COAXIAL VALVES

ASCO
JOUCOMATIC
COAXIAL TECHNOLOGY

For industrial applications where:
• high pressure, high viscosity, abrasive or aggressive fluids/gases are used
• space is limited

the coaxial valve design is the solution for 2- or 3-way compact valves with high flow and low pressure drop characteristics.

operating principle 2-way valve

operating principle 3-way valve

The tube movement can be achieved with an electromagnetic or a pneumatic actuator. In both cases, the valves are direct operated.

Solenoid coaxial valves

For an easy AC/DC electrical control
2/2, 3/2, normally closed, normally open versions
Brass, stainless steel executions
Threaded connections G 3/8” to G 1”
Mounting brackets
Pressure operated coaxial valves

Namur interface
2/2, 3/2, normally closed, normally open versions
Brass, stainless steel executions
Threaded connections G 3/8” to G 1”
Magneto-resistive detector
Mounting brackets

**Bi-directional capability:**
The pressure operated coaxial valve can be used on both sides with 40 bar differential pressure if it is equipped with a 5/2 spool valve. The pilot pressure is applied to close and to open the valve.

ASCO/JOUCOMATIC’s complete solution:
coaxial valve and NAMUR spool valve

A wide range of Namur valves is available:
• 3/2, 5/2 monostable, bistable functions
• Aluminium, brass, stainless steel executions
• Basic to ultra low power version

All the exhaust ports are pipable and the “non breathing” design provides environment and solenoid valve internal part protection.

With the 3/2 NAMUR version, the spring-return chamber “breathes” through the solenoid valve, isolating it from the outside atmosphere.

Typical applications: industrial furnaces, ceramic industry, lubrication circuits, machine-tools, pumps equipment ...
## TECHNICAL CHARACTERISTICS

### Solenoid and pressure operated coaxial valves

<table>
<thead>
<tr>
<th>Function</th>
<th>2/2, 3/2 NC, NO</th>
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<tbody>
<tr>
<td>Body material</td>
<td>brass or stainless steel (for 3/2 version, only brass execution)</td>
</tr>
<tr>
<td>Connection</td>
<td>G 3/8”, G1/2”, G3/4”, G1”</td>
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<tr>
<td>Kv (m3/h)</td>
<td>2.2, 5.2, 7.5, 12.2</td>
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<tr>
<td>Pressure</td>
<td>10⁴ mbar to 40 bar</td>
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<tr>
<td>Back pressure</td>
<td>12 bar (40 bar for a pressure operated coaxial valve with 5/2 pilot valve)</td>
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<td>Maximum viscosity</td>
<td>500 cSt (mm²/s)</td>
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<td>Fluid temperature range</td>
<td>-20°C to +100°C</td>
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<tr>
<td>Ambient temperature</td>
<td>-20°C to +60°C</td>
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### Solenoid coaxial valves

- Coil: insulation class H - IP 65 protection
- Standard voltages: 24 V DC, 115-230 V 50/60 Hz
- Nominal power: 35 to 69 W

### Pressure operated coaxial valves

- Pilot fluids: filtered air or oil, pressure 4 to 8 bar