

General Data



TM082269

Grundfos ISP44 is a robust industrial pressure sensor that offers outstanding performance in a compact and durable stainless-steel package. This type of sensor is perfectly engineered for use in industrial applications like booster pumps. With its integrated leak seal guard, the ISP44 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. ISP44 is applicable in a wide range including corrosive media that are compatible with AISI 316L stainless steel.

Application

- Harsh environments where AISI 316L stainless steel is required
- Industrial applications
- Booster pumps.

Features and benefits

- Wetted parts:
 - Material in contact with media: AISI 316L stainless steel
- 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 (See table below for higher media temperatures)	-40 to +212 °F (-40 °C to +100 °C)
Ambient temperature range	-40 to +185 °F (-40 °C to +85 °C)
Storage temperature range	-58 to +302 °F
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 +266 °F: 3% 0 to +212 °F: 2%
Response time	< 2ms
Pressure range	0 to 362 psi (0 to 25 Bar)
Overload pressure	4 x FS
Burst pressure	5 x FS
Weight (depending on pressure connection and electrical connection)	0.22 lbs

Materials

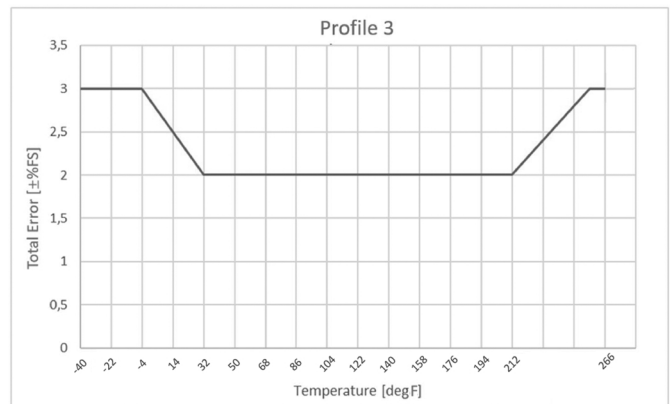
Wetted parts	AISI 316L stainless steel
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Environmental standards

Enclosure class	IP67 including connector
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Temperature vs total error band

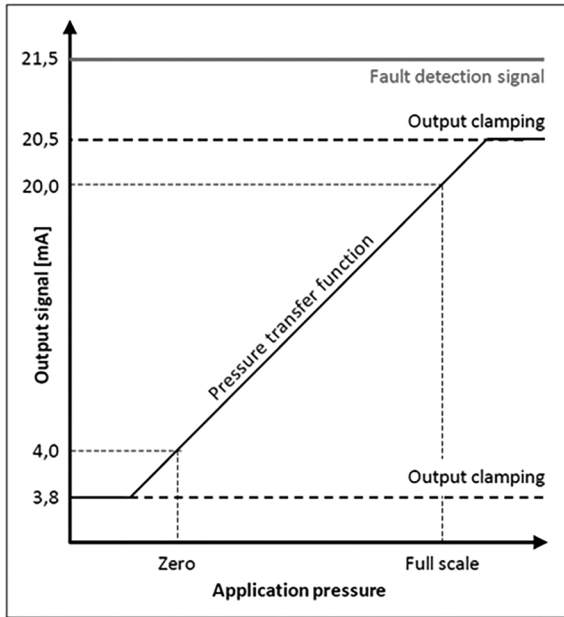
Max. media temperature based on ≤ 24V supply



Media temperature	230 °F (110 °C)	248 °F (120 °C)	266 °F (130 °C)
Ambient temperature	< 149 °F (65 °C)	< 113 °F (45 °C)	< 77 °F (25 °C)

Output and diagnostics

Example: 4-20mA



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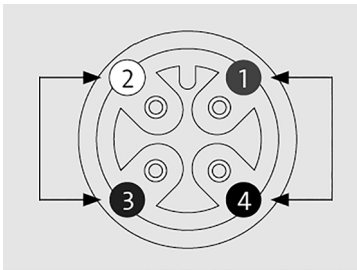
Output clamping levels

- 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.

Electrical connection



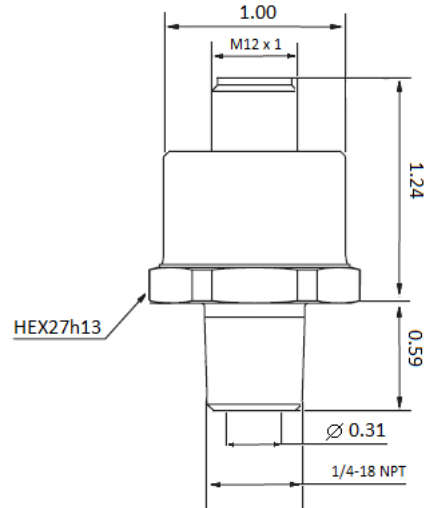
TM1040364

PIN	Function
1	+ Supply
2	N/A
3	GND / Iout / 4-20mA
4	N/A

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ECM: 1345279

Dimensions



TM082270

(Displayed dimensions are measured in inches.)

Product range

Product range for ISP44 US

Description	Range psi (bar)	Connections			Product number
		Electrical	Mechanical	Type	
PRESS. TR. ISP44 0-87 P 1/4"N 4-20 M12	0-87 (0-6)	M12	1/4	NPT	99970220
PRESS. TR. ISP44 0-145 P 1/4"N 4-20 M12	0-145 (0-10)	M12	1/4	NPT	99970234
PRESS. TR. ISP44 0-232 P 1/4"N 4-20 M12	0-232 (0-16)	M12	1/4	NPT	99970236
PRESS. TR. ISP44 0-362 P 1/4"N 4-20 M12	0-362 (0-25)	M12	1/4	NPT	99970238

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