sealant)



Fits Tubes Outside diameter (mm)	PN	Model	Connection thread (M)	H (hexagonal)	øD*	øD <sub>z</sub>	L <sub>1</sub>	L <sub>2</sub>	A <sub>X</sub>	M	Effective cross-sectional area (mm)		Minimum Hole Diameter	Weight
											Nylon	Organosilicon		
ø3.2	1.Y13174	KQ2T23-01AS	1/8	10	7.1	10	14.5	16.6	17.1	13.3	3.4	2.9	2.5	5.2g
	1.Y13175	KQ2T23-02AS	1/4	14	7.1	10	14.5	21.1	20	13.3	3.4	2.9	2.5	14.7g
ø4	1.Y13176	KQ2T04-01AS	1/8	10	8.2	10	14.8	16.2	17.2	13.3	6	4.1	3	5.5g
	1.Y13177	KQ2T04-02AS	1/4	14	8.2	10	14.8	21.7	21.1	13.3	6	4.1	3	15g
ø6	1.Y05154	KQ2T06-01AS	1/8	10	10.4	10	15.5	17.3	19.4	13.3	13.9	11	4.5	6.1g
	1.Y13178	KQ2T06-02AS	1/4	14	10.4	10	15.5	22.8	23.3	13.3	13.9	11	4.5	15.6g
ø8	1.Y13179	KQ2T06-03AS	3/8	17	10.4	10	15.5	24.1	24.2	13.3	13.9	11	4.5	27.4g
	1.Y13180	KQ2T08-01AS	1/8	10	13.2	10	16.4	18.7	22.2	14.2	14	4.5	7.9g	
ø10	1.Y13181	KQ2T08-02AS	1/4	14	13.2	12	17.2	25.4	27.3	14.2	26.3	18.2	6	19.4g
	1.Y13182	KQ2T08-03AS	3/8	17	13.2	12	17.2	25.5	27	14.2	26.3	18.2	6	26.5g
ø12	1.Y13183	KQ2T10-01AS	1/8	12	15.9	12	18.6	23.5	28.4	15.6	21.6	14.9	6	13.9g
	1.Y13184	KQ2T10-02AS	1/4	17	15.9	17	19.3	28.6	31.9	15.6	35.2	25	7.5	24.3g
ø14	1.Y13185	KQ2T10-03AS	3/8	17	15.9	17	19.3	29.5	32.4	15.6	35.2	25	7.5	24.8g
	1.Y13186	KQ2T10-04AS	1/2	22	15.9	17	19.3	33.5	35.1	15.6	35.2	25	7.5	47.3g
ø16	1.Y13187	KQ2T12-02AS	1/4	17	18.5	17	21.5	29.9	34.5	17	57.2	45.2	9	27.3g
	1.Y13188	KQ2T12-03AS	3/8	17	18.5	17	21.5	30.8	35	17	57.2	45.2	9	28g
ø18	1.Y13189	KQ2T12-04AS	1/2	22	18.5	17	21.5	34.8	37.7	17	57.2	45.2	9	50.4g
	1.Y13190	KQ2T16-02AS	1/4	17	23.8	17	25.1	32.6	39.8	20.6	57.2	57.2	9	35.6g
ø20	1.Y13191	KQ2T16-03AS	3/8	22	23.8	21	27.1	35.4	42.2	20.6	71	58.9	11	47.7g
	1.Y13192	KQ2T16-04AS	1/2	22	23.8	21	27.1	34.1	39.6	20.6	100	58.9	13	51.4g

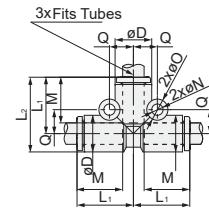
\* R reference dimension of R thread after screwing in

\* øD are maximum diameters.

