

HDPM series Parallel Type Air Gripper/ with Dust Cover

Product features/ Code of order

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Feature

- The cover type to prevent the filings and dust
- Grippe acting by bearing mechanism
- Mounting brackets in option



Specification

Item	Bore size (mm)	Ø10	Ø16	Ø20	Ø25	Ø32
Action		Double acting				
Fluid		Air				
Pressure range	kgf / cm ² (kPa)	1.5 ~ 7 (150 ~ 700)				
Ambient and fluid temperature	° C	0 ~ 60				
Max. operation frequency	time/min	100				
Lubrication		Lubrication free type				
Max. gripper point length (L)	mm	25	35	55	65	80
Gripper stroke	mm	4	8	12	14	16
Port size	mm	M3 X 0.5P	M5 X 0.8P			
Sensing device		With magnet				

Note 1: P: operating pressure kgf/cm², L: the gripping point length is 30mm.

Code of order HDPM 20 – HM – 8G 2

1 2 3 4

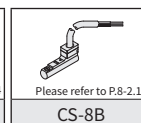
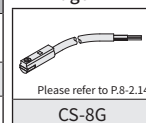
1	Mark	Bore size (mm)
	10	Ø10
	16	Ø16
	20	Ø20
	25	Ø25
	32	Ø32

2	Mark	Mouting bracket	Mark	Mouting bracket	Mark	Mouting bracket
	None	Without Mouting bracket	HM		HB	

● HM: Internal mounting HB: External mounting

3	Mark	Sensor switch
	None	Without sensor switch
	8G	CS-8G
	8B	CS-8B

● Image



4	Mark	Sensor quantity
	1	With 1 sensor switche
	2	With 2 sensor switches

HDD

HDS

HDM

HDP

HDPM

HDZ

HDZL

HDZM

HDW

HDWM

HMW

HMG

HMY

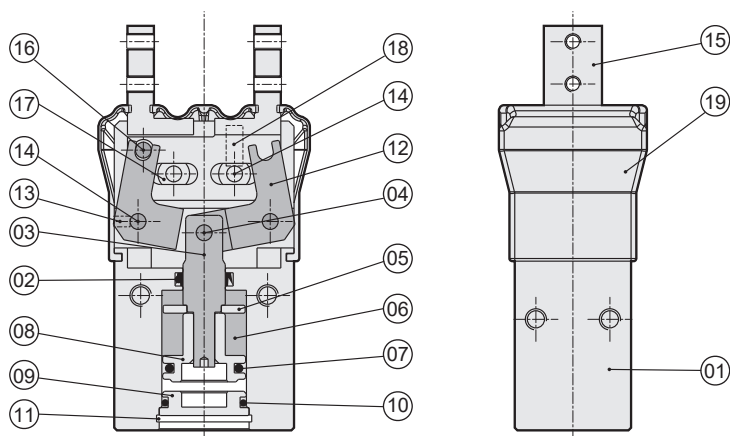
HDU

HDPM series Parallel Type Air Gripper/ with Dust Cover

Product features

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Internal structure



Components and material list

No.	Item	Material	No.	Item	Material	No.	Item	Material
01	Body	Aluminum alloy	08	Piston	Copper alloy	15	Finger	Alloy steel
02	Shaft packing	NBR	09	Rear cover	Aluminum alloy	16	Pin	Bearing steel
03	Shaft	Stainless steel	10	O-ring	NBR	17	Bearing	Alloy steel
04	Pin	Bearing steel	11	C clip	Spring steel	18	Plug	Alloy steel
05	Magnet cap	Copper alloy	12	Action lever	Alloy steel	19	Dustproof cover	Silicon
06	Magnet	Compound material	13	Plug	Alloy steel			
07	Pinston packing	NBR	14	Pin	Bearing steel			

