



PS SERIES section 1

Diaphragm pressure switches

- ◆ watertight casing;
- ◆ ranges included between -6 mbar and 160 bar.

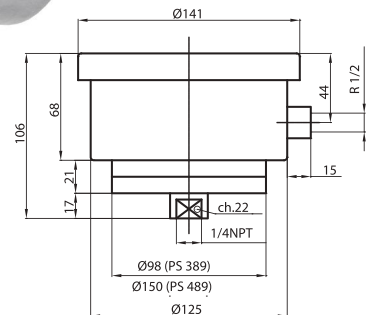
This instrument has a diaphragm that, under the process fluid pressure, acts directly on the microswitch, through a self-centering pivot. The simple structure of the instrument grants a reliable mechanic switch and a long working life.



PS 389/489

Weight ~ kg 2,00
(ref. to PS 389)

Weight ~ kg 3,00
(ref. to PS 489)



TECHNICAL FEATURES

- **Models**
 - PS 389: ranges included between 1 and 160 bar;
 - PS 489: ranges included between 6 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;
 - diaphragm coated (see specific heading).
- **Pressure element gasket**
 - di P.T.F.E..
- **Setting ranges**
 - see table PS 1.
- **Electrical specifications**
 - 1 or 2 microswitches with change-over contacts (SPDT) - see table PS 2.
- **Differential**
 - Fixed, of adjustable 10 ÷ .50% of setting range for ranges ≥ 1 bar - see tables PS 1 and PS 2.
- **Repeatability**
 - ≤ 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 ÷ +65 °C.
- **Operating temperature**
 - max 100 °C.
- **Thermal drift**
 - ≤ 0,05% every °C of variations.

SPECIAL MATERIALS

- **Diaphragm coatings**
 - P.T.F.E.;
 - Monel 400;
 - Hastelloy C276;
 - tantalum.

OPTIONS

- **Special over-pressure**
 - see table PS 1.
- **Degreasing for oxygen service**
- **Tropicalization**
- **Wall mounting clamp**
- **2" pipe mounting clamp**



Table PS 1
Setting ranges and relative parameters

Model	Setting range	Test pressure	Special over-pressure	Differential 1 micro	Differential 2 micro
PS 489	0,7 ÷ 6 mbar (1)	10 mbar		0,5 mbar	
PS 489	1 ÷ 16 mbar (1)	20 mbar		0,8 mbar	
PS 489	2 ÷ 25 mbar (1)	30 mbar		1,2 mbar	
PS 489	5 ÷ 40 mbar (1)	0,5 bar	400 mbar	4 mbar	5 mbar
PS 489	5 ÷ 60 mbar (1)	0,5 bar	600 mbar	4 mbar	5 mbar
PS 489	6 ÷ 100 mbar (1)	0,5 bar	1 bar	4 mbar	6 mbar
PS 489	9 ÷ 160 mbar (1)	0,5 bar	1,6 bar	6 mbar	9 mbar
PS 489	9 ÷ 250 mbar (1)	1 bar	2,5 bar	6 mbar	9 mbar
PS 489	15 ÷ 400 mbar (1)	1 bar	4 bar	10 mbar	15 mbar
PS 489	18 ÷ 600 mbar (1)	1 bar	6 bar	12 mbar	18 mbar
PS 389	0,06 ÷ 1 bar (1)	1,2 bar	10 bar	25 mbar	60 mbar
PS 389	0,06 ÷ 1,6 bar (1)	2 bar	16 bar	30 mbar	60 mbar
PS 389	0,06 ÷ 2,5 bar (1)	3 bar	25 bar	40 mbar	60 mbar
PS 389	0,08 ÷ 4 bar	5 bar	40 bar	50 mbar	80 mbar
PS 389	0,09 ÷ 6 bar	8 bar	40 bar	60 mbar	90 mbar
PS 389	0,15 ÷ 10 bar	12 bar	40 bar	100 mbar	150 mbar
PS 389	0,25 ÷ 16 bar	20 bar	40 bar	160 mbar	250 mbar
PS 389	0,4 ÷ 25 bar	30 bar	40 bar	250 mbar	400 mbar
PS 389	0,6 ÷ 40 bar	48 bar	60 bar	400 mbar	600 mbar
PS 389	0,9 ÷ 60 bar	70 bar	80 bar	600 mbar	900 mbar
PS 389	6 ÷ 100 bar	120 bar		4 bar	6 bar
PS 389	8 ÷ 160 bar	185 bar		5 bar	8 bar

note 1: setting ranges also available for vacuum and compound

note 2: differential and minimum set-point value, for micro (see table PS 2) type S3, S5, S7 and S8, are 300% of those shown in table

Table PS 2
Microswitches - ohmic load

Type		V DC 24	V AC 125	V AC 250
S1	Standard	0,1 A	15 A	15 A
S2 (1)	SPLASH	0,1 A	15 A	15 A
S3 (1)	Goldplated	0,1 A	1 A	
S4 (1)	Inert gas filled	0,1 A	15 A	15 A
S5 (1)	Goldplated and inert gas filled	0,1 A	1 A	
S6 (2)	Adjustable dead band	0,1 A	20 A	20 A
S7 (1)	SPLASH V DC	6 A	15 A	15 A
S8 (1)	Inert gas filled	6 A	15 A	15 A

(1) For range ≥ 40 mbar

(2) For range ≥ 1 bar

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