

# 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

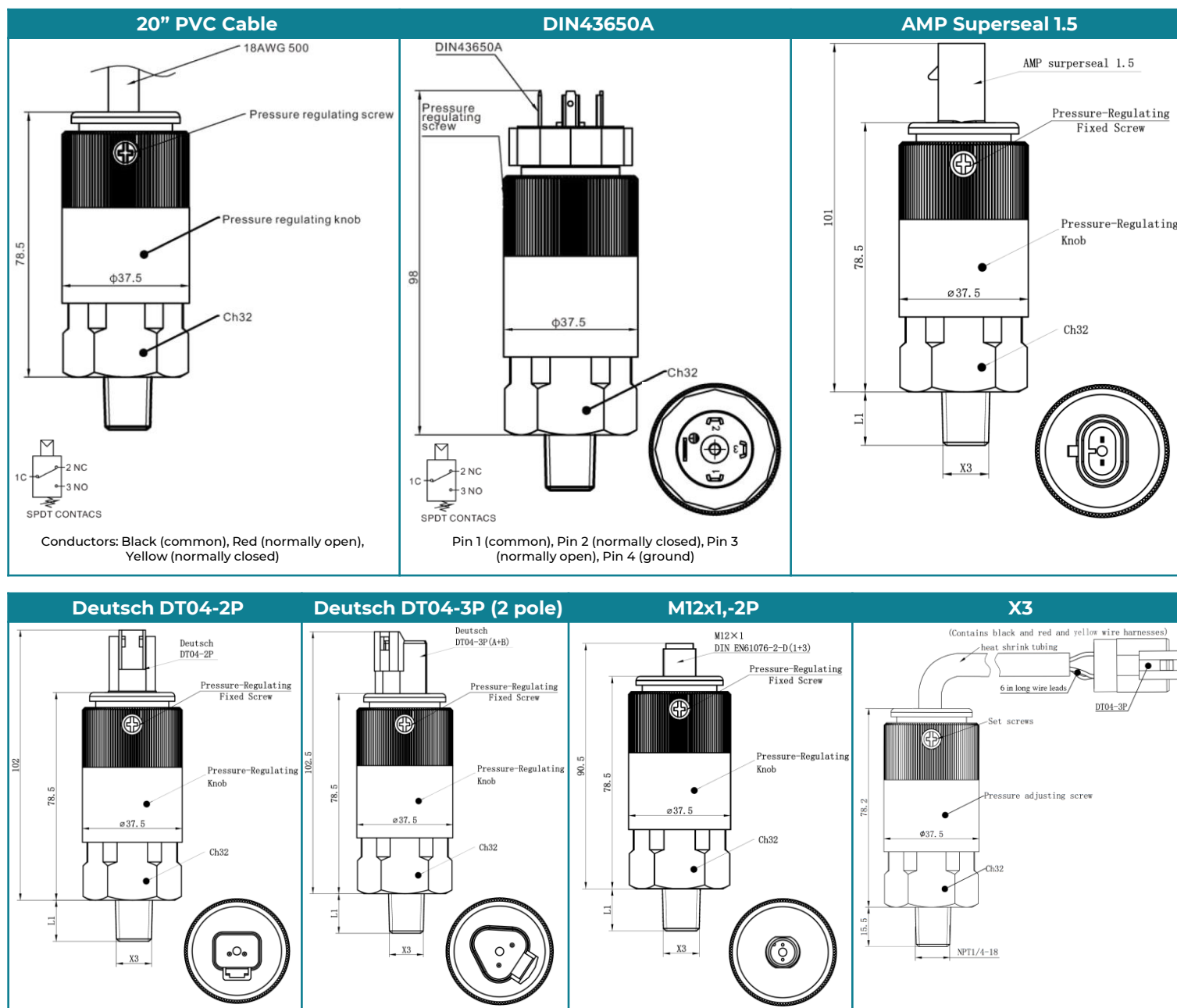
# Build Your Part Number

## Series P50

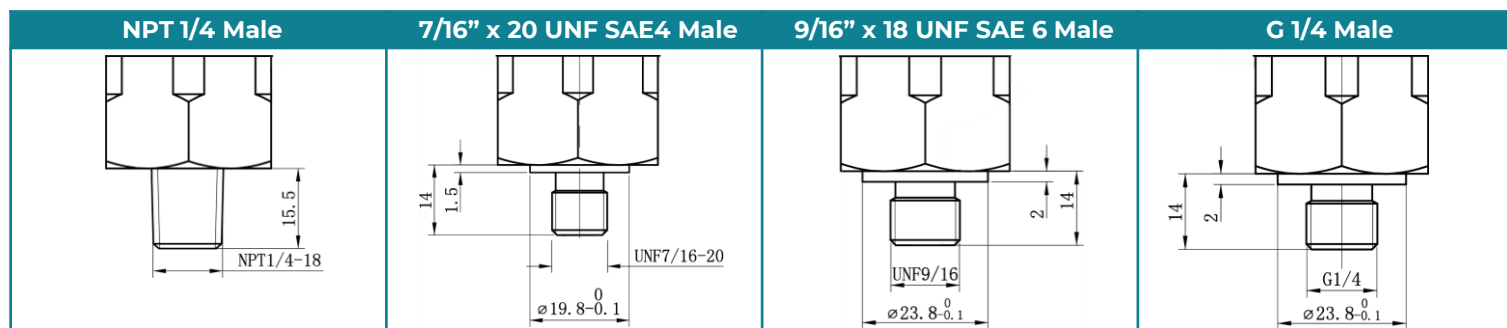
**Example: P50CCSN15L6B3000R-PSE16**

<b>Series</b>													
P50													
<b>Pressure Range - select one</b>													
	<table border="1"> <thead> <tr> <th></th> <th>PSI</th> <th>Bar</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>725...2,900</td> <td>50...200</td> </tr> <tr> <td>B</td> <td>1,450...4,350</td> <td>100...300</td> </tr> <tr> <td>C</td> <td>2,900...7,250</td> <td>200...500</td> </tr> </tbody> </table>		PSI	Bar	A	725...2,900	50...200	B	1,450...4,350	100...300	C	2,900...7,250	200...500
	PSI	Bar											
A	725...2,900	50...200											
B	1,450...4,350	100...300											
C	2,900...7,250	200...500											
<b>Contact Type- select one</b>													
A	SPST normally open (electrical terminal options 6B, PV, AS, 6D, 6E, 6F)												
B	SPST normally closed (electrical terminal options 6B, PV, AS, 6D, 6E, 6F)												
C	SPDT change-over (electrical terminal options 6B, PV, 6G)												
<b>Body Material &amp; Wetted Pressure Port - select one</b>													
S	Stainless Steel 304												
B	Brass												
<b>Sealing Material - select one (applies to internally wetted parts and parallel threaded process ports)</b>													
N1	NBR (-30...+100°C) standard												
F1	FKM (-10...+120°C)												
H1	HNBR (-30...+120°C)												
E1	EPDM (-50...+130°C)												
<b>Process Port - select one</b>													
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)												
<b>Electrical Terminals - select one (see page 6)</b>													
6B	DIN 43650A (IP65) (SPDT, SPST normally open or normally closed; 4 pole)												
PV	20" PVC non-shielded cable (IP67) (SPDT, SPST normally open or normally closed; 3 conductor)												
AS	AMP Superseal 1.5 series, 2-pole (IP 67) (SPST normally open or normally closed; 2 pole)												
6D	M12x1, 2-pole (IP67) (SPST normally open or normally closed; 2 pole)												
6E	Deutsch DT04-2P (IP67) (SPST normally open or normally closed; 2 pole)												
6F	Deutsch DT04-3P (IP67) (SPST normally open or normally closed; Note: DT04-3P form factor, but only 2 poles)												
6G	Deutsch DT04-3P attached with shrink wrapped 6" leads (IP67) (SPDT, SPST normally open or normally closed; 3 pole)												
<b>Factory Setting - optional (leave blank if not desired)</b>													
XXX ex: 950 = switch point at 950 psi; 3200 = switch point at 3200 psi													
