

**EXCELON®72**  
**Soft Start/Dump Valve**  
**1/4 ", 3/8 " Port Sizes**

- **EXCELON design allows in-line or modular installation**
- **Controlled increase of downstream pressure on start up**
- **Solenoid or air pilot operated**
- **High forward flow capacity**
- **High flow dump facility**
- **Modular installations with EXCELON 72, 73, and 74 series can be made to suit particular applications**

Soft start valves allow a controlled increase of pressure onto downstream cylinders/machines offering protection to personnel and equipment.

The dump feature can be activated by removing power to the solenoid or the air pilot.

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

**Technical Data**

Fluid: Compressed air

Maximum pressure solenoid operated:

Dependant 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:

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

Operating temperature pilot operated:

-20°C\* to +65°C (0°F\* to +150°F)

\* Consult our technical service for use below +2°C

Air Pilot Port:

10-32 UNF with PTF main ports

M5 with ISO main ports

Exhaust Port:

1/4 "PTF with PTF main ports

1/4 "ISO Rc with ISO Rc main ports

1/4 "ISO Rc with ISO G main ports

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

21 dm<sup>3</sup>/s (45 scfm) [P<sub>1</sub> to P<sub>2</sub> = Cv 1,59] [P<sub>2</sub> to P<sub>3</sub> = Cv 1,72]

Snap pressure:

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

Charge time:

For 2 litre (0.53 gallon US) downstream volume and 6,3 bar (90 psig) inlet pressure

Minimum 0,8 sec.

Typical maximum 99 sec.



Materials:

Body: Zinc alloy

Elastomers: Synthetic materials

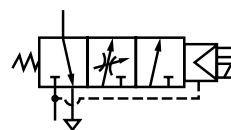
Filter discs: Sintered plastic

Internal components: Brass/steel

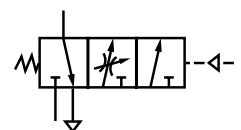
**Ordering Information**

See *Ordering Information* on the following pages.

**ISO Symbols**



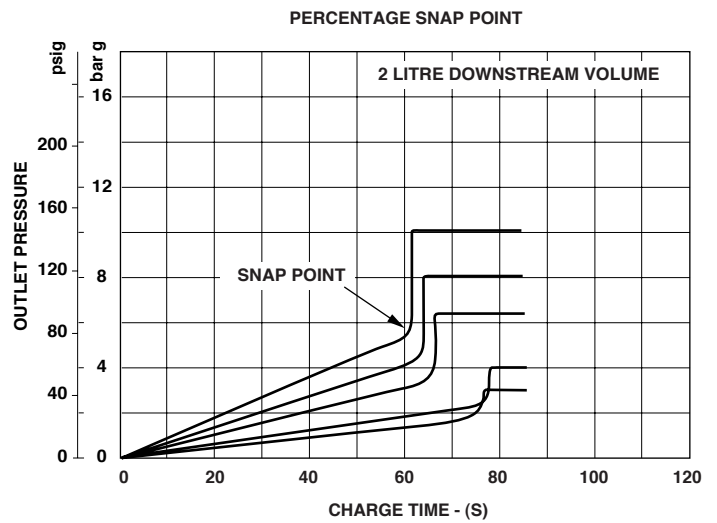
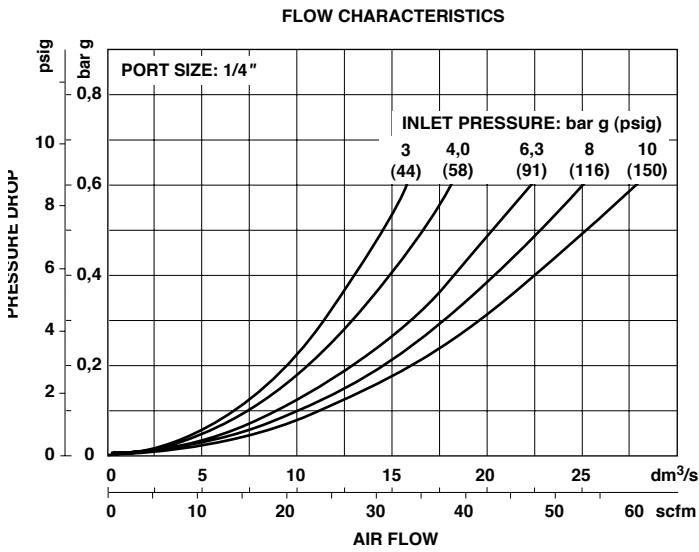
Solenoid operated



Air pilot



## Typical Performance Characteristics



**Ordering Information.** Models listed are with ISO G threads. Solenoid operated models include 24 V d.c. coil and plug without indicator.

