

# PCS7 General Purpose Mini Pressure Switches



## Product overview

PCS7 general purpose switches with snap action micro switches can be used in a wide range of hydraulic and pneumatic applications. Their proven piston/diaphragm design offers outstanding accuracy over a very wide pressure range with an outstanding 6000 psi proof pressure. Their modular construction allows Gems to offer a large number of standard pressure fittings in two materials as well as numerous electrical ratings and terminations. Users can easily configure this model to meet their needs.

### Notes:

- 1 Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product.
- 2 Strictly follow the wiring method for wiring, otherwise it may cause product damage or other potential faults.
- 3 Misuse of the product may cause danger or personal injury.

### Notes:

- 1 Do not misuse documentation.
- 2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- 3 Complete installation, operation, and maintenance information is provided in the instructions of the product.
- 4 Misuse of the product may cause danger or personal injury.



## Performance parameters

Pressure range	10 to 5000 psi (0.7 to 344 bar)
SWitch	SPST; SPDT
Wetted Parts Diaphragm	Nitrile (optional EPDM, Viton® or Neoprene)
Fitting	Zinc-Plated Steel (optional 316 Stainless Steel)
Electrical Termination	DIN 43650A IP65; Spade Terminals IP00; Flying Leads IP65; Conduit with Flying Leads IP65; IP option IP66
Proof Pressure	6000 psi (414 bar)
Burst Pressure	9000 psi (600 bar)
Approvals	CE
Weight, Approximate	0.4 lbs. (0.15 kg)
Recommended Operating Temperature Limits	

Diaphragm Material	Options Selected		
	No option, -10A, -SP or -RD	-RD or -RD and -G	-SP or -10A
Nitrile	15° F to 185° F (-9° C to +85° C)	15° F to 250° F (-9° C to +121° C)	15° F to 212° F (-9° C to +100° C)
Viton®	0° F to 185° F (-18° C to +85° C)	0° F to 250° F (-18° C to +121° C)	0° F to 212° F (-18° C to +100° C)
EPDM	10° F to +185° F (-23° C to +85° C)	-10° F to +250° F (-23° C to +121° C)	10° F to +212° F (-23° C to +100° C)
Neoprene	-10° F to +185° F (-23° C to +85° C)	-10° F to +185° F (-23° C to +85° C)	-10° F to +185° F (-23° C to +85° C)

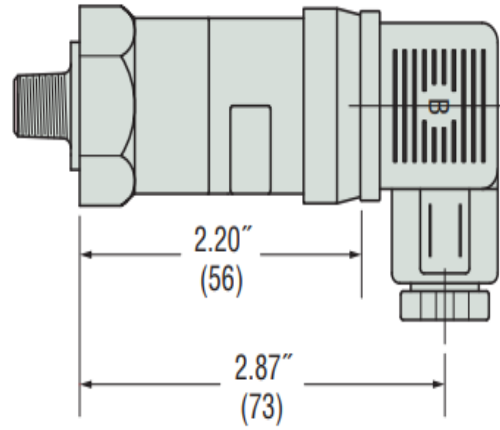
### Electrical Switch Ratings

Options Selected	AC	DC
No option or -RD	5 amps @ 125/250 Volts	5 amps resistive, 3 amps inductive @ 28 Volts
-G only or -RD with -G	1 amp @ 125 Volts	1 amp resistive, 0.5 amp inductive @ 28 Volts
-10A only or -SP without -G	10.1 amps @ 125/250 Volts	—
-SP with -G	2 amps @ 125/250 Volts	—

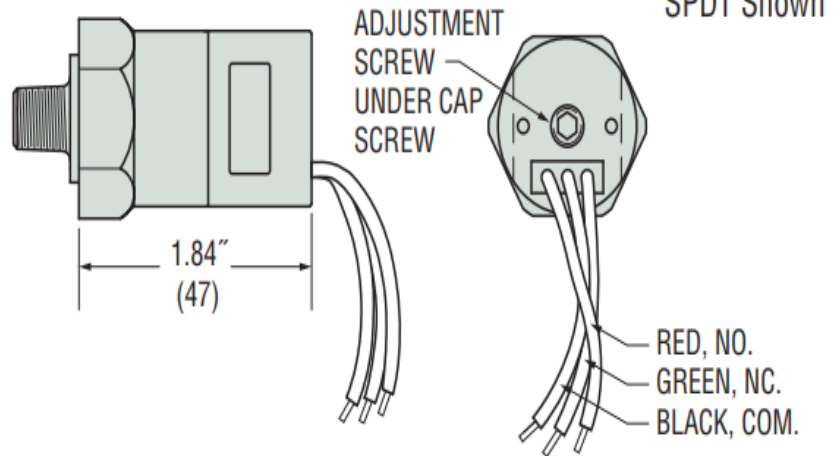
Note: Switches may function below the cold temperature limit but the set points and deadband will increase. Consult factory for details.

