

ELECTRONIC PRESSURE SWITCH



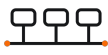
- 0 ... 10 KPA TO 0 ... 1000 BAR
- SWITCHING OUTPUT PNP / NPN
- 4 ... 20 MA · 1 ... 5 V · RS485
- LED DISPLAY, KEYS
- IP67 · M12 × 1 CONNECTOR



IP67



M12



RS485



Analogsignal



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 / 2 / 5 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
Output	switching output / frequency · analogue 4 ... 20 mA · analogue 1 ... 5 V · RS485



OVERVIEW

Compact electronic pressure switch with LED display: switching point set by key, switching output PNP or NPN – optionally with analogue or RS485 output.

A diffused silicon sensor measures the pressure; the LED shows the value continuously. The one-piece injection-moulded housing is protected to IP67 and connected via an M12 × 1 plug. The switching hysteresis is set to 0.5 % of the switching value ex works and can be adjusted.

0 ... 1000 bar largest range	< 10 ms response time	≤ ± 0.5 % accuracy F.S.	IP67 protection class
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SWITCHING
■ PNP / NPN selectable
■ NO / NC selectable
■ switching load < 200 mA
■ switching point set by key

VERSIONS
■ switching output / frequency
■ analogue 4 ... 20 mA
■ analogue 1 ... 5 V
■ RS485



TECHNICAL DATA

MEASUREMENT AND PRECISION

Measuring principle	diffused silicon sensor
Accuracy	$\leq \pm 0.5 \% \text{ F.S.}$
Stability (annual drift)	$\leq \pm 0.3 \% \text{ F.S.}$
Switching 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

Sensing diaphragm	stainless steel 316L / ceramic
Process connection	stainless steel 304
Seal	butadiene rubber / fluororubber
Housing	engineering plastic, one-piece injection-moulded
Protection class	IP67
Electrical connection	M12 x 1 connector

PRESSURE RESISTANCE

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

PIN ASSIGNMENT M12 x 1 (4-PIN)

Pin · wire	switching output / frequency · analogue	RS485
1 · BN brown	supply +	supply +
3 · BU blue	supply -	supply -
4 · BK black	OUT1: SP1 PNP (default) / NPN · frequency · or 4 ... 20 mA or 1 ... 5 V	RS485 B
2 · WH white	not used	RS485 A

ELECTRICAL PROPERTIES

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

SWITCHING OUTPUT

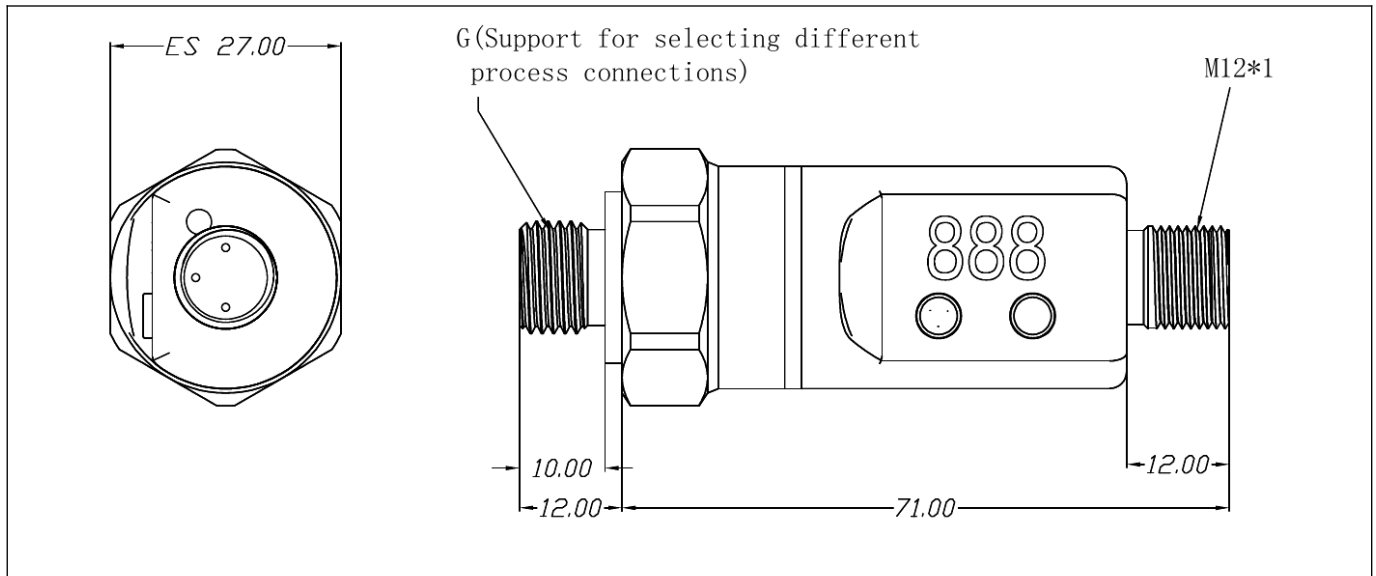
Output type	PNP / NPN, NO / NC selectable; frequency (100 Hz at full scale) optional
Switching load	< 200 mA
Response time	< 10 ms
Switching point	set by up / down keys
Hysteresis	0.5 % of the switching value ex works, adjustable

OTHER OUTPUTS

Analogue	4 ... 20 mA or 1 ... 5 V
Communication	RS485
Display	LED, digital reading



DIMENSIONS (mm)



Dimensions in mm. G = process thread (selectable), ES = width across flats.

COMPLIANCE AND CERTIFICATION

Protection Rating IP67

