

## ■ Features

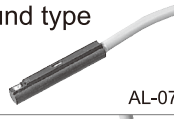

1. The gripper open and close are controlled by pneumatic system.
2. Miniature design, space saving.
3. Sensor installation is available.



Fulcrum type

Parallel type

## ■ How to order

HYC	32	SR	D	1
Mini chuck	Bore size	Sensor	Type	Number of sensor
HPC:Parallel type HYC:Fulcrum type	10 :Ø10 16 :Ø16 20 :Ø20 25 :Ø25 32 :Ø32	Blank :W/O sensor SR :Round type  SU :Square type 	Blank :Reed switch D :NPN E :PNP	1 pc 2 pcs

\*Sensor please refer to P3-191, P3-193

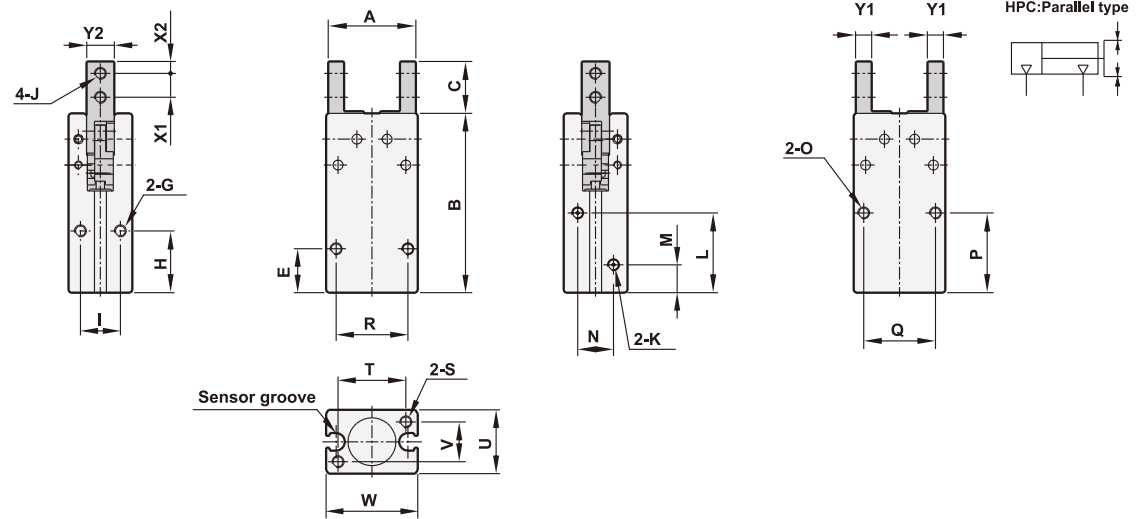
## ■ Specifications

Bore size	Ø10	Ø16	Ø20	Ø25	Ø32
Port size	M3		M5		
Gripping gap distance (For HPC)	4mm	8mm	12mm	14mm	16mm
Gripping force (For HPC)	5N	17.6N	34.3N	58.8N	83.3N
Operating angle (For HYC)	-10° ~ +30°				
Fluid	Compressed air				
Acting	Double acting				
Operating pressure range	1.5 ~ 7 kgf/cm <sup>2</sup>				
Max. operating pressure	10.5 kgf/cm <sup>2</sup>				
Lubrication	Not required or few				
Body material	Aluminum alloy				
Magnet	Built-in				
Ambient temperature	0°C ~ 60°C				
Operating frequency	50 ~ 700 mm/Sec.				

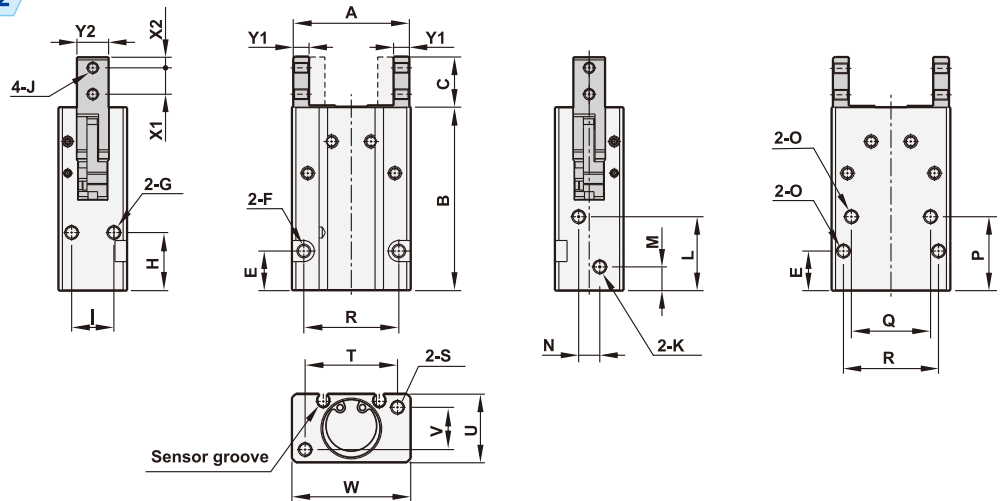
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## ■ Dimensions

