



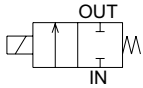
Metal-free 2-port solenoid valve

MKB3 Series

- NC
- Working fluid: Water/pure water/chemical liquids
- Port size: M6/1/4-28UNF



JIS symbol

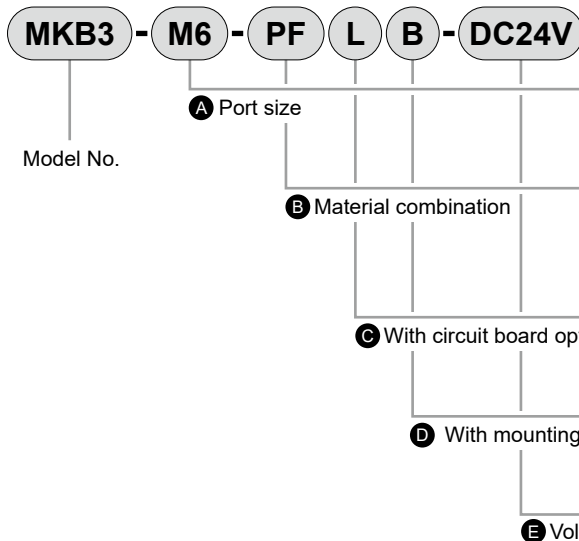


Specifications

Descriptions	MKB3	
Actuation	NC	
Working fluid	Water/pure water/chemical liquids (fluids that do not corrode wetted part materials)	
Proof pressure MPa	0.5 (≈73 psi, 5 bar) (water pressure)	
Working pressure MPa	-0.08 (≈-12 psi, -0.8 bar) to 0.25 (≈36 psi, 2.5 bar)	
Back pressure MPa	0 (≈0 psi, 0 bar) to 0.25 (≈36 psi, 2.5 bar)	
Fluid temperature °C	5 (41°F) to 50 (122°F)	
Ambient temperature °C	5 (41°F) to 50 (122°F)	
Atmosphere	No explosive or corrosive atmospheres	
Valve seat leakage cm ³ /min	0 (water pressure)	
Port size	M6, 1/4-28UNF	
Orifice size mm	1.5	
Cv	0.04	
Valve structure	Diaphragm direct acting valve	
Mounting orientation	Unrestricted	
Weight g	50	
Electrical specifications		
Rated voltage	24 VDC/12 VDC	
Voltage fluctuation range	±5%	
Power consumption W	Standard	2.5
	Energy saving With circuit	2.5 (*2)
	Starting Holding	1
Leakage current mA	1.0 or less (24 VDC)/2.0 or less (12 VDC) (*3)	
Thermal class	Class 130 (B)	

- *1: When using sodium hypochlorite (soda), select FKM for the diaphragm material.
(EPDM will deteriorate over long-term use even with tap water levels of residual chlorine)
For 0.1% or less effective concentration, perform functional testing according to your application before use.
Contact CKD for more than 0.1% effective chlorine concentration.
- *2: Time from energizing to 200 ms.
- *3: The leakage current from the control circuit must be equal to or less than the values shown in the table.
- *4: As this product has an integrated electronic circuit board, do not use it in very humid atmospheres.
- *5: Solenoid valve has polarity. Connect the red lead wire to the plus (+) side. (With circuit board option: for L)
- *6: After the solenoid valve is completely switched OFF, set an interval of one second or more before switching it ON the next time. (With circuit board option: for L)
- *7: For the mounting plate option, slide the product in the piping direction by pulling the lever to remove from the mounting plate.

How to order



Code	Content	
A Port size		
M6	M6	
4U	1/4-28UNF	
B Material combination		
	Body material	Diaphragm material
PF	PPS	FKM
PE	PPS	EPDM
C With circuit board option		
Blank	No option	
L	With lamp/energy saving board	
D With mounting plate option		
B	With mounting plate (standard) *1	
N	Without mounting plate *2	
E Voltage		
DC24V	24 VDC	
DC12V	12 VDC	

