Submersible pressure transmitter for water level measurement accuracy ≤ 0.5%, ≤ 0.25%, ≤ 0.1% series EDN.366

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…20 mbar to 0…20 bar
- Ingress production IP68 certified
- Housing parts of stainless steel

Application area

- Hydrostatic pressure measurement
- Level measurement in vessel and storage systems
- Measurement of water or fuel storage tank level
- Sea water desalinization plants

General specification

Submersible pressure transmitter, EDN.366

Pressure ranges
From 0…20 mbar to 0…20 bar

Accuracy
included Linearity+Hysteriesis+Repeatability
** measuring pressure less 1 bar, ≤ 0.25%
A4: ≤ ± 0.5% FS
A7: ≤ ± 0.25% FS
A9: ≤ ± 0.1% 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

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 316L

Temperature range

Compensated temperature range:	0…70℃
Operating:	-20…80℃
	-40…+125 ℃ / option
Ambient:	-20…85℃
Storage:	-20…85℃

Thermal error

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

Electrical connection
IP68 cable gland, st.steel

Pressure connection
End cap, st.steel

Protection
IP68 with cable gland
including atmosphire compensation tube inside

Cable
Polyethylene, PE cable
Polyethylene, PUR cable

End cap
4 holes on the side and 4 holes on the floor
connecting screw thread M12

Weight
Approx. 130g without cables

DAHO

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

Norminal pressure:

From 0…20 mbar up to 0…20 bar

Permissible static pressure:

1.3 x pressure range, max.13 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

[1]Accuracy: ≤ ±0.5%FSO @ 5℃

[1] accuracy according to IEC 60770 - limit point adjustment including non-linearity, hysteresis as well as repeatability

** measuring pressure less 1 bar, ≤ 0.25%

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
Response time:	≤±0.5%FS / year
	<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…80℃
	-40…+125 ℃ / option
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 316L
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

[Option]

If necessary, it will be supplied signal output, voltage as follows.

Voltage:

0…10V, 3-wire system
0…5V, 3-wire system
1…5V, 3-wire system

Ingress protection per IEC 60529:

IP68 Cable gland

Ordering information

Model code **EDN.366 · [ ] · [ ] · [ ] · [ ] · 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	
PE	PE Cable
PUR	PUR Cable

Cable length / standard 5m	
? m	Standard 5m + additionally

Pressure range code, unit bar

Code	Range
	0…20 mbar
	:
R36	0…20 bar
RYY	on request

Option code

Code	Description
T4	-40…125℃ / operating temperature
RS	Restrictor screw in socket hole
NO	"USE NO OIL" for Oxygen application
PCA	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

※ ***Information***

1. *EDN.366 제품은 기본적으로 사용자의 요구 사양에 따라 제작 공급되어지는 제품이다. 따라서, 케이블 길이는 기본 5m를 공급하며 추가 길이와 측정 압력 범위는 사용자의 요구에 의해 제작 공급한다.*

2. *케이블 길이는 사용자 요구 사양에 따라 길이가 정해지며, 케이블은 대기압 보상도선이 있는 특수 케이블로 제작된다. 제작 완료 후 또는 나중에 이미 공급된 케이블에 추가적인 연결이 불가능하므로 최초에 전체 길이를 정확하게 판단되어야 한다.*

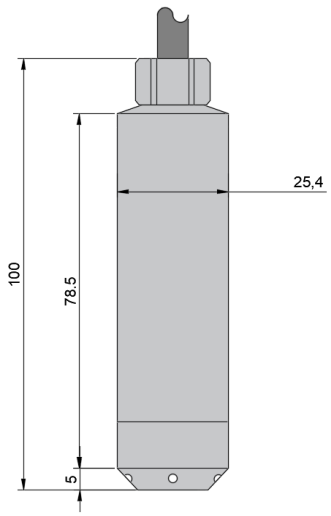
3. *물이나 기름(비중)의 수심 깊이 또는 탱크 높이를 고려하여 측정 압력 범위를 정해야 하며, 이와 함께 케이블의 길이는 최종 연결지점까지의 전체 길이를 고려되어야 한다.*

How to order

EDN.366.A4.O1.PE 20m.BR23

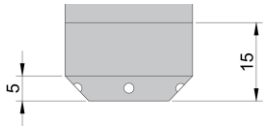
EDN.366, 0.5%, 4…20mA, PE cable 20m, 0…1 bar

Outline drawing



Cable gland Type

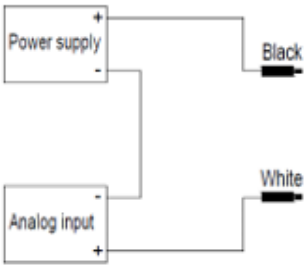
Process connection



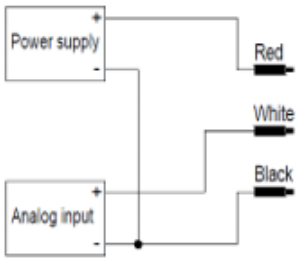
End cap

Pin assignn

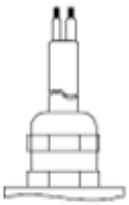
Pin assignment



2-wire / current



3-wire / voltage



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

Daho Tronic Ltd.
STX W-Tower 209
Gyeongin-ro 53Gil 90 Guro-gu
Seoul 08215 Korea
Tel: +82 2 865-7001 Fax: +82 2 865-7109
info@daho.co.kr
www.daho.co.kr