## HPC-10



## HPC-16~32



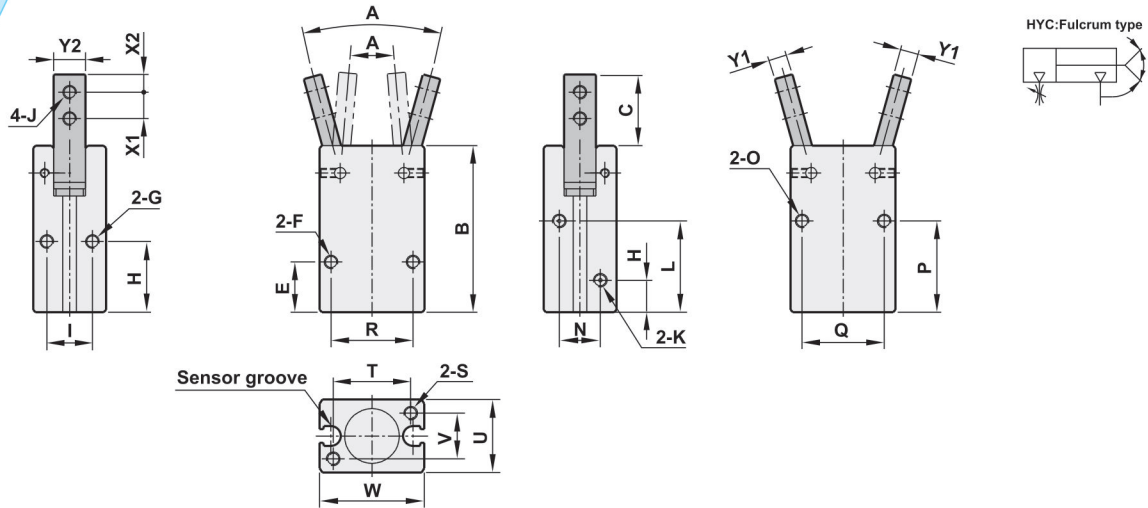
Model	A		B	C	E	F	G	H	I	J
	Open	Closed								
HPC-10	22°	18°	45	13	11	M3xP0.5xL8.0	M3xP0.5xDepth5.0	15.5	10	M3xP0.5 through
HPC-16	33°	25°	58.5	15	14	Ø3.4 through, Ø6 Counter bore x Depth 3.5	M4xP0.7xDepth8.0	21	14	M3xP0.5 through
HPC-20	44°	32°	69.5	19	15	Ø4.3 through, Ø8 Counter bore x Depth 4.6	M5xP0.8xDepth10.0	22	16	M4xP0.7 through
HPC-25	51°	37°	79.5	24	16	Ø5.3 through, Ø9.5 Counter bore x Depth 5.5	M6xP1.0xDepth12.0	24.5	20	M5xP0.8 through
HPC-32	60°	44°	88	31	18	Ø5.3 through, Ø9.5 Counter bore x Depth 5.5	M6xP1.0xDepth15.0	30	26	M6xP1.0 through

Model	K	L	M	N	O	P	Q	R	S	T	U	V	W	X1	X2	Y1	Y2
HPC-10	M3xP0.5	20	7	6	M3xP0.5xL8.0	20	18	18	M3xP0.5xL5.0	17	16	10	23	6	3	4	7
HPC-16	M5xP0.8	23	8	6	M4xP0.7xL8.0	25.5	24	28	M4xP0.7xL8.0	26	22	14	34	8	3	4	11
HPC-20	M5xP0.8	28	9	8	M5xP0.8xL10.0	28	30	36	M5xP0.8xL10.0	35	26	16	45	10	4	6	12
HPC-25	M5xP0.8	30.5	9.5	18	M6xP1.0xL12.0	31.5	36	40	M6xP1.0xL10.0	40	32	20	52	12	5	8	14
HPC-32	M5xP0.8	34	10	24	M6xP1.0xL15.0	37.5	44	50	M6xP1.0xL10.0	46	40	26	60	15	7	9	18

