FISCHER
MESS- UND REGELTECHNIK

Type DE 28

Application

Measuring Transmitter for over-pressure, partial vacuum and differential pressure. Ranges: 0-0,6 upto 0-16 bar. This series of transmitter is suitable for various measuring applications in the field of industrial and sanitary techniques.

Typical applications:

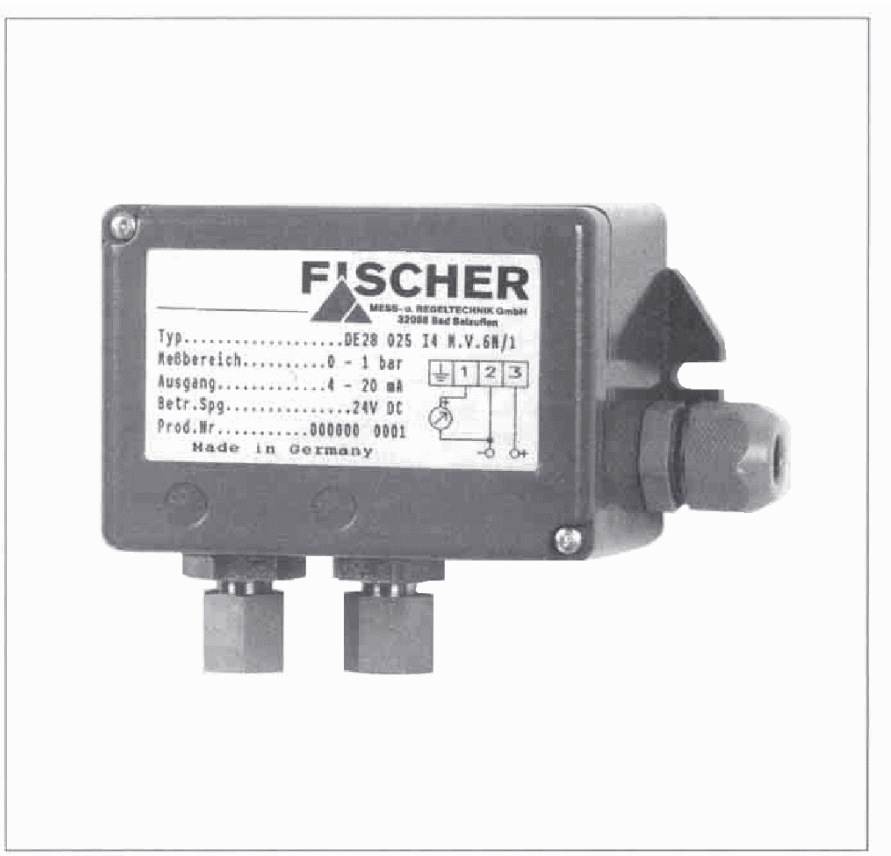
> Measurement of differential pressure between forward- and return- flow in heating systems
> Monitoring of filters, blowers and compressors

Main Features

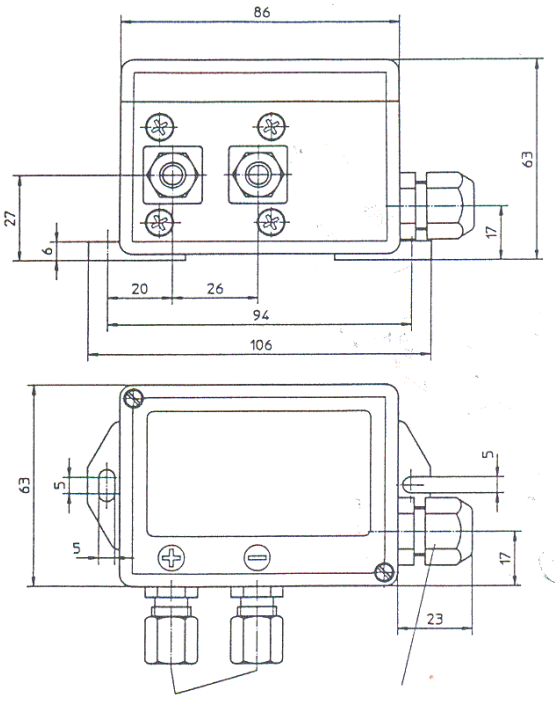
> overpressure protection
> maintenance- due to inductive movement
> multiple applications
> rugged design

Construction and Operation

This transmitter is based on a rugged and uncomplicated diaphragm movement.
The operating principle of the system is identical for all three appli cations. In a state of equilibrium, the forces of the springs on both sides of the diaphragm are balanced. The pressure or differential pressure to be measured creates an unbalanced force of the springs for the measuring range until a new equilibrium is reached.
A centre-mounted tappet transfers the motion of the diaphragm system to the core of an inductive displacement transducer. The subsequent converter circuit converts this motion into an electrial output signal 0(4) - 20 mA linear, three-wire connection. The transmitter is protected against wrong-poled connection of the supply voltage. The output is short circuit proofed.

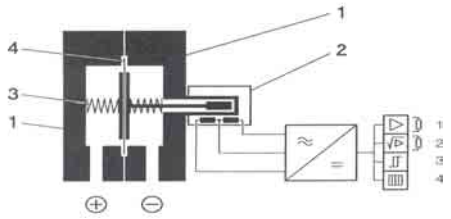


Dimensional Drawing



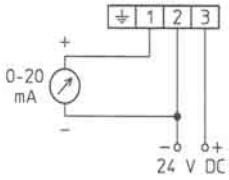
Cutting ring connection for ø 6 mm PG 9 cable gland

Functional Sheme



1. presssure chamber
2. inductive displacement transducer
3. measuring springs
4. measuring diaphragm

Electrial connection



Technical Data

Measuring ranges	0-0,6	0-1	0-1,6	0-2,5	0-4	0-6
Max static operating pressure				5	8	12
Measuring ranges in psi	0-9	0-15	0-20	0-40	0-60	0-100
Max static operating pressure (in psi)	20	30	40	80	120	200

Linearity	2,5 % of full scale range
Permissible ambient temperature	0 - 70 °C
Permissible medium temperature	70 °C
Case material	polycarbornate
Dimensions	83 x 63 x 63 mm
Pressure chamber	brass
Measuring diaphragm	NBR
Pressure Connection	Cutting ring connection MS for 6 / 8 mm tube
Mounting	wall mounting
Mounting position	as required
Power supply	24 V DC
Output signal	0(4) -20 mA / 0-10 V DC tree-wire-connection
Electrical connection	numbered cable, prewired

Ordering code

Differential Pressure Transmitter **Typ DE 28** ☐☐M☐☐☐☐☐L

Ranges

0.....0,6 bar = (0,06 MPa)	0 1
0.....1 bar = (0,10 MPa)	0 2
0.....1,6 bar = (0,16 MPa)	0 3
0.....2,5 bar = (0,25 MPa)	0 4
0.....4 bar = (0,40 MPa)	0 5
0.... 6 bar = (0,60 MPa)	0 6

Pressure Camber / Gaskets

Brass / NBR

Pressure Connection

Cutting ring connection for 6 mm tube of brass	4 0
Cutting ring connection for 8 mm tube of brass	4 1

Electrical connection

Numbered cable, 1 m, prewired	1
Numbered cable, 2,5 m, prewired	2
Numbered cable, 5 m, prewired	5

Output signal

0 - 20 mA linear, three-wire-connection	A
4 - 20 mA linear, three-wire-connection	P
0 - 10 V DC linear, three-wire-connection	C

Power supply

24 V DC / AC