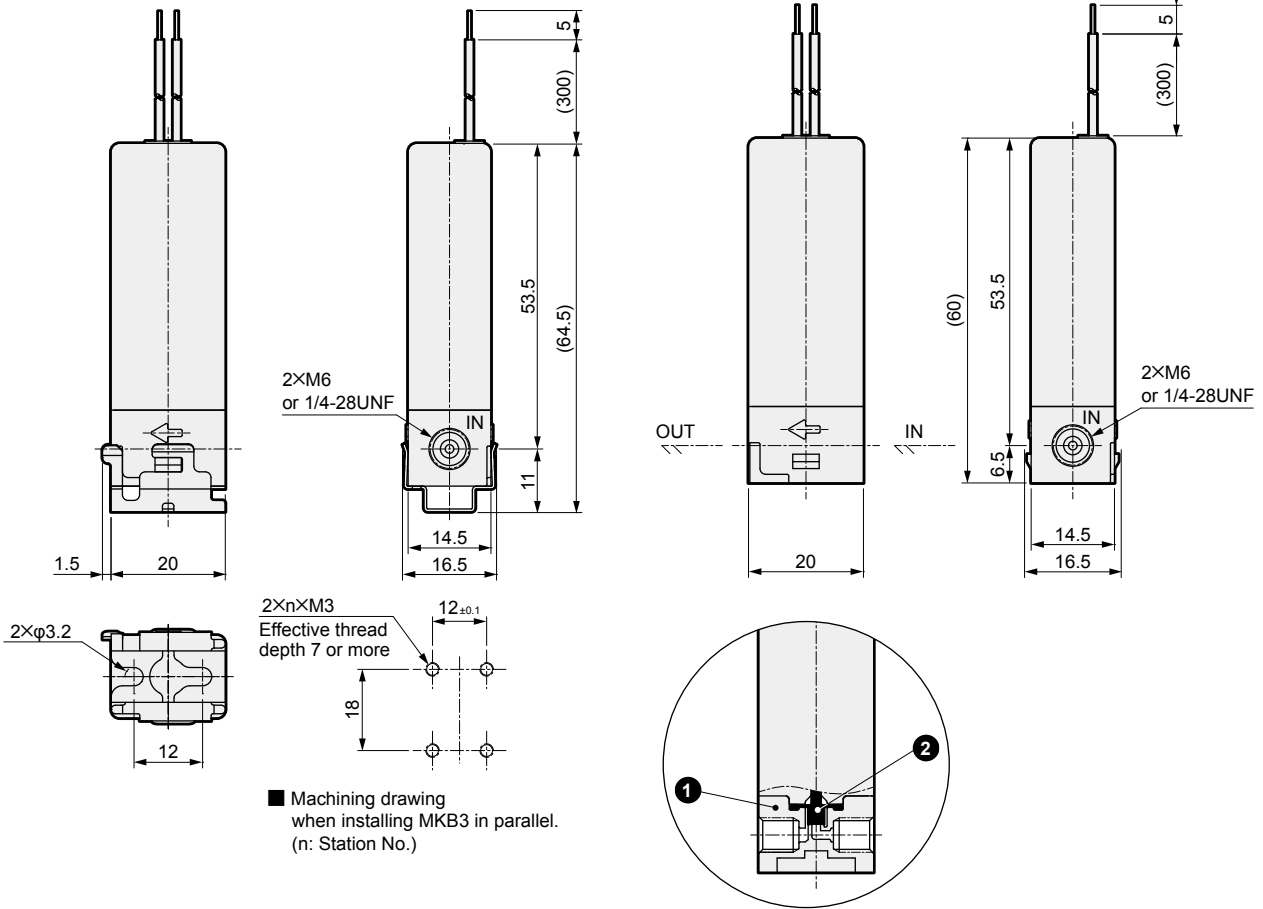
- *1 : Mounting plate is attached.
*2 : Cannot be installed with discrete solenoid valve without mounting plate.

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
SAB/
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
SpecFld
Custom
Ending

Dimensions

● With mounting plate (standard)

● Without mounting plate



Main part material

No.	Part name	Material	
①	Body	PPS	Polyphenylene sulfide
②	Diaphragm	FKM, EPDM	Fluoro rubber, ethylene propylene rubber

⚠ CAUTION

- *1 : Slide the product in the piping direction by pulling the lever to remove from the mounting plate.
- *2 : Do not use metal fittings because they could damage the port. Use a PP or fluorine resin fitting. Refer to the recommended fitting tightening torque below.
Recommended tightening torque: 0.10 to 0.15 N·m
- *3 : Do not disassemble the product.
- *4 : Foreign matter, etc., inside the piping may cause malfunction and valve seat leakage. Always flush the piping before installing the valve.
- *5 : When using vertical piping on the secondary side, keep it within 2 m in height. Use tubing or piping with the same or larger bore size as the orifice size to fix the pipe.
- *6 : Do not hold the lead wire while handling.