

S3 series Mechanical Valve

Technical Specification



Model	S3B	S3C	S3D	S3V	S3R	S3L	S3Y	S3PM	S3PP	S3PF	S3PL	S3HS
Working Medium	Air (Filtrated by over 40um ¹ s sieve)											
Acting type	Eeternal control direct acting											
Port size ①	05: M5; 06: G1/8; 08: G1/4											
Effective sectional area	05:2.5 mm ² (Cv=0.14); 06:8.0mm ² (Cv=0.45); 08:12.0mm ² (Cv=0.67)											
Ways number	3/2 Way											
Lubrication ②	No need											
Working pressure range	0~0.8MPa											
Gurantee pressure	1.5MPa(215psi)											
Working temperature ℃	-5~60℃(Not Frozen)											
Body material	Aluminium alloy											

① Port type has G type for choosing

② If adding lubrication, don't stop midway, lubrication is ISOVG32 or same type.

Symbol



Order Code

S3	PM	06	R
Structure code	Structure code		Button's color
S3: S type 3/2 way			
Structure code			
B: Basic type Mechanical valve			
C: Long handle type hand valve			
D: Short handle type hand valve			
Y: Rocker type hand valve			
R: Roller lever type Mechanical valve			
L: Stop rotating button type hand valve			
PL:			
PP: Raised button type hand valve			
PF: Flat button type hand valve			
PM:Mushroom button type hand valve			
HS:Selecting type hand valve			
			Model type
			PL type
			PP\PF
			PM\HS
			Other type
			Button's color
			R:Red
			G:green
			B:black
			No this code
			Port size
			Model series
			100 series
			200 series
			Port size
			06:G1/8
			06:G1/8
			08:G1/4

Resersing stroke

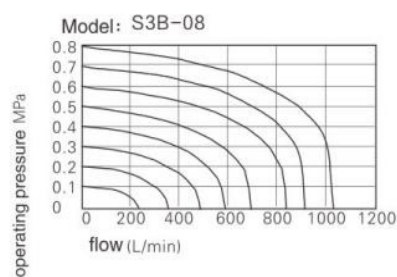
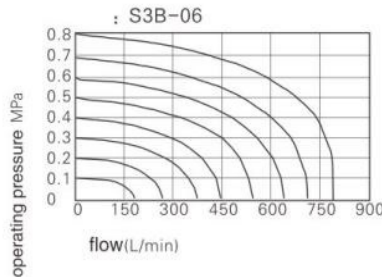
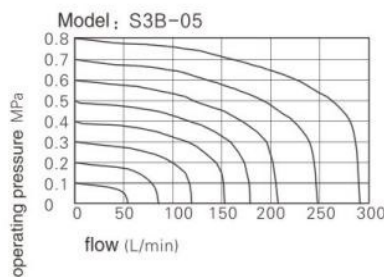
- external force required by S3B、S3R、S3L、S3V series are Provided by external agencies; used in position detection or position switch
- S3PF、S3PM、S3PP、S3PL、S3Y、S3HS、S3C、S3D series are manual type, Multiple structure shape control head, convinent for using in different conditions.
- Cut-off structure, Good sealing, Commutation flexibility, No need to add lubricating oil
- S3C、S3D、S3Y、S3R、S3L series' control head are metal type, long life, and More reliable and stable

Resersing stroke

单位:mm

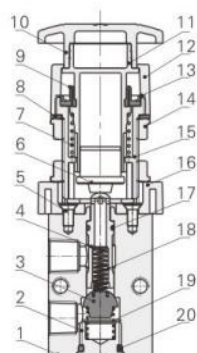
model	spool stroke	pushbutton stroke	spool stroke	pushbutton stroke	roller(hand shank)stroke
S3B	2.4~4.0	—	S3R	2.4~3.4	5.5~7.8
S3PF	2.4~4.0	3.8~5.4	S3L	2.4~3.4	6.0~8.6
S3PP	2.4~4.0	3.8~5.4	S3V	2.4~3.8	3.4~4.8
S3PM	2.4~4.0	3.8~5.4	S3C	2.4~3.8	14.4~18.4
S3PL	2.4~4.0	5.9~7.5	S3D	2.4~3.8	7.4~9.4
S3HS	2.4~4.0	5.1~6.7			

