

DSD: Differential pressure switch

How energy efficiency is improved

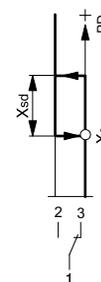
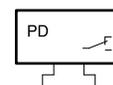
Control and monitoring of differential pressure according to needs and with no auxiliary energy

Features

- For monitoring the differential pressure in liquids, gases and vapours
- For use in, for example, filter technology and plant and machine engineering
- Differential pressure setting ranges from 0.06 to 6 bar
- Up to 80 °C media temperature
- High repeat precision
- High overload protection
- Can be used in all neutral media, such as heating water, neutral gases, oils etc.
- Long serviceable life
- With fitting bracket



DSD1**F002



Technical data

Parameters

Min. load	0.1 A, 250 V~, 25 VA 0.1 A, 30 V=
Max. load	3(1) A, 250 V~, 250 VA 0.4 A, 30 V=, 10 W
Temperature dependence	1.5%/10 K
Accuracy	3% of the setting range
Hysteresis	5% of the setting range
Mechanical serviceable life	10 ⁶ switchings
Max. static operating pressure (positive and negative pressure)	16 bar

Ambient conditions

Admissible ambient temperature	-10...70 °C
Admissible temperature of medium (non-freezing media)	0...80 °C
Admissible ambient humidity	45...75% rh

Construction

Power cable ¹⁾	3 x 0.5 mm ²
Diaphragms	Chromium-nickel steel 1.4310
Connecting thread	G 1/8" (female thread)
Weight	0.2 kg

Standards and directives

Type of protection	IP65 (EN 60529)
Protection class	II (EN 60730)

CE conformity according to	Low-Voltage Directive 2014/35/EU	EN 60730-1 / EN 60730-2-6
	EMC Directive 2014/30/EU	EN 55014 Click rate N < 0.2 Art. 4.2
	PED 97/23/EC	Art. 3.3
	PED 2014/68/EU	Art. 13, fluid group 2

Overview of types

Type	Setting range (bar)
DSD134F102	0.06...0.6
DSD137F002	0.10...1.0
DSD140F002	0.25...2.5
DSD143F002	0.6...6.0

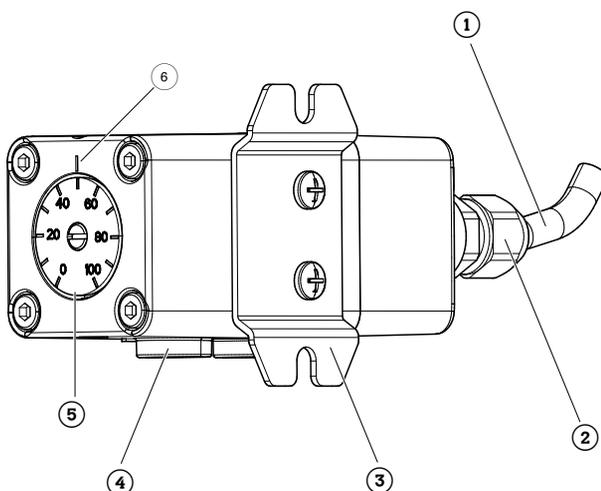
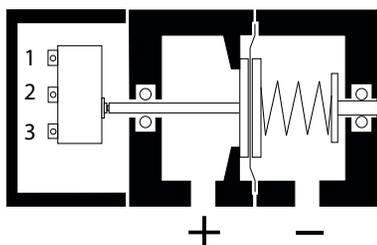
¹⁾ 1 m long, fixed wiring

Accessories

Type	Description
0300360005	Cutting ring fitting G $\frac{1}{8}$ " to 6 mm pipe (2 pcs)
0300360006	Pneumatic fitting G $\frac{1}{8}$ " to 6 mm hose (2 pcs)
0300360016	Throttle screws G $\frac{1}{8}$ ", G $\frac{1}{8}$ " (2 pcs)

Description of operation

The pressure to be measured exerts a force on one side of a sturdy diaphragm. This force affects the membrane system. A switching tappet mounted on the membrane activates a micro-switch. The switching point can be set via a setpoint adjuster. A scale fitted to the setpoint adjuster and a setting marker show the respective switching point that is set. The product is suitable for positive, negative and differential pressure measurement.



1) Connection cable	2) Cable gland
3) Fitting bracket	4) Plug connection
5) Setpoint adjuster	6) Setting marker

Intended use

This product is only suitable for the purpose intended by the manufacturer.

All related product regulations must also be adhered to. Modifying or converting the product is not admissible.

This product is not suitable for safety applications.

Not to be used outside or in ATEX zones.

Additional technical data

Materials that come into contact with the medium:

Housing	Polyamide (reinforced with fibre glass)
Diaphragm, measuring range spring	Chromium-nickel steel 1.4310
Setpoint adjuster, switching tappet etc.	Brass CW614N
Seals	EPDM
Other parts	PTFE

Materials that do not come into contact with the medium:

Housing	Polyamide (reinforced with fibre glass)
Cable gland	Polyamide
Connection cable	Silicone- and halogen-free polymer
Fitting bracket	Stainless steel 1.4301

Disposal

When disposing of the product, observe the currently applicable local laws.

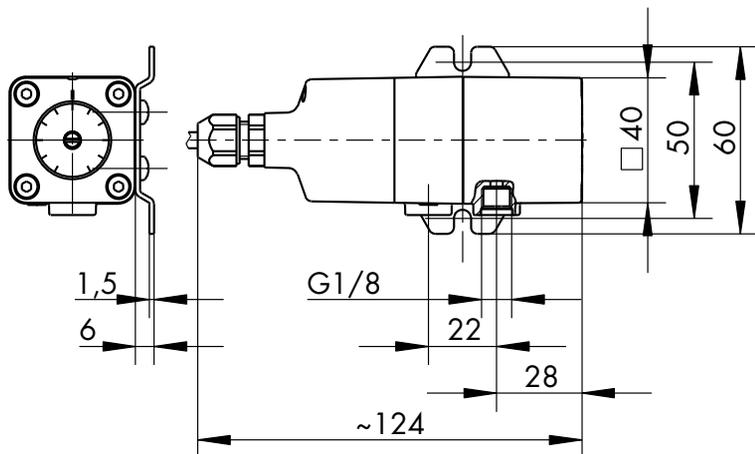
More information on materials can be found in the Declaration on materials and the environment for this product.

Connection diagram



Dimension drawing

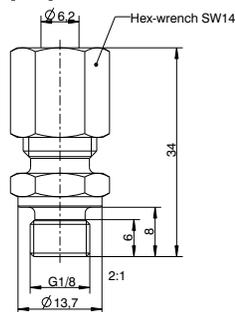
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Accessories

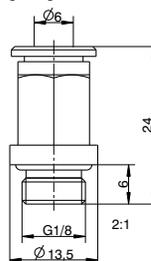
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