

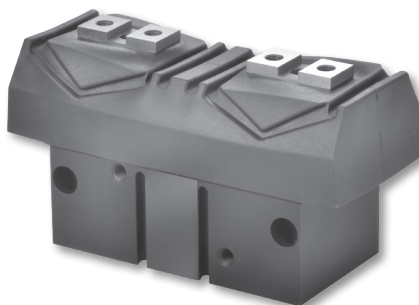
HDWM series 2-Finger Heavy-load Type Air Gripper/ with Dust Cover

Product features/ Code of order

CHELIC

Feature

- Wedge slider type
- Built-in magnet
- Large output and good stability



Specification

Item	Bore size (mm)	Ø25	Ø32	Ø40	Ø50
Action		Double acting			
Fluid		Air			
Pressure range	kgf / cm ² (kPa)	3 ~ 7 (300 ~ 700)			
Ambient and fluid temperature	° C	-5 ~ 60 (No freezing status)			
Max. operation frequency	time/min	80		60	
Lubrication		Non-lube			
Sensing device		With magnet			

Code of order **HDWM 25 – 9D 2**

1 2 3

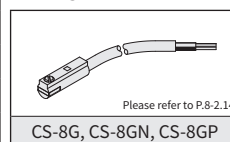
1

Mark	Bore size (mm)
25	Ø25
32	Ø32
40	Ø40
50	Ø50

2

Mark	Sensor switch
None	Without sensor switch
8G	CS-8G
8GN	CS-8GN
8GP	CS-8GP
9D	CS-9D
9B	CS-9B
9H	CS-9H
9DN	CS-9DN
9DP	CS-9DP

● Image



3

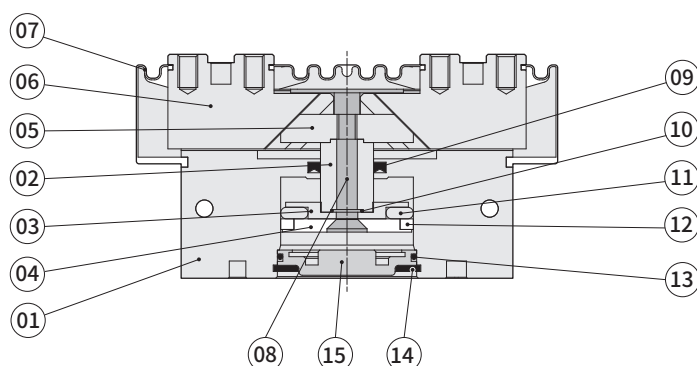
Mark	Sensor quantity
1	With 1 sensor switch
2	With 2 sensor switches

HDWM series 2-Finger Heavy-load Type Air Gripper/ with Dust Cover

Product features

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Internal structure



Components and material list

No.	Item	Material	No.	Item	Material
01	Body	Aluminum alloy	09	Shaft packing	NBR
02	Shaft	Carbon steel	10	Shaft O-ring	NBR
03	Piston	Aluminum alloy	11	Piston packing	NBR
04	Magnet cap	Aluminum alloy	12	Magnet	Plastic
05	Wedge slide base	Alloy steel	13	Rear cover O-ring	NBR
06	Finger	Carbon steel	14	C Clip	Spring steel
07	Dustproof cover	NBR	15	Rear cover	Aluminum alloy
08	Magnetic cap screw	Alloy steel			

Packing and O-ring material list

Item		Piston packing	Shaft packing	Rear cover O-ring
Model	Quantity	1	1	1
HDWM Ø25		PZ-25	MYA-10	Ø22 X Ø1.5
HDWM Ø32		COP-32	MYA-12	Ø32 X Ø1
HDWM Ø40		COP-40	MYA-16	Ø37.82 X Ø1.78
HDWM Ø50		COP-50	MYA-20	Ø47.35 X Ø1.78

