

## Type DE 26

### General Description

The type DE 26 uses a precision piezo-resistive sensing element for accurate measurement of small pressure differentials, in the ranges 0–10 mbar to 0–60 mbar. It is suitable for a variety of applications, generally for inert and relatively clean gases, for functions such as

- flow measurement
- monitoring positive pressure of clean rooms, relative to the atmosphere
- monitoring of filter condition in air and gas systems

### Applications

- air conditioning and ventilation systems
- filtration systems
- instrumentation for industrial machinery and equipment

### Important Features

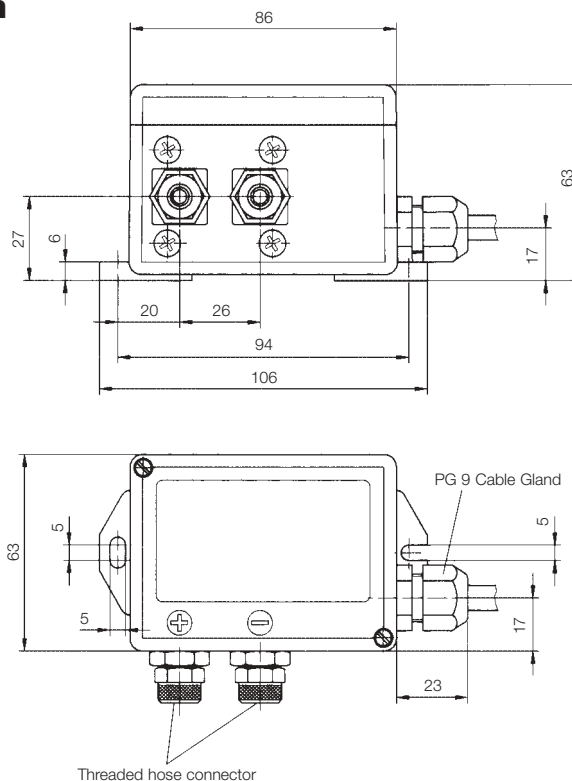
- easy to install
- high sensitivity and resolution
- low hysteresis

### Principles of Operation

The sensor consists of a precision piezo-resistive strain gauge integrated on a silicon chip, bonded to a ceramic substrate, which together form the sensing diaphragm. The two pressure ports of the differential pressure transmitter lead to cavities on either side of the diaphragm. When there is a pressure difference across the diaphragm, it flexes towards the lower pressure cavity. This deflection causes a change in the balance of the strain gauge bridge, which is converted by the transmitter's electronic circuit module to a 0–20 mA output signal, proportional to the differential pressure.



### Dimension



## Specifications

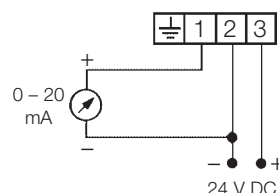
### General

Ranges	0–10 mbar to 0–60 mbar (see Ordering Code)
Nominal pressure rating	0,2 bar
Maximum static pressure	0,2 bar
Max. differential overpressure	Safe up to max. static pressure
Linearity	± 1% of range
Hysteresis	± 0.1% of range
Operating temperature ambient	–10 to +50°C
Operating temperature media	–10 to +50°C
Pressure connection	Threaded connectors for hoses (8/6 or 6/4)
Electrical connection	Attached multi-core cable, 2 or 5 m length
Protection class	IP54 per DIN 40050
Materials – media contact	Silicon, glass reinforced polyester, aluminium, NBR
Materials – housing	Makrolon

### Electrical

Operating voltage	24 V DC (15–30 V DC) 24 V AC ± 10%
Power consumption	max. 1,5 VA/W
Output signal	0–20 mA
Electrical connections	3-wire
Supply voltage load	≤ 700 Ohm
Output current e limit	Approx. 30 mA
Temperature coefficient	1% FS/10°K
Electrical protection	protected against supply reverse polarity, overvoltage and output short circuit

### El. connection



## Ordering Code

### Differential Pressure Transmitter

### Type

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### Ranges

0–10 mbar	▷ 5	4
0–16 mbar	▷ 5	5
0–25 mbar	▷ 5	6
0–40 mbar	▷ 5	7
0–60 mbar	▷ 5	8

### Pressure Connections

Threaded connectors for hose 6/4	▷ 4	0
Threaded connectors for hose 8/6	▷ 4	1

### Electrical Connections

Attached multi-core cable, 2 m length	▷ 2
Attached multi-core cable, 5 m length	▷ 5

### Operating Voltage

24 V ± 10% AC	▷ 4
24 V DC (15–30 V DC)	▷ 9