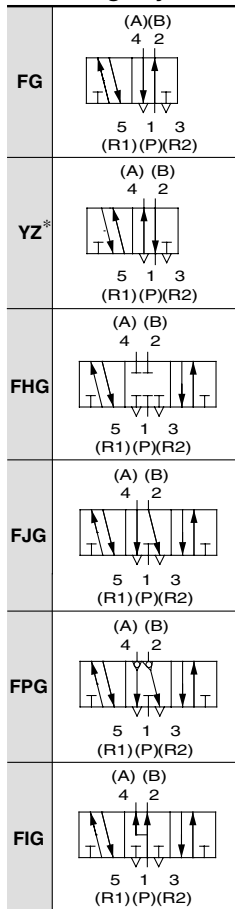


ISO Standard Solenoid Valve: Size 1 Metal Seal/Rubber Seal, Single Unit Series VQ7-6

How to Order Valves

VQ7-6-FG-S-3-□-□-□-□-□-□

Passage symbol



* Option

Number of solenoids	
S	Single
D	Double

Connector

Nil	DIN terminal block (With connector)
O	DIN terminal block (Without connector)
SC	Pre-wired connector

Sub-plate port size

Nil	Without sub-plate
A02	Side ported Rc 1/4 *
A03	Side ported Rc 3/8
B02	Bottom ported Rc 1/4 *
B03	Bottom ported Rc 3/8

* Port R is Rc 3/8

Thread type

Nil	Rc
F	G
T	NPTF

Seal

Nil	Metal seal
R	Rubber seal

Option

Nil	None
Z	Light/Surge voltage suppressor
V	Individual pilot exhaust

* When two or more symbols are specified, indicate them alphabetically.

Coil rated

1	100 VAC
2	200 VAC
3	24 VDC
4	12 VDC
9	Other voltages

* For other voltages, please contact SMC separately.

How to Order Sub-plate

VS7-1-A02-□

Port size

A02	Side ported RC 1/4*
A03	Side ported Rc 3/8
B02	Bottom ported Rc 1/4*
B03	Bottom ported Rc 3/8

* Port 3(R2) and 5(R1) are Rc 3/8

Thread type

Nil	Rc
F	G
T	NPTF

Specifications

Model	Porting specifications			Weight (kg)
	Piping location	1(P), 2(B), 4(A) port size	3(R2), 5(R1) port size	
VS7-1-A02□	Side	1/4	3/8	0.37
VS7-1-A03□		3/8		
VS7-1-B02□	Bottom	1/4	3/8	
VS7-1-B03□		3/8		

