

P74F - EXCELON® Modular System Soft Start/Dump Valves



- > **Port size: 3/8" ... 3/4"**
(ISO G/PTF)
- > **Assists machine designers in complying with the European Machineries Directive**
- > **Excelon design allows in-line installation or modular installation with other Excelon products**
- > **Can help existing machinery to comply with POWER (Provision and Use of Work Equipment Regulations)**
- > **Controlled increase of downstream pressure onstart up**
- > **High forward flow capacity**
- > **High flow dump facility**



Technical features

Medium:

Compressed air only

Operating pressure:

Solenoid actuated:

3 ... 10 bar (44 ... 145 psi)

Pilot actuated:

3 ... 17 bar (44 ... 250 psi)

Snap pressure:

Full flow when downstream pressure reaches 50 – 80% of inletpressure

Charge time:

For 2 litre downstream volume and 6,3 bar (90 psi) inlet pressure 0,2 sec. minimum
110 sec. maximum

Port size:

G3/8, G1/2, G3/4,
3/8 PTF 1/2 PTF , 3/8 PTF

Pilot port:

Rc1/4 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:

57 dm³/s

Operating pressure: 6,3 bar (91 psi) Δp: 0,5 bar (7 psi)

P1 » P2 = Cv 4,4; P2 » P3 = Cv 5,6

Standard compliances:

II 2G Ex h IIC T6 Gb
II 2D Ex h IIIC T85° Db

Ambient/Media temperature:

Solenoid actuated:

-20° ... +50°C (-4° ... +122°F)

Pilot actuated:

-20° ... +80°C (+4° ... +176°F)

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

Materials:

Body & intermediate body:

Aluminium

Elastomers: Synthetic materials

Filter discs: Sintered plastic

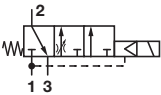
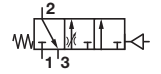
Internal components: Brass/steel

Top plate & exhaust bonnet: Zinc

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	Pilot port	Weight (kg)	Typ
	G3/8	—	Solenoid/spring	24 V d.c.	-	1,08	P74F-3GC-PFA *1)
	G1/2	Basic	Solenoid/spring	24 V d.c.	-	1,05	P74F-4GC-PFA *1)
	G3/4	—	Solenoid/spring	24 V d.c.	-	1,41	P74F-6GC-PFA *1)
	G3/8	—	Air/spring	-	M5	1,05	P74F-3GA-NNN
	G1/2	Basic	Air/spring	-	M5	1,02	P74F-4GA-NNN
	G3/4	—	Air/spring	-	M5	1,35	P74F-6GA-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

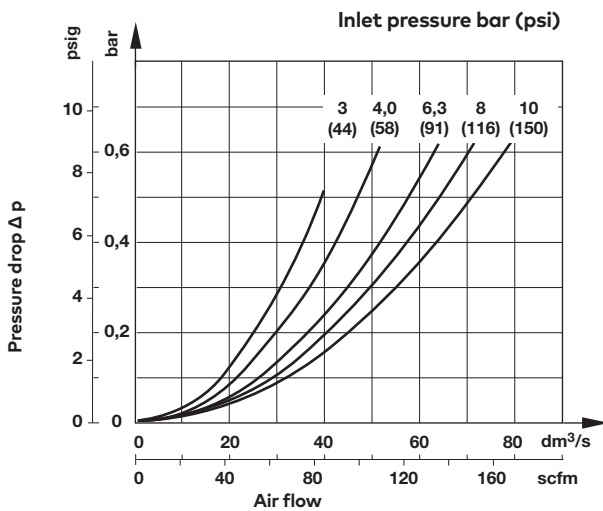
Port size	Substitute
3/8"	3
1/2"	4
3/4"	6
Thread size	Substitute
PTF	A
ISO G parallel (standard)	G
Operator	Substitute
Air pilot*1)	A
Air pilot with manual lockout slide* 1)	B
22 mm miniature solenoid	C
22 mm miniature solenoid with manual lockout slide	D
CNOMO solenoid	L
CNOMO solenoid with manual lockout slide	M

