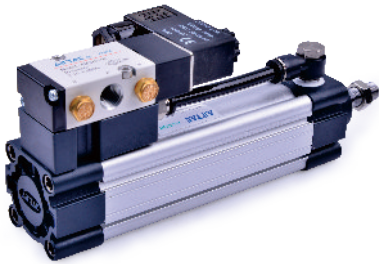
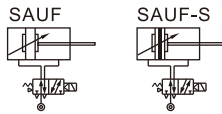


Standard cylinder(Profile)

SAUF Series—With valve type



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 decentralize 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	2000
	With TC type 100 125 150 160 175 200 250 300 350 400 450 500	100		
40	Standard type 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	50	1200	2000
	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 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	75	1500	2000
	With TC type 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	125		

[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 μm filter element)					
Mounting type	Basic FA FB CA CB LB					
Operating pressure	0.1~1.0MPa(15~145psi)(1.0~10.0bar)					
Proof pressure	1.5MPa(215psi)(15bar)					
Temperature °C	-20~70					
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	21 28 29					
Port size	1/8"	1/4"		3/8"	1/2"	
PU tube size(ODXID)	Φ8 × Φ5			Φ10 × Φ6.5		
Solenoid valve specification						
Model	4M210-06 & 4M210-08		4M310-08 & 4M310-10			
Fluid	Air(to be filtered by 40 μm filter element)					
Acting type	Internal piloted					
Port size [Note1]	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 [Note2]	Not required					
Max. frequency [Note3]	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					

[Note1] PT thread is available.

[Note2] It can't stop in the midway of lubricating. Lubricants like ISO VG32 or equivalent are recommended.

[Note3] The maximum actuation frequency is in the no-load state.
Add) Refer to P353 for detail of sensor switch.

Ordering code

SAUF 50 × 1000 S □ -06 A □ □

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

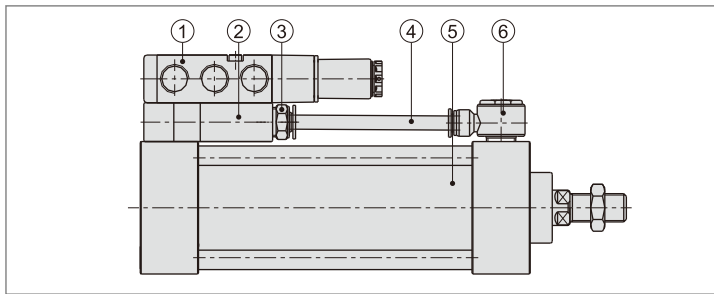
① Model	② Bore size	③ Stroke	④ Magnet	⑤ Mounting type[Note1]	⑥ Port size	⑦ Voltage	⑧ Electrical entry	⑨ Thread type
SAUF: Double acting with valve type	32 40 50 63 80 100	Refer to stroke table for details	Blank: Without magnet S: With magnet	Blank	06: 1/8" 08: 1/4" 10: 3/8"	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: Terminal I: Grommet	Blank: PT
				LB				
				FA				
				FB				
				CA				
				CB				

[Note1] The accessories are the same as SC series, please refer to page 40~43 for details.

Standard cylinder(Profile)

