

Mechanical Pressure Switch

- Switch point adjustable by hand turn of housing barrel
- 10 Amps / 250 VAC
4 Amps / 30 VDC
- Temperatures ranges from -58°F to 266°F
- 1 million cycle durability
- Pressure settings from 725 to 7,250 psi
- IP65/IP67-rated enclosures ensure protection against dust and water ingress



About

The P50 is a compact, hand adjustable switch designed for applications requiring precise pressure monitoring and control. With selectable contact types (SPST-NO, SPST-NC, & SPDT) and a broad operating pressure range from 725 to 7,250 psi, it is adaptable across diverse process system requirements. Constructed from brass or stainless steel and with multiple thread & electrical connection options, it supports customization for specific installations. The P50's robust electrical endurance and mechanical lifespan make it ideal for demanding industrial environments.

Applications

- ✓ Industrial machinery
- ✓ Manufacturing equipment
- ✓ Automotive industry
- ✓ HVAC
- ✓ Refrigeration
- ✓ Water treatment
- ✓ Fluid management
- ✓ Heavy equipment
- ✓ Hydraulic compactors
- ✓ More

Build Your Part Number

Series P50
Example: P50CCSN15L6B3000R-PSE150

Series	
P50	

Pressure Range - select one		
	PSI	Bar
A	725...2,900	50...200
B	1,450...4,350	100...300
C	2,900...7,250	200...500

Contact Type- select one	
A	SPST normally open (electrical terminal options AS, 6D, 6E, 6F)
B	SPST normally closed (electrical terminal options AS, 6D, 6E, 6F)
C	SPDT change-over (electrical terminal options 6B, PV, PV4, 6H, 6G, WP)

Body Material & Wetted Pressure Port - select one	
S	Stainless Steel 304
B	Brass

Sealing Material - select one (applies to internally wetted parts and parallel threaded process ports)	
N1	NBR (-30...+100°C) standard
F1	FKM (-10...+120°C)
H1	HNBR (-30...+120°C)
E1	EPDM (-50...+130°C)

Process Port - select one (see page 5)	
5A	NPT 1/8" male (only for pressure ranges below 750 psi)
5C	NPT 1/4" male
5G	7/16" x 20 UNF SAE4 male (ED ring seal included)
5L	9/16" x 18 UNF SAE 6 male (ED ring seal included)
5N	G 1/4 Male (ED ring seal included)

Electrical Terminals - select one (see page 4)		
6B	DIN 43650A (IP65)	(SPDT; 4 pole)
PV	20" inches PVC non-shielded cable	(SPDT; 3 conductor)
PV4	12' feet PVC non-shielded cable	(SPDT; 3 conductor)
AS	AMP Superseal 1.5 series, 2-pole	(SPST normally open or normally closed; 2 pole)
6D	M12x1, 2-pole	(SPST normally open or normally closed; 2 pole)
6H	M12x1, 5-pole attached by 6" leads	(SPDT; 5 pole)
6E	Deutsch DT04-2P	(SPST normally open or normally closed; 2 pole)
6F	Deutsch DT04-3P	(SPST normally open or normally closed; Note: DT04-3P form factor, 2 active poles)
6G	Deutsch DT04-3P attached by 6" leads	(SPDT; 3 pole)
WP	Weather Pack Connector attached by 6" leads	(SPDT; 3 pole)

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Example: P50CCSN15L6B3000R

PSE150

Factory Setting - optional (leave blank if not desired)

XXX ex: 950 = switch point at 950 psi; 3200 = switch point at 3200 psi

Activation - select only when a factory setting is selected, otherwise leave blank

R Set to switch on rising pressure
F Set to switch on falling pressure

Mating Electrical Connection Assembly – optional; will be quoted as a separate line item (leave blank if not desired)

Part#	
PSE14	DIN 43650-A female with cable gland, field wireable
PSE19	DIN 43650-A female 1/2" NPT threaded port, field wireable
PSE73	DIN 43650-A female with 1 meter PVC unshielded cable
PSE74	DIN 43650-A female with 3 meter PVC unshielded cable
PSE75	DIN 43650-A female with 5 meter PVC unshielded cable
PSE76	DIN 43650-A female with 7.5 meter PVC unshielded cable
PSE77	DIN 43650-A female with 10 meter PVC unshielded cable
PSE78	DIN 43650-A female with 20 meter PVC unshielded cable
PSE1	M12x1, 5-pole female straight with cable gland, field wireable
PSE150	M12x1, 5-pole female straight with 1 meter PVC shielded cable
PSE151	M12x1, 5-pole female straight with 3 meter PVC shielded cable
PSE152	M12x1, 5-pole female straight with 5 meter PVC shielded cable
PSE153	M12x1, 5-pole female straight with 7.5 meter PVC shielded cable
PSE154	M12x1, 5-pole female straight with 10 meter PVC shielded cable
PSE155	M12x1, 5-pole female straight with 20 meter PVC shielded cable
PSE30	M12x1, 5-pole female 90° with 1 meter PVC shielded cable
PSE31	M12x1, 5-pole female 90° with 3 meter PVC shielded cable
PSE32	M12x1, 5-pole female 90° with 5 meter PVC shielded cable
PSE33	M12x1, 5-pole female 90° with 7.5 meter PVC shielded cable
PSE34	M12x1, 5-pole female 90° with 10 meter PVC shielded cable
PSE35	M12x1, 5-pole female 90° with 20 meter PVC shielded cable
PSE121	Deutsch DT06-2P female with 1 meter PVC unshielded cable
PSE122	Deutsch DT06-2P female with 3 meter PVC unshielded cable
PSE123	Deutsch DT06-2P female with 5 meter PVC unshielded cable
PSE124	Deutsch DT06-2P female with 7.5 meter PVC unshielded cable
PSE125	Deutsch DT06-2P female with 10 meter PVC unshielded cable
PSE126	Deutsch DT06-2P female with 20 meter PVC unshielded cable
PSE127	Deutsch DT06-3P female with 1 meter PVC unshielded cable
PSE128	Deutsch DT06-3P female with 3 meter PVC unshielded cable
PSE129	Deutsch DT06-3P female with 5 meter PVC unshielded cable
PSE130	Deutsch DT06-3P female with 7.5 meter PVC unshielded cable
PSE131	Deutsch DT06-3P female with 10 meter PVC unshielded cable
PSE132	Deutsch DT06-3P female with 20 meter PVC unshielded cable

