

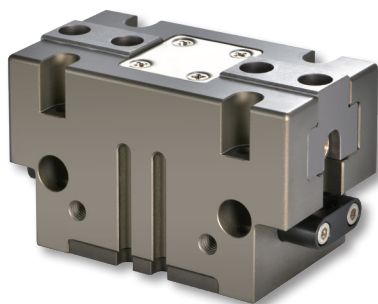
HMW series Wedge Slider Type Air Gripper

Product features/ Code of order

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Feature

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



Specification

Item	Bore size (mm)		Ø18	Ø22	Ø27	Ø34	Ø44	Ø55	Ø66	Ø92	Ø125
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	77	121	188	253	377	731	1059	1814	3649
	Open	N	83	125	190	301	431	810	1125	2266	3927
Stroke per jaw	mm		2.5	4	6	8	10	13	16	20	30
Port size			M3x0.5	M5x0.8			PT 1/8				PT 1/4
Recommend workpiece weight	kg		0.4	0.6	1	1.5	2.2	4.1	5.7	11.5	20
Open/ Close time	s		0.02	0.03	0.04	0.07	0.1		0.35		0.45
Repeatability	mm		±0.01					±0.02			±0.05
Sensing device			With magnet								

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

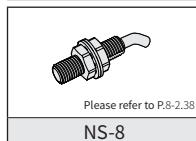
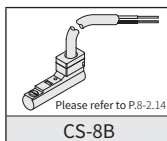
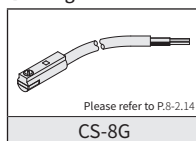
Code of order **HMW 34 - 8G 2 - N8 2**

1 2 3 4 5

1	Mark	Bore size (mm)
	18	Ø18
	22	Ø22
	27	Ø27
	34	Ø34
	44	Ø44
	55	Ø55
	66	Ø66
	92	Ø92
	125	Ø125

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

Image



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

4	Mark	Proximity sensor	Bore size
	None	Without proximity sensor	—
	N8	NS-8	Ø27 ~ Ø125

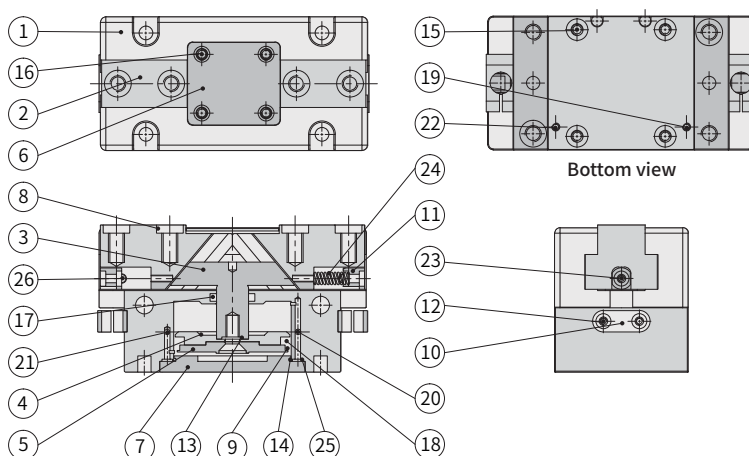
5	Mark	Proximity sensor quantity
	1	With 1 proximity sensor
	2	With 2 proximity sensors

HMW series Wedge Slider Type Air Gripper

Product features

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Internal structure



Product weight

Model	Weight (kg)
HMW Ø18	0.11
HMW Ø22	0.19
HMW Ø27	0.29
HMW Ø34	0.5
HMW Ø44	0.77
HMW Ø55	1.42
HMW Ø66	2.76
HMW Ø92	5.06
HMW Ø125	13.26

