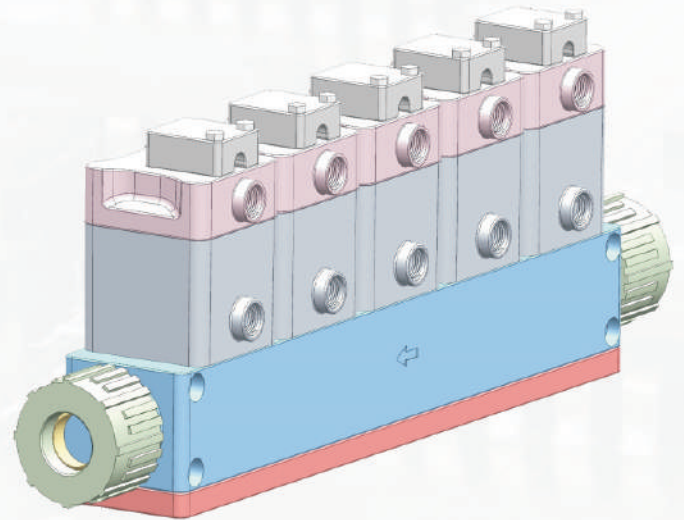


DVM 319

Multiway

Valveblocks



The DVM series multi-function valve is a compact control valve that can be customized. Through the combination of different control modules to achieve application requirements, it can realize the combination functions of shunt, regulation, control, etc. The position feedback module can be extended. Low metal ion pollution and low Particulate characteristics are widely used in the semiconductor industry.

Easy installation and maintenance

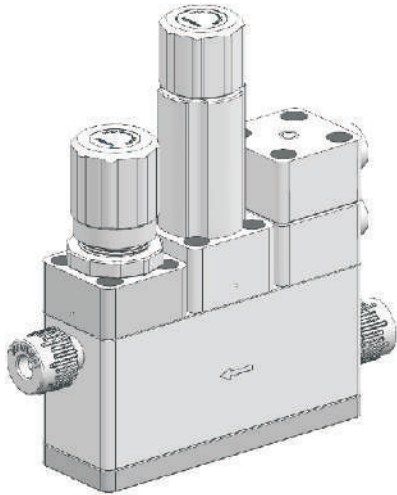
- * A combination of functions and a very compact installation size
- * Miniaturized design, easy installation, no maintenance
- * The interface standard has high versatility and can be interchanged with market products
- * Modular design makes repair and maintenance more convenient

High safety performance

- * Complies with FDA 177-1520 / 177-1550 dissolution testing requirements
- * Triple-sealed valve cavity diaphragm structure can effectively cut off leakage
- * Pneumatic control can be used in high-frequency occasions ≤ 20 times /Min

High Flexibility

- * Wetted material PTFE, PFA
- * Diaphragm material PTFE
- * Mechanism material PVDF, PP-Natural, PPS
- * Interface form FlareLINK, Insert Bushing
- * Pneumatic expandable manual limit and position feedback sensor



Performance data

| Item | Unit | Data |
|------------------------|----------------------|-------------------------------|
| Service pressure | bar | 0...5,0 |
| Backpressure | bar | 0...5,0 |
| NC/NO control pressure | kgf/cm ² | 4,0...5,0 |
| DA control pressure | kgf/cm ² | 3,0...4,0 |
| Leakage rate | cm ³ /min | 0 (Based on water pressure) |
| Configurable sensors | VDC | 24 (PNP or NPN) |
| Operating temperature | °C | 5...80 |
| Ambient temperature | °C | 0...60 (sensor 0...50) |
| Material | Valve body | PTFE |
| | Diaphragm | PTFE |
| | Actuating element | PVDF / PPN |
| | Baseplate | SS316L |
| | Bolt | SUS Coating |

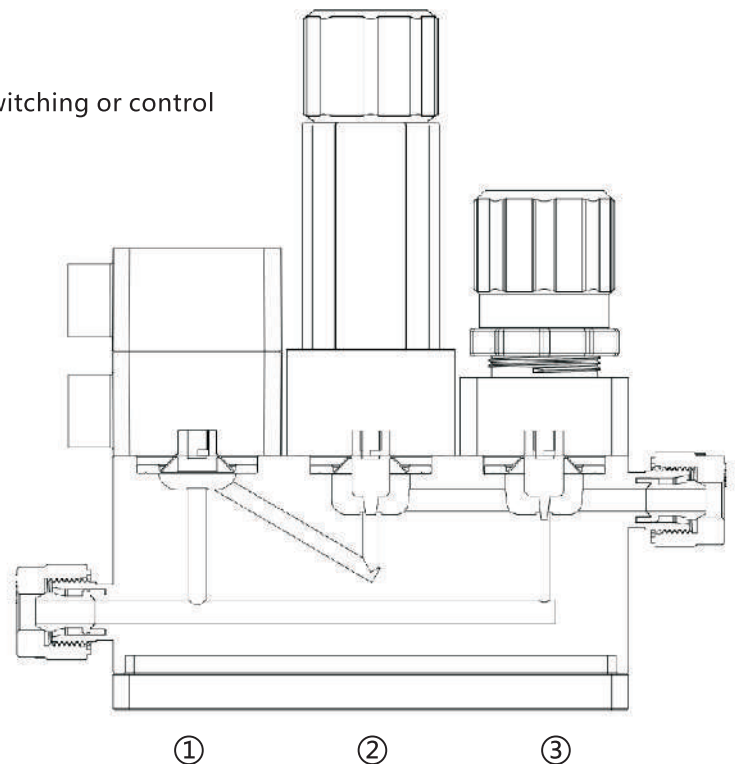
Product code

| Size (Inch) | Flow | Insert Bushing | | Flare LINK | |
|---------------------------------|----------|----------------|--|------------|--|
| | | PTFE | | PTFE | |
| Precision drip regulating valve | | | | | |
| 1/4 | 0...1500 | 319.6068212M | | | |
| 1/4 | 0...3000 | 319.6068212 | | | |

Function Description

Three seat, For flow regulation, and different flow switching or control

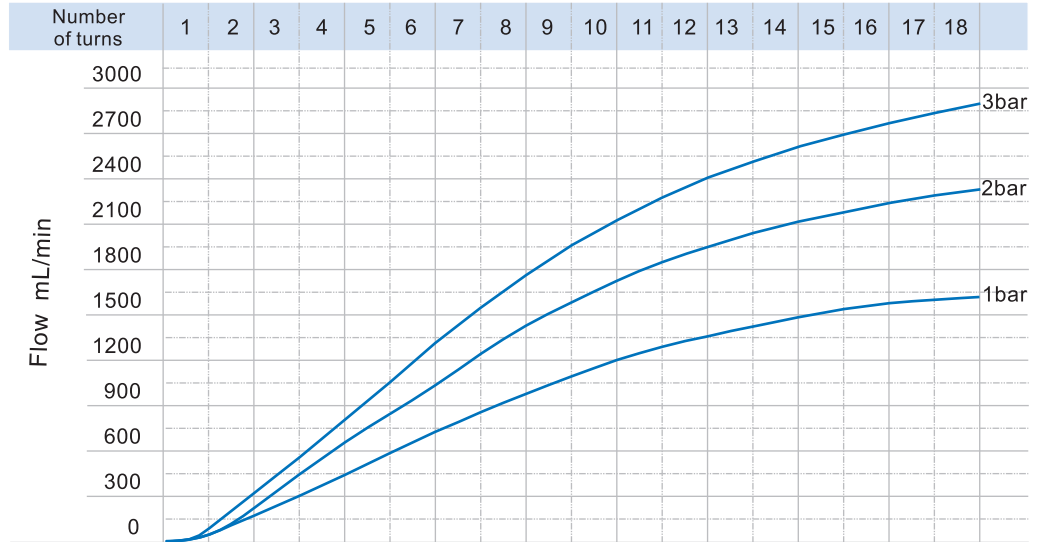
- ① Valve position:
Pneumatic on-off function
- ② Valve position:
Large flow manual precision adjustment function
- ③ Valve position:
Small flow manual adjustment and cutting function