P74F-★ ★ ★ - ★ ★ ★

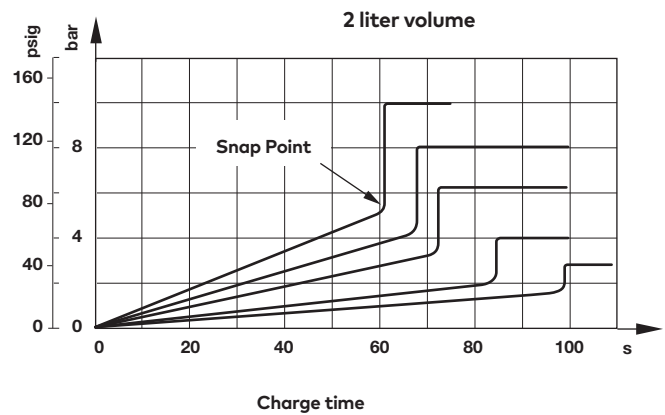
Connector	Substitute
With	A
Without	N
Coil voltage	Substitute
24 V d.c.	F
12 V d.c.	E
220/240 V a.c.	B
110/120 V a.c.	A
No coil	Z
No solenoid	N
Manual override	Substitute
Shrouded push button	P
No solenoid	N

*1)To order air pilot models also substitute 'NNN' at digits 8, 9 and 10 e.g. P74F-2GA-NNN.



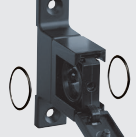




Flow characteristics



Charge time





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 4	Page 4	Page 4	Page 4	Page 4	Page 4
4324-50	4314-51	4314-52	G3/8: 4315-10 G1/2: 4315-11 G3/4: 4315-12 3/8 PTF: 4315-02 1/2 PTF: 4315-03 3/4 PTF: 4315-04	G1/4: 4316-52 1/4 PTF: 4316-50	G 3/8: T74B-3GA-P1N G 1/2: T74B-4GA-P1N G 3/4: T74B-6GA-P1N 3/4 PTF: T74B-6AA-P1N	G 3/8: T74T-3GA-P1N G 1/2: T74T-4GA-P1N G 3/4: T74T-6GA-P1N 1/2 PTF: T74T-4AA-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	Pressure switch (0,5 ... 8 bar)
	
Page 4	Page 4
0523110000000000	0881300000000000

Padlock

Padlock (brass) with two keys *1)

