

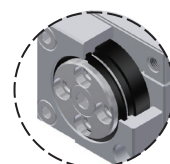
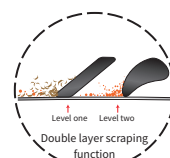
HMG series Dual-sided Force Type Air Gripper

Product features/ Code of order

CHELIC

Feature

- Wedge slider type
- Prevent dust and chip
- Lateral force



Specification

Item		Bore size (mm)	Ø22	Ø27	Ø34	Ø44	Ø55
Action			Double acting				
Fluid			Air				
Pressure range		kgf / cm ² (kPa)	2 ~ 8 (200 ~ 800)				
Ambient and fluid temperature		° C	5 ~ 80				
Lubrication			Lubrication free type				
Gripping force	Close	N	128	205	301	538	808
	Open	N	136	220	324	572	854
Stroke per jaw		mm	4	6	8	10	13
Port size			M5X0.8P			PT1/8	
Recommend workpiece weight		kg	0.7	1.1	1.6	2.9	4.3
Open/ Close time		s	0.03	0.04	0.05	0.09	0.13
Repeatability		mm	±0.01				
Sensing device			With magnet				

Note: The gripping force is the force of open and close gripper, the acting pressure is 5 kgf/cm².

Code of order HMG L 22 - 8G 2

1 2 3 4

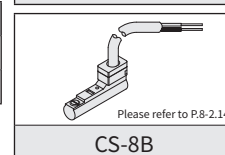
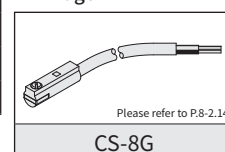
1	Mark	Type
	None	Standard
	L	Long

2	Mark	Bore size (mm)
	22	Ø22
	27	Ø27
	34	Ø34
	44	Ø44
	55	Ø55

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

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

Image



HDD

HDS

HDM

HDP

HDPM

HDZ

HDZL

HDZM

HDW

HDWM

HMW

HMG

HMY

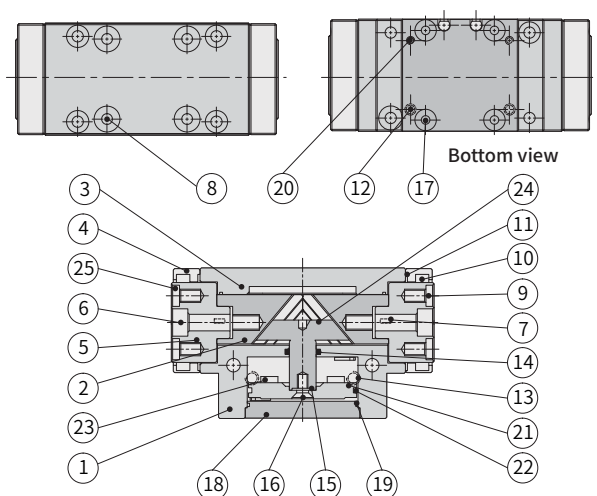
HDU

HMG series Dual-sided Force Type Air Gripper

Product features

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Internal structure



Product weight

Model	Weight (kg)
HMG Ø22	0.25
HMG Ø27	0.39
HMG Ø34	0.68
HMG Ø44	1.13
HMG Ø55	2.01

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

Components and material list

No.	Item	Material	No.	Item	Material
01	Body	Aluminum alloy	14	Shaft packing	NBR
02	Finger	Stainless steel	15	O-ring	NBR
03	Top cover	Aluminum alloy	16	Screw	Alloy steel
04	Side cap	Aluminum alloy	17	Screw	Alloy steel
05	Connector	Stainless steel	18	Base	Aluminum alloy
06	Screw	Alloy steel	19	O-ring	NBR
07	Pin	Alloy steel	20	Set screw	Alloy steel
08	Screw	Alloy steel	21	Piston	Aluminum alloy
09	Screw	Alloy steel	22	X-ring	NBR
10	Dust-proof packing	NBR	23	Magnet	Rare earth metal
11	O-ring	NBR	24	Shaft	Alloy steel
12	O-ring	NBR	25	Centering sleeve	Carbon steel
13	Set screw	Alloy steel			