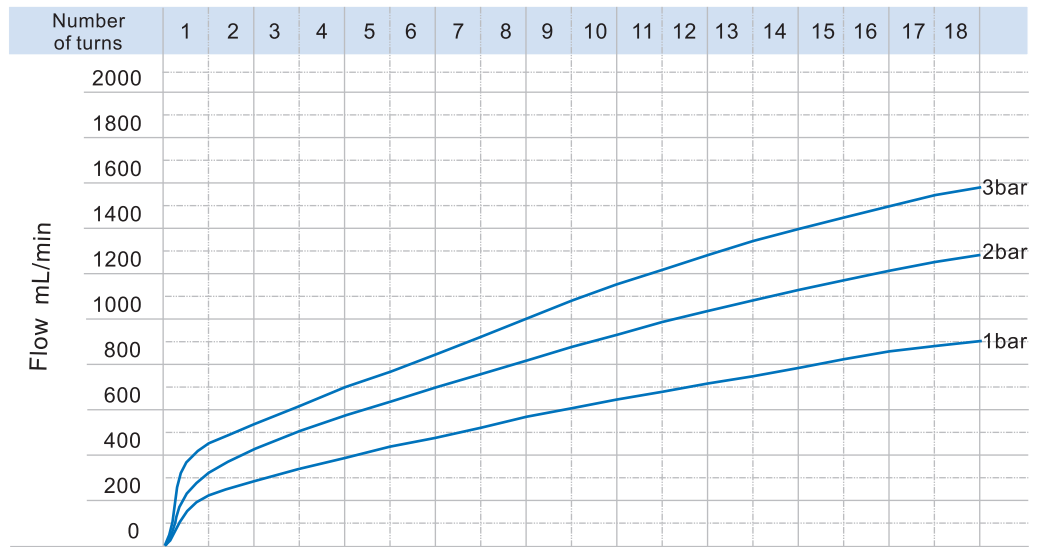
Linear graph of relative flow

The relative flow linear coefficient refers to the flow change as a function of the valve opening stroke.

3000 Type Data

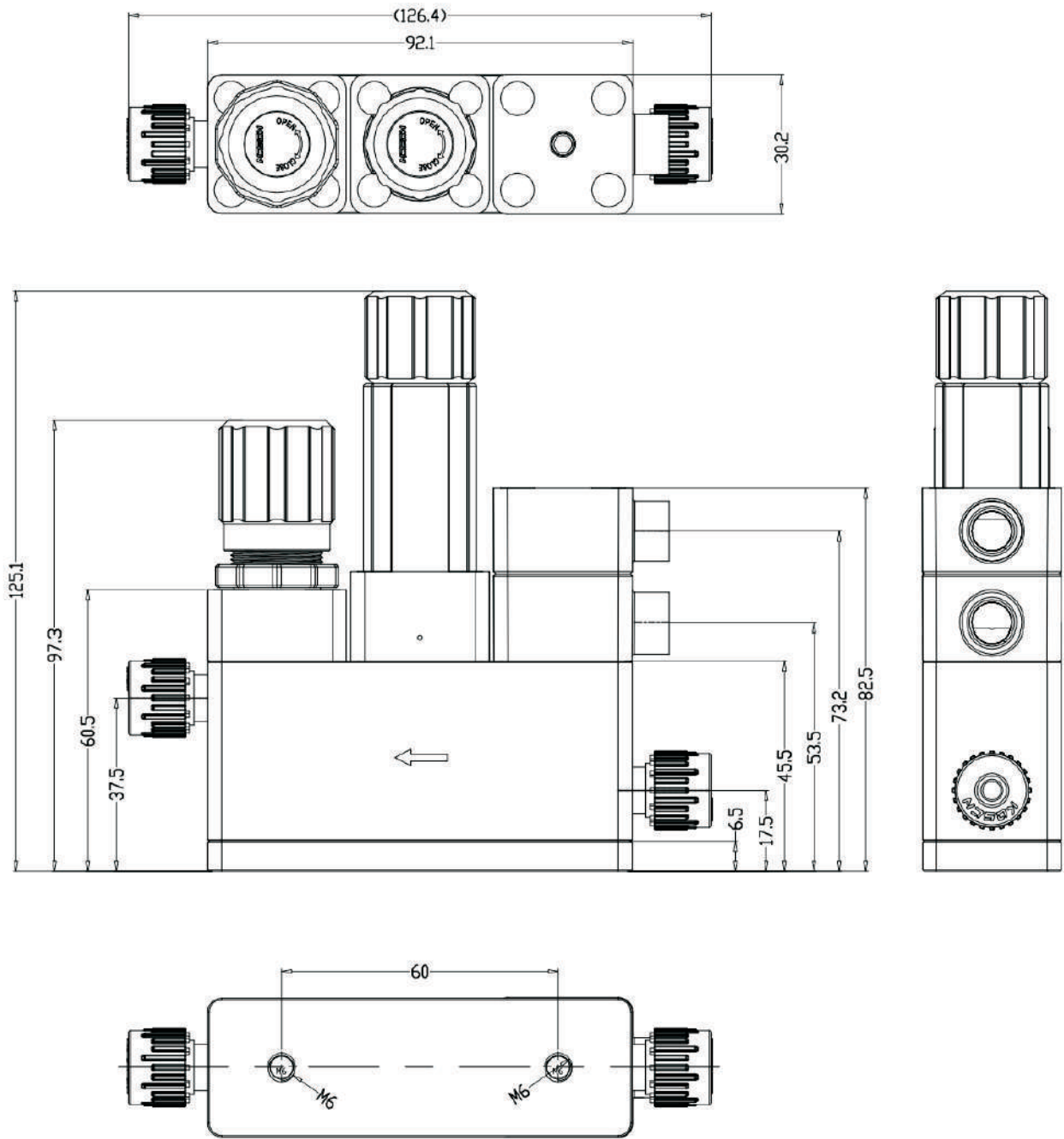


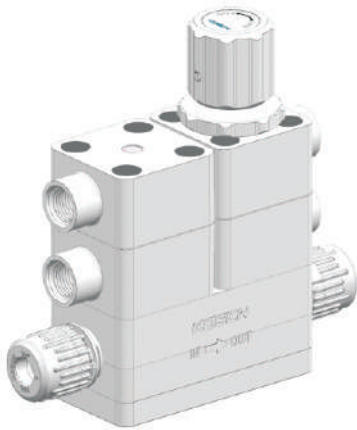
1500 Type Data
20-21-40



DVM319 , PRECISION DIRP REGULATING VALVE

1/4 Size





Performance data

| Item | Unit | Data |
|------------------------|----------------------|-------------------------------|
| Service pressure | bar | 0...5,0 |
| Backpressure | bar | 0...5,0 |
| NC/NO control pressure | kgf/cm ² | 4,0...5,0 |
| DA control pressure | kgf/cm ² | 3,0...4,0 |
| Leakage rate | cm ³ /min | 0 (Based on water pressure) |
| Siphon capacity | cm ³ | 0,12...0,55 |
| Operating temperature | °C | 5...100 |
| Ambient temperature | °C | 0...60 |
| Material | Valve body | PTFE |
| | Diaphragm | PTFE |
| | Actuating element | PVDF / PPN |
| | Baseplate | SS316L |
| | Bolt | SUS Coating |

Product code

| Size (Inch) | PFA Insert Bushing | | PTFE Flare LINK | | Siphon Capacity |
|------------------------------|--------------------|-------------|-----------------|-------------|--------------------|
| | NC+NC | NC+NO | NC+NC | NC+NO | |
| Two seat siphon valve | | | | | |
| 1/4 Double regulate | 319.7067207 | 319.7067233 | 319.7068007 | 319.7068033 | 0.12 |
| 1/4 Single regulate | 319.7067220 | 319.7067235 | 319.7068020 | 319.7068035 | 0.12 |
| 3/8 Double regulate | | | 319.7108010 | 319.7108034 | 0.55 |
| 3/8 Single regulate | | | 319.7108021 | 319.7108036 | 0.55 |

Function Description

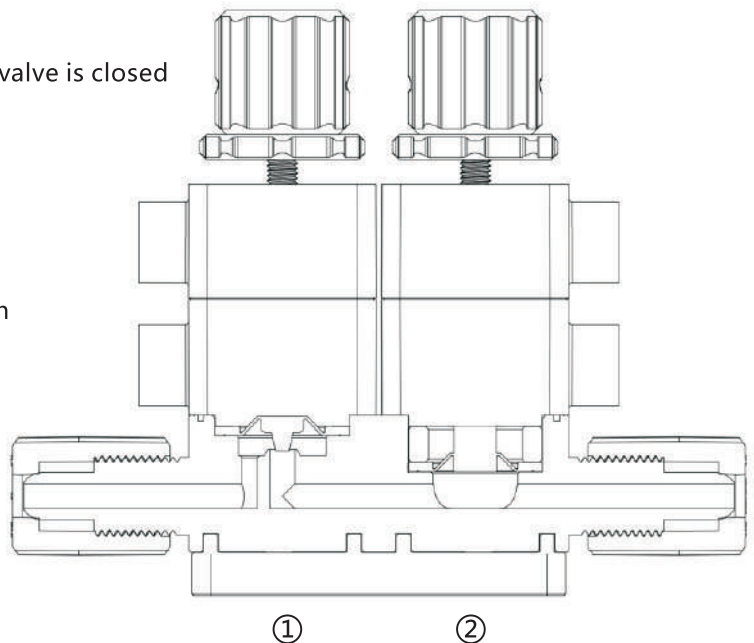
For siphoning the liquid behind the valve after the valve is closed

