

Pressure switch, heavy-duty version TPST / DPST Model PSM-630

WIKA data sheet PSM-630

Applications

- Air compressor
- Water pump

Special features

- Setting ranges 1 ... 5 to 6 ... 16 bar
- Electrical rating up to AC 440V 16A
- Including on/off knob to control switching manually.
- Integrated relief valve to ensure smooth restart of the compressor.



Fig. top: Pressure switch mechanical, model PSM-630

Fig. bottom: Pressure switch mechanical with relief valve, model PSM-630

Description

The model PSM-630 is used in industrial control, monitoring and alarm applications. The switch point can be adjusted by the customer on site. The instrument can switch electrical loads of up to AC 440 V, 16 A.

The integrated relief valve (option) is used for depressurising the pressure chamber of the compression piston before starting the compressor. With the manual On/Off knob, the contact system can be locked in the open position, irrespective of the process pressure.

Specifications

Unit	Setting range ¹⁾	Permissible switch point on rising pressure	Adjustable switch differential ²⁾	Maximum working pressure
bar	1 ... 5	1.7 ... 5	0.7 ... 3	8
	2.5 ... 11	4.3 ... 11	1.8 ... 7	15
	6 ... 16	8.3 ... 16	2.3 ... 7	20
MPa	0.1 ... 0.5	0.17 ... 0.5	0.07 ... 0.3	0.8
	0.25 ... 1.1	0.43 ... 1.1	0.18 ... 0.7	1.5
	0.6 ... 1.6	0.83 ... 1.6	0.23 ... 0.7	2.0

1) Switch point and reset point have to be within the setting range.

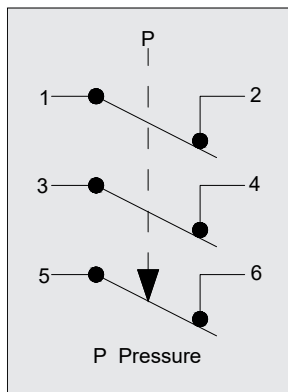
2) The difference between the switch point and the reset point is also known as switch hysteresis.

Non-repeatability of the switch point

≤ 2% of Span

Switch contact

3-Pole normally closed TPST/ DPST



Manual on/off knob

For locking the contact system in the open position Off: Switch contact is positively opened by hand On: Switch contact is opened/closed per switch point setting.

Electrical rating

16A, 230V / 440V AC

Operating conditions

Permissible temperature ranges

Ambient: -40 ... +70 °C (-40 ... +158 °F)

Medium: -20 ... +70 °C (-4 ... +158 °F)

Storage: -20 ... +80 °C (-4 ... +176 °F)

Reference conditions

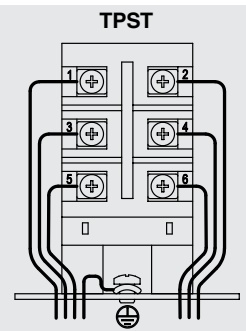
Relative humidity per BS 6134

< 50 % r. h. at 40 °C (104 °F)

< 90 % r. h. at 20 °C (68 °F)

Terminal assignment

- 1 NC Normally closed 1, power supply
- 2 NC Normally closed 1, load
- 3 NC Normally closed 2, power supply
- 4 NC Normally closed 2, load
- 5 NC Normally closed 3, power supply
- 6 NC Normally closed 3, load
- ⊕ GND Ground connection



Electrical connection

2 × Rubber grommet for cables Ø 6 ... 12 mm (Ø 0.24 ... 0.55 in)

Ingress protection

IP44 (as per IEC/EN 60529)

Relief valve (option)

1/4" flare

Process connections

Process connection per	Thread size
ISO 228-1	G1/2" female
	G1/4" female
	4-port connection G1/2 × G1/4 × G1/4 × G1/4

