

DIFFERENTIAL PRESSURE SENSOR WITH DISPLAY



- Δp 0 ... 0.1 TO 0 ... 25 BAR
- STATIC PRESSURE < 10 MPA
- IO-LINK · RS485 · ANALOGUE
- LED DISPLAY, HEAD TURNS 330°
- STAINLESS STEEL · IP67 · M12



IP67



Stainless Steel
AISI 304 · 1.4301



M12



IO-Link



RS485



4...20 mA
0...10 V



Display

VERSIONS

Feature	Versions
Differential range	0 ... 0.1 / 0.2 / 0.5 / 1 / 5 / 6 / 10 / 16 / 25 bar
High and low side connection	selectable per side: G1/4 female · G1/4 male · G1/2 male · M20 x 1.5 male
Output	two switching outputs / frequency (4-pin) · one switching output / IO-Link / frequency + analogue (4-pin) · two switching outputs / IO-Link / frequency + analogue (5-pin) · RS485 (4-pin)



OVERVIEW

Differential pressure sensor with LED display: switching outputs, analogue output and IO-Link in one device, high and low side connections selectable per side.

A diffused silicon sensor measures the difference between the high (H) and low (L) side. Both sides together withstand a static pressure below 10 MPa, one side alone 2.5 times the full scale. The connections are chosen per side. The display head rotates by 330°.

0 ... 25 bar largest range	< 10 MPa static pressure	≤ ± 0.5 % accuracy F.S.	IP67 protection class
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MEASUREMENT	OUTPUTS
differential 0 ... 0.1 to 0 ... 25 bar	two switching outputs PNP / NPN
overload one side 2.5 × full scale	4 ... 20 mA / 1 ... 5 V / 0 ... 10 V
accuracy ≤ ± 0.5 % F.S.	IO-Link or RS485
annual drift ≤ ± 0.3 % F.S.	frequency output 100 Hz

TECHNICAL DATA

MEASUREMENT AND PRECISION

Measuring principle	diffused silicon sensor
Accuracy	$\leq \pm 0.5 \% \text{ F.S.}$
Linearity	$\leq 0.5 \% \text{ F.S.}$
Stability (annual drift)	$\leq \pm 0.3 \% \text{ F.S.}$
Switching accuracy	$\leq \pm 0.5 \% \text{ F.S.}$
Analogue output accuracy	$\leq \pm 0.5 \% \text{ F.S.}$
Overload, one side	2.5 × full scale
Static pressure (both sides)	< 10 MPa

TEMPERATURES

Medium temperature	-20 ... +85 °C
Ambient temperature	-20 ... +80 °C
Storage temperature	-30 ... +80 °C

MECHANICAL PROPERTIES

Display head	engineering plastic, flame class UL-94 V-0, rotatable 330°
Housing	stainless steel 304
Wetted parts	stainless steel 304
Protection class	IP67
Electrical connection	M12 × 1 connector

ELECTRICAL PROPERTIES

Supply voltage	12 ... 30 V DC
No-load current	max. 40 mA at 24 V DC
Protection	reverse polarity, overload, short circuit

OUTPUTS

Switching output	PNP / NPN switchable, NO / NC selectable
Switching load	< 200 mA / 24 V DC
Response time	0.01 ... 2 s
Analogue output	4 ... 20 mA / 1 ... 5 V / 0 ... 10 V selectable
Load	$\leq 500 \Omega$
Frequency output	100 Hz at full scale
Communication	IO-Link / RS485

DISPLAY AND OPERATION

Display	4-digit LED, red, 12 mm high
Display range	-1999 ... 9999
Operation	three keys with menu

