

Type DS 31

Applications

The instrument can be used for all neutral media such as industrial water, water for heating systems, neutral gases, oils etc. It is suitable for on/off control due to the continuously adjustable switching point between 10% and 100% of the measuring range.

Main features

- high repeatability of the switching points
- long service life
- high overpressure protection

Construction and functioning

These pressure switches are based on a rugged and uncomplicated diaphragm movement. They are suitable for monitoring pressure, partial vacuum and differential pressure.

The operating principle of the system is identical in all three cases. The monitored pressure or differential pressure creates an unbalanced force at the diaphragm. This force moves the diaphragm system against the force of the range selector springs. A tappet, which is mounted on the diaphragm, actuates the microswitch.

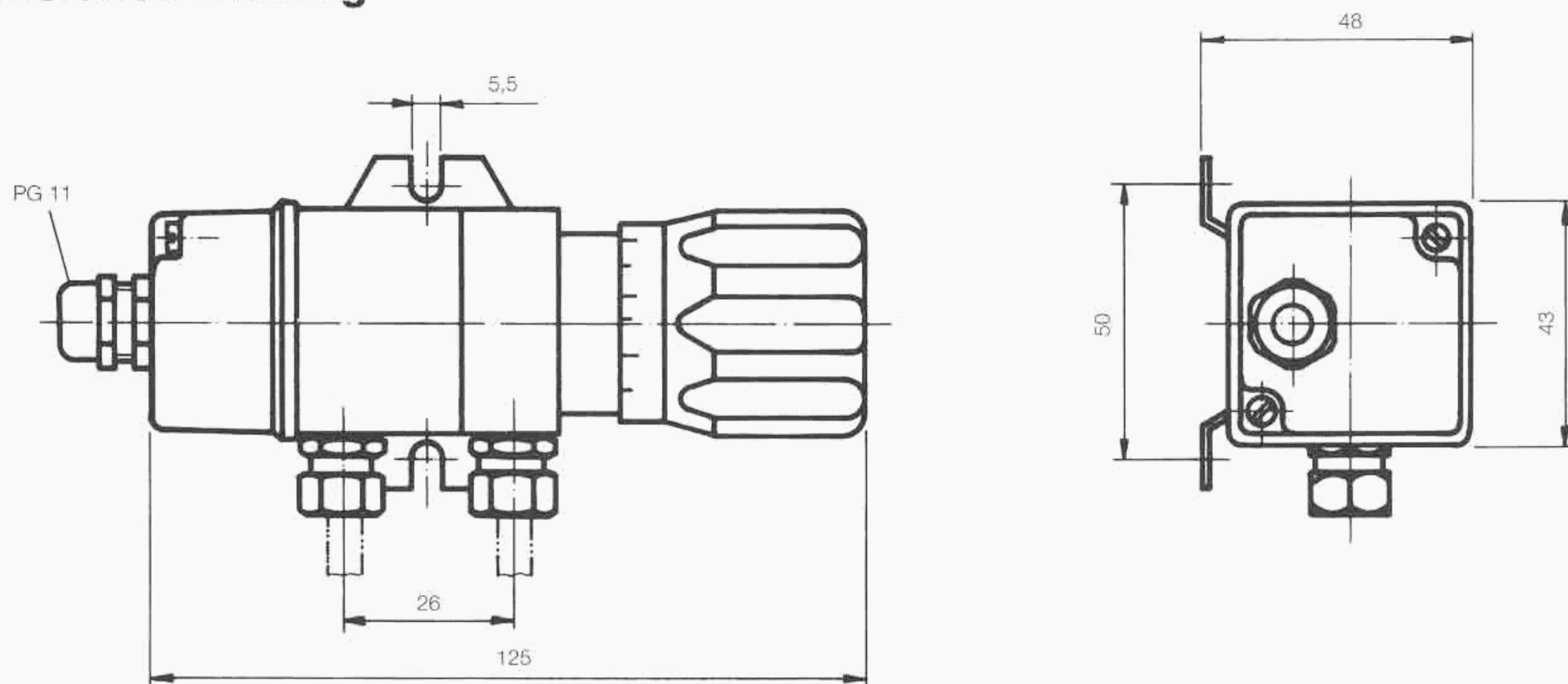
The setpoint can be adjusted by a scaled hand-wheel.



Technical Data

Measuring range	0...0.6 bar to 0...4 bar (ref. ordering code)
Max. static operating pressure	16 bar, over- and underload protected up to 16 bar
Permissible ambient temperature	+80 °C
Permissible medium temperature	+80 °C
Pressure chamber	brass
Diaphragm	NBR or Viton
Pressure connections	G 1/8 female, cutting ring fitting for 6 mm tube
Mounting	base for wallmounting
Electrical connection	numbered cable, prewired
Switching point	10...100% of the range, continuously adjustable
Contact type	microswitches, hysteresis approx. 2%
Contact rating of microswitch	U~ max 250 VAC; I max 3 A; P max 500 VA U= max 30 VDC; I max 0,4 A; P max 10 W

Dimensioned Drawing



Ordering Code

Differential Pressure Switch

Type DS 31

□ □ **F** □ □ □ **A** □

Measuring ranges

0 to 0.6 bar	▷	0	1
0 to 1 bar	▷	0	2
0 to 1.6 bar	▷	0	3
0 to 2.5 bar	▷	0	4
0 to 4 bar	▷	0	5

Measuring system

Pressure chamber, diaphragm, gaskets: brass / NRB	▷	M
Pressure chamber, diaphragm, gaskets: brass / Viton	▷	N

Pressure connection

G 1/8 female	▷	0	0
Cutting ring fitting in steel for 6 mm tube	▷	2	0
Cutting ring fitting in brass for 6 mm tube	▷	2	8
Cutting ring fitting in brass for 8 mm tube	▷	2	9

Switch

1 adjustable microswitch

Electrical connection

1 meter numbered cable, prewired	▷	1
2 meter numbered cable, prewired	▷	2

(Please state switching function with your ordering: **NO** or **NC**)