

12.3.1 TECHNICAL DATA

MAX OPERATING PRESSURE (PS): 650 bar

PRESSURE TEST (PT): 1.43 x PS

SETTING RANGE: 6 ÷ 630 bar

WORKING TEMPERATURE: -20 ÷ +120 °C

REPEATABILITY: ≤ 1% of the value set

HYSTERESIS: see Table 12.3l/m

FLUID VISCOSITY RANGE: 10 ÷ 400 cSt

RECOMMENDED VISCOSITY: 36 cSt

FLUID CONTAMINATION DEGREE:

class 20/18/15 according to ISO 4406/99

BODY MATERIAL: die-cast aluminium

SEALS:

- P = Nitrile rubber (NBR)
- V = Fluorocarbon (FKM)

See Table 12.3e and/or Chapter 1.5

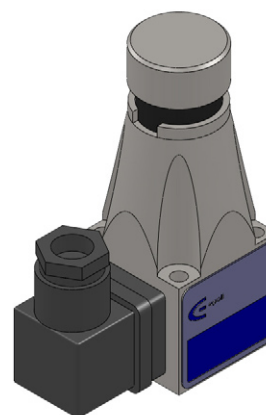
HYDRAULIC CONNECTION:

- G = 1/4" BSP ISO 228, female
- F = plate with screws

ELECTRICAL CONNECTION: Electrical 3 poles connector + earthing
DIN 43650 Pg 9

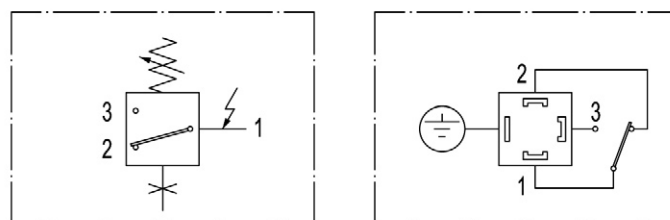
ELECTRICAL FEATURES: see Table 12.3c

WEIGHT: see Table 12.3f/g/h/i



12.3a

12.3.2 HYDRAULIC SYMBOL



12.3d

| Hydraulic features | | PS* 35 | PS*150 | PS* 350 | PS* 630 |
|---------------------------------|-----|--------|---------|----------|----------|
| Adjustment range | bar | 3 ÷ 35 | 6 ÷ 140 | 10 ÷ 350 | 20 ÷ 630 |
| Maximum operating pressure (PS) | bar | 350 | 350 | 650 | 650 |

12.3b

| Electrical features | | Alternate current | | Continuous current | |
|---|-------------|-------------------|-----|--------------------|------|
| Power supply | V | 125 | 250 | 30 | 250 |
| Maximum resistive load on contacts | A | 7 | 5 | 5 | 0.2 |
| Maximum inductive load on contacts | A | 4 | 2 | 3 | 0.02 |
| Electrical insulation (according to CEI EN 60204) | | > 1 MΩ a 500 Vdc | | | |
| Maximum frequency of insertion | Cycles/min. | 120 | | | |
| Mean time between failures for mechanical parts | Cycles | 10,000,000 | | | |
| mean time between failures for electrical parts | Cycles | 2,000,000 | | | |
| Protection degree | | IP 65 | | | |

12.3c

12.3.3 DESCRIPTION

The pressure switches PS* are electro-hydraulic piston type, with an electric exchange contact that switches to achieve a predetermined pressure value.

The pressure in the hydraulic circuit acts on the internal piston, opposed by the spring, whose load can be adjust by or with the adjustment screw or the knurled knob. Upon reaching the set pressure, the piston moves causing the exchange switching of the micro-contact.

The pressure switches are available with four pressure ranges from 6 to 630 bar, with wall mount or threaded of 1/4" BSP, female.

The version with the adjustment knob is provided with a graduated vernier with the values of pressure.