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	Base O-ring	NBR
02	Finger	Carbon steel	15	Shaft base screw	Alloy steel
03	Shaft	Alloy steel	16	Shaft base screw	Alloy steel
04	Piston	Aluminum alloy	17	Body X-ring	NBR
05	Magnet cap	Aluminum alloy	18	Piston X-ring	NBR
06	Finger cap	Stainless steel	19	Body O-ring	NBR
07	Base	Aluminum alloy	20	Body Plug	NBR
08	Centering sleeve	Carbon steel	21	Absorbing rubber	NBR
09	Magnet	Rare earth metal	22	Base set screw	Alloy steel
10	Proximity sensor holder	Aluminum alloy	23	Adjusting block screw	Alloy steel
11	Proximity sensor adjuster	Iron	24	Adjusting block spring	Stainless steel
12	Proximity sensor	Alloy steel	25	Body O-ring	NBR
13	Shaft O-ring	NBR	26	Base set screw	Alloy steel

Packing and O-ring material list

Unit: mm

Item	13 Shaft O-ring	14 Base O-ring	17 Body X-ring	17 Shaft packing	18 Piston X-ring	19 Body O-ring	25 Body O-ring
Model \ Quantity	1	1	1	1	1	2	2
HMW Ø18	Ø 5 x Ø 1	Ø 16 x Ø 1	4.47x8.03x1.78	-	14x17.56x1.78	Ø 2 x Ø 1.5	-
HMW Ø22	Ø 6 x Ø 1	Ø 20 x Ø 1	5.29x8.85x1.78	-	18.77x22.33x1.78	Ø 2.9 x Ø 1	-
HMW Ø27	Ø 4 x Ø 1	Ø 25 x Ø 1	-	MY-8A	23.52x27.08x1.78	Ø 2.9 x Ø 1	-
HMW Ø34	Ø 6 x Ø 1	Ø 28.7 x Ø 1.17	10.82x14.38x1.78	-	23.52x27.08x1.78	Ø 2 x Ø 1.5	Ø 2 x Ø 1
HMW Ø44	Ø 6 x Ø 1	Ø 40 x Ø 1	10.77x16.01x2.62	-	PSD-44	-	Ø 2 x Ø 1(4pcs)
HMW Ø55	Ø 8 x Ø 1	Ø 52 x Ø 1	13.95x19.19x2.62	-	48.9x54.14x2.62	Ø 2 x Ø 1	Ø 5 x Ø 1
HMW Ø66	Ø 10 x Ø 1	Ø 60.04 x Ø 1.78	-	MY-16A	59.92x66.98x3.53	-	Ø 4 x Ø 1
HMW Ø92	Ø 10 x Ø 1	Ø 80 x Ø 2	-	MY-20A	85.32x92.38x3.53	-	-
HMW Ø125	Ø 12 x Ø 1	Ø 117.07 x Ø 3.53	32.99x38.23x2.62	-	117.07x124.13x3.53	-	-

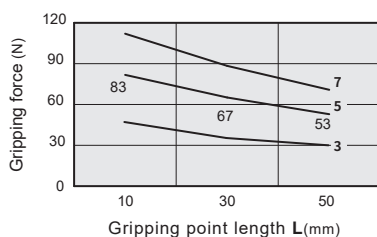
HMW series Wedge Slider Type Air Gripper

Characteristics graph

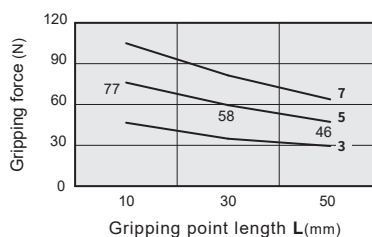
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Gripping force characteristic

