



PS SERIES section 2

Diaphragm differential pressure switches

- ◆ watertight casing;
- ◆ ranges included between 250 mbar and 10 bar.

This instrument has a diaphragm with double bellows, that acts directly on the microswitch, through a selfcentering pivot. The simple structure of the instrument grants a reliable mechanic switch and a long working life.



TECHNICAL FEATURES

- **Models**
 - PS 399: ranges included between 1 and 10 bar;
 - PS 499: ranges included between 250 and 600 mbar.
- **Casing**
 - case and cover in AISI 304 stainless steel with bayonet lock.
- **Protection degree (according to EN 60529)**
 - IP 65.
- **Pressure connection**
 - AISI 316L stainless steel:
 - 1/4-18 NPT (1/4 NPT female) - standard;
 - G 1/2 B (1/2 Gas or BSP male) or 1/2-14 NPT EXT (1/2 NPT male) - on request.
- **Pressure element**
 - AISI 316 stainless steel diaphragm with 2 AISI 321 stainless steel bellows.
- **Pressure element gasket**
 - di P.T.F.E..
- **Setting ranges**
 - see table PS 3.
- **Static pressure**
 - see table PS 3.
- **Electrical specifications**
 - 1 or 2 microswitches with change-over contacts (SPDT) - see table PS 4.
- **Differential**
 - Fixed, of adjustable 10 ÷ .50% of setting range for ranges ≥ 1 bar - see tables PS 3 and PS 4.
- **Repeatability**
 - $\leq 1\%$ of Full scale deflection.
- **Set-point adjustment**
 - internal, micrometric adjustable.
- **Electrical wiring**
 - terminal box.
- **Electrical connection**
 - R 1/2 (1/2 Gas or BSPT female) thread (others on request).
- **Ambient temperature**
 - $-25 \div +65$ °C.
- **Operating temperature**
 - max 100 °C.
- **Thermal drift**
 - $\leq 0,05\%$ ogni °C di variazione.

OPTIONS

- Lower connections
- Degreasing for oxygen service
- Tropicalization
- Wall mounting clamp
- 2" pipe mounting clamp



Table PS 3
Setting ranges and relative parameters

Model	Setting range	One side static pressure	Both side static pressure	Differential 1 micro	Differential 2 micro
PS 499	20 ÷ 250 mbar	2,5 bar	4 bar	10 mbar	15 mbar
PS 499	25 ÷ 400 mbar	4 bar	4 bar	16 mbar	20 mbar
PS 499	35 ÷ 600 mbar	4 bar	4 bar	20 mbar	30 mbar
PS 399	0,1 ÷ 1 bar	10 bar	25 bar	60 mbar	80 mbar
PS 399	0,1 ÷ 2,5 bar	15 bar	25 bar	60 mbar	80 mbar
PS 399	0,2 ÷ 4 bar	15 bar	25 bar	70 mbar	100 mbar
PS 399	0,2 ÷ 6 bar	15 bar	25 bar	100 mbar	150 mbar
PS 399	0,2 ÷ 10 bar	15 bar	25 bar	120 mbar	170 mbar

note: differential and minimum set-point value, for micro (see table PS 4) type S3, S5, S7 and S8, are 300% of those shown in table

Table PS 4
Microswitches - ohmic load

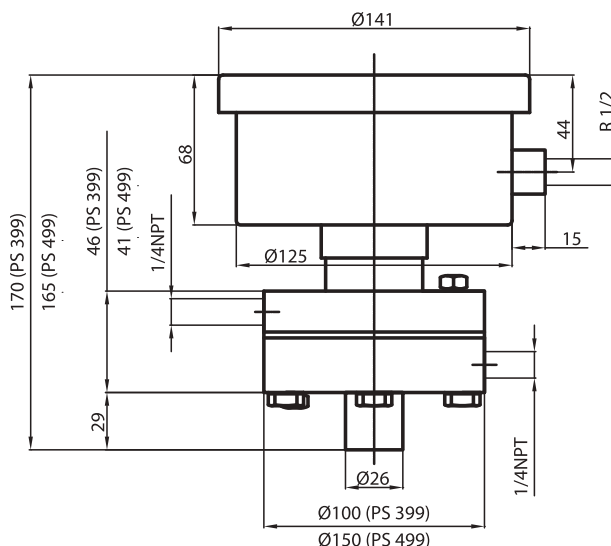
Tipo		V DC 24	V AC 125	V AC 250
S1	Standard	0,1 A	15 A	15 A
S2	SPLASH	0,1 A	15 A	15 A
S3	Goldplated	0,1 A	1 A	
S4	Inert gas filled	0,1 A	15 A	15 A
S5	Goldplated and inert gas filled	0,1 A	1 A	
S6 (1)	Adjustable dead band	0,1 A	20 A	20 A
S7	SPLASH V DC	6 A	15 A	15 A
S8	Inert gas filled V DC	6 A	15 A	15 A

(1) For ranges ≥ 1 bar

PS 399/499

Weight ~ kg 3,85
(rif. a PS 399)

Weight ~ kg 6,20
(rif. a PS 499)



note: informations shown in this series may be changed at any time without prior notice.