Unit: mm

Product weight

Model	Weight (kg)
HDWM Ø25	0.28
HDWM Ø32	0.48
HDWM Ø40	0.87
HDWM Ø50	1.45

Note: All of above are theoretical data.
Weight tolerance about $\pm 5\%$

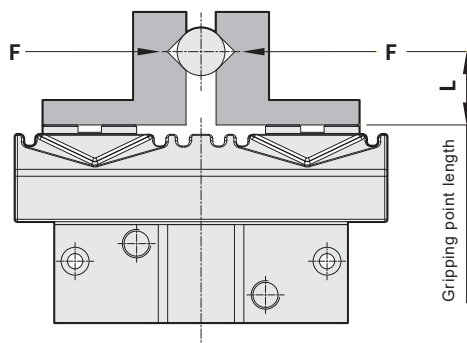
HDWM series 2-Finger Heavy-load Type Air Gripper/ with Dust Cover

Characteristics graph

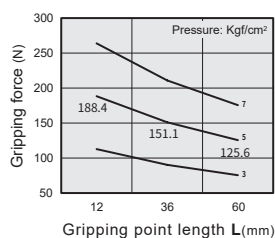
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Gripping force characteristic

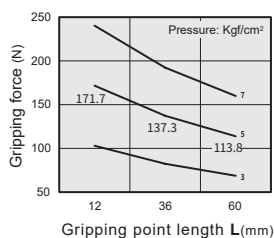
- HDWM Closed gripping force



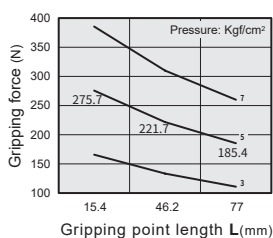
HDWM 25 - OPEN



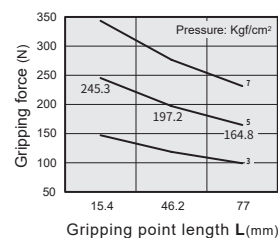
HDWM 25 - CLOSE



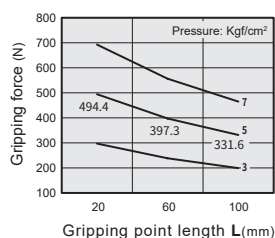
HDWM 32 - OPEN



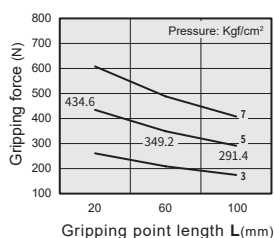
HDWM 32 - CLOSE



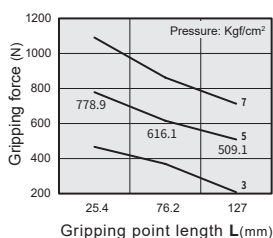
HDWM 40 - OPEN



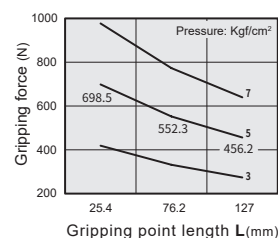
HDWM 40M - CLOSE



HDWM 50 - OPEN



HDWM 50 - CLOSE



HDWM series 2-Finger Heavy-load Type Air Gripper/ with Dust Cover

Operating type and data, Mounting type

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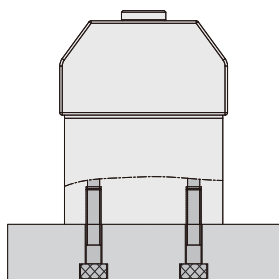
Operating type and data

Action	Model	Bore size (mm)	The smallest operating pressure (kgf/cm ²)	Thread port (mm)	Effective gripping force (N)	
Double acting	HDWM 20	20	3	4-M3x0.5Px4.5 dp	Open	94
					Close	84
	HDWM 25	25	3	4-M4x0.7Px5 dp	Open	148
					Close	134
	HDWM 32	32	3	4-M5x0.8Px8 dp	Open	245
					Close	221
	HDWM 40	40	3	4-M6x1.0Px10 dp	Open	451
					Close	402
	HDWM 50	50	3	4-M6x1.0Px10 dp	Open	738
					Close	662
	HDWM 63	63	3	4-M8x1.25Px13 dp	Open	1245
					Close	1117
	HDWM 80	80	3	4-M10x1.5Px10 dp	Open	1600
					Close	1500
	HDWM 100	100	3	4-M12x1.75Px16 dp	Open	2300
					Close	2252

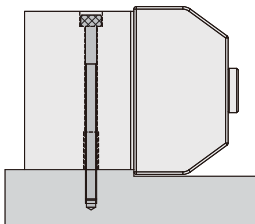
Note: The gripping force is the force of open and close gripper which in the length of gripping point is 30mm and acting pressure is 5kgf/cm².