ISO Standard Solenoid Valve: Size 1 Metal Seal/Rubber Seal Series VQ7-6

Model

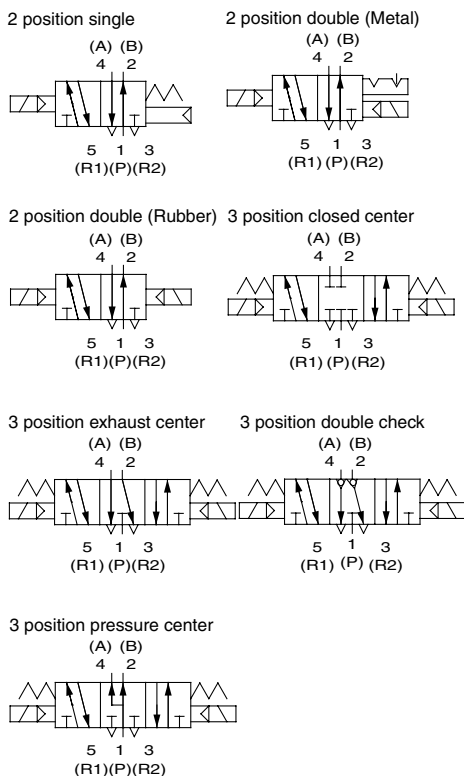
Series	Number of positions		Model		Port size	Flow characteristics						(1) Response time (ms)	(2) Weight (kg)	
						1 → 4/2 (P → A/B)			4/2 → 5/3 (A/B → EA/EB)					
						C [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(s·bar)]	b	Cv			
VQ7-6	2 position	Single	Metal seal	VQ7-6-FG-S-□	1/4	4.1	0.10	0.9	5.2	0.10	1.1	20 or less	0.40	
			Rubber seal	VQ7-6-FG-S-□R		5.0	0.13	1.1	6.0	0.11	1.4	25 or less		
		Double	Metal seal	VQ7-6-FG-D-□		4.1	0.10	0.9	5.2	0.10	1.1	12 or less		0.45
			Rubber seal	VQ7-6-FG-D-□R		5.0	0.13	1.1	6.0	0.11	1.4	15 or less		
	3 position	Closed center	Metal seal	VQ7-6-FHG-D-□		4.1	0.10	0.9	5.2	0.10	1.1	40 or less	0.48	
			Rubber seal	VQ7-6-FHG-D-□R		5.0	0.13	1.1	5.6	0.20	1.3	45 or less		
		Exhaust center	Metal seal	VQ7-6-FJG-D-□		4.1	0.10	0.9	5.2	0.10	1.1	40 or less	0.48	
			Rubber seal	VQ7-6-FJG-D-□R		4.8	0.16	1.1	6.0	0.17	1.4	45 or less		
		Double check	Metal seal	VQ7-6-FPG-D-□		1.4	—	—	3.1	—	—	50 or less	0.84	
				VQ7-6-FPG-D-□R		1.4	—	—	3.1	—	—	50 or less		
			Pressure center	Metal seal		VQ7-6-FIG-D-□	4.1	0.10	0.9	5.2	0.08	1.1	40 or less	0.48
				Rubber seal		VQ7-6-FIG-D-□R	5.6	0.15	1.2	5.9	0.08	1.3	45 or less	

Note 1) Based on JIS B 8375-1981 (Value for supply pressure of 0.5 MPa, with light/surge voltage suppressor, when using clean air.) Response time values will change depending on pressure and air quality.
Value when ON for double type.

Note 2) Weight without sub-plate. (Sub-plate: 0.37 kg)



JIS Symbol



Standard Specifications

Valve specifications	Valve construction		Metal seal	Rubber seal	
	Fluid	Air/Inert gas			
Maximum operating pressure	1.0 MPa				
Min. operating pressure	Single	0.15 MPa	0.20 MPa		
	Double	0.15 MPa	0.15 MPa		
	3 position	0.15 MPa	0.20 MPa		
Ambient and fluid temperature	-10 to 60°C ⁽¹⁾		-5 to 60°C ⁽¹⁾		
Lubrication	Not required				
Manual override	Push type (Tool required)				
Shock/Vibration resistance	150/30 m/s ² ⁽²⁾				
Enclosure	IP65 (Dusttight, Low jetproof)				
Solenoid specifications	Coil rated voltage	12 VDC, 24 VDC, 100 VAC, 110 VAC, 200 VAC, 220 VAC (50/60 Hz)			
	Allowable voltage fluctuation	±10% of rated voltage			
	Coil insulation type	Class B or equivalent			
	Power consumption (Current)	24 VDC	1 W DC (42 mA)		
		12 VDC	1 W DC (83 mA)		
		100 VAC	Inrush 1.2 VA (12 mA), Holding 1.2 VA (12 mA)		
		110 VAC	Inrush 1.3 VA (11.7 mA), Holding 1.3 VA (11.7 mA)		
200 VAC		Inrush 2.4 VA (12 mA), Holding 2.4 VA (12 mA)			
220 VAC	Inrush 2.6 VA (11.7 mA), Holding 2.6 VA (11.7 mA)				

Note 1) Use dry air to prevent condensation when operating at low temperatures.
Note 2) Impact resistance: No malfunction occurred when it is tested with a drop tester in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition. (Values at the initial period)