Packing and O-ring material list

Unit: mm

Item	Piston packing	Shaft packing	Rear cover O-ring
Model \ Quantity	1	1	1
HDPM Ø10	APA - 10	MY - 6A	Ø8 x Ø1
HDPM Ø16	APA - 16	MY - 8A	Ø13.2 x Ø1.5
HDPM Ø20	APA - 20	MY - 10A	Ø17.5 x Ø1.5
HDPM Ø25	APA - 25	MY - 12A	Ø22 x Ø1.5
HDPM Ø32	APA - 32	MYA - 16	Ø28.5 x Ø2.0

Product weight

Model	Weight (kg)
HDPM Ø10	0.12
HDPM Ø16	0.16
HDPM Ø20	0.55
HDPM Ø25	0.75
HDPM Ø32	1.23

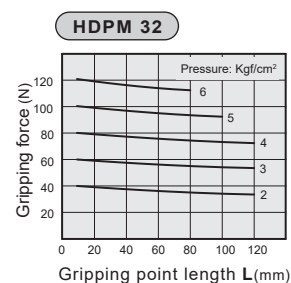
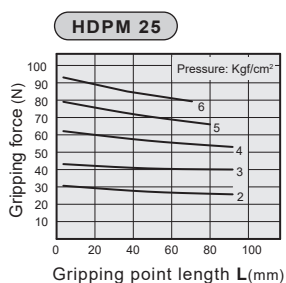
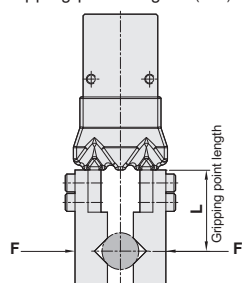
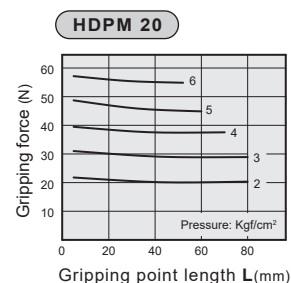
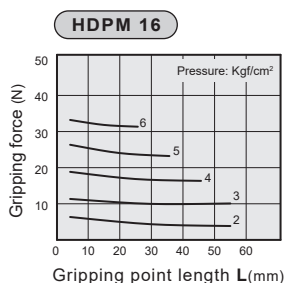
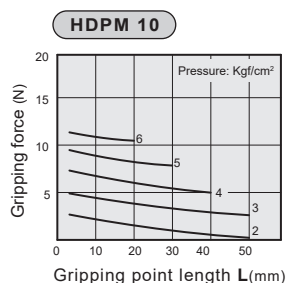
Note: All of above are theoretical data. Weight tolerance about ±5%

HDPM series Parallel Type Air Gripper/ with Dust Cover

Characteristics graph, Operating type and data, Mounting type

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Gripping force characteristic



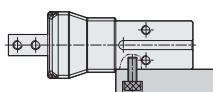
Operating type and data

Action	Model	Bore size (mm)	The smallest operating pressure (kgf/cm ²)	Thread port (mm)	Effective gripping force (N)	
Double acting	HDPM 10	10	2.2	4-M3x0.5P	Open	4.9
					Close	7.8
	HDPM 16	16	1	4-M3x0.5P	Open	17.6
					Close	23.5
	HDPM 20	20	1	4-M4x0.7P	Open	34.3
					Close	46
	HDPM 25	25	1	4-M5x0.8P	Open	58.8
					Close	73.5
	HDPM 32	32	1	4-M6x1.0P	Open	83.3
					Close	98

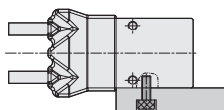
Note: The gripping force is the force of open and close gripper which in the length of gripping point is 30mm and acting pressure is 5 kgf/cm².

Mounting type

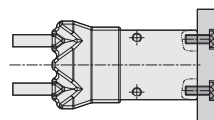
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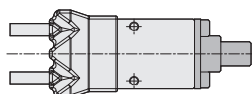
2. Vertical mounting.