Packing and O-ring material list

Unit: mm

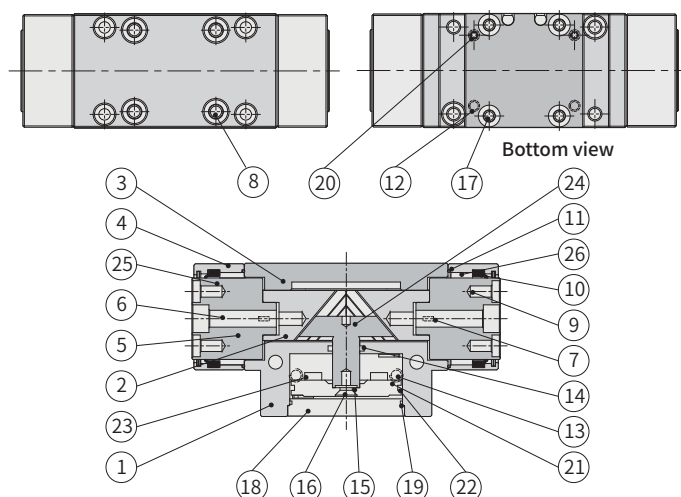
Item	X-ring	Shaft packing	19 O-ring	Dust-proof packing	11 O-ring
Model \ Quantity	1	1	1	2	2
HMG Ø22	18.77x22.33x1.78	MY-6A	Ø20 x Ø1	SER20	Ø22 x Ø1
HMG Ø27	23.52x27.08x1.78	MY-8A	Ø25 x Ø1	SER22	Ø26 x Ø1
HMG Ø34	29.87x33.43x1.78	MY-10A	Ø34.5 x Ø1.2	SER30	Ø34 x Ø1
HMG Ø44	37.82x41.38x1.78	MY-12A	Ø40 x Ø1	SER32	Ø33 x Ø2
HMG Ø55	48.9x54.14x2.62	MY-14A	Ø52 x Ø1	SER40	Ø44.5 x Ø1.5

HMGL series Dual-sided Force Type Air Gripper

Product features

CHELIC

Internal structure



Product weight

Model	Weight (kg)
HMGL Ø22	0.40
HMGL Ø27	0.50
HMGL Ø34	0.74
HMGL Ø44	1.20
HMGL Ø55	1.83

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

Components and material list

No.	Item	Material	No.	Item	Material
01	Body	Aluminum alloy	14	Shaft packing	NBR
02	Finger	Stainless steel	15	O-ring	NBR
03	Top cover	Aluminum alloy	16	Screw	Alloy steel
04	Side cap	Aluminum alloy	17	Screw	Alloy steel
05	Connector	Stainless steel	18	Base	Aluminum alloy
06	Screw	Alloy steel	19	O-ring	NBR
07	Pin	Alloy steel	20	Set screw	Alloy steel
08	Screw	Alloy steel	21	Piston	Aluminum alloy
09	Screw	Alloy steel	22	X-ring	NBR
10	Dust-proof packing	NBR	23	Magnet	Rare earth metal
11	O-ring	NBR	24	Shaft	Alloy steel
12	O-ring	NBR	25	Centering sleeve	Carbon steel
13	Set screw	Alloy steel	26	Oilless bearing	Bearing steel

