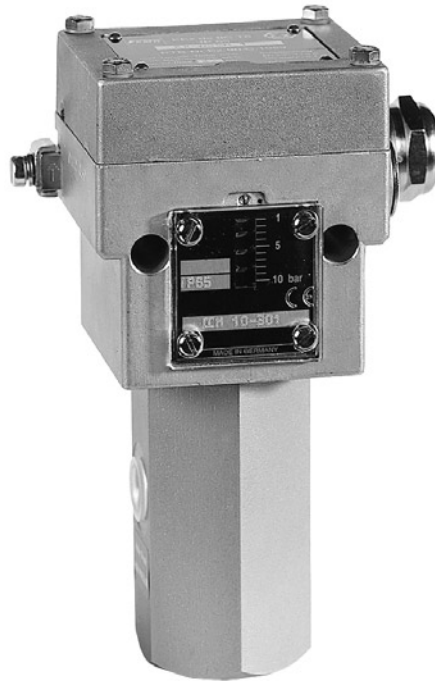


PS07

Differential pressure switches

- compact
- heavy-duty design
- 9 different pressure ranges
- various materials
- plug connection



Description:

The PS07 series pressure switches are mechanically very robust. The PS07 heavy-duty housing is made of die-cast aluminum; it is saltwater-proof and, depending on the pressure range, has an aluminum or stainless steel 1.4305 fitting. Both connections are G1/4 female thread. Pressure changes at the connections act on a dual chamber system with stainless steel bellows or buna N diaphragm, whose movements are transmitted via a mechanical bridge to a high-performance microswitch. The switching point can be adjusted from outside of the device by turning a setpoint spindle, which alters the spring bias. A counter pressure spring, which assures very stable switching at low adjustment values, is also fitted in the switch.

Typical Applications:

The PS07 series pressure switches are suitable for regulating and monitoring differential pressures on the order of millibars up to differential pressures on the order of double-digit bar values. The PS07 guarantees outstanding long-term stability and small operating-point drift since the pressure-absorbing bellows / diaphragms and are only lightly loaded relative to their design load ranges. The travel is limited by a stop so that maximum protection against overpressures can be achieved even for small operating ranges and hystereses. Typically, the PS07 is installed throughout industry to monitor filters or gas / liquid streams.

Models:

Differential pressure switches

Operating range: see "Model Coding" section

Process

connection: 2x G1/4 female thread

The PS07 can be screwed to the pressure pipe with the G1/4 male threaded fitting, or alternatively, it can be fixed with 2 screws (4 mm diameter) to a flat surface. When connecting the device to pressurized lines, please note:
P (+) high pressure
S (-) low pressure

Housing material: die-cast aluminum GD-Al Si 12 (salt-water-proof)

Pressure probe materials: PS07.x.(A...D):
buna N membrane
aluminum sensor housing
PS07.(E...I):
bellows 1.4571
sensor housing 1.4305

Electrical Specifications:

Connection: plug connector

Protection type: IP54 in vertical mounting position

The PS07 can be installed in the vertical and horizontal positions, whereby the vertical mounting position is the most advantageous mounting position for the switch.

Switch rating: 250 VAC, 8A (ohmic), 5A (inductive)
250 VDC, 0.3A (ohmic)
24 VDC, 8A (ohmic)

Operating range:

Model:	Hysteresis not adjustable	Maximum pressure (on one or two sides)	Connection drawing no.*
PS07.A	2 mbar	0.5 bar	17
PS07.B	15 mbar	1.5 bar	17
PS07.C	20 mbar	3 bar	17
PS07.D	35 mbar	3 bar	17
PS07.E	0.15 bar	15 bar	18
PS07.F	0.13 bar	15 bar	18
PS07.G	0.2 bar	25 bar	18
PS07.H	0.2 bar	15 bar	18
PS07.I	0.6 bar	25 bar	18

* Connection drawings as per data sheet PS08

Model Coding:

Order Number: PS07. D.

Differential pressure switches

Operating ranges

Setting range

A* = 4 to 25 mbar
B* = 10 to 60 mbar
C* = 20 to 160 mbar
D* = 100 to 600 mbar
E* = -0.1 to +0.4 bar
F = 0.2 to 1.6 bar
G* = 1 to 4 bar
H = 0.5 to 6 bar
I = 3 to 16 bar

* No scale gradations (\pm markings only)

Technical Specifications:

Measuring range: see table

Max. pressure: see table

Max. gas/liquid temp.: -25 °C bis +70 °C
kurzzeitig bis +85 °C

Actuation pressure: the setting spindle can be adjusted with a screwdriver from outside

Repeatability: < 1 % of working range (for pressure ranges > 1 bar)

Adjustment: the scale value corresponds to the lower switching point, the upper switching point is higher by the amount of the hysteresis

Sealing: the device can be sealed; subsequent sealing may be done in the field if necessary.

Dial: the PS07.A...D devices have plus-minus markings only, which can be set using a manometer or by the vendor