① Valve position:

- Pneumatic on-off function
- Valve opening adjustment is optional

② Valve position:

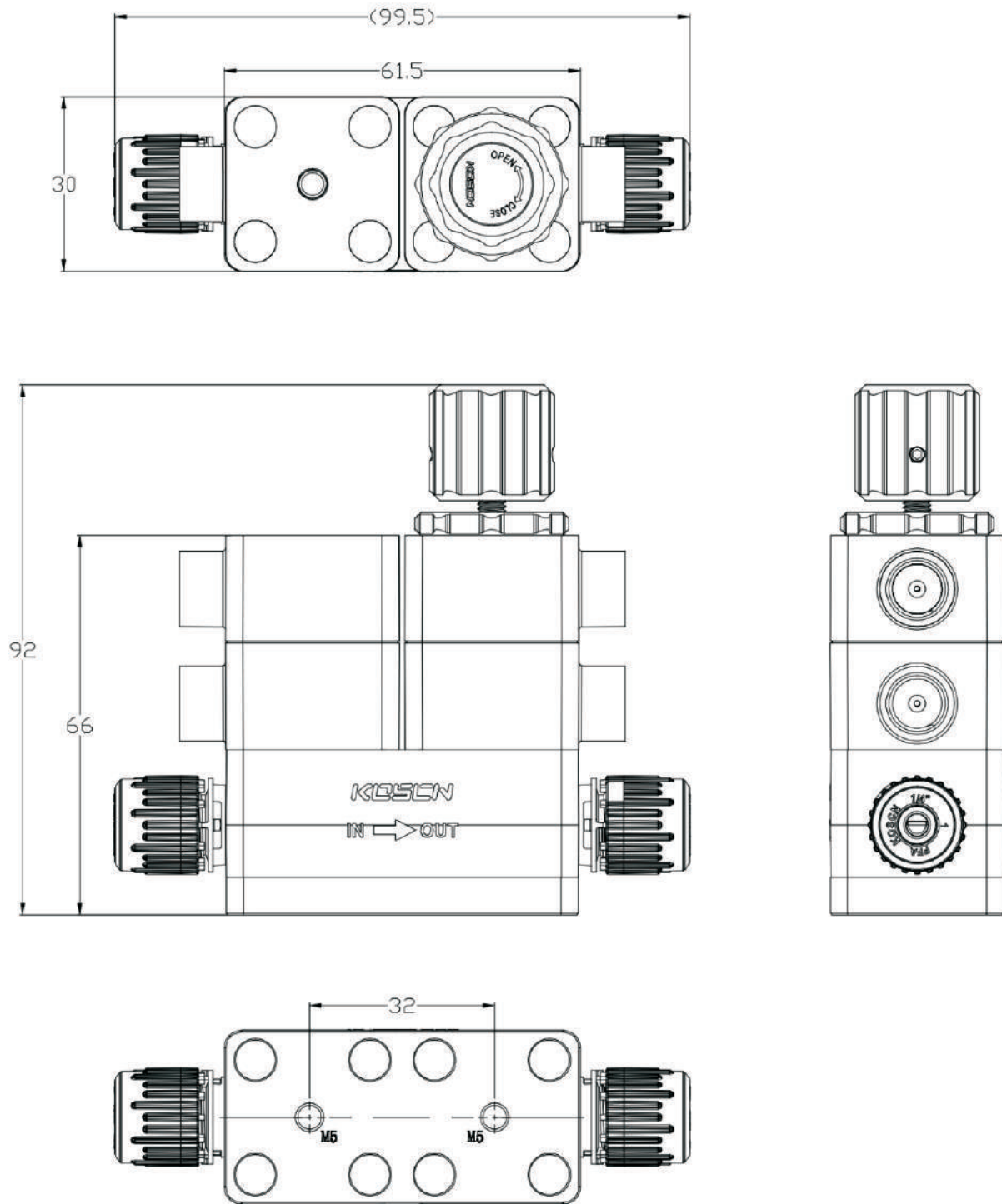
- Valve chamber negative pressure siphon function
- The siphon volume can be adjusted manually

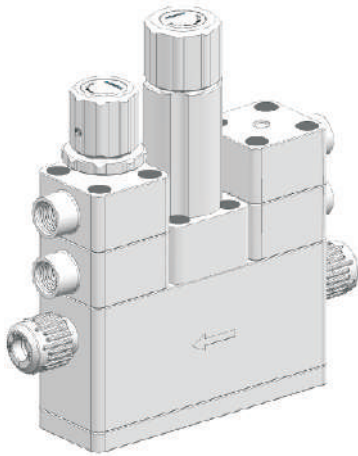


DVM319 , SIPHON VALVE

1/4 Size

* More specifications can be obtained from the factory or agent for 3D model drawings





Performance data

| Item | Unit | Data |
|------------------------|----------------------|-------------------------------|
| Service pressure | bar | 0...5,0 |
| Backpressure | bar | 0...5,0 |
| NC/NO control pressure | kgf/cm ² | 4,0...5,0 |
| DA control pressure | kgf/cm ² | 3,0...4,0 |
| Leakage rate | cm ³ /min | 0 (Based on water pressure) |
| Siphon capacity | cm ³ | 0,12 |
| Operating temperature | °C | 5...100 |
| Ambient temperature | °C | 0...60 |
| Material | Valve body | PTFE |
| | Diaphragm | PTFE |
| | Actuating element | PVDF / PPN |
| | Baseplate | SS316L |
| | Bolt | SUS Coating |

Product code

| Size (Inch) | Flow | Insert Bushing | | Flare LINK | | Siphon capacity |
|---------------------------------|----------|----------------|--|------------|--|-----------------|
| | | PTFE | | PTFE | | |
| Precision regulate siphon valve | | | | | | |
| 1/4 | 0...500 | 319.6068211S | | | | 0.03 |
| 1/4 | 0...1500 | 319.6068211M | | | | 0.08 |
| 1/4 | 0...3000 | 319.6068211 | | | | 0.12 |

Function Description

Three seat, For flow regulation,

And for siphoning the liquid behind the valve after the valve is closed

① Valve position:

Pneumatic on-off function

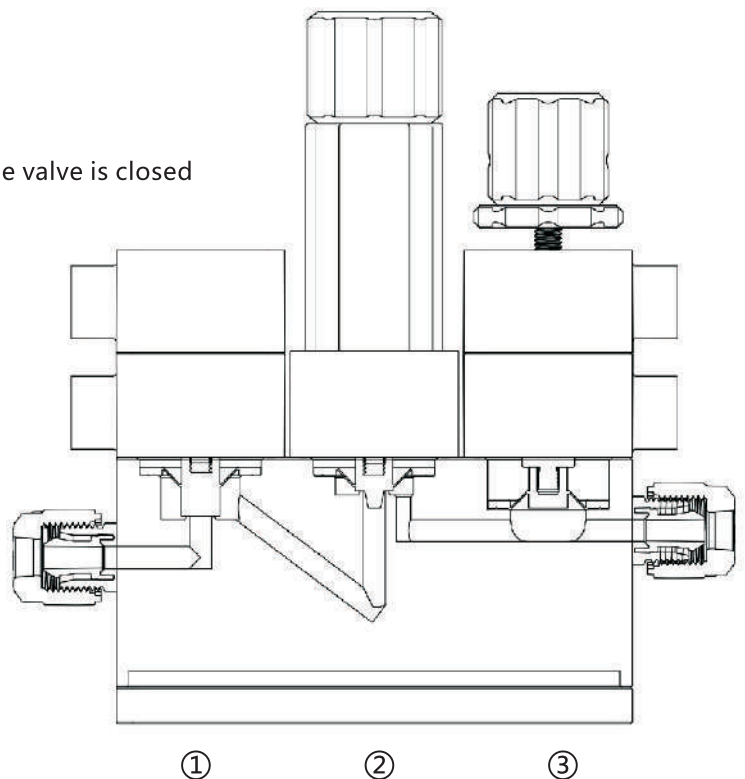
② Valve position:

Flow manual precision adjustment function

③ Valve position:

