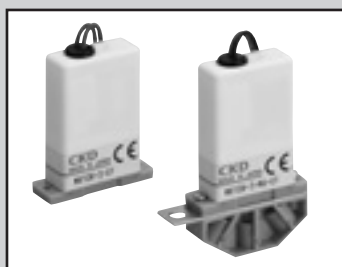


Metal-free 2, 3-port solenoid valve for chemical liquids



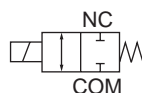
MR10R Series

- NC(open when energized), NO(Closed when energized), universal
- Working fluid: Water, pure water, chemical liquids
- Port size: M5, M6, 1/4-28UNF

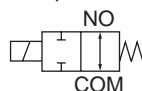


JIS symbol

- 2-port: NC



- 2-port: NO



- 3-port: Universal



Specifications

Item	2-port		3-port
	MR10R-2NC	MR10R-2NO	MR10R-3
Actuation	NC (open when energized)	NO	Universal
Working fluid	Water, Pure water, Chemical liquids (fluids that do not corrode wetted part materials)		
Proof pressure MPa	0.4 (water pressure)		
Working pressureMPa	-0.08 to 0.2		
Fluid temperature °C	5 to 50		
Ambient temperature°C	5 to 50		
Atmosphere	explosive / No corrosive atmospheres		
Valve seat leakagecm ³ /min	0 (water pressure)		
Port size	M5, M6, 1/4-28UNF		
Orifice size mm	1		
Cv	0.03		
Volumetric capacity μℓ	19 (*1)		
Valve structure	Diaphragm direct acting (rocker)		
Mounting orientation	Unrestricted (*2)		
Weight g	18 (Actuator), 22 (direct piping)		
Electrical specifications			
Rated voltage	24 VDC/12 VDC		
Voltage fluctuation range	±5%		
Power	When starting	3.6 (24 VDC)/4.2 (12 VDC) (*3)	
consumption W	When holding	1	
Leakage current mA	1.0 or less (24 VDC)/2.0 or less (12 VDC) (*4)		
Thermal class	Class 130 (B)		

*1: Volume of wetted parts formed by the body and diaphragm. Note that piping volume is excluded.

*2: Install vertically so that the coil where little fluid accumulates is at the top.

*3: Time from energizing to 50 ms.

*4: The leakage current from the control circuit must be equal to or less than the values shown in the table.

*5: For 0.1% or less effective chlorine concentration of sodium hypochlorite (soda), perform functional testing according to your application before use. Do not use effective chlorine concentration exceeding 0.1%.

*6: As this product has an integrated electronic circuit board, do not use it in very humid atmospheres.

*7: Solenoid valve has polarity. Connect the red lead wire to the plus (+) side.

*8: After the solenoid valve is completely switched OFF, set an interval of 1 seconds or more before switching it ON the next time.

*9: Make sure to read the safety precautions on pages 3 to 8 before use.

How to order

MR10R - 2NC - M6 - EF - DC24V

Model No.

A No. of Ports/type

B Port size

C Material combination

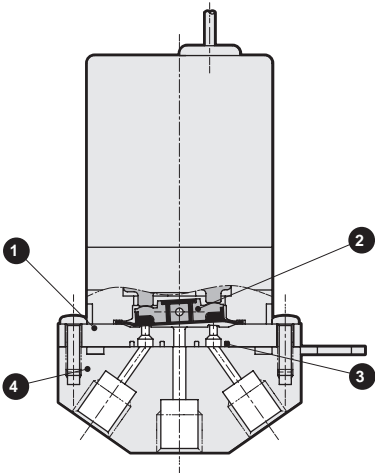
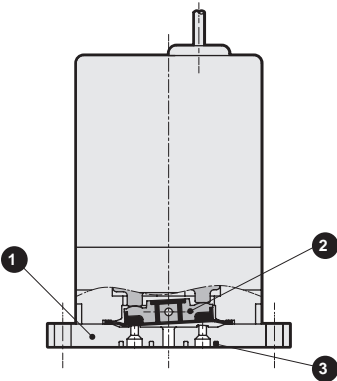
D Voltage

Code	Description	
A No. of Ports/type		
2NC	2-port/NC(Open when energized)Model	
2NO	2-port/NO(Closed when energized)Model	
3	3-port/universal	
B Port size		
Blank	Actuator	
M5	M5(Direct piping)	
M6	M6(Direct piping)	
4U	1/4-28UNF(Direct piping)	
C Material combination		
	Body material	Sealant
EF	PEEK	FKM
D Voltage		
DC24V	24 VDC	
DC12V	12 VDC	