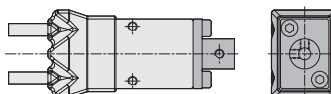
3. Axial mounting.



4. With HM mounting bracket.



5. With HB mounting bracket.



HDD

HDS

HDM

HDP

HDPM

HDZ

HDZL

HDZM

HDW

HDWM

HMW

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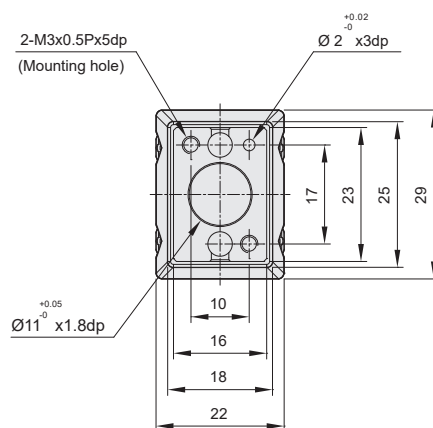
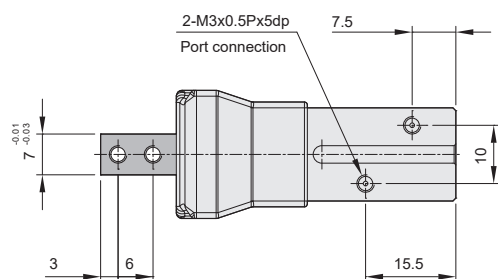
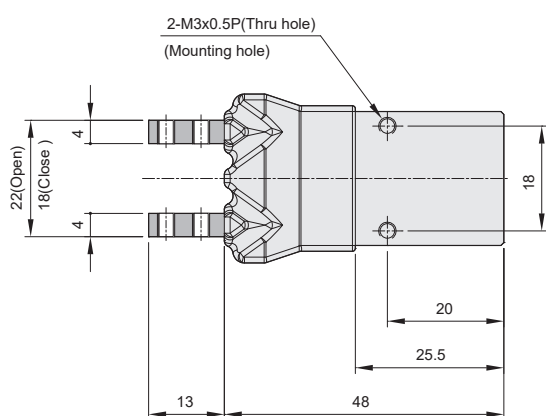
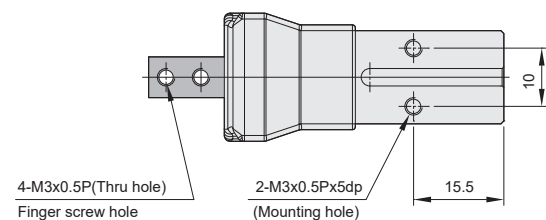
HDU

