Low pressure transmitters specialized product ≤ 1600 m bar series EDL.324

St. steel housing & wetted part

General features

- Piezoresistive silico pressure sensors applied
- Wetted & housing parts are made of stainless steel
- Pressure measuring range, mostly ≤ 1600 mbar with atmospheric pressure compensation
- Various electrical plugs
- High product quality against high temperature & noise

Application area

- for low pressure measurement
- for air & various gases pressure measurement
- for HVAC application
- for semiconductor industry
- to measure pressure of liquid



Pressure transmitter series EDL.324

General specification

Pressure ranges
From 0…10 mbar to 0...1600 mbar

Accuracy & BFSL, non linearlity
included Linearity + Hysteresis + Repeatibility

±0.5 % F.S	P meas. range, higher than 10 mbar
±0.25 % F.S	P meas. range, higher than 200 mbar

Higher than 100 mbar, between 20℃≤ T_M ≤ 30℃
- accuracy ≤ ±0.5 % F.S
- non-linearlity [BFSL] ≤ ±0.2 %
- hysteresis and repeatibility ≤ ±0.1 %

Lower than 100 mbar, between 20℃≤ T_M ≤ 30℃
- accuracy ≤ ±1.0 % F.S
- non-linearlity [BFSL] ≤ ±0.2 %
- hysteresis and repeatibility ≤ ±0.1 %

Overpressure
1.5 x pressure range

Output type

Current output:	4…20mA / 2-wire loof system
Voltage output:	0…10V / 3-wire system
	0…5V / 3-wire system
	1…5V / 3-wire system
	0.5…4.5V / 3-wire system

Power supply

Reference power	:	DC 24V
Available power	:	DC 9…30V

Isolation > 100MΩ at 100 VDC

Response time ≤ 5ms

Temperature range

Compensated temperature range:	-10…80℃
Operating:	-20…100℃
	-40…+125 ℃ / option
Ambient:	-20…100℃
Storage:	-40…125℃

Materials

Wetted parts	st. steel, 316L
Body:	st. steel, 304

Electrical connection & weather protection

DIN 43650 A	IP65
mPm plug	IP65
M12 plug	IP65
2m flying cable	IP65

Pressure connection
G 1/2", G 3/8", G1/4" , R 1/2", R1/4", Others on request

Weight Approx. 166g

Option
High temperature adapter
up to 200℃ / up to 300℃

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Seoul 08215 Korea
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Technical specifications

Input pressure range

Norminal pressure:

0…10 mabr to 0…1600 mbar

Permissible static pressure:

1.5 x pressure range, max.2400 mbar

Output signal / Supply

Modbus protocol via RS485 interface

Buad rates :	9,600 and 115,200 bps
Data type :	Float32
Unit of Pressure :	bar, kPa, MPa, kgf/cm², psi, mmH2O, mmHg
Unit of Temperature :	℃

Output signal / Supply [Option]

Current:

2-wire	4…20mA	Vs=9…30 VDC

Voltage:

3-wire	0…10V, 0…5V, 1...5V 0.5…4.5V	Vs=9…30 VDC

Performance

[1]Accuracy: ≤ ±0.5%FSO @ 25℃

[1] 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 max=[(Vs-Vs min)/0.02A]Ω

Voltage: 3-wire, R_L min=10kΩ

Influence effects:

Supply:	0.05%FSO/10V
Longterm stability:	≤±0.5%FS / year
Response time:	<5ms

Thermal effects (Offset and Span) / Permissible temperatures

FS thermal error:	±0.75%FS @ 25℃, typical
Zero thermal error:	±0.75%FS @ 25℃, typical
Operating temperature:	-20…100℃
Compensated tempearture:	-10…80℃

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
0.5…4.5V, 3-wire system

Ingress protection: IP65 / DIN 43650 A plug

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 **EDL.324 · [ ] · [ ] · [ ] · [ ] B [ ] · [ ]**

Accuracy	
A4	≤ 0.5 % F.S
A7	≤ 0.25 % F.S, meas. P ≥ 200 mbar

Output signal	
O1	4…20mA / 2-wire system
O2	0…10V / 3-wire system
O3	1…5V / 3-wire system
O4	0…5V / 3-wire system
O6	0.5...4.5V / 3-wire system

Electrical connection	
D	DIN 43650 A
P	mPm plug
M	M12 plug
MA	M12 plug, 90 Angle
C	2m cable