Internal structure and main part material

● Actuator

● Direct piping

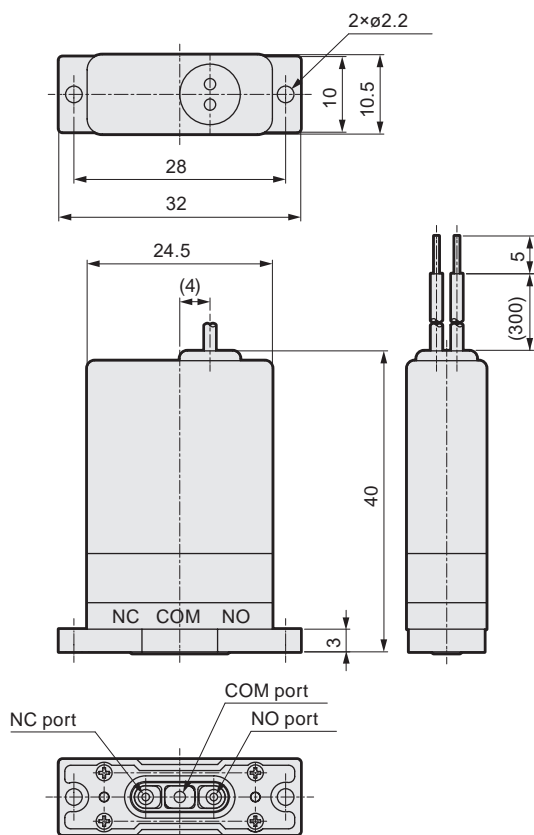


Cannot be disassembled

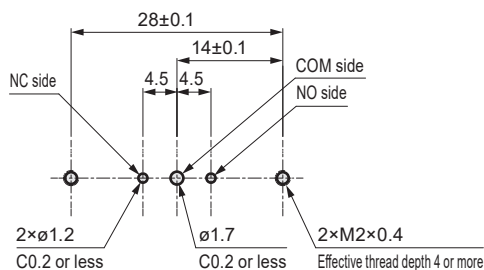
Part No.	Part name	Material	
1	Body	PEEK	Polyether ether ketone
2	Diaphragm	FKM	Fluoro rubber
3	Packing	FKM	Fluoro rubber
4	Connection adaptor	PEEK	Polyether ether ketone

Dimensions

● Actuator



● Actuator installation dimensions

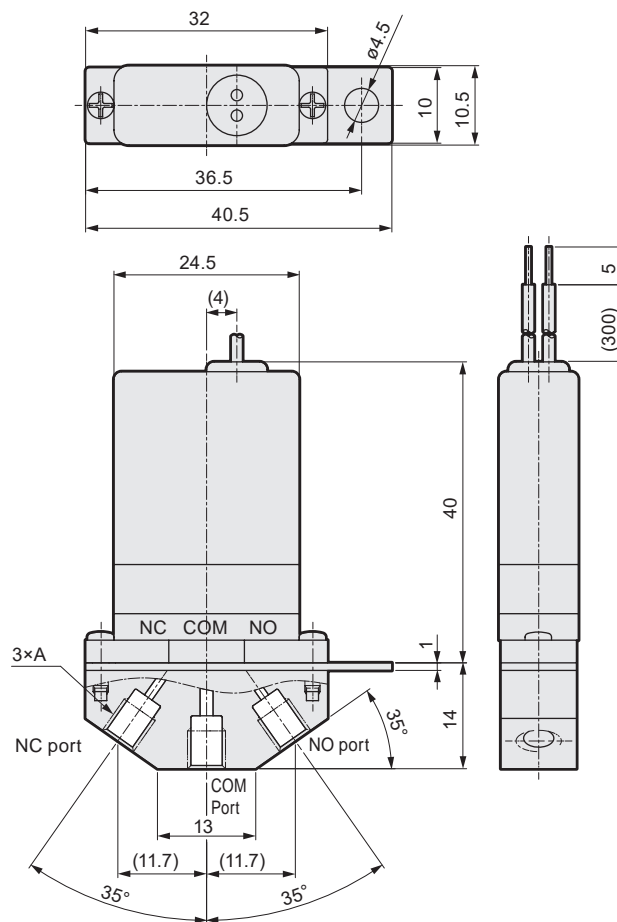


* Surface roughness Rz6.3 or less

* Recommended thread size: M2 length 6 mm

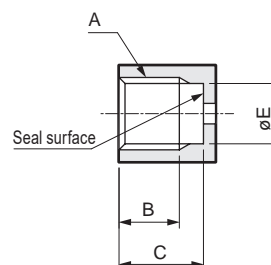
* Various connection adapters and manifolds are available as required.
Contact CKD for details.

● Direct piping



Note: The NO port is plugged when MR10R-2NC and the NC port is plugged when MR10R-2NO

● Port size dimensions



Model No.	A	B	C	E
MR10R-*-M5	M5	5	7	4.1
MR10R-*-M6	M6	5	7	4.9
MR10R-*-4U	1/4-28UNF	5	7	5.36