## Connector

### Kq2 series

#### T-shaped connection :KQ2T

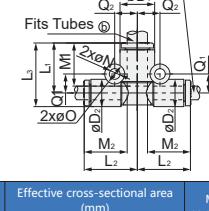


Fits Tubes Outside diameter (mm)	PN	Model	øD*	L <sub>1</sub>	L <sub>2</sub>	M	Q	øO	øN	Effective cross-sectional area (mm)		Minimum Hole Diameter	Weight
										Nylon	Organosilicon		
ø2	1.Y13193	KQ2T02-00A	5.8	12.9	15.8	11.9	4.5	6	3.2	0.9	1.4	1.4g	
	1.Y13194	KQ2T23-00A	7.1	14.9	18.5	13.3	5.4	6	3.2	2.9	2.5	2.3g	
ø4	1.Y03077	KQ2T04-00A	8.2	15.3	19.4	13.3	5.7	6	3.2	6.4	4.4	3	2.8g
	1.Y03076	KQ2T06-00A	10.4	16.3	21.5	13.3	6.8	6	3.2	13.4	10.6	4.5	3.8g
ø8	1.Y00761	KQ2T08-00A	13.2	18.2	24.8	14.2	8.4	8	4.2	25.6	17.7	6	7g
	1.Y13195	KQ2T10-00A	15.9	20.6	28.6	15.6	9.6	8	4.2	40	28.4	7.5	11g
ø12	1.Y13196	KQ2T12-00A	18.5	23	32.3	17	10.7	8	4.2	57.4	45.4	9	15.7g
	1.Y13197	KQ2T16-00A	23.8	26	38.6	20.5	13.4	8	4.2	100	58.9	13	29.8g

\* øD are maximum diameters.

### Kq2 series

#### T-shaped connection :KQ2T



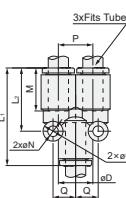
Fits Tubes Outside diameter (mm)	PN	Model	øD*	øD <sub>z</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	M <sub>1</sub>	M <sub>2</sub>	Q <sub>1</sub>	Q <sub>2</sub>	øO	øN	Effective cross-sectional area (mm)		Minimum Hole Diameter	Weight		
														Nylon	Organosilicon				
ø6	ø4	1.Y13201	KQ2T06-04A	8.2	10.4	16.3	15.3	21.5	13.3	13.3	6.8	5.7	6	3.2	6.4	4.4	3	2.5g	
	ø8	ø6	1.Y13202	KQ2T08-06A	10.4	13.2	17.3	17.2	23.9	13.3	14.2	8.4	7.3	8	4.2	13.4	10.6	4.5	6g
ø10	ø8	ø8	1.Y13203	KQ2T10-08A	13.2	15.9	19.2	19.6	27.2	14.2	15.6	9.6	8.4	8	4.2	25.6	17.7	6	9.5g
	ø10	ø10	1.Y13204	KQ2T12-10A	15.9	18.5	21.6	22	30.9	15.6	17	10.7	9.6	8	4.2	40	28.4	7.5	13.4g

\* øD are maximum diameters.

## Connector

### Kq2 series

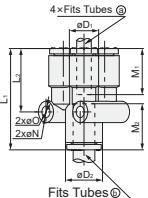
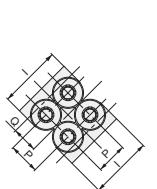
#### Y-shaped connection :KQ2U



