



Pilot operated 2-port solenoid valve

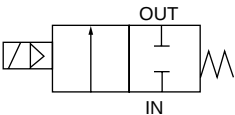
PVS Series

- NC (open when energized), NO (closed when energized)
- Working fluid: Steam/water/air
- Port size: Rc1/2, Rc3/4, Rc1, 32 to 80 flange

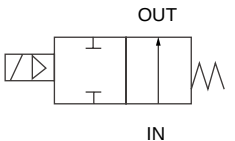


JIS symbol

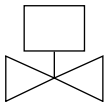
- NC (open when energized)



- NO (closed when energized)



Mounting orientation



Stable operation and long service life general purpose valve

- The use of a 3-port pilot valve enables stable operation
- Packless pipe double structure
- Short plunger stroke length
- NC (open when energized)/NO (closed when energized)

Specifications

1 MPa ≈ 145.0 psi, 1 MPa = 10 bar

Item	PVS-15A-210	PVS-20A-210	PVS-25A-210	PVS-32A-210	PVS-40A-210	PVS-50A-210	PVS-65A-210	PVS-80A-210
Working fluid	Steam/water/air							
Port size	Rc1/2	Rc3/4	Rc1	32 flange	40 flange	50 flange	65 flange	80 flange
Orifice size mm	15	20	25	32	40	50	65	80
Cv	3.1	5.4	10	22	30	48	68	100
Max. working pressure MPa	1.0 (≈150 psi, 10 bar)							
Working pressure differential MPa	0.05 (≈7.3 psi, 0.5 bar) to 1 (≈150 psi, 10 bar)							
Proof pressure (water pressure) MPa	1.5 (≈220 psi, 15 bar)							
Fluid temperature °C	5 (41°F) to 185 (365°F)							
Ambient temperature °C	0 (32°F) to 70 (158°F)							
Valve seat leakage cm³/min	400 or less (at pneumatic pressure 0.05 to 1 MPa)					800 or less (at pneumatic pressure 0.05 to 1 MPa)		
Mounting orientation	Limited to vertical orientation with the coil on top.							
Weight kg	2.2	2.6	3.1	8.5	9.8	14.2	21.8	25.1
Electrical specifications								
Rated voltage	100 VAC 50/60 Hz, 200 VAC 50/60 Hz							
Apparent power VA	When holding	37 [43]				85 [102]		
	When starting	130 [151]				300 [360]		
Power consumption W	29					70		
Thermal class	Class 180 (H)							

*1 : Values in [] are for NO.

How to order

PVS - **15A** - **210** - **4M** - **AC100V**

A Port size

B Actuation

C Coil option

D Voltage

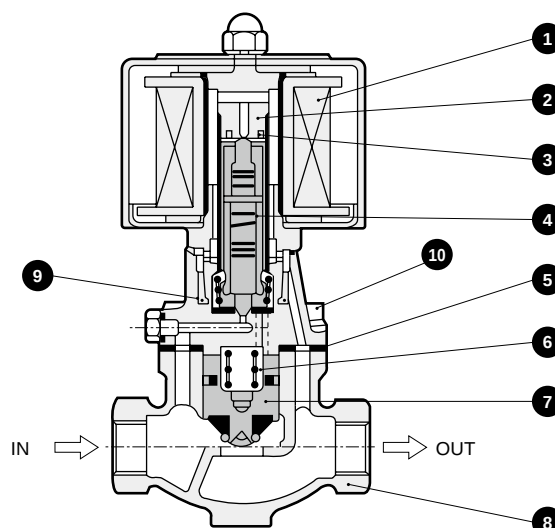
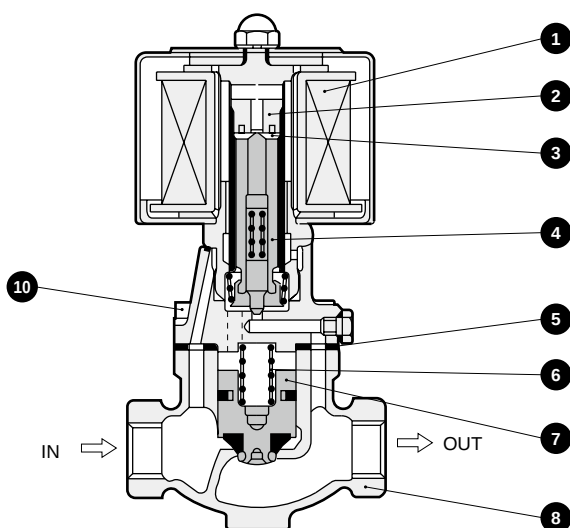
Code	Description
A Port size	
15A	Rc1/2
20A	Rc3/4
25A	Rc1
32A	32 flange
40A	40 flange
50A	50 flange
65A	65 flange
80A	80 flange
B Actuation	
Blank	NC (open when energized)
NO	NO (closed when energized)
C Coil option	
Blank	Open frame lead wire coil
4M	HP terminal box (G1/2)
4N	HP terminal box with lamp (G1/2)
D Voltage	
AC100V	100 VAC 50/60 Hz
AC200V	200 VAC 50/60 Hz

* Glands for terminal box are available.
Contact CKD for details.