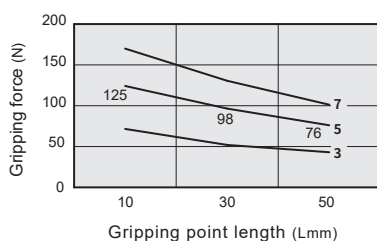
HMW 18 - OPEN



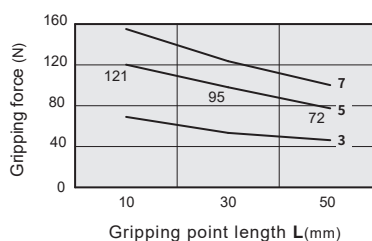
HMW 18 - CLOSE



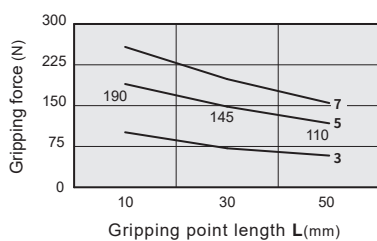
HMW 22- OPEN



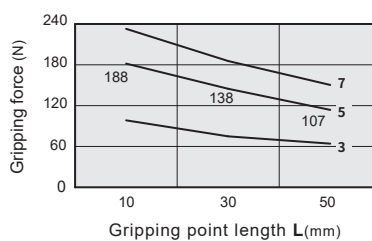
HMW 22- CLOSE



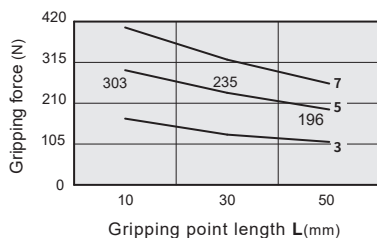
HMW 27- OPEN



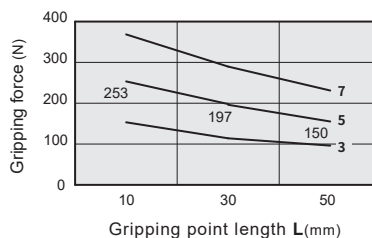
HMW 27- CLOSE



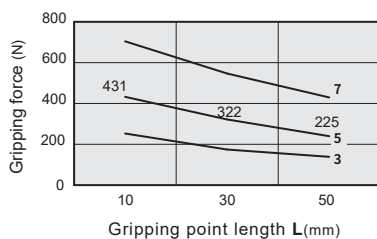
HMW 34- OPEN



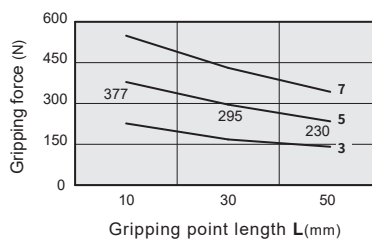
HMW 34- CLOSE



HMW 44- OPEN



HMW 44- CLOSE

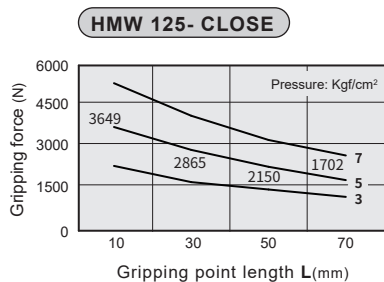
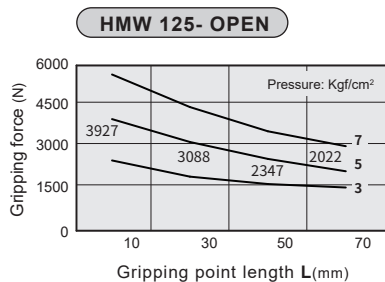
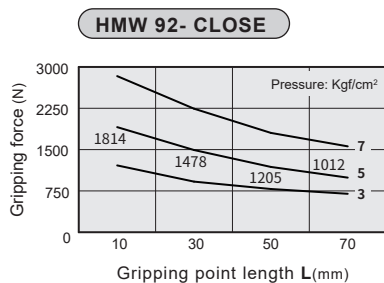
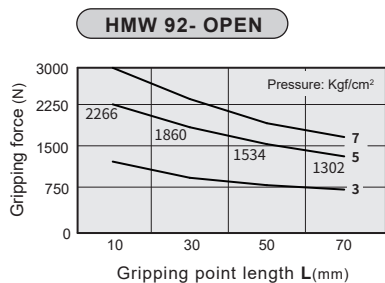
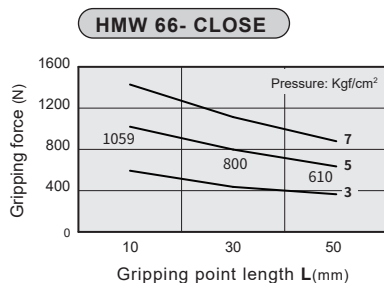
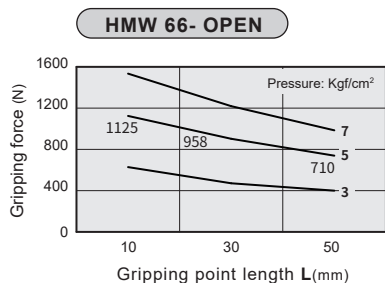
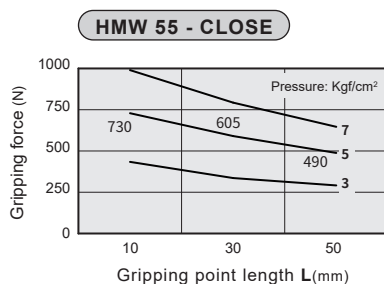
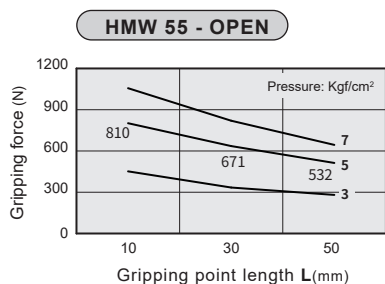