Fits Tubes Outside diameter (mm)	PN	Model	$\phi D^*$	L <sub>1</sub>	L <sub>2</sub>	P	M	Q	$\phi O$	$\phi N$	Effective cross-sectional area (mm)	Minimum Hole Diameter	Weight
											Nylon		
$\phi 2$	1.Y13205	KQ2U02-00A	5.8	25.8	16.1	5.8	11.9	4.5	6	3.2	-	0.9	1.4g
$\phi 3.2$	1.Y13206	KQ2U23-00A	7.1	28.9	18	7.1	13.3	5.2	6	3.2	3.4	2.9	2.3g
$\phi 4$	1.Y02601	KQ2U04-00A	8.2	29	18.2	8.2	13.3	5.7	6	3.2	4.2	4.2	2.8g
$\phi 6$	1.Y02600	KQ2U06-00A	10.4	30.1	19.4	10.4	13.3	6.8	6	3.2	13.4	10.6	4.5
$\phi 8$	1.Y03078	KQ2U08-00A	13.2	33.2	22.3	13.2	14.2	8.7	8	4.2	25.6	17.7	6
$\phi 10$	1.Y13207	KQ2U10-00A	15.9	37.1	25	15.9	15.6	10.1	8	4.2	40	28.4	7g
$\phi 12$	1.Y13208	KQ2U12-00A	18.5	41.1	27.8	18.5	17	11.4	8	4.2	57.4	45.4	9
$\phi 16$	1.Y13209	KQ2U16-00A	23.8	51.5	35	23.8	20.6	14	8	4.2	113	60	13
* $\phi D$ are maximum diameters.													

### Kq2 series

#### Reducing four pipe Y-shaped connection :KQ2UD

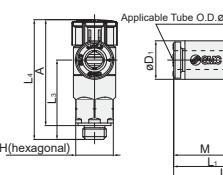


Fits Tubes Outside diameter (mm)	PN	Model	$\phi D^*$	$\phi D_1$	L <sub>1</sub>	L <sub>2</sub>	P	I	M <sub>1</sub>	M <sub>2</sub>	Q	$\phi O$	$\phi N$	Effective cross-sectional area (mm)	Minimum Hole Diameter	Weight	
														Nylon			
$\phi 4$	$\phi 6$	1.Y06909	KQ2UD04-06A	8.2	10.4	29.2	18.2	8.2	16.6	13.3	13.3	6.8	6	3.2	4.2	3	5.4g
$\phi 6$	$\phi 8$	1.Y08529	KQ2UD06-08A	10.4	13.2	32	20.5	10.4	21	13.3	14.2	8.2	6	3.2	13.4	10.6	8.1g

\*  $\phi D_1$ 、 $\phi D_2$  are maximum diameters.

### Asseries

#### Elbow type throttle valve



$\phi d$	Model	T	H	$\phi D_1$	$\phi D_3$	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	$L_{4(1)}$		$A^{(2)}$		M	Intake throttle (PN)	Exhaust throttling (PN)	Weight
									release	lock	release	lock				
$\phi 2$	As12□1F-M5-02A	M5x0.8	8	5.8	9.4	15.8	20.3	16.9	26.5	25.4	23.5	22.4	11.9	1.Y13218	1.Y13222	5g
$\phi 3.2$	As12□1F-M5-23A	M5x0.8	8	7.2	9.4	17.2	21.7	16.9	26.5	25.4	23.5	22.4	13.3	1.Y13219	1.Y13223	5g
$\phi 4$	As12□1F-M5-04A	M5x0.8	8	8.2	9.4	17.2	21.7	16.9	26.5	25.4	23.5	22.4	13.3	1.Y13220	1.Y13224	5g
$\phi 6$	As12□1F-M5-06A	M5x0.8	8	10.4	9.4	18.6	23.1	16.5	26.5	25.4	23.5	22.4	13.3	1.Y13221	1.Y03830	6g

