

Low pressure transmitters for scrubber machines series EDL.335

st. steel housing & wetted parts

General features

- Piezoresistive silicon pressure sensors applied
- Pressure range from ± 25 mbar to ± 500 mbar
- Wiring with M12 connector or various connectors
- Wetted & housing parts are made of st. steel 316L
- 12.4 mm hole with pressure thread connections, i.e, G 1/2", R 1/2" and G 3/4"

Application area

- for scrubber machine application
- for low pressure measurement
- for air & various gases pressure measurement

General specification

Pressure ranges

-25 mbar ...+25 mbar
-50 mbar ...+50 mbar
-250 mbar ...+250 mbar
-500 mbar ...+500 mbar
others on request

Accuracy

included Linearity+Hysteresis+Repeatability
 $\pm 0.5\%$ FS
 $\pm 0.25\%$ FS. [P. measuring range ≥ 100 mbar]

Overpressure

1.3 X pressure range

Output type

Current / 2-wire: 4...20mA
Voltage / 3-wire: 0...10V
0...5V
1...5V

Power supply

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

Response time ≤ 5 ms

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

Materials

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



Pressure transmitter series EDL.335

Electrical connection

DIN43650 A, M12 Plug, Cable type

Pressure connection

G 1/2" with 12.4mm hole
others on request

Temperature range of

Operation: $-20 \dots 100^\circ\text{C}$
Compensation: $-10 \dots 80^\circ\text{C}$

Thermal error

Zero thermal error: $\pm 0.75\%$ FS @ 25°C (typ.)
Span thermal error: $\pm 0.75\%$ FS @ 25°C (typ.)

Protection IP65

Weight Approx. 166g

Option

High temperature adapter
up to 200°C / up to 300°C



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Technical specifications

Input pressure range

Norminal pressure:
 ± 25 mbar to ± 500 mbar

Permissible static pressure:
1.3 x pressure range, max.1100 mbar

Output signal / Supply [Option]

Modbus protocol via RS485 interface
Baud rates : 9,600 and 115,200 bps
Data type : Float32
Unit of Pressure : bar, kPa, MPa, kgf/cm²,
psi, mmH₂O, mmHg
Unit of Temperature : °C

Output signal / Supply

Current:
2-wire 4...20mA Vs=9...30 VDC

Voltage:
3-wire 0...10V Vs=9...30 VDC
0...5 V
1...5 V

Performance

¹Accuracy: $\leq \pm 0.5\%$ FSO @ 25 °C
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: $\leq \pm 0.5\%$ FS / year
Response time: <5ms

Thermal effects (Offset and Span)

/ Permissible temperatures

FS thermal error: $\pm 0.75\%$ FS @ 25 °C, typical
Zero thermal error: $\pm 0.75\%$ FS @ 25 °C, typical
Operating temperature: -20...100 °C
Compensated tempearture: -10...80 °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

EDL.335

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B

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Accuracy

A4	± 0.5%
A7	± 0.25%, meas. P ≥ 200 mbar

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
D	DIN 43650 A
M	M12 plug
C	2m cable

Process connection

R4	R1/4" with 6mm hole
G2	G1/2" with 12.4mm hole
G4	G1/4" with 6mm hole
XX	Others

Pressure range code, unit bar

Code	Range
R124	±25 mbar
R127	±50 mbar
R132	±250 mbar
R135	±500 mbar
RXXX	Others on request

Option code

Code	Description
T4	-40...125 °C / operating temperature
RS	Restrictor screw in socket hole
NO	"USE NO OIL" for Oxygen application
AD	Adapter
CD2	Cooling device up to 200 °C
CD3	Cooling device up to 300 °C
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

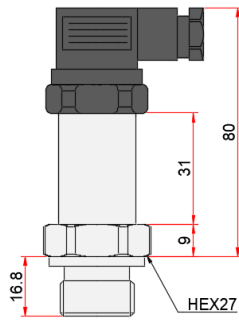
How to Order

EDL.335.A4.O1.M.R4.BR135

EDL.335, ±0.5%FS, 4...20mA, M12, R 1/4" with 6mm hole, ± 500 mbar

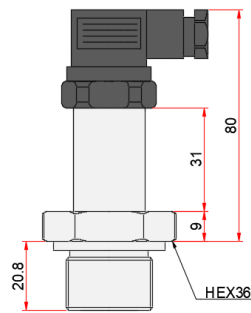
Outline drawing

DIN 43650 A plug



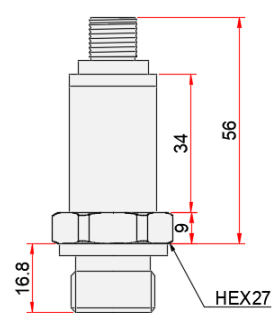
G 1/2" with hole 12.4mm hole

DIN 43650 A plug



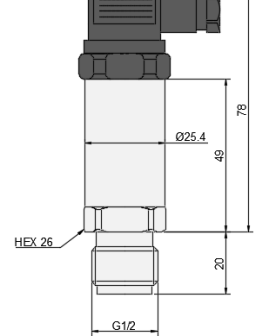
G 3/4" with hole 12.4mm

M12 plug



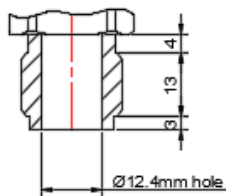
G 1/2" with hole 12.4mm hole

DIN 43650 A plug



G1/2" with washer

Process connection



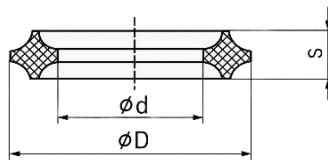
■ others upon request

Standard	Thread size
DIN 3852-E	G 1/2" with hole 12.4mm
	G 3/4" flush diaphragm type

Metal gasket (Sealing washer)(Option)



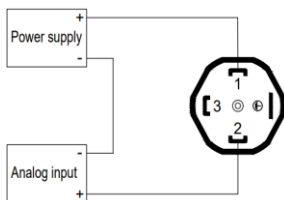
Model: AC23



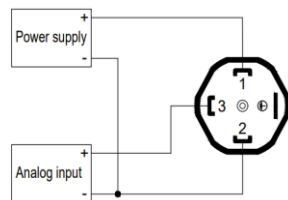
Model	Thread	Dimension in mm			Material
		D + 0.2	d - 0.2	s	
AC23	G 1/2"	14.8	8	4	316L

Pin assignment

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



2-wire / current



3-wire / voltage

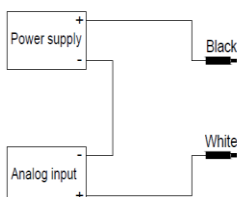
Pin No.	2-Wire	3-Wire
1	+Vcc	+Vcc
2	Output(mA)	GND
3		Output(VDC)



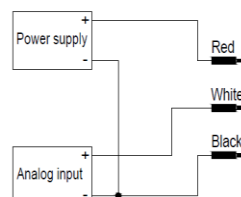
M12 x 1, 5-pin / male

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

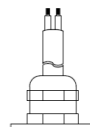
Flying leads with 2m cable



2-wire / current



3-wire / voltage



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

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