

P74A, P74B, P74C - EXCELON® Modular System; Air or solenoid actuated directional control valves

- Port size: Unthreaded Ports, 1/2" basic size
- Solenoid or air pilot actuated
- Excelon design allows in-line installation or modular installation with other Excelon products
- 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
	1/2"	Basic	Air pilot/Spring	3 ... 17	3 ... 17	—	0,54	1	P74A-NGA-NNN
	1/2"	Basic	Air pilot/Spring	3 ... 17	3 ... 17	—	0,54	1	P74B-NGA-NNN
	1/2"	Basic	Air pilot/Spring	3 ... 17	3 ... 17	—	0,54	2	P74C-NGA-NNN
	1/2"	Basic	Solenoid/Spring	3 ... 10	—	24 V d.c.	0,74	3	P74A-NNC-PFA *2)
	1/2"	Basic	Solenoid/Spring	3 ... 10	—	24 V d.c.	0,74	4	P74C-NGC-PFA *2)

*1) Unthreaded

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

Option selector


Function	Substitute
2/2 NC	A
2/2 NO	B
3/2 NC	C
Exhaust port only	Substitute
PTF	A
ISO G parallel (standard)	G
Operator	Substitute
Air pilot *1)	A
22 mm miniature solenoid	C

*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
Voltage	Watts	Substitute
24 V d.c.	2 W	F
12 V d.c.	2 W	E
220/240 V a.c.	6/5,0 VA	B
110/120 V a.c.	4/2,5 VA	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				
	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	4/2,5 VA	QM/48/18J/21	18J
	220/240 V 50/60 Hz	6/5,0 VA	QM/48/19J/21	19J








Connector plugs

Industrial standard
22 mm 2-pole + PE






0657868000000000

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)
						
Page 4	Page 3	Page 3	Page 3	Page 3	Page 4	Page 4
4324-50	4314-51	4314-52	G3/8: 4315-10	G1/4: 4316-52	G 3/8: T74B-3GA-P1N	G 3/8: T74T-3GA-P1N
			G1/2: 4315-11	1/4 PTF: 4316-50	G 1/2: T74B-4GA-P1N	G 1/2: T74T-4GA-P1N
			G3/4: 4315-12		G 3/4: T74B-6GA-P1N	G 3/4: T74T-6GA-P1N
			3/8 PTF: 4315-02			
			1/2 PTF: 4315-03			1/2 PTF: T74T-4AA-P1N
			3/4 PTF: 4315-04		3/4 PTF: T74B-6AA-P1N	3/4 PTF: T74T-6AA-P1N

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

Pressure switch

Porting block for pressure switch *1)	Pressure switch (0,5 ... 8 bar)	Connector DIN EN 175301-803 Form A
		
Page 4		
0523110000000000	0881300000000000	0570110000000000

*1) Pressure switch is not in scope of delivery

Service kits

Service kit
53474-37
53474-40 (P74C)