Valve chamber negative pressure siphon function

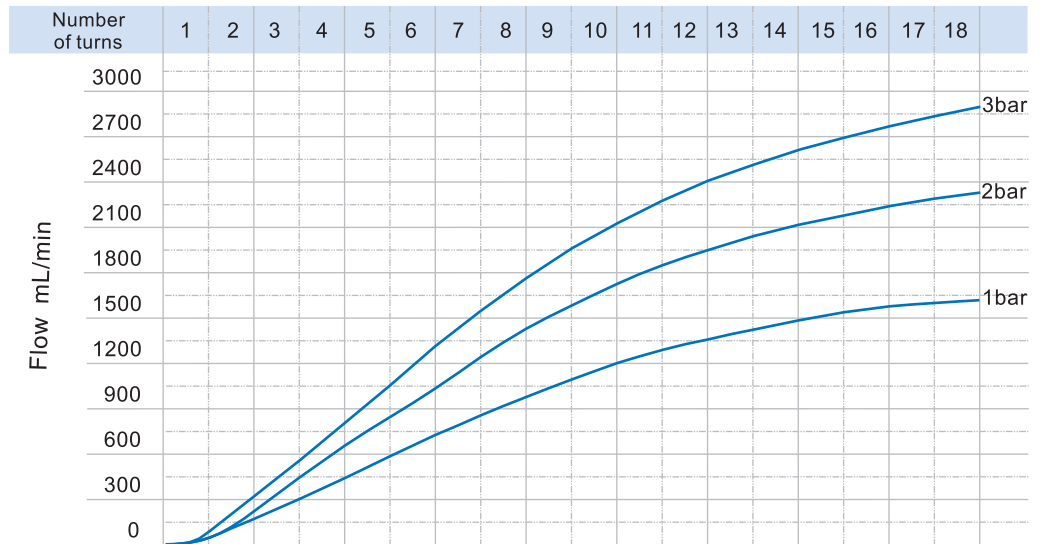
The siphon volume can be adjusted manually



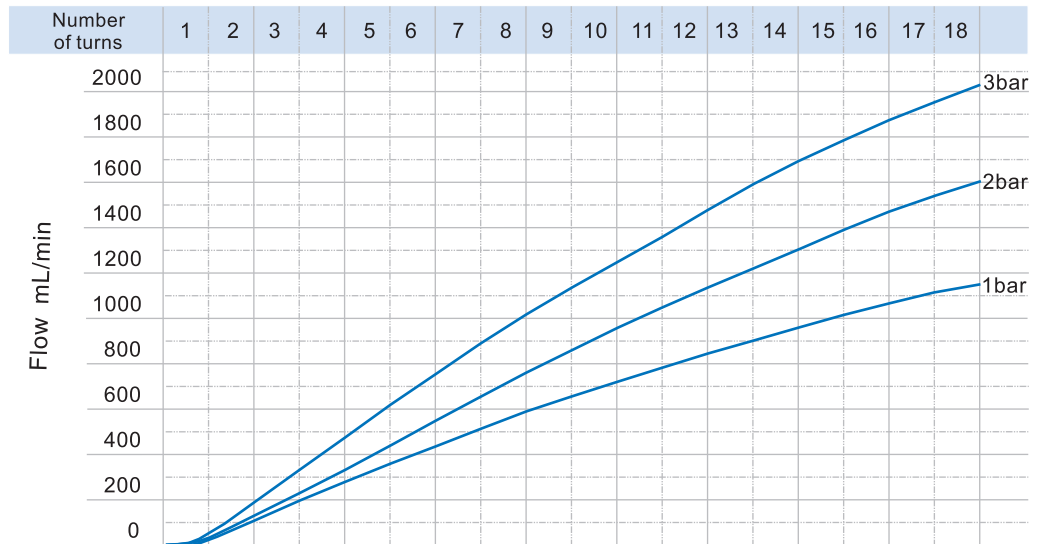
Linear graph of relative flow

The relative flow linear coefficient refers to the flow change as a function of the valve opening stroke.

