Pressure transmitters a/w diaphragm seal MDB Model EDN.315

CE

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…1.6 bar to 0…250 bar
- Wiring with DIN43650A L-connector or various connectors
- Ingress production IP65 / IP67 / IP68
- Housing parts of stainless steel



Application area

- Hydraulic and pneumatic control systems
- Pump and compressors
- Cooling equipment and air conditioning system
- Pressure calibration, pressure checking
- Liquid pressure system and switch

General specification

series EDN.315 a/w chemical seal MDB

Pressure ranges
From 0…1.6 bar to 0…250 bar

Accuracy
± 0.5% FS
included Linearity+Hysteriesis+Repeatability
** pressure range, negative ≤ ± 1.0%

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

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

Response time
≤ 5ms

Isolation
> 100MΩ at 100 VDC

Materials

Wetted parts:	St.steel 316L
Sensor sealing:	FKM
Body:	St.steel 304

Temperature range

Operating:	-20…100℃
Temperature compensating range:	
	0…70℃
	-10…70℃ / option
Ambient:	-20…85℃
Storage:	-20…100℃

Thermal error

Zero thermal error:	±0.75%FS @ 25℃, typical
Span thermal error:	±0.75%FS @ 25℃, typical

Pressure connection
G 1/4", DIN 3152-E with sealing by DIN 3869 ring seals
G 3/8"
G 1/2"
R 1/4"
R 1/2"

Electrical connection

DIN43650 A / mPm plug	IP65
Head type	IP65
M12 plug	IP67
2m flying cable	IP67
Underwater elec. Plug	IP68

Weight
series EDN.3xx, approx. 140g and additionally depends on each flanges based on each standards.

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Technical specifications

Input pressure range

Norminal pressure:

0…250 bar

Permissible static pressure:

1.3 x pressure range, max.1100 bar

Pressure range from 0…1.6 bar to 0…250 bar

Output signal / Supply

Current:

2-wire	4…20mA	Vs=12…30 VDC

Voltage:

3-wire	0…10V, 1-5V	Vs=12…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:	0…70℃

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

Ingress protection: IP65 / IP67 / IP68 (depending on electrical connection)

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.315 · [ ] · [ ] · [ ] · B [ ] · [ ]**

Code	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

Code	Electrical connection
D	DIN 43650 A
P	mpm plug
M	M12 plug
C	2m cable
H	General head

Code	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 bar

Code	Range
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
R39	0…40
R41	0…60
R43	0…100
R45	0…160
R47	0…250
RYY	Others on request

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

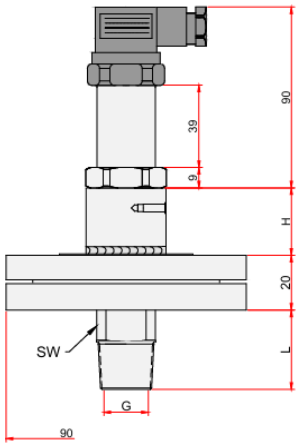
How to order

EDN.315.O1.D.G3.BR35 aw MDB G3/8"
EDN.315, 4…20mA, DIN 43650 A, 0…16 bar aw MDB G3/8"

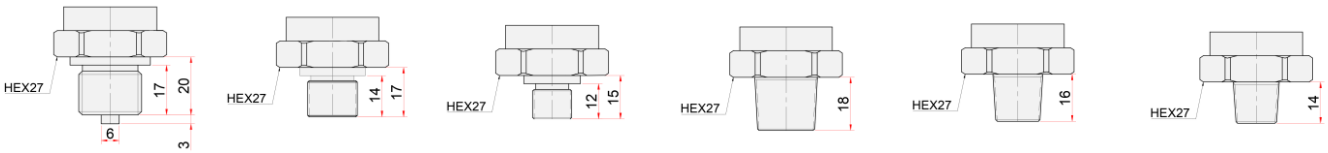
Pressure Transmitters with chemical seals

■ Flange type chemical seals

ISO 1179-2, KS B0222				
Standard	G	H	SW	L
KS B0222	R 1/4"	15	24	29
	R 3/8"			31
	R 1/2"			33
A DIN EN ISO 1179-2	G 1/4"			30
	G 3/8"			32
	G 1/2"			35



Process connection



G1/2" B **EN 837-1**

G3/8" A **DIN EN ISO 1179-2**

G1/4" A **DIN EN ISO 1179-2**

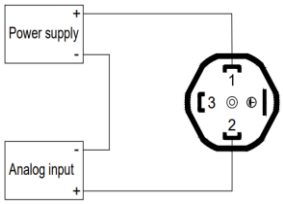
R1/2" **ISO 7**

R3/8" **ISO 7**

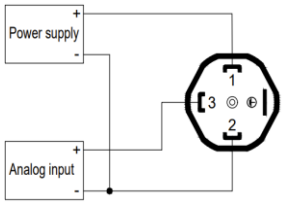
R1/4" **ISO 7**

Pin assignment

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



2-wire / current



3-wire / voltage

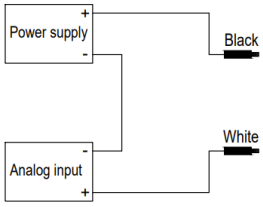
Pin No.	2-Wire	3-Wire
1	+Vcc	+Vcc
2	Output(mA)	GND
3		Output(VDC)

M12 x 1, 5-pin / male

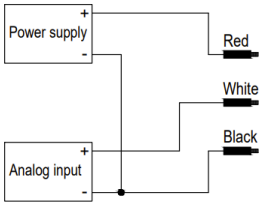


Pin No.	2-Wire	3-Wire
1	+Vcc	+Vcc
2	Output(mA)	GND
3		Output(VDC)
4		

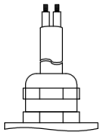
Flying leads with 2m cable



2-wire / current

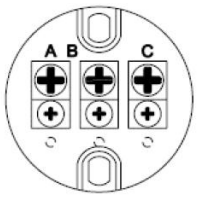


3-wire / voltage



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

Head type



Connection diaphragm

Pin No.	Current output	Voltage output
A	+Vcc	+Vcc
B	Output	Output
C	⏚	GND

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