

## Pressure switch mechanical Model PSM-550

Switzer data sheet PSM-550



### Applications

- Pumps, filters
- Vacuum brakes
- Lubrication system, hydraulic system
- HVAC
- Circuit breakers
- Heat exchanger, water treatment

### Special features

- Wide adjustable range
- Adjustable on-off differential
- Sturdy snap action switch
- Repeatability  $\pm 1\%$
- Weatherproof to IP67



Pressure switch mechanical, model PSM-550

### Description

PSM-550 pressure switches utilise seamless bellows as the sensing element. Simplicity of design and easy of installation has been stressed for reliable use, even in applications where shock and vibrations are present. The sensing element is suitable for a variety of process fluids.

PSM-550 switches have an excellent record backed by our responsive manufacturing facility. Special application assistance is always available.

Applications include pumps, compressors, filters, evaporators, heat exchangers, lubrication systems, hydraulic systems, marine equipment, heating and air conditioning equipment, turbines, generators and circuit-breakers etc.

## Standard version

### Switch enclosure

Cover: ABS, plastic  
Housing: Polyester

### Repeatability

±1 % of full scale value

### Permissible ambient temperature

-25 °C ... +70 °C

### Permissible medium temperature

- -20 °C ... +70 °C for code 11 and 41
- -20 °C ... +170 °C for code 44 and 22

### Process connection

- 3/8" BSP(M)

### Measuring element

- Bellows
- NBR (Nitrile) diaphragm for PSM-550-M1

### Pressure connector

- Brass (standard)
- Mild steel for PSM-550-M1 (standard)
- 304 or 316 stainless steel

### Gasket

Process connection: Nitrile  
Cover: Silicone

### Switch contacts

One SPDT contact system

### On-off differential

Adjustable

### Electrical rating

- AC-1: 10A, 230V
- AC-15: 4A, 230V

### Electrical entry

1/2" NPT(F)

### Ingress protection

IP67

### Mounting

Direct online

### Conformity

Generally to BS:6134:1991

### Options

- One SPDT microswitch  
15A resistive AC 250 V  
0.5A 110V / 0.25A 220V / 8A 24V:DC-resistive  
0.2A 110V / 0.10A 220V / 7A 24V:DC-Inductive
- DPDT microswitch  
10A AC 125 / 250 V,  
2A AC 480 V, 0.25A DC 250 V

## Ordering matrix

Model	Range in bar	Differential in bar		Maximum working pressure in bar	
		Contact system/ S type microswitch	D type microswitch	11	41
PSM-550-C1	(-) 0.8 ... 5	0.5 ... 2	0.5 ... 2	15	25
PSM-550-V1	(-) 1 ... 0	0.09 ... 0.4	0.18 ... 0.49	7	7
PSM-550-B1	0.1 ... 1.1	0.07 ... 0.16	0.14 ... 0.23	7	7
PSM-550-B2	0.2 ... 3	0.12 ... 0.75	0.25 ... 1.1	7	7
PSM-550-B3	0.2 ... 6	0.25 ... 1.2	0.5 ... 1.45	15	25
PSM-550-B4	1 ... 10	0.3 ... 1.3	0.6 ... 1.6	16	25
PSM-550-B5 *	2 ... 17	0.3 ... 2	0.6 ... 2.3	---	25
PSM-550-B6	4 ... 17	1.2 ... 4	2.4 ... 5.2	25	25
PSM-550-B7	10 ... 30	1 ... 4	2.0 ... 5.0	45	45

Model	Range in cmWC	Differential in cmWC		Maximum working pressure in bar
		Contact system/ S type microswitch	D type microswitch	NC
PSM-550-M1	0 ... 300	10 ... 50	20 ... 60	0.5

\* PSM-550-B5 is not available with phosphor bronze bellows.

## Ordering matrix continued

### Sensing element and pressure connector

- 11** PB bellows with brass pressure connector (standard)
- 41** 304 SS bellows with brass pressure connector
- 44** 304 SS bellows with 304 SS pressure connector
- 22** 316 SS bellows with 316 SS pressure connector (for model PSM-550-B3, B4, B5 and B6 only)
- NC** Nitrile diaphragm with mild steel pressure connector (for model PSM-550-M1 only)

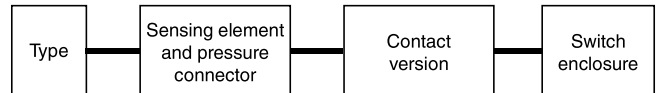
### Contact version

- C** One SPDT contact system
- S** One SPDT microswitch
- D** DPDT microswitch

### Switch enclosure

- D** ABS, plastic cover with polyester housing, weatherproof to IP67 as per IS/IEC:60529-2001 (standard)
- A** Aluminium, powder coated cover with Die cast aluminium housing, weatherproof to IP66 as per IS/IEC:60529-2001