Flow characteristics



Inner construct

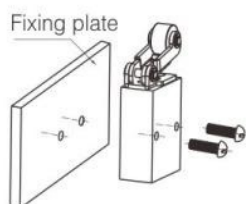
S3PM



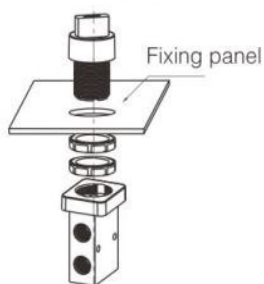
No.	Item	No.	Item	No.	Item	No.	Item
1	Valve body	6	Push button press release	11	Push button body	16	Button fixed block
2	Base	7	Spring	12	Push button cover	17	O ring
3	Nut	8	Fastening washer	13	Push button press ring	18	Spring
4	Axis core	9	Dust-proof guard	14	Fastening nut	19	Spring
5	Cross screw	10	Push button cap	15	Push button fixed	20	O ring

installing and using

Valve body fixing type



Panel fixing type



Notice:

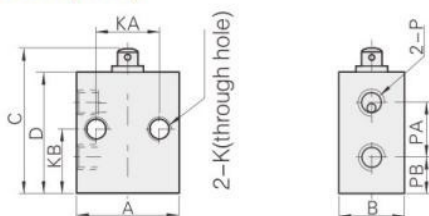
1.the control part is made of engineering plastics, only manual operation is allowed. No metal impact to switch valves s3b s3c s3d s3pm s3pf s3pp series are auto return series. s3y s3hs s3pl series hand valves are manual return series , and for m3pl ,when it press into position, need rotating the knob to return back.

2.pay attention to the reversing stroke. When any external force makes the valve reversing, the base reversing stroke should not exceed the reversing range specified in the control stroke table, otherwise the valve body will be damaged

3.s3l one-way rolling-wheel valve as long as one direction can make the valve switch (from right to left impact). Invalid impact in the other direction (left to right)

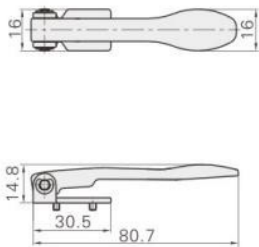
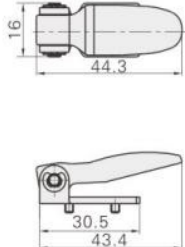
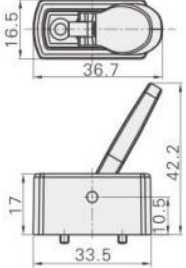
4.control head units can order separately.

Dimension(mm)



Model	A	B	C	D	K	KA	KB	P	PA	PB
05 type	26	16.5	36	30	M5x0.8	16	15	M5x0.8	13	9
06 type	30	16.5	47	41	M5x0.8	23	20.5	G1/8	17.5	11.5
08 type	34	17.5	52	46	M5x0.8	24	22.5	G1/4	21	12

Common type control head external specification

Model	Long shank type		Short shank type		shake shank type	
Order mode	Order code	Specification	Order code	Specification	Order code	Specification
Order mode	M3C210-P13A	M3C210 long shank units	M3D210-P13A	M3C210 short shank units	M3Y210-P13A	M3C210 shake shank units
Applicable products	S3C110、S3C210		S3D110、S3D210		S3Y110、S3Y210	
Outer dimension						