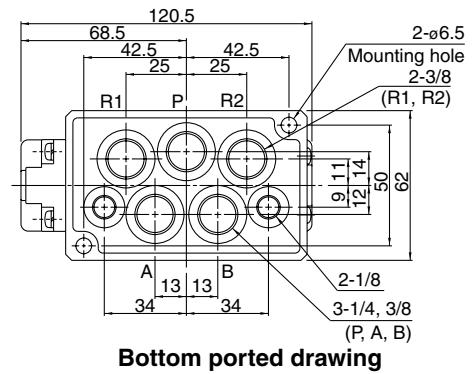
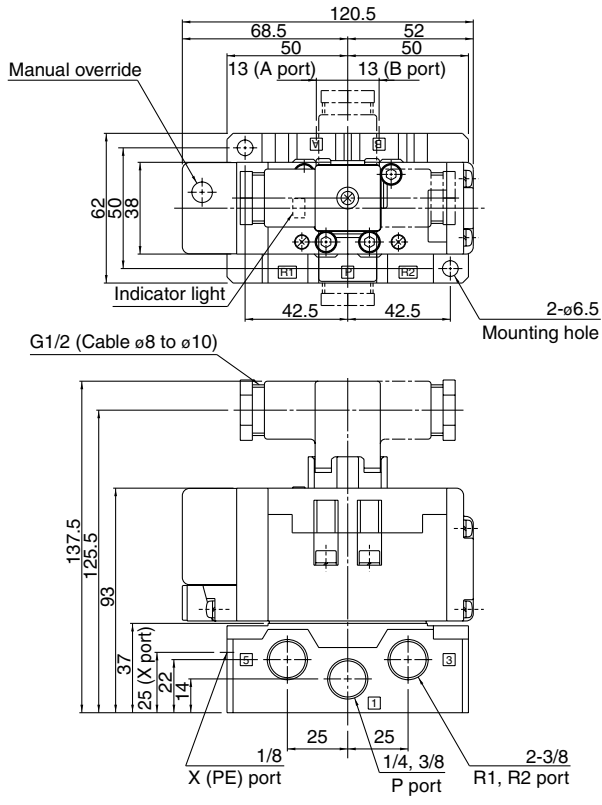
Vibration resistance: No malfunction occurred in a one-sweep test between 45 and 2000 Hz. Test was performed at both energized and de-energized states in the axial direction and at the right angles to the main valve and armature. (Values at the initial period)