Packing and O-ring material list

Unit: mm

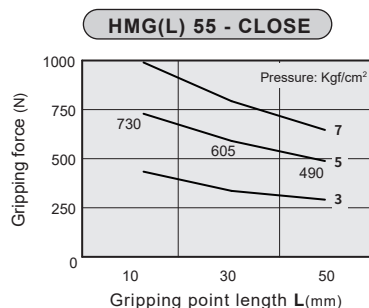
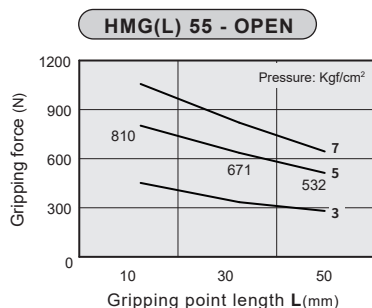
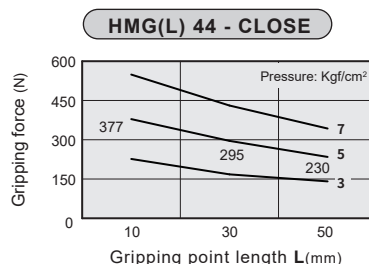
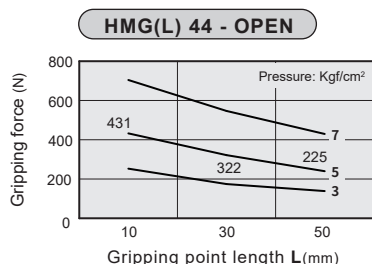
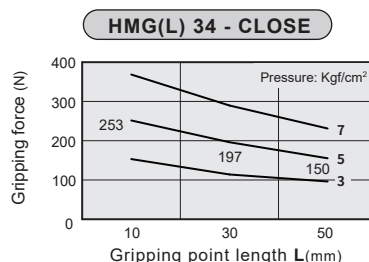
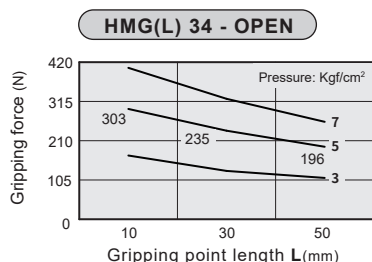
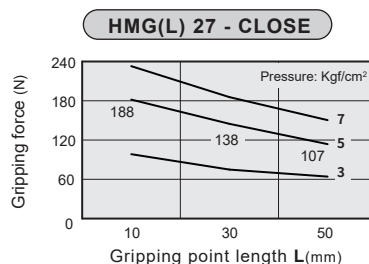
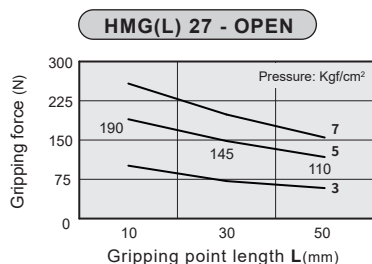
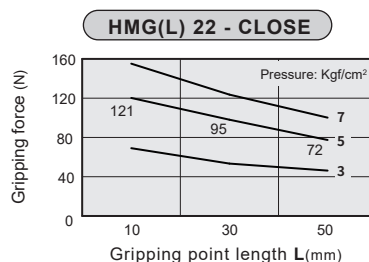
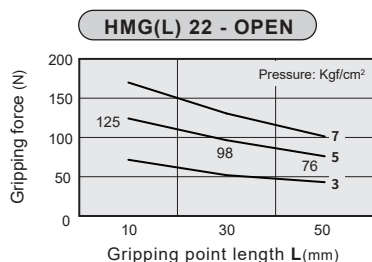
Item	X-ring	Shaft packing	19 O-ring	Dust-proof packing	11 O-ring
Model \ Quantity	1	1	1	2	2
HMGL Ø22	18.77x22.33x1.78	MY-6A	Ø20 x Ø1	SER20	Ø24 x Ø1
HMGL Ø27	23.52x27.08x1.78	MY-8A	Ø25 x Ø1	SER22	Ø26 x Ø1
HMGL Ø34	29.87x33.43x1.78	MY-10A	Ø34.5 x Ø1.2	SER30	Ø34 x Ø1
HMGL Ø44	37.82x41.38x1.78	MY-12A	Ø40 x Ø1	SER32	Ø36 x Ø2
HMGL Ø55	48.9x54.14x2.62	MY-14A	Ø52 x Ø1	SER40	Ø44.5 x Ø1.5