HDPM series Parallel Type Air Gripper/ with Dust Cover

Dimensions

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HDPM 10

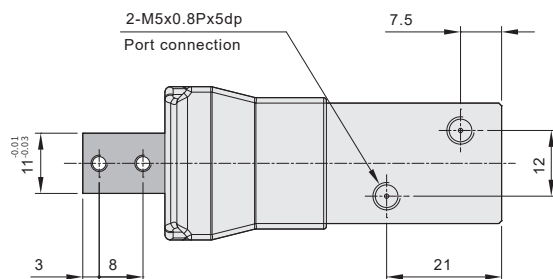
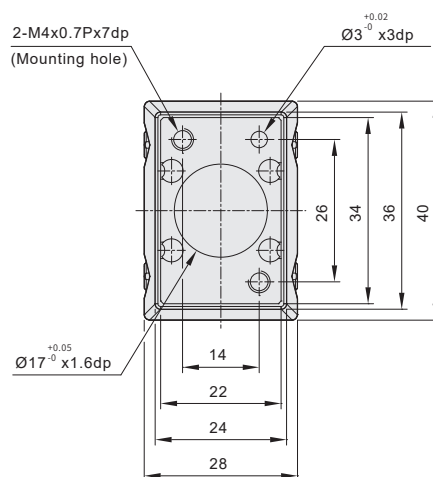
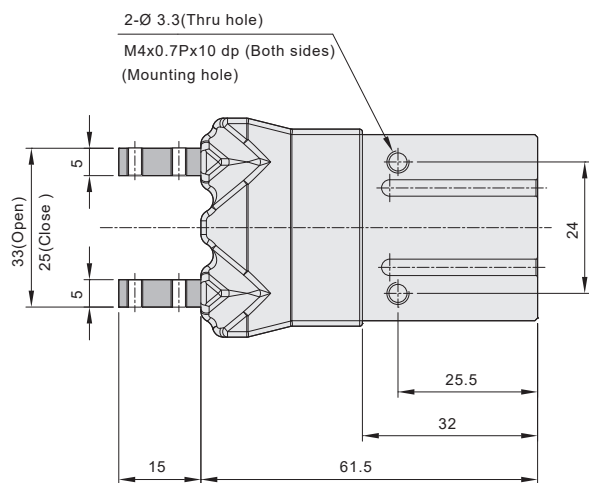
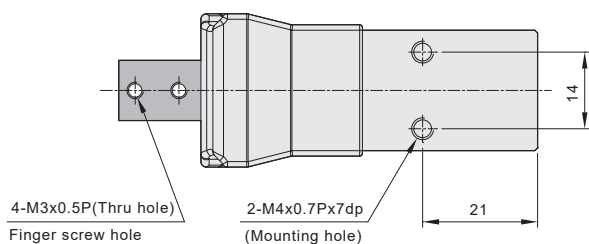


HDPM series Parallel Type Air Gripper/ with Dust Cover

Dimensions

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HDPM 16



HDD

HDS

HDM

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HDPM

HDZ

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HMY

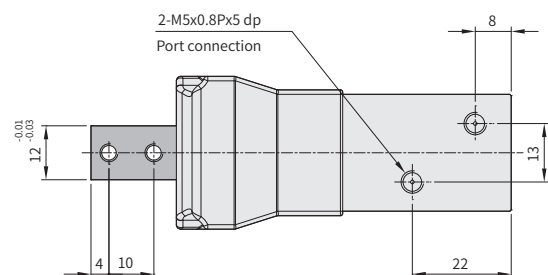
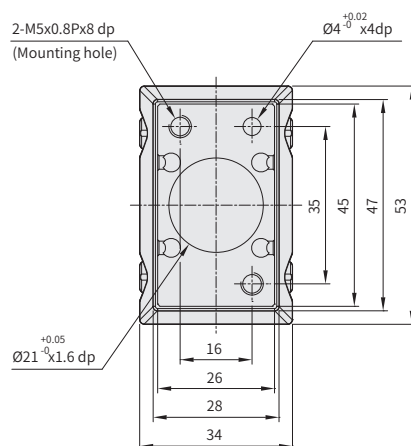
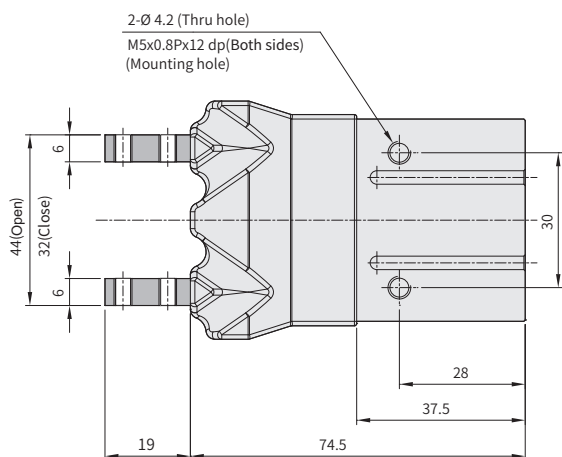
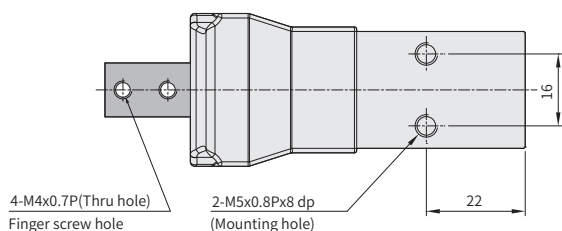
HDU