- VK
- VZ
- VF
- VFR
- VP4
- VZS
- VFS
- VS4
- VQ7
- EVS
- VFN

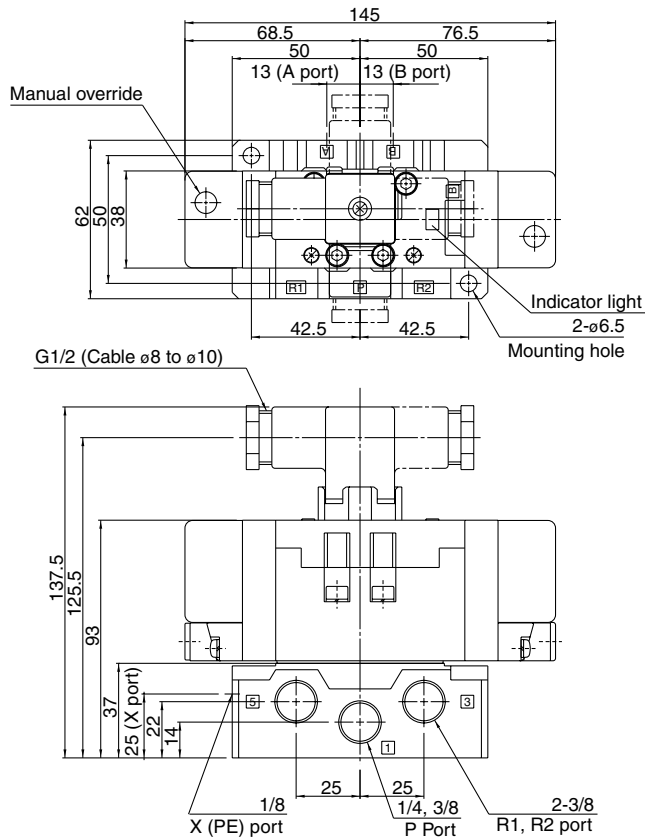
Series VQ7-6

DIN Terminal Type

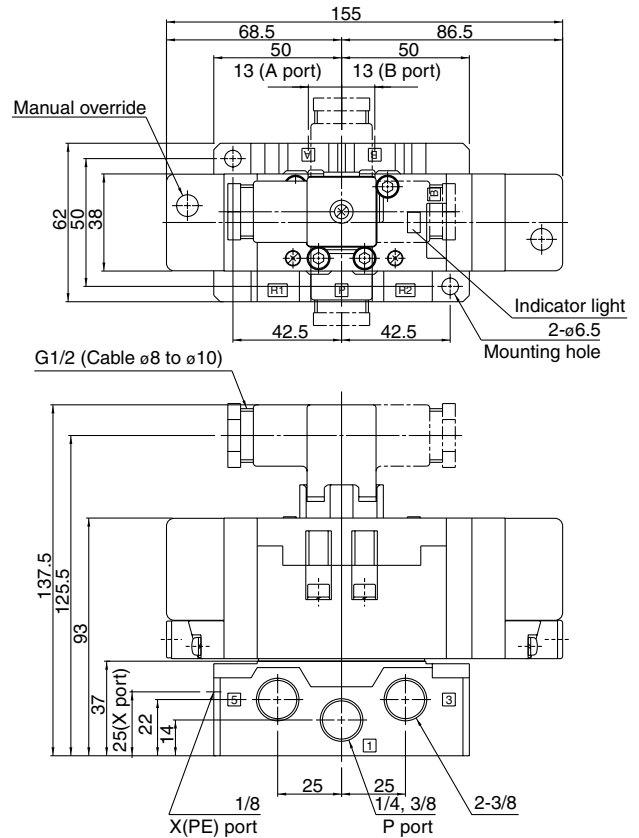
2 position single : VQ7-6-FG-S
 single (Reverse pressure): VQ7-6-YZ-S



2 position double : VQ7-6-FG-D
 double (Reverse pressure): VQ7-6-YZ-D



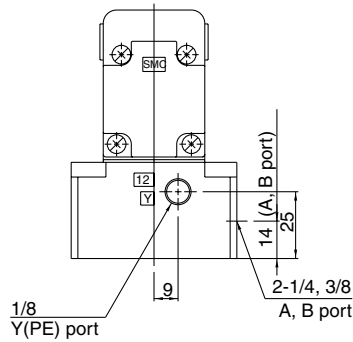
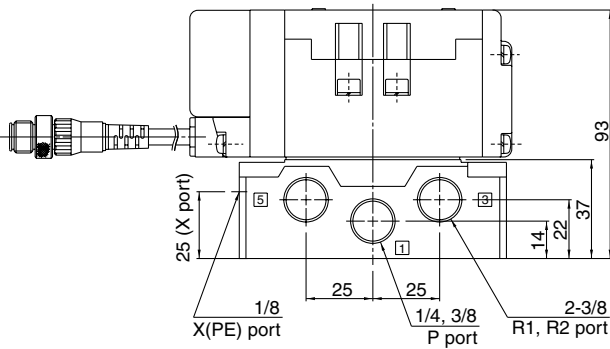
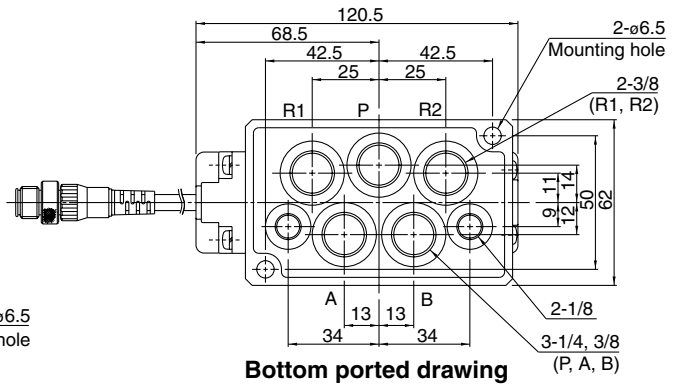
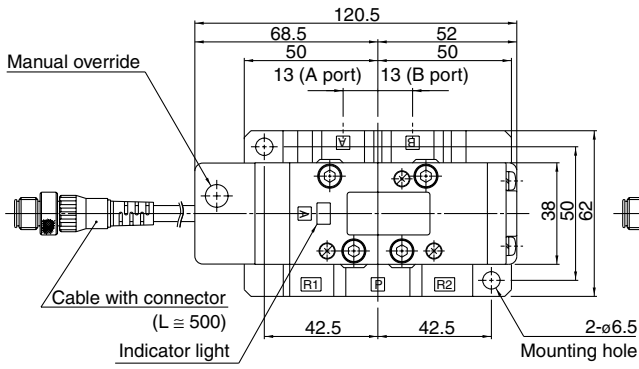
3 position closed center : VQ7-6-FHG-D
 exhaust center : VQ7-6-FJG-D
 pressure center: VQ7-6-FIG-D