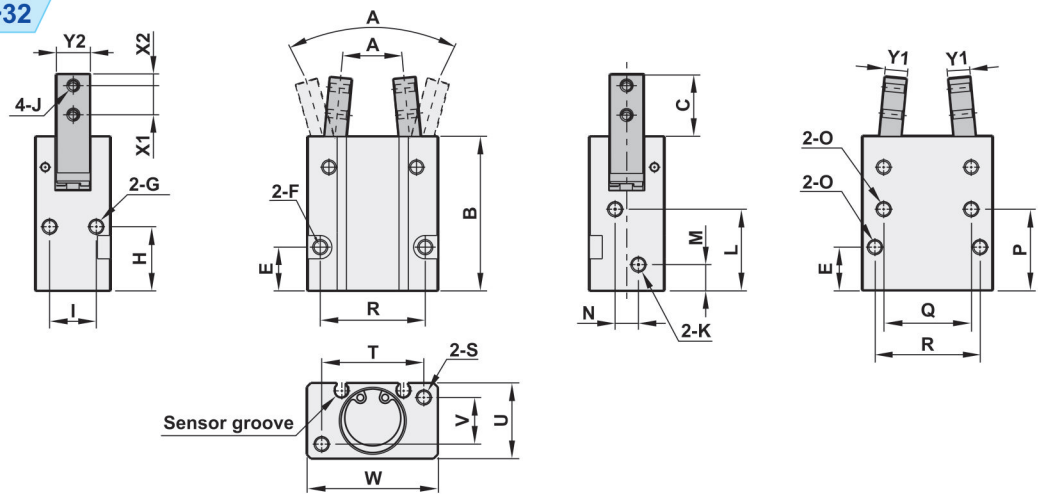
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■ Dimensions

HYC-10



HYC-16~32



(Unit: mm)