□Symbol 0 exhaust throttling, 1 intake throttling

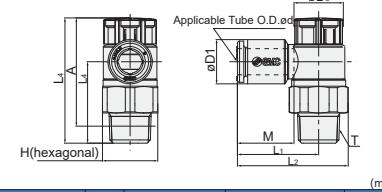
(1)Reference Size

(2)Reference dimension of R thread after screwing in

## Connector

### Asseries

#### Elbow type throttle valve(sealant)



$\phi d$	Model	T	H	$\phi D_1$	$\phi D_3$	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	$L_{4(1)}$ <sup>(1)</sup>	$A^{(2)}$ <sup>(2)</sup>	M	Intake throttle (PN)	Exhaust throttling (PN)	Weight		
									release	lock						
$\phi 3.2$	AS22□1F-01-23SA	1/8	13	7.2	12	19.1	26.2	19.1	30.6	29.2	27.5	26.1	13.3	1.Y13225	1.Y13246	9g
$\phi 4$	AS22□1F-01-04SA	1/8	13	8.2	12	19.1	26.2	19.1	30.6	29.2	27.5	26.1	13.3	1.Y13247	1.Y13247	9g
$\phi 6$	AS22□1F-01-06SA	1/8	13	10.4	12	19.1	26.2	19.1	30.6	29.2	27.5	26.1	13.3	1.Y13227	1.Y05040	10g
$\phi 8$	AS22□1F-01-08SA	1/8	13	13.2	12	22.4	29.5	19.1	30.6	29.2	27.5	26.1	14.2	1.Y13228	1.Y13248	11g
$\phi 10$	AS22□1F-01-10SA	1/8	13	15.9	12	25.3	32.4	19.1	30.6	29.2	27.5	26.1	15.6	1.Y13229	1.Y13249	12g
$\phi 12$	AS22□1F-02-23SA	1/4	17	7.2	13	20.9	30.2	22.6	36.6	35	31.1	29.5	13.3	1.Y13230	1.Y13250	18g
$\phi 4$	AS22□1F-02-04SA	1/4	17	8.2	13	20.9	30.2	22.6	36.6	35	31.1	29.5	13.3	1.Y13231	1.Y13251	18g
$\phi 6$	AS22□1F-02-06SA	1/4	17	10.4	13	23.4	32.7	22.6	36.6	35	31.1	29.5	13.3	1.Y13232	1.Y06906	18g
$\phi 8$	AS22□1F-02-08SA	1/4	17	13.2	13	23.9	33.2	22.6	36.6	35	31.1	29.5	14.2	1.Y13233	1.Y08260	19g
$\phi 10$	AS22□1F-02-10SA	1/4	17	15.9	13	26.9	36.2	22.6	36.6	35	31.1	29.5	15.6	1.Y13234	1.Y13252	20g
$\phi 6$	AS32□1F-02-06SA	3/8	19	10.4	16.6	21.8	32.1	28.7	42.3	40.7	37.1	35.5	13.3	1.Y13239	1.Y13257	31g
$\phi 8$	AS32□1F-03-08SA	3/8	19	13.2	16.6	22.7	33	28.7	42.3	40.7	37.1	35.5	14.2	1.Y13240	1.Y13258	31g
$\phi 10$	AS32□1F-03-10SA	3/8	19	15.9	16.6	26.7	37	28	42.3	40.7	37.1	35.5	15.6	1.Y13241	1.Y13259	32g
$\phi 12$	AS32□1F-03-12SA	3/8	19	18.5	16.6	29.7	40	26.8	42.3	40.7	37.1	35.5	17	1.Y13242	1.Y13260	34g
$\phi 10$	AS42□1F-04-10SA	1/2	24	15.9	18.8	27.4	40.3	36.2	50.8	49.2	43.7	42.1	15.6	1.Y13243	1.Y13261	54g
$\phi 12$	AS42□1F-04-12SA	1/2	24	18.5	18.8	30.8	43.7	35.1	50.8	49.2	43.7	42.1	17	1.Y13244	1.Y13262	56g
$\phi 16$	AS42□1F-04-16SA	1/2	24	23.8	18.8	34.8	47.7	32.7	50.8	49.2	43.7	42.1	20.6	1.Y13245	1.Y13263	60g

