

## 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

70 °C

### Permissible medium temperature

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

### Process connection

- 3/8" BSP(M)

### Measuring element

- Bellows
- Nitrile diaphragm for PSM-550-M1

### Pressure connector

- Brass (standard)
- Mild steel for PSM-550-M1 (standard)
- Stainless steel

### Gasket

Process connection: Nitrile  
Cover: Silicone

### Switch contacts

One SPDT contact system

### On-off differential

Adjustable

### Electrical rating

10A resistive, 4A inductive AC 230 V

### Electrical entry

1/2" NPT(F)

### Ingress protection

IP67

### Mounting

Direct online

### Conformity

Generally to BS:6134:1991

## Ordering matrix

| Type         | Range in bar  | Differential in bar                   |                    | Maximum test pressure in bar |    |
|--------------|---------------|---------------------------------------|--------------------|------------------------------|----|
|              |               | Contact system/<br>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 |

| Type       | Range in cmWC | Differential in cmWc                  |                    | Maximum test pressure in bar |     |
|------------|---------------|---------------------------------------|--------------------|------------------------------|-----|
|            |               | Contact system/<br>S type microswitch | D type microswitch | NC                           | 41  |
| PSM-550-M1 | 0 ... 300     | 10 ... 50                             | 20 ... 60          | 0.5                          | --- |

★ PSM-550-B5 available only with 304 stainless steel bellows with brass pressure connector.

## 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 – 10A resistive 4A Inductive AC 230 V, (standard)
- S** 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
- D** DPDT microswitch, 10A AC 125 / 250 V, 2A AC 480 V, 0.25A DC 250 V

### 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**

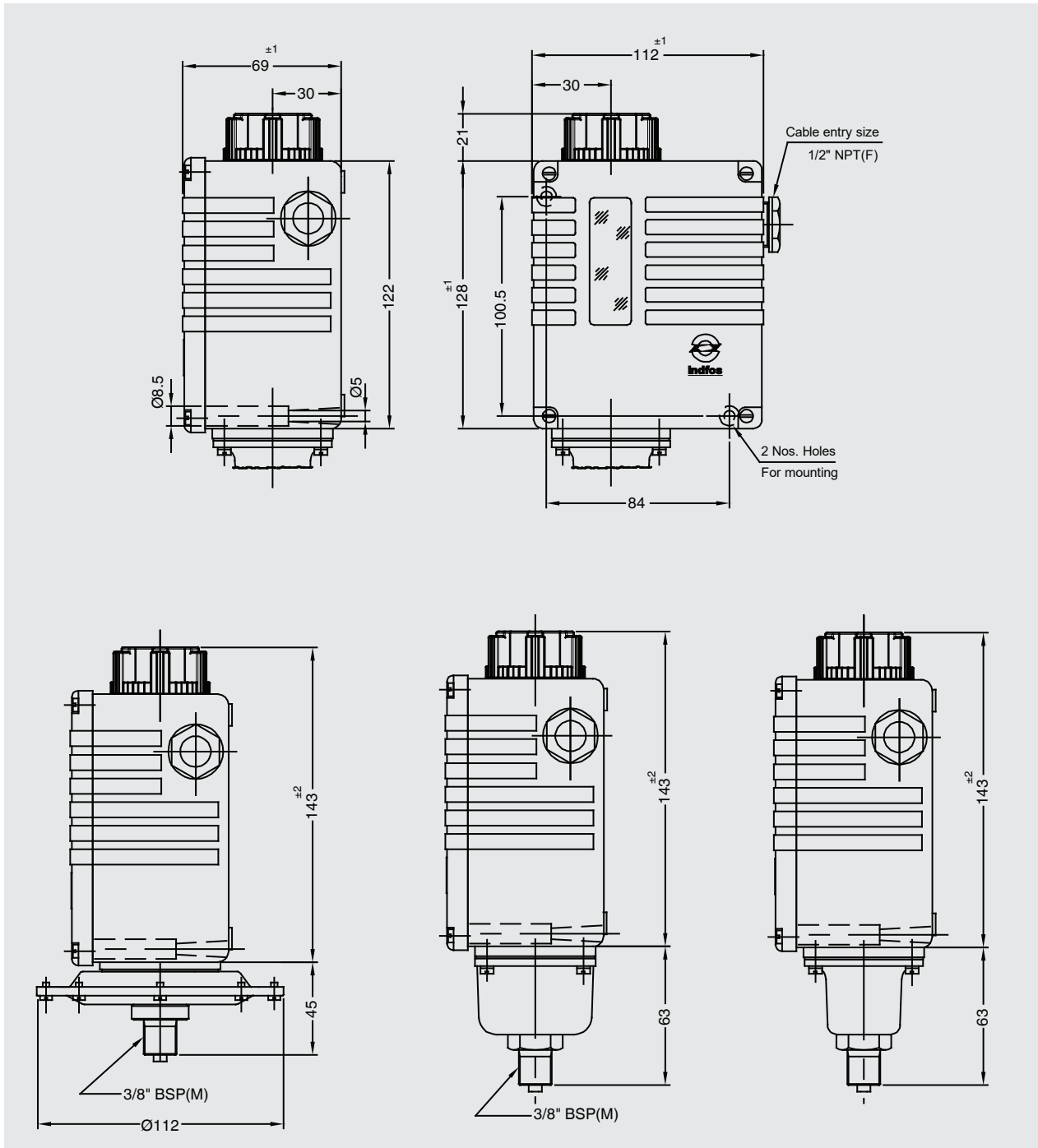
Type PSM-550-B4 (range 1 to 10 bar)

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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