FV320/420 series Foot Valve



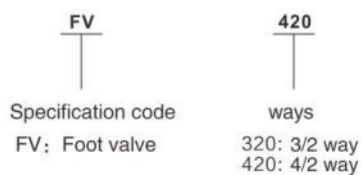
Technical Specification

Model	FV320	FV420
Working Fluid	air (filtered by 40UM sieve)	
ports and positions	3/2 way	4/2 way
Action type	directly operated type	
Port size	06:G1/8	08:G1/4
Operating pressure	0~0.8Mpa	
working temperature	-5~60℃(28~140° F)	
Lubrication oil	not need	

Symbol

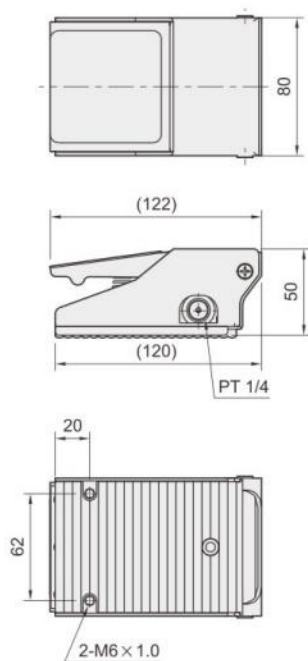


Order Code

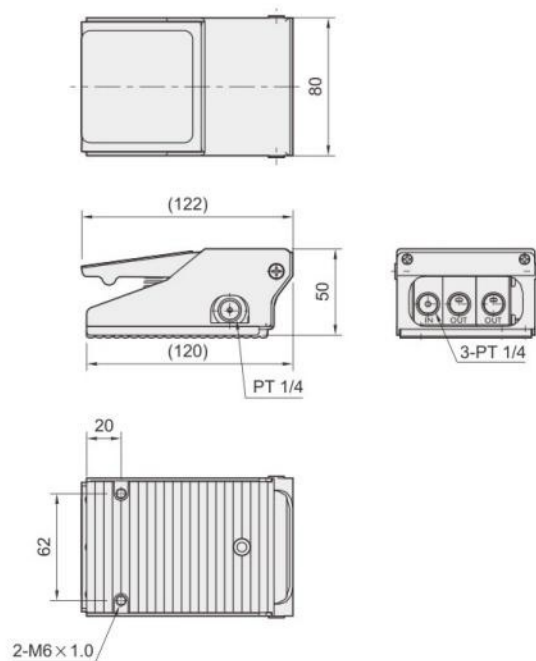


Dimension(mm)

FV320



FV320



4F/FOV series Foot Valve

Technical Specification



Model	4F210-08	4F210-08L	4F210-08F	4F210-08LF
Working Fluid	Air(to be filtered by 40 μ m filter element)			
Action Mode	foot control directly-action type			
Port Size①	PT1/4			
Position	5/2 way			
Pressure Range	0~0.8MPa (0~114psi)			
Proof pressure	1.5MPa(15bar)(215psi)			
Temperature Range	-5~60°C(Not Frozen)			
body material	Aluminum alloy			
lubrication	No need			

