Type 6519 NAMUR I.S. can be combined with...

- NAMUR flange mounting
- Intrinsically-safe operation
- 5 or 3-way function
- Corrosion-resistant version for outdoor use
- FM, ATEX

The Type 6519 NAMUR I.S. valve is used for the pneumatic control of double or single-acting actuators with a NAMUR adapter plate flange. The circuit function can be changed using a change-over plate. In the 3/2-way function, feedback of the exhaust air takes place in the spring area of the armature drive. The diaphragm-controlled valve seats work with very low friction, ensuring reliable switching of the valve even after long shutdown periods and at ambient temperatures below +32 °F (0 °C). The valves work without a continuous air consumption, and the use of high quality materials makes it possible to use these valves in the open air and under chemical atmospheres.

Note:
The units may only be used in explosive atmospheres in the manner approved by FM and the Federal Institute of Physics and Technology (PTB), i.e., the permissible maximum electrical values must be complied with. Suitable barriers and isolating modules are available for this.

![Diagram of Type 6519 NAMUR I.S. solenoid valve with various components including: Profibus PA, Fieldbus Foundation, Barriers, Remote I/O, Process valves, and a diagram of the valve mechanism.

Technical data

- Orifice: 87 PSI (DN 6.0 mm)
- Body material: Pilot valve - 303 Stainless steel (1.4306) or brass, Main valve - Polyamide, glass-fibre reinforced
- Seal material: HKM, NBR and PUR
- Media: Oiled or unoiled compressed air, instrument air, nitrogen
- Ambient temperature: -13 to +131 °F (-25 to +55 °C)
- Pneumatic connection: Supply ports 1, 3, 5 - Threaded port NPT 1/4, Service ports 2 and 4 - NAMUR adapter plate acc. to VDI/VDE 3845
- Electrical connection: Tag connectors acc. to DIN 43650, Form A for connector Type 2508 (see accessories). Ensure correct polarity!
- Ambient conditions: Open air, chemical atmosphere
- Protection class: IP 65 with connector

Electrical data

- Type of protection: II 2G EEx ia IIC T5T6 PTB01 ATEX2101; FM CL 1, Div 1, ABCD
- Functional values for valve switching function:
  - Minimum switching current: 29 mA at +68 °F (+20 °C) and +131 °F (+55 °C)
  - Nominal resistance of the coil: 310 Ω at +68 °F (+20 °C) and 360 Ω at +131 °F (+55 °C)
  - Minimum terminal voltage: 9.0 V at +68 °F (+20 °C) and 10.4 V at +131 °F (+55 °C)
- Permissible maximum values acc. to certificate of conformity:
  - Ui: 35 V
  - li: 0.9 A
  - Pi: 1.1 W
  - T-amb. max.: +131 °F (+55 °C)

Note:
The valve is intended for operation on 24 VDC outputs via the intermediate switching of a corresponding intrinsically-safe operating resource (isolating module or barrier). If required, request the "Recommended Barrier and Isolating Module" data sheet.
### Dimensions [mm]

![Dimensions Diagram]

### Ordering chart for valves (other versions upon request)

<table>
<thead>
<tr>
<th>Circuit function</th>
<th>Orifice [mm]</th>
<th>QNn value air [l/min]</th>
<th>Cv</th>
<th>Pressure range [PSI]</th>
<th>Material for control air bush</th>
<th>Seal material</th>
<th>Material for control air bush</th>
<th>Body material for pilot valve</th>
<th>Item no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H 5/2–way valve</td>
<td>6.0</td>
<td>900</td>
<td>1.3</td>
<td>29 – 116</td>
<td>Stainless steel</td>
<td>NBR and PUR</td>
<td>303 St. st. (1.4305)</td>
<td>166 252 C</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>166 253 D</td>
<td></td>
<td>303 St. st. (1.4305)</td>
<td>Brass, nickel plated</td>
<td></td>
</tr>
</tbody>
</table>

In the stainless steel version, the supplied fixing screws are also from stainless steel.

The Type 6519 NAMUR I.S. valves are delivered ex-works in the 5/2–way circuit function with two adapter plates. They can be converted to the 3/2–way function by changing the plate.

### Ordering chart for accessories

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Item no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless steel cap nut for additional protection of the exhaust air channel from damp penetration</td>
<td>649 554</td>
</tr>
<tr>
<td>Cable plug Type 2508 acc. to DIN 43650 with blue compression gland nut</td>
<td>438 574</td>
</tr>
</tbody>
</table>

In case of special application conditions, please consult for advice. We reserve the right to make technical changes without notice.

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