

Mechanical Pressure Switch

- Switch point adjustable by hand turn of housing barrel
- 10 Amps / 250 VAC
4 Amps / 30 VDC
- Temperatures ranges from -40°F to 248°F
- 1 million cycle durability
- Pressure settings from 10 to 750 psi
- IP65/IP67-rated enclosures ensure protection against dust and water ingress



About

The P412 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 10 to 750 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 P412'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

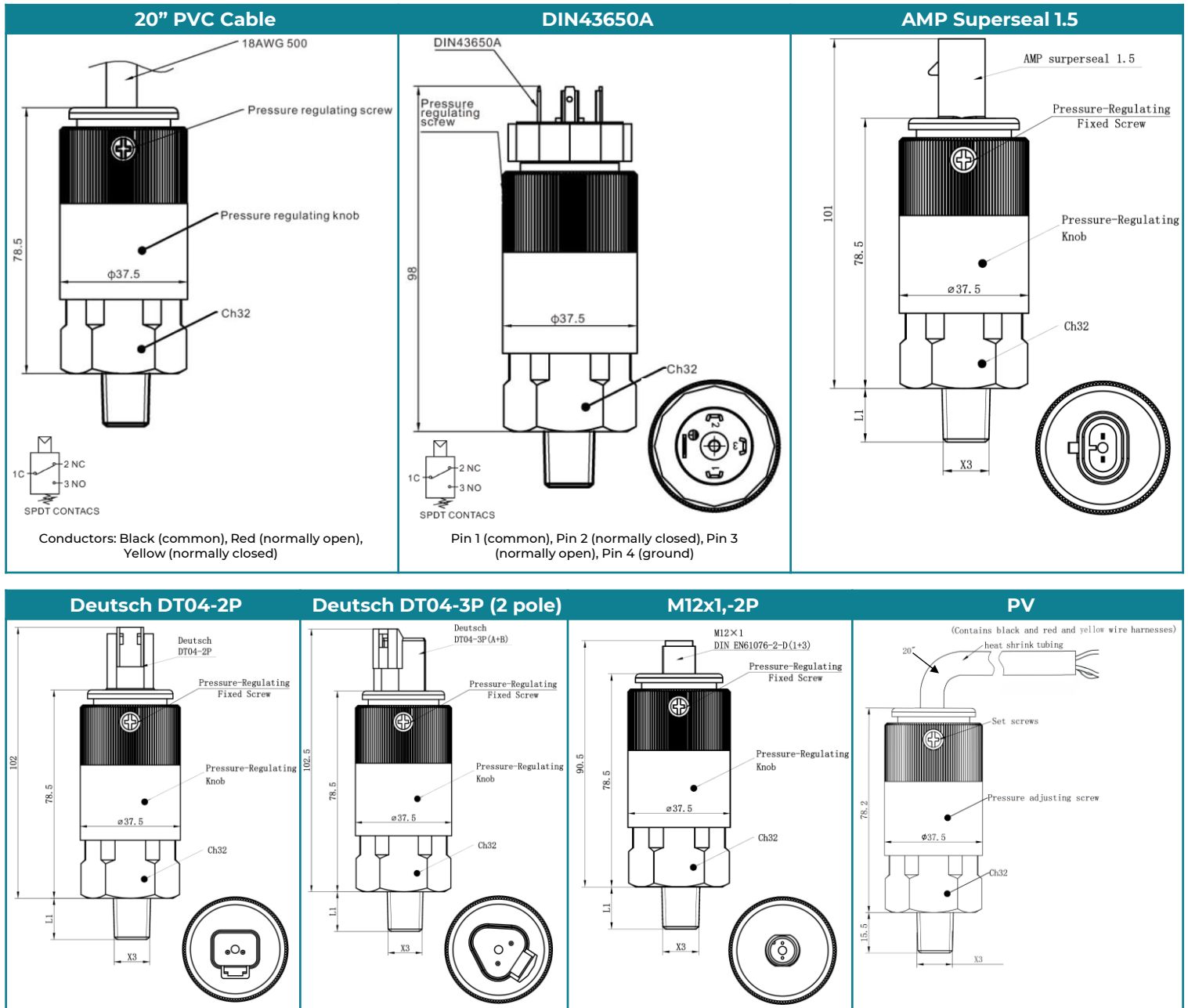
Build Your Part Number

Series P412

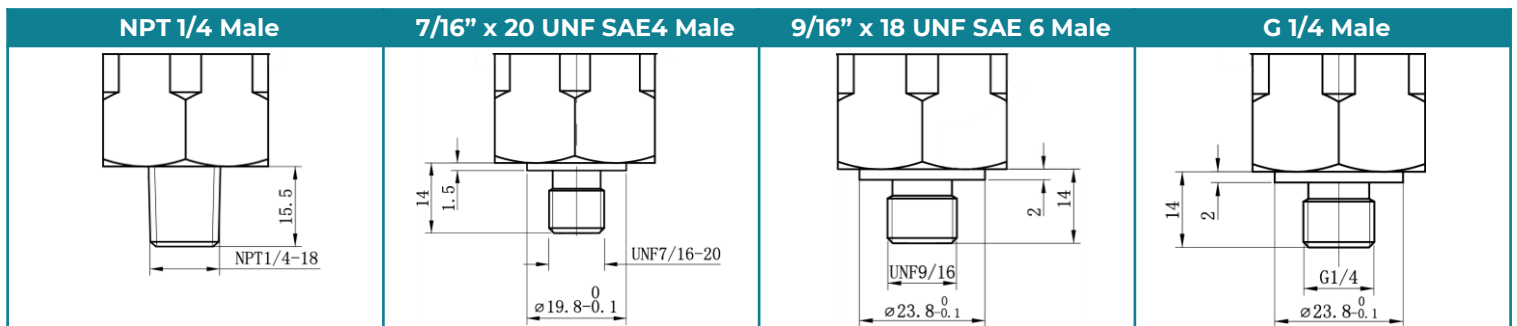
Example: P412DCBN15C6B300R-PSE120

Series																			
P412																			
Pressure Range - select one																			
	<table border="1"> <thead> <tr> <th></th> <th>PSI</th> <th>Bar</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>10...40</td> <td>0.69...2.76</td> </tr> <tr> <td>B</td> <td>25...100</td> <td>1.73...6.90</td> </tr> <tr> <td>C</td> <td>50...200</td> <td>3.45...13.8</td> </tr> <tr> <td>D</td> <td>100...400</td> <td>6.9...27.59</td> </tr> <tr> <td>E</td> <td>250...750</td> <td>17.25...51.73</td> </tr> </tbody> </table>		PSI	Bar	A	10...40	0.69...2.76	B	25...100	1.73...6.90	C	50...200	3.45...13.8	D	100...400	6.9...27.59	E	250...750	17.25...51.73
	PSI	Bar																	
A	10...40	0.69...2.76																	
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C	50...200	3.45...13.8																	
D	100...400	6.9...27.59																	
E	250...750	17.25...51.73																	
Contact Type- select one																			
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)																		
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																			
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 6)																			
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)																		
