

Compact metal-free lever 2, 3-port solenoid valve for medical equipment

# HMTB1/HMTG1 Series

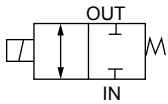
- NC (open when energized), universal
- Working fluid: Water/pure water/chemical liquids
- Port size:  $\varnothing 2$  barbed fitting



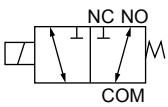
- EXA
- FWD
- HNB/G
- USB/G
- FAB/G
- FGB/G
- FVB
- FWB/G
- FHB
- FLB
- AB
- AG
- AP/AD
- APK/ADK
- DryAir
- EX-XPLNprf
- XPLNprf
- HVB/HVL
- S $\diamond$ B/NAB
- LAD/NAD
- Water-Rela
- NP/NAP/NVP
- SNP
- CHB/G
- MXB/G
- Other valves
- SWD/MWD
- DustColl
- CVE/CVSE
- CCH/CPE/D
- LifeSci
- Gas-Combus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

## JIS symbol

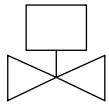
- HMTB1 (2-port)  
: NC (open when energized)



- HMTG1 (3-port)  
: Universal



## Mounting orientation



## Specifications

1 MPa = 10 bar

Item	HMTB1	HMTG1
Working fluid	Water/pure water/chemical liquids (fluids that do not corrode wetted part materials)	
Proof pressure MPa	0.6 ( $\approx 87$ psi, 6 bar) (water pressure)	
Working pressure MPa	IN $\rightarrow$ OUT: -0.05 ( $\approx -7.3$ psi) to 0.3 ( $\approx 44$ psi)	COM $\rightarrow$ NC/NO: -0.05 ( $\approx -7.3$ psi) to 0.3 ( $\approx 44$ psi)
	OUT $\rightarrow$ IN: -0.05 ( $\approx -7.3$ psi) to 0.15 ( $\approx 22$ psi)	NC/NO $\rightarrow$ COM: -0.05 ( $\approx -7.3$ psi) to 0.15 ( $\approx 22$ psi)
Fluid temperature $^{\circ}\text{C}$	5 (41 $^{\circ}\text{F}$ ) to 40 (104 $^{\circ}\text{F}$ )	
Ambient temperature $^{\circ}\text{C}$	0 (32 $^{\circ}\text{F}$ ) to 55 (131 $^{\circ}\text{F}$ )	
Port size	$\varnothing 2$ barbed fitting	
Orifice size mm	1.6	
Cv	0.05	
Mounting orientation	Vertical position with coil on top	
Weight kg	0.21	
Frequency Cycle/min.	60 or less	
Operation sound dB	50	
<b>Electrical specifications</b>		
Rated voltage	24 VDC/12 VDC	
Voltage fluctuation range	$\pm 10\%$	
Temperature rise K	30	
Power consumption	When starting	9.6 (*1)
	When holding	2.4
Leakage current mA	5 or less (*2)	
Thermal class	Class 120 (E)	

\*1 : Time from energizing to 200 ms.

\*2 : The leakage current from the control circuit must be equal to or less than the values shown in the table.

\*3 : Use direct current (excluding rectified alternating current).

\*4 : When starting and switching retention, noise is generated temporarily. Check the compatibility of the control circuit.

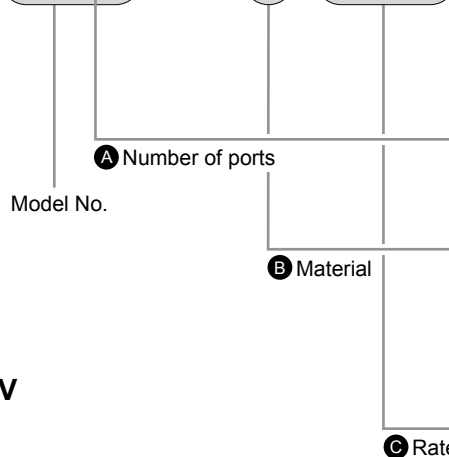
\*5 : Do not apply excessive force on the fitting when connecting or disconnecting the tube.

\*6 : Solenoid valve has polarity. Connect the red lead wire to the plus (+) side.

\*7 : After the solenoid valve is completely switched ON or OFF, set an interval of 0.5 seconds or more before switching it the next time.

## How to order

**HMT**(B)1-2TN-(PN)-DC12V



Code	Description	
<b>A Number of ports</b>		
B	2-port valve	
G	3-port valve	
<b>B Material</b>		
	Body	Seal
PN	PPS	NBR
PF	PPS	FKM
PE	PPS	EPDM
<b>C Rated voltage</b>		
DC12V	12 VDC	
DC24V	24 VDC	

[Example of model No. 1]