ISO Standard Solenoid Valve: Size 1 Metal Seal/Rubber Seal Series VQ7-6

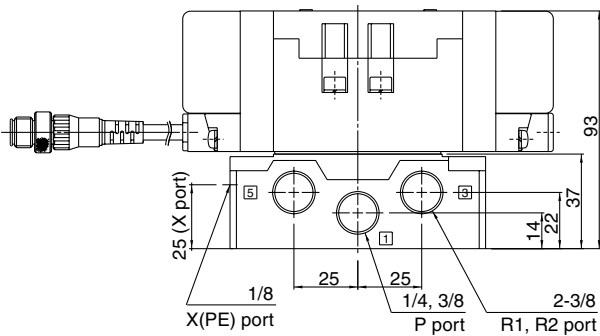
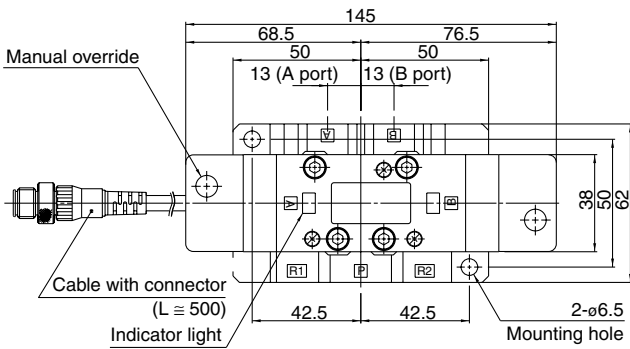
Prewired Connector Type

2 position single : VQ7-6-FG-S□□□□SC
single (Reverse pressure): VQ7-6-YZ-S□□□□SC

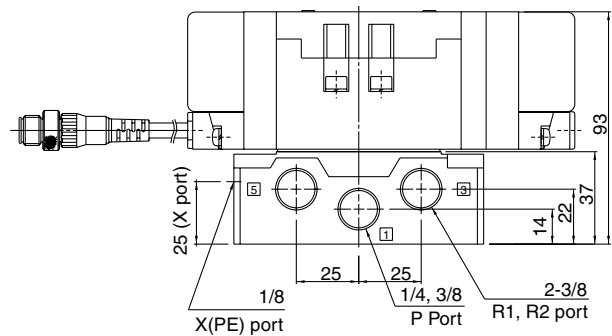
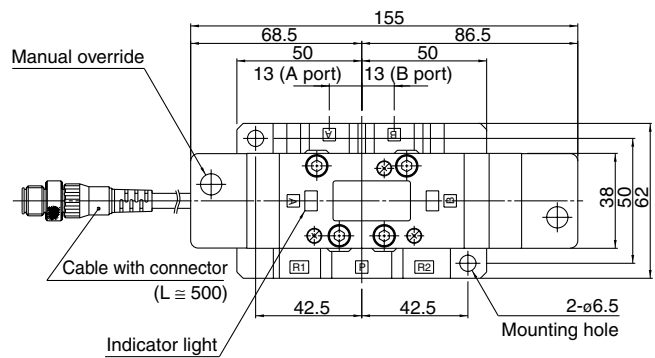


- VK
- VZ
- VF
- VFR
- VP4
- VZS
- VFS
- VS4
- VQ7
- EVS
- VFN

2 position double : VQ7-6-FG-D-□□□□SC
double (Reverse pressure): VQ7-6-YZ-D-□□□□SC



3 position closed center : VQ7-6-FHG-D-□□□□SC
exhaust center : VQ7-6-FJG-D-□□□□SC
pressure center : VQ7-6-FIG-D-□□□□SC

