P74A, P74B, P74C - EXELON® Modular System
Air or Solenoid Operated Directional Control Valves

> Port size: Unthreaded
> Customised poppets
> High flow spring return
> Ports, 1/2" basic size
> Excelon design allows
> in-line installation
> or modular installation
> with other Excelon
> products
> Solenoid or air pilot
> actuated

**Technical features**

**Medium:**
Compressed air only

**Operating pressure:**
3 ... 10 bar (44 ... 145 psi) solenoid actuated
3 ... 17 bar (44 ... 250 psi) pilot actuated

**Port size:**
Unthreaded

**Pilot port:**
G1/4 with ISO G main ports
1/4 PTF with PTF main ports

**Exhaust port:**
G1/2 with ISO G main ports
1/2 PTF with PTF main ports

**Flow factor:**

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NC</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/2</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>3/2</td>
<td>B</td>
<td>A</td>
</tr>
</tbody>
</table>

**Flow direction:**

<table>
<thead>
<tr>
<th>2/2</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Ambient/Media temperature:**

- Solenoid operated:
  - Depending on solenoid rating
  - -20° ... +50°C (+4° ... +122°F)
  - Pilot operated
  - -20° ... +80°C (+4° ... +176°F)

- Version with gauge:
  - -20° ... +65°C (+4° ... +149°F)

**Materials:**

- Body: Zinc
- Elastomers: Synthetic materials
- Internal components: Aluminium

**Electrical details for solenoid operators**

- **Voltage tolerance:** ± 10%
- **Rating:** 100% continuous duty
- **Inlet orifice:** 1.0 mm
- **Electrical connection:** Industrial Standard, 22 mm
- **Solenoid coil mounting:** Four positions x 90°
- **Protection class:** IP 65 (with sealed plug)

**Technical data - standard models**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Size</th>
<th>Actuation/return</th>
<th>Operating pressure (bar)</th>
<th>Pilot pressure (bar)</th>
<th>Voltage</th>
<th>Gewicht (kg)</th>
<th>Drawing No.</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>1/2</td>
<td>Basic</td>
<td>Air pilot/Spring</td>
<td>3 ... 17</td>
<td>3 ... 17</td>
<td>—</td>
<td>0.54</td>
<td>1</td>
<td>P74A-NGA-NNN</td>
</tr>
<tr>
<td>10</td>
<td>1/2</td>
<td>Basic</td>
<td>Air pilot/Spring</td>
<td>3 ... 17</td>
<td>3 ... 17</td>
<td>—</td>
<td>0.54</td>
<td>1</td>
<td>P74B-NGA-NNN</td>
</tr>
<tr>
<td>12</td>
<td>1/2</td>
<td>Basic</td>
<td>Air pilot/Spring</td>
<td>3 ... 17</td>
<td>3 ... 17</td>
<td>—</td>
<td>0.54</td>
<td>2</td>
<td>P74C-NGA-NNN</td>
</tr>
<tr>
<td>12</td>
<td>1/2</td>
<td>Basic</td>
<td>Solenoid/Spring</td>
<td>3 ... 10</td>
<td>—</td>
<td>24 V d.c.</td>
<td>0.74</td>
<td>3</td>
<td>P74A-NNC-PFA *2</td>
</tr>
<tr>
<td>12</td>
<td>1/2</td>
<td>Basic</td>
<td>Solenoid/Spring</td>
<td>3 ... 10</td>
<td>—</td>
<td>24 V d.c.</td>
<td>0.74</td>
<td>4</td>
<td>P74C-NGC-PFA *2</td>
</tr>
</tbody>
</table>

*1) Unthreaded

*2) To select other solenoid type and coil voltage refer to option selector on page 2
Option selector

<table>
<thead>
<tr>
<th>Function</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/2 NC</td>
<td>A</td>
</tr>
<tr>
<td>2/2 NO</td>
<td>B</td>
</tr>
<tr>
<td>3/2 NC</td>
<td>C</td>
</tr>
<tr>
<td>Exhaust port only</td>
<td>A</td>
</tr>
<tr>
<td>PTF</td>
<td></td>
</tr>
<tr>
<td>ISO G parallel (standard)</td>
<td></td>
</tr>
<tr>
<td>Operator</td>
<td>Substitute</td>
</tr>
<tr>
<td>Air pilot *1)</td>
<td>A</td>
</tr>
<tr>
<td>22 mm miniature solenoid</td>
<td>C</td>
</tr>
</tbody>
</table>

*1) To order air pilot models also substitute ‘NNN’ at digits 8, 9 and 10 e.g. P74A-NGA-NNN.

P74★-N★★★★★

Connector Substitute
- With: A
- Without: N

Coil voltage Substitute
- 24 V d.c.: F
- 12 V d.c.: E
- 220/240 V a.c.: B
- 110/120 V a.c.: A
- No coil: Z
- No solenoid: N

Manual override Substitute
- Push only, spring return: P
- Without: N

Voltage codes and spare coils

22 mm coil for connector interface acc. to industrial standard

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Power</th>
<th>Model</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 V d.c.</td>
<td>2 W</td>
<td>QM/48/12J/21</td>
<td>12J</td>
</tr>
<tr>
<td>24 V d.c.</td>
<td>2 W</td>
<td>QM/48/13J/21</td>
<td>13J</td>
</tr>
<tr>
<td>110/120 V 50/60 Hz</td>
<td>2.5 W</td>
<td>QM/48/18J/21</td>
<td>18J</td>
</tr>
<tr>
<td>220/240 V 50/60 Hz</td>
<td>5.0 W</td>
<td>QM/48/19J/21</td>
<td>19J</td>
</tr>
</tbody>
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Connector plugs

Industrial plugs 22 mm 2-pole + PE

Voltage codes and spare coils Connector plugs

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<td>220/240 V 50/60 Hz</td>
<td>5.0 W</td>
<td>QM/48/19J/21</td>
<td>19J</td>
</tr>
</tbody>
</table>

Accessories

Wall mounting bracket
- Quikclamp®
- Quikclamp with wall bracket®
- Quikmount pipe adaptor *1)
- Porting block with three alternative 1/4" ports
- 2/2 Shut-off valves (for full technical specification see datasheet 8.200.600)
- 3/2 Shut-off valves (for full technical specification see datasheet 8.200.600)

Pressure switch

Porting block for pressure switch *1)
- Pressure switch (0.5 ... 8 bar)
- Connector DIN EN 175301-803 Form A

Silencer

Service kits

Service kit
- 53474-37
- 53474-40 (P74C)
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Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure. System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided. System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

Warning