HMW series Wedge Slider Type Air Gripper

Characteristics graph

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Gripping force characteristic



HDD

HDS

HDM

HDP

HDPM

HDZ

HDZL

HDZM

HDW

HDWM

HMW

HMG

HMY

HDU

HMW series Wedge Slider Type Air Gripper

Operating type and data, Mounting type

CHELIC

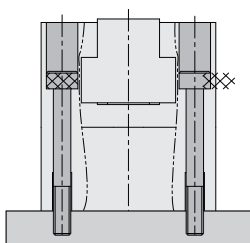
Operating type and data

Action	Model	Bore size (mm)	The smallest operating pressure (kgf/cm ²)	Thread port (mm)	Effective gripping force (N)	
Double acting	HMW 18	18	2	4-M2.5x0.45Px4dp	Open	83
					Close	77
	HMW 22	22	2	4-M3x0.5Px5dp	Open	125
					Close	121
	HMW 27	27	2	6-M4x0.7P	Open	190
					Close	188
	HMW 34	34	2	6-M5x0.8P	Open	301
					Close	253
	HMW 44	44	2	4-M6x1.0Px10dp	Open	431
					Close	377
	HMW 55	55	2	4-M6x1.0Px9dp	Open	810
					Close	731
	HMW 66	66	2	4-M10x1.5Px13dp	Open	1125
					Close	1059
	HMW 92	92	2	6-M10x1.5Px13dp	Open	2266
					Close	1814
	HMW 125	125	2	6-M12x1.75Px18dp	Open	3927
					Close	3649

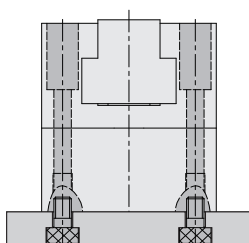
Note: The gripping force is the force of open and close gripper, the acting pressure is 5 kgf/cm².

Mounting type

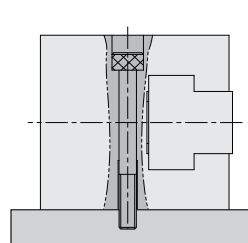
1. Apply the screw to through-holes of body



