

## Differential Pressure Transmitters series EDN.350

A4	$\leq \pm 0.5\% \text{ F.S}$
A7	$\leq \pm 0.25\% \text{ F.S}$
A9	$\leq \pm 0.1\% \text{ F.S}$



Piezoresistive silicon pressure sensors  
all st. steel housing of wetted parts  
with Declaration of Conformity, CE

### General features

- Piezoresistive Silicon Pressure Transmitters for industrial applications
- Differential pressure range from 0...25 mbar to 0...35 bar
- Wiring with DIN43650A L-connector or various connectors
- Ingress protection IP65
- Housing parts of stainless steel

### Application area

- Hydraulic and pneumatic control systems
- Level measurement system
- Control equipments and air conditioning system
- pressure checking system

### General specification

#### Pressure ranges

from 0...25 mbar to 0...35 bar

#### Maximum Static Pressure

0...200 bar

#### Accuracy

including non-linearity, hysteresis, zero point and full scale error according to IEC 61298-2

0.5% F.S	$\geq 0...10 \text{ mbar}$
0.25% F.S	$\geq 0...100 \text{ mbar}$
0.1% F.S	$\geq 0...1000 \text{ mbar}$

#### Overpressure

1.3 X pressure range

#### Output type

4...20mA, 2-wire system  
0...10V, 3-wire system  
0...5V, 3-wire system  
1...5V, 3-wire system

#### Temperature range

Temperature compensating range: 0...+70 °C  
Operating: -20...+80 °C  
-40...+125 °C / option  
Ambient: -20...+100 °C  
Storage: -40...+120 °C

#### Thermal error

Zero thermal error:  $\pm 0.75\% \text{ FS @ } 25 \text{ }^\circ\text{C}$ , typical  
Span thermal error:  $\pm 0.75\% \text{ FS @ } 25 \text{ }^\circ\text{C}$ , typical



### Pressure transmitter series EDN.35x

#### Long term stability

- pressure range > 400 mbar, 0.1% FS typical.  
0.2% FS max.
- pressure range  $\leq 40 \text{ mbar}$ , typical. 2 mbar max.

#### Power supply

Ref. power: DC 24V  
Available power: DC 12...30V

#### Response time

$\leq 5 \text{ ms}$

#### Isolation

> 100M $\Omega$  at 100 VDC

#### Materials

Wetted parts: st. steel 316L  
Sensor sealing: FKM O-ring  
Body: st. steel 316L

#### Electrical connection

DIN43650 A  
M12 Plug  
Cable type  
Head type  
Others on request

#### Pressure connection

Female G 1/4" Female G1/4" accordance with ISO 228

#### Protection

IP65 with plug DIN 43650A

#### Weight

$\leq 350 \text{ g}$



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## Technical specifications

### Input pressure range

Norminal pressure:  
0...25 mbar up to 0...35 bar

Permissible static pressure:  
1.3 x pressure range

### Output signal / Supply

Current:  
2-wire 4...20mA  $V_s=12...30$  VDC

Voltage:  
3-wire 0...10V, 0...5V, 1...5V  $V_s=12...30$  VDC

### Performance

<sup>1</sup>Accuracy:  $\leq \pm 0.5\% \text{FSO @ } 25^\circ\text{C}$   
<sup>1</sup> accuracy according to IEC 60770 - limit point adjustment including non-linearity, hysteresis as well as repeatability

Permissible load /  $R_L$   
Current: 2-wire,  $R_L \text{ max}=[(V_s-V_s \text{ min})/0.02\text{A}]\Omega$   
Voltage: 3-wire,  $R_L \text{ min}=10\text{k}\Omega$

Influence effects:  
Supply: 0.05%FSO/10V  
Longterm stability:  $\leq \pm 0.5\% \text{FS / year}$   
Response time: <5ms

### Thermal effects (Offset and Span) / Permissible temperatures

FS thermal error:  $\pm 0.75\% \text{FS @ } 25^\circ\text{C}$ , typical  
Zero thermal error:  $\pm 0.75\% \text{FS @ } 25^\circ\text{C}$ , typical  
Operating temperature:  $-20...80^\circ\text{C}$   
Compensated teperature:  $0...70^\circ\text{C}$

### Electrical protection

Electromagnetic compatibility:  
Emission and immunity according to  
EN 61326-2-3:20B CCISPR II Group 1, Class A  
EN IEC 61000-3-2:2019

Insulation: the transmitter is grounded via  
the process connection

### Mechanical stability

Vibration: No change at 10 g RMS (20...2000) Hz  
Shock: 0.1 g (1m/s) Max.