Mounting type

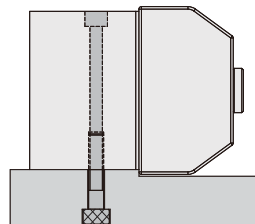
1. Apply the screw from bottom thread hole



2. Apply the screw to through-holes in the side of body



3. Apply the screw from side thread hole



HDD

HDS

HDM

HDP

HDPM

HDZ

HDZL

HDZM

HDW

HDWM

HMW

HMG

HMY

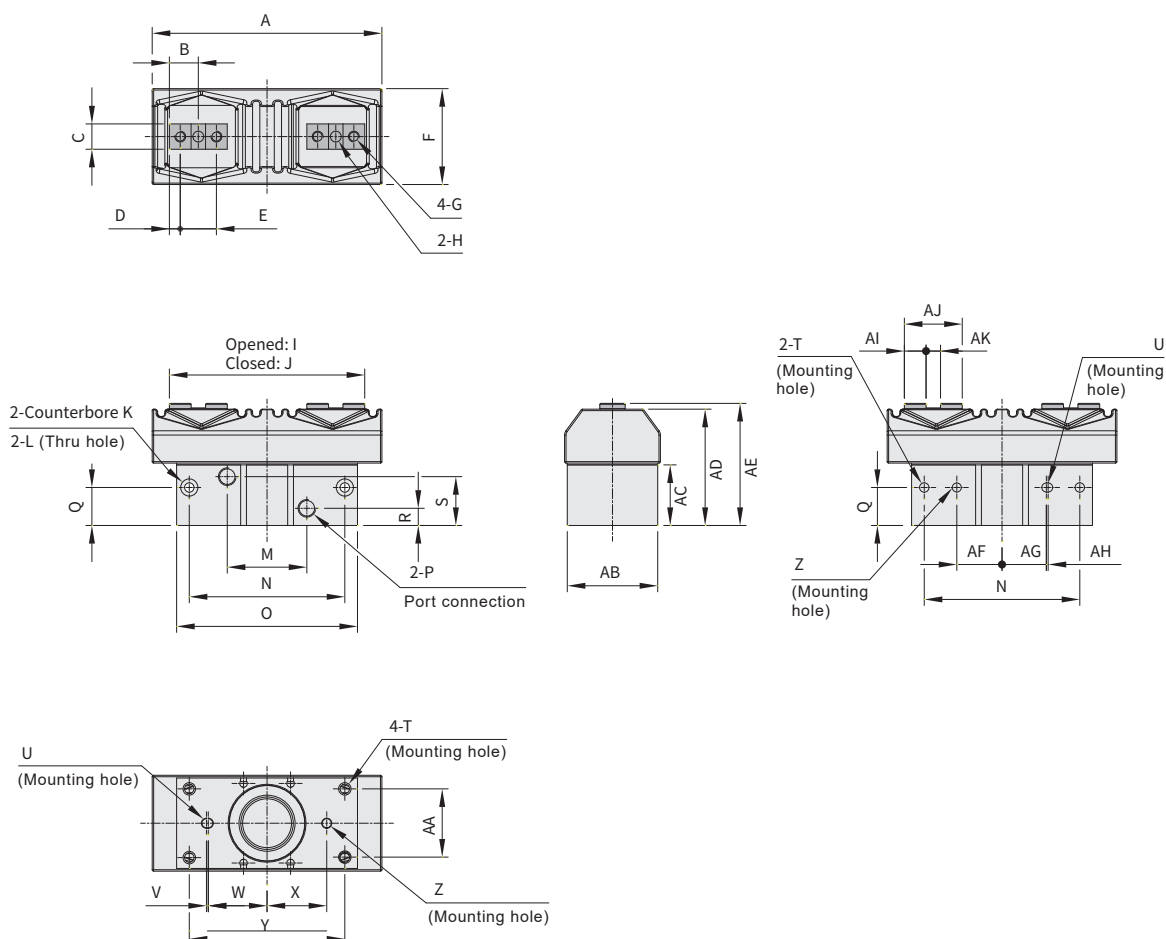
HDU

HDWM series 2-Finger Heavy-load Type Air Gripper/ with Dust Cover

Dimensions

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HDWM 25~50



Unit: mm

Mark Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
HDWM 25	83	10.5	10	4	13	39	M4x0.7Px5dp	Ø4	76	64	Ø8x8dp	Ø4.3	25.5	54	64	M5	17	8	22	M5	4x4.5dp	1	19.5
HDWM 32	103	13	12	5	16	45	M5x0.8Px8dp	Ø5	96	80	Ø8x8dp	Ø4.3	34	70	80	M5	20	9	26	M5	4x4.2dp	1	24.5
HDWM 40	127	16	14	6	20	53	M6x1.0Px10dp	Ø6	120	100	Ø9.5x9dp	Ø5.2	44	86	100	PT 1/8	21	9.5	27	M6	5x5.2dp	1	32.5
HDWM 50	160	20	16	8	24	63	M6x1.0Px10dp	Ø6	151	125	Ø11x12dp	Ø6.8	48	105	125	PT 1/8	24	11.5	33	M8	6x6.2dp	1	47.5

Unit: mm

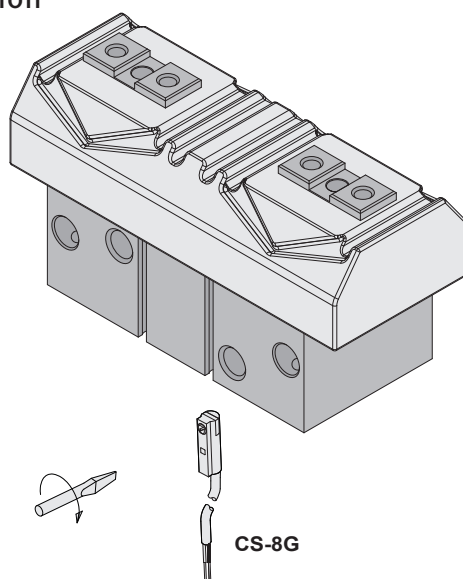