12.3.4 DIAPHRAGM - TEMPERATURE - LIQUID COMPATIBILITY

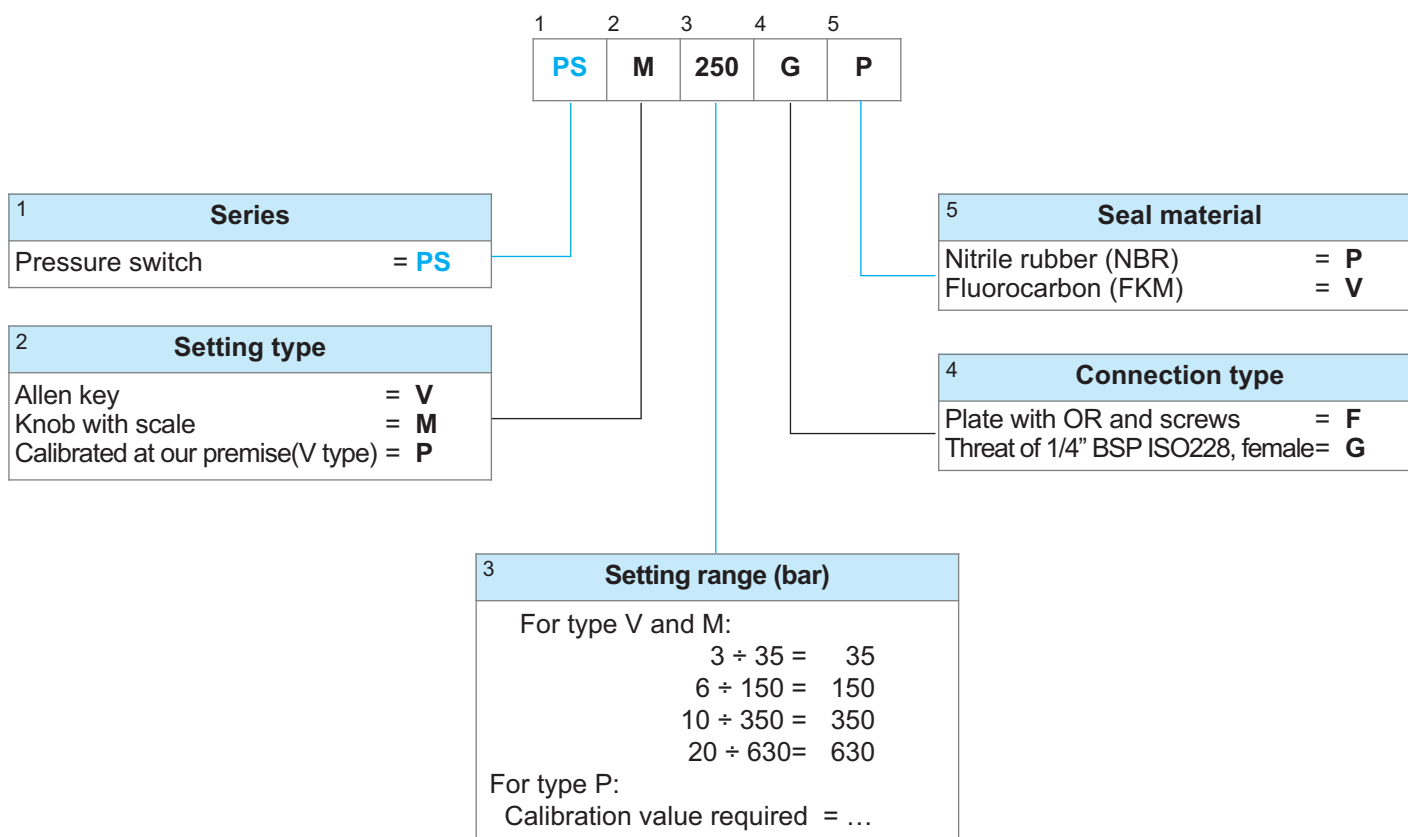
When selecting the accumulator variant, pay attention to the following non-binding notes with regard to hydraulic fluid, diaphragm material and the permissive temperature range.