□Symbol 0 exhaust throttling, 1 intake throttling

(1)Reference Size

(2)Reference dimension of R thread after screwing in

Fits Tubes Outside diameter (mm)	PN	Model	$\phi D^*$	L	A	Weight
$\phi 2$	1.Y13210	KJP-02	3	17	10.4	0.1g
$\phi 3.2$	1.Y13211	KQ2P-23	5	31.5	18.2	1g
$\phi 4$	1.Y13212	KQ2P-04	6	32	18.7	1g
$\phi 6$	1.Y13213	KQ2P-06	8	35	21.7	1g
$\phi 8$	1.Y13214	KQ2P-08	10	39	24.8	2g
$\phi 10$	1.Y13215	KQ2P-10	12	43	27.4	3.5g
$\phi 12$	1.Y13216	KQ2P-12	14	45.5	28.5	5g
$\phi 16$	1.Y13217	KQ2P-16	20.9	47	26.4	8g

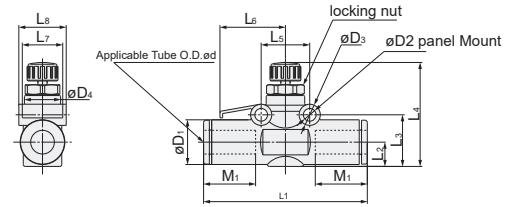
□Symbol 0 exhaust throttling, 1 intake throttling

(1)Reference Size

(2)Reference dimension of R thread after screwing in

## Connector

### Asseries Straight-through throttle valve



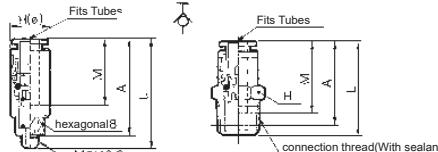
$\varnothing d$	PN	Model	$\varnothing D_1$	$\varnothing D_2$	$\varnothing D_3$	$\varnothing D_4$	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	$L_4^{(1)}$	MAX.	MIX.	L <sub>5</sub>	L <sub>6</sub>	L <sub>7</sub>	L <sub>8</sub>	M <sub>1</sub>	Weight
$\varnothing 2$	1.Y13264	AS1002F-02	6	3.2	5	6	25.4	3.4	7.9	20.9	18.4	11	9.8	5	6.7	8.8	3g	
$\varnothing 3.2$	1.Y13265	AS1002F-23	8.4	3.3	5.5	9.1	36	4.4	11.1	23.8	21	11	15.4	8.8	9.8	12.7	5g	
$\varnothing 4$	1.Y04457	AS1002F-04	9.3	3.3	5.5	9.1	37	5.1	11.8	24.5	21.7	11	15.4	8.8	10.1	12.7	5.5g	
$\varnothing 6$	1.Y04777	AS1002F-06	11.6	3.3	5.5	9.1	39.5	6.1	12.8	25.5	22.7	11	15.4	8.8	12.3	13.5	6.5g	
$\varnothing 4$	1.Y13266	AS2002F-04	9.3	3.3	5.5	10	40.7	5.2	12.3	28.9	25.4	12.6	17	10.5	11.5	12.7	8.5g	
$\varnothing 6$	1.Y13267	AS2002F-06	11.6	3.3	5.5	10	42.5	6.3	13.4	30	26.5	12.6	17	10.5	12.3	13.5	9.5g	
$\varnothing 6$	1.Y13268	AS2052F-06	12.8	4.3	7.8	14	53.2	6.7	16.3	34.5	29.5	17	22.8	12	15.7	17	19g	
$\varnothing 8$	1.Y13269	AS2052F-08	15.2	4.3	7.8	14	57.2	8	17.6	35.8	30.8	17	22.8	12	16.1	18	22g	
$\varnothing 6$	1.Y13270	AS3002F-06	13.2	4.3	8	19.3	59	7.4	19.3	38.6	33.6	22	25	12	20.5	17	36g	
$\varnothing 8$	1.Y13271	AS3002F-08	15.2	4.3	8	19.3	65	8.2	20.1	39.4	34.4	22	25	12	20.5	18	38g	
$\varnothing 10$	1.Y13272	AS3002F-10	18.5	4.3	8	19.3	70.8	9.8	21.7	41	36	22	25	12	20.5	21	42g	
$\varnothing 12$	1.Y13273	AS3002F-12	20.9	4.3	8	19.3	76	10.9	22.8	42.1	37.1	22	25	12	22.1	22	44g	
$\varnothing 10$	1.Y13274	AS4002F-10	18.5	4.3	8	25	76.9	10.3	22.7	51.6	44.1	28	33	14	26.2	21	76g	
$\varnothing 12$	1.Y13275	AS4002F-12	21.7	4.3	8	25	81.3	11.3	23.7	52.6	45.1	28	33	14	26.2	22	82g	

