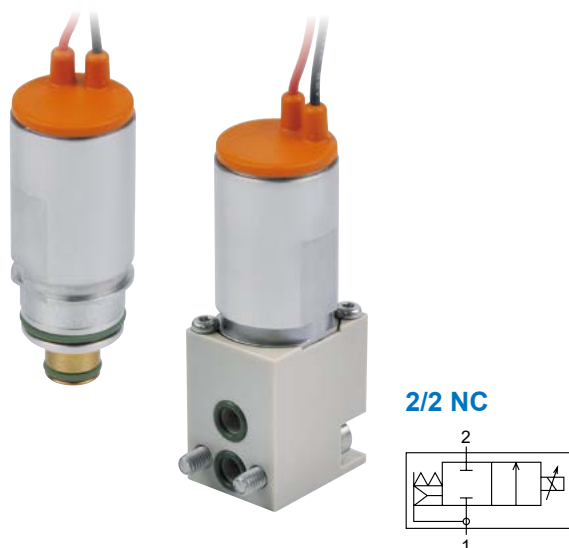




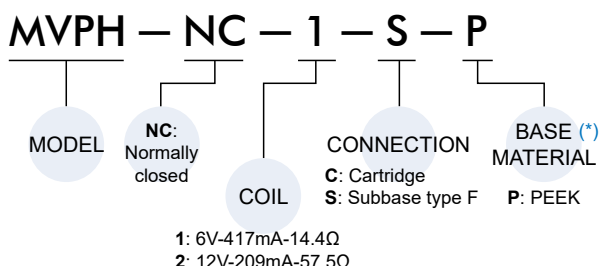
### Feature

- High-flow pressure compensated proportional valve designed primarily for mixing and dosing of gases in ventilation, respiratory equipment, anesthesia, and analytical instruments.
- Product life: 100 million.

### Application Industry

- Printing industry.
- Textile industry: Rapid response for yarn, waving machines.
- Packaging industry: N2 or controlled vacuum for food.
- Fuel cell: Air dosing.

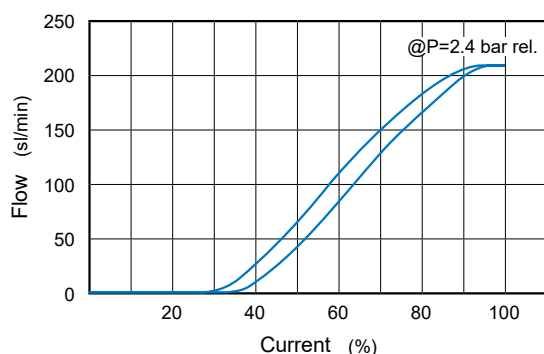
### Order example



\* Non-standard materials and special applications, please contact sales.  
\* Only for (S) subbase type F.

### Flow rate characteristics

Don't use as reference.



### Specification

| Model                           |                        | MVPH                          |
|---------------------------------|------------------------|-------------------------------|
| Type of acting                  |                        | Compensated                   |
| Nb of ways / function           |                        | 2/2 NC - Proportional         |
| Type of pneumatical connection  |                        | Cartridge, Subbase type F     |
| Orifice size                    | (mm)                   | ø4.6                          |
| Materials in contact with media | Operator               | Stainless steel               |
|                                 | Orifice                | Stainless steel               |
|                                 | Subbase                | PEEK                          |
|                                 | Seal                   | FPM                           |
| Mounting orientation            |                        | Indifferent                   |
| Media                           |                        | Air, oxygen, neutral gases    |
| Pressure range @port 1          | (bar rel.)             | 0 ~ 7                         |
| Back pressure @port 2 (*)       |                        | ≤ 10% of the inlet pressure   |
| Flow @ 2.4 bar rel. @ 20°C      | (sl/min)               | ≥ 190                         |
| Internal leakage @ 20°C         | (ml/min)               | ≤ 1 @ 0 ~ 7 bar rel.          |
| External leakage @ 20°C         | (ml/min)               | ≤ 1 @ 7 bar rel.              |
| Storage                         | (°C)                   | -20~+70                       |
| Temperature                     | Ambient operating (°C) | 5~+50                         |
|                                 | Media operating (°C)   | 5~+50                         |
| Protection (DIN 40050)          |                        | IP51                          |
| Duty cycle                      |                        | 100% ED                       |
| Filter of front end             | (µm)                   | 20 recommended (not included) |
| Weight                          | (g)                    | 40 ± 5                        |

\* The pressure on the outlet must keep ≤10% of the inlet, in order to guarantee good regulation for pressure.

### Coil specification

|                                     |                           |      |
|-------------------------------------|---------------------------|------|
| Nominal voltage @ 20°C (*1) (V)     | 12                        | 6    |
| Maximum voltage (*2) (V)            | 18                        | 9    |
| Nominal current ±3% @ 20°C (mA)     | 209                       | 417  |
| Nominal power @ 20°C (W)            | 2.5                       |      |
| Nominal resistance ±3% @ 20°C (Ω)   | 57.5                      | 14.4 |
| Electrical insulation (V AC)        | 500                       |      |
| Maximum coil temperature (°C)       | < 120                     |      |
| Electrical connection               | 300mm AWG 26 Flying leads |      |
| Recommended supply voltage (*3) (V) | 24                        | 12   |

\*1. Operating voltage (Nominal power = nominal voltage × nominal current)

\*2. When power is continuously supplied, resistance may increase and current may decrease, potentially resulting in insufficient flow. To address this, the operating voltage may need to be increased. However, to prevent coil burnout, the operating voltage must not exceed the maximum voltage. It is recommended to use current control instead of voltage control. The advantage of current control is that it maintains the current within the rated range even when resistance increases due to continuous power supply, ensuring stable product performance.