HMG(L) series Dual-sided Force Type Air Gripper

Characteristics graph

CHELIC

Gripping force characteristic



HMG(L) series Dual-sided Force Type Air Gripper

Operating type and data, Mounting type

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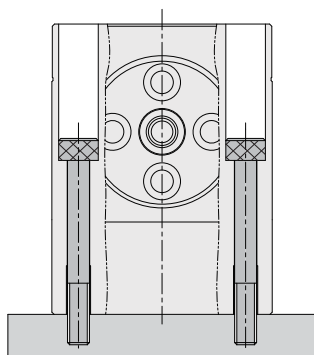
Operating type and data

Action	Model	Bore size (mm)	The smallest operating pressure (kgf/cm ²)	Thread port (mm)	Effective gripping force (N)	
Double acting	HMG(L) 22	22	2	8-M3x0.5Px4dp	Open	136
					Close	128
	HMG(L) 27	27	2	8-M4x0.7Px6dp	Open	220
					Close	205
	HMG(L) 34	34	2	8-M5x0.8Px6dp	Open	324
					Close	301
	HMG(L) 44	44	2	8-M5x0.8Px8dp	Open	572
					Close	538
	HMG(L) 55	55	2	8-M6x1.0Px9dp	Open	854
					Close	808

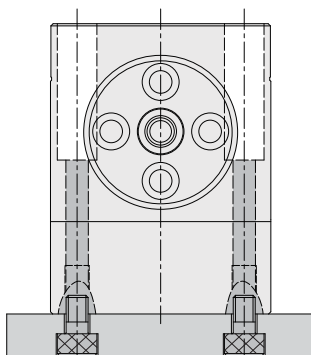
Note: The gripping force is the force of open and close gripper, the acting pressure is 5 kgf/cm².

Mounting type

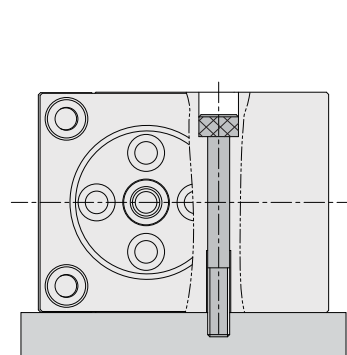
1. Apply the screw to through-holes of body



