

Industrial Automation

IMI Norgren

P72C - EXCELON® Modular System; 3/2 Air or solenoid actuated directional control valves

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



Technical features

Medium:

Compressed air only

Maximum pressure solenoid

Dependant on solenoid rating [must not exceed 10 bar (150 psi)]
Maximum pressure pilot operated:
10 bar (150 psi)
Minimum operating pressure:

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
12 2 10	G 1/4	Basic	Solenoid/spring	24 V d.c.	0,96	P72C-2GC-PFN *1)
1 3 W	G 3/8		Solenoid/spring	24 V d.c.	0,93	P72C-3GC-PFN *1)
12 ₁ 2 10	G 1/4	Basic	Air/spring	-	0,84	P72C-2GA-NNN
-D-113W	G 3/8		Air/spring	-	0,82	P72C-3GA-NNN

 $^{^{\}star}$ 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 P72C-***-** Port size Connector Substitute Substitute 1/4" 2 With Α 3/8* Without N 3 Thread size Voltage Substitute Substitute Watts ISO G (standard) G 24 V d.c. 2 W F PTF 12 V d.c. F 2 W Operator Substitute 220/240 V a.c. 6/5,0 VA **B** Air pilot *1) Α 110/120 V a.c 4/2,5 VA A С 22 mm miniature No coil solenoid No solenoid Ν CNOMO Solenoid Substitute operator *1)To order air pilot models also With Ρ substitute 'NNN' at digits 8, 9 and 10 e.g. P72C-2GA-NNN. No solenoid

Accessories



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



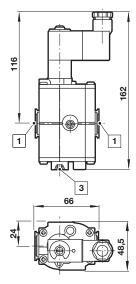


0881300000000000 0613633000000000 *1) for shut-off valves

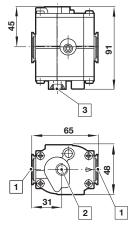




Drawings Solenoid actuated



Air pilot actuated



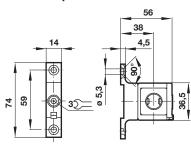
Accessories Quikclamp®

Dimensions in mm Projection/First angle





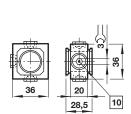
Quikclamp® with wall bracket



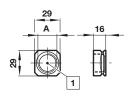


Pilot port Exhaust port

Porting block



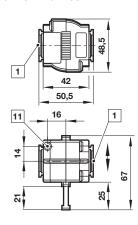
10 Ports (G1/4 or 1/4 NPT) plugged



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

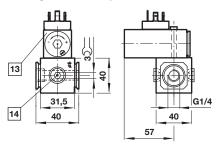
Shut-off valves

Main ports 1/4" or 3/8"



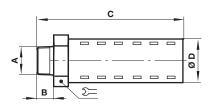
Main ports 1/4" or 3/8" ISO G/PTF Exhaust port M5 at 3/2 valve only

Porting block for pressure switch



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

Silencer



Α	В	С	D	$\Sigma =$	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 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.