

## General Data



TM11040371

Grundfos ISP40 is a robust industrial pressure sensor that offers outstanding performance in a compact and durable stainless-steel housing. This type of sensor is perfectly engineered for use in industrial applications like booster pumps and air compressors. With its integrated leak seal guard, the ISP40 ensures that no leakage through the cable is possible. Furthermore, the pressure transmitter has a wide temperature range, and is designed to handle a certain degree of hydraulic shock. ISP40 is applicable in a wide range including corrosive media that are compatible with AISI 304L stainless steel.

## Application

- Environments where AISI 304L stainless steel is required
- Industrial applications
- Booster pumps.

## Features and benefits

- Wetted parts:
  - AISI 304L stainless steel (sensor housing)
  - AISI 316L stainless steel (sensor diaphragm)
- hermetically sealed media interface (fully welded stainless steel)
- compact and cost-effective design for OEM applications
- superior shock and vibration resistance
- high overload and burst pressure
- robust electronics platform for harsh electrical environments.

## Specifications

### System conditions and environment

Media temperature range	-40 to +130 °C, non-freezing
Ambient temperature range	-40 to +85 °C
Storage temperature range	-50 to +150 °C
Nom. output signal (short circuit protected)	4 to 20 mA
Supply voltage	8 to 28 V
Accuracy at 20°C	≤ ±0.5% FS
Total error band	-40 to +130 °C: 3% 0 to +100 °C: 2%
Response time	< 2ms
Overload pressure	4 x FS
Burst pressure	5 x FS
Weight (depending on pressure connection and electrical connection)	< 100 g

### Materials

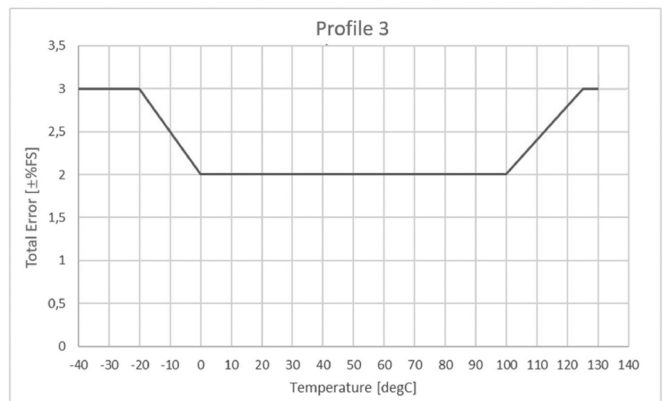
Wetted parts	AISI 304L stainless steel (housing) AISI 316L stainless steel (sensor diaphragm)
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### Environmental standards

Enclosure class	IP67 including connector
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## Temperature vs total error band

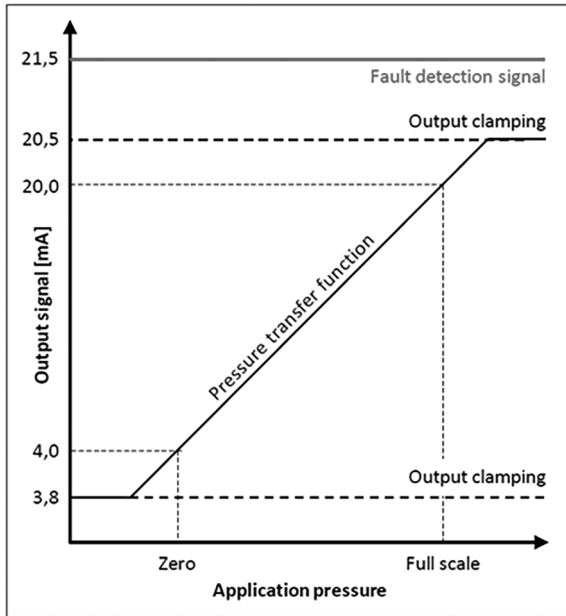
### Max. media temperature based on ≤ 24V supply



Media temperature	110 °C	120 °C	130 °C
Ambient temperature	< 65 °C	< 45 °C	< 25 °C

## Output and diagnostics

Example: 4-20mA



TM1040367

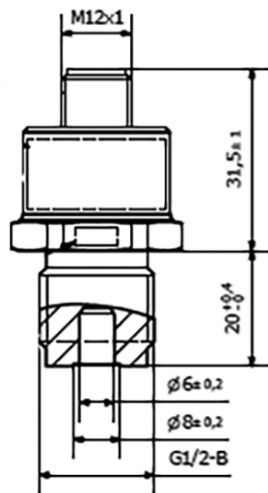
### Output clamping levels

- Limit the output signal if the pressure rises above or falls below the normal range.

### Fault detection signal level

- Placed above the pressure output range. Output at this level signals a sensor fault.

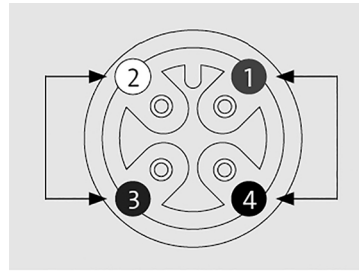
## Dimensions



TM1040370

92751640 03.2022  
ECM: 1335650

## Electrical connection



TM1040364

PIN	Function
1	+ Supply
2	N/A
3	- Supply
4	N/A

## Product range

### Product range for ISP40

Description	Range bar (psi)	Connections			Product number
		Electrical	Mechanical	Type	
PRESS. TR. ISP40 0-6 B 1/2"G 4-20 M12	0-6 (0-87)	M12	1/2	G	99792159
PRESS. TR. ISP40 0-10 B 1/2"G 4-20 M12	0-10 (0-145)	M12	1/2	G	99792175
PRESS. TR. ISP40 0-16 B 1/2"G 4-20 M12	0-16 (0-232)	M12	1/2	G	99792176
PRESS. TR. ISP44 0-25 B 1/2"G	0-25 (0-362)	M12	1/2	G	92618276