**P72F - ★★★ - ★★★**

| Port | Thread | Operator | Solenoid manual operation | Coil Voltage | Nominal Power | Connector |
|---|---|---|---|---|---|---|
| 2 1/4" | A PTF | A Air pilot | P Shrouded push button | A 110/120 50/60 Hz | 4/2,5 VA | A Standard with cable gland |
| 3 3/8" | B ISO Rc taper | C 22 mm solenoid | L CNOMO | B 220/240 50/60 Hz | 4/2,5 VA | B As A with LED & Suppressor |
| | G ISO G parallel | L CNOMO solenoid | N None | D 6 V d.c. | 2W | N None |
| | | N None | | E 12 V d.c. | 2W | |
| | | | | F 24 V d.c. | 2W | |
| | | | | Z No coil | | |
| | | | | N No Solenoid | | |

## 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)
Minimum operating pressure: 3 bar (44 psig)
Operating temperature solenoid operated:* dependant on solenoid rating – must be within range -20° to +65°C (0° to +150°F)
Operating temperature pilot operated:* 20° to +65°C (0° to +150°F)
* Air supply must be dry enough avoid ice formation at temperatures below +2°C (+35°F).
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
Snap Pressure: full flow when downstream pressure reaches 50 – 80% of inlet pressure.:
Materials:
Zinc alloy body. Synthetic elastomeric materials. Sintered plastic filter discs, brass/steel internal components

## REPLACEMENT ITEMS

Service kit includes items: 6, 9, 11, 12, 17, 24, 25 4384-520

## INSTALLATION

1. Before installation the operating conditions of temperature, pressure, etc, must be checked for conformity with the Technical Data.
2. Mount unit securely:
   - upstream of cycling valves,
   - with air flow in direction of arrow on body,
   - as close as possible to the device being serviced.
   - with sufficient clearance for removal of parts for service.
   - Can be installed at any angle.
   - Airline piping should be the same size as unit ports.
3. Connect piping to proper ports using pipe thread sealant on male threads only. Do not allow sealant to enter interior of soft start valve.
4. Because of high exhaust flow, a silencer should be used or exhaust piped away.
5. Install a Norgren general purpose filter upstream of the valve to prevent blockage of feed holes.

## ADJUSTMENT

1. Turn on system air supply prior to applying pilot signal to operator. Failure to do so may cause valve to continuously exhaust.
2. The time to reach full pressure is dependent on the downstream system volume.
3. Unit is set to give maximum delay. Back of flow adjuster as described to achieve desired Soft Start speed. To assess the time delay actuate the solenoid or apply the air pilot signal (press and hold manual operator on solenoid versions to actuate).
4. If the time to reach full pressure is incorrect it can be adjusted using flow adjuster (10). To access adjuster remove tamper resistant plug (9). Use a 3 mm allen key on adjusting screw (10), turn clockwise to increase the time.

## MAINTENANCE

1. Shut off inlet pressure. Reduce pressure in inlet and outlet lines to zero.
2. Unit can be disassembled without removal from air line.
3. Disassemble in general accordance with the item numbers on exploded view.

## CLEANING:

1. Clean parts with warm water and soap.
2. Rinse and dry parts. Blow out internal passages in body with clean, dry compressed air.
3. Examine all components and replace worn or damaged parts.

## ASSEMBLY:

1. Lubricate o-rings and seals (12, 21, 26, 27) with a light coat of good quality o-ring grease.
2. Assemble the unit as shown on the exploded view.
3. Torque Table

| Item | Torque in Nm (Inch-Pounds) |
|---|---|
| 1, 17 (Screws) | 2,8 to 3,9 (25 to 35) |

## WARNING

For use in compressed air systems only. Not to be used where pressures and temperatures can exceed those listed under Technical Data.
Disposal of non metallic materials must be carried out in an approved manner. Burning may generate toxic fumes.

**Use in potentially explosive atmospheres**

Code of device according EC directive 2014/34/EU

Ⅱ 2G Ex h IIC T6 Gb
Ⅱ 2D Ex h IIIC T85°C Db

- Only non-flammable gasese to be used as a medium.
- Surface temperature dependant on process fluid temperature and ambient temperature must be below the ignition temperature of the flammable gas or dust.
- Earth unit and/or pipework to avoid electrostatic discharge.
- Precautions should be taken to prevent hazard from adiabatic compression.
- Use wet cloth for cleaning.
- Protect the unit from object falling onto it.
- Avoid contact with corrosive environment.
- For servicing the unit it is recommended to carry out this work outside of the danger zone.
- For details of ignition hazard assessment contact Norgren.