

Excelon[®] valves

P72F, P74F Smooth start/Exhaust valves

Excelon[®] design allows in-line or modular installation

Controls increase of downstream pressure on start up. Cylinders and other air operated devices are eased into normal operating positions, reducing the possibility of equipment damage and hazards to the user.

Blocks inlet air and exhausts downstream air when pilot signal is removed or when the optional manual lockout slide is closed

Optional manual slide can be padlocked in closed position

Solenoid pilot or air pilot operation

Designed for use in start-up and shutdown of equipment.



P72F

P74F

P74F-AD

Technical data

Fluid:

Compressed air

Maximum pressure solenoid operated:

Dependent on solenoid rating [must not exceed 250 psig (17 bar)]

Maximum pressure pilot operated:

250 psig (17 bar) max.

Minimum operating pressure:

44 psig (3 bar)

Operating temperature solenoid operated:

Dependent on solenoid rating [must be within range 0°* to 150°F (-20°* to 65°C)] (72)

[must be within range 0°* to 175°F (-20°* to 80°C)]

Operating temperature pilot operated:

0°* to 150°F (-20°* to 65°C) (72)

0°* to 175°F (-20°* to 80°C) (74)

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

Materials

Body: Zinc alloy (72) Aluminum (74)

Elastomers: Synthetic materials

Filter discs: Sintered plastic

Internal components: Brass/steel

Ordering Information

Models listed include PTF threads. Solenoid operated models include 24 VDC coil and plug without indicator.

Port size	Solenoid operated*	lb (kg)	Air pilot operated	lb (kg)
1/4"	P72F-2AC-PFA	2.0 (0.91)	P72F-2AA-NNN	1.93 (0.88)
3/8"	P74F-3AC-PFA	2.4 (1.08)	P74F-3AA-NNN	2.3 (1.05)
1/2"	P74F-4AC-PFA	2.3 (1.05)	P74F-4AA-NNN	2.2 (1.02)
3/4"	P74F-6AC-PFA	3.1 (1.41)	P74F-6AA-NNN	3.0 (1.35)

* Solenoid operated models are supplied with 22 mm 24 V d.c. 2 W coil and connector plug without indicator light. plugs. To select alternative voltages and other options refer to the Options selector below. For connector plugs see next page.

** Factory repair only

Options selector

Series	Substitute	Connectors	Substitute	
72	2	3 pin plug with cable gland, no indicator light	A	
74	4	Without	N	
Port size	Substitute	Coil voltage	Nominal power rating	Substitute
1/4" (72)	2	24 V d.c.	2 W	F
3/8"	3	110/120 V	4/2.5 VA, 50/60 Hz	A
1/2" (74)	4	No solenoid		N
3/4" (74)	6			
Threads	Substitute	Solenoid manual operator	Substitute	
PTF	A	Shrouded push button	P	
ISO G parallel	G	None	N	
Operator	Substitute			
Air pilot	A			
Air pilot with manual lockout slide (74)	B			
22 mm miniature solenoid	C			
22 mm miniature solenoid with manual lockout slide (74)	D			

P7★F-★-★-★-★-★

Excelon® valves

P72F, P74F Smooth start/Exhaust valves

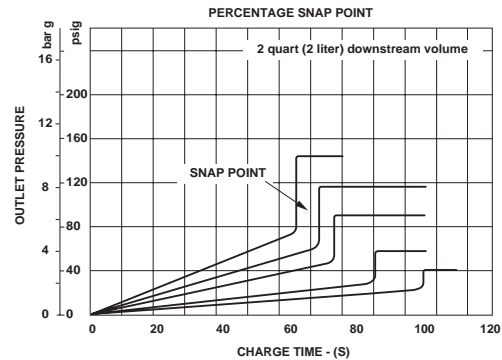
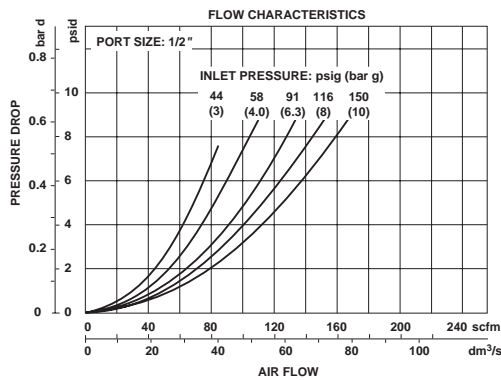
Dimensions in inches (mm)

