

EXCELON® 74
Solenoid Operated Directional Control Valves
Unthreaded Ports, 1/2" Basic Size

- **Modular installation only**
- **High-flow, spring return valves**
- **2-port/2-position valves available as normally closed or normally open valves**
- **3-port/2-position valves available only as normally closed valves.**
- **Cushioned poppets for long life**


Technical Data

Fluid: Filtered and lubricated compressed air
 Main valve inlet pressure range: 2 to 10 bar (30 to 150 psig)
 Temperature range*: -30° to +55°C (-20° to +130°F)
 * Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Average flow factor (Cv) of 2-port valves: 4,0
 Average flow factor (Cv) of 3-port valves:
 In-out ports: 3,2
 Out-exhaust ports: 5,3

Response times of 3 port/2 position valve (elapsed time from solenoid energized to an increase in the main valve pressure):
 Standard operator: 11 ms at 6,3 bar (90 psig) inlet pressure
 Low wattage operator: 13,5 ms at 6,3 bar (90 psig) inlet pressure

Exhaust port on 3-port/2-position valves: 1/2 PTF, ISO G, or ISO Rc

Solenoid operator specifications:

Voltage and power requirements:

Voltage	Standard Coil	Low Watt Coil
6Vdc	—	2W
12Vdc	7,5W	2W
24Vdc	7,5W	3,5W
24V 50/60Hz	7,5W	3,5W
110/120V 50/60Hz	7,5W	3,5W
220/240V 50/60Hz	7,5W	—

Duty: Continuous at 90% to 110% of rated voltage.

Coil Type: Molded with three pin plug-in connector.

Enclosure Classification: NEMA 1, NEMA 4 and IP 65.

Connector Plug: Cable grip for cables 6 to 8 mm (1/4" to 5/16") diameter. Electrical connectors conform to *Industry Standard Form B for Three-Pin Electrical Plug Connectors, 11 mm spacing.*

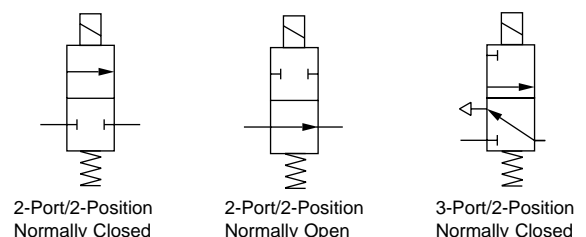
Override: Manual, locking or non-locking

Materials:

Body: Zinc
 Pistons, poppets: Aluminum
 Elastomers: Nitrile
 Operator housing: PPS plastic
 Operator base: Aluminum
 Plunger, spring: Stainless steel

Ordering Information

See *Ordering Information* on the following pages.

ISO Symbols




P74 Solenoid Operated Valves

Ordering Information. Models listed include ISO G exhaust port threads, non-locking override, 110/120Vac standard coil,

Installation Type	2 Port/2 Position Normally Closed	2 Port/2 Position Normally Open	3 Port/2 Position Normally Closed	Weight kg (lb)
Modular*	P74A-NGC-PJA	P74B-NGC-PJA	P74C-NGC-PJA	0,74 (1.63)

* Valve ports are unthreaded. To install in air line use Quikclamp™ and Quikclamp pipe adapters or connect to other Excelon 74 units.

Alternative Models

Type	Substitute	Connector	Substitute
2-port/2-position, NC	A	Cable grip	A
2-port/2-position, NO	B	Cable grip with indicator lights and surge protection. Use only with A, F, J and P coils.	B
3-port/2-position, NC	C	No connector	N

Main Port Threads	Substitute
No threaded ports	N


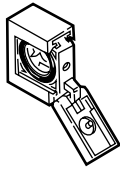
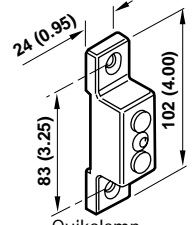
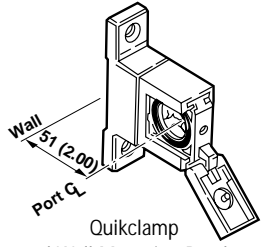
Exhaust Port Threads	Substitute
PTF	A
ISO Rc	B
ISO G	G

