

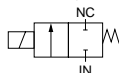


US (resin body type) Series

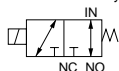
- NC (normally closed) type, universal type
- Port size: M6, barbed joint (applicable bore size $\phi 6 \times \phi 4$)

JIS symbol

- USB (2 port valve)
: NC (normally closed) type



- USG (3 port valve)
: Universal type



Common specifications

| Item | USB/USG |
|--|--|
| Withstanding pressure (water) MPa | 1.5 (US*2), 2 (US*3) |
| Fluid temperature °C | 0 to 60 (no freezing) |
| Ambient temperature °C | 0 to 50 |
| Heat proof class | B |
| Atmosphere | Place free of corrosive gas and explosive gas |
| Valve seat leakage cm ³ /min. | 0.2 or less |
| Port size | M6/barbed joint (applicable bore size $\phi 6 \times \phi 4$) |
| Mounting attitude | Free |
| Rated voltage | 24 VDC |
| Treatment | Oil free |

Individual specifications

| Item Model no. | Working fluid | Orifice (mm) | Cv flow factor | C [dm ³ /(s·bar)] | b | Max. working pressure diff. (MPa) | Power consumption (W) |
|--|-----------------------------------|-----------------|----------------|------------------------------|------|--------------------------------------|--------------------------|
| 2 port valve for water (E) Wetted metal: 2 (SUS316 or equivalent)) | | | | | | | |
| USB2- * -1 | Water, pure water | 1 | 0.03 | 0.13 | 0.36 | 0.6 | 3 |
| | | 1.5 | 0.06 | 0.27 | 0.28 | 0.3 | 3 |
| USB3- * -1 | (Note 1) | 1.6 | 0.08 | 0.32 | 0.30 | 0.7 | 4 |
| | | 2.3 | 0.13 | 0.45 | 0.30 | 0.3 | 4 |
| 3 port valve for water (E) Wetted metal: 2 (SUS316 or equivalent)) | | | | | | | |
| USG2- * -1 | Water, pure water | 1 | 0.03 | 0.13 | 0.36 | 0.6 (0.2 when NO pressurized) | 3 |
| | | 1.5 | 0.06 | 0.27 | 0.28 | 0.3 (0.1 when NO pressurized) | 3 |
| USG3- * -1 | (Note 1) | 1.6 | 0.08 | 0.32 | 0.30 | 0.2 (0.08 when NO pressurized) | 4 |
| 2 port valve for air (E) Wetted metal: 1 (SUS405 or equivalent)) | | | | | | | |
| USB2- * -1 | Air, dry air, low vacuum | 1 | 0.03 | 0.13 | 0.36 | 0.7 | 3 |
| | | 1.5 | 0.06 | 0.27 | 0.28 | 0.3 | 3 |
| USB3- * -1 | (1.33 x 10 ² Pa (abs)) | 1.6 | 0.08 | 0.32 | 0.30 | 0.9 | 4 |
| | | 2.3 | 0.13 | 0.45 | 0.30 | 0.3 | 4 |
| 3 port valve for air (E) Wetted metal: 1 (SUS405 or equivalent)) | | | | | | | |
| USG2- * -1 | Air, dry air, low vacuum | 1 | 0.03 | 0.13 | 0.36 | 0.7 (0.3 when NO pressurized) | 3 |
| | | 1.5 | 0.06 | 0.27 | 0.28 | 0.3 (0.1 when NO pressurized) | 3 |
| USG3- * -1 | (1.33 x 10 ² Pa (abs)) | 1.6 | 0.08 | 0.32 | 0.30 | 0.3 (0.1 when NO pressurized) | 4 |

Note 1: Check the compatibility between the wetted part material and working fluid before using chemicals for washing.

Note 2: When using a 3 port valve in a continuously energized state, use a fluoro rubber seal.

Note 3: Effective sectional area S and sonic conductance C are converted as $S = 5.0 \times C$.

