

**Excelon® 74**  
**Soft Start/Dump Valve**  
**3/8", 1/2", 3/4" Port Size**

- **EXCELRON design allows inline 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.**



### 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: Dependent on solenoid rating. Must not exceed 17 bar (250 psig).

Maximum pressure pilot operated: 17 bar (250 psig) max.

Minimum operating pressure: 3 bar (44 psig)

Operating temperature solenoid operated: Dependent on solenoid rating. Must be within range -20°C\* to +80°C (0°F\* to +175°F).

Operating temperature pilot operated:  
 -20°C\* to +80°C (0°F\* to +175°F)

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

Air pilot port:

Rc1/4 with ISO G and ISO Rc main ports

1/4" PTF with PTF main ports

Exhaust port:

G1/2 with ISO G and ISO Rc main ports

1/2" PTF with PTF main ports

Typical flow with 6,3 bar (90 psig) inlet pressure and pressure drop of 0.5 bar (7 psig):

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 litre downstream volume and 6,3 bar (90 psig) inlet pressure:

Minimum: 0,2 sec.

Typical maximum: 110 sec.

Materials:

Body: Aluminium

Intermediate body: Aluminium

Elastomers: Synthetic materials

Filter discs: Sintered plastic

Internal components: Brass/steel

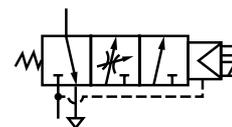
Top plate: Zinc

Exhaust bonnet: Zinc

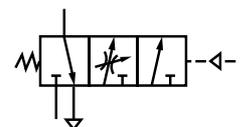
### Ordering Information

See *Ordering Information* on the following pages.

### ISO Symbols



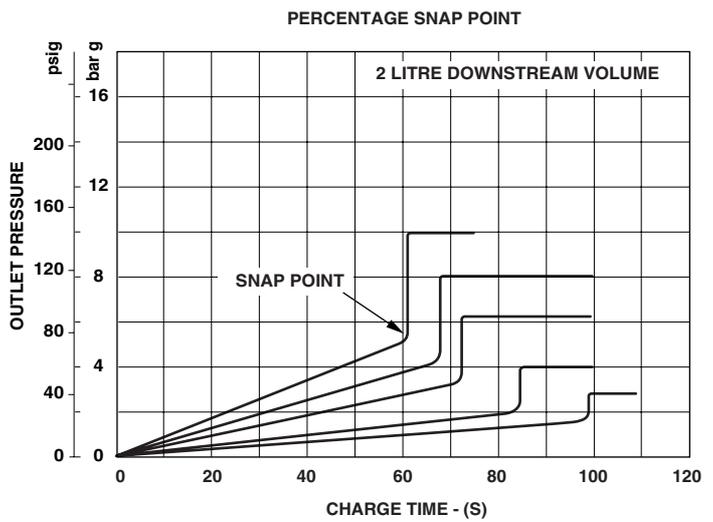
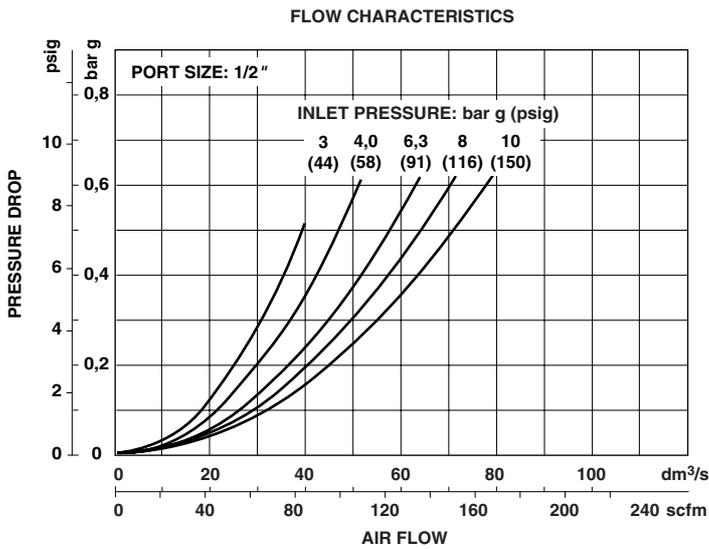
Solenoid operated



Air pilot



### Typical Performance Characteristics



**Ordering Information.** Models listed are with ISO G ports. Solenoid models are with 24 V d.c. coils and plug without indicator.