Internal structure and parts list

● NC (open when energized)
PVS-15A to 80A-210

● NO (closed when energized)
PVS-15A to 80A-210NO



NO (closed when energized) keep the main valve open using the fluid pressure on the IN side when no current is applied.

No.	Part name	Material	No.	Part name	Material
1	Coil	—	6	Spring *1	SUS304 Stainless steel
2	Core assembly	SUS405 or equiv. Stainless steel	7	Main valve	SUS304/PTFE Stainless steel Tetrafluoroethylene resin
3	Shading coil	C1100T Copper	8	Body	CAC408 Bronze casting
4	Plunger	SUS405 or equiv. Stainless steel	9	O-ring	FKM Fluoro rubber
5	Gasket	PTFE Tetrafluoroethylene resin	10	Bolt	SWRM Steel

*1 : A spring is not available for 50A to 80A.

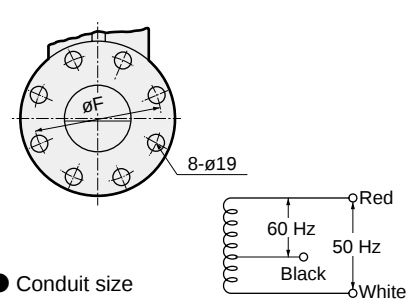
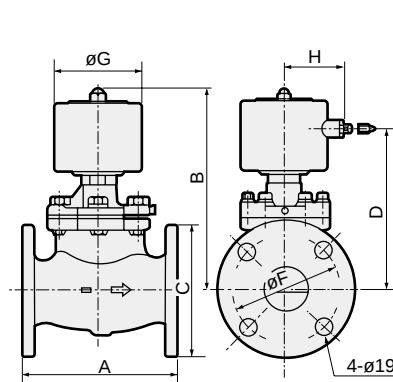
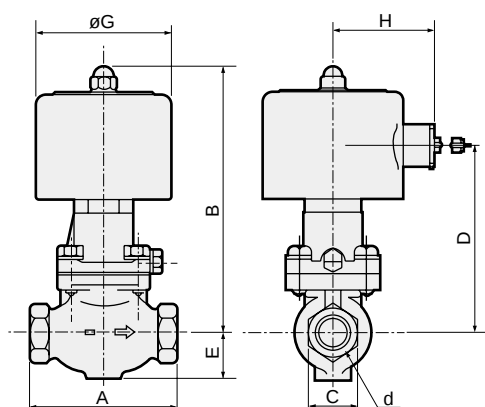
*2 : After an entire day of use, tighten the bolt again.

Dimensions

● PVS-15A to 25A-210

● PVS-32A to 80A-210

● PVS-80A-210



● Conduit size
Thin steel conduit thread
JIS C 8305 CTC19

● Lead wire

30/0.18 (0.75 mm²) silicone rubber insulated glass fiber braided wire
Length 300 mm

* d is the port size (refer to the left page).

Model No.	A	B	C	D	E	F	G	H
PVS-15A-210	90	152	29	107	27	—	84	61
PVS-20A-210	100	159	35	114	31	—	84	61
PVS-25A-210	110	170	46	125	33	—	84	61
PVS-32A-210	170	181	135	136	—	100	84	61
PVS-40A-210	180	191	140	146	—	105	84	61
PVS-50A-210	180	237	155	177	—	120	100	69
PVS-65A-210	210	263	175	203	—	140	100	69
PVS-80A-210	240	290	185	230	—	150	100	69

EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/AD
APK/ADK
DryAir
EX-XPLNprf
XPLNprf
HVB/HVL
S◇B/NAB
LAD/NAD
Water-Rela
NP/NAP/NVP
SNP
CHB/G
MXB/G
Other valves
SWD/MWD
DustColl
CVE/CVSE
CCH/CPE/D
LifeSci
Gas-Combus
Auto-Water
Outdoor
SpecFld
Custom
Ending