<b>Activation - optional (leave blank if not desired)</b>													
R	Set to switch on rising pressure												
F	Set to switch on falling pressure												
<b>Mating Electrical Connection Assembly – optional; will be quoted as a separate line item (leave blank if not desired)</b>													
PSE1	M12x1, 5 pole – straight with cable gland (field wireable)												
PSE2	M12x1, 5 pole - straight with 1 meter PUR cable												
PSE3	M12x1, 5 pole - straight with 3 meter PUR cable												
PSE4	M12x1, 5 pole - straight with 1 meter PUR shielded cable												
PSE5	M12x1, 5 pole - straight with 3 meter PUR shielded cable												
PSE6	M12x1, 5 pole - 90° (field wireable)												
PSE7	M12x1, 5 pole - 90° with 1 meter PUR shielded cable												
PSE8	M12x1, 5 pole - 90° with 3 meter PUR shielded cable												
PSE14	DIN 43650-A with cable gland (field wireable)												
PSE15	DIN 43650-A with 1 meter PUR cable												
PSE16	DIN 43650-A with 3 meter PUR cable												
PSE17	DIN 43650-A with 1 meter PUR shielded cable												
PSE18	DIN 43650-A with 3 meter PUR shielded cable												
PSE19	DIN 43650-A with 1/2" NPT female & cable gland (field wireable)												
PSE22	Deutsch DTO4-2P with 1 meter PUR cable												
PSE23	Deutsch DTO4-2P with 3 meter PUR cable												
PSE24	Deutsch DTO4-3P with 1 meter PUR cable												
PSE25	Deutsch DTO4-3P with 3 meter PUR cable												

# Dimensions (mm)



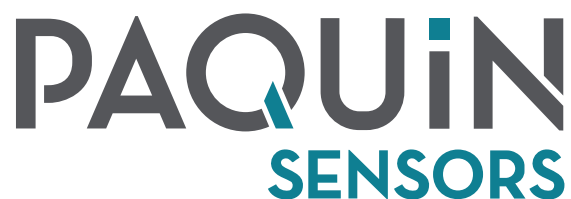
## Process Ports



# Technical Parameters

Technical Parameters				
Accuracy	Switching Hysteresis	10-20% of the set pressure (e.g. pressure setting 600psi, hysteresis 60-120psi)		
	Repeatability Precision	1%		
	Switching Differential Parameters	Within 20% of switch point		
	Pressure Sensing Technology	Diaphragm 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		
	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		
	Dielectric strength	When the resistance is 10 MΩ , add 500 VDC between the mutually insulated inserts and inserts and between the inserts and the plastic parts, and maintain no alarm and breakdown phenomenon for one minute. (View testing report for details)		
Environmental	Over Pressure	11600 PSI (800 bar)		
	Burst Pressure	14500 PSI (10000 bar)		
	Max Vibration	10-60Hz, peak amplitude 0.15mm, acceleration 20m/s², 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 ... 150.8°F (-25°C ... 66°C)		
	Medium Temperature Range	-4°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		

# 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.*

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