HDPM series Parallel Type Air Gripper/ with Dust Cover

Dimensions

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HDPM 20

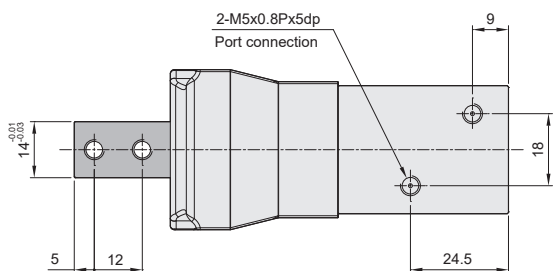
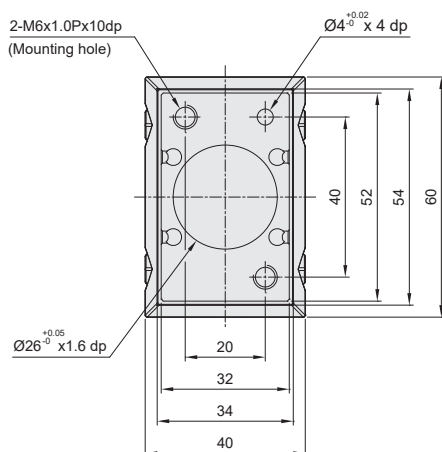
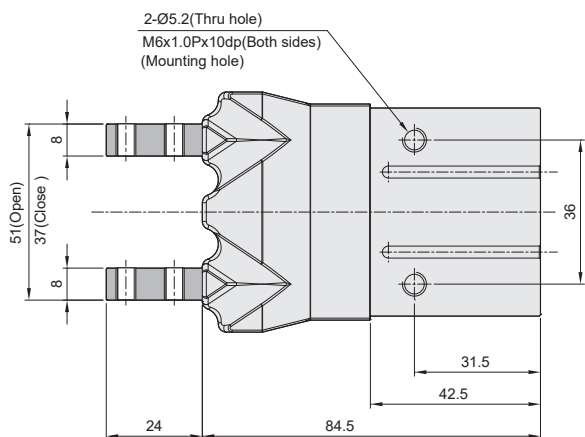
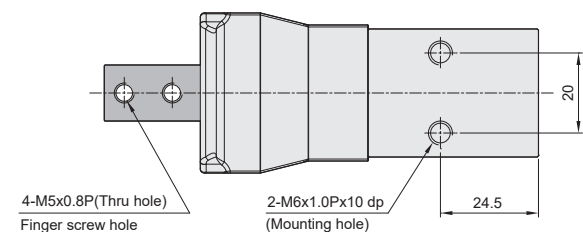


