

PRESSURE SENSOR WITH OLED DISPLAY



- 0 ... 10 KPA TO 0 ... 1000 BAR
- OLED DISPLAY, HEAD TURNS 330°
- IO-LINK · RS485 · 4 ... 20 MA
- ALSO FLUSH UP TO 100 BAR
- STAINLESS STEEL · IP67 · M12



IP67



Stainless Steel
AISI 304 · 1.4301



M12



IO-Link



RS485



Analog signal



Display

VERSIONS

Feature	Versions
Measuring range	0 ... 10 / 60 kPa · 0 ... 1 / 2 / 5 / 10 / 25 / 60 / 100 / 160 / 250 / 400 / 600 / 1000 bar · compound -10 ... 10 kPa, -60 ... 60 kPa, -1 ... 1 / 5 / 10 bar
Pressure type	gauge pressure · negative pressure
Thread	G1/4 male, G1/2 male, G1/4 female, NPT1/4 male, R1/4 male, M20 × 1.5 male
Flush diaphragm, up to 100 bar	ceramic: clamp 1.5" (OD 50.5 mm), M22 × 1.5 male · metal, oil-filled: clamp 1.5" sanitary or non-sanitary, M20 × 1.5 male, M22 × 1.5 male
Output	two switching outputs + analogue (5-pin) · switching output / IO-Link + analogue (4-pin) · RS485 (4-pin)



OVERVIEW

Pressure sensor with OLED display showing pressure and unit as well as the percentage of range and the switching states – with switching, analogue and IO-Link output.

The standard version measures with a diffused silicon sensor up to 1000 bar. There are also flush versions with ceramic or oil-filled metal diaphragm up to 100 bar, also with sanitary clamp. The display head rotates by 330°; settings are made with three keys and a menu.

0 ... 1000 bar largest range	≤ ± 0.5 % accuracy F.S.	< 10 ms response time	IP67 protection class
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MEASUREMENT	OUTPUTS
- gauge and negative pressure 0 ... 10 kPa to 0 ... 1000 bar - flush up to 100 bar - accuracy ≤ ± 0.5 % F.S.	- two switching outputs PNP / NPN - switching current < 500 mA 4 ... 20 mA, load ≤ 0.5 kΩ - IO-Link or RS485



TECHNICAL DATA

MEASUREMENT AND PRECISION

Measuring principle	diffused silicon sensor; flush: ceramic or oil-filled metal
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	$\leq \pm 0.5 \% \text{ F.S.}$

TEMPERATURES

Medium temperature	$-20 \dots +85 \text{ }^{\circ}\text{C}$
Ambient temperature	$-20 \dots +80 \text{ }^{\circ}\text{C}$
Storage temperature	$-30 \dots +80 \text{ }^{\circ}\text{C}$

MECHANICAL PROPERTIES

Case	stainless steel / engineering plastic
Housing	stainless steel 304
Display head	rotatable 330°
Wetted parts	stainless steel 316L / 304
Protection class	IP67
Electrical connection	M12 $\times$ 1 connector

PRESSURE RESISTANCE

Measuring range	Max. overload pressure	Min. damage pressure
1 · 2 · 5 bar	$\times 5$	$\times 6$
10 · 16 · 25 bar	$\times 3$	$\times 4$
60 · 100 · 160 bar	$\times 2$	$\times 3$
250 · 400 bar	$\times 1.5$	$\times 2$
600 bar	$\times 1.3$	$\times 1.6$

PIN ASSIGNMENT M12 $\times$ 1

Pin · wire	two switching outputs + analogue (5-pin)	switching output / IO-Link + analogue (4-pin)
1 · BN brown	supply +	supply +
3 · BU blue	supply –	supply –
4 · BK black	OUT1: switching PNP (default) / NPN	OUT1: switching PNP (default) / NPN · IO-Link
2 · WH white	OUT2: switching PNP (default) / NPN	OUT2: analogue 4 ... 20 mA (default) or switching PNP / NPN
5 · GY grey	OUT3: analogue 4 ... 20 mA (default)	–
RS485 version (4-pin)	1 · BN +, 3 · BU –	4 · BK RS485 B, 2 · WH RS485 A

ELECTRICAL PROPERTIES

Supply voltage	16 ... 28 V DC
No-load current	max. 30 mA at 24 V DC
Protection	reverse polarity, overload