Page 4
0613633000000000

*1) for shut-off valves

Silencer

Silencer

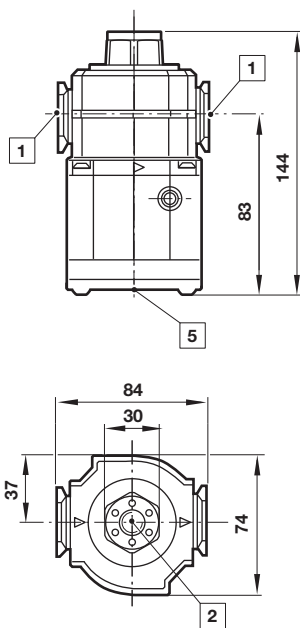
Page 4
R1/2: MB004B 1/2 NPT: MB004A

Drawings

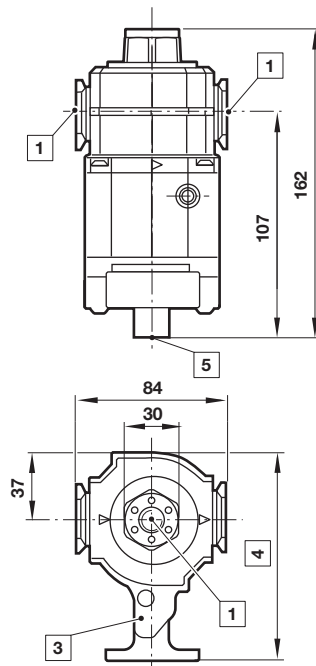
Dimensions in mm
Projection/First angle



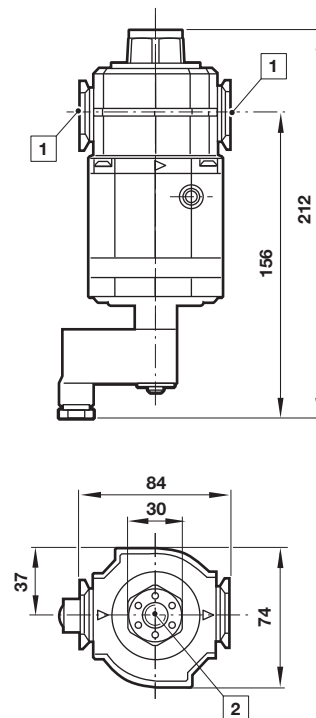
Air pilot actuated



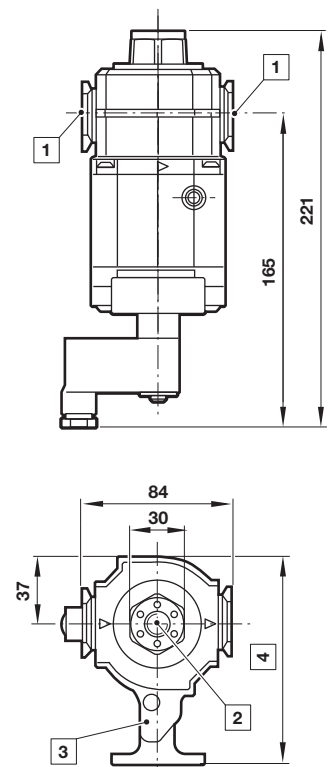
Air actuated plus manual lockout slide



Solenoid actuated



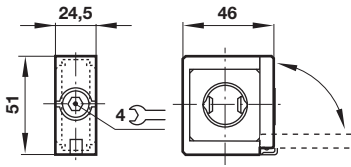
Solenoid actuated plus manual lockout slide



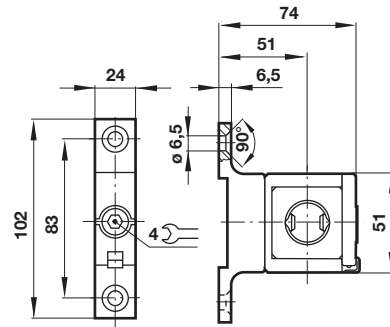
- 1 Main ports 3/8", 1/2" or 3/4"
- 2 Pilot port
- 3 Manual lockout slide
- 4 Minimum 96 mm; maximum 111 mm
- 5 Exhaust port

Accessories

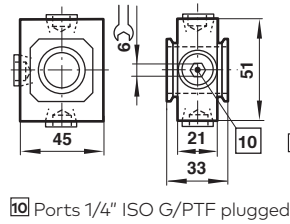
Quikclamp®



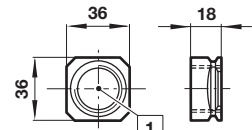
Quikclamp® with wall bracket



Porting block



Pipe adapter



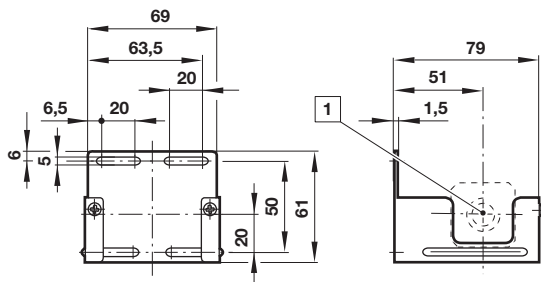
1 Main ports 3/8", 1/2" or 3/4" ISO G/PTF

10 Ports 1/4" ISO G/PTF plugged

Dimensions in mm
Projection/First angle

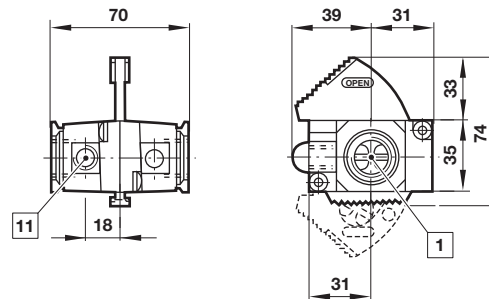


Wall mounting bracket



1 Main ports

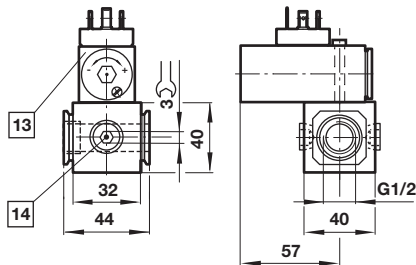
Shut-off valves



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

11 Exhaust port Rc1/8

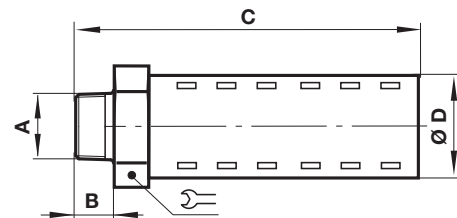
Porting block for pressure switch



13 Pressure switch is not in scope of delivery

14 Alternative G1/4 ports plugged

Silencer



A	B	C	D		Model
R1/2	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.