

P72C - EXCELON® Modular System; 3/2

Air or solenoid actuated directional control valves



- > Port size: 1/4" or 3/8" (ISO G/NPT)
- > Solenoid or air pilot operated
- > Excelon design allows in-line installation or modular installation with other Excelon products
- > Customised poppets for long service life
- > 3/2 valves, normally closed
- > High flow



Technical features

Medium:

Compressed air only

Maximum pressure solenoid operated:

Dependant on solenoid rating [must not exceed 10 bar (150 psi)]

Maximum pressure pilot operated: 10 bar (150 psi)

Minimum operating pressure: 3 bar (44 psi)

Air Pilot Port:

M5 with ISO G main ports

10-32 UNF with PTF main ports

Exhaust Port:

Rc1/4 with ISO G main ports

1/4 PTF with PTF main ports

Average flow factor (Cv):

IN to OUT ports: 1,31

OUT to EXHAUST ports: 1,27

Ambient/Media temperature:

Solenoid operated: -20 ... +65°C (+4 ... +149°F)

Maximum temperature for solenoid operated valves is depending on the solenoid rating, but must not exceed +65°C (+149°F)

Pilot operated -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 alloy

Elastomers: Synthetic materials

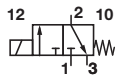
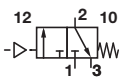
Filter discs: Sintered plastic

Internal components: Brass/steel

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	Size	Actuation/return	Voltage	Weight (kg)	Model
	G 1/4	Basic	Solenoid/spring	24 V d.c.	0,96	P72C-2GC-PFN *1)
	G 3/8		Solenoid/spring	24 V d.c.	0,93	P72C-3GC-PFN *1)
	G 1/4	Basic	Air/spring	-	0,84	P72C-2GA-NNN
	G 3/8		Air/spring	-	0,82	P72C-3GA-NNN

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

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



Option selector







Port size	Substitute
1/4"	2
3/8"	3
Thread size	Substitute
ISO G (standard)	G
PTF	A
Operator	Substitute
Air pilot *1)	A
22 mm miniature solenoid	C
CNOMO	L

P72C-★ ★ ★ - ★ ★ ★

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
Solenoid operator	Substitute	
With	P	
No solenoid	N	




*1) To order air pilot models also substitute 'NNN' at digits 8, 9 and 10 e.g. P72C-2GA-NNN.

Accessories

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 8.160.600)	3/2 Shut-off valves (for full technical specification see datasheet 8.160.600)
					
Page 3	Page 3	Page 3	Page 3	Page 3	Page 3
4214-51	4214-52	G1/4: 4215-08 G3/8: 4215-09 1/4 PTF: 4215-02 3/8 PTF: 4215-03	G1/4: 4216-52 1/4 PTF: 4216-50	G1/4: T72B-2GA-P1N G3/8: T72B-3GA-P1N 1/4 PTF: T72B-2AA-P1N 3/8 PTF: T72B-3AA-P1N	G1/4: T72T-2GA-P1N G3/8: T72T-3GA-P1N 1/4 PTF: T72T-2AA-P1N 3/8 PTF: T72T-3AA-P1N

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

Pressure switch

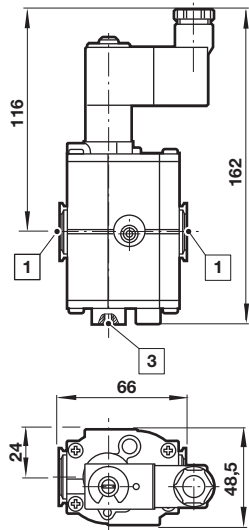
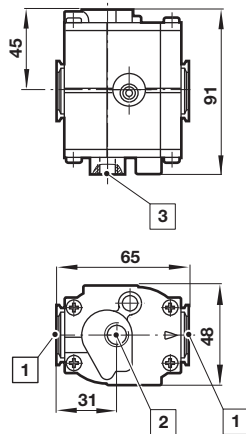
Porting block for pressure switch	Pressure switch (0,5 ... 8 bar)	Padlock (brass) with two keys *1)
		
0523109000000000	0881300000000000	0613633000000000

*1) for shut-off valves

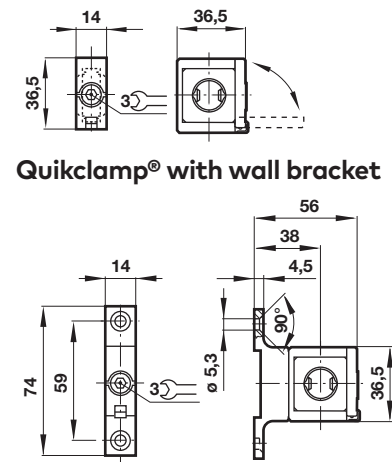
Padlock

Silencer

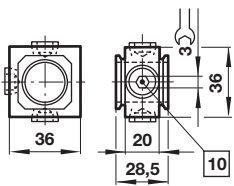
Page 3
R1/4: MB002B 1/4 PTF: MB002A

Drawings
Solenoid actuated

Air pilot actuated

Accessories
Quikclamp®

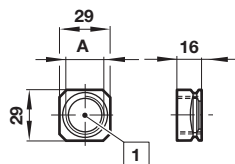
 Dimensions in mm
 Projection/First angle

Quikclamp® with wall bracket


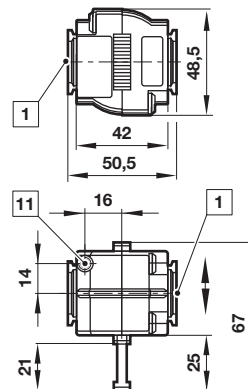
- 1 Main ports 1/4" or 3/8"
- 2 Pilot port
- 3 Exhaust port

Porting block


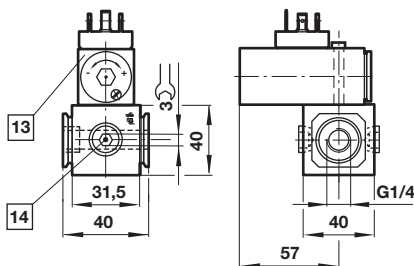
- 10 Ports (G1/4 or 1/4 NPT) plugged

Pipe adapter


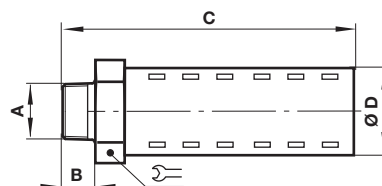
- 1 Main ports 1/4" or 3/8" ISO G/PTF

Shut-off valves


- 1 Main ports 1/4" or 3/8" ISO G/PTF
- 11 Exhaust port M5 at 3/2 valve only

Porting block for pressure switch


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

Silencer


A	B	C	D		Model
R1/4	17	92	32	32	MB002B
1/4 NPT	17	92	32	32	MB002A

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.

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.