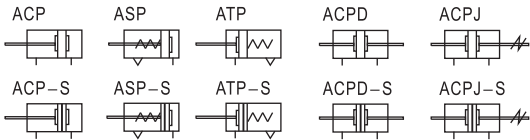


Tight cylinder
ACP Series



Symbol



Product feature

- 1. DIN standard cylinder.
- 2. The cylinder body connects with the threads of the front and back cover, forming high strength and convenient maintenance.
- 3. The internal diameter of the body is treated with rolling followed by the treatment of hard anodizing, forming an excellent abrasion resistance and durability
- 4. The seal of piston adopts heterogeneous two-way seal structure. It has compact dimension and the function of oil reservation.
- 5. Compact structure can effectively save installation space.
- 6. There are magnetic switch slots around the cylinder body, which is convenient to install inducting switch.
- 7. Installing accessories with various specifications are optional.

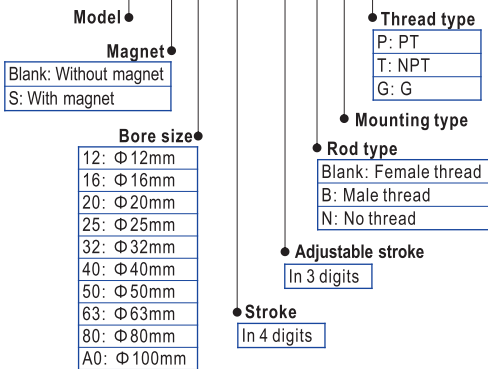
Ordering code

Model can to be changed Ordering code. Example:

Production type: ACPJ
Magnet: With magnet
Bore size: 50mm
Stroke: 80mm
Adjustable stroke: 50mm
Rod type: Male thread
Mounting type: LB
Thread type: NPT

Model: ACPJ S-50 x 80-B-LB-T

Ordering code: ACPJ S 50 0080 050 B LB T



Specification

Bore size(mm)		12	16	20	25	32	40	50	63	80	100
Acting type		Double acting, Single acting-Push type, Single acting-Pull type									
Fluid		Air(to be filtered by 40 μ m filter element)									
Operating pressure	Double acting	0.1~1.0MPa(15~145psi)(1.0~10.0bar)									
	Single acting	0.2~1.0MPa(28~145psi)(2.0~10.0bar)									
Proof pressure		1.5MPa(215psi)(15bar)									
Temperature °C		-20~80									
Speed range mm/s		Double acting: 30~500					Single acting: 50~500				
Stroke tolerance		0~150 ^{+1.0} ₀					>150 ^{+1.4} ₀				
Cushion type		Bumper									
Port size ①		M5×0.8					1/8"				1/4"

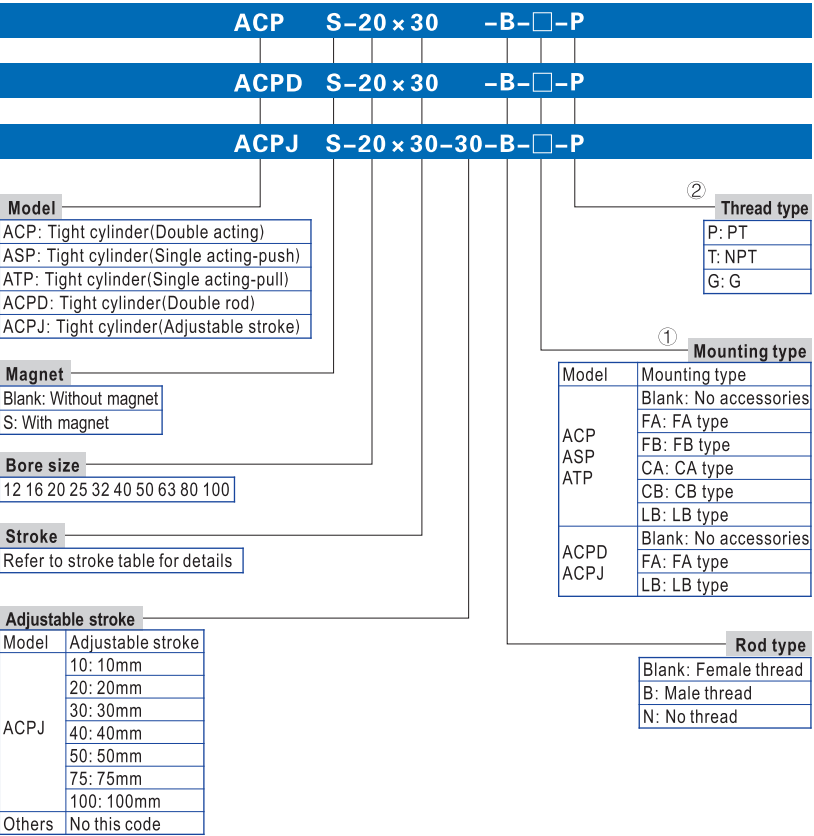
① PT thread, NPT thread and G thread are available. Add) Refer to P403~426 for detail of sensor switch.

