

## Industrial **Automation**

**IMI Norgren** 

# 18SAllfluid electronic pressure sensor

- 0 ... 800 bar Port size: G1/4
- Robust sensor for hydraulic applications
- Small, space saving construction
- Robust stainless steel housing
- High overpressure

## **Technical features** Medium:

For neutral and aggressive gases or fluids

Operating pressure: 0 ... 800 bar (0 ... 11603 psi) Port size: G1/4

Supply voltage: 12 ... 30 V d.c. (current output) 15 ... 30 V d.c. (voltage output)

Residual ripple (max.): 10% (within supply voltage) at 50 Hz

Output signal: 4 to 20 mA (2-wire technology) 0 to 10 V (3-wire technology) Frequency output on request

Electrical connection: M12 x 1

## **Technical data**

- Temperature compensated
- 3-wire technology (0 ... 10 V) 2-wire technology (4 ... 20 mA)
- Excellent long-term stability
- Stainless steel measuring element not oil-filled

Mounting position:

Load resistance:

Measuring range:

See table below

 $\pm$  0,5% of full scale (FS)

< + 0,1% (depending on

Interference emission:

Interference immunity:

30 g, xyz, DIN EN 60068-2-27

Shock protection:

Vibration protection: 3 g, 5 ... 500 Hz, xyz,

measuring range)

Linearity:

Hysteresis:

EN 50081-1

EN 50082-2

Protected/short-circuit proof

See diagram

Optional



DIN EN 60068-2-6

Degree of protection : IP65 (with mounted plug)

Weight: 0,07 kg (0.15 lbs)

## Temperature sensitivity:

Zero point <  $\pm$  0,4% of final value pro 10° Kelvin - typ. Range <  $\pm$  0,2% of final value pro 10° Kelvin - typ.

## Ambient/Media temperature:

Ambient: -20 ... +85°C (-4 ... +185°F) -40 ... +110°C (-40 ... +230°F)\* Media<sup>.</sup> -20 ... +85°C (-4 ... +185°F) -40 ... +125°C (-40 ... 257)\* \* on request Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F)

### Materials:

Housing: Stainless steel 1.4571/1.4542 Sensor: Stainless steel membrane 1.4542

Symbol	Measuring range (relative pressure)		Maximum over pressure		Output signal		Model *1)
	(bar)	(psi)	(bar)	(psi)	(mA)	(V)	
P	0 10	145	40	580	4 20	_	0862170
	0 25	362	50	725	4 20	-	0862370
	0 100	1450	200	2900	4 20	-	0862470
	0 250	3625	500	7251	4 20	-	0862670
	0 400	5801	750	10877	4 20	_	0862770
	0 800	11603	1000	14503	4 20	-	0862970
P	0 10	145	40	580	-	0 10	0862180
	0 25	362	50	725	-	0 10	0862380
	0 100	1450	200	2900	-	0 10	0862480
	0 250	3625	500	7251	-	0 10	0862680
	0 400	5801	750	10877	_	0 10	0862780
	0 800	11603	1000	14503	-	0 10	0862980
		_					

\*1) Connector not in scope of delivery. Please see page 2.

Our policy is one of continued research and development. We therefore reserve the right to amend. without notice, the specifications given in this document. (2002 - 5302e) © 2024 Norgren GmbH

## Accessories

Surge damper



0574773 (brass) 0553258 (stainless steel) Connector M12 x 1

4- or 5-pin, 90°

0523058 (2 m cable,4-core)

0523053 (5 m cable,4-core) 0250081 (5 m cable, 5-core, on



0523056 (without cable)

4-pin, 90°

4-pin, straight



4-pin, straight

0523057 (2 m cable, 4-core) 0523052 (5 m cable, 4-core) 0523055 (without cable)

PE-requirement \*1)
\*1) Cable with screening





# 0 ... 10 V $\frac{P}{U} = \frac{1}{3} + \frac{1}{2} + \frac{$

## Characteristic load curve



Load (RL)

## Electrical connection M12 x 1

		Electrical coni 2-wire	aection, M12 x 1, PIN-No. 3-wire
3 2	+ UB	1	1
	GND	-	3
	Signal	4	4

## Basic dimensions Pressure switch



Dimensions in mm Projection/First angle





Surge damper

Warning

These products are intended for use in industrial compressed air and fluid systems only. Do not use these products where pressures and temperatures can exceed those listed under **»Technical features/dat**a«. Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult Norgren GmbH.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure. System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

en 5.11.401.02