

Pressure Transmitter Type 4359

Application

Pressure transmitters Series 4359 are used to measure pressures in liquids, viscous media and gases. The pressure is converted into a standard electrical signal.

Type designation

4359-242
4359

Series 4359
Pressure transmitter with thin-film sensor (piezo-resistive)

-010 output 0 - 10 V
-106 output 1 - 6 V
-020 output 0 - 20 mA
-420 output 4 - 20 mA
-242 output 4 - 20 mA,
2-wire

Extra Codes

/ 73 with cable attached
/ 93 special ranges
/117 pressure connection 1/2" pipe with taper seal
/118 filter module
(to improve EMC)

Ordering example

Pressure transmitter
Type 4359-420/73/117
range: 0 - 400 bar

Pressure ranges

Gauge pressure
0- 10 bar
0 - 16 bar
0 - 25 bar
0 - 40 bar
0 - 60 bar
0 - 100 bar
0 - 160 bar
0 - 250 bar
0 - 400 bar
0 - 500 bar

Technical data

Reference conditions
to IEC 770/5.3

Case
stainless steel, Mat.Ref. 1.4301

Parts in contact with medium
stainless steel, Mat.Ref. 1.4571;
stainless steel diaphragm, Mat.Ref. 1.4401
sealing elements: FPM (Viton)

Pressure transfer medium
Silicone oil

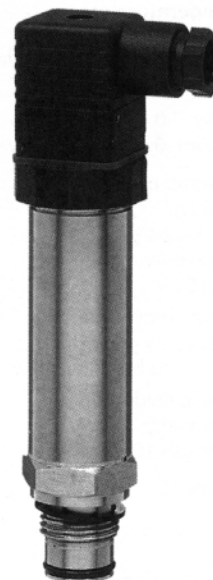
Pressure connection
1/2" pipe male with flush diaphragm
(see dimension drawing)

Electrical connection
normally:
terminal box to DIN 43 650,
Form AF,
up to 1.5 mm² conductor cross-section,
Pg 9 cable gland.

Code /73:
attached 5-core screened PUR cable with internal pressure equilibration tubing, length 2 m; other lengths to special order.

Supply
normally 13 to 30 V d.c.,
11.6 to 30 V d.c. without reverse polarity protection to special order.
Residual hum: the voltage peaks must not go above or below the values specified for the supply voltage.
Max. current loading: 30 mA.

Supply voltage error
0.2% max. per 10 V
Nominal voltage 24 V d.c.



Output
0 - 10 V, burden 2 k Ω min.
1 - 6 V, burden 2 k Ω min.

0 - 20 mA, burden $\frac{U - 12 V}{0.02 A}$ max.

4 - 20 mA, burden $\frac{U - 12 V}{0.02 A}$ max.

4 - 20 mA, burden $\frac{U - 13 V}{0.02 A}$ max.
(2-wire)

Adjustable by potentiometer
zero: $\pm 5\%$ approx.
span: $\pm 5\%$ approx.

Burden error
0.1% max.

Insulation resistance
(housing/electrical connection)
100 M Ω at 50 V d.c.

Test voltage
(housing/electrical connection)
500 V a.c.

Deviation from characteristic
0.6% or less, after zero adjustment according to DIN 16 086

Hysteresis
not exceeding 0.2% full scale

Reproducibility
0.1% full scale or better

Long-term stability
0.5% full scale or better / annum

Overload limit
200% full scale
on ranges up to 160 bar
150% full scale
on ranges up to 400 bar
120% full scale
on range above 400 bar