Stroke

Bore size (mm)		Standard stroke (mm)																					Max. std stroke	Max. stroke
12 16	Double acting	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 110 120 125 150 160 175 200																					200	200
	Single acting	5 10																					10	-
20 25	Double acting	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 110 120 125 150 160 175 200																					200	200
	Single acting	5 10 15 20 25																					25	-
32 40 50 63	Double acting	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 110 120 125 150 160 175 200 225 250 275 300																					300	300
	Single acting	5 10 15 20 25																					25	-
80 100	Double acting	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 110 120 125 150 160 175 200 225 250 275 300 325 350 375 400																					400	400
	Single acting	5 10 15 20 25																					25	-

Note) 1. Please contact the company for other special strokes.
2. The dimensions of non-std stroke cylinder has the same dimensions as the next longer stroke std. stroke cylinder.
e.g. 23mm stroke cylinder has the same dimensions of 25 std. stroke cylinder.

Explain of model



① Please refer to page 271 for accessory parts.
② Standard thread is blank here.



Tight cylinder

ACP Series



Inner structure and material of major parts

ACP-S

NO.	Item	Material
1	Body	Aluminum alloy
2	Screw	Carbon steel
3	Piston rod	Φ 12~25 Stainless steel Others S45C
4	O-ring	NBR
5	Piston	Aluminum alloy
6	Back cover	Aluminum alloy
7	Magnet holder	Aluminum alloy
8	Bumper	TPU
9	Magnet	Φ 12~32 Sintered metal (Neodymium-iron-boron) Others Plastic
10	O-ring	NBR
11	Wear ring	Φ 12~32 No Others Wear resistant material
12	Piston seal	NBR
13	Front cover	Aluminum alloy
14	Bushing	Φ 12~20 No Others Wear resistant material
15	Front cover packing	NBR

Dimensions

ACP

ASP

ATP

Bore size\Item	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Q1	R	R1
12	6	4	30	18	29	7	M5×0.8	3	6	M4×0.7	11.5	18	38	42.5	4.5	5	M3×0.5	3.3	8	1.5
16	6	4	30	18	29	7	M5×0.8	3	8	M4×0.7	11.5	18	38	42.5	4.5	6	M4×0.7	4.5	10	1.5
20	6	4	37.5	22	36	7	M5×0.8	3	10	M5×0.8	11.5	18	38	42.5	4.5	8	M5×0.8	5.5	12	2
25	6.1	4	41.5	26	40	7	M5×0.8	4	10	M5×0.8	11.5	18	39.5	45	5.5	8	M5×0.8	5.5	12	2
32	6.1	4	52	32	50	8	1/8"	4.5	12	M6×1.0	14	21	44.5	50.5	6	10	M6×1.0	6.5	14	2.6
40	6.1	4	62.5	42	60	8	1/8"	4.5	12	M6×1.0	14	21	45.5	52	6.5	10	M6×1.0	6.5	14	2.6
50	6.1	4	71	50	68	8	1/8"	5	16	M8×1.25	14	21.5	45.5	53	7.5	13	M8×1.25	8.5	16	3.3
63	8.1	4	91	62	87	8	1/8"	5	16	M10×1.5	15	24	50	57.5	7.5	13	M8×1.25	8.5	16	3.3
80	8.1	4	111	82	107	8.5	1/8"	5.5	20	M10×1.5	16	27	56	64	8	17	M10×1.5	10.5	20	4.7
100	8.1	4	133	103	128	10.5	1/4"	7.5	25	M10×1.5	19	32	66.5	76.5	10	22	M12×1.75	12.5	24	6.1

Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

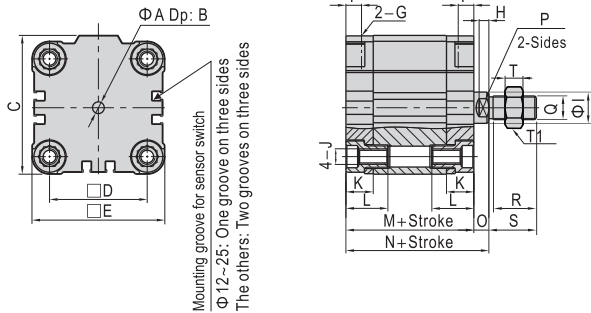


ACP

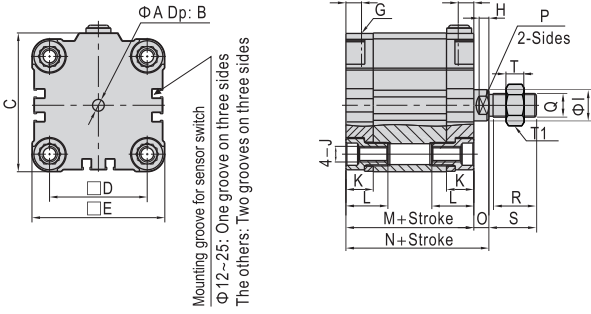
Tight cylinder
ACP Series



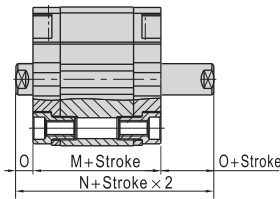
ACP-B



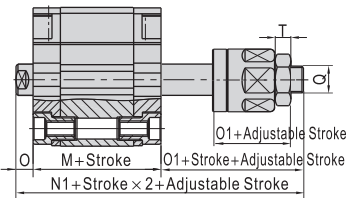
ASP-B



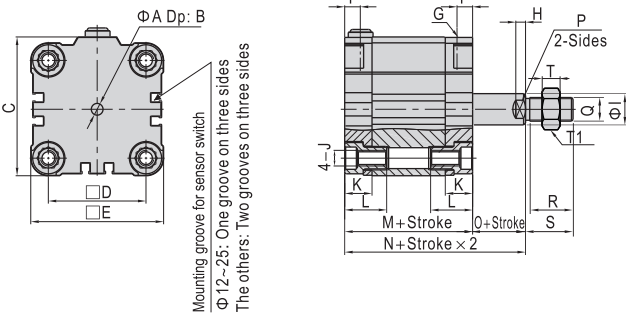
ACPD



ACPJ



ATP-B



Bore size\Item	A	B	C	D	E	F	G	H	I	J
12	6	4	30	18	29	7	M5 × 0.8	3	6	M4 × 0.7
16	6	4	30	18	29	7	M5 × 0.8	3	8	M4 × 0.7
20	6	4	37.5	22	36	7	M5 × 0.8	3	10	M5 × 0.8
25	6.1	4	41.5	26	40	7	M5 × 0.8	4	10	M5 × 0.8
32	6.1	4	52	32	50	8	1/8"	4.5	12	M6 × 1.0
40	6.1	4	62.5	42	60	8	1/8"	4.5	12	M6 × 1.0
50	6.1	4	71	50	68	8	1/8"	5	16	M8 × 1.25
63	8.1	4	91	62	87	8	1/8"	5	16	M10 × 1.5
80	8.1	4	111	82	107	8.5	1/8"	5.5	20	M10 × 1.5
100	8.1	4	133	103	128	10.5	1/4"	7.5	25	M10 × 1.5

Bore size\Item	K	L	M	N	O	P	Q	R	S	T	T1
12	11.5	18	38	42.5	4.5	5	M6 × 1.0	15	16	5	10
16	11.5	18	38	42.5	4.5	6	M8 × 1.25	19	20	6	12
20	11.5	18	38	42.5	4.5	8	M10 × 1.25	20	22	6	17
25	11.5	18	39.5	45	5.5	8	M10 × 1.25	20	22	6	17
32	14	21	44.5	50.5	6	10	M10 × 1.25	20	22	6	17
40	14	21	45.5	52	6.5	10	M10 × 1.25	20	22	6	17
50	14	21.5	45.5	53	7.5	13	M12 × 1.25	22	24	7	17
63	15	24	50	57.5	7.5	13	M12 × 1.25	22	24	7	17
80	16	27	56	64	8	17	M16 × 1.5	30	32	8	23
100	19	32	66.5	76.5	10	22	M20 × 1.5	38	40	10	26

Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

Bore size\Item	M	N	N1	O	O1	T	Q
12	38	47	63.5	4.5	21	5	M6 × 1.0
16	38	47	67.5	4.5	25	6	M8 × 1.25
20	38	47	69.5	4.5	27	6	M10 × 1.25
25	39.5	50.5	72	5.5	27	6	M10 × 1.25
32	44.5	56.5	77.5	6	27	6	M10 × 1.25
40	45.5	58.5	79	6.5	27	6	M10 × 1.25
50	45.5	60.5	81	7.5	28	7	M12 × 1.25
63	50	65	85.5	7.5	28	7	M12 × 1.25
80	56	72	93	8	29	8	M16 × 1.5
100	66.5	86.5	112	10	35.5	10	M20 × 1.5

Remark:
1. The dimensions of magnet type cylinder are the same as non-magnet type cylinder.
2. Please refer to this page for male thread dimensions.
3. The unmarked dimension is the same as ACP standard type.

