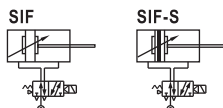


ISO15552 Standard cylinder

SIF Series(With valve)



Symbol



Product feature

- 1.For Standard Cylinders: use 4M210 valve for bore size 32,40 & 50; 4M310 valve for bore size 63,80 & 100mm;
- 2.Individually control, no need for extra solenoid valves;
- 3.Installation time & space saving; suitable for decentralise installation in large system.
- 4.Options of mounting accessories & easy installation.

Stroke

Bore size(mm)	Standard stroke (mm)	Mini. stroke	Max. std stroke	Max. stroke
32	Standard type 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500	50	1000	1800
	With TC type 100 125 150 160 175 200 250 300 350 400 450 500	100		
40	Standard type 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800	50	1200	1800
	With TC type 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800	100		
50	Standard type 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	50	1200	1800
	With TC type 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	100		
63 80 100	Standard type 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	50	1500	1800
	With TC type 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	100		

Note) Consult us for non-standard stroke.

Specification

Cylinder specification												
Bore size(mm)	32		40		50		63		80		100	
Acting type	Double acting											
Fluid	Air(to be filtered by 40 μ m filter element)											
Mounting type	Basic		FA	FB	CA	CB	CR	LB	TC	FTC	TCM1	TCM2
Operating pressure	0.1~1.0MPa(15~145psi)(1.0~10.0bar)											
Proof pressure	1.5MPa(215psi)(15bar)											
Temperature °C	-20~80											
Speed range mm/s	30~800											
Stroke tolerance	0~250 ^{+1.0} ₀ 251~1000 ^{+1.5} ₀ 1001~1500 ^{+2.0} ₀											
Cushion type	Variable cushion											
Adjustable cushionstroke	27				30				36			
Port size	1/8"			1/4"			3/8"			1/2"		
PU tube size(ODXID)	Φ 8 × Φ 5						Φ 10 × Φ 6.5					
Solenoid valve specification												
Model	4M210-06 & 4M210-08						4M310-08 & 4M310-10					
Fluid	Air(to be filtered by 40 μ m filter element)											
Acting type	Internal piloted											
Port size ①	In=Exhaust=1/8" & In=1/4" Exhaust=1/8"						In=Exhaust=1/4" & In=PT3/8 Exhaust=1/4"					
Orifice size	4M210-06: 14.0mm ² (Cv=0.78) 4M210-08: 16.0mm ² (Cv=0.89)						4M310-08: 25.0mm ² (Cv=1.40) 4M310-10: 30.0mm ² (Cv=1.68)					
Valve type	5 port 2 position											
Operating pressure	0.15~0.8MPa(21~114psi)											
Proof pressure	1.5MPa(215psi)											
Temperature °C	-20~70											
Body material	Aluminum alloy											
Lubrication ②	Not required											
Max. frequency ③	5 cycle/sec						4 cycle/sec					
Coil specification												
Standard voltage	AC220V、AC110V、AC24V、DC24V、DC12V											
Scope voltage	AC: ± 15% DC: ± 10%											
Power consumption	AC: 3.5VA DC: 3.0W											
Protection	IP65(DIN40050)											
Temperature classification	B Class											
Electrical entry	Terminal, Grommet											
Activating time	0.05 sec and below											

- ① PT thread, G thread and NPT thread are available.
 ② It can't stop in the midway of lubricating. Lubricants like ISO VG32 or equivalent are recommended.
 ③ The maximum actuation frequency is in the no-load state.
 Add) Refer to P457~480 for detail of sensor switch.

Ordering code

SIF 50 × 1000 S □ -06 A □ □																								
Model	SIF: Double acting with valve type																							
Bore size	32 40 50 63 80 100																							
Stroke	Refer to stroke table for details																							
Magnet	Blank: Without magnet S: With magnet																							
① Mounting type	<table border="1"> <thead> <tr> <th>Mounting type</th><th>Available series</th><th>Memo</th></tr> </thead> <tbody> <tr> <td>Blank: Standard type</td><td rowspan="9">SIF</td><td></td></tr> <tr> <td>LB: LB type</td><td></td></tr> <tr> <td>FA: FA type</td><td></td></tr> <tr> <td>FB: FB type</td><td></td></tr> <tr> <td>CA: CA type</td><td></td></tr> <tr> <td>CB: CB type</td><td></td></tr> <tr> <td>CR: CR type</td><td>Be used with CB</td></tr> <tr> <td>FTC: FTC type</td><td>Be used with TCM1 TCM2</td></tr> <tr> <td>TC: TC type</td><td></td></tr> </tbody> </table>		Mounting type	Available series	Memo	Blank: Standard type	SIF		LB: LB type		FA: FA type		FB: FB type		CA: CA type		CB: CB type		CR: CR type	Be used with CB	FTC: FTC type	Be used with TCM1 TCM2	TC: TC type	
Mounting type	Available series	Memo																						
Blank: Standard type	SIF																							
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CR: CR type		Be used with CB																						
FTC: FTC type		Be used with TCM1 TCM2																						
TC: TC type																								
Thread type	Blank: PT G: G T: NPT																							
Electrical entry	Blank: Terminal I: Grommet																							
Voltage	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V																							
Port size	06: 1/8" 08: 1/4" 10: 3/8"																							

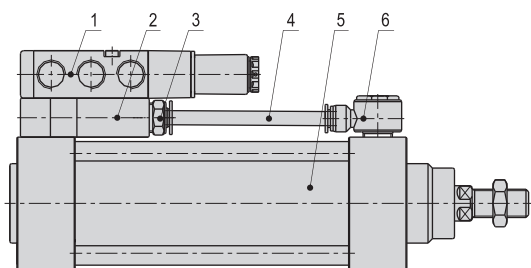
① Please refer to page 186~188 for accessory parts.