Factory Setting - optional (leave blank if not desired)																			
XXX	ex: 300 = switch point at 300 psi; 500 = switch point at 500 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)																			
PSE1	M12x1, 5 pole - straight with cable gland (field wireable)																		
PSE102	M12x1, 5 pole - straight with 1 meter PVC cable																		
PSE103	M12x1, 5 pole - straight with 3 meter PVC cable																		
PSE150	M12x1, 5 pole - straight with 1 meter PVC shielded cable																		
PSE151	M12x1, 5 pole - straight with 3 meter PVC 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)																		
PSE120	DIN 43650-A with 1 meter PVC cable																		
PSE121	DIN 43650-A with 3 meter PVC 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 (field wireable)																		
PSE132	Deutsch DT04-2P with 1 meter PVC cable																		
PSE133	Deutsch DT04-2P with 3 meter PVC cable																		
PSE138	Deutsch DT04-3P with 1 meter PVC cable																		
PSE139	Deutsch DT04-3P with 3 meter PVC cable																		

Dimensions (mm)



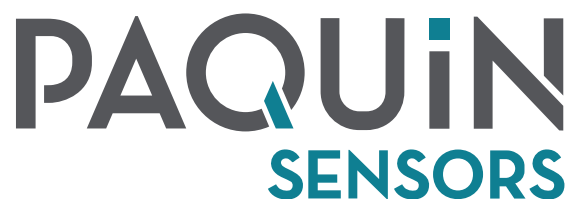
Process Ports



Technical Parameters

Technical Parameters			
Accuracy	Switching Hysteresis (Differential)	For ranges 25...100, 50...200, 100...400, 250...750 psi: 10-20% of the set pressure (e.g. pressure setting 150 psi, hysteresis 15-30 psi) For range 10...40 psi: 10-40% of the set pressure (e.g. pressure setting 20 psi, hysteresis 2-8 psi)	
	Repeatability Precision	1%	
	Pressure Sensing Technology	Diaphragm	
	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	6,525 PSI (450 bar)	
	Burst Pressure	8,700 PSI (600 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	-40°F ... 248°F (-40°C ... 120°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.

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