

P74A, P74B. P74C - EXCELON[®] Modular System Air or Solenoid Operated Directional Control Valves

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



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: 2/2 Cv = 4.0 3/2 IN » OUT Cv = 3,2 3/2 OUT » EXHAUST Cv = 5,3 Flow direction: 2/2 NC: A » B 2/2 NO: A » B 3/2: B » A

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) Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°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

Symbol	Port size *1)	Size	Actuation/ return	Operating pressure (bar)	Pilot pressure (bar)	Voltage	Gewicht (kg)	Drawing No.	Model
12 (B) ₁ 2 10 -⊳-⊥⊥⊥	1/2"	Basic	Air pilot/Spring	3 17	3 17	_	0,54	1	P74A-NGA-NNN
1'(A) 12 (B),2 10	1/2"	Basic	Air pilot/Spring	3 17	3 17	—	0,54	1	P74B-NGA-NNN
12 (A) ₂ 10	1/2"	Basic	Air pilot/Spring	3 17	3 17	_	0,54	2	P74C-NGA-NNN
-▷- <u> ⊥-, </u> , W, (B) 1 '3 12 (B),2 10	1/2"	Basic	Solenoid/Spring	3 10	_	24 V d.c.	0,74	3	P74A-NNC-PFA *2)
1(A)	1/2"	Basic	Solenoid/Spring	3 10	_	24 V d.c.	0,74	4	P74C-NGC-PFA *2)
(B) 1 3									

*1) Unthreaded

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





Option selector

e.g. P74A-NGA-NNN.

Option selector		P74★-N★★
Function	Substitute	<──────────────────────────────
2/2 NC	Α	
2/2 NO	В	
3/2 NC	С	
Exhaust port only	Substitute	~
PTF	Α	
ISO G parallel (standard)	G	
Operator	Substitute	<
Air pilot *1)	Α	
22 mm miniature solenoid	С	

		Connector	Substitute
		With	Α
		Without	Ν
		Coil voltage	Substitute
		24 V d.c.	F
		12 V d.c.	E
		220/240 V a.c.	В
		110/120 V a.c.	Α
		No coil	Z
		No solenoid	Ν
L		Manual override	Substitute
		Push only, spring return	Р
		Without	Ν

Voltage codes and spare coils

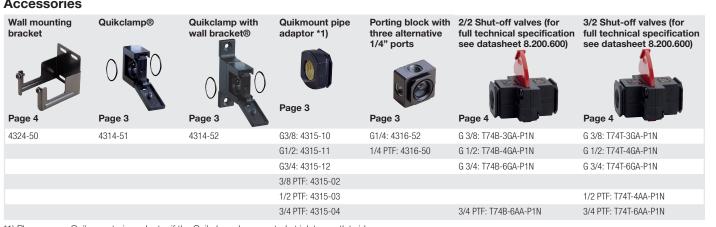
22 mm coil for connector interface acc. to industrial standard								
	Voltage	Power Inrush/Hold	Model	Code				
	12 V d.c.	2 W	QM/48/12J/21	12J				
	24 V d.c	2 W	QM/48/13J/21	13J				
	110/120 V 50/60 Hz	2,5 VA	QM/48/18J/21	18J				
· · · · · · · · · · · · · · · · · · ·	220/240 V 50/60 Hz	5,0 VA	QM/48/19J/21	19J				

Connector plugs



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Accessories



*1) Please use a Quikmount pipe adaptor if the Quikclamp be mounted at inlet or outlet side.

Pressure switch



Service kit

53474-37 53474-40 (P74C)

Service kits

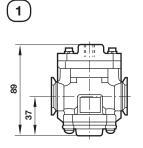


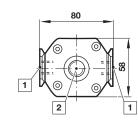
P74A, P74B. P74C - EXCELON® Modular System **Air or Solenoid Operated Directional Control Valves**

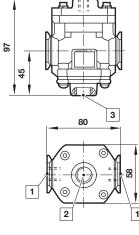
Dimensions in mm Projection/First angle





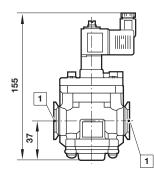






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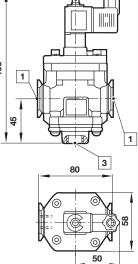
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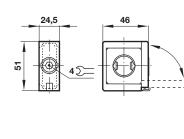
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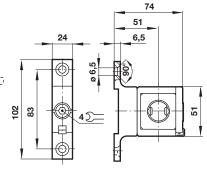


- 1 Unthreaded main port 1/2" 2 Pilot port 1/4"
- 3 Exhaust port 1/2"

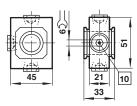
Accessories Quikclamp®



Quikclamp® with wall bracket

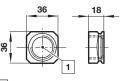


Porting block



10 Ports 1/4" ISO G/PTF plugged

Pipe adapter



1 Main ports 3/8", 1/2" or 3/4" ISO G/PTF

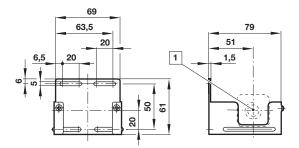
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Dimensions in mm Projection/First angle

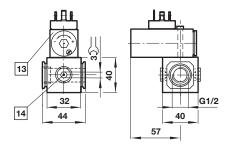
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Wall mounting bracket



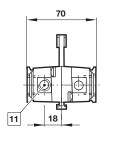
1 Main ports

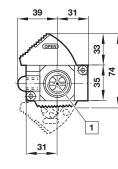
Porting block for pressure switch



Pressure switch is not in scope of deliveryAlternative G1/4 ports plugged

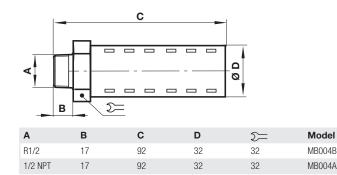
Shut-off valves





Main ports 3/8", 1/2" or 3/4" ISO G/PTF
Exhaust port Rc1/8 at 3/2 valve only

Silencer



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 features/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 IMI Precision Engineering, Norgren Inc. 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.