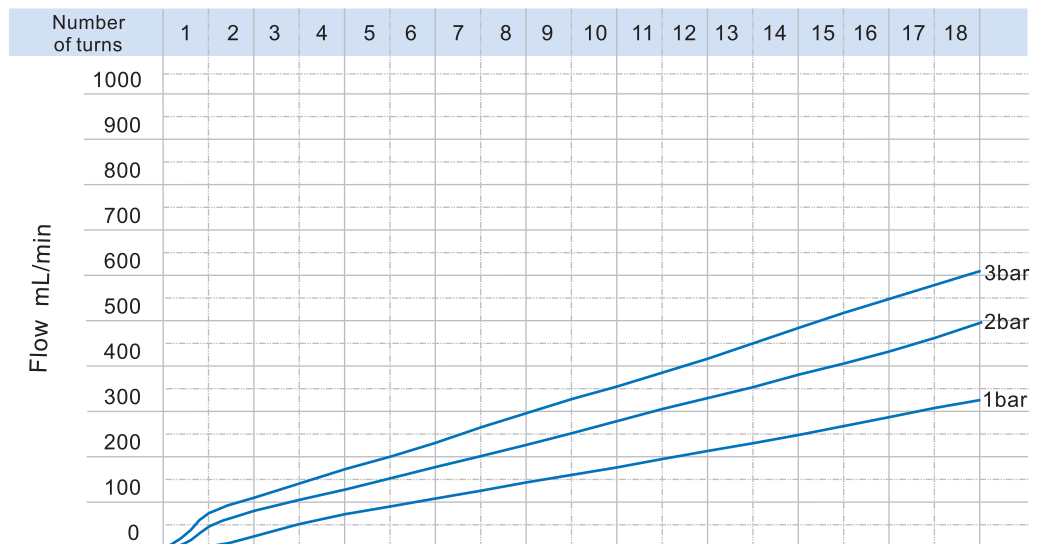
3000 Type Data
38-25-40



1500 Type Data
38-30-50

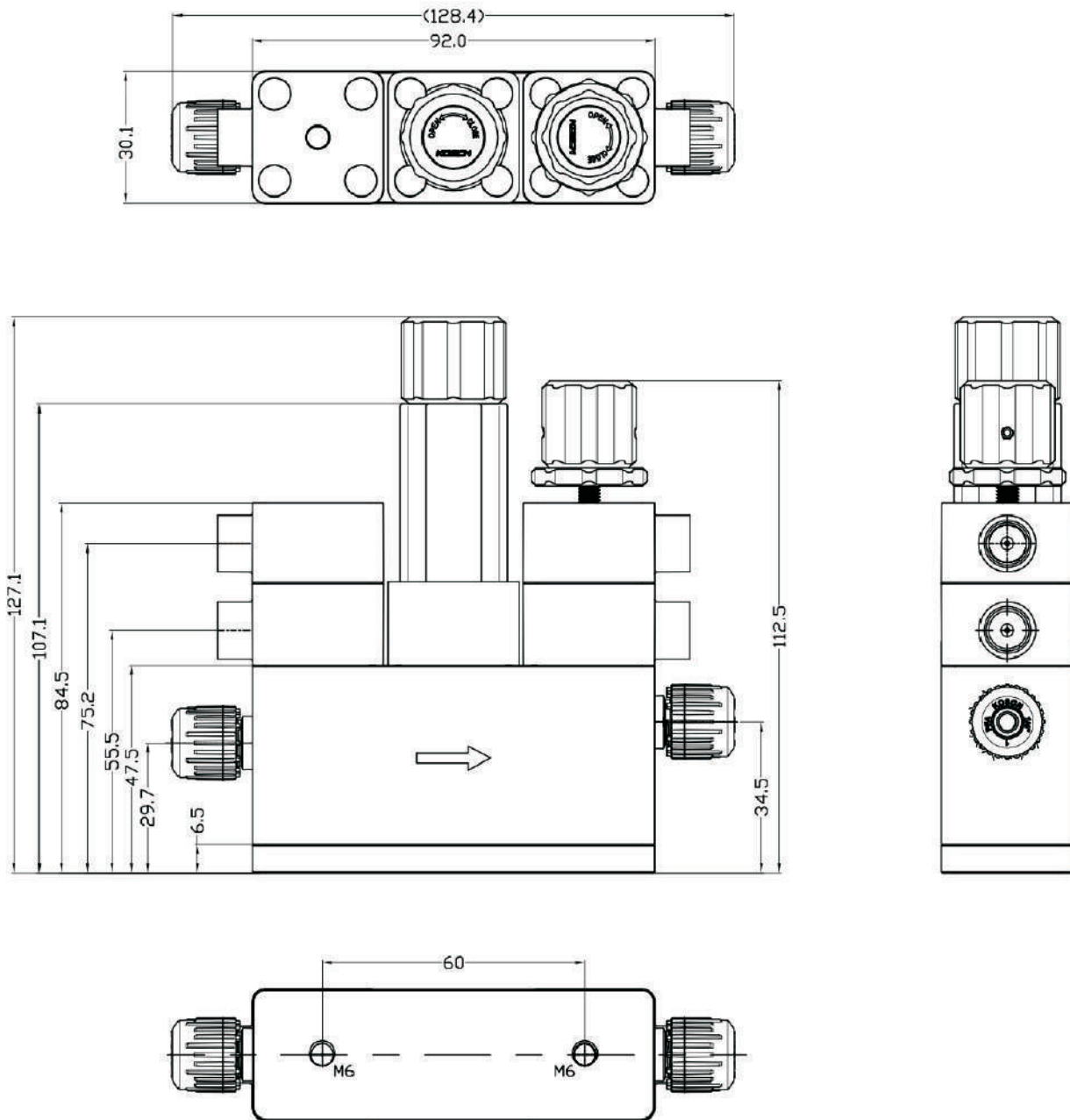


500 Type Data
38-35-55

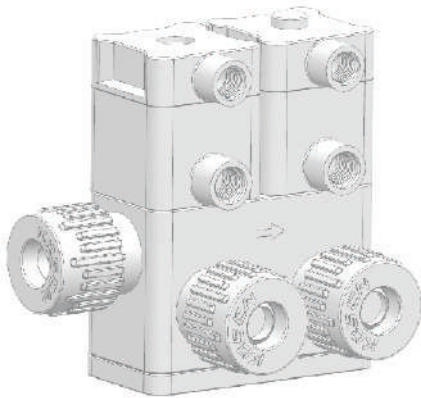


DVM319 , PRECISION REGULATE SIPHON VALVE

1/4 Size



DVM319 , LOW-OUT MULTI WAY VALVE



Performance data

| Item | Unit | Data |
|------------------------|----------------------|-------------------------------|
| Service pressure | bar | 0...0,05 |
| Backpressure | bar | 0...5,0 |
| NC/NO control pressure | kgf/cm ² | 4,0...5,0 |
| DA control pressure | kgf/cm ² | 3,0...4,0 |
| Leakage rate | cm ³ /min | 0 (Based on water pressure) |
| Configurable sensors | VDC | 24 (PNP or NPN) |
| Operating temperature | °C | 5...120 |
| Ambient temperature | °C | 0...60 (sensor 0...50) |
| Material | Valve body | PTFE |
| | Diaphragm | PTFE |
| | Actuating element | PVDF |
| | Baseplate | PVDF / SUS |
| | Bolt | SUS Coating |

Product code

| Size (Inch) | Quantity of seat | Entrance direction | Interface form | Mode | | | | | CODE |
|------------------------|---------------------|-----------------------|----------------|------|----|---|---|---|--------------|
| | | | | ① | ② | ③ | ④ | ⑤ | |
| Low-Out multiway valve | | | | | | | | | |
| 1/2 | 2 | Left | Insert Bushing | NC | NO | - | - | - | 319.2128206L |
| 1/2 | 2 | Right | Insert Bushing | NC | NO | - | - | - | 319.2128206R |
| 3/4 | 2 | Left | Insert Bushing | NC | NO | - | - | - | 319.2198219L |
| 3/4 | 2 | Right | Insert Bushing | NC | NO | - | - | - | 319.2198219R |

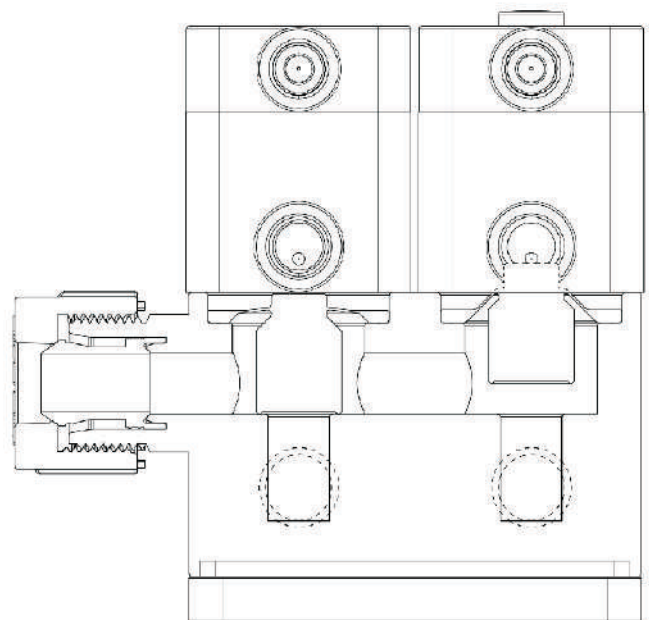
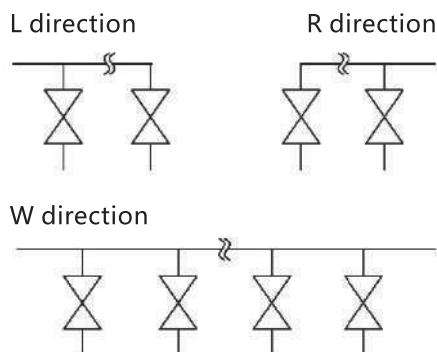
Function Description

Multi-way valve, one into multiple out, high into low out

Ensure the effect of liquid emptying

Position feedback sensor is optional

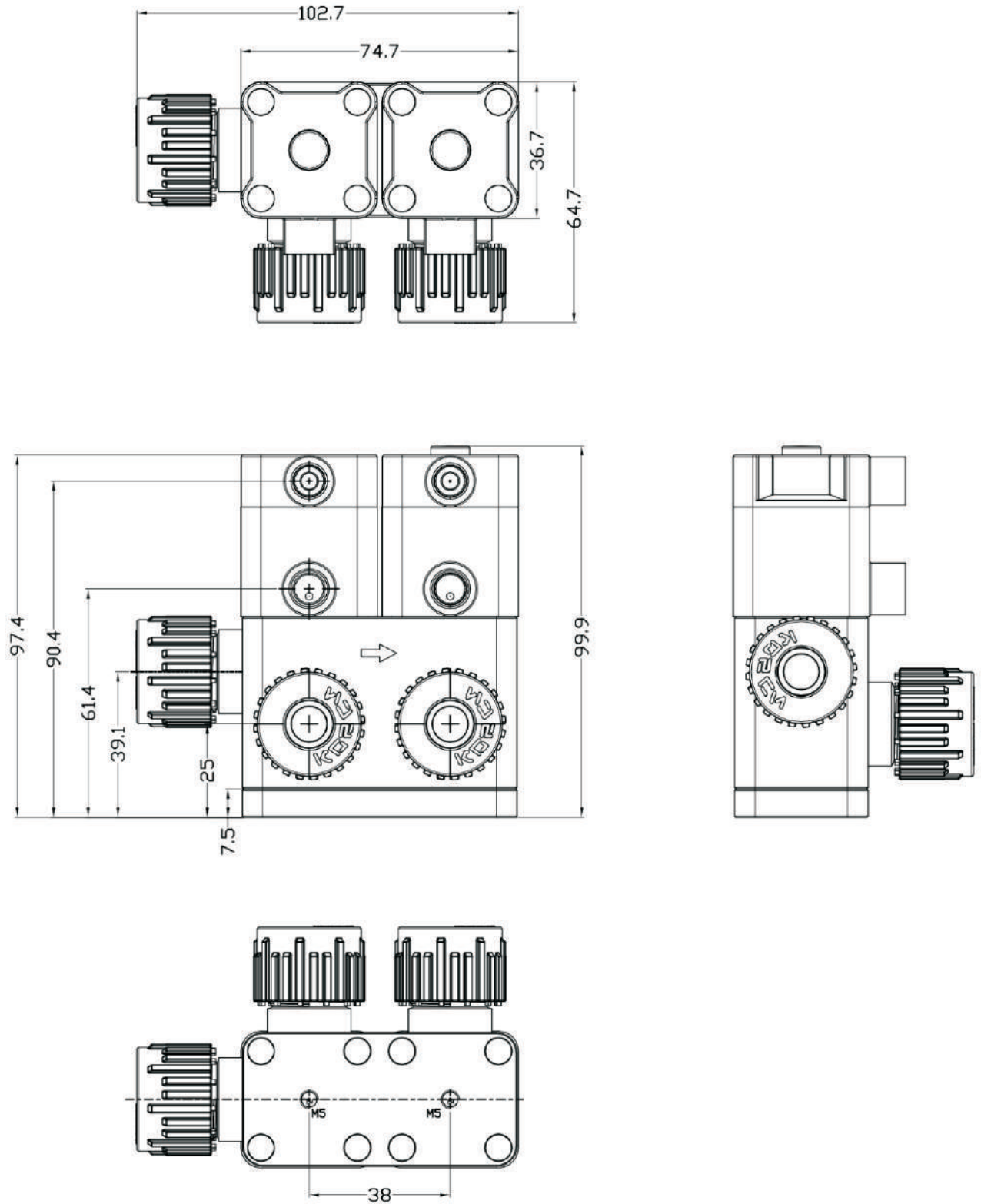
* Not suitable for pressure scenarios above 0.5bar



