

## 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

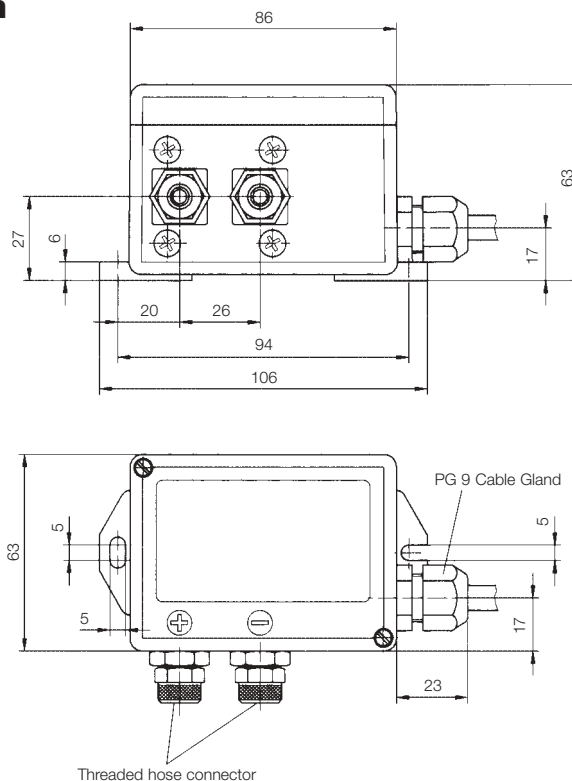
- easy to install
- high sensitivity and resolution
- low hysteresis

### 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

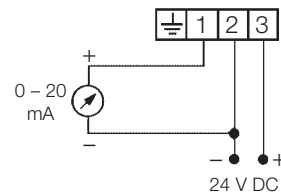
### General

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
Hysterisis _____	± 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