Accessories

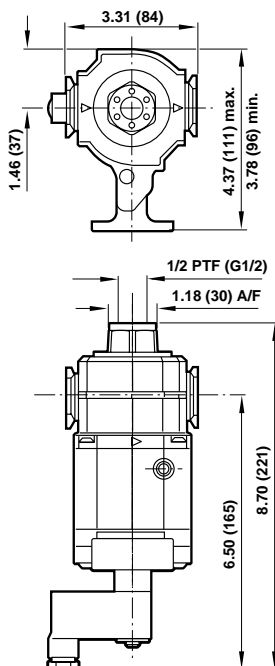
	Exhaust port silencer	Quikmount pipe adapters (quantity of 1)	Quikclamp®	Quikclamp® and wall bracket	Plug with cable gland for 22mm solenoid		
P72F	MB002A	4215-02 (1/4) 4215-03 (3/8)	4214-51	4214-52	54934-08*	12 ... 24 V a.c./d.c.	Indicator type
					54934-02	110/120 V a.c.	Indicator type
					54934-01		No indicator
P74F	MB004A	4315-02 (3/8) 4215-03 (1/2) 4315-04 (3/4)	4314-51	4314-52	54934-08*	12 ... 24 V a.c./d.c.	Indicator type
					54934-02	110/120 V a.c.	Indicator type
					54934-01		No indicator

*Reduced light intensity at 12 V.

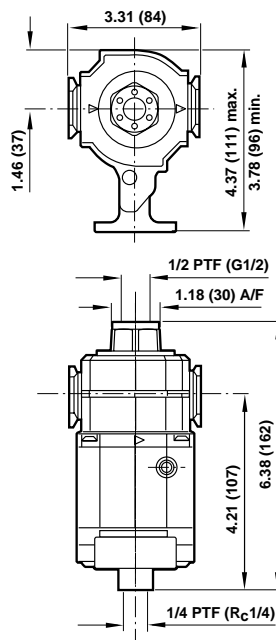
Typical Performance Characteristics



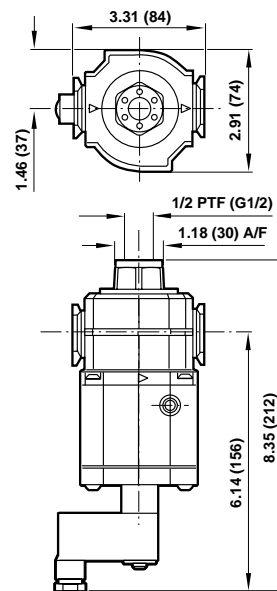
Solenoid operated plus manual shut-off with lockout



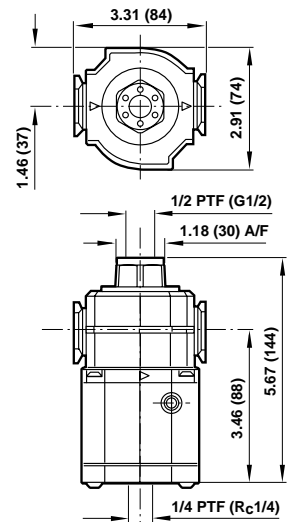
Air pilot operated plus manual shut-off with lockout



Solenoid operated



Air pilot operated



Excelon Valves

P72E and P74E

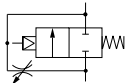
Excelon® 72 and 74 Smooth Start Valves 1/4", 3/8", and 1/2" Port Sizes

Ordering Information

Models listed are with PTF threads.