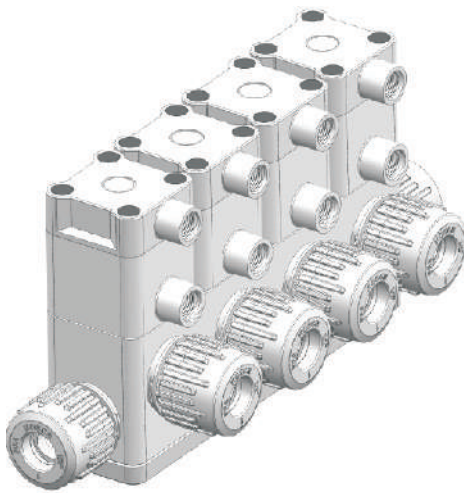
DVM319 , LOW-OUT MULTI WAY VALVE

1/2 Size

* More specifications can be obtained from the factory or agent for 3D model drawings



DVM319 HIGH-OUT MULTI WAY VALVE



Performance data

| Item | Unit | Data |
|------------------------|----------------------|-------------------------------|
| Service pressure | bar | 0...5,0 |
| Backpressure | bar | 0...5,0 |
| NC/NO control pressure | kgf/cm ² | 4,0...5,0 |
| DA control pressure | kgf/cm ² | 3,0...4,0 |
| Leakage rate | cm ³ /min | 0 (Based on water pressure) |
| Configurable sensors | VDC | 24 (PNP or NPN) |
| Operating temperature | °C | 5...120 |
| Ambient temperature | °C | 0...60 (sensor 0...50) |
| Material | Valve body | PTFE |
| | Diaphragm | PTFE |
| | Actuating element | PVDF |
| | Baseplate | PVDF / SUS |
| | Bolt | SUS Coating |

Product code

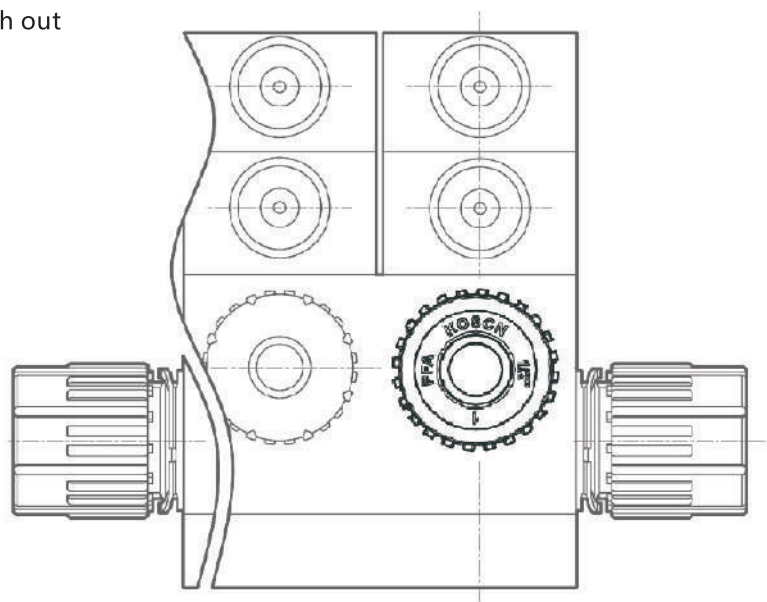
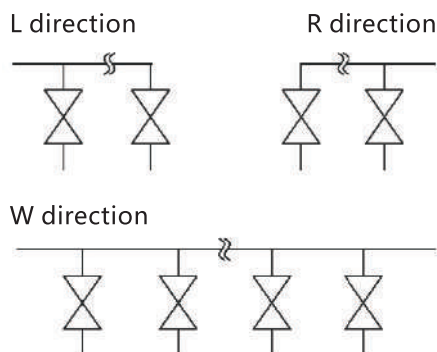
| Size (Inch) | Quantity of seat | Entrance direction | Interface form | Mode | | | | | CODE |
|-------------------------|---------------------|-----------------------|----------------|------|----|----|----|---|--------------|
| | | | | ① | ② | ③ | ④ | ⑤ | |
| HIGH-Out multiway valve | | | | | | | | | |
| 1/2 | 4 | Left | Insert Bushing | NC | NC | NC | NC | - | 319.4128208L |
| 1/2 | 4 | Right | Insert Bushing | NC | NC | NC | NC | - | 319.4128208R |
| 1/2 | 4 | W | Insert Bushing | NC | NC | NC | NC | - | 319.4128208W |

Function Description

Multi-way valve, one into multiple out, low into high out

Standard valve runner structure

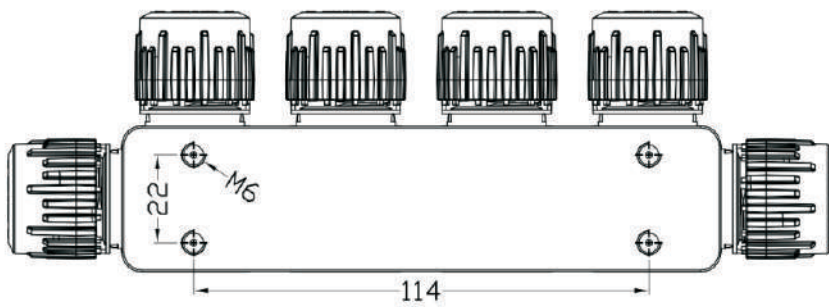
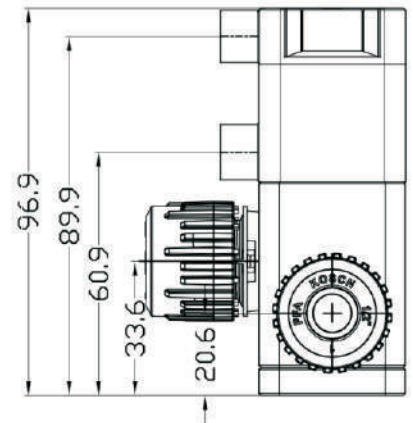
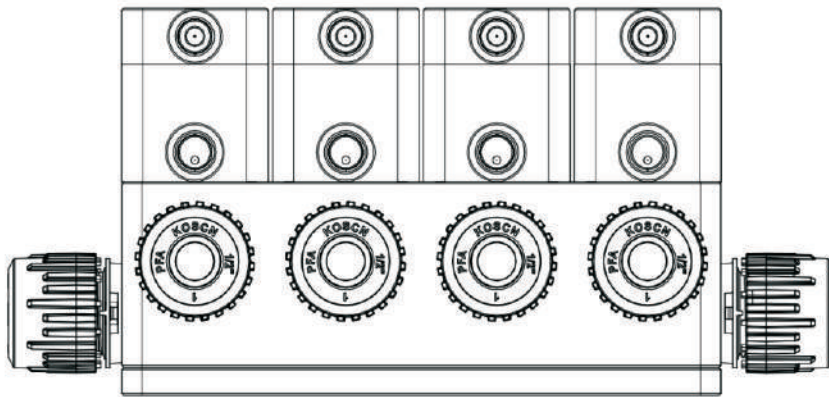
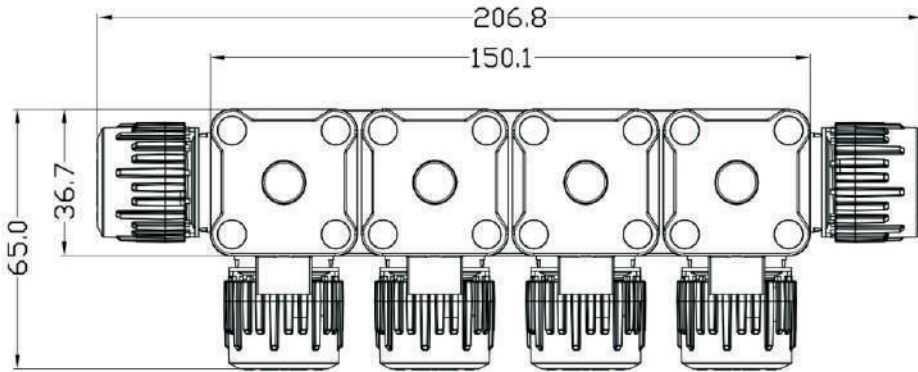
Position feedback sensor is optional