Electrical Connections

<p>PV (3 pole)</p> <p>Conductors: Black (common), Red (normally open), Yellow (normally closed)</p>	<p>DIN43650A (4 pole)</p> <p>Pin 1 (common), Pin 2 (normally closed), Pin 3 (normally open), Pin 4 (ground)</p>	<p>AMP Superseal 1.5 (2 pole)</p>
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<p>Deutsch DT04-2P (2 pole)</p>	<p>Deutsch DT04-3P (2 pole)</p>	<p>M12x1, -2P (2 pole)</p>	<p>Deutsch DT04-3P (3 pole)</p> <p>Pin 1 (normally open), Pin 2 (normally closed), Pin 3 (common)</p>
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<p>PV4 (3 pole)</p> <p>Conductors: Black (common), Red (normally open), Yellow (normally closed)</p>	<p>Weather Pack</p> <p>C (Common), B (normally closed), A (normally open)</p>	<p>M12x1, 5-pole with 6 inch leads</p> <p>Pin 1 (normally closed), Pin 3 (common), Pin 4 (normally open), Pin 2 & 5 (not used)</p>
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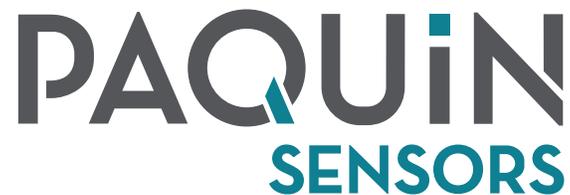
Technical Parameters

Technical Parameters				
Accuracy	Switching Hysteresis (Differential)	10-20% of the set pressure (e.g. pressure setting 600psi, hysteresis 60-120psi)		
	Repeatability Precision	1%		
	Pressure Sensing Technology	Piston		
	Switch Point	Factory set with field (user) adjustability		
	Mechanical Life Endurance	1 million cycles		
	Electric Life Endurance	50,000 cycles		
Electrical	Max AC / Max DC	250VAC / 10Amp	30VDC / 4 Amp	
	Output	SPST normally open SPST normally closed SPDT change-over		
	Insulation Resistance & Dielectric Strength	10mΩ @ 1 min with 500VDC between all insulated inserts and plastic parts and maintain no alarm and breakdown phenomenon for one minute.		
	Electrical Connections	DIN 43650-A with field wireable mating connector PVC cable 20" non shielded DT04 - 2 pole DT04 - 3 pole (Note: 3 pole form factor, but only 2 poles) Amp Super seal (please refer to TE Connectivity part# 282104-1) M12x1, 2 pole		
Environmental	Over Pressure	11600 PSI (800 bar)		
	Burst Pressure	14500 PSI (10000 bar)		
	Max Vibration	10-60Hz, peak amplitude 0.15mm, acceleration 20m/s ² , vibration duration 2 hours		
	Operating Temperature	FKM	+14° ... 248°F (-10° ... 120°C)	
		NBR	-22° ... 212°F (-30° ... 100°C)	
		HNBR	-22° ... 248°F (-30° ... 120°C)	
		EPDM	-58° ... 266°F (-50° ... 130°C)	
	Ambient Temperature Range	-13°F ... 150°F (-25°C ... 66°C)		
	Medium Temperature Range	-22°F ... 212°F (-30°C ... 100°C)		
	Working Ambient Humidity	30% ... 80% Relative Humidity		
IP Protection	DIN 43650A Hirschmann with approved mating connector	IP65		
	All others	IP67		
Material	Body and Pressure Port	Stainless steel Brass		
	Electrical Contacts	Silver cadmium alloy		
	Wetted Internal Seals	Nitrile Rubber Buna (NBR), FKM, HNBR, EPDM		
	Weight	~320g		

Process Ports

NPT 1/4 Male	7/16" x 20 UNF SAE4 Male	9/16" x 18 UNF SAE 6 Male	G 1/4 Male
<p>15.5 NPT1/4-18</p>	<p>14 1.5 UNF7/16-20 $\varnothing 19.8^{0}_{-0.1}$</p>	<p>2 14 UNF9/16 $\varnothing 23.8^{0}_{-0.1}$</p>	<p>14 2 G1/4 $\varnothing 23.8^{0}_{-0.1}$</p>

Additional Information



Paquin Sensors' product portfolio is designed to provide options to fit the most diverse range of specifications.

We collaborate with our customers to match the best product technologies with your unique application requirements.

Please [contact us](#) or call +1 (800) 831-8217 anytime to discuss your needs!