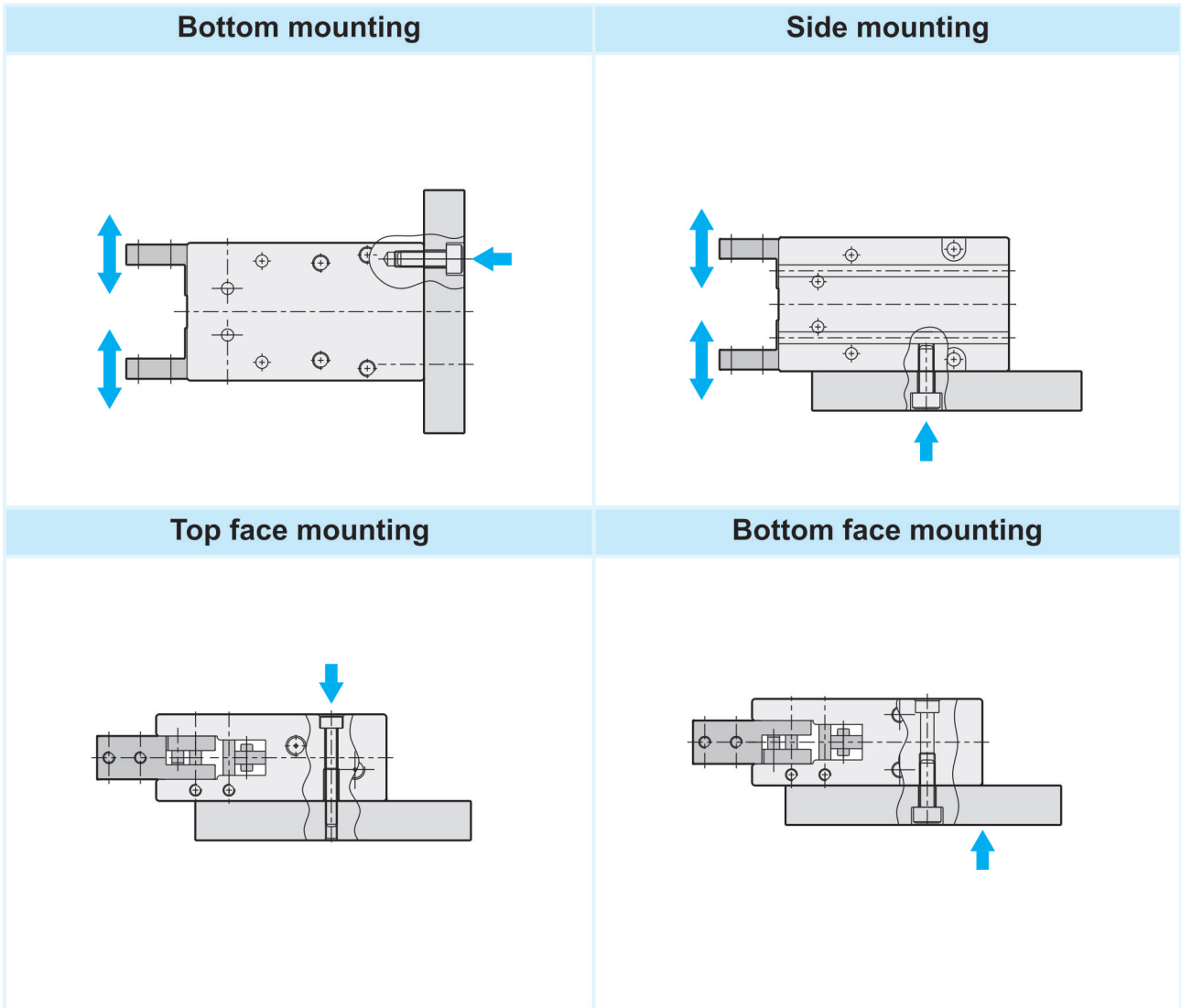
Model	A		B	C	E	F	G	H	I	J
	Open	Close d								
HYC-10	30°	-10°	36.5	15.7	11	M3xP0.5xL8.0	M3xP0.5xL5.0	15.5	10	M3xP0.5 through
HYC-16	30°	-10°	45.5	15.8	14	φ 3.4 through, φ 6 Counter bore x L3.5	M4xP0.7xL8.0	21	14	M3xP0.5 through
HYC-20	30°	-10°	53	22	15	φ 4.2 through, φ 8 Counter bore x L4.6	M5xP0.8xL10.0	22	16	M4xP0.7 through
HYC-25	30°	-10°	61	26	16	φ 5.3 through, φ 9.5 Counter bore x L5.5	M6xP1.0xL12.0	24.5	20	M5xP0.8 through
HYC-32	30°	-10°	68	30	18	φ 5.3 through, φ 9.5 Counter bore x L5.5	M6xP1.0xL15.0	30	26	M6xP1.0 through

Model	K	L	M	N	O	P	Q	R	S	T	U	V	W	X1	X2	Y1	Y2
HYC-10	M3xP0.5	20	7	9	M3xP0.5xL8.0	20	18	18	M3xP0.5xL8.0	17	16	10	23	6	3	4	7
HYC-16	M5xP0.8	23	8	6	M4xP0.7xL8.0	25.5	24	28	M4xP0.7xL8.0	26	22	14	34	8	3	6	9
HYC-20	M5xP0.8	28	9	8	M5xP0.8xL10.0	28	30	36	M5xP0.8xL10.0	35	26	16	45	10	4	7	12
HYC-25	M5xP0.8	30.5	9.5	18	M6xP1.0xL12.0	31.5	36	40	M6xP1.0xL10.0	40	32	20	52	12	5	9	14
HYC-32	M5xP0.8	34	10	24	M6xP1.0xL15.0	37.5	44	50	M6xP1.0xL10.0	46	40	26	60	14	6	10	18