2. Apply the screw from bottom thread hole



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



HDD

HDS

HDM

HDP

HDPM

HDZ

HDZL

HDZM

HDW

HDWM

HMW

HMG

HMY

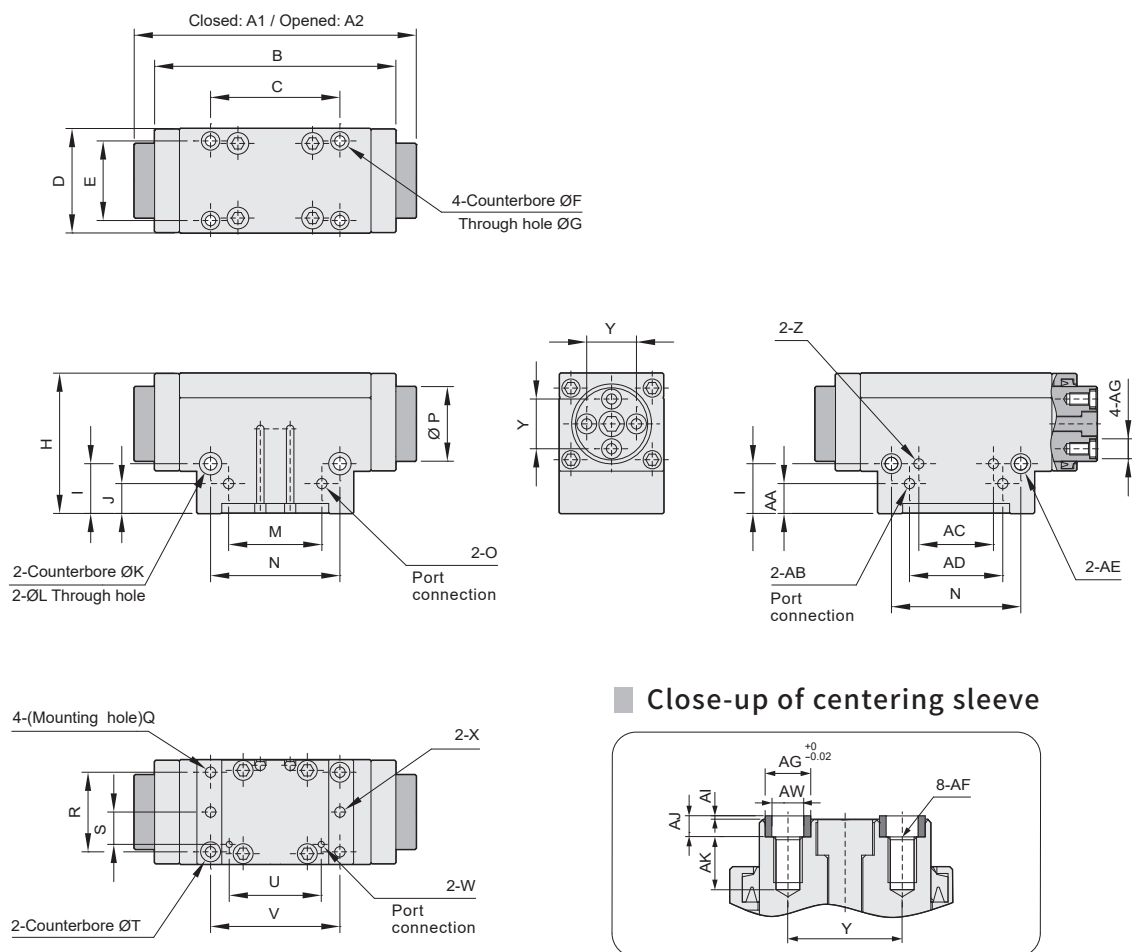
HDU

HMG series Dual-sided Force Type Air Gripper

Dimensions

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HMG 22 ~ 55



Unit: mm

Mark	A1	A2	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
Model																								
HMG 22	71	79	69.6	35	30.1	22	5.6	3.3	39.5	14.5	10	6	3.3	25	35	M5	20	M4x0.7Px10dp	22	9.5	Ø6x3dp	22.8	35	M3
HMG 27	82	94	80.1	42	36.1	27	7.1	4.2	47.5	17.5	10	7.2	4.2	30.5	42	M5	20	M5x0.8Px10dp	27	11.6	Ø8x3dp	27.6	42	M3
HMG 34	98.5	114.5	97	52	42	32	7.4	4.2	55.4	20	12	9	5.1	37.5	52	M5	30	M5x0.8Px10dp	32	13	Ø8x3dp	37	52	M3
HMG 44	122.5	142.5	108.6	66	50.1	38	9	5.1	66	25	15	11	6.6	49	66	PT1/8	32	M6x1.0Px10dp	38	14.9	Ø10x4dp	49	66	M3
HMG 55	154	180	151.6	82	60.1	45	10.5	6.8	76.5	30	15	14	9	61	82	PT1/8	40	M8x1.25Px10dp	45	19.8	Ø12x4dp	56.8	82	M5