2. Apply the screw from bottom thread hole



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

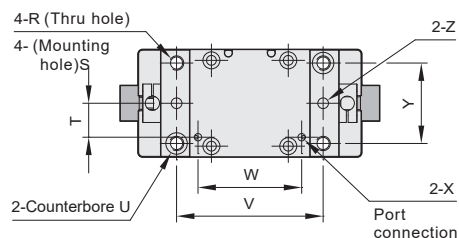
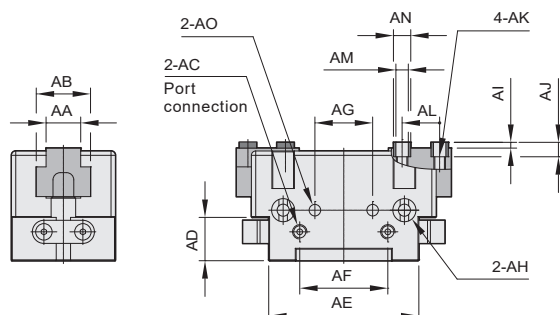
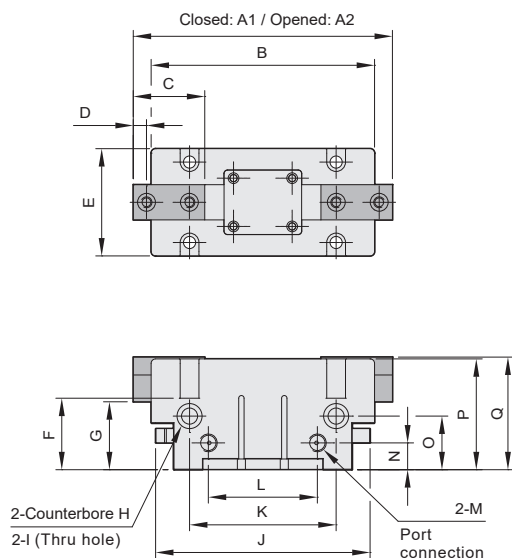


HMW series Wedge Slider Type Air Gripper

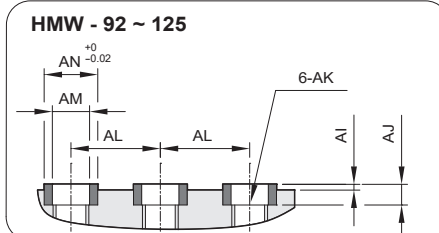
Dimensions

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HMW 18 ~ 125



Close-up of centering sleeve



Mark	A1	A2	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
HMW 18	44.4	49.4	45	14.8	3.5	24	16	15.2	Ø4.8x9dp	Ø2.6	-	32	22	M3	8	11	24	24.7	Ø2.5	M3x0.5Px10dp	6.2
HMW 22	56	64	57	20.7	3.3	30	22	17.7	Ø6x6dp	Ø3.3	-	35	25	M5	10	14.5	30	31	Ø3.3	M4x0.7Px10dp	8
HMW 27	62.4	74.4	64	21.7	4	36	25	22.2	Ø7.2x11dp	Ø4.2	70	42	30.5	M5	10	17.5	38	39	Ø4.2	M5x0.8Px10dp	9.2
HMW 34	79	95	80	26.7	5	42	35	29	Ø9x12dp	Ø5.1	83	52	37.5	M5	12	20	48	49	Ø4.2	M5x0.8Px10dp	12
HMW 44	99	119	100	32	6	50	35	31	Ø11x10dp	Ø6.6	101	66	49	PT1/8	15	25	54	55	Ø5.1	M6x1.0Px10dp	16.5
HMW 55	123.8	149.8	125	40	7.4	60	40	38	Ø14x15dp	Ø9	120	82	61	PT1/8	15	30	62	63	Ø6.8	M8x1.25Px10dp	19
HMW 66	159	191	160	50	9	72	50	45	Ø14x17dp	Ø9	145	100	74	PT1/8	18	28	76	77	Ø6.8	M8x1.25Px10dp	25
HMW 92	200	240	200	67.5	12	95	67	59	Ø18.5x12.5dp	Ø12.5	180	128	100	PT1/8	18	44	97	98	Ø10.5	M12x1.75Px15dp	24
HMW 125	260	320	260	87	15	135	93	78	Ø18.5x12.5dp	Ø12.5	220	175	134	PT1/4	25	66	128	130	Ø12.5	M14x2.0Px30dp	25