Process connection	
G2	G 1/2" (PF 1/2")
G3	G 3/8" (PF 3/8")
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 mbar

Code	Range
R161	0…10
R162	0…16
R163	0…25
R165	0…40
R167	0…60
R168	0…100
R170	0…160
R172	0…250
R174	0…400
R176	0…600
R23	0…1000
R26	0…1600

Option code

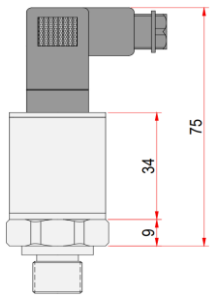
Code	Description
RS	Restrictor screw in socket hole
NO	"USE NO OIL" for Oxygen application
AD	Adapter
CD2	Cooling device up to 200℃
CD3	Cooling device up to 300℃
TP	St. steel tag plate, 60 x 20 x 0.5t
DMCC	Manufacture calibration certificate
KC	KOLAS Ilac-MRA calibration certificate
CC	Certificate of conformance / origin

How to order

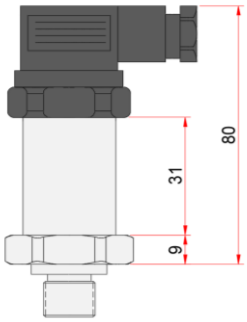
EDL.324.O1DG4BR174

EDL.324, 4…20mA, DIN 43650 A, G 1/4", 0…400 mbar

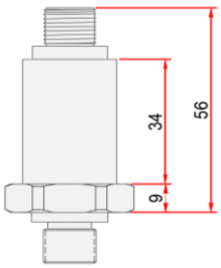
Outline drawing



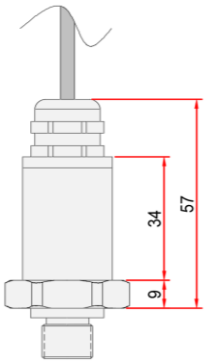
mPm plug type



DIN 43650A type

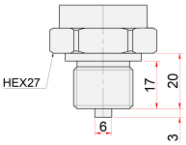


M12 plug type

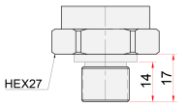


Cable gland type

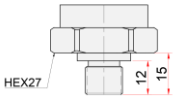
Process connection



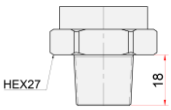
G1/2" B
EN 837-1



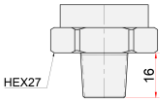
G3/8" A
DIN EN ISO 1179-2



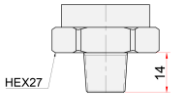
G1/4" A
DIN EN ISO 1179-2



R1/2"
ISO 7



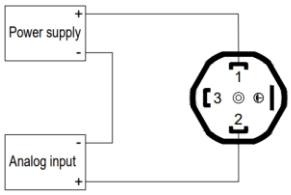
R3/8"
ISO 7



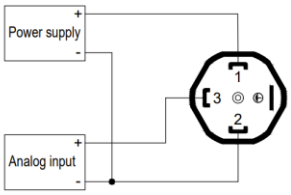
R1/4"
ISO 7

Pin assignment

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



2-wire / current



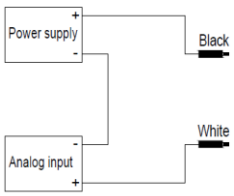
3-wire / voltage

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

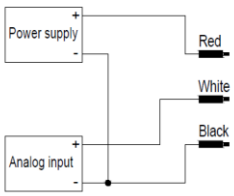


Pin No.	2-Wire	3-Wire
1	+Vcc	+Vcc
2	Output(mA)	GND
3		Output(VDC)
4		

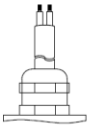
■ ***Flying leads with 2m cable***



2-wire / current



3-wire / voltage



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

■ ***M12 x 1, 5-pin / male***



Pin No.		communication
1		OUT/GND
2		N.C.
3		+Vcc
4	A	Signal RS-485
5	B	Signal RS-485

RS485 & 4…20mA / 2-wire system



Pin No.		communication
1		GND
2		+OUT
3		+Vcc
4	A	Signal RS-485
5	B	Signal RS-485

RS485 & 0…10V, 0…5V, 1…5V / 3-wire system

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