Unit: mm

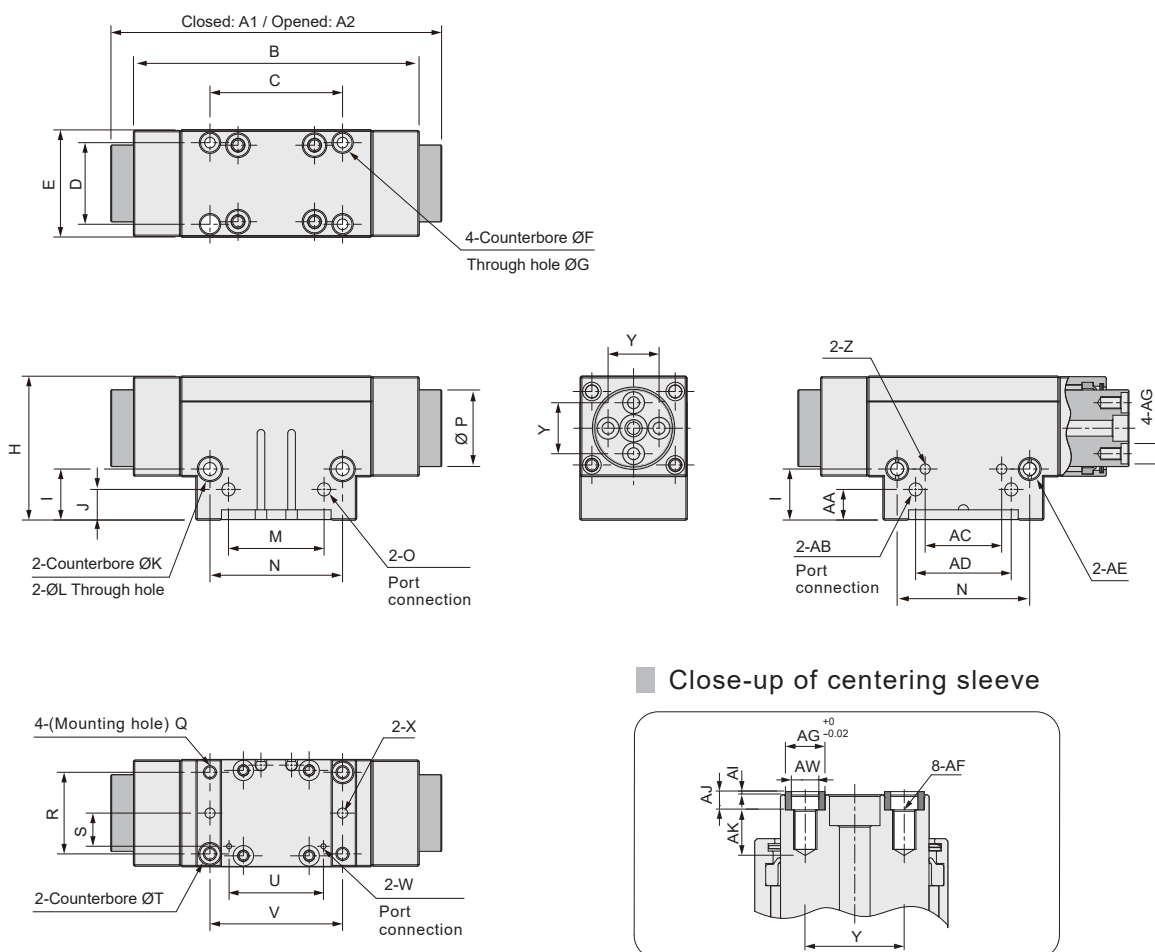
Mark	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AW	AI	AJ	AK
Model														
HMG 22	Ø3x3dp	14	Ø3x3dp	10	M5	18	25	Ø6x3dp	M3x0.5Px4dp	Ø5x2dp	Ø3.3	2	4	4
HMG 27	Ø4x6dp	15.2	Ø4x5dp	10	M5	20	30.5	Ø8x3dp	M4x0.7Px6dp	Ø6x2.5dp	Ø4.3	1.5	4	6
HMG 34	Ø4x8dp	20	Ø4x5dp	12	M5	30	37.5	Ø8x3dp	M5x0.8Px6dp	Ø8x3dp	Ø5.3	2	5	6
HMG 44	Ø5x6dp	22.5	Ø5x5dp	15	M5	50	49	Ø10x4dp	M5x0.8Px8dp	Ø8x2.5dp	Ø5.3	2.5	5	8
HMG 55	Ø6x10dp	28	Ø6x6dp	15	M5	60	61	Ø12x4dp	M6x1.0Px9dp	Ø10x3dp	Ø6.3	2	5	9