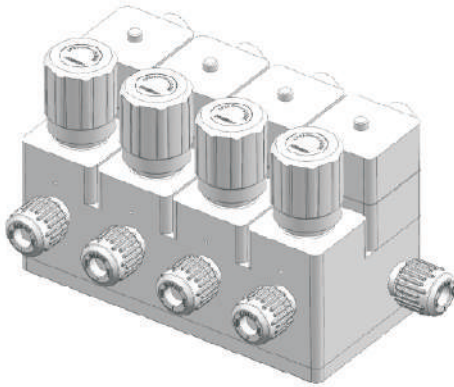


DVM319 HIGH-OUT MULTI WAY VALVE

1/2 Size

* More specifications can be obtained from the factory or agent for 3D model drawings





Performance data

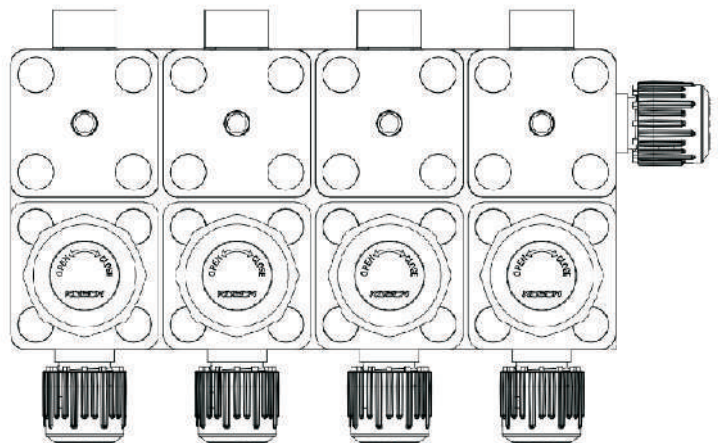
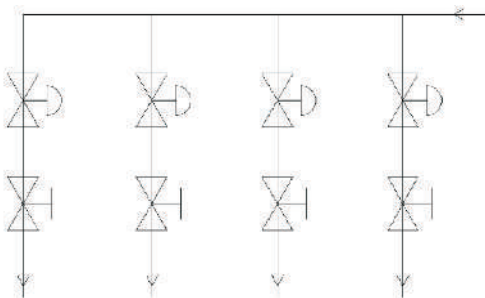
| Item | Unit | Data |
|------------------------|----------------------|-------------------------------|
| Service pressure | bar | 0...5,0 |
| Backpressure | bar | 0...5,0 |
| NC/NO control pressure | kgf/cm ² | 4,0...5,0 |
| DA control pressure | kgf/cm ² | 3,0...4,0 |
| Leakage rate | cm ³ /min | 0 (Based on water pressure) |
| Configurable sensors | VDC | 24 (PNP or NPN) |
| Operating temperature | °C | 5...80 |
| Ambient temperature | °C | 0...60 (sensor 0...50) |
| Material | Valve body | PTFE |
| | Diaphragm | PTFE |
| | Actuating element | PVDF / PPN |
| | Baseplate | PVDF / SUS |
| | Bolt | SUS Coating |

Product code

| Size (Inch) | Quantity of seat | Interface form | | | | | | | | | CODE |
|------------------------|---------------------|----------------|----|--------|----|--------|----|--------|----|--------|-------------|
| | | | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | |
| By-pass multiway valve | | | | | | | | | | | |
| 1/4 | 8 | Insert Bushing | NO | Manual | NO | Manual | NO | Manual | NO | Manual | 319.X068218 |

Function Description

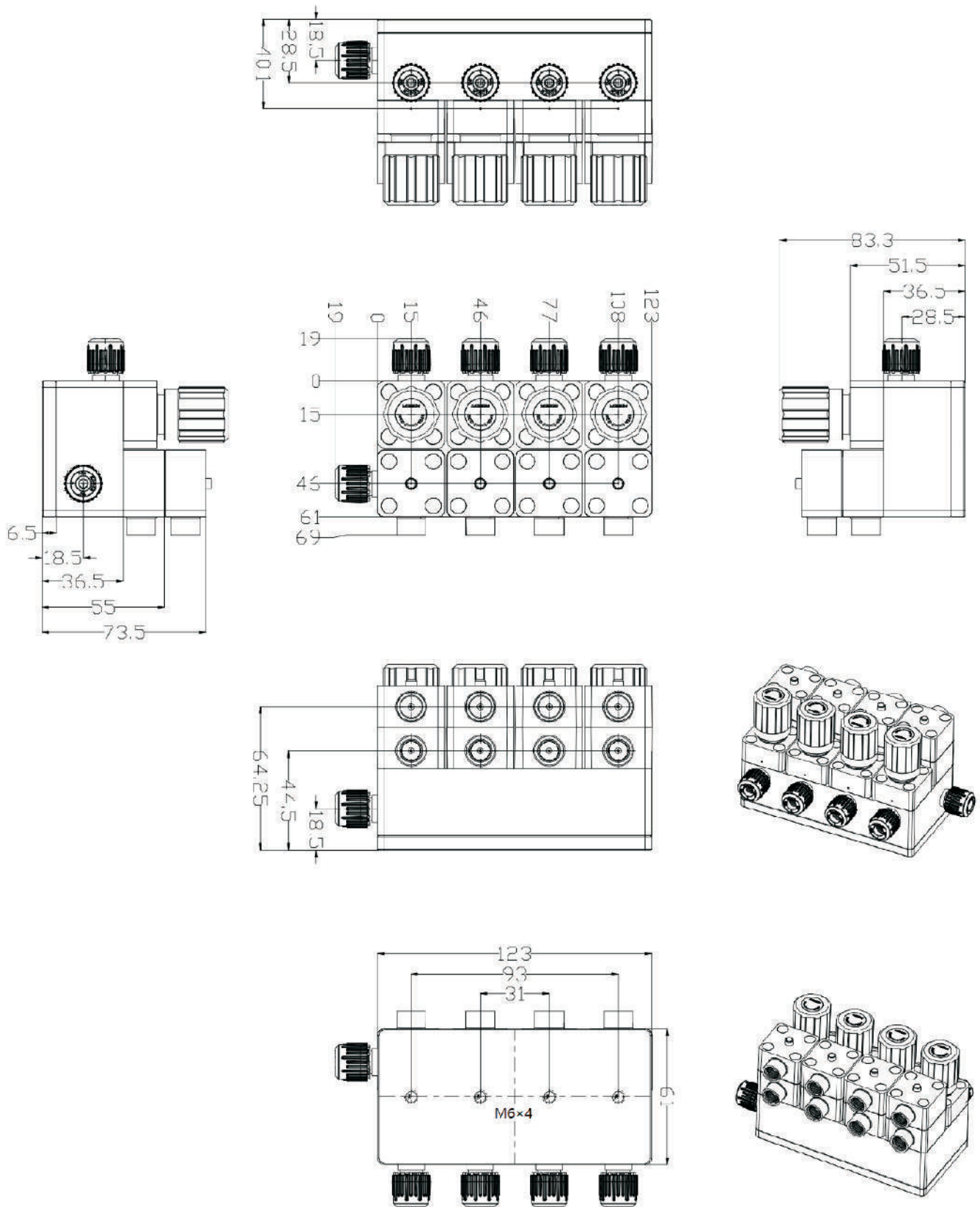
- Independent submodules in series combination of manual and pneumatic
- Multiple submodules can be combined into multiple points
- The main flow path can be larger than the branch flow path
- Position feedback sensor is optional



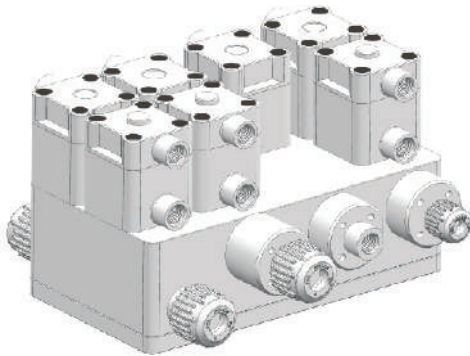
DVM319 , BY-PASS MULTI WAY VALVE

1/4 Eight seat Size

* More specifications can be obtained from the factory or agent for 3D model drawings



DVM319 , MANY MODULES MULTI WAY VALVE



Performance data

| Item | Unit | Data |
|------------------------|----------------------|-------------------------------|
| Service pressure | bar | 0...5,0 |
| Backpressure | bar | 0...5,0 |
| NC/NO control pressure | kgf/cm ² | 4,0...5,0 |
| DA control pressure | kgf/cm ² | 3,0...4,0 |
| Leakage rate | cm ³ /min | 0 (Based on water pressure) |
| Configurable sensors | VDC | 24 (PNP or NPN) |
| Operating temperature | °C | 5...120 |
| Ambient temperature | °C | 0...60 (sensor 0...50) |
| Material | Valve body | PTFE |
| | Diaphragm | PTFE |
| | Actuating element | PVDF |
| | Baseplate | PVDF / SUS |
| | Bolt | SUS Coating |