Operator	Substitute
Solenoid, internal air pilot	C

Solenoid Operator Override	Substitute
Non-locking, push button	P
Locking, screwdriver slot	S
No solenoid operator	N

Solenoid Operator	Substitute	
Coil Voltage	Standard	Low Watt
6 Vdc	—	D
12 Vdc	Q	E
24 Vdc	P	F
24 Vac	L	C
110/120 Vac	J	A
220/240 Vac	K	—
No coil	Y	Z
No solenoid operator	N	N

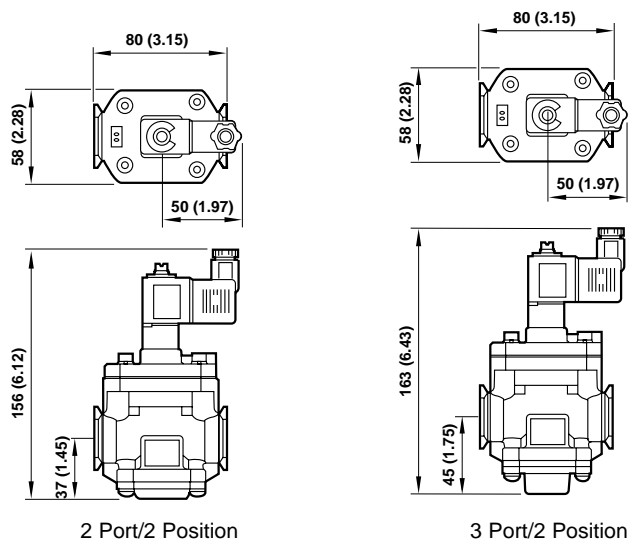
Accessories

 <p>Quikmount Pipe Adapters (each kit contains one adapter) **</p> <table border="1"> <thead> <tr> <th>Size</th> <th>PTF Threads</th> <th>ISO Rc Threads</th> <th>ISO G Threads</th> </tr> </thead> <tbody> <tr> <td>1/4"</td> <td>4315-01</td> <td>4315-05</td> <td>4315-09</td> </tr> <tr> <td>3/8"</td> <td>4315-01</td> <td>4315-06</td> <td>4315-10</td> </tr> <tr> <td>1/2"</td> <td>4315-03</td> <td>4315-07</td> <td>4315-11</td> </tr> <tr> <td>3/4"</td> <td>4315-04</td> <td>4315-08</td> <td>4315-12</td> </tr> </tbody> </table>	Size	PTF Threads	ISO Rc Threads	ISO G Threads	1/4"	4315-01	4315-05	4315-09	3/8"	4315-01	4315-06	4315-10	1/2"	4315-03	4315-07	4315-11	3/4"	4315-04	4315-08	4315-12	 <p>Quikclamp †</p> <p>4314-51</p>	 <p>Quikclamp Wall Mounting Bracket</p> <p>4313-50</p>	 <p>Quikclamp and Wall Mounting Bracket</p> <p>4314-52</p>
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** Each pipe adapter adds 18 mm (0.71") to the overall length of a valve.

† Each Quikclamp adds 13,6 mm (0.54") to the overall length of a valve.

Dimensions mm (inches)



Service Kit

Item	Type	Part Number
Service kit	Seal & Gasket	53474-37
Quikclamp service kit	2 o-rings	4384-770

Service kit includes all o-rings, head gasket and seals.

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where *pressures* and *temperatures* can exceed those listed under 'Technical Data'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult Norgren.

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.

Water vapor will pass through these units and will condense into liquid if air temperature drops in the downstream system. Install an air dryer if water condensation could have a detrimental effect on the application.