OUTPUTS

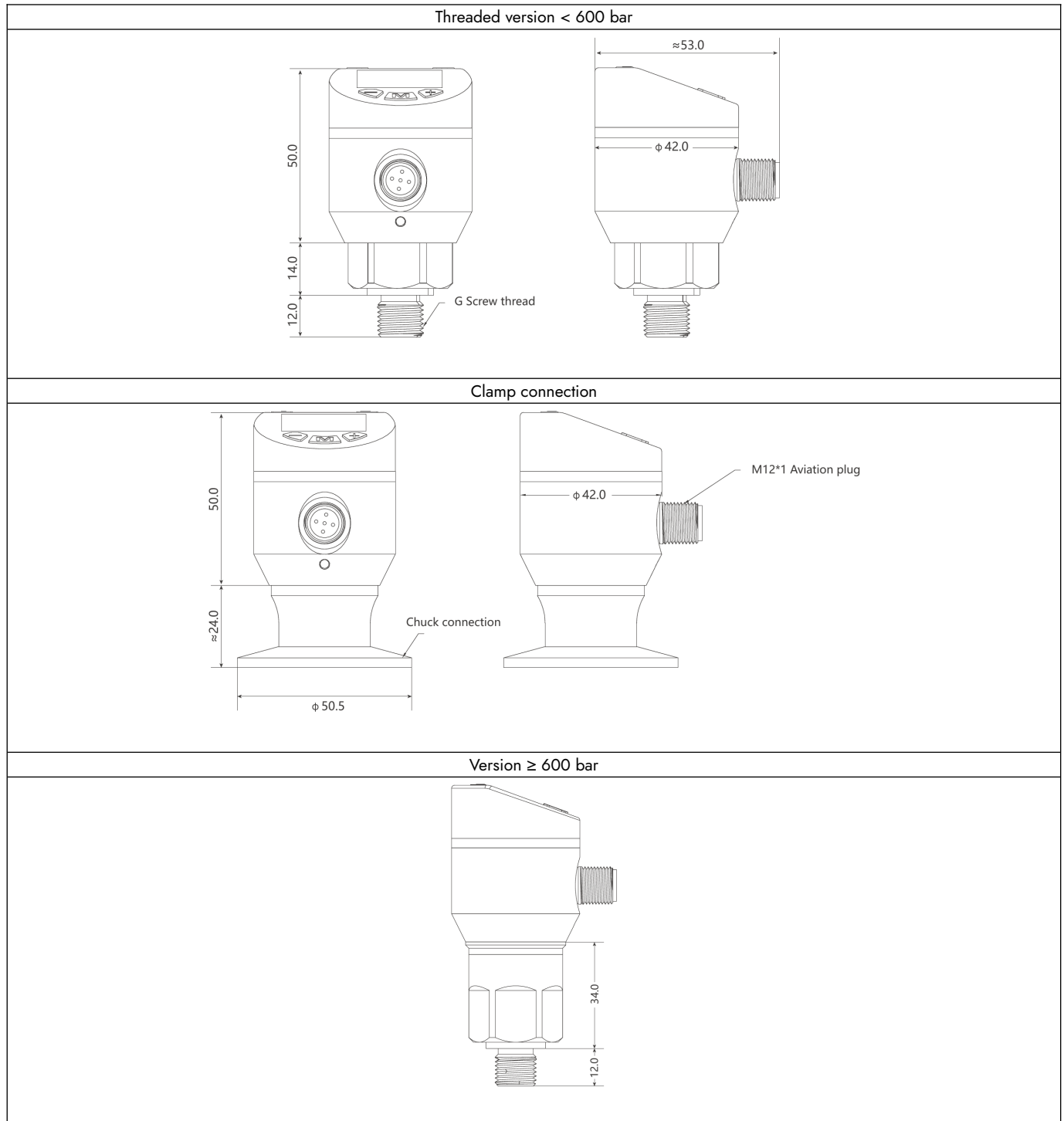
Switching output	PNP / NPN switchable, NO / NC selectable
Output current S1, S2	$< 500 \text{ mA}$
Response time	$< 10 \text{ ms}$
Analogue output	4 ... 20 mA
Load	$\leq 0.5 \text{ k}\Omega$
Communication	IO-Link / RS485

DISPLAY AND OPERATION

Display	OLED
Shown	pressure value, unit, percentage of range, switching state 1 and 2
Operation	three keys with menu



DIMENSIONS (mm)



Dimensions in mm. G = process thread.

COMPLIANCE AND CERTIFICATION

Protection Rating IP67