PIN ASSIGNMENT M12 × 1 – SWITCHING AND ANALOGUE OUTPUTS

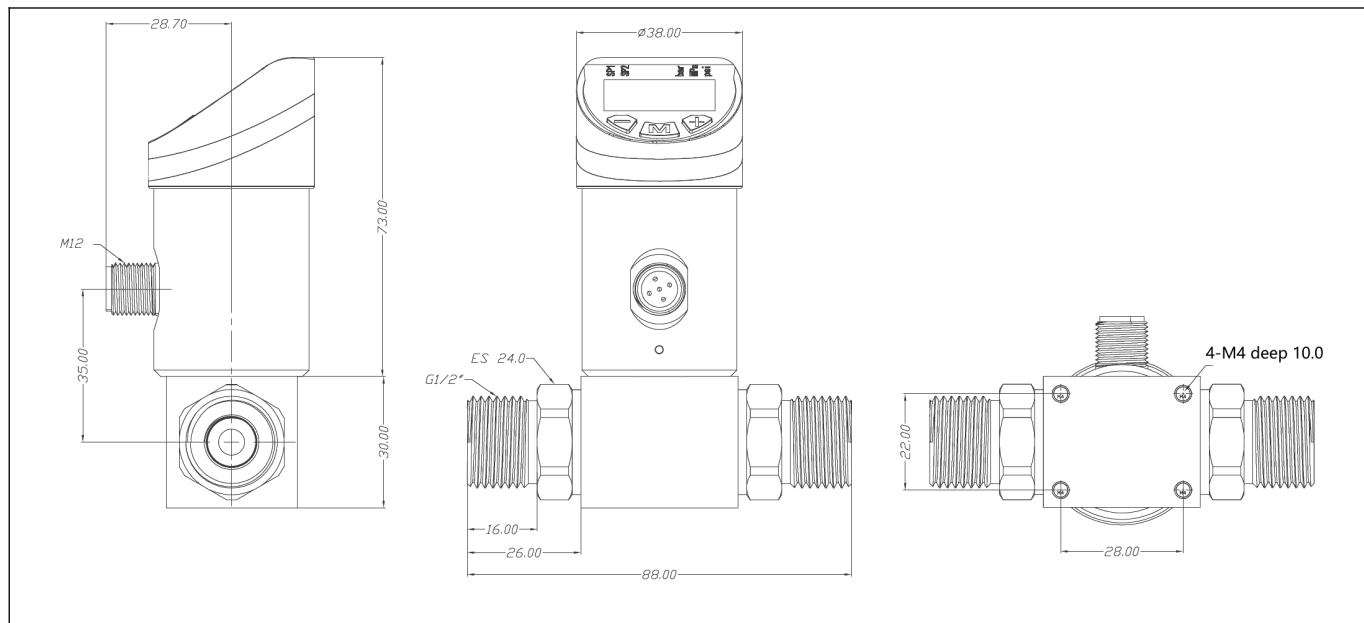
Pin · wire	two switching outputs + analogue (5-pin)	one switching output + analogue (4-pin)
1 · BN brown	supply +	supply +
3 · BU blue	supply –	supply –
4 · BK black	OUT1: SP1 PNP (default) / NPN · IO-Link · frequency	OUT1: SP1 PNP (default) / NPN · IO-Link · frequency
2 · WH white	OUT2: SP2 PNP (default) / NPN	OUT2: 4 ... 20 mA (default) / 1 ... 5 V / 0 ... 10 V
5 · GY grey	OUT3: 4 ... 20 mA (default) / 1 ... 5 V / 0 ... 10 V	–

PIN ASSIGNMENT M12 × 1 – TWO SWITCHING OUTPUTS · RS485

Pin · wire	two switching outputs (4-pin)	RS485 (4-pin)
1 · BN brown	supply +	supply +
3 · BU blue	supply –	supply –
4 · BK black	OUT1: SP1 PNP (default) / NPN · frequency	RS485 B
2 · WH white	OUT2: SP2 PNP (default) / NPN	RS485 A



DIMENSIONS (mm)



Dimensions in mm. Threads 4 x M4, 10 deep. ES = width across flats.

COMPLIANCE AND CERTIFICATION

Protection Rating IP67