HDPM series Parallel Type Air Gripper/ with Dust Cover

Dimensions

CHELIC

HDPM 25



HDD

HDS

HDM

HDP

HDPM

HDZ

HDZL

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HDW

HDWM

HMW

HMG

HMY

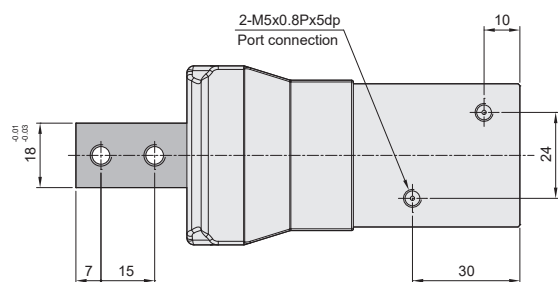
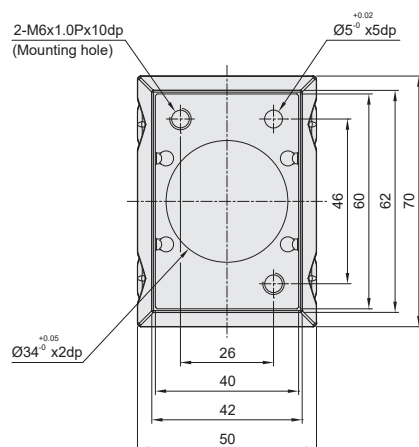
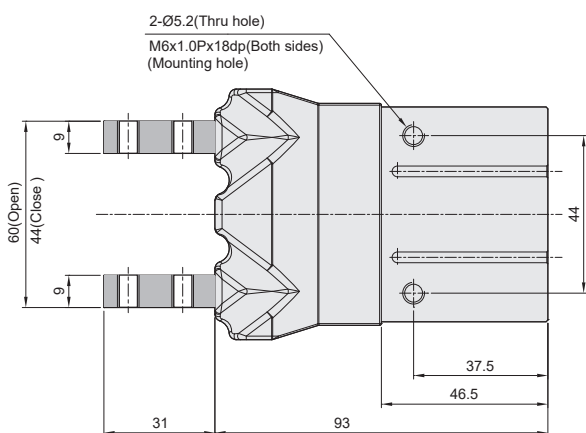
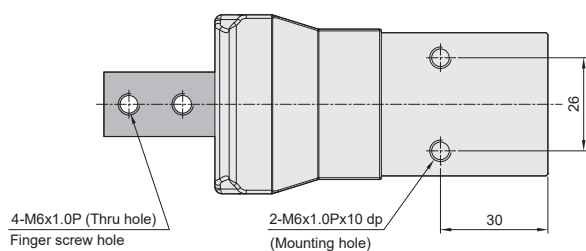
HDU

HDPM series Parallel Type Air Gripper/ with Dust Cover

Dimensions

CHELIC

HDPM 32

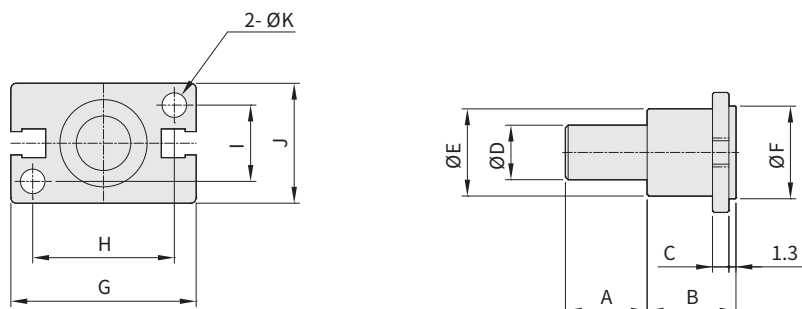


HDPM series Parallel Type Air Gripper/ with Dust Cover

Mounting bracket

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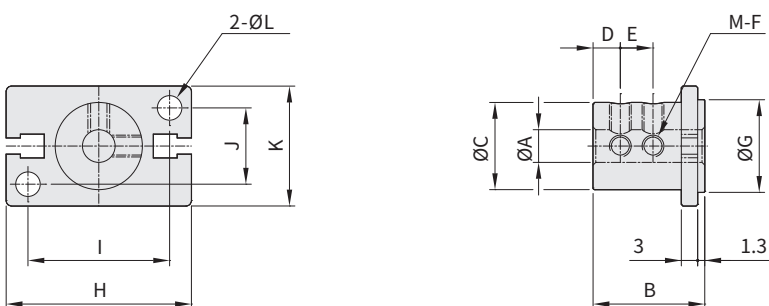
■ HM type mounting bracket



