

Pilot kick 2-port solenoid valve for steam

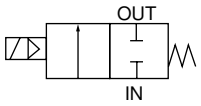
PKS Series

- NC (open when energized)
- Working fluid: Steam
- Port size: Rc1/2, Rc3/4, Rc1, 32 to 50 flange

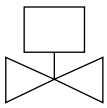
RoHS

JIS symbol

- NC (open when energized)



Mounting orientation



Operation is possible with zero differential pressure.

- Stable operation under both low and high pressures
- Operation is possible with zero differential pressure

Specifications

1 MPa ≈ 145.0 psi, 1 MPa = 10 bar, °F = 9/5°C + 32

Item	PKS-04-27	PKS-06-27	PKS-10-27	PKS-12-27	PKS-14-27	PKS-20-25
Working fluid	Steam					
Port size	Rc1/2	Rc3/4	Rc1	32 flange	40 flange	50 flange
Orifice size mm	15	20	25	35	40	50
Cv	4	7	12	22	30	48
Working pressure differential MPa	0 (≈0 psi, 0 bar) to 0.7 (≈100 psi, 7 bar)					0 to 0.5
Proof pressure (water pressure) MPa	1.5 (≈220 psi, 15 bar)					1.0
Fluid temperature °C	5 (41°F) to 175 (347°F)					5 to 160
Ambient temperature °C	0 (32°F) to 70 (158°F)					
Valve seat leakage cm^3/min	400 or less [at pneumatic pressure 0.05 to 0.7 (0.5) MPa]					
Mounting orientation	Limited to vertical orientation with the coil on top.					
Weight kg	1.8	2.2	2.9	9	10	13
Electrical specifications						
Rated voltage	100 VAC 50/60 Hz, 200 VAC 50/60 Hz					
Apparent power VA When holding	30			75		90
Apparent power VA When starting	80			150		180
Power consumption W	22			60		61
Thermal class	Class 180 (H)					

Note: When used at a pressure less than 0.05 MPa, the sealant may be unstable. Contact CKD in this case.

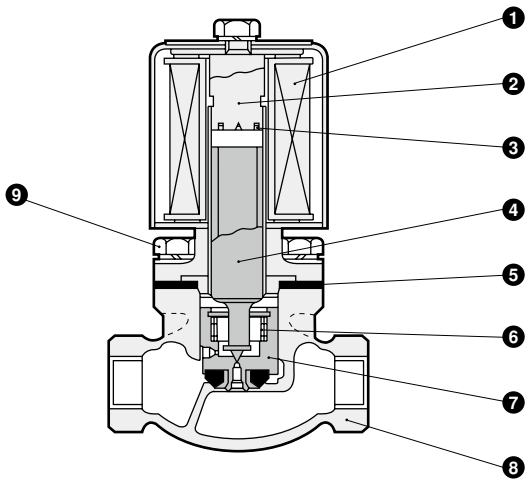
How to order

PKS - 04 - 27 - 4M - AC100V

- 27: Fixed code (25 for PKS-20)
- 04: Ⓐ Port size
- 4M: Ⓑ Coil option
- AC100V: Ⓒ Voltage

Code	Description
Ⓐ Port size	
04	Rc1/2
06	Rc3/4
10	Rc1
12	32 flange
14	40 flange
20	50 flange
Ⓑ Coil option	
Blank	Open frame lead wire coil
4M	HP terminal box (G1/2)
4N	HP terminal box with lamp (G1/2)
Ⓒ Voltage	
AC100V	100 VAC 50/60 Hz
AC200V	200 VAC 50/60 Hz

Internal structure and parts list

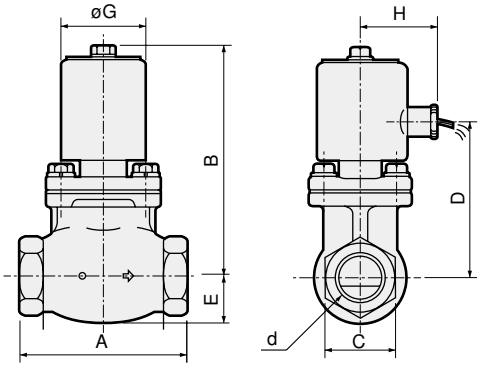


No.	Part name	Material		No.	Part name	Material	
1	Coil	-	-	6	Spring	SUS304	Stainless steel
2	Core assembly	SUS405 or equiv., SUS316L	Stainless steel	7	Main valve	SUS304/PTFE	Stainless steel Tetrafluoroethylene resin
3	Shading coil	Cu	Copper	8	Body	CAC408	Bronze
4	Plunger	SUS405 or equiv.	Stainless steel	9	Bolt	SWRM	Steel
5	Gasket	PTFE	Tetrafluoroethylene resin				

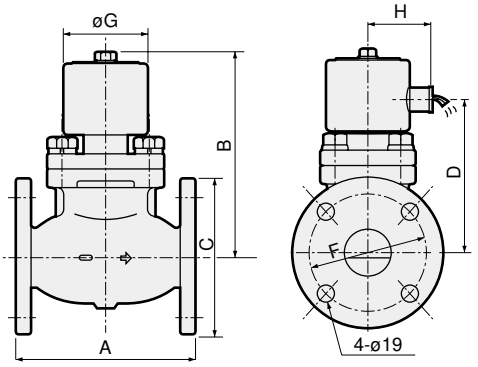
*1 : After an entire day of use, tighten the bolt again.

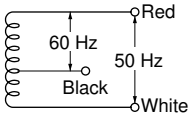
Dimensions

● PKS-04 to 10-27



● PKS-12 to 20-27(25)





● Conduit size
Thin steel conduit thread
JIS C 8305 CTC19

● Lead wire

30/0.18 (0.75 mm²) silicone 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
PKS-04-27	90	126	29	88	23	—	60	49
PKS-06-27	100	133	35	95	26	—	60	49
PKS-10-27	110	145	44	107	30	—	60	49
PKS-12-27	170	180	135	128	—	100	84	66
PKS-14-27	180	185	140	133	—	105	84	66
PKS-20-25	180	205	155	155	—	120	84	66