MIXED threaded valves G1/8 - G 1/4 - G1/2
- Mixed commutation system (spool - poppet)
- High flow rate
- Quick response time
- High cycles
- Control: manual, mechanical, pneumatic, electric
- Modular sub-bases

**TECHNICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Property</th>
<th>G1/8</th>
<th>G1/4</th>
<th>G1/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient temperature</td>
<td>-10</td>
<td>+45</td>
<td></td>
</tr>
<tr>
<td>Fluid temperature</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluid</td>
<td>filtered air 50 μm, lubricated or not</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commutation system</td>
<td>poppet mixed system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ways/Positions</td>
<td>5/2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure</td>
<td>10 bar max</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>pneumatic, electric, mechanical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return</td>
<td>pneumomechanical spring, pneumatic, electric</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connections</td>
<td>G1/8</td>
<td>G1/4</td>
<td>G1/2</td>
</tr>
<tr>
<td>Nominal Ø (mm)</td>
<td>6</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Nominal flow rate (NL/min)</td>
<td>1080</td>
<td>1600</td>
<td>4600</td>
</tr>
</tbody>
</table>

**CONSTRUCTIVE CHARACTERISTICS**

- Valve body: G1/8 - G1/4 = zamak
- G1/2 = die-cast aluminium
- Seals: nitrile rubber, polyurethane
- Actuators: technopolymer
- Spool: aluminium

**ELECTRIC CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Property</th>
<th>G1/8</th>
<th>G1/4</th>
<th>G1/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electropilot</td>
<td>U1</td>
<td>U2</td>
<td></td>
</tr>
<tr>
<td>Coil</td>
<td>DA</td>
<td>DB</td>
<td></td>
</tr>
<tr>
<td>Power consumption</td>
<td>3.5 W (DC) - 5 VA (AC)</td>
<td>11 W (DC) - 10 VA (AC)</td>
<td></td>
</tr>
<tr>
<td>Connector</td>
<td>AM-5110</td>
<td>AM-5111</td>
<td></td>
</tr>
<tr>
<td>Voltage</td>
<td>12 V DC - 24 V DC - 24 V AC - 110 V AC - 230 V AC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual override</td>
<td>with 2 position screw</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Flow rate characteristics**

**G1/8**

Flow rate characteristics

**G1/4**

Flow rate characteristics

**G1/2**

Flow rate characteristics

P = Working pressure
PA = Supply pressure
Qn = Flow rate
Indirect mechanical control for use with pneumatic, mechanical and manual actuators

**Manual Actuators**

- **Recessed button**
  - BLACK: AI-3511
  - RED: AI-3512
  - GREEN: AI-3513

- **Head button**
  - RED: AI-3514
  - BLACK: AI-3515
  - RED: AI-3516

- **Button**
  - GREEN: AI-3517
  - RED: AI-3518
  - BLACK: AI-3519

- **Rotating selector**
  - BLACK: AI-3520
  - BLACK: AI-3521

- **Rotating lever selector**
  - BLACK: AI-3522
  - BLACK: AI-3523

- **Lever operator**
  - BLACK: AI-3524

- **Omni-directional operator**
  - BLACK: AI-3525

- **Push-pull operator**
  - BLACK: AI-3526

**Pneumatic and Mechanical Actuators**

- **Pneumatic actuator**
  - AI-3550

- **Amplified pneumatic actuator**
  - AI-3551

- **Roller operator 1 position**
  - AI-3560

- **Ball-push operator 1 position**
  - AI-3562

- **Operator with omni-directional antenna 1 position**
  - AI-3563

- **Roller lever operator 1 position**
  - AI-3570

- **Articulated roller lever operator 1 position**
  - AI-3571

- **Key operator 1 position**
  - AI-3572

For actuator dimensions refer to section “Accessories > Actuators and buttons”
Indirect control
for panel mounting actuators Ø 22

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Connection</th>
<th>Control</th>
<th>Return</th>
<th>Pressure</th>
<th>Weight</th>
<th>Part no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/2</td>
<td>G1/8</td>
<td>ball pushrod</td>
<td>pneumomechanical spring</td>
<td>1,8÷10 bar</td>
<td>0,28</td>
<td>AC-7013</td>
</tr>
<tr>
<td>5/2</td>
<td>G1/4</td>
<td>ball pushrod</td>
<td>pneumatic amplified</td>
<td>1÷10 bar</td>
<td>0,29</td>
<td>AC-8013P</td>
</tr>
<tr>
<td>5/2</td>
<td>G1/2</td>
<td>ball pushrod</td>
<td>pneumatic amplified</td>
<td>1÷10 bar</td>
<td>0,28</td>
<td>AC-9013P</td>
</tr>
</tbody>
</table>

MANUAL ACTUATORS

- **Recessed button**
  - BLACK: AI-3511
  - RED: AI-3512
  - GREEN: AI-3513

- **Head button**
  - RED: AI-3514
  - BLACK: AI-3516

- **Button**
  - GREEN: AI-3515
  - RED: AI-3517
  - BLACK: AI-3519

- **Rotating selector**
  - BLACK: AI-3520
  - BLACK: AI-3521

- **Rotating lever selector**
  - BLACK: AI-3522
  - BLACK: AI-3523

- **Lever operator**
  - BLACK: AI-3524

- **Omni-directional operator**
  - BLACK: AI-3525

- **Push-pull operator**
  - BLACK: AI-3526

For actuator dimensions refer to section “Accessories > Actuators and buttons”
Single/double pneumatic impulse