Port Size	Solenoid Operated* Model	Weight kg (lb)	Air Pilot Operated Model	Weight kg (lb)
G1/4	P72F-2GC-PFA	0,91 (2.00)	P72F-2GA-NNN	0,88 (1.93)
G3/8	P72F-3GC-PFA	0,90 (1.98)	P72F-3GA-NNN	0,87 (1.91)

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

### Alternative Models

P 7 2 F - \* \* \* - \* \* \*

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

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

Operator	Substitute
Air pilot**	A
22 mm miniature solenoid	C
CNOMO	L

Solenoid Manual Operator Substitute	
Shrouded push button	P
None	N

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
24 V d.c.	7,5 W	P
12 V d.c.	2 W	E
6 V d.c.	2 W	D
24 V 50/60 Hz	4/2,5 VA	C
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

\*\* to order air pilot models also substitute 'NNN' at digits 8, 9 and 10 e.g. P72F-2GA-NNN.

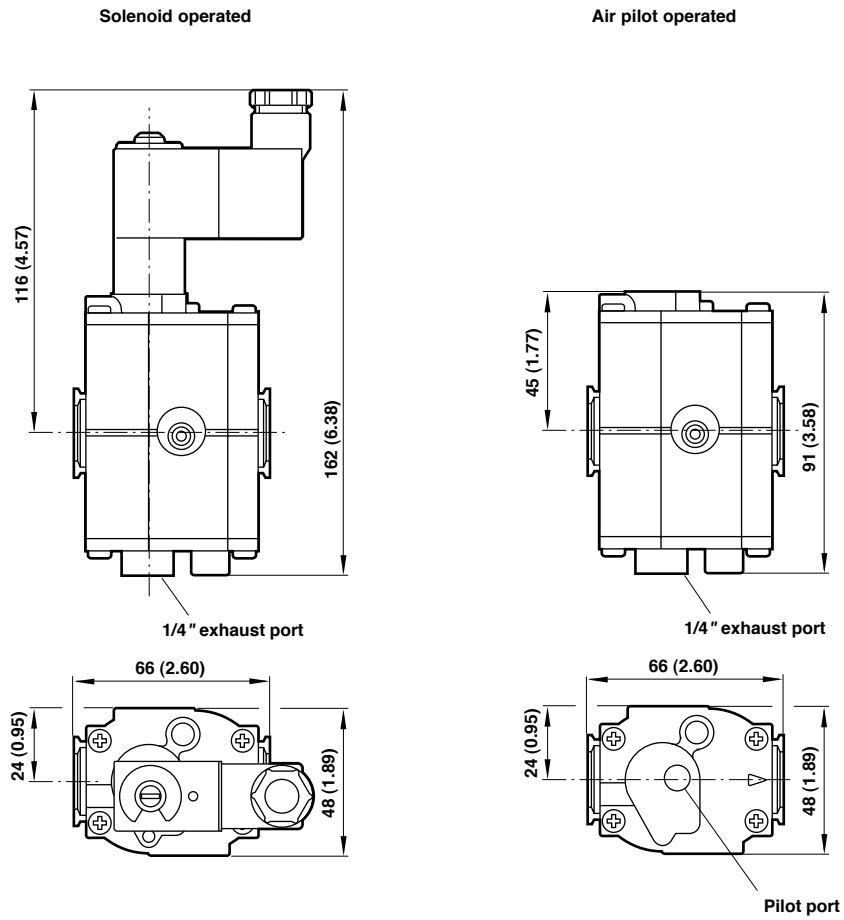
### Accessories

Plug with Cable Gland for 22 mm Solenoid			3/2 Shut-off Valve			Exhaust Port Silencer		
M/P24121/1*	12-24 V ac/dc	Indicator type	G1/4	T72T-2GA-P1N	R1/4:	MB002B		
M/P24121/2	150-230 V ac	Indicator type	G3/8	T72T-3GA-P1N	1/4 PTF:	MB002A		
M/P24121/3	150-230 V ac	Indicator type						
M/P19063		No Indicator						

\* Reduced light intensity at 12 V.



**Dimensions mm (inches)**



**Service Kits**

Item	Type	Part number
Service kit	All models	4384-520

Service kit includes all seals, valve assembly and tamper resistant plug.



## 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.

Water vapor will pass through these units and will condense into liquid if air temperature drops in the downstream system. Install an air dryer if water condensation could have a detrimental effect on the application.