### Model Number to be ordered as below



Example: **PSM-550-B4-41-S-A**

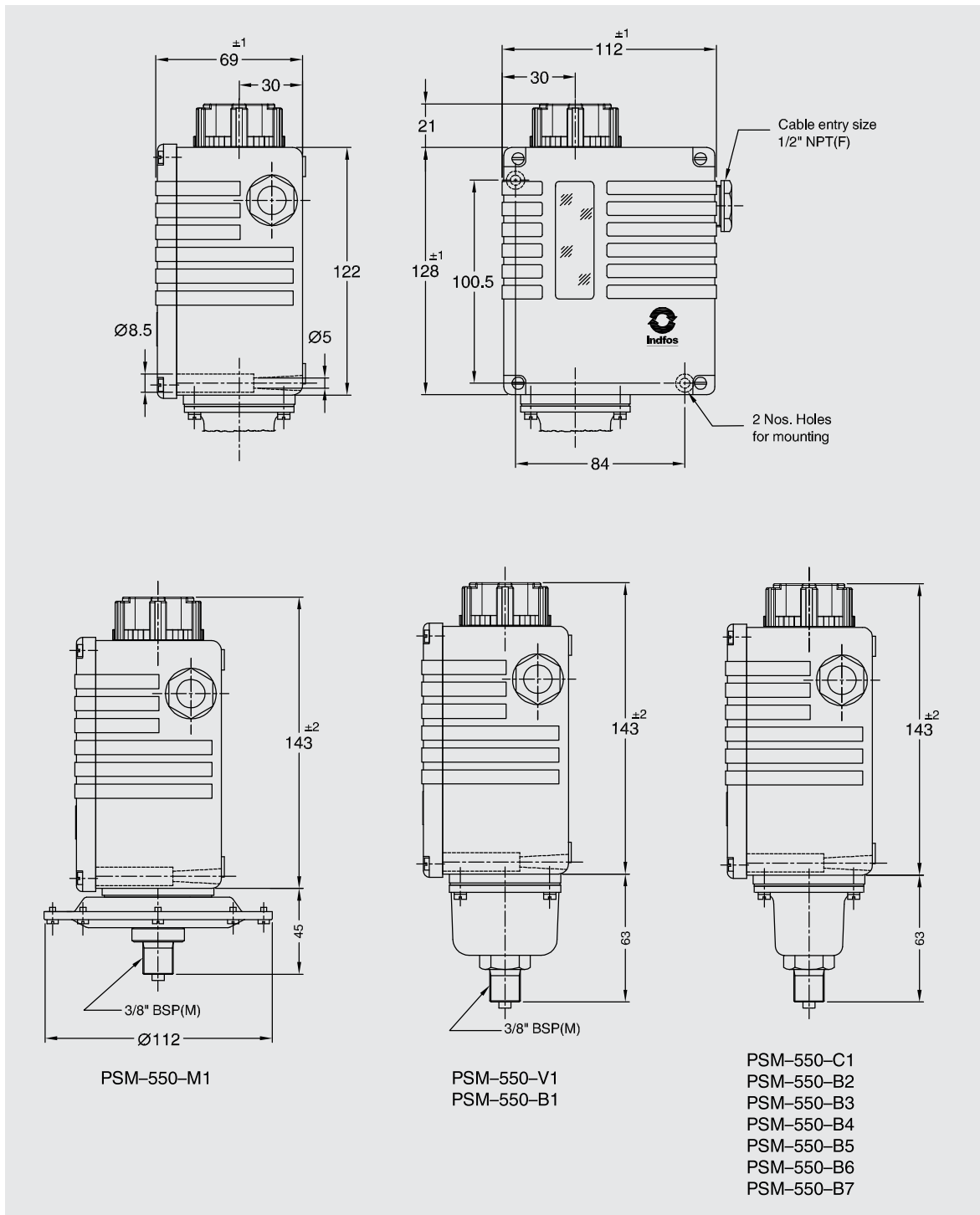
Type PSM-550-B4 (range 1 to 10 bar)

304 SS bellows with brass pressure connector

SPDT microswitch 15A resistive AC 250V

Aluminium, powder coated cover with Die cast aluminium housing, weatherproof to IP66 as per IS/IEC:60529-2001

## Dimensions in mm



### Ordering information

Type / Sensing element and pressure connector / Contact version / Switch enclosure

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