### Materials

Pressure port: Stainless steel 316L  
Housing / body: Stainless steel 304  
Sensor diaphragm: Stainless steel 316L  
Wetted parts: Stainless steel 316L

### Miscellaneous

Current consumption  
■ Signal output type  
• Current 4...20mA: 25 mA  
• Voltage 0...10V, 0...5V, 1...5V: 7mA  
■ Ingress protection: IP65

### EMC Test report for CE conformance

■ EN 61326-2-3:2013 / Class A  
■ EN 61326-2-3: 2013 / IEC 61326-1:2012

## Ordering information

Model code

EDN.350 · [ ] · [ ] · [ ] · [ ] · B [ ] · [ ]

### Accuracy

A4	≤ 0.5 % F.S
A7	≤ 0.25 % F.S
A9	≤ 0.1 % F.S

### Output signal

O1	4...20mA / 2-wire system
O2	0...10V / 3-wire system
O3	0...5V / 3-wire system
O4	1...5V / 3-wire system

### Electrical connection

D	DIN 43650 A
M	M12 plug
C	2m cable
H	General head

### Process connection

G4	G 1/4" Female + G1/4" Female
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### Pressure range code, unit bar

Code	Range
R126	0...25 mbar
R128	0...40 mbar
R129	0...60 mbar
R131	0...100 mbar
R134	0...200 mbar
R137	0...400 mbar
R21	0...600 mbar
R23	0...1
R26	0...1.6
R28	0...2.5
R30	0...4
R32	0...6
R33	0...10
R35	0...16
R37	0...25
R38	0...35
RYY	Others on request

### Option code

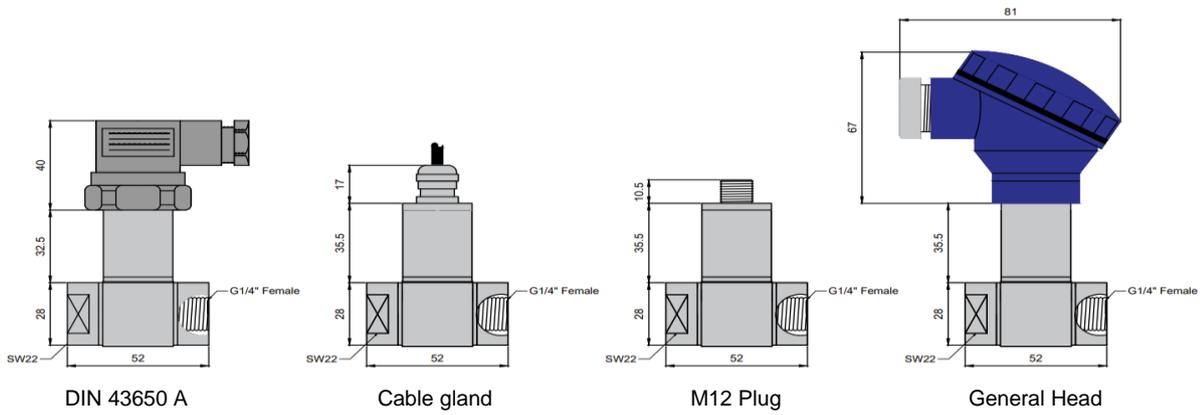
Code	Description
NO	"USE NO OIL" for Oxygen application
PCA	Adapter G1/4" Male + G1/4" Male
TP	St. steel tag plate, 60 x 20 x 0.5t
DMCC	Manufacture calibration certificate
KC	KOLAS Ilac-MRA calibration certificate

### How to order

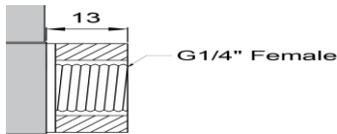
EDN.350.A4.O1.D.G4.BR30

0.5%, 4...20mA, DIN 43650 A, G 1/4" Female, 0...4 bar

## Outline drawing



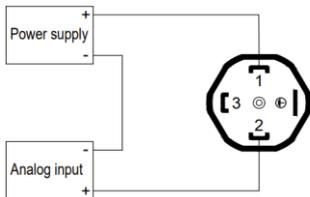
## Process connection



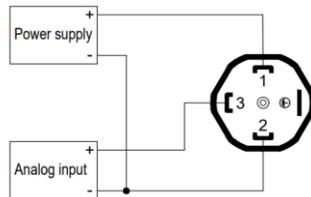
G 1/4" Female  
DIN EN ISO 228

## Pin assignment

DIN 43650A connector according to DIN EN 175301-803A



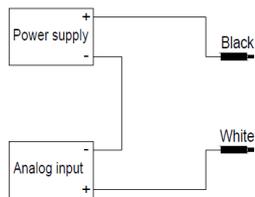
2-wire / current



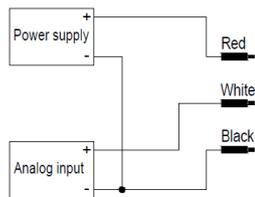
3-wire / voltage

Pin No.	2-Wire	3-Wire
1	+Vcc	+Vcc
2	Output(mA)	GND
3		Output(VDC)

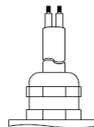
Flying leads with 2m cable



2-wire / current



3-wire / voltage



	2-Wire	3-Wire
White	Output(mA)	Output(VDC)
Red		+Vcc
Black	+Vcc	GND