Unit: mm

Model	Mark	A	B	C	D	E	F	G	H	I	J	K
HM 10		10	10	2	8	12	11	23	17	10	16	3.5
HM 16		15	15	3	10	16	17	34	26	14	22	4.5
HM 20		15	15	3	10	18	21	45	35	16	26	5.5
HM 25		25	17	5	14	26	26	52	40	20	32	6.6
HM 32		25	20	6	16	30	34	60	46	26	40	6.6

■ HB type mounting bracket



Unit: mm

Model	Mark	A	B	C	D	E	F	G	H	I	J	K	L	L
HB 10		4	15	10	5	-	M3 x 0.5p	11	23	17	10	16	3.5	2
HB 16		6	20.5	16	5	6	M4 x 0.7p	17	34	26	14	22	4.5	4
HB 20		8	20.5	20	7	7	M4 x 0.7p	21	45	35	16	26	5.5	4
HB 25		10	30.5	25	8	10	M4 x 0.7p	26	52	40	20	32	6.5	4
HB 32		12	40.5	32	10	15	M4 x 0.7p	34	60	46	26	40	6.5	4

HDD

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HMY

HDU

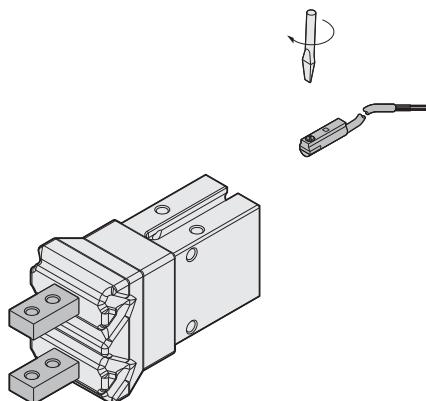
HDPM series Parallel Type Air Gripper/ with Dust Cover

Mounting type and operation of sensor switch

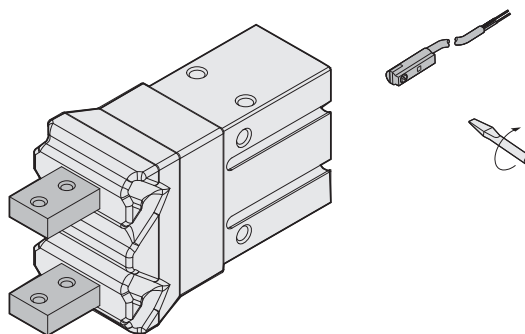
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■ Sensor switch installation

● HDPM 10



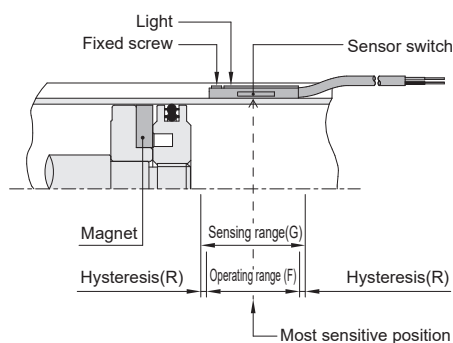
● HDPM 16 ~ 32



■ Sensing range

Sensor switch is fixed on the cylinder body.
The magnetic piston head will activate the sensor switch when it enters the operating range. It has 0.5mm differential.

■ Sensor switch setting and operating range



■ Operating range

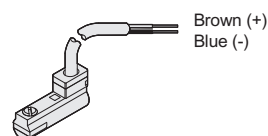
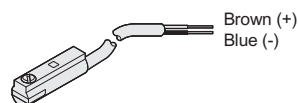
When piston head moves the switch setting and adjustment will be based on the responding range generated by the magnetic field and the switch. (Please refer to the below table)

Unit: mm

Model	CS-8G(B)	
Bore size	Operating range (F)	Hysteresis(R)
10	3.5	0.6
16	4	0.8
20	6	1
25	6	1
32	7	1.2

■ Sensor switch introduction

CS-8G(B)



Voltage: DC 5~30V