

PS77 – Economical Industrial Pressure Switch

- ▶ 0.35 to 413 bar (5 to 6000 psi) *formerly PS-K series*
- ▶ Up to 20 amp switching capabilities
- ▶ Wear disc design for longer life
- ▶ Adjustable deadband on 20 amp models

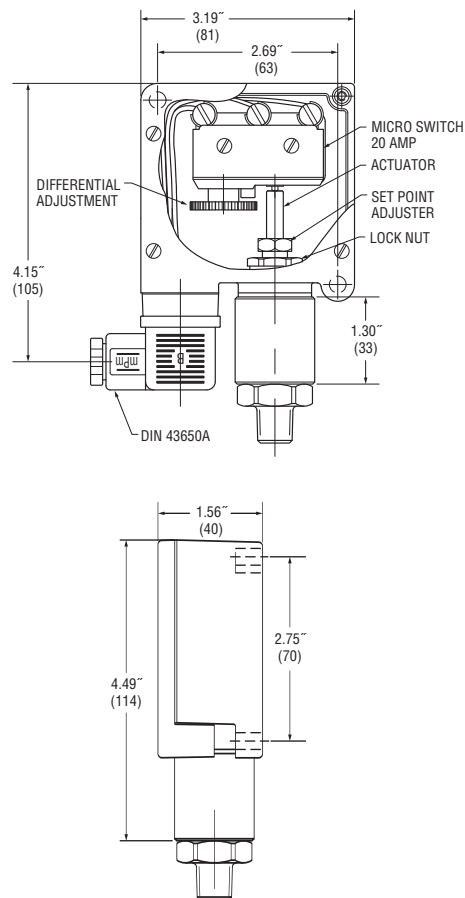
Gems PS77 Series pressure switches incorporate a wear disc and cushioning ring that provide resistance to pressure surges. The industrial enclosure houses either an SPDT 20 Amp switch featuring a dead band adjustment or a DPDT 10 amp switch. The switches use a piston/diaphragm design, which combines the high proof pressure of piston technology with the sensitivity of diaphragm designs. The switches can be field or factory adjusted.

Specifications

Operating Temperature	-40°C to +80°C (-40°F to +180°F)
Switch	20 Amp @ 240Vac (-C circuit) 10 Amp @ 250Vac (-CC, -Z, -ZZ circuits)
Repeatability	2% of Highest Set Point @ 20°C (70°F)
Wetted Parts	
Diaphragm	Nitrile (Optional Viton®, Neoprene or EPDM)
Fitting	Zinc Plated Steel (Optional 316 SS)
Electrical Termination	DIN 43650A or 1/2" NPTF Conduit; Plastic Case IP65
Proof Pressure	600 bar (9000 psi)
Approvals	CE
Weight, Approximate	0.45 kg (1.0 lbs.)



Dimensions



Wiring

	DIN
Common	#1
N.C.	#2
N.O.	#3

How to Order

Use the **Bold** characters from the chart below to construct a product code.

	PS77	10	4MNZ	C	H	XX	XXXX
PS77 Series _____							
Pressure Range Code _____							
Insert Pressure Range Code from table below							
Pressure Fitting _____							
12L14 Zinc Plated Steel	316 Stainless Steel (housing also 316SS)						
2MNZ 1/8" NPTM	4MNS 1/4" NPTM						
4MNZ 1/4" NPTM	4MGS 1/4" BSPM						
4FNZ 1/4" NPTF	4FGS 1/4" BSPF						
4MGZ 1/4" BSPM	6MSS 9/16"-18 SAE Male						
4FGZ 1/4" BSPF							
4MSZ 7/16"-20 SAE Male							
6MSZ 9/16"-18 SAE Male							
4SSZ 7/16"-20 SAE Male Swivel							
Circuit _____							
C SPDT CC DPDT Z SPDT-DB							
Electrical Termination _____							
ELXX 1/2" NPT Male Conduit w/Flying Leads ¹							
H DIN 43650A Male Half Only ² HC DIN 43650A 9mm Cable Clamp ²							
HN DIN 43650A with 1/2" Female NPT Conduit ²							
Options _____							
V Viton® Diaphragm N Neoprene Diaphragm E EPDM Diaphragm							
G Gold Contacts (for loads less than 12mA @ 12Vdc) OXY Oxygen Cleaned ³							
R Restrictor (low damping coefficient) Brass							
SR Spiral Restrictor (high damping coefficient) 12L14 Steel w/Black Oxide Finish							
Fixed Set Point (optional)							
A. Specify set point FS (in BAR or PSI, see example)* _____							
B. Set Point Actuation _____							
R on Rising Pressure F on Falling Pressure							
Example: FS1BARF for 1 BAR Falling or FS20PSIR for 20 PSI Rising							

Notes:

- 18" is standard. Specify lead length in inches (max. 48"). e.g. **EL18** or **EL30**.
- DIN connectors require **C** SPDT circuit.
- Requires stainless steel pressure fitting.
- Set Point must be within Pressure Range selected in Step 1 above.

Pressure Range Table

Pressure Range Code	Pressure Range	Adjustable Dead Band	Proof Pressure
10	0.35-1.7 bar (5-25 psi)	0.17-0.43 bar (3-6 psi)	35 bar (500 psi)
20	1.0-5.2 bar (15-75 psi)	0.5-1.25 bar (8-19 psi)	600 bar (9000 psi)
30	3.5-10.3 bar (50-150 psi)	1.0-2.5 bar (15-37 psi)	600 bar (9000 psi)
40	10.3-44.8 bar (150-650 psi)	4.5-11 bar (65-160 psi)	600 bar (9000 psi)
50	34.5-120.7 bar (500-1750 psi)	12-30 bar (175-430 psi)	600 bar (9000 psi)
60	69.0-241.3 bar (1000-3500 psi)	24-60 bar (300-875 psi)	600 bar (9000 psi)
70	172.4-413.7 bar (2500-6000 psi)	42-105 bar (600-1500 psi)	600 bar (9000 psi)