ISO15552 Standard cylinder

SIF Series(With valve)

Main combination

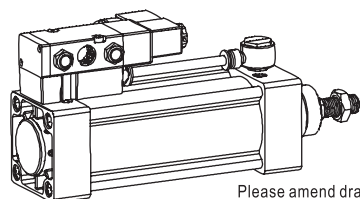


NO.	Item
1	4M series solenoid valve
2	Unite block
3	APC series tube connector
4	PU tube
5	SI series cylinder
6	APH series tube connector

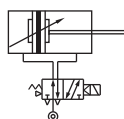
How to use

- Options for piston rod to retract or extend when solenoid coil is energized.
- Default factory setting will be piston rod to retract when energized (see Drawing one). Should you require piston rod to extend when energized, reposition the solenoid valves as shown in Drawing two.

Drawing one

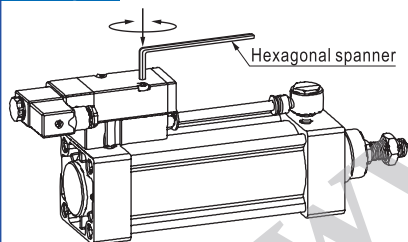


Pull when energized

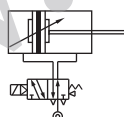


Please amend drawing of cylinder piston rod & cylinder symbol to extended position.

Drawing two



Push when energized

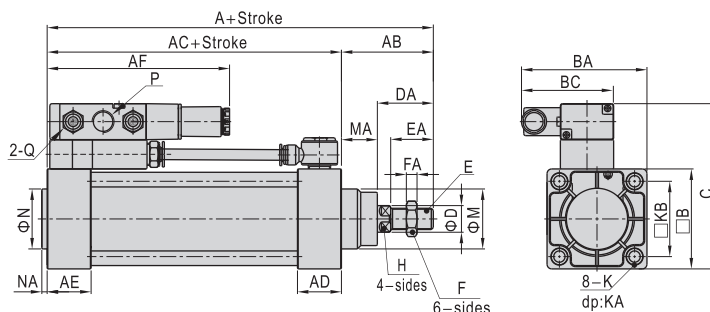


Attention

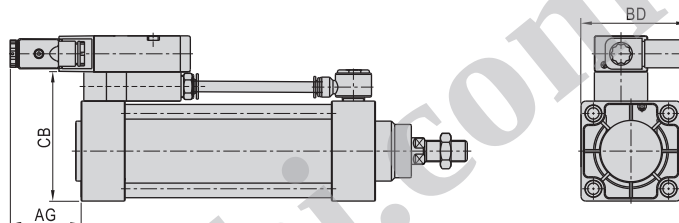
Ensure that the seals between the mounting block & valve are placed correctly when repositioning the valve.

Dimensions

Pull when electrify



Push when electrify



Bore size\Item	A	AB	AC	AD	AE	AF	AG	B	BA	BC	BD	C	CB
32	142	48	94	27.5	27.5	117.5	53.5	47	78.5	67	67.5	91	69
40	159	54	105	32	32	120	51	53	82	67	70	97	75
50	175	69	106	31	31	118.5	52.5	65	89.5	67	74.5	109	87
63	190	69	121	33	33	137	53	75	94.5	69.5	79.5	124	97
80	214	86	128	33	33	137	53	95	105.5	69.5	88	144	117
100	229	91	138	37	37	137.5	52.5	115	118	69.5	96	164	137

Bore size\Item	D	DA	E	EA	F	FA	H	M	MA	N	NA
32	12	29	M10X1.25	22	17	6	10	30	19	30	3
40	16	33	M12X1.25	24	17	7	13	35	21	35	3.5
50	20	42	M16X1.5	32	23	8	17	40	27	40	3.5
63	20	42	M16X1.5	32	23	8	17	45	27	45	4
80	25	53	M20X1.5	40	26	10	22	45	33	45	4
100	25	55	M20X1.5	40	26	10	22	55	36	55	4

Bore size\Item	Compatible valve's type	P	Q	K(No TC)	K(With TC)	KA(No TC)	KA(With TC)	KB
32	4M210-06	1/8"	1/8"	M6	M5	16	14	32.5
	4M210-08	1/4"						
40	4M210-06	1/8"	1/8"	M6	M5	16	16	38
	4M210-08	1/4"						
50	4M210-06	1/8"	1/8"	M8	M6	16	16	46.5
	4M210-08	1/4"						
63	4M310-08	1/4"	1/4"	M8	M6	16	16	56.5
	4M310-10	3/8"						
80	4M310-08	1/4"	1/4"	M10	M8	17	16	72
	4M310-10	3/8"						
100	4M310-08	1/4"	1/4"	M10	M8	17	16	89
	4M310-10	3/8"						

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