□Symbol 0/1 exhaust throttling, 1 intake throttling

(1)Reference Size

(2)Reference dimension of R thread after screwing in

### KC series Straight joint :KCH



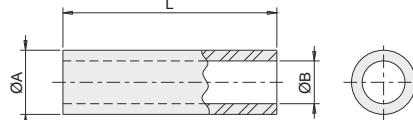
<Occasions for M5> <Occasions for R>

Fits Tubes Outside diameter (mm)	PN	Model	Connection thread (M)		H (hexagonal)	L	A	M	Effective cross-sectional area (mm)		Weight
			Nylon	Organosilicon					Nylon	Organosilicon	
$\varnothing 4$	1.Y03525	KCH04-M5	M5x0.8		9.8	30.8	27.3	18	2.1	2.1	8g
	1.Y13286	KCH04-01S	1/8		10	26.1	22.1	18	2.6	2.6	8g
$\varnothing 6$	1.Y03524	KCH06-M5	M5x0.8		11.8	32.4	28.9	19.5	2.4	2.4	10g
	1.Y13287	KCH06-01S	1/8		12	37.5	33.4	19	6.8	6.8	16g
$\varnothing 8$	1.Y13288	KCH08-01S	1/8		14	42.4	38.4	21.5	16.2	13.1	20g

※ R reference dimension of R thread after screwing in

## Hoses

Polyurethane hose for compressed air suitable for use with push-in fittings.



Technical characteristics  
 $T = -15 \sim +60^\circ C$   
 $P = 0.8 \text{ MPa}$



\* Each box is 100 meters in length.

PN	Model	Colour	A [mm]	B [mm]	L [m]	Lm [g/m]
1.Y00824	AH4B	Black	4	2.5	100	9g
1.Y03687	AH4BU	Blue	4	2.5	100	9g
1.Y00823	AH4G	Green	4	2.5	100	9g
1.Y03686	AH4T	Transparent	4	2.5	100	9g
1.Y00821	AH4Y	Yellow	4	2.5	100	9g
1.Y00822	AH4R	Red	4	2.5	100	9g
1.Y05661	AH4O	Orange	4	2.5	100	9g
1.Y00830	AH6B	Black	6	4	100	19g
1.Y00829	AH6BU	Blue	6	4	100	19g
1.Y00825	AH6G	Green	6	4	100	19g
1.Y00827	AH6T	Transparent	6	4	100	19g
1.Y00828	AH6Y	Yellow	6	4	100	19g
1.Y00826	AH6R	Red	6	4	100	19g
1.Y04640	AH6O	Orange	6	4	100	19g
1.Y04478	AH8B	Black	8	5	100	36g
1.Y00831	AH8BU	Blue	8	5	100	36g
1.Y04476	AH10B	Black	10	6.5	100	54g
1.Y05660	AH10BU	Blue	10	6.5	100	54g

A [Outer diameter]  
B [Inner diameter]  
L [Length]  
Lm [Linear mass]  
P [Operating pressure range]  
T [Operating temperature range]

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PAT40-2000	4.Y10975	1
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PCT8-2000	4.Y10961	2
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