Mark Model	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
HDWM 25	20	54	Ø4x4.5dp	27	36	25.6	48.2	50.6	14	13.5	1	8	21	5
HDWM 32	25	70	Ø4x4.2dp	32	42	29.2	55.7	59	18	17.5	1	10	26	6
HDWM 40	33	86	Ø5x5.2dp	38	50	33.5	64.3	67.5	25	24.5	1	12	32	8
HDWM 50	48	105	Ø6x6.2dp	44	60	41	74.7	79	30	29.5	1	16	40	8

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Mounting type and operation of sensor switch

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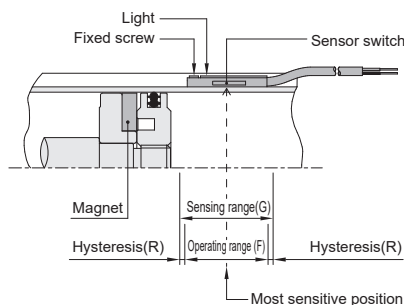
Sensor switch installation



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

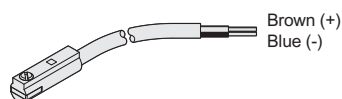
When piston head moves the switch setting and adjustment will be based on the responding range generated by the magnetic field and the switch. (Please refer to the below table)

Unit: mm

Model	CS-8G	
Bore size	Operating range (F)	Hysteresis(R)
25	9	1
32	7	1
40	8	1
50	9	1.2

Sensor switch introduction

CS-8G



Voltage: DC 5 ~ 30V

HDD

HDS

HDM

HDP

HDPM

HDZ

HDZL

HDZM

HDW

HDWM

HMW

HMG

HMY

HDU