US (resin body type) series

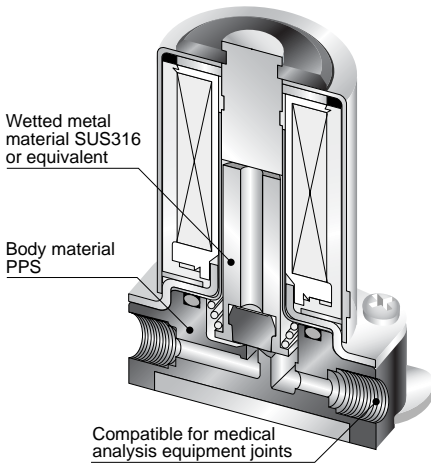
How to order

USB2 - M6 - 1 - S 2 - DC24V

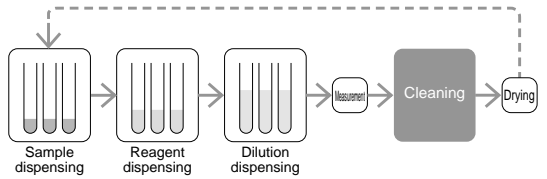
| A Model no. | | A Model no. | | | |
|---------------------------------|----------------------|--------------|------|--------------|------|
| | | 2 port valve | | 3 port valve | |
| Symbol | Descriptions | USB2 | USB3 | USG2 | USG3 |
| B Port size | | | | | |
| M6 | M6 | ● | ● | ● (Note 1) | ● |
| T6 | Barbed joint | ● | ● | ● | ● |
| C Orifice | | | | | |
| 1 | Refer to the right. | ø1 | ø1.6 | ø1 | ø1.6 |
| 2 | Refer to the right. | ø1.5 | ø2.3 | ø1.5 | ø1.5 |
| D Body/sealant materials | | | | | |
| | Body | Sealant | | | |
| G | PPS | NBR | ● | ● | ● |
| S | PPS | FKM | ● | ● | ● |
| E Wetted metal material | | | | | |
| 1 | SUS405 or equivalent | ● | ● | ● | ● |
| 2 | SUS316 or equivalent | ● | ● | ● | ● |

⚠ Note on model no. selection

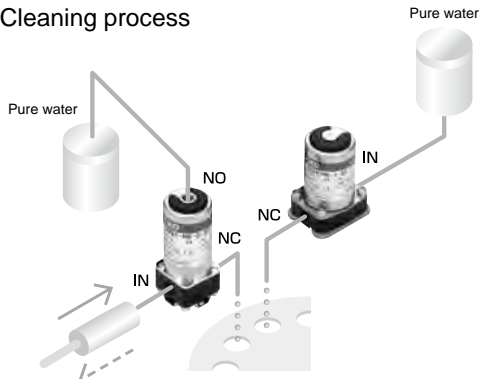
Note 1: The NO port of USG2 is M5.



Applications



Cleaning process



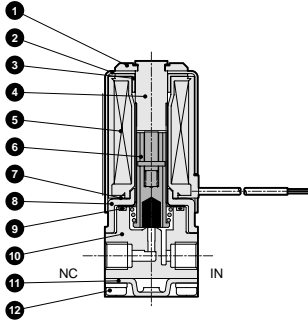
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/
AD
APK/
ADK
For
dry air
Explosion
proof
HVB/
HVL
SAB/
SVB
NP/NAP/
NVP
CHB/G
MXB/G
Other G.P.
systems
PD/FAD/
PJ
CVE/
CVSE
CPE/
CPD
Medical
analysis
Custom
order

Compact direct acting 3 port solenoid valve

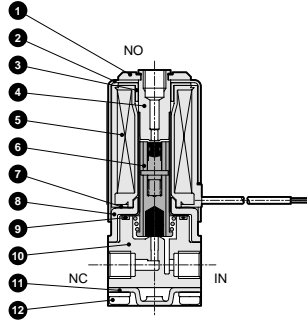
US^B2 (resin body type) Series

Internal structure and parts list

● USB2



● USG2

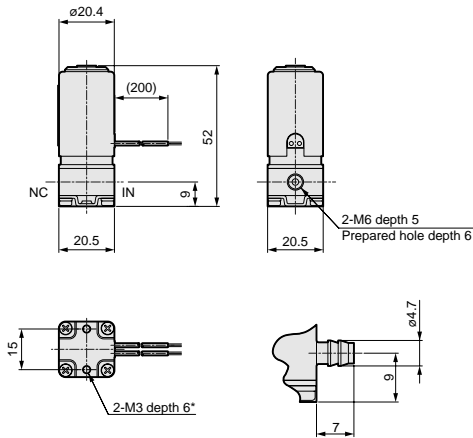


| No. | Parts name | Material | No. | Parts name | Material |
|-----|------------------|--|-----|------------------------|-----------|
| 1 | Clip | PBT | 7 | Waving washer | S65C |
| 2 | Bonnet | SPC | 8 | Core B | SPC |
| 3 | Sub core | SPC | 9 | O ring | NBR (FKM) |
| 4 | Core assembly | SUS316 (SUS405 or equivalent), SUS316L | 10 | Body | PPS |
| 5 | Coil assembly | - | 11 | Holding plate | SPC |
| 6 | Plunger assembly | SUS316 (SUS405 or equivalent), NBR (FKM) | 12 | Pan head machine screw | SWRM |

Materials in () are selectable based on options.

