

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.

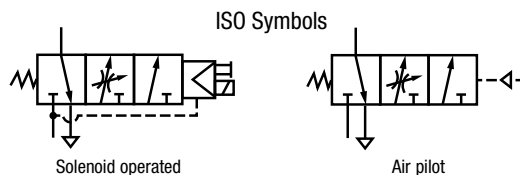
Port size	Solenoid operated*	lb (kg)	Air pilot operated	lb (kg)
1/4"	P72F-2AC-PFA	2.0 (0.91)	P72F-2AA-NNN	1.93 (0.88)
3/8"	P74F-3AC-PFA	2.4 (1.08)	P74F-3AA-NNN	2.3 (1.05)
1/2"	P74F-4AC-PFA	2.3 (1.05)	P74F-4AA-NNN	2.2 (1.02)
3/4"	P74F-6AC-PFA	3.1 (1.41)	P74F-6AA-NNN	3.0 (1.35)

* 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	Solenoid manual operator	Substitute	
Threads	Substitute	Shrouded push button	P	
PTF	A	None	N	
ISO G parallel	G			
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			



Excelon® valves

P72F, P74F Smooth start/Exhaust valves

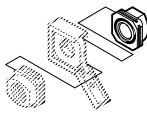
Dimensions in inches (mm)

Accessories

Exhaust port silencer



Quikmount pipe adapters (quantity of 1)



Quikclamp®



Quikclamp® and wall bracket



Plug with cable gland for 22mm solenoid



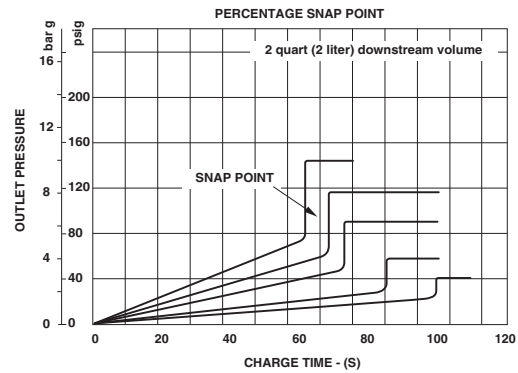
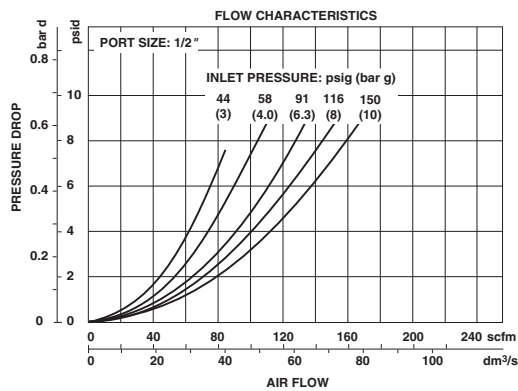
Indicator type

No indicator

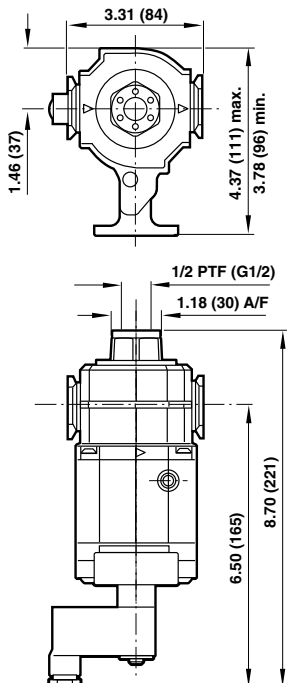
P72F	MB002A	4215-02 (1/4)	4214-51	4214-52	54934-08*	12 ... 24 V a.c./d.c.	Indicator type
		4215-03 (3/8)			54934-02	110/120 V a.c.	Indicator type
					54934-01		No indicator
P74F	MB004A	4315-02 (3/8)	4314-51	4314-52	54934-08*	12 ... 24 V a.c./d.c.	Indicator type
		4215-03 (1/2)			54934-02	110/120 V a.c.	Indicator type
		4315-04 (3/4)			54934-01		No indicator

*Reduced light intensity at 12 V.

