

**Excelon 74 Smooth Start/Exhaust Valve**  
**3/8", 1/2", 3/4" Port Size**

- 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.
- 3 port/2 position, normally closed, soft start valve with optional manual lockout slide
- 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 primarily for use in start-up and shutdown of equipment, not as a frequently cycling directional control valve. Norgren offers a wide variety of valves designed for frequent cycling and other applications. Please refer to the P72C and P74C valves, and to other Norgren valve catalogs.



**Ordering Information.** Models listed are with PTF ports. 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)
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)

\* To select other solenoid type and coil voltage refer to alternative models table below.

**Alternative Models**

P 7 4 F - ★ ★ ★ - ★ ★ ★

Port Size	Substitute
3/8"	3
1/2"	4
3/4"	6

Threads	Substitute
PTF	A
ISO Rc taper	B
ISO G parallel	G

Operator	Substitute
Air pilot**	A
Air pilot with manual lockout slide**	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

Connectors	Substitute
3 pin plug with cable gland, no indicator light	A
Cable grip w/indicator light †	B
1/2" Conduit	C
Without	N

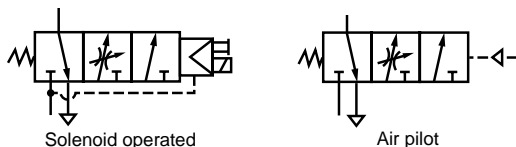
Coil Voltage	Nominal Power Rating	Substitute
24 V d.c.	2 W	F
12 V d.c.	2 W	E
6 V d.c.	2 W	D
220/240 V 50/60 Hz	4/2.5 VA	B
110/120 V 50/60 Hz	4/2.5 VA	A
No coil	2 W	Z
No solenoid		N

Solenoid Operator	Substitute
Shrouded push button	P
Screw driver slot****	S
None	N

\*\* To order air pilot models also substitute 'NNN' at digits 8, 9 and 10 e.g. P74F-4AA-NNN.

\*\*\*\* Not available with D or M operator.

† Use with A and F coils only.

**ISO Symbols**


**See Section ALE-24 for Accessories**



**Technical Data**

**System air supply:** Turn on system air supply prior to applying pilot signal to operator.  
**Failure to do so may cause valve to continuously exhaust.**

Fluid: Compressed air

Maximum pressure solenoid operated:

Dependant 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:

Dependant on solenoid rating  
 [must be within range 0°\* to 175°F (-20°\* to 80°C)]

Operating temperature pilot operated:

0°\* to 175°F (-20°\* to 80°C)

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

Air pilot port:

- ISO Rc1/4 with ISO Rc main ports
- ISO Rc1/4 with ISO G main ports
- 1/4" PTF with PTF main ports

Exhaust port:

- ISO G1/2 with ISO G main ports
- ISO G1/2 with ISO Rc main ports
- 1/2" PTF with PTF main ports

Typical flow with 90 psig (6.3 bar) inlet pressure and pressure drop of 7 psig (0.5 bar):  
 57 dm<sup>3</sup>/s (P<sub>1</sub> to P<sub>2</sub> = Cv 4.4) (P<sub>2</sub> to P<sub>3</sub> = Cv 5.6)

Snap pressure:

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

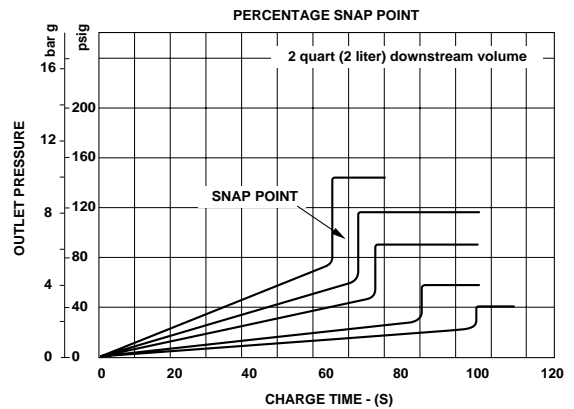
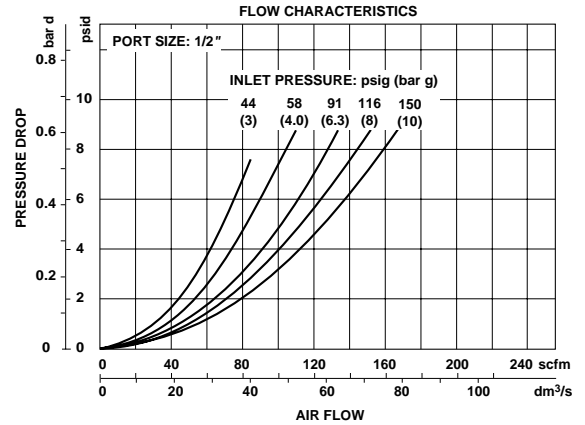
Charge time:

For 2 liter downstream volume and 90 psig (6.3 bar) inlet pressure:  
 0.2 sec. minimum  
 76 sec. maximum

Materials

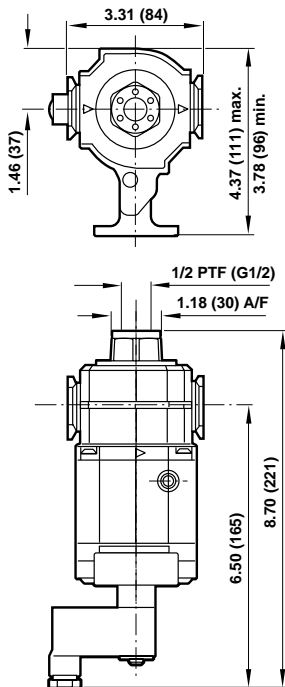
- Body: Aluminium
- Intermediate body: Aluminium
- Elastomers: Synthetic materials
- Filter discs: Sintered plastic
- Internal components: Brass/steel
- Top plate: Zinc
- Exhaust bonnet: Zinc

**Typical Performance Characteristics**

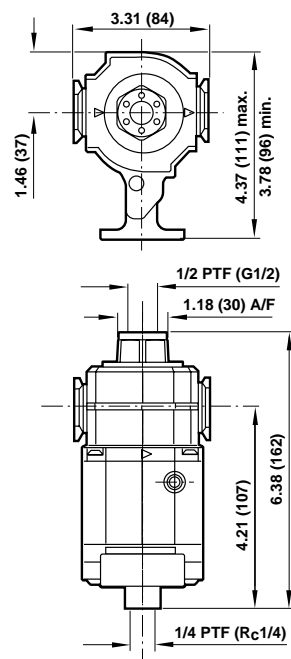


All Dimensions in Inches (mm)

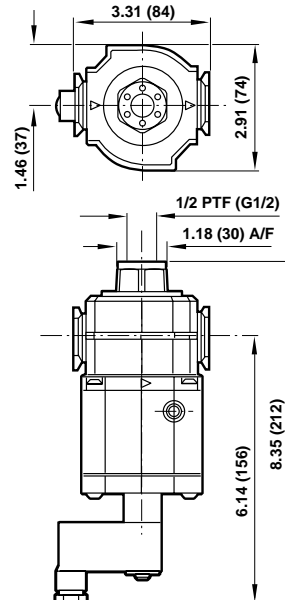
**Solenoid operated plus manual shut-off with lockout**



**Air pilot operated plus manual shut-off with lockout**



**Solenoid operated**



**Air pilot operated**