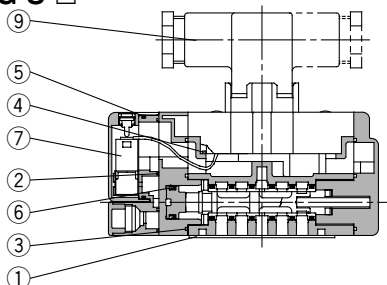


Series VQ7-6 Construction

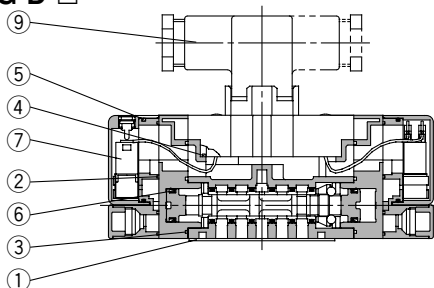
DIN Terminal Type

Metal seal type

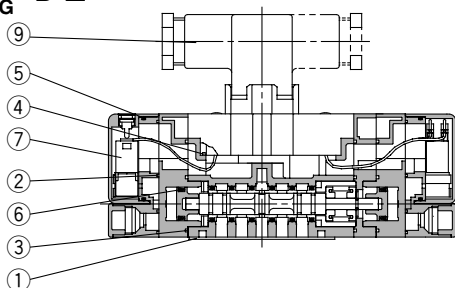
VQ7-6-FG-S-□



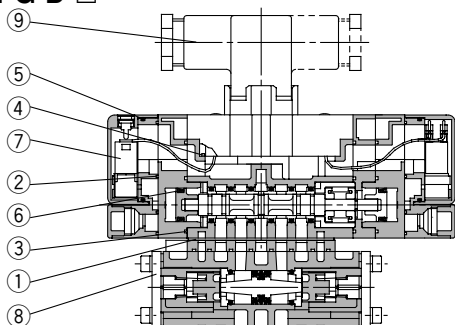
VQ7-6-FG-D-□



VQ7-6-^{FHG}_{FJG}-D-□

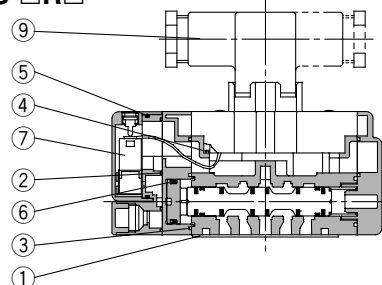


VQ7-6-FPG-D-□

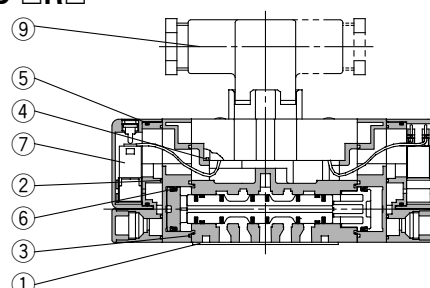


Rubber seal type

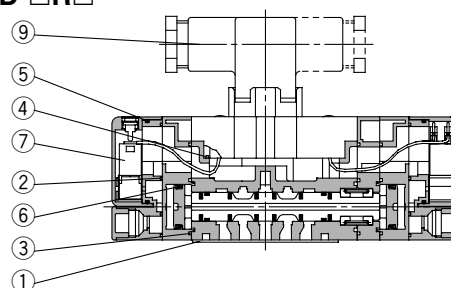
VQ7-6-FG-S-□R□



VQ7-6-FG-D-□R□



VQ7-6-^{FHG}_{FJG}-D-□R□



Replacement Parts (For valve)

No.	Description	VQ7-6-FG-S-□	VQ7-6-FG-D-□	VQ7-6- ^{FHG} _{FJG} -D-□	VQ7-6-FPG-D-□	VQ7-6-FG-S-□R□	VQ7-6-FG-D-□R□	VQ7-6- ^{FHG} _{FJG} -D-□R□
①	Gasket				AXT500-13			
②	Gasket A				VQ7060-13-2			
③	Gasket B				VQ7060-13-1			
④	Gasket C				VQ7060-13-3			
⑤	O-ring				37 x 1.6			
⑥	Mini Y seal		MYN-11				MYN-16	
⑦	Pilot valve assembly				VQZ110Q-□			
⑧	Double check spacer		—		VV71-FPG		—	
⑨	DIN terminal				UKL-S1			