■ Theoretical force

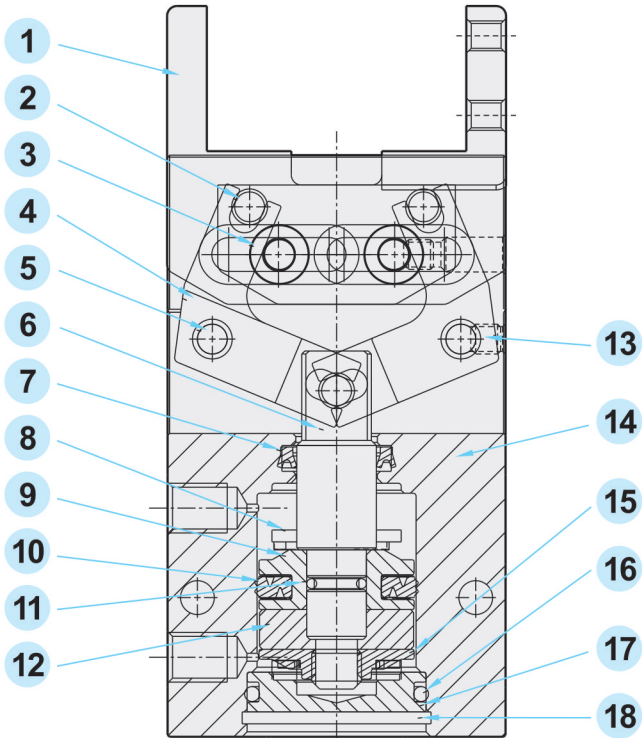
Bore size	Piston area cm²	Operating pressure    kgf/cm²					
		2	3	4	5	6	7
<i>φ</i> 10	0.79	1.58	2.37	3.16	3.95	4.74	5.53
<i>φ</i> 16	2.01	4.02	6.03	8.04	10.5	12.06	14.07
<i>φ</i> 20	3.14	6.28	9.42	12.56	157	18.84	21.98
<i>φ</i> 25	4.91	9.82	14.73	19.64	24.55	29.46	34.37
<i>φ</i> 32	8.04	16.08	24.12	32.16	40.2	48.24	56.28

■ Mounting example



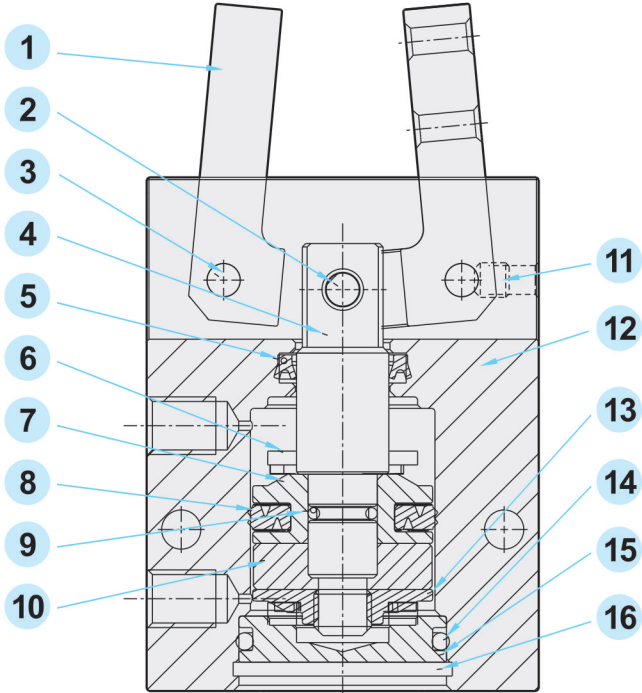
Material of parts

HPC: Parallel type



No.	Description	Material	Qty
1	Gripper	Stainless steel	2
2	Pin	Carbon steel	3
3	Roller	Carbon steel	4
4	Lever	Stainless steel	2
5	Lever shaft	Carbon steel	4
6	Piston rod	S45C+Cr	1
7	U-ring	NBR	1
8	Gasket	NBR	2
9	Piston	Aluminum alloy	1
10	U-piston seal	NBR	1
11	O-ring	NBR	1
12	Magnet	Ferrite magnet	1
13	Plug	Carbon steel	4
14	Body	Aluminum alloy	1
15	Magnet holder	Aluminum alloy	1
16	O-ring	NBR	1
17	End cover	Aluminum alloy	1
18	C type snap ring	Fe+Ni	1

HYC: Fulcrum type



No.	Description	Material	Qty
1	Gripper	Stainless steel	2
2	Pin	Carbon steel	1
3	Lever shaft	Carbon steel	2
4	Piston rod	S45C+Cr	1
5	U-ring	NBR	1
6	Gasket	NBR	2
7	Piston	Aluminum alloy	1
8	U-piston ring	NBR	1
9	O-ring	NBR	1
10	Magnet	Ferrite magnet	1
11	Plug	Carbon steel	2
12	Body	Aluminum alloy	1
13	Magnet holder	Aluminum alloy	1
14	O-ring	NBR	1
15	End cover	Aluminum alloy	1
16	C type snap ring	Fe+Ni	1

Memo..

Pneumatic Actuators

Mini Gripper

HPS

HYC

SRGN

SRZN