### SINGLE PNEUMATIC IMPULSE

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Connection</th>
<th>Control</th>
<th>Return</th>
<th>Pressure</th>
<th>Times (ms)</th>
<th>Weight</th>
<th>Part no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/2</td>
<td>G1/8</td>
<td>pneumatic amplified</td>
<td>pneumomechanical</td>
<td>1,8-10</td>
<td>8</td>
<td>10</td>
<td>0,22</td>
</tr>
<tr>
<td></td>
<td>G1/4</td>
<td>pneumatic amplified</td>
<td>pneumomechanical</td>
<td>2,3-10</td>
<td>10</td>
<td>10</td>
<td>0,23</td>
</tr>
<tr>
<td></td>
<td>G1/2</td>
<td>pneumatic amplified</td>
<td>pneumomechanical</td>
<td>2-10</td>
<td>10</td>
<td>10</td>
<td>0,76</td>
</tr>
</tbody>
</table>

### DOUBLE PNEUMATIC IMPULSE

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Connection</th>
<th>Control</th>
<th>Return</th>
<th>Pressure</th>
<th>Times (ms)</th>
<th>Weight</th>
<th>Part no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/2</td>
<td>G1/8</td>
<td>pneumatic amplified</td>
<td>pneumatic amplified</td>
<td>1-10</td>
<td>5</td>
<td>10</td>
<td>0,23</td>
</tr>
<tr>
<td></td>
<td>G1/4</td>
<td>pneumatic amplified</td>
<td>pneumatic amplified</td>
<td>0,8-10</td>
<td>6</td>
<td>6</td>
<td>0,21</td>
</tr>
<tr>
<td></td>
<td>G1/2</td>
<td>pneumatic amplified</td>
<td>pneumatic amplified</td>
<td>0,8-10</td>
<td>8</td>
<td>8</td>
<td>0,77</td>
</tr>
</tbody>
</table>

### Single pneumatic impulse

![Diagram of single pneumatic impulse]

- 1 = Supply port
- 2 - 4 = Use
- 3 - 5 = Exhaust
- 14 = Control
- 12 = Return

### Double pneumatic impulse

![Diagram of double pneumatic impulse]

- 1 = Supply port
- 2 - 4 = Use
- 3 - 5 = Exhaust
- 14 = Control
- 12 = Return
**MIXED threaded valves G1/8 - G 1/4 - G1/2**

### Single/double electric impulse

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Connection</th>
<th>Control</th>
<th>Return</th>
<th>Pressure (bar)</th>
<th>Times (ms)</th>
<th>Weight (Kg)</th>
<th>Part no.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SINGLE ELECTRIC IMPULSE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S/2</td>
<td>G1/8</td>
<td>electric amplified</td>
<td>pneumomechanical</td>
<td>1,8-10</td>
<td>18 20</td>
<td>0,27</td>
<td>AC-7500</td>
</tr>
<tr>
<td></td>
<td>G1/4</td>
<td></td>
<td></td>
<td>2,3-10</td>
<td>22 22</td>
<td>0,28</td>
<td>AC-8500</td>
</tr>
<tr>
<td></td>
<td>G1/2</td>
<td></td>
<td></td>
<td>2-10</td>
<td>23 30</td>
<td>1,1</td>
<td>AC-9500</td>
</tr>
<tr>
<td><strong>DOUBLE ELECTRIC IMPULSE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S/2</td>
<td>G1/8</td>
<td>electric amplified</td>
<td>electric amplified</td>
<td>1-10</td>
<td>14 14</td>
<td>0,33</td>
<td>AC-7520</td>
</tr>
<tr>
<td></td>
<td>G1/4</td>
<td></td>
<td></td>
<td>0,8-10</td>
<td>14 14</td>
<td>0,31</td>
<td>AC-8520</td>
</tr>
<tr>
<td></td>
<td>G1/2</td>
<td></td>
<td></td>
<td>0,8-10</td>
<td>16 16</td>
<td>1,1</td>
<td>AC-9520</td>
</tr>
</tbody>
</table>

**Single electric impulse**

- Manual override
  - 1 = Supply port
  - 2 - 4 = Use
  - 3 - 5 = Exhaust
  - 14 = Control
  - 12 = Return

**Double electric impulse**

- Manual override
  - 1 = Supply port
  - 2 - 4 = Use
  - 3 - 5 = Exhaust
  - 14 = Control
  - 12 = Return

For technical data of coils, refer to section "Accessories>Coils"
For external servoassisted pilot, use AM - 5148 plates (refer to next pages)
Electrovalves are supplied without coil, connector and locking ring
MIXED threaded valves G1/8 - G 1/4 - G1/2

Modular sub-base G1/8

Manual override
1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

AC-7900
Sub-base with connections G1/8
weight: 0.15 Kg

AC-7905
Inlet plate MIXED system 5/2 - G1/8
weight: 0.06 Kg

Modular sub-base G1/4

Manual override
1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

AC-8900
Sub-base with threaded connections G1/4
Screws are supplied separately
weight: 0.2 Kg