Silencer



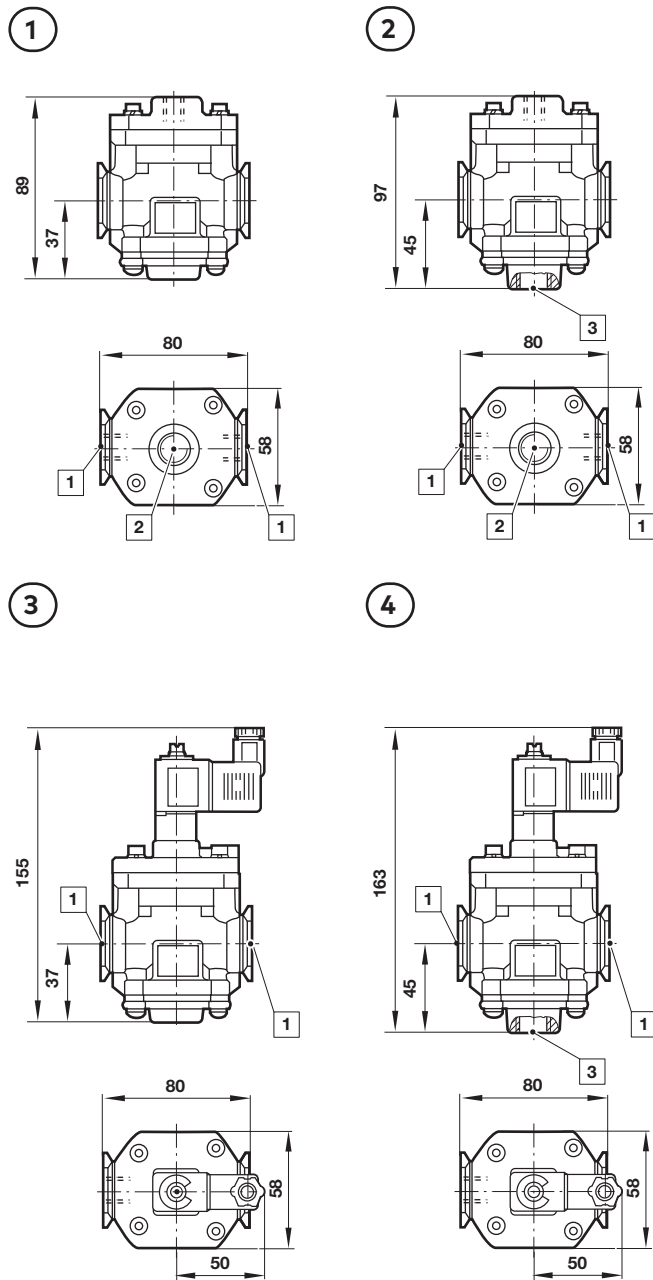
Page 4

R1/2: MB004B

1/2 NPT: MB004A

Drawings

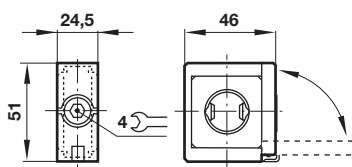
Dimensions in mm
Projection/First angle



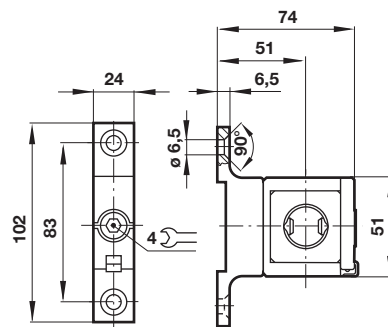
- 1 Unthreaded main port 1/2"
- 2 Pilot port 1/4"
- 3 Exhaust port 1/2"

Accessories

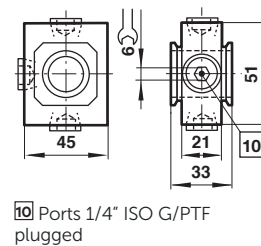
Quikclamp®



Quikclamp® with wall bracket

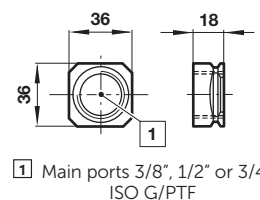


Porting block



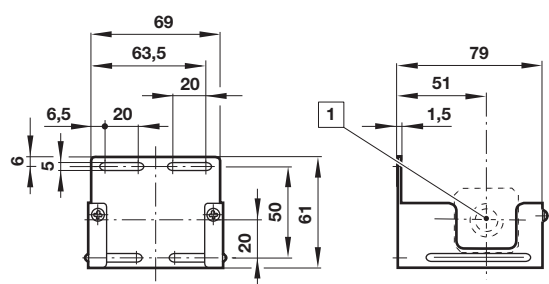
- 10 Ports 1/4" ISO G/PTF plugged

Pipe adapter



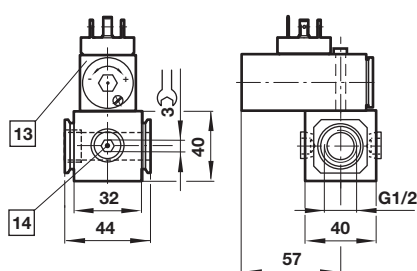
- 1 Main ports 3/8", 1/2" or 3/4" ISO G/PTF

Wall mounting bracket



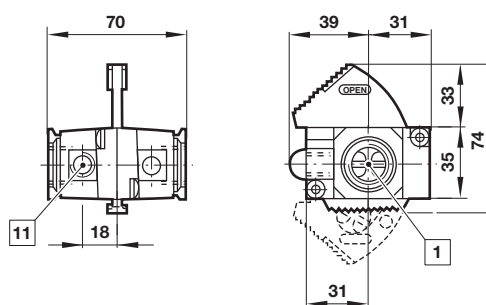
1 Main ports

Porting block for pressure switch



13 Pressure switch is not in scope of delivery
14 Alternative G1/4 ports plugged

Shut-off valves

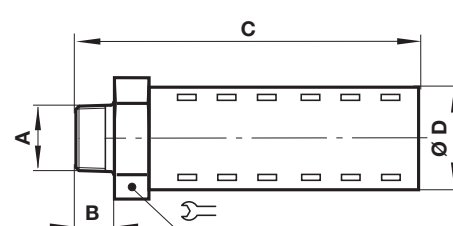


Dimensions in mm
Projection/First angle



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

Silencer



A	B	C	D		Model
R1/2	17	92	32	32	MB004B
1/2 NPT	17	92	32	32	MB004A

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 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.