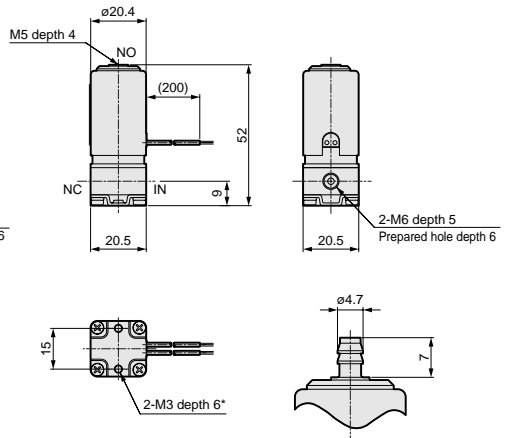
Dimensions

● USB2



<For option symbol "T6">
Barbed joint dimensions

● USG2



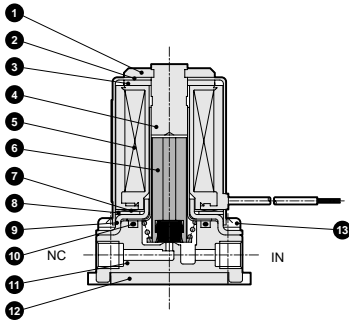
<For option symbol "T6">
NO port barbed joint dimensions
(IN and NC ports are the same as those of the 2 port valve)

* Do not screw in more than 6 mm when installing the product.

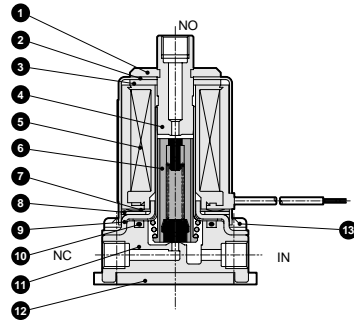
US_G^B3 (resin body type) series

Internal structure and parts list

● USB3



● USG3

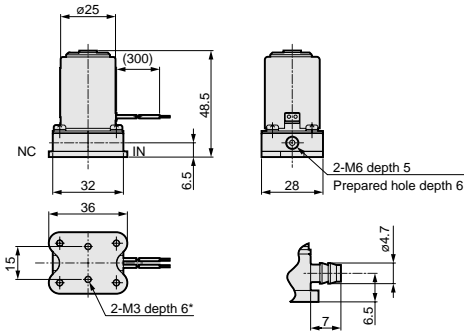


| No. | Parts name | Material | No. | Parts name | Material |
|-----|------------------|--|-----|------------------------|-----------|
| 1 | Clip | PBT | 8 | Sub core | SPC |
| 2 | Bonnet | SPC | 9 | Core B | SPC |
| 3 | Bonnet piece | SPC | 10 | O ring | NBR (FKM) |
| 4 | Core assembly | SUS316 (SUS405 or equivalent), SUS316L | 11 | Body | PPS |
| 5 | Coil assembly | - | 12 | Holding plate | SPC |
| 6 | Plunger assembly | SUS316 (SUS405 or equivalent), NBR (FKM) | 13 | Pan head machine screw | SWRM |
| 7 | Waving washer | S65C | | | |

Materials in () are selectable based on options.

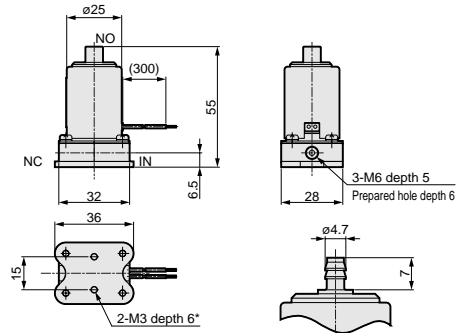
Dimensions

● USB3



<For option symbol "T6">
Barbed joint dimensions

● USG3



<For option symbol "T6">
NO port barbed joint dimensions
(IN and NC ports are the same as those of the 2 port valve)

* Do not screw in more than 6 mm when installing the product.

HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/
AD
APK/
ADK
For
dry air
Explosion
proof
HVB/
HVL
SAB/
SVB
NP/NAP/
NVP
CHB/G
MXB/G
Other G.P.
systems
PD/FAD/
PJ
CVE/
CVSE
CPE/
CPD
Medical
analysis
Custom
order

Compact direct acting 3 port solenoid valve