**HMTB1-2TN-PF-DC24V**

Model : HMTB1

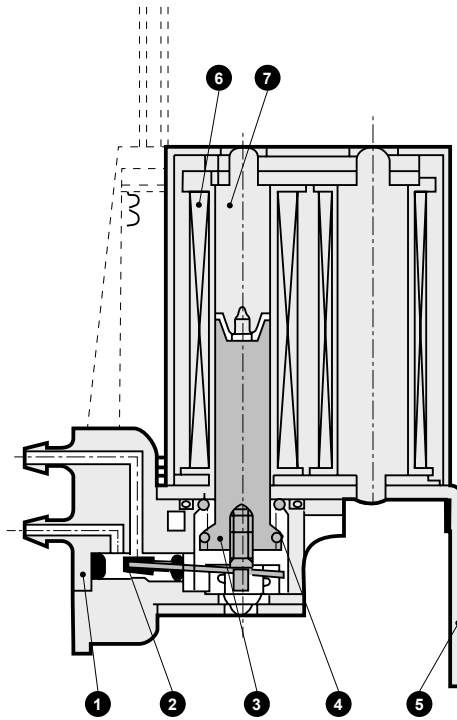
**A** Number of ports : 2-port valve

**B** Material : Body - PPS, sealant - FKM

**C** Rated voltage : 24 VDC

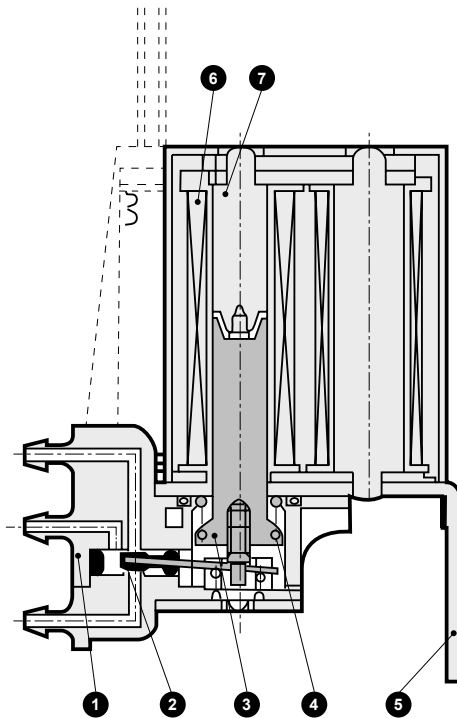
## Internal structure and parts list

### ● HMTB1 (2-port)



Cannot be disassembled

### ● HMTG1 (3-port)



Cannot be disassembled

No.	Part name	Material	No.	Part name	Material
1	Body	PPS	5	Frame	SUS430
2	Valve seat packing	NBR, FKM, EPDM	6	Coil assembly	—
3	Plunger assembly	SUS430/SUS304	7	Core assembly	SUM22, SPC
4	Spring	SUS304			
		Polyphenylene sulfide			Stainless steel
		Nitrile rubber, fluoro rubber, ethylene propylene rubber			
		Stainless steel			Steel
		Stainless steel			

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XPLNprf
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S $\phi$ B/NAB
LAD/NAD
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NP/NAP/NVP
SNP
CHB/G
MXB/G
Other valves
SWD/MWD
DustColl
CVE/CVSE
CCH/CPE/D
LifeSci
Gas-Combust
Auto-Water
Outdoor
SpecFld
Custom
Ending

# HMTB1/HMTG1 Series

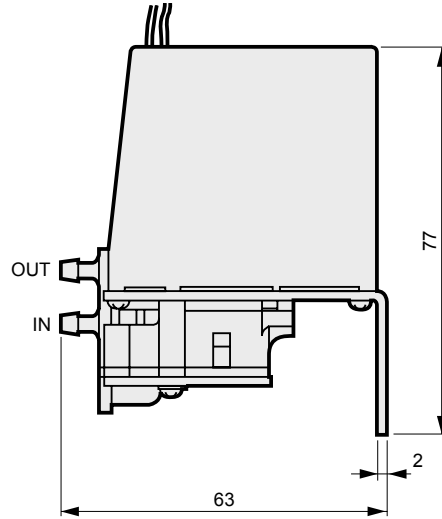
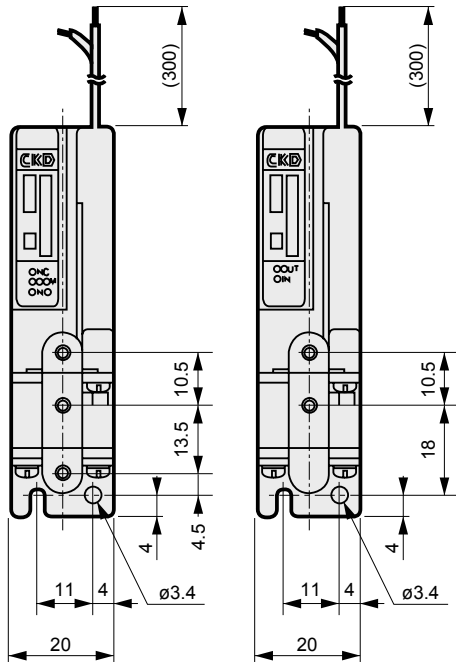


## Dimensions

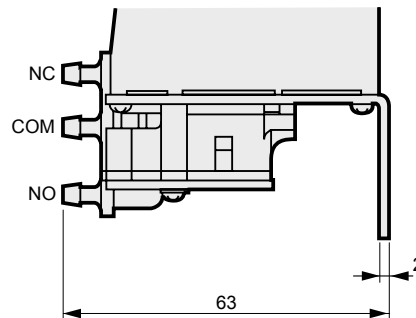
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● HMTG1 (3-port)

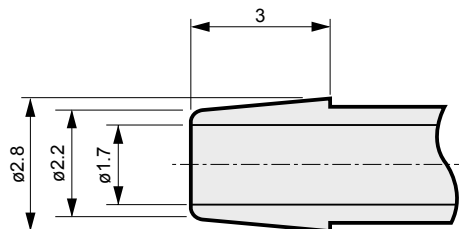
● HMTB1 (2-port)



● HMTG1 Series (3-port)



## Barbed fitting dimensions



Note: Do not apply extreme lateral load to the barbed fitting.  
(Allowable lateral load) 0.2 N·m or less