Product code

| Size (Inch) | Quantity of seat | Interface form | Mode | CODE |
|------------------------------|---------------------|----------------|------------------------|-------------|
| Many modules multi way valve | | | | |
| 1/4-3/8 | 10 | Insert Bushing | NC×4 + NO×3 + CHECK ×3 | 319.X108216 |

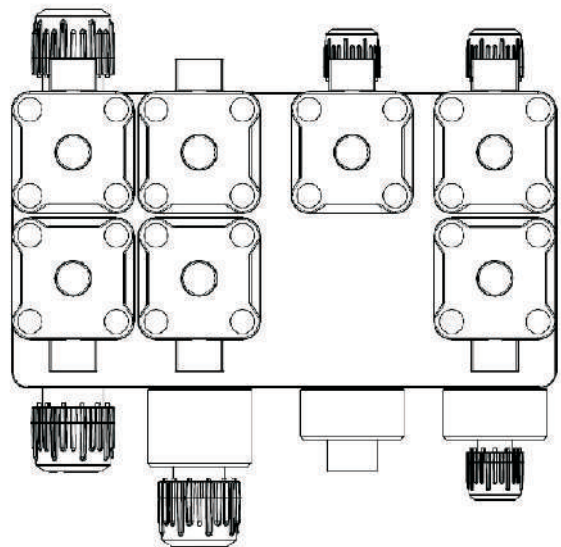
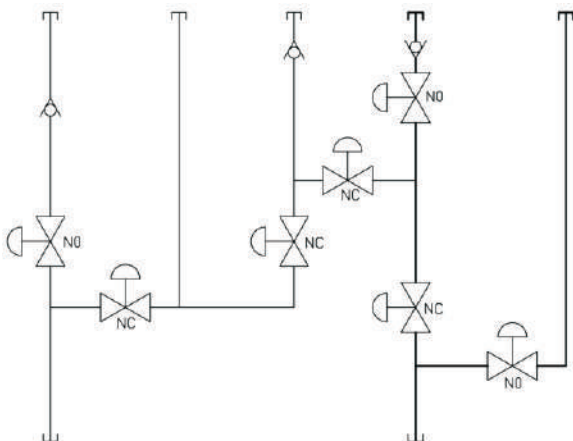
Function Description

Multi-combination, multi-function module valve

Manual, pneumatic, one-way and other different functions in series and parallel combination

Position feedback sensor is optional

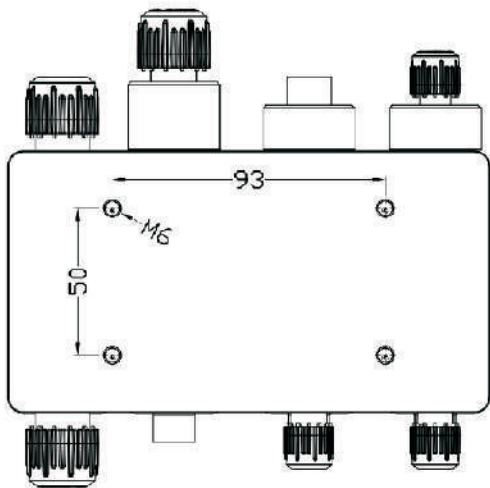
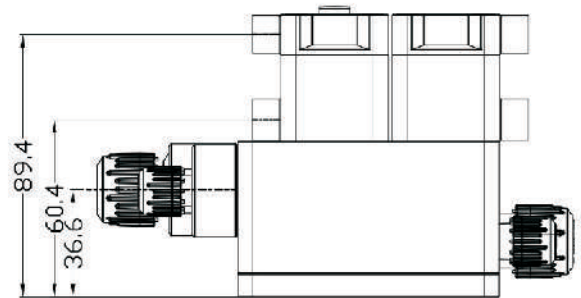
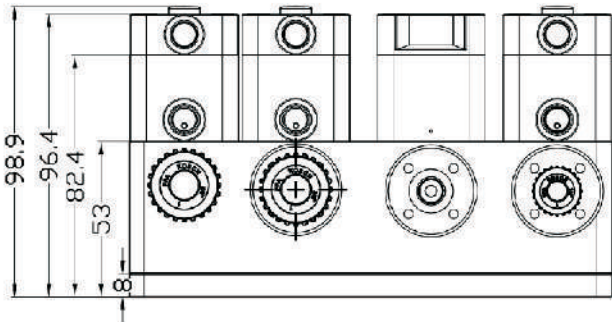
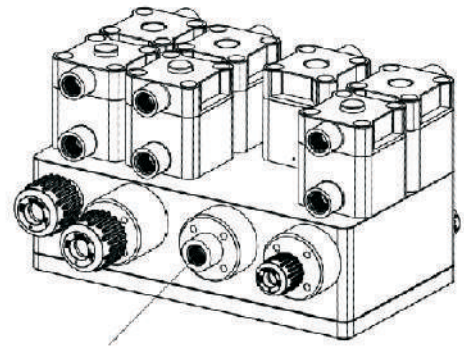
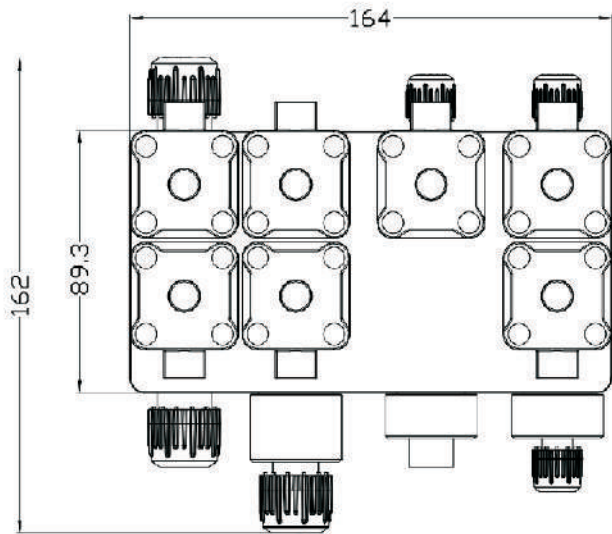
The function is not universal when used in specific application scenarios



DVM319 , MANY MODULES MULTI WAY VALVE

1/4-3/8 Ten seat Size

* More specifications can be obtained from the factory or agent for 3D model drawings



DV319 , SELECTION GUIDE

DVM Selection guide

| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 3 | 1 | 9 | | | | | | | | |
| Number of valve seats | | | | | | | | | | | |
| 2 seats | | | | 2 | | | | | | | |
| 3 seats | | | | 3 | | | | | | | |
| 4 seats | | | | 4 | | | | | | | |
| 5 seats | | | | 5 | | | | | | | |
| 6 seats | | | | A | | | | | | | |
| 7 seats | | | | B | | | | | | | |
| 8 seats | | | | C | | | | | | | |
| Specific function - 3 seats | | | | 6 | | | | | | | |
| Specific function - 2 seats | | | | 7 | | | | | | | |
| 9 seats | | | | 9 | | | | | | | |
| Compound type | | | | X | | | | | | | |
| Interface size | | | | | | | | | | | |
| 1/4 | | | | 06 | | | | | | | |
| 3/8 | | | | 10 | | | | | | | |
| 1/2 | | | | 12 | | | | | | | |
| 3/4 | | | | 19 | | | | | | | |
| Valve body material | | | | | | | | | | | |
| PFA | | | | | | 7 | | | | | |
| PTFE | | | | | | 8 | | | | | |
| Connection mode | | | | | | | | | | | |
| FlareLINK | | | | | | | 0 | | | | |
| Insert Bushing | | | | | | | 2 | | | | |
| NPT | | | | | | | 9 | | | | |
| Serial number | | | | | | | | | | | |
| Unique identification code | | | | | | | | XX | | | |
| Entrance direction | | | | | | | | | | | |
| Left | | | | | | | | | L | | |
| Right | | | | | | | | | R | | |
| Bilateral | | | | | | | | | W | | |
| Limit switch | | | | | | | | | | | |
| PNP | | | | | | | | | | A0 | |
| NPN | | | | | | | | | | A1 | |
| Number of switches | | | | | | | | | | | |
| 1 group | | | | | | | | | | | 1 |
| 2 group | | | | | | | | | | | 2 |
| 3 group | | | | | | | | | | | 3 |
| 4 group | | | | | | | | | | | 4 |
| 5 group | | | | | | | | | | | 5 |

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