

Mechanical Pressure Switch

- Factory set or user adjustable switch points
- Diaphragm and piston options
- Ranges from 1.45 to 2,900 PSI
- Rated for 1M mechanical cycles
- Temperatures from -40°F to 2212°F (-40°C to 100°C)
- Brass, zinc plated and stainless-steel body and pressure ports
- SPST contacts
- Up to IP67



About

The P415 Mechanical Pressure Switch is a robust and versatile solution for monitoring and controlling pressure across a wide range of industrial applications. Designed for durability and flexibility, it features an adjustable switch point, broad pressure range up to 2,900 PSI, and rugged construction options including brass, zinc-plated steel, and stainless steel. With reliable SPST switching and up to IP67 protection, the P415 delivers dependable performance in demanding environments such as HVAC, hydraulics, and automation systems.

Applications

- ✓ HVAC & Refrigeration
- ✓ Automation Controls
- ✓ Water Management
- ✓ Hydraulics
- ✓ Pneumatics
- ✓ Equipment Builders
- ✓ Skid Packages
- ✓ More

Build Your Part Number

Series P415

Example: P4155ABN5C6D600R

Series

P415

Pressure Range & Switching Mechanism - select one

PSI	Bar	Tolerance	Switching Mechanism
1 1.45...21 psi ±2.9	0.1...1.5 bar ±0.2	+/-2.9 psi	Diaphragm
2 14.5...87 psi ± 7.5	1...6 bar ±0.5	+/- 7.5 psi	Diaphragm
3 72...290 psi ± 14.5	5...20 bar ±1	+/- 14.5 psi	Diaphragm
4 217...725 psi ± 29	15...50 bar ±2	+/-29 psi	Diaphragm
5 435...1,450 psi ± 72	30...100 bar ±5	+/-72.5 psi	Piston
6 725...2,175 psi ± 145	50...150 bar ±10	+/-145 psi	Piston
7 1,450...2,900 psi ± 217	100...200 bar ±15	+/- 217 psi	Piston

Contact Type- select one

A	SPST normally open
B	SPST normally closed

Body & Wetted Port - select one

B	Brass	For ranges 1,2,3
Z	Zinc Plated Steel	For ranges 1,2,3,4
S	Stainless Steel	For ranges 1,2,3,4,5,6,7

Wetted Sealing Material - select one

	Material	Fahrenheit	Celsius	
N	NBR	-22...+212°F	-30...+100°C	For pressure ranges, 1,2,3,4,5
H	HNBR	-22...+248°F	-30...+120°C	For pressure ranges, 1,2,3,4,5
F	FKM	+14...+248 °F	+10...+120°C	For pressure ranges, 1,2,3,4,5
E	EPDM	-58...+266°F	-50...+130°C	For pressure ranges 6,7
P	PTFE	-22...+266°F	-30 ...+130°C	For pressure ranges 6,7

Process Connection - select one

5A	1/8" NPT male
5C	1/4" NPT male
5G	7/16"-20 UNF male (SAE 4)
5L	9/16"-18 UNF male (SAE6)
5M	G 1/8" Male
5N	G 1/4" Male
5Q	G 1/2" Male

Electrical Termination (SPDT) - select one (refer to page 4)

6B	DIN 43650A (includes field wire able female mating connector)	(SPST normally open or normally closed; 2 pole)
6D	M12x1, 2-pole (1+3)	(SPST normally open or normally closed; 2 pole)
6S	Faston Male Spades 6.3 X 0.8	(SPST normally open or normally closed; 2 pole)
6M	M3 screws	(SPST normally open or normally closed; 2 pole)
6Y	Bayonet DIN72585A1-2.1	(SPST normally open or normally closed; 2 pole)
6E	Deutsch DT04-2p	(SPST normally open or normally closed; 2 pole)
6F	Deutsch DT04-3p (A+B)	(SPST normally open or normally closed; 2 pole)
AS	AMP Superseal 1.5 series	(SPST normally open or normally closed; 2 pole)
PV	20" inches PVC non shielded cable (non removable)	(SPST normally open or normally closed; 2 pole)
XX	Custom integrated cable length in inches (Ex: 50 inches = 50)	(SPST normally open or normally closed; 2 pole)

Factory Set Switch Point (optional) - if not desired please skip

XX	Please provide in psi (Ex: 600 = 600 psi)
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Build Your Part Number Cont.

Series P415

Example: P4155ABN5C6D600R

Switch Point Direction - select only when factory set switch point is desired, otherwise please skip

R	Increasing pressure
D	Decreasing pressure

Mating Electrical Connection Assembly – optional; will be quoted as a separate line item

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
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

Technical Parameters

Accuracy	Switching Hysteresis	~20% of the switch point pressure
	Mechanic Life Endurance	1 million cycles
	Electric Life Endurance	100,000 cycles
Electrical	Max Voltage	36 VDC
	Max Current	4 A
	Contact Type	SPST
Environmental & other	Over Pressure	Diaphragm design with zinc plated or stainless-steel body : 2,175 psi Diaphragm design with brass body: 580 psi Piston Design: 6,525 psi
	Burst Pressure	Diaphragm design with zinc plated or stainless-steel body: 4,350 psi Diaphragm design with brass body: 1,160 psi Piston Design: 8,700 psi
	Working Temperature Range	Depending on sealing material; please refer to page 2
Material	Housing	Brass / Zinc plated steel / Stainless steel
	Contacts	Silver cadmium alloy / Gold plated on request
	Wetted Parts	Pressure Port: Brass, Zinc plated steel, Stainless steel Diaphragm: NBR, HNBR, FKM, EPDM, PTFE Piston: Stainless steel 304
	Weight	~85g

Electrical Terminations

Dimensions

Series P415