| Code letter | Polymer | ISO | Temperature range (°C) | Some of the liquids compatible with the polymer |
|-------------|-----------------------------|-----|------------------------|--|
| P | Standard nitrile (Perburan) | NBR | -20 ÷ +80 | Aliphatic hydrocarbons (propane, butane, gasoline, oils, mineral greases, diesel fuel, fuel oil, kerosene), mineral greases and oils, HFA - HFB - HFC fluids, many dilute acids, alkalis, saline solutions, water, water glycol. |
| V | Fluorocarbon | FKM | -10 ÷ +120 | Mineral oils and greases, non-flammable fluids of HFD group, silicone oils and greases, animal and vegetable oils and greases, aliphatic hydrocarbons (gasoline, butane, propane, natural gas), aromatics hydrocarbons (benzene, toluene), chlorinated hydrocarbons (Tetrachloroethylene, carbon tetrachloride), fuel (regular, super and containing methanol), excellent resistance to ozone, weathering and aging. |

For other hydraulic fluid and/or temperatures, please contact us.

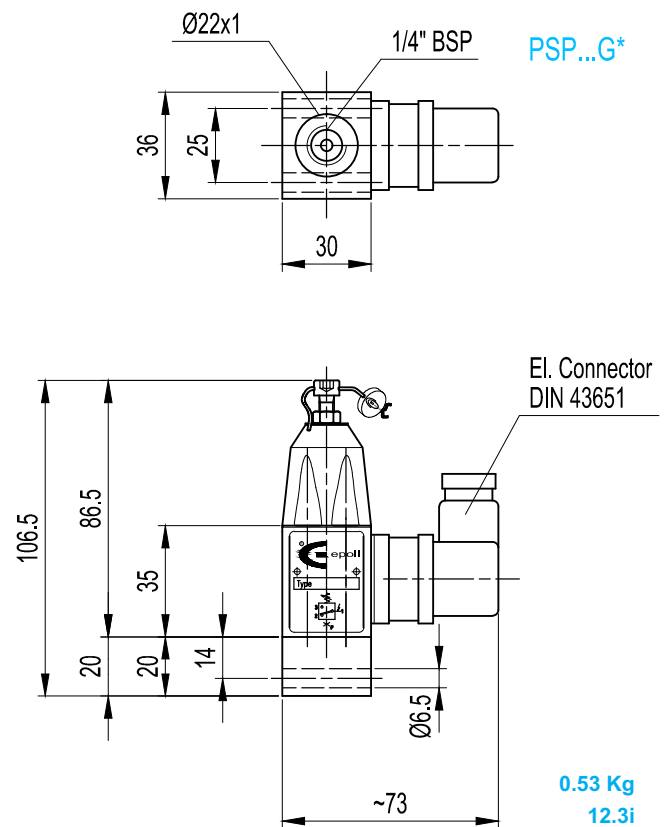
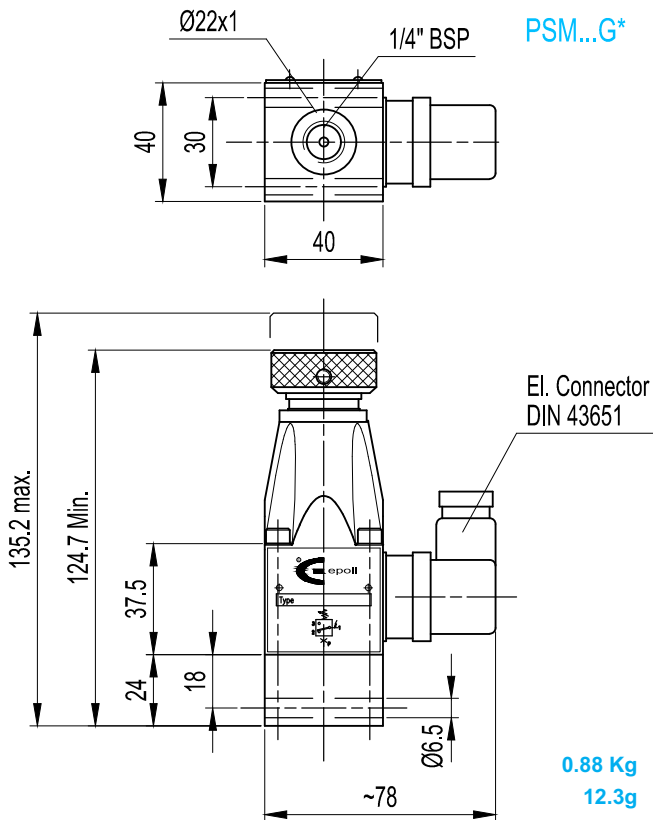
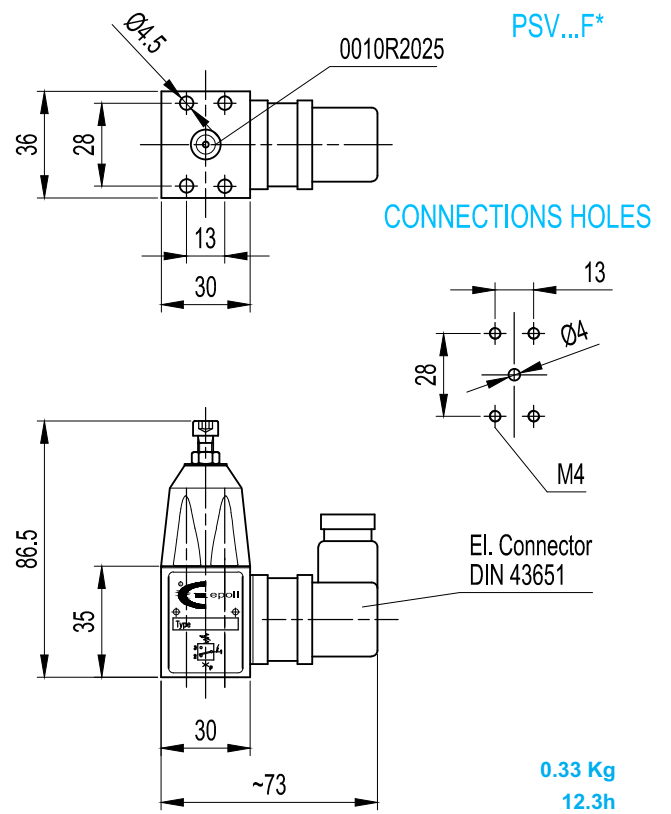
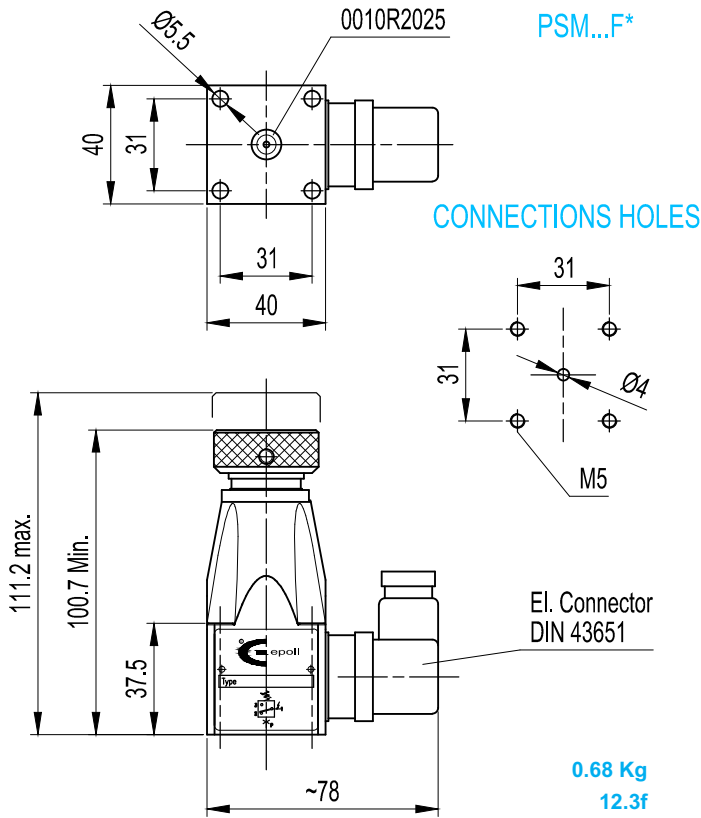
12.3e