Port Size	Model	Weight lb (kg)
1/4"	P72E-2AN-NNN	1.86 (0.84)
3/8"	P72E-3AN-NNN	1.80 (0.82)
1/2"	P74E-NNN-NNN	1.17 (0.53)

ISO Symbol



High-flow, spring return, 2 port/2 position normally closed valves

Adjustable rate of pressure increase

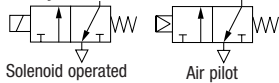
Modular installations with Excelon® 72, 73, and 74 series can be made to suit particular applications



P72C

Excelon® 72 Air or Solenoid Operated Directional Control Valves 1/4", 3/8" Port Sizes

ISO Symbols



Solenoid operated

Air pilot

Excelon® design allows in-line or modular installation

3 port/2 position valves, normally closed

Modular installations with Excelon® 72, 73, and 74 series can be made to suit particular applications



Ordering Information

Models listed are with PTF threads. Solenoid operated models include 24 V d.c. coil and plug without indicator.

Port Size	Solenoid Operated Model	Weight lb (kg)	Air Pilot Operated Model	Weight lb (kg)
1/4"	P72C-2AC-PFA	2.11 (0.96)	P72C-2AA-NNN	1.86 (0.84)
3/8"	P72C-3AC-PFA	2.05 (0.93)	P72C-3AA-NNN	1.80 (0.82)

P74 Air Operated

Excelon® 74 Air Operated Directional Control Valves Unthreaded Ports, 1/2" Basic Size

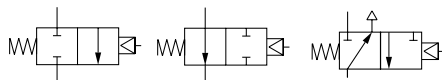
Ordering Information

Models listed include PTF threads in the pilot and exhaust ports.

Installation Type	2 Port/2 Position Normally Closed	2 Port/2 Position Normally Open	3 Port/2 Position Normally Closed	Weight lb (kg)
Modular*	P74A-NAA-NNN	P74B-NAA-NNN	P74C-NAA-NNN	1.20 (0.54)

* Valve main ports are unthreaded. To install in air line or connect to other Excelon® 74 units use Quikclamp® and Quikclamp® pipe adapters.

ISO Symbols



2-Port/2-Position Normally Closed

2-Port/2-Position Normally Open

3-Port/2-Position Normally Closed

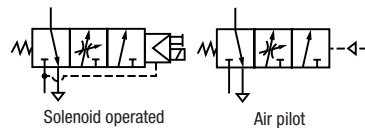
Modular installation only
2-port/2-position valves available as normally closed or normally open valves
3-port/2-position valves available as normally closed valves.



Excelon Valves

P74 Solenoid Operated Valve

Excelon® 74 Solenoid Operated Directional Control Valve
Unthreaded Ports, 1/2" Basic Size
ISO Symbols



Modular installation only

2-port/2-position valves available as normally closed or normally open valves

3-port/2-position valves available only as normally closed valves.



Ordering Information

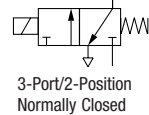
Models listed include PTF exhaust port threads, non-locking override, 110/120Vac standard coil, and cable grip connector.

Installation Type	2 Port/2 Position Normally Closed	2 Port/2 Position Normally Open	3 Port/2 Position Normally Closed	Weight lb (kg)
Modular*	P74A-NNC-PJA	P74B-NNC-PJA	P74C-NAC-PJA	1.63 (0.74)

* Valve main ports are unthreaded. To install in air line or connect to other Excelon® 74 units use Quikclamp® and Quikclamp® pipe adapters.

P74 Lockout Valve

Excelon® 74 Solenoid Operated Valve with Lockout Unthreaded Ports, 1/2" Basic Size
ISO Symbol



Modular installation only

High-flow, 3-port/2-position, normally closed

Manually operated lockout slide can be locked in the closed position with a customer supplied padlock.



Ordering Information

Models listed include PTF exhaust port threads, non-locking override, 110/120Vac coil, and cable grip connector.

Installation Type	3 Port/2 Position Normally Closed	Weight lb (kg)
Modular*	P74C-NAD-PJA	2.03 (0.92)

* Valve main ports are unthreaded. To install in air line or connect to other Excelon® 74 units use Quikclamp® and Quikclamp® pipe adapters.