Materials

Wetted parts

Diaphragm : NBR

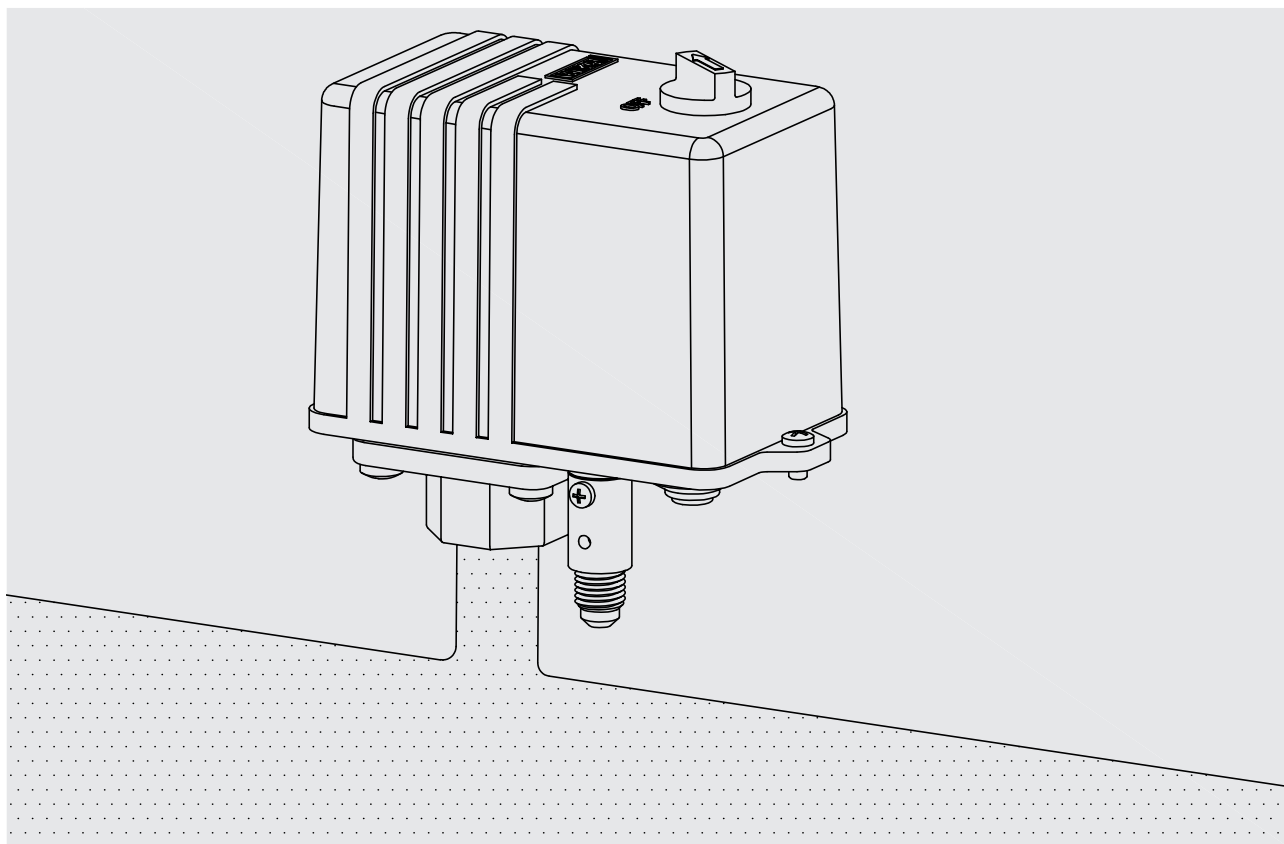
Process connection: Casting

Ordering matrix

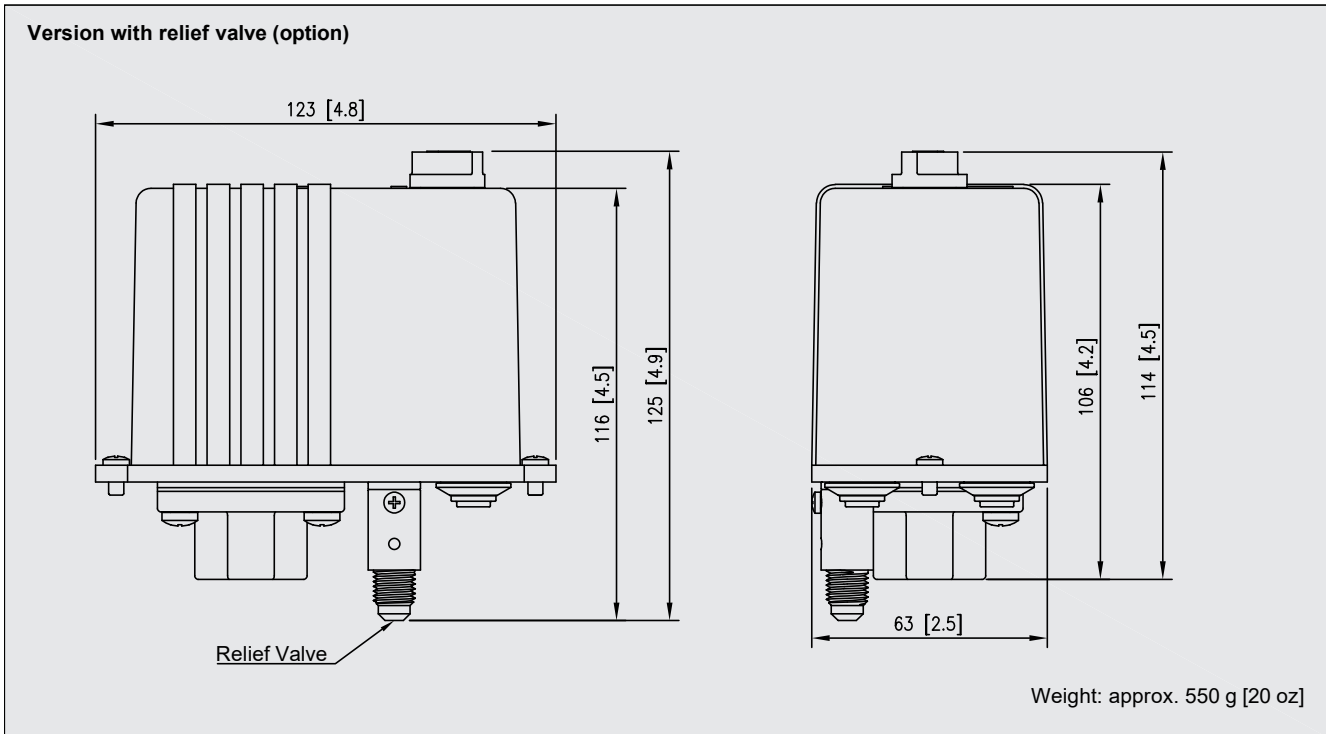
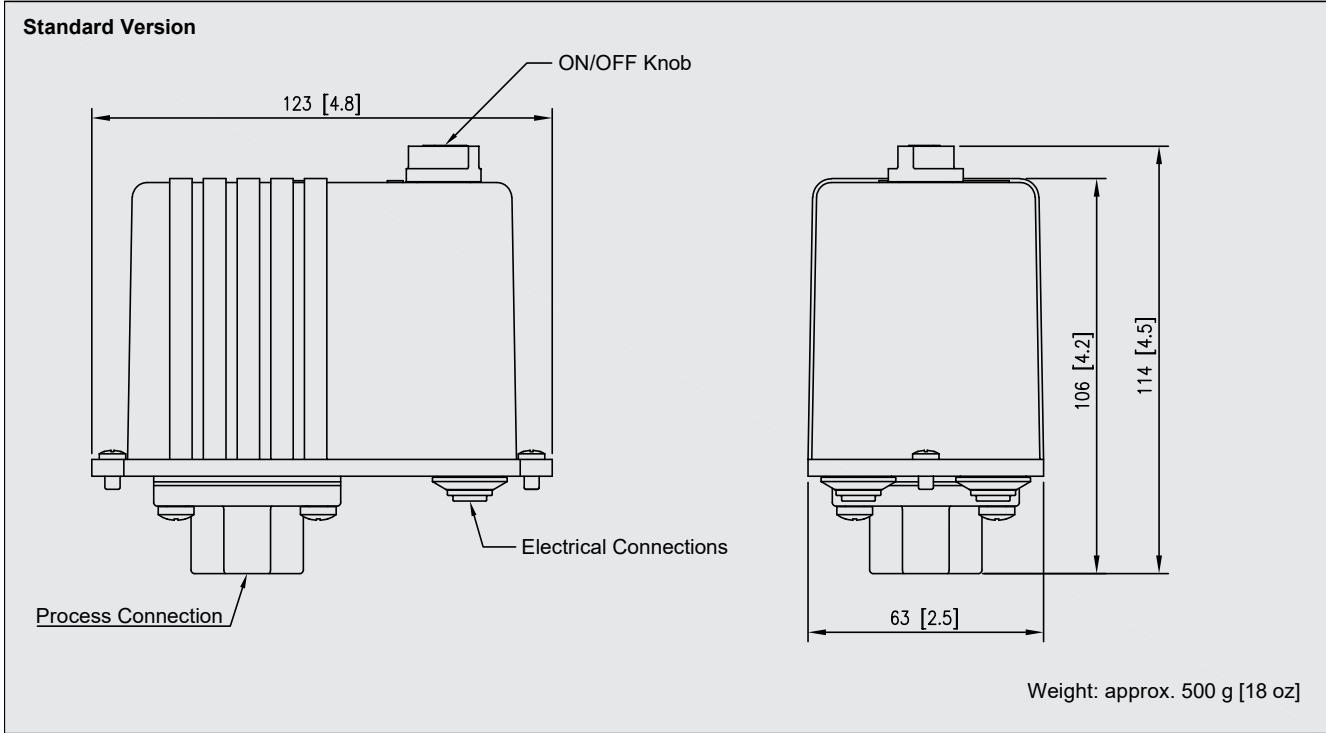
Range	Item number list			
	Double pole single throw (DPST)		Tripple pole single throw (TPST)	
	With relief valve	Without relief valve	With relief valve	Without relief valve
1 ... 5 bar	—	65964310	—	65964315
2.5 ... 11 bar	65964308	65964311	65964313	65964316
6 ... 16 bar	65964309	62964312	65964314	65964317

