

Pressure transmitters for low cost applications series EDN.310



all st. steel housing of wetted parts
with Declaration of Conformity, CE

General features

- Piezosistive Silicon Pressure Transmitters for industrial applications
- Pressure range from 0...2.5 bar to 0...200 bar
- Wiring with mPm connector
- Wiring with 2m flying cable
- Ingress protection IP65
- Housing parts of stainless steel

Application area

- Hydraulic and pneumatic control systems
- Pump and compressors
- Control equipments and air conditioning system
- pressure checking system

General specification

Pressure ranges

0...2.5 to 0...200 bar

Accuracy

0.5% F.S

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

Non-linearity / BFSL

less than $\pm 0.25\%$ FS

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

Power supply

Available power: DC 12...30V

Response time

$\leq 5\text{ms}$

Isolation

$> 100\text{M}\Omega$ at 100 VDC

Materials

Wetted parts: St. steel 316L

Sensor sealing: FKM

Body: St. steel 304



Pressure transmitter series EDN.310

Temperature range

Compensated temperature range: 0...70 °C

Operating temperature: -20...80 °C

Ambient temperature: -20...85 °C

Storage temperature: -20...100 °C

Thermal error

$\pm 0.75\%$ FS @ 25 °C, typical

Zero thermal error: $\pm 0.75\%$ FS @ 25 °C, typical

Span thermal error:

Electrical connection

mPm plug

2m flying cable type

DIN43650 A

Pressure connection

G 1/4", DIN 3852-E with sealing by DIN 3869 ring seals

G 1/2"

R 1/4"

R 1/2"

Protection

IP65

Weight

Approx. 140g



DAHO Tronic Limited

Tel: 02-865-7001 Fax: 02-865-7109

mail: info@daho.co.kr

STX W-Tower 209

Gyeongin-ro 53 Gil 90 Guro-gu

Seoul 08215 Korea

www.daho.co.kr

Technical specifications

Input pressure range

Normal pressure:

0...2.5 to 0...200 bar

Permissible static pressure:

1.3 x pressure range, max.1100 bar

Output signal / Supply

Current:

2-wire 4...20mA Vs=12...30 VDC

Voltage:

3-wire 0...10V, 0...5V, 1...5V Vs=12...30 VDC

Performance

¹Accuracy: BFSL $\leq \pm 0.25\% \text{FSO}$ @ 25 °C

¹ accuracy according to IEC 60770 - limit point adjustment

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 °C, typical

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

Operating temperature: -20...80 °C

-40...+125 °C / option

Compensated temperature: 0...70 °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 current max. 25mA

Current

4...20mA, 2-wire system

Signal output voltage max. 7mA

Voltage:

0...10V, 3-wire system

0...5V, 3-wire system

1...5V, 3-wire system

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.310 · · · · B ·

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

P	mPm plug
C	2m cable
D	DIN 43650 A

Process connection

G2	G 1/2" (PF 1/2")
G4	G 1/4" (PF 1/4")
R2	R 1/2" (BSPT 1/2")
R4	R 1/4" (BSPT 1/4")

Pressure range code, unit bar

Code	Range
R28	0...2.5
R30	0...4
R32	0...6
R33	0...10
R35	0...16
R37	0...25
R39	0...40
R41	0...60
R43	0...100
R45	0...160
R46	0...200

Option code

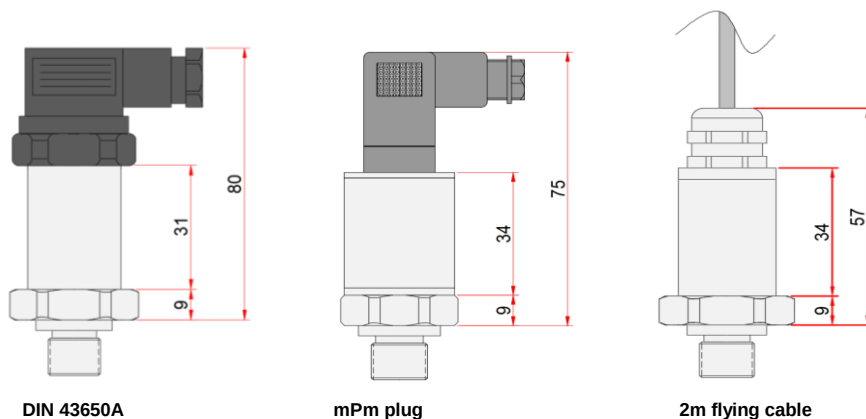
Code	Description
RS	Restrictor screw in socket hole
NO	"USE NO OIL" for Oxygen application
AD	Adapter
TP	St. steel tag plate, 60 x 20 x 0.5t
DMCC	Manufacture calibration certificate
KC	KOLAS Ilac-MRA calibration certificate
CC	Certificate of conformance / origin
T4	Operating temperature -40...+125 °C

How to order

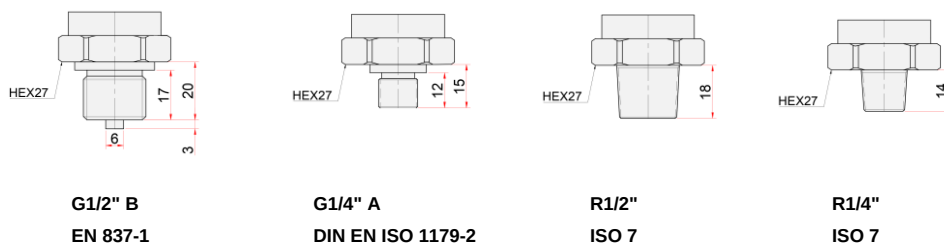
EDN.310.O1.P.G4.BR35

EDN.310, 4...20mA, mPm plug, G 1/4", 0...16 bar

Outline drawing

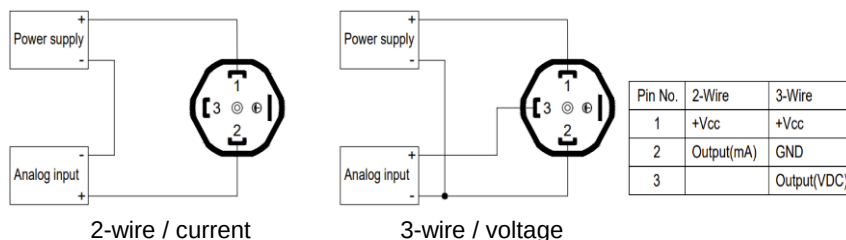


Process connection



Pin assignment

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



Flying leads with 2m cable