SAUF Series—With valve type

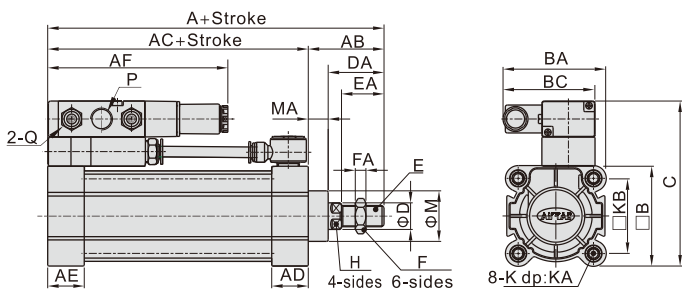
Inner structure



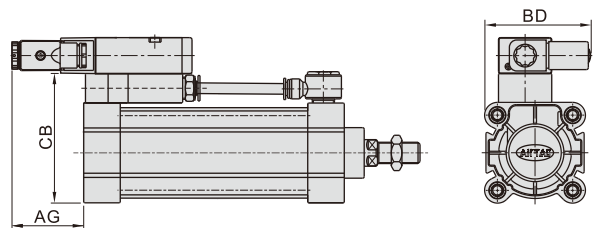
NO.	Item
1	4M series solenoid valve
2	Unite block
3	APC series tube connector
4	PU tube
5	SAU series cylinder
6	APH series tube connector

Dimensions

Pull when energized



Push when energized



Bore size\Item	A	AB	AC	AD	AE	AF	AG	B	BA	BC	BD
32	140	47	93	27.5	27.5	118	53	45	67	67	77
40	142	49	93	27.5	27.5	118	53	50	68.5	67	80.5
50	150	57	93	27.5	27.5	120	51	62	72	67	89
63	153	57	96	27.5	27.5	135.5	54.5	75	77.5	69.5	96.5
80	182	75	107	33	33	137	53	94	86.5	69.5	106.5
100	188	75	113	33	33	135.5	54.5	112	96	69.5	115

Bore size\Item	C	CB	D	DA	E	EA	F	FA	H	M	MA
32	89	67	12	32	M10X1.25	22	17	6	10	28	15
40	94	72	16	34	M12X1.25	24	17	7	13	32	15
50	106	84	20	42	M16X1.5	32	23	8	17	38	15
63	124	97	20	42	M16X1.5	32	23	8	17	38	15
80	143	116	25	54	M20X1.5	40	26	10	22	47	21
100	161	134	25	54	M20X1.5	40	26	10	22	47	21

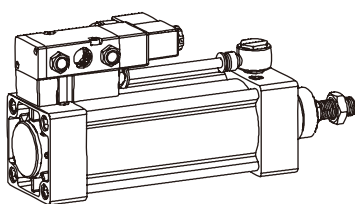
Bore size\Item	valve's type	P	Q	K	KA	KB
32	4M210-06	1/8"	1/8"	M6X1(NoTC)	9.5(No TC)	33
	4M210-08	1/4"		M5X0.8(With TC)	10(With TC)	
40	4M210-06	1/8"	1/8"	M6X1(No TC)	9.5(No TC)	37
	4M210-08	1/4"		M5X0.8(With TC)	9(With TC)	
50	4M210-06	1/8"	1/8"	M6X1(No TC)	9.5(No TC)	47
	4M210-08	1/4"		M5X0.8(With TC)	9.5(With TC)	
63	4M310-08	1/4"	1/4"	M8X1.25(No TC)	9.5(No TC)	56
	4M310-10	3/8"		M6X1(With TC)	7.5(With TC)	
80	4M310-08	1/4"	1/4"	M10X1.5(No TC)	11.5(No TC)	70
	4M310-10	3/8"		M8X1.25(With TC)	11(With TC)	
100	4M310-08	1/4"	1/4"	M10X1.5(No TC)	11.5(No TC)	84
	4M310-10	3/8"		M8X1.25(With TC)	11(With TC)	

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

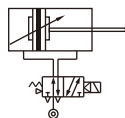
How to use

- 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 valve as shown in Drawing two.

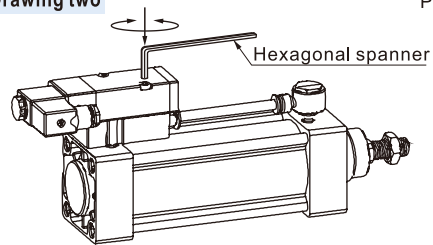
Drawing one



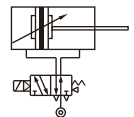
Pull when energized



Drawing two



Push when energized



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