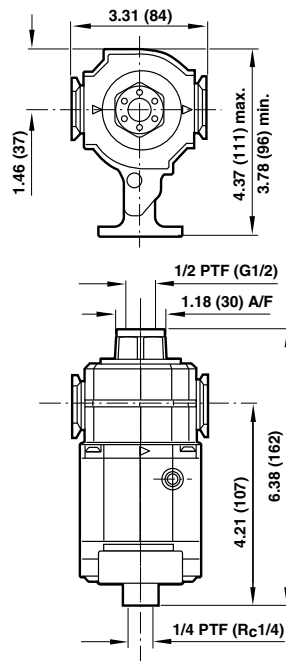
Typical Performance Characteristics



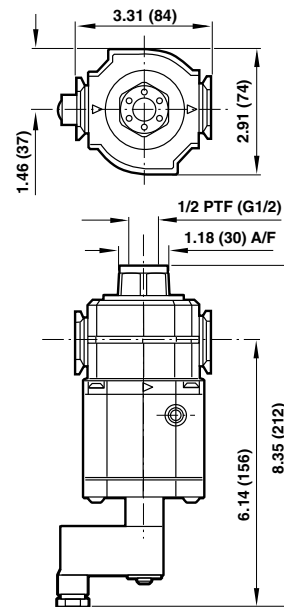
Solenoid operated plus manual shut-off with lockout



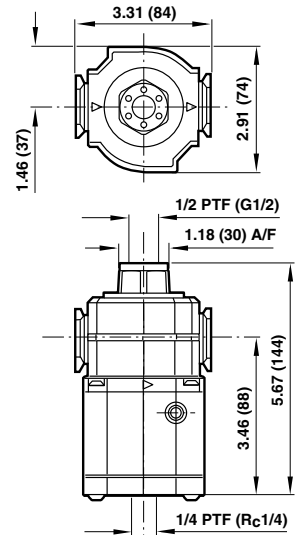
Air pilot operated plus manual shut-off with lockout



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)

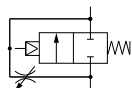
High-flow, spring return, 2 port/2 position normally closed valves

Adjustable rate of pressure increase

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



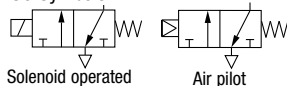
ISO Symbol



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		Air Pilot Operated	
	Model	Weight lb (kg)	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		3 Port/2 Position		Weight lb (kg)
	Normally Closed	Normally Open	Normally Closed	Normally Closed	
Modular*	P74A-NAA-NNN	P74B-NAA-NNN	P74C-NAA-NNN	P74D-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.

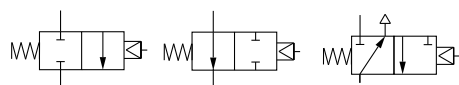
Modular installation only

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

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



ISO Symbols



2-Port/2-Position Normally Closed

2-Port/2-Position Normally Open

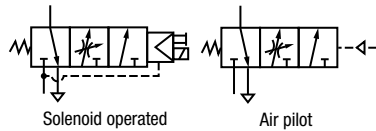
3-Port/2-Position Normally Closed

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.

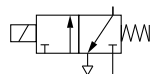
Installation Type	2 Port/2 Position Normally Closed	2 Port/2 Position Normally Open	3 Port/2 Position Normally Closed	Weight lb (kg)
Modular*	P74A-NNC-PJA	P74B-NNC-PJA	P74C-NAC-PJA	1.63 (0.74)

* 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



3-Port/2-Position
Normally Closed

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.

Excelon® lockout valves

1/4" to 3/4" port size

Excelon® design allows in-line or modular installation

Valves can be locked in the closed position only

Excelon® 3-port/2-position lockout valves help conform to OSHA Lockout regulations in USA market.

Technical data

Fluid: Compressed air

Maximum Pressure: 250 psig (17 bar)

Operating Temperature*: -30° to 150°F (-34° to 65°C)

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

Cv factor from IN to OUT ports

1/4" ports: 4.0

3/8" ports: 8.0

1/2" ports: 8.1

3/4" ports: 7.7

Cv factor from OUT to Exhaust ports on 3-port/2-position valves: 0.2.

