### 5-VMK 50
### 5-VFK 50

**Valve type with pilot valve**

#### 2/2 way valve
- **Pressure Range**: externally controlled
  - PN 0-100 bar
  - DN 50 mm
- **Orifice**
  - thread/flange valve normally closed
  - symbol: NC
- **Function**
  - valve normally open
  - symbol: NO

#### Design
- **Body Materials**
  1. Pressure balanced, with spring return
  2. Steel, galvanized
  3. Steel, nickel plated
  4. Without non-ferr. Metals
  5. Stainless steel

- **Seal Materials**
  - Synthetic resin on metal
  - NBR

#### General Specifications
- **Ports**
  - VMK threads G 2
  - VFK flanges PN 64 / 100
- **Function**
  - NC
- **Pressure Range**
  - Bar: 0/40 / 0-100
- **Kv Value**
  - Vacuum: 43.0
  - Pressure (max): 2.3 l/min
- **Vacuum Rate**
  - ≤ 10⁻⁵ mbar.s⁻¹
- **Back Pressure**
  - Media: gaseous - liquid - highly viscous - gelatious - pasty - contaminated
  - Valve: version available
- **Abrasive Media**
  - Opening: by throttles on pilot valve
  - Closing: bi-directional upon request
- **Flow Direction**
  - Switching time: 0.5 to 3.5 seconds
- **Ambient Temperature**
  - Media: 60°C
  - Valve: 50°C
- **Limit Switches**
  - Manual Override: via pilot valve
  - Approvals: inducive / mechanical upon request
- **Weight**
  - VMK: 12.3 kg
  - VFK: 18.7 kg
- **Additional Equipment**
  - Mounting brackets upon request
  - LED/WAZ upon request

#### Electrical Specifications
- **Nominal Voltage**
  - Uₙ: DC 24 V
  - AC 230 V 50 Hz
  - Special voltage upon request
- **Power Consumption**
  - Uₙ: 4.8 W
  - AC 2.5 W
  - Special voltage upon request
- **Protection**
  - ENC 100%
  - Protection: IP65 (P54)
  - Connection: co-ax / Namur
- **Energized Duty Rating**
  - Connection: plug acc. DIN EN 175301-803 form B, 4 positions x90° / wire diameter 6-8 mm
  - 100% on request
  - Connection: plug acc. DVGW
  - Connection: plug acc. VDMA
  - Connection: Plug acc. PSE / PPS / PTP / PTF / PPS-TP / PPS-TP
  - Connection: Plug acc. PEDU
  - Connection: Plug acc. PEDU VSH
  - Connection: Plug acc. PEDU VSH

#### Pneumatic Specifications
- **Actuation Pressure Range**
  - Bar: 4-10
  - CM/stroke: 65
- **Cycle Speed**
  - Control: Main valve speed variable by throttles on pilot valve
  - Preferably 0.2 slg of pilot valve
- **Pilot Valve Interface**
  - Actuator ports: co-ax / Namur
  - ISO 1
- **Actuator Ports by Media**
  - X/Y: G 1/4

#### Hydraulic Specifications
- **Actuation Pressure Range**
  - Bar: 10-30 / 30-60
  - Connection: preferably 4/2 way control valve
- **Actuator Ports by Media**
  - X/Y: G 1/4

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**Above stated body materials refer to the valve port connections that get in contact with the media only!**

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**Details needed for main valve**
- Orifice
- Port
- Function NC/NO
- Operating pressure
- Flow rate
- Media
- Media temperature
- Ambient temperature
- Type of actuation

**Details needed for pneumatic actuation**
- Nominal Voltage
- Type of Protection
- Actuation pressure range min/max
- Low wattage coil, actuation pressure range 4-7 bar
- Pilot valve type

**Details needed for hydraulic actuation**
- Actuation pressure range min/max
- Hydraulic control valve function

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**Notes**
- The valve's technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.
- If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and/or chemical properties of the materials or seals used, may not be suitable for the intended application.
### Type VMK 50

**Function:** NC  
Closed when not energized

**Constructive Length:**
- Standard: 312 mm  
- With 1/2 inductive limit switches: 312 mm  
- With force-feed lubrication nipple: 312 mm  
- With mechanical limit switches: -

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<th>Flanges PN</th>
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### Type VFK 50

**Function:** NO  
Open when not energized

**Pneumatic Actuation:**
- 5/2 way pilot valve  
- Flow rate 700 l/min  
- Pressure range 3-10 bar  
- G 1/8

- 5/2 way pilot valve ISO 1  
- Flow rate 700 l/min  
- Pressure range 3-10 bar  
- G 1/4