Port Size	Solenoid Operated* Model	Weight kg	Air Pilot Operated Model	Weight kg
G3/8	P74F-3GC-PFA	1,08	P74F-3GA-NNN	1,05
G1/2	P74F-4GC-PFA	1,05	P74F-4GA-NNN	1,02
G3/4	P74F-6GC-PFA	1,41	P74F-6GA-NNN	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	A
Without	N

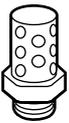
Coil Voltage	Nominal Power Rating	Substitute
24 V d.c.	2 W	F
12 V d.c.	2 W	E
6 V d.c.	2 W	D
220/240 V 50/60 Hz	4/2,5 VA	B
110/120 V 50/60 Hz	4/2,5 VA	A
No coil	2 W	Z
No solenoid		N

Solenoid Manual Operator	Substitute
Shrouded push button	P
None	N

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

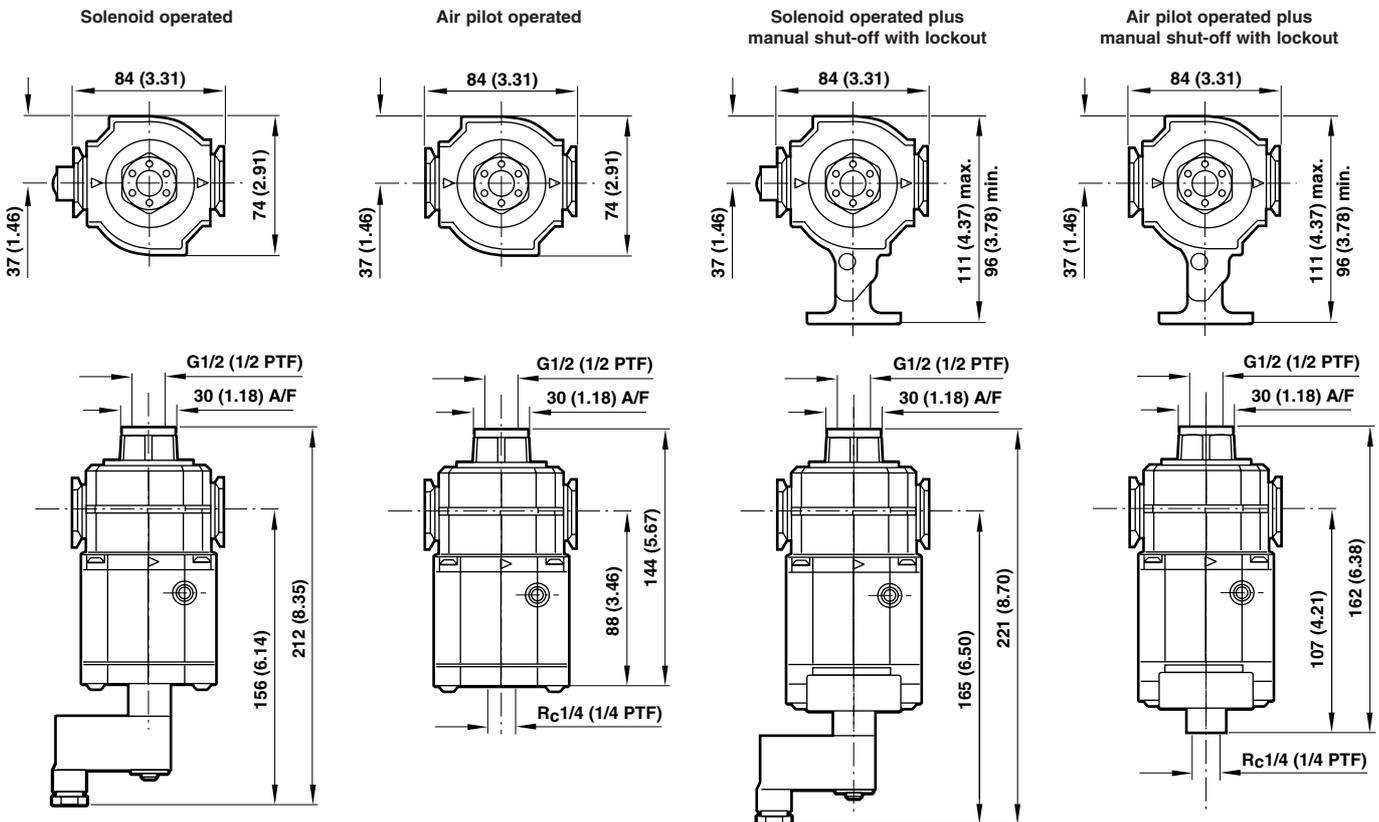


**Accessories**

	
Exhaust Port Silencer	Plug with Cable Gland for 22 mm Solenoid
MB004B (R1/2)	M/P24121/1* 12–24 V ac/dc Indicator type
MB004A (1/2 PTF)	M/P24121/2 150–230 V ac Indicator type
	M/P24121/3 150–230 V ac Indicator type
	M/P19063 No Indicator

\* Reduced light intensity at 12 V.

**Dimensions mm (inches)**





## 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 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.