Unit: mm

Mark	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO
HMW 18	Ø5x2.5dp	32	20.5	M3	18	Ø3x5dp	6.8	12.2	M3	9	38	22	12	Ø5x2.5dp	2	4	M2.5x0.45Px4dp	8	Ø2.8	Ø4	Ø3x3dp
HMW 22	Ø6x3dp	35	22.8	M3	22	Ø3x3dp	10	15.6	M5	13	42	25	-	Ø6x3dp	2	4	M3x0.5Px5dp	12	Ø3.3	Ø5	-
HMW 27	Ø8x3dp	42	27.6	M3	27	Ø4x8dp	12	18.8	M5	15	52	30.5	20	Ø8x3dp	2	5	M4x0.7Px6dp	13	Ø4.3	Ø6	Ø4x5dp
HMW 34	Ø8x3dp	52	37	M3	32	Ø4x8dp	14.4	22.8	M5	20	63	37.5	-	Ø8x3dp	2	5	M5x0.8Px6dp	16	Ø5.3	Ø8	-
HMW 44	Ø10x4dp	66	49	M3	38	Ø5x6dp	17.8	27	M5	24	81	49	50	Ø10x4dp	2	5	M6x1.0Px10dp	20	Ø6.3	Ø10	Ø5x5dp
HMW 55	Ø12x4dp	82	58	M5	45	Ø6x10dp	19.7	32	M5	26	100	61	60	Ø12x4dp	2	6	M6x1.0Px9dp	24	Ø6.3	Ø10	Ø6x6dp
HMW 66	Ø12x4dp	100	74	M5	56	Ø6x12dp	26	42	M5	32	125	74	76	Ø12x4dp	2	7	M10x1.5Px13dp	32	Ø10.3	Ø14	Ø6x7dp
HMW 92	Ø18x4dp	128	100	M5	68	Ø10x12dp	28	45	M5	48	160	100	100	Ø18x12.5dp	2	7	M10x1.5Px13dp	22	Ø10.3	Ø14	Ø8x8dp
HMW 125	Ø18x4dp	175	134	PT1/8	100	Ø10x12dp	40	69	PT1/4	67	200	134	140	Ø18x12.5dp	2	7	M12x1.75Px18dp	30	Ø12.5	Ø18	Ø10x12dp

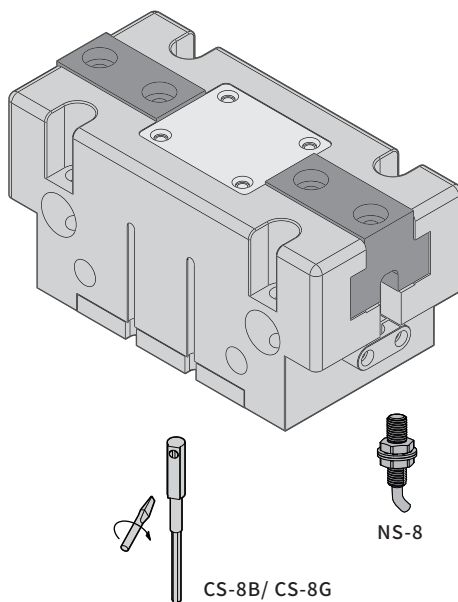
Unit: mm

HMW series Wedge Slider Type Air Gripper

Mounting type and operation of sensor switch

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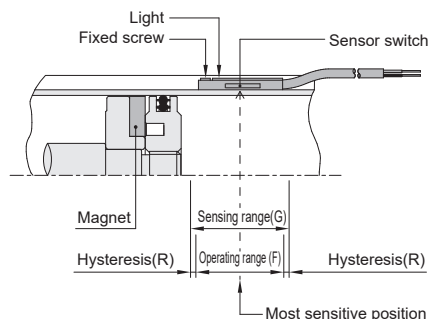
Sensor switch installation



Sensing range

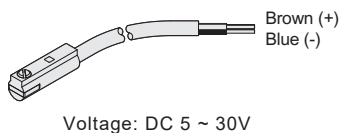
Sensor switch is fixed on the cylinder body. The magnetic piston head will activate the sensor switch when it enters the operating range. It has 0.5mm differential.

Sensor switch setting and operating range



Sensor switch introduction

CS-8G



CS-8B