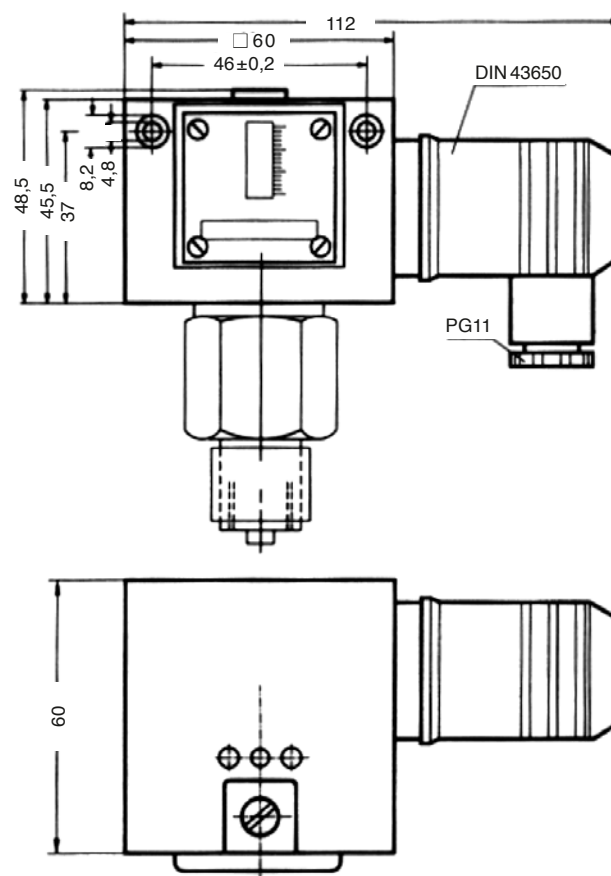
Vacuum: all model PS07 devices may be operated under vacuum, the device will NOT be damaged as a result

Vibrations: no appreciable deviations up to 4g. The hysteresis is slightly reduced at higher accelerations. Deployment above 25g is unapproved.

Options: gold-plated contacts, 2 microswitches, ex proofed model, MIN / MAX limiter

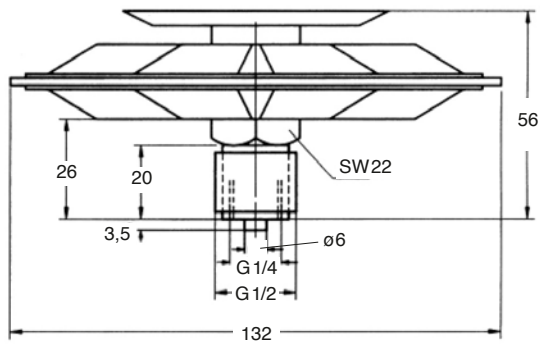
PS05, PS06, PS07, PS08

Housing Dimensions

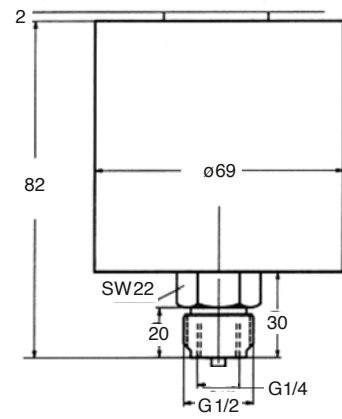


PS05 / PS06 / PS07 / PS08 – Connection Drawings

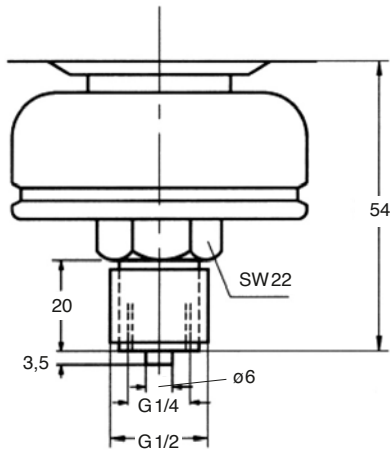
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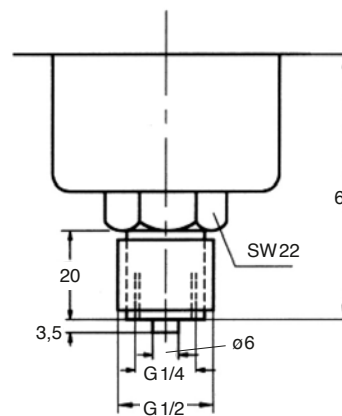
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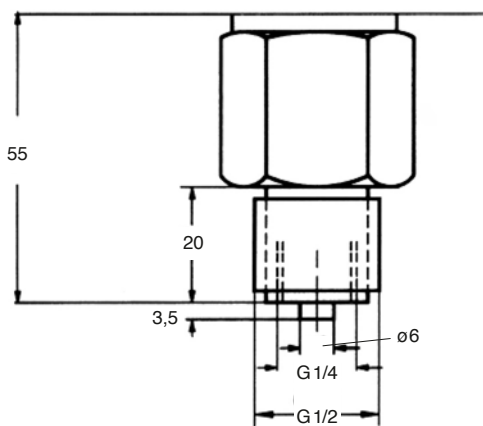
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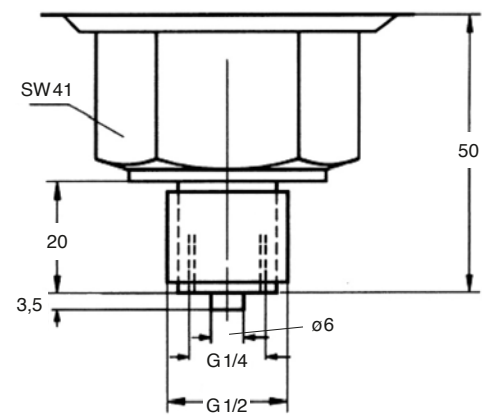
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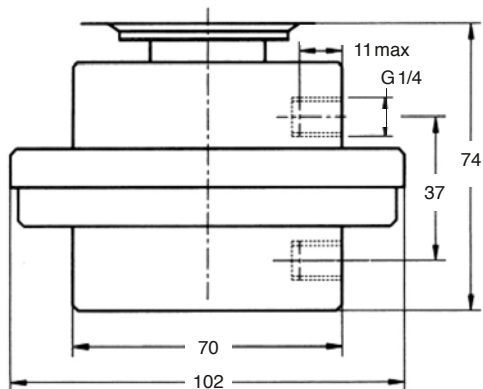
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