Exhaust port threads on T72T and T73T models: 10-32

Exhaust port threads on T74T models:

1/8 PTF with PTF main ports

1/8" ISO Rc with ISO G and ISO Rc main ports

Hole diameter in slide for padlock 72 and 73: 5/16" (8 mm)

Hole diameter in slide for padlock: 0.29" (7.5 mm)

Materials

Body: Zinc

Slide: Acetal plastic

Elastomers: Nitrile



Ordering Information

Models listed are with PTF threads.

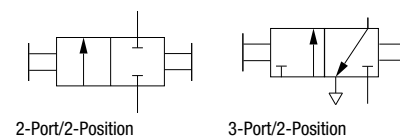
Port Size	2-Port/2-Position	3-Port/2-Position (OSHA)	3-Port/2-Position	Weight lbs (kg)
	No exhaust outlet	Unthreaded exhaust port	Threaded exhaust port	
1/4"	T72B-2AA-P1N	T72E-2AA-P1N	T72T-2AA-P1N	0.79 (0.36)
3/8"	T72B-3AA-P1N	T72E-2AA-P1N	T72T-3AA-P1N	0.86 (0.39)
Port Size	2-Port/2-Position	3-Port/2-Position (OSHA)	3-Port/2-Position	Weight lbs (kg)
	No exhaust outlet	Unthreaded exhaust outlet	Threaded exhaust port	
1/4"	T73B-2AA-P1N	T73E-2AA-P1N	T73T-2AA-P1N	0.7 (0.3)
3/8"	T73B-3AA-P1N	T73E-3AA-P1N	T73T-3AA-P1N	0.7 (0.3)
1/2"	T73B-4AA-P1N	T73E-4AA-P1N	T73T-4AA-P1N	0.7 (0.3)
Port Size	2-Port/2-Position	3-Port/2-Position (OSHA)	3-Port/2-Position	Weight lbs (kg)
	Padlock closed only	Padlock closed only	Padlock closed only	
3/8"	T74B-3AA-P1N	T74E-3AA-P1N	T74T-3AA-P1N	0.69 (0.32)
1/2"	T74B-4AA-P1N	T74E-4AA-P1N	T74T-4AA-P1N	0.65 (0.30)
3/4"	T74B-6AA-P1N	T74E-6AA-P1N	T74T-6AA-P1N	0.62 (0.28)

Service Kits

Type	Part Number
T72	4384-513
T73B (black slide)	4384-610
T73E (yellow slide)	4384-611
T73T (red slide)	4384-612
T74B (black slide)	4384-711
T74E (yellow slide)	4384-710
T74T (red slide)	4384-713

Service kit includes seals and slide.

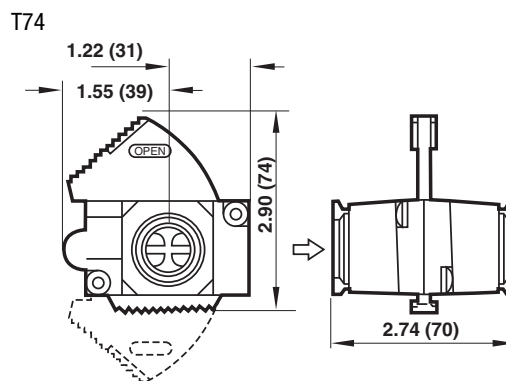
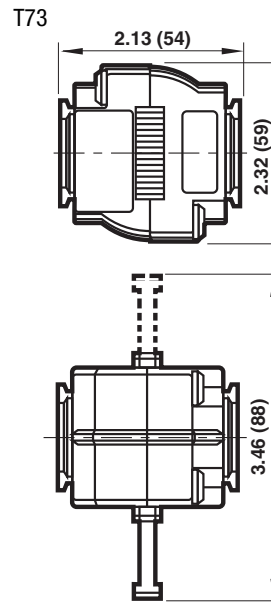
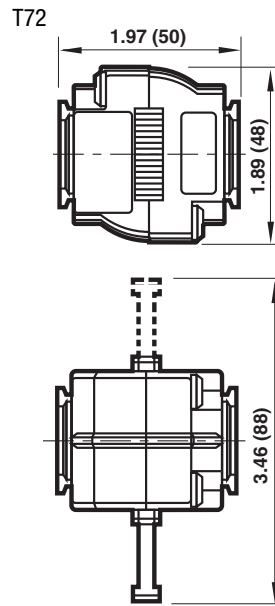
ISO Symbols