Mounting

Direct

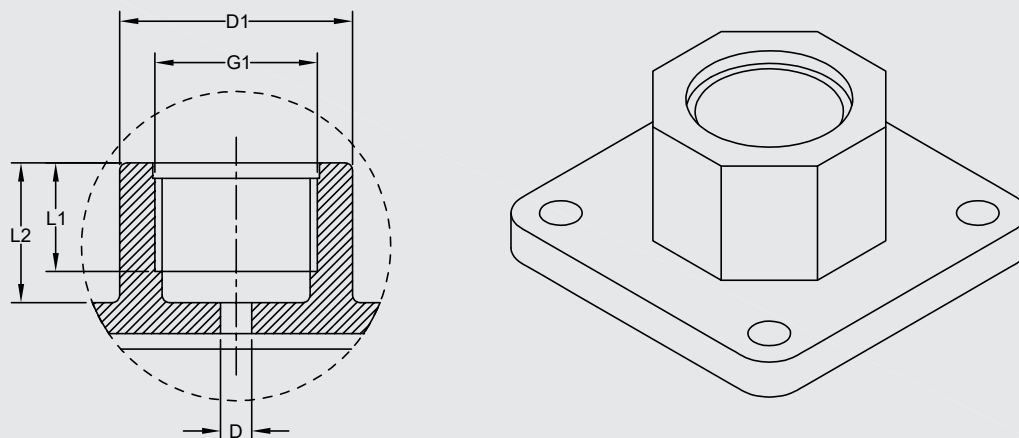


Dimensions in mm [inch]

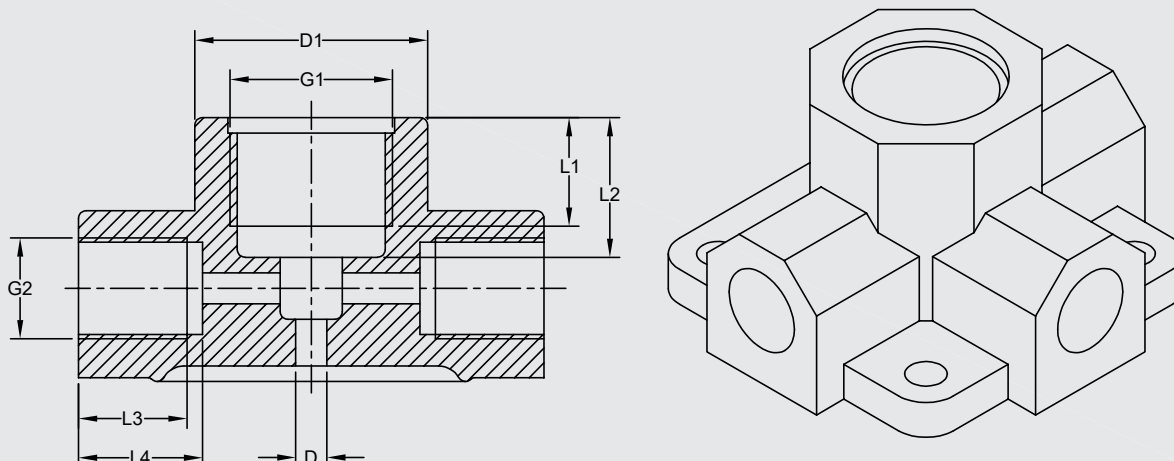


Process connection

Single Port (Thread per ISO 228-1)



Four Port (Thread per ISO 228-1)



Dimensions in mm [in]

D	D1 ¹⁾	G1	L1	L2	G2	L3	L4
Ø4.0 [0.157]	SW 30 [1.18]	G1/2" (F)	14 [0.55]	18 [0.71]	G1/4" (F)	14 [0.55]	16 [0.63]

¹⁾ SW = Spanner Width

Ordering information

Model / Relief valve / Manual On/Off switch / Setting range / Process connection

© 2022 WIKA Instruments India Pvt. Ltd., all rights reserved.

The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.



WIKA Instruments India Pvt. Ltd.

Plot no B-20 and B-21, Industrial area
Site-3, Meerut Road
Ghaziabad 201003, Uttar Pradesh
Tel. +91 0120-2712134
sales@wika.co.in
www.wika.co.in