12.3.5 ORDER CODE



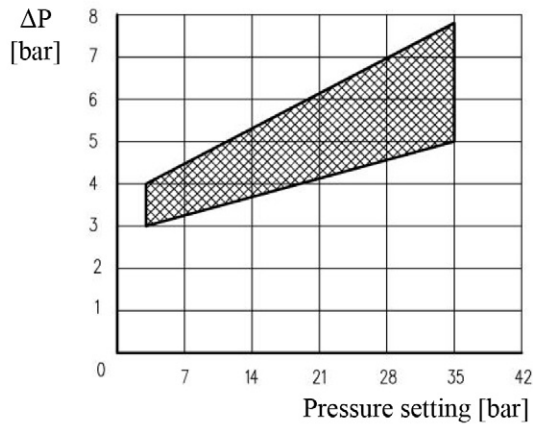
Special variants upon request

12.3.6 DIMENSIONS

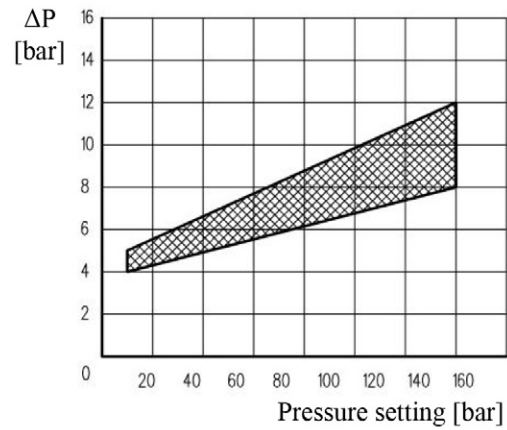


12.3.7 HYSTERESIS CURVES

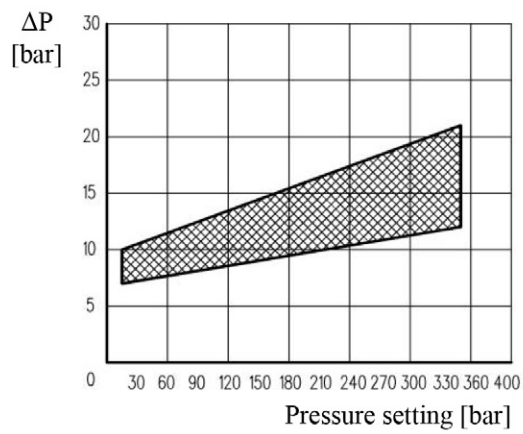
PSM 35



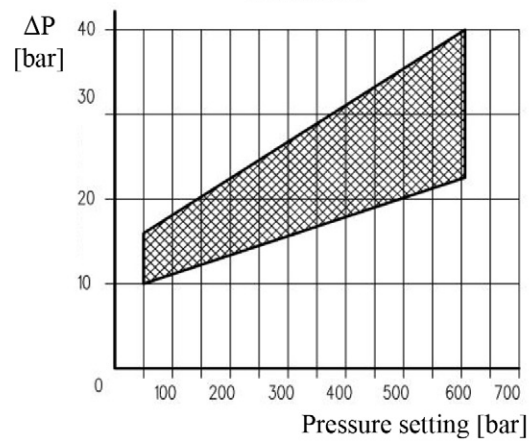
PSM 150



PSM 350

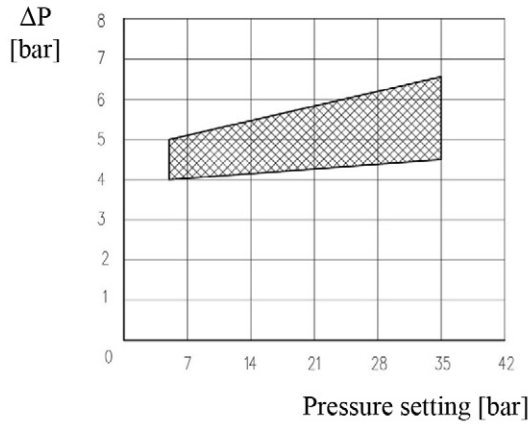


PSM 630

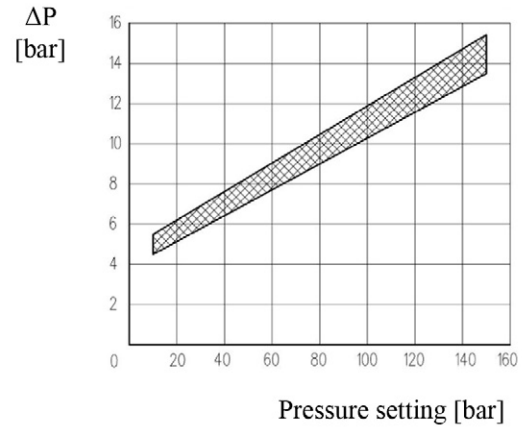


12.31

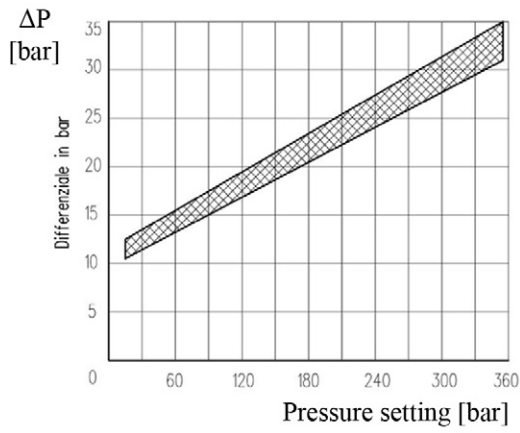
PSV 35



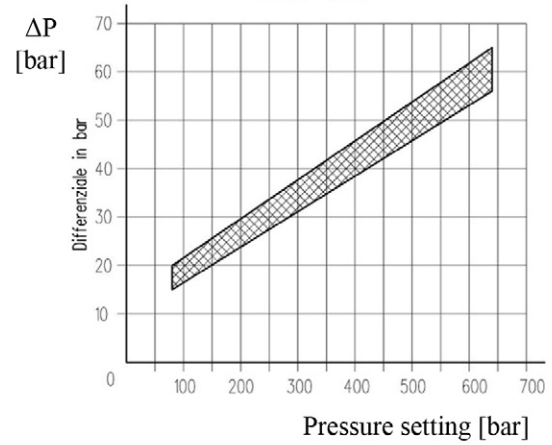
PSV 150



PSV 350



PSV 630



12.3m

12.3.8 INSTALLATION

The pressure switches can be installed in any position without impairing their proper functioning.

Make sure the hydraulic system has no air.

The fixing of the pressure switches for the plate mounting type PS...F is carried out by 4 screws laying on a ground surface according to flatness and roughness values equal to or better than those indicated by the adequate symbols. If the minimum values of flatness and / or roughness are met, fluid leakages can easily occur between the switch and the laying plan.

The pressure switch comes with the electrical 3 poles connector DIN 43650 PG9 already assembled and, in the version PS...F, it is supplied complete with rings and screws.

Reproduction is forbidden.

In the spirit of continuous improvement, our products may be changed.