Excelon lockout valves

1/4" to 3/4" port size

Dimensions in inches (mm)





Excelon® Pro T92 Lockout/shut-off valve

- Easy to order
- Configuration flexibility
- Excellent value
- No tools required for assembly
- RoHs compliant

Technical data

Fluid: Compressed air
 Maximum pressure
 175 psig (12 bar)
 Cv factor from IN to OUT ports
 1/4" PTF: 2.57
 3/8" PIF: 1.77
 Operating temperature*
 -4° to 140°F (-20° to 60°C)
 * Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials

Body: PBT
 Elastomers: Nitrile



Port Size	2-Port/2-Position No exhaust outlet Black slide	3-Port/2-Position (OSHA) Unthreaded exhaust port Yellow slide	3-Port/2-Position 10-32 (M5) threaded exhaust port, Red slide	Weight lbs (kg)
1/4" PTF	T92B-2A-B1N	T92E-2A-B1N	T92T-2A-B1N	.35 (.16)

Substitute	Exhaust port	T92	B1N	Substitute	Description
B	Plugged	★	★	NN	no connection
E	Unthreaded	★	★	1A	1/8" PTF
T	Threaded M5 (10-32 UNF)	★	★	2A	1/4" PTF
				3A	3/8" PTF
				1B	1/8" ISO Rc
				2B	1/4" ISO Rc
				3B	3/8" ISO Rc
				1G	1/8" ISO G
				2G	1/4" ISO G
				3G	3/8" ISO G
				6D	6mm PIF
				8D	8mm (5/16") PIF
				AD	10mm PIF
				BD	12mm PIF
				4E	1/4" PIF
				6E	3/8" PIF
				8E	1/2" PIF
				2R*	1/4" PTF
				2T*	1/4" ISO Rc
				2V*	1/4" ISO G

* Does not include mounting bracket

Excelon® Pro Modular System

T92, Lockout/shut-off valve

Accessories and Kits

Threaded connector w/mounting bracket*		Push-In-Fitting connector w/mounting bracket*		Threaded connector w/o mounting brackets		Porting block		Quikconnect™ (quantity of 1)	
Connection	P/N	Connection	P/N	Connection	P/N	Connection	P/N	P/N	
1/8" PTF	9212KIT-1A	6mm PIF	9213KIT-6D	1/4" PTF	9211KIT-2R	1/4" PTF	9216-50	9210-50	
1/4" PTF	9212KIT-2A	8mm (5/16") PIF	9213KIT-8D	1/4" ISO Rc	9211KIT-2T	1/4" ISO G	9216-51		
3/8" PTF	9212KIT-3A	10mm PIF	9213KIT-AD	1/4" ISO G	9211KIT-2V	1/4" ISO Rc	9216-52		
1/8" ISO Rc	9212KIT-1B	12mm PIF	9213KIT-BD						
1/4" ISO Rc	9212KIT-2B	1/4" PIF	9213KIT-4E						
3/8" ISO Rc	9212KIT-3B	3/8" PIF	9213KIT-6E						
1/8" ISO G	9212KIT-1G	1/2" PIF	9213KIT-8E						
1/4" ISO G	9212KIT-2G								
3/8" ISO G	9212KIT-3G								

* Use 1/4" (6 mm) screws and appropriate washers when attaching brackets to a surface.

* Connector Dimensions

1/8" and 1/4" threaded connectors shown. See below for port-to-port dimensions for additional connectors.

PIF Connector	Port-to-port
1/4", 6mm, 8mm (5/16")	2.37" (60.2)
3/8", 1/2", 10mm, 12mm	2.48" (61.9)
Threaded connector	
1/8", 1/4"	1.79" (45.5)
3/8"	2.99" (76.1)

