

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.

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WE SENSOR						
Performance parameters						
Pressure range	10 to 5000 psi (0.7 to 34	44 bar)				
SWitch	SPST; SPDT					
Wetted Parts	Nitrile (antiquel EDDM Vitar © an Nagarage)					
Diaphragm	Nitrile (optional EPDM, Viton® or Neoprene)					
Fitting	Zinc-Plated Steel (optional 316 Stainless Steel)					
Floatrical Tarmination	DIN 43650A IP65; Spade Terminals IP00; Flying Leads IP65;					
Electrical Termination	Conduit with Flying Leads IP65; IP option IP66					
Proof Pressure	6000 psi (414 bar)	6000 psi (414 bar)				
Burst Pressure	9000 psi (600 bar)					
Approvals	CE					
Weight, Approximate	0.4 lbs. (0.15 kg)					
Recommended Operating Temperature Limits						
	Options Selected					
Diaphragm Material	No option,	-RD or -RD and -G		-SP or -10A		
Diaphilagin Material	-10A, -SP or -RD					
Nitrile	15° F to 185° F	15° F to 250° F		15° F to 212° F		
	(-9° C to +85° C)	(-9° C to +121° C)		(-9° C to +100° C)		
Viton®	0° F to 185° F	0° F to 250° F		0° F to 212° F		
	(-18° C to +85° C)	(-18° C to +121° C)		(-18° C to +100° C)		
EPDM	10° F to +185° F	-10° F to +250° F		10° F to +212° F		
	(-23° C to +85° C)	(-23° C to +121° C)		(-23° C to +100° C)		
Neoprene	-10° F to +185° F	-10° F to +185° F		-10° F to +185° F		
пеоргене	(-23° C to +85° C)	(-23° C to -	+85° C)	(-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,			
Conly of 100 with 40			0.5 amp inductive @ 28 Volts			
-10A only or -SP without	10.1 amps @ 125/250 Volts		_			
-G						
-SP with -G	2 amps @ 125/250 Volts		_			

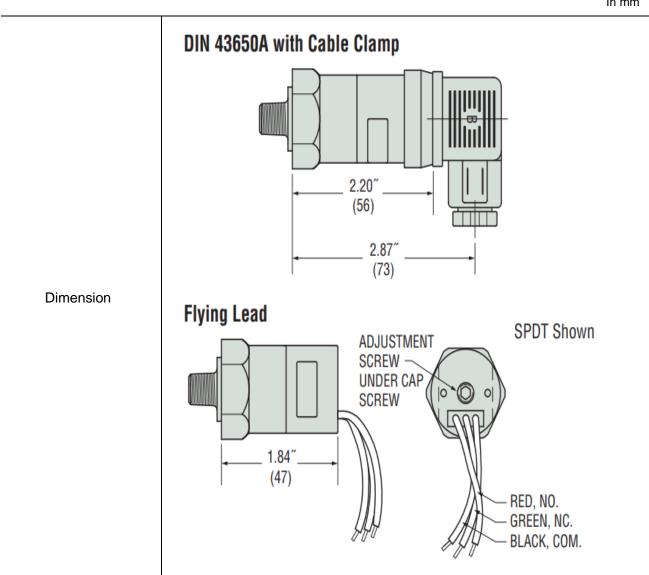
Note: Switches may function below the cold temperature limit but the set points and deadband will increase. Consult factory for details.

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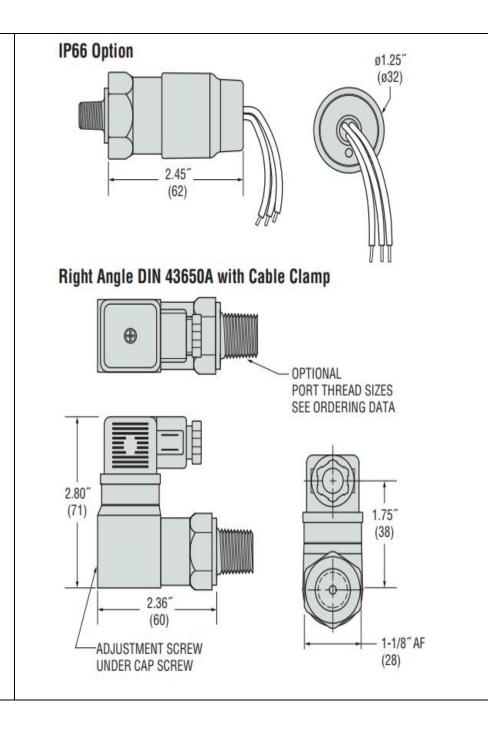
Wring connection

In mm



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

^{*} Accuracy and set point of units may change due to the effects of temperature.

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^{**} 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	- Н	- XX	- XXXX
Product model Pressure range See the above table Pressure Fitting 12L14 Zinc-Plated Steel				Fixed Set Point (optional) A. Specify set point -FS (in PSI or BAR, see example)11 B. Set Point Actuation R on Rising Pressure F on Falling Pressure Example: -FS2BARF for 2 BAR Falling or -FS20PSIR for 20 PSI Rising
-2MNZ=1/8" NPTM -4MNZ=1/4" NPTM -8MNZ=1/2" NPTM -2MGZ=1/8" BSPM (G type) -4MGZ=1/4" BSPM (G type) -4MSZ=7/16"-20 SAE Male -6MSZ=9/16"-18 SAE Male -M10Z=M10 x 1.0, Straight -M12Z=M12 x 1.5, Straight -M14Z=M14 x 1.5, Straight 316 Stainless Steel				Options7 -V=Viton® Diaphragm -10A=10A @ 125/250 VAC Max. Rating -G=Gold Contacts (for loads less than 12 mA @ 12 VDC) -RD=Reduced Differential (25% reduction typical) -IP=Ingress Protection8 -R=Restrictor (low damping coefficient) Brass -DE=Deutsch Connector, Male, DT04 Series
-2MNS=1/8" NPTM -4MNS=1/4" NPTM -2MGS=1/8" BSPM (G type) -4MGS=1/4" BSPM (G type) -A=SPST/N.OB=SPST/N.CC=SPDT				Electrical Termination SP=Spade Terminals2 -FLXX=Flying Leads3 -FLSXX=Flying Leads w/PVC Shrink Tubing3 -H=DIN 43650A Male Half Only6 -HCR=Right Angle DIN 43650A 9mm Cable Clamp6

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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.

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