



Pilot kick 2-port solenoid valve for air

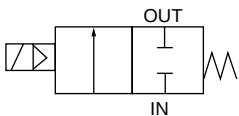
PKA Series

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

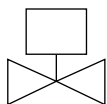
RoHS

JIS symbol

- NC (open when energized)



Mounting orientation



Operation is possible with zero differential pressure and also with low vacuum.

- 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	PKA-04-27	PKA-06-27	PKA-10-27	PKA-12-27	PKA-14-27	PKA-20-25
Working fluid	Air					
Port size	Rc1/2	Rc3/4	Rc1	32 flange	40 flange	50 flange
Orifice size mm	15	20	25	35	40	50
C[dm³/(s·bar)]	20	-	-	-	-	-
b	0.30	-	-	-	-	-
s(mm²)	-	128	220	404	552	883
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 60 (140°F)					
Ambient temperature °C	0 (32°F) to 65 (149°F)			0 (32°F) to 45 (113°F)		0 to 40
Valve seat leakage cm³/min	1 or less. For stainless steel bodies, 400 or less. (*1)			2 or less (*1)		
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
	When starting	80	150	180
Power consumption W		22	57	68
Thermal class		Class 130 (B)		

*1 : For PKA-04 to 14, the value at pneumatic pressure 0.05 to 0.7 MPa is shown. For PKA-20, the value at pneumatic pressure 0.05 to 0.5 MPa is shown.

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

*2 : Effective cross-sectional area "S" and sonic conductance "C" are converted as $S \approx 5.0 \times C$.

How to order

PKA - 04 - 27 - C - 3M - AC100V

Fixed code (25 for PKA-20)

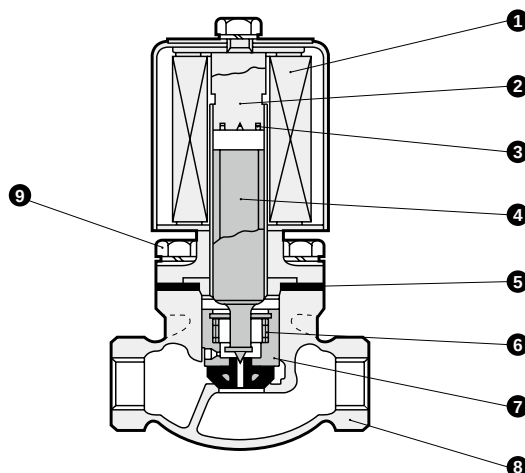
A Port size**B** Body material**C** Coil option**D** Voltage

Code	Description
A Port size	
04	Rc1/2
06	Rc3/4
10	Rc1
12	32 flange
14	40 flange
20	50 flange
B Body material	
Blank	Bronze
C (*3)	Stainless steel
C Coil option	
Blank	Open frame lead wire coil
3M	HP terminal box (G1/2)
3N	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.

*3: For Item **A** 12, 14, 20, stainless steel (Item **B** C) is not available.

Internal structure and parts list



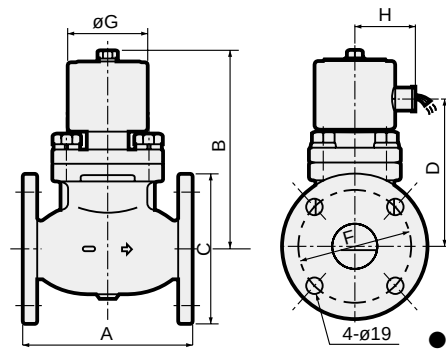
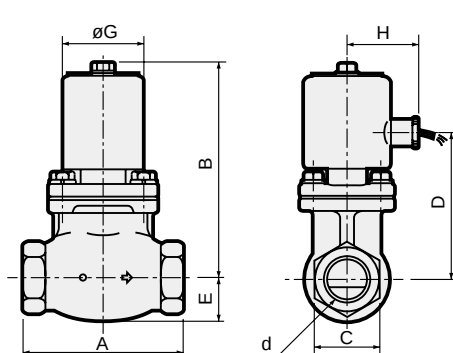
No.	Part name	Material	No.	Part name	Material
1	Coil	-	6	Spring	SUS304
2	Core assembly	SUS405 or equiv., SUS316L	7	Main valve	C3604/NBR (SUS304, PTFE)
3	Shading coil	Cu(Ag)	8	Body	CAC408(SCS13)
4	Plunger	SUS405 or equiv.	9	Bolt	SWRM(SUS304)
5	Gasket	Inorganic fiber (PTFE)			

Materials shown in () are for stainless steel body.

Dimensions

● PKA-04 to 10-27

● PKA-12 to 20-27(25)



● Conduit size
Thin steel conduit thread
JIS C 8305 CTC19

● Lead wire
30/0.18 (0.75 mm²) heat resistant vinyl stranded wire

Length 300 mm

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

Model No.	A	B	C	D	E	F	G	H
PKA-04-27	90	126	29	88	23(27)	—	60	49
PKA-06-27	100	133	35	95	26(29)	—	60	49
PKA-10-27	110	145	44(46)	107	30(33)	—	60	49
PKA-12-27	170	180	135	128	—	100	84	66
PKA-14-27	180	185	140	133	—	105	84	66
PKA-20-25	180	205	155	155	—	120	84	66

Dimensions shown in () are for stainless steel body.

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