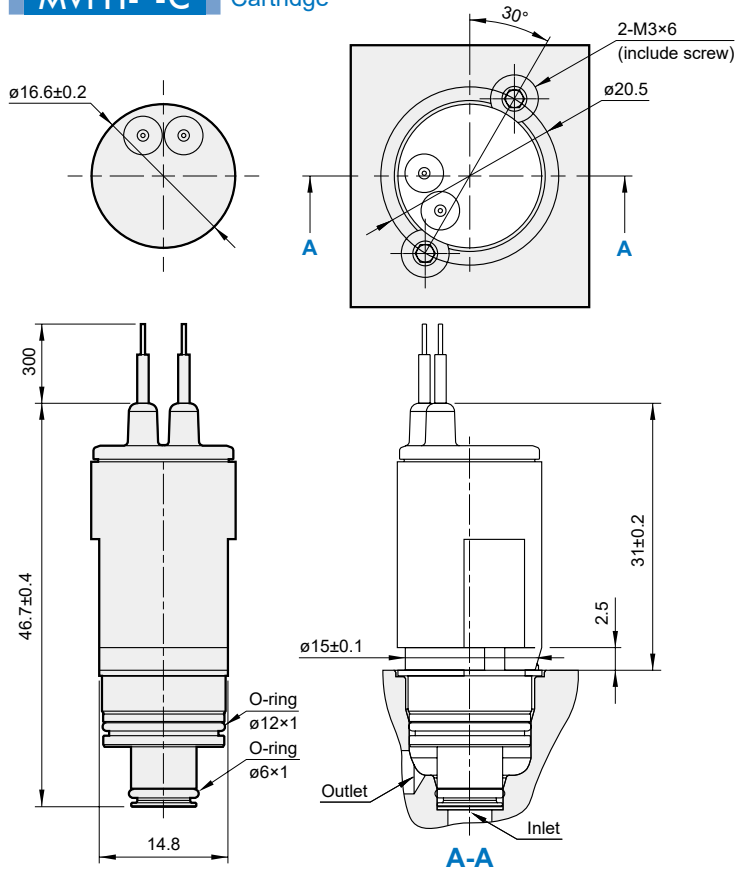
\*3. To meet the requirements of maximum voltage usage, the power supply voltage specification should exceed the maximum voltage. Do not directly connect the power supply voltage to the product, as this may result in coil burnout.

# MVPH Dimensions

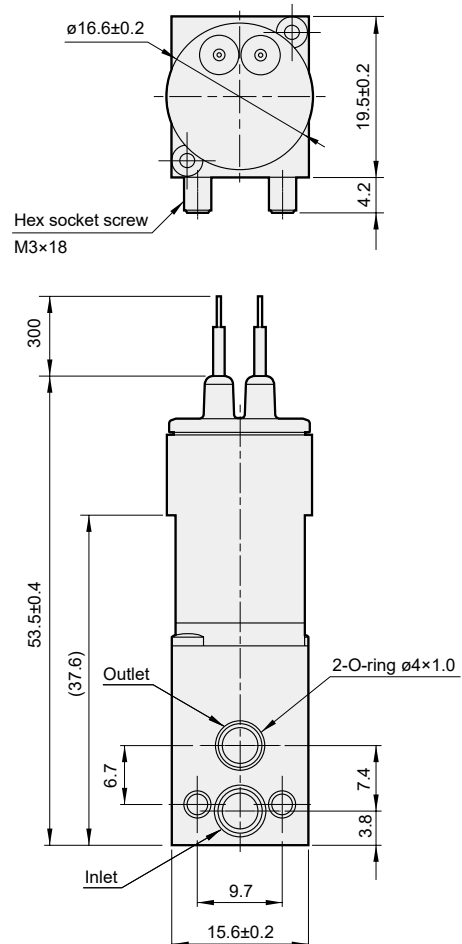
## HIGH-FLOW PROPORTIONAL VALVE



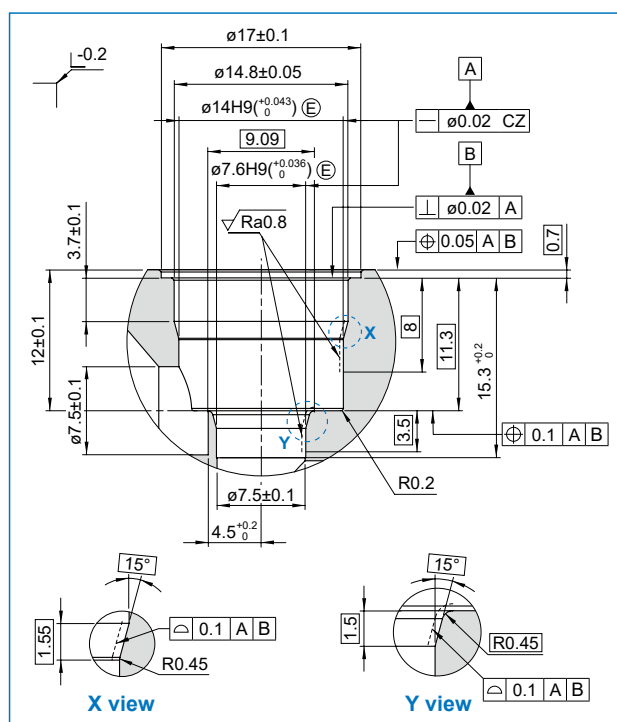
**MVPH-\*-C** Cartridge



**MVPH-\*-S** Sub-base type F



**Cartridge hole**  
Valve footprint



**Subbase type F**  
Valve footprint