①port thread have NPT G thread option

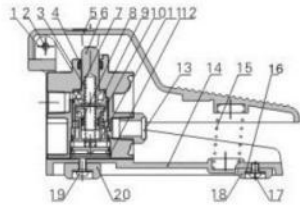
Symbol



Product feature

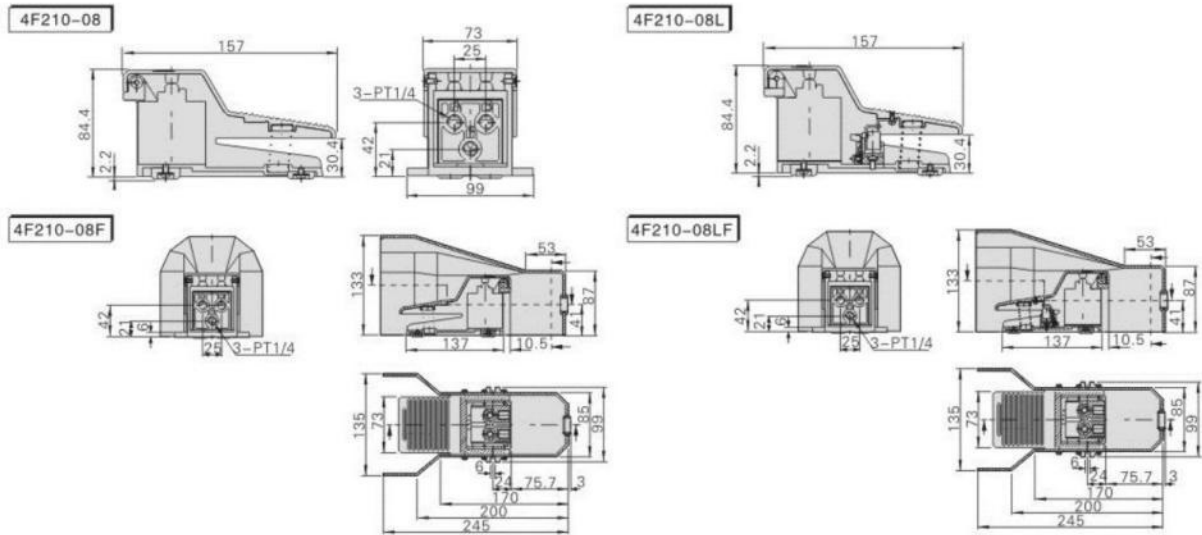
1. aluminum pedal, directly-action design, stable and reliable.
2. if the reversing time is longer, you can choose the lock type.
3. The locking mechanism is stable and reliable, and the unlocking is light and fast. But limited by the size of the structure, can not withstand frequent strong shocks
4. High strength plastic protective cover available

inner construct



No.	item	No.	item	No.	item
1	axle pin	8	O Ring	15	spring
2	countersunk screw snap ring	9	front cover	16	washer
3	spring	10	piston	17	round-head screw
4	E type snap ring	11	bottom cover	18	small foot shim
5	pedal	12	C type snap ring	19	round-head screw
6	Axis core	13	silencer	20	big foot shim
7	O Ring	14	base		

Dimension(mm)



FV/3F/3FM series Foot Valve

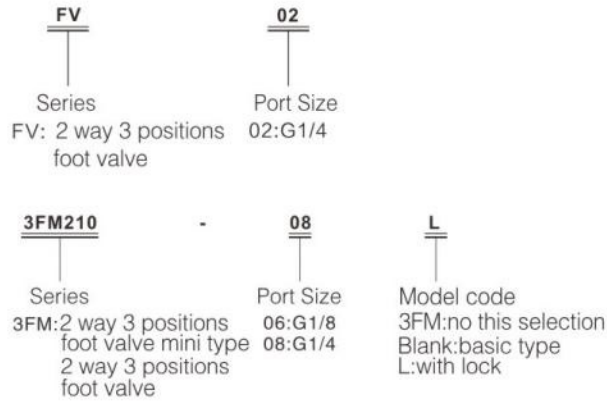
Technical Specification



Model	FV-02	3F210-06	3FM210-06	3F210-08	3FM210-08
Working Fluid	Air(to be filtered by 40 μ m filter element)				
Action Mode	foot control directly-action normal closed type				
Port Size①	G1/8	PT1/8	G1/8	PT1/4	G1/4
Position	3/2 way				
Pressure Range	0~0.8MPa(0~114psi)				
Proof pressure	1.5MPa(15bar)(215psi)				
Temperature Range	-5~60°C(Not Frozen)				
body material	3FM:plastic; 3F:Aluminum alloy				
lubrication	No need				

①port thread have NPT G thread option

Order Code



Symbol



Dimension(mm)