Dimension

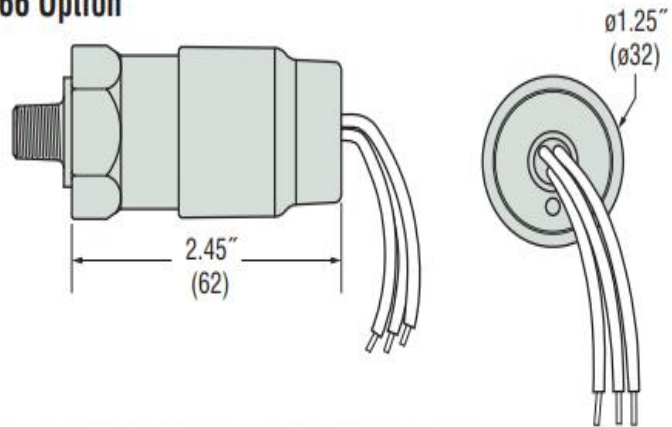
### DIN 43650A with Cable Clamp



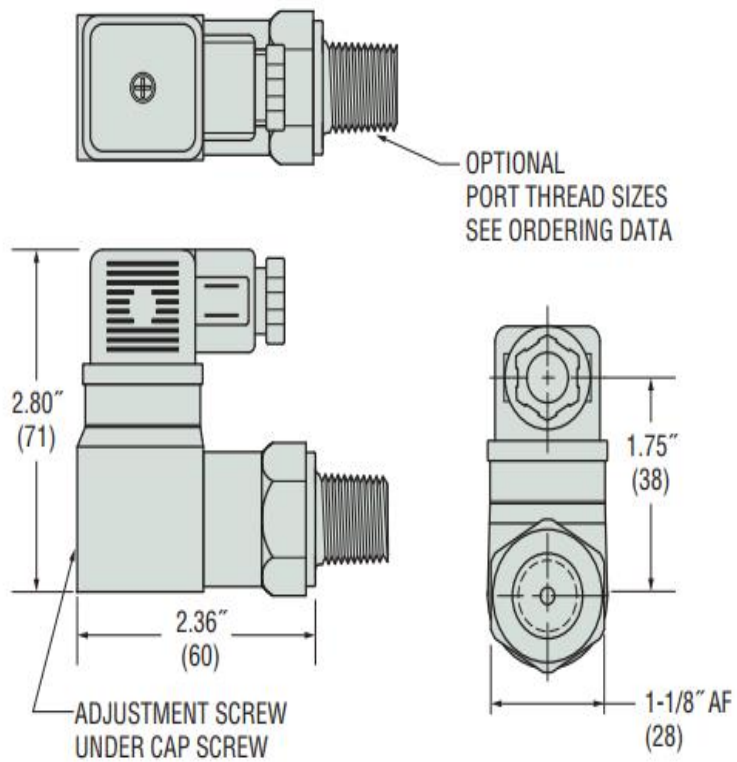
### Flying Lead



### IP66 Option



### Right Angle DIN 43650A with Cable Clamp



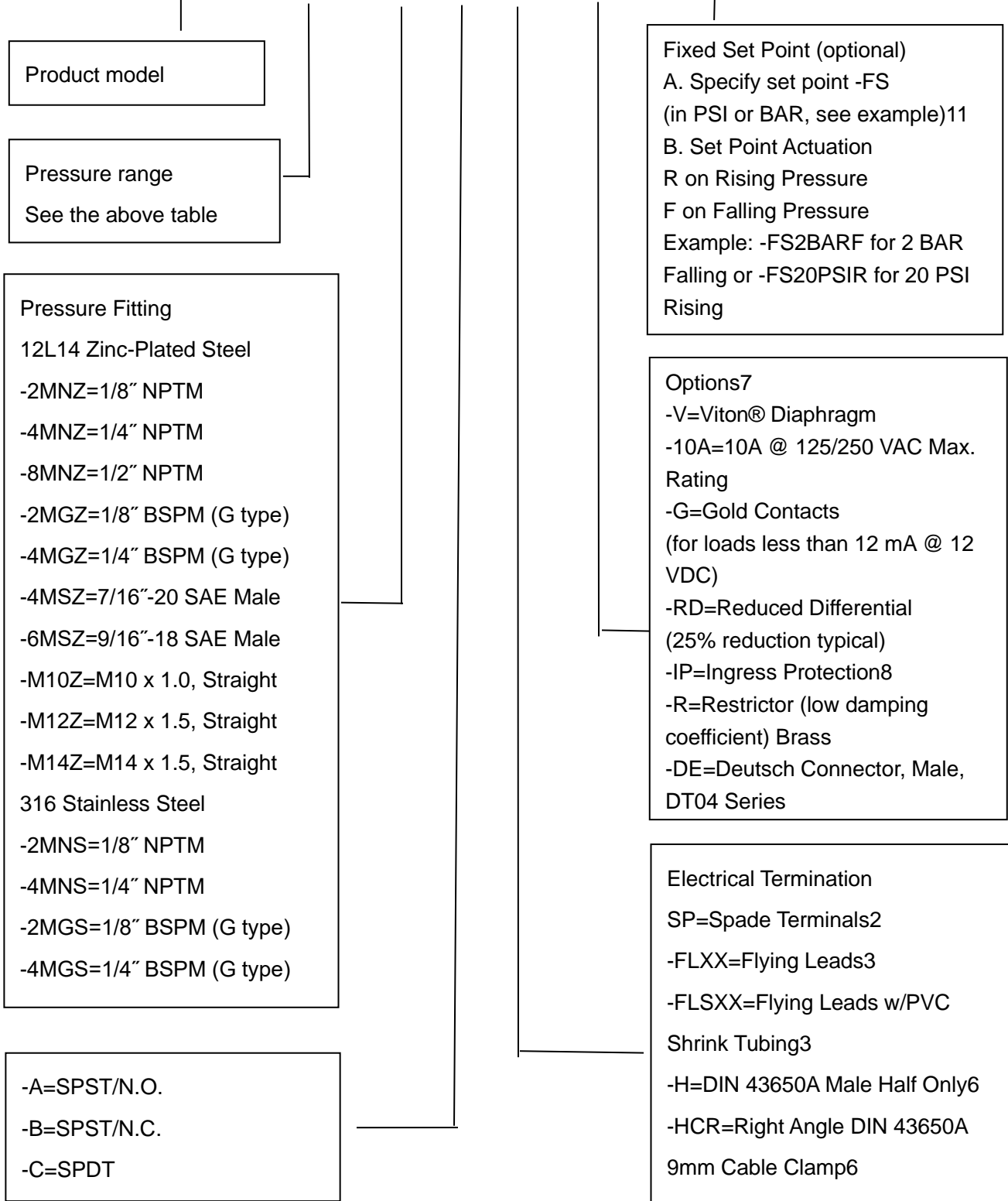
<b>Pressure range</b>			
Pressure range code	Pressure range	Accuracy*	Average Deadband **
10	10-30 psi (0.7-2.1 bar)	± 1.5 psi (0.103 bar) +2% of setting	3.5 psi (0.28 bar) +11% of setting
20	25-75 psi (1.7-5.2 bar)	± 2.5 psi (0.172 bar) +2% of setting	3.5 psi (0.28 bar) +11% of setting
30	65-300 psi (4.5-20.7 bar)	± 5.0 psi (0.345 bar) +2% of setting	20 psig (1.38 bar) +11% of setting
40	250-1000 psi (17.2-69.0 bar)	± 15 psi (1.03 bar) +2% of setting	45 psig (3.10 bar) +12% of setting
50	1000-3000 psi (69-206.8 bar)	± 30 psi (2.06 bar) +3% of setting	70 psig (4.83 bar) +12% of setting
60	2500-5000 psi (172.4-344.7 bar)	± 50 psi (3.45 bar) +4% of setting	140 psi (9.65 bar) +13% of setting

\* Accuracy and set point of units may change due to the effects of temperature.

\*\* These numbers are for the standard microswitch. With either the -SP or -10A option, the values are typically 20% greater than those listed. With the -RD option, the values will be typically 25% less than those listed. In certain applications deadband can be tailored and controlled to customer specifications. Consult factory for details.

How to order

PCS7 - 10 - 4MNZ -C - H - XX - XXXX





Notes:

1. Other fittings available. Consult factory.
2. 20% increase in deadband typical.
3. 18" is standard. Specify lead length in inches (max. 48"). e.g. -FL18 or -FLS30.
4. 18" is standard. Specify lead length in inches (max.48"). e.g. -EL18 or -EL30.
5. 36" is minimum. Specify cable length in inches. e.g. -CAB36 or -CAB120.
6. DIN connectors require -C SPDT circuit.
7. Options -10A, -G or -RD cannot be combined.
8. Ingress Protection is available only with -FL, -FLS or -CAB Electrical Termination choices. Ingress Protection requires Fixed Set Point -FS.
9. Requires stainless steel housing.
10. -SR will result in wider deadbands and slower response time.
11. Set Point must be within Pressure Range selected in Step 1.

Wotian reserves the right to make any change in this publication without notice. The information provided is believed to be accurate and reliable as of this product sheet.

## Contact us

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