HMGL series Dual-sided Force Type Air Gripper

Dimensions

CHELIC

HMGL 22 ~ 55



Unit: mm

Mark Model	A1	A2	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
HMGL 22	80.8	88.8	79.6	35	30.1	22	5.6	3.3	39.5	14.5	10	6	3.3	25	35	M5	20	M4x0.7Px10dp	22	9.5	Ø6x3dp	22.8	35	M3
HMGL 27	91.7	103.7	90.1	42	36.1	27	7.1	4.2	47.5	17.5	10	7.2	4.2	30.5	42	M5	20	M5x0.8Px10dp	27	11.6	Ø8x3dp	27.6	42	M3
HMGL 34	113.4	129.4	112	52	42	32	7.4	4.2	55.4	20	12	9	5.1	37.5	52	M5	30	M5x0.8Px10dp	32	13	Ø8x3dp	37	52	M3
HMGL 44	137.4	157.4	135.6	66	50.1	38	9	5.1	66	25	15	11	6.6	49	66	PT1/8	32	M6x1.0Px10dp	38	14.9	Ø10x4dp	49	66	M3
HMGL 55	173.7	199.7	171.6	82	60.1	45	10.5	6.8	76.5	30	15	14	9	61	82	PT1/8	40	M8x1.25Px10dp	45	19.8	Ø12x4dp	56.8	82	M5

Unit: mm

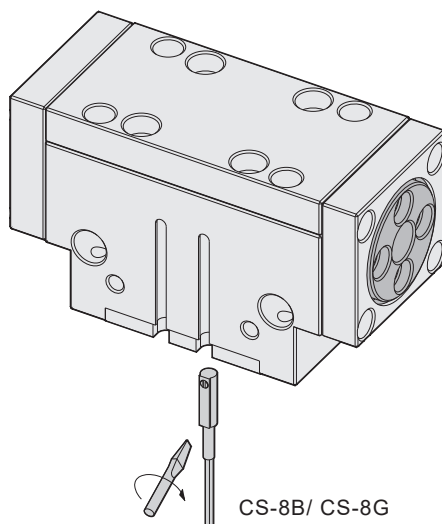
Mark Model	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AW	AI	AJ	AK
HMGL 22	Ø3x3dp	14	Ø3x3dp	10	M5	18	25	Ø6x3dp	M3x0.5Px4dp	Ø5x2dp	Ø3.3	2	4	4
HMGL 27	Ø4x6dp	15.2	Ø4x5dp	10	M5	20	30.5	Ø8x3dp	M4x0.7Px6dp	Ø6x2.5dp	Ø4.3	1.5	4	6
HMGL 34	Ø4x8dp	20	Ø4x5dp	12	M5	30	37.5	Ø8x3dp	M5x0.8Px6dp	Ø8x3dp	Ø5.3	2	5	6
HMGL 44	Ø5x6dp	22.5	Ø5x5dp	15	M5	50	49	Ø10x4dp	M5x0.8Px8dp	Ø8x2.5dp	Ø5.3	2.5	5	8
HMGL 55	Ø6x10dp	28	Ø6x6dp	15	M5	60	61	Ø12x4dp	M6x1.0Px9dp	Ø10x3dp	Ø6.3	2	5	9

HMG series Dual-sided Force Type Air Gripper

Mounting type and operation of sensor switch

CHELIC

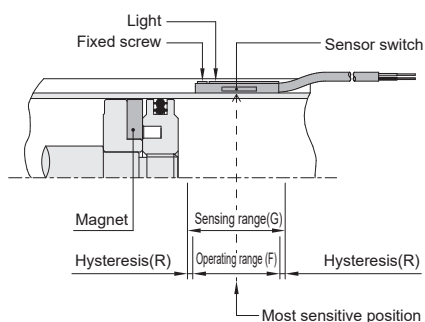
Sensor switch installation



Sensing range

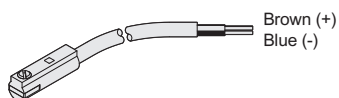
Sensor switch is fixed on the cylinder body. The magnetic piston head will activate the sensor switch when it enters the operating range. It has 0.5mm differential.

Sensor switch setting and operating range



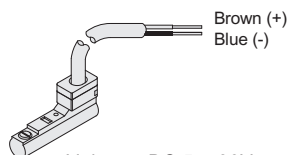
Sensor switch introduction

CS-8G



Voltage: DC 5 ~ 30V

CS-8B



Voltage: DC 5 ~ 30V