



PRESSURE SWITCHES

TYPE IPS



- **MICROSWITCH ACTUATION**
- **REDUCED OVERALL SIZE**
- **IMPROVED MECHANISM**

Operating Function

Industrial Pressure Switch (IPS) is an electromechanical device that senses changes in pressure and provides electrical contact closures at predetermined pressure values.

A hydraulically formed seamless Phosphor Bronze bellows senses the changes in pressure and actuates a snap acting microswitch at desired pressure settings. The cut-in and cut-out points are adjustable over the entire range.

IPS Pressure Switch may be used to activate an alarm or may directly control the process. In an alarm application, the switch protects valuable equipment by an audible signal. In direct control application, the switch can be linked electrically to other equipment, for trip or interlock.

Application

IPS Pressure Switches are meant for use with oil, water, air, steam and other non-corrosive pressure mediums. They are NOT designed for use with any refrigerant gases.

IPS Pressure Switches are used on a wide variety of applications which include

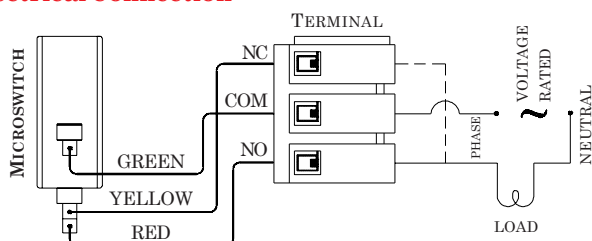
- Pumps Controls
- Compressors
- Turbines
- Lubrication Systems
- Condensers
- Process Boilers
- Controls in conjunction with Solenoid Valves.

Settings

The adjustments are conveniently located on top surface of the control. The switch can be set to operate at desired pressure values by adopting the following procedure:

1. Decide the maximum pressure at which the switch has to changeover.
2. Decide the differential at which the control has to operate.
3. First set the maximum changeover pressure on the range scale. This can be done by removing the knob and turning the range spindle.
4. Next set the differential on the differential scale with the help of the differential spindle.
5. Check the maximum and minimum changeover pressures with a master gauge.

Electrical Connection



The electrical continuity is maintained between contacts NC & COM under normal conditions. The contacts changeover to NO & COM on rise of pressure to preset value.

Since the electrical contact is of SPDT type, it can be used for reverse applications also.

Coloured wires are used for NO, NC and COM for easy identification.

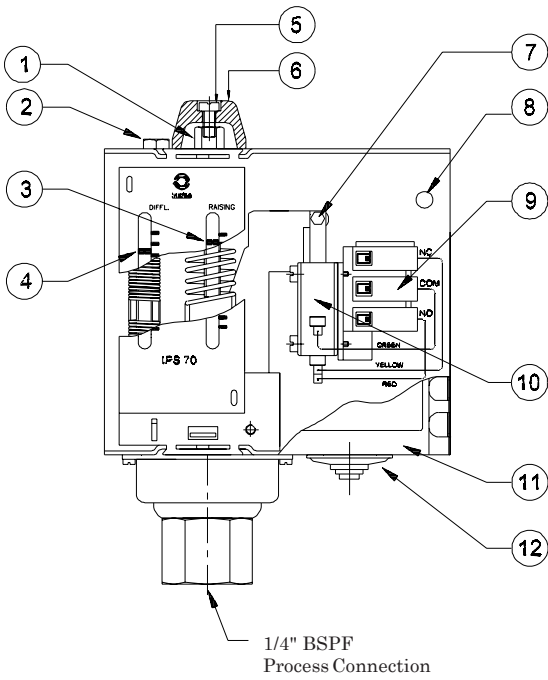
Mounting

The pressure control can be mounted on a wall or panel by means of mounting holes provided at the back of the device.

GENERAL SPECIFICATION

Enclosure	Plated Steel with ABS cover to IP:33 as per IS:13947 (Part-1), 1993				
Sensing Element	Phosphor Bronze Bellows				
Switching	Instrument Quality snap acting microswitch – SPDT contacts				
Switch Rating	15A 250V AC				
Repeatability / Accuracy	± 2% FSR				
Ambient Temperature	70°C				
Process Temperature	100°C max.				
Process Connection	1/4" BSP (F)				
Cable Entry	Suitable for Cable dia upto 14 mm OD				
Mounting	Surface / Panel				

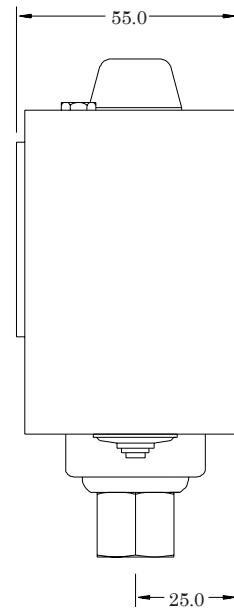
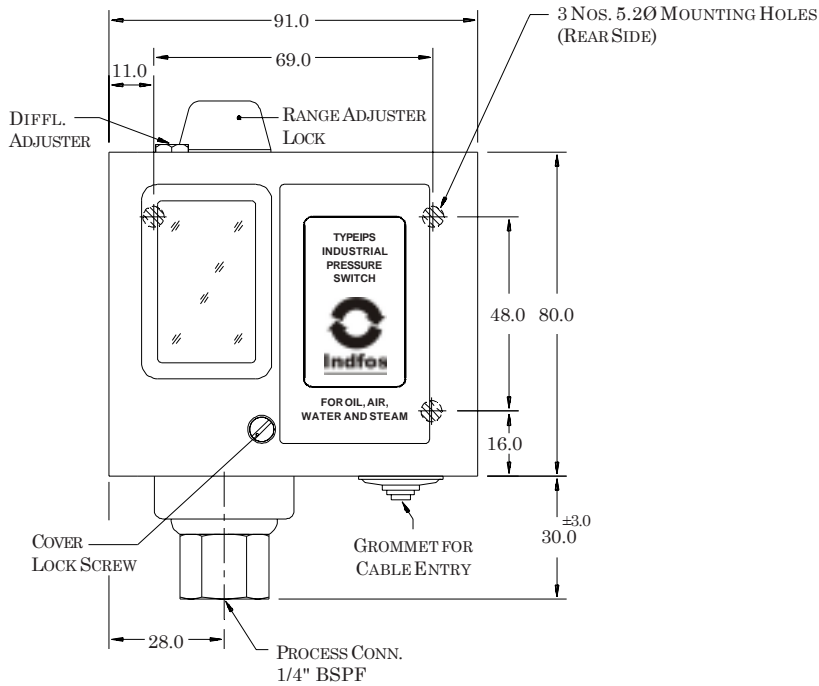
Ordering Code	Range		Adjustable Differential		Max. Pressure	
	Bar	PSI	Bar	PSI	Bar	PSI
IPS-70	0 – 5	0 – 70	0.5 – 4	7 – 55	16	230
IPS-100	0 – 7	0 – 100	0.6 – 6	9 – 85	16	230
IPS-200	3 – 15	45 – 215	1.4 – 5	20 – 70	32	450
IPS-400	5 – 30	75 – 425	2.6 – 8	40 – 115	32	450



1. Range Adjuster
2. Differential Adjuster
3. Setpoint Index
4. Differential Index
5. Range Adjuster Lock Screw
6. Range Adjuster Lock
7. Striker Screw
8. Mounting Holes : 5.2Ø – at 3 corners of 48 H x 69 W
9. Terminal Connector
10. Microswitch 15A 230V AC SPDT
11. Top Cover
12. Grommet for 6 to 14 mm Ø cable



MOUNTING DIMENSIONS



All dimensions are in mm