



Pressure sensors
Pressure transmitter

PHT-RB010ST20SOAMS0Z



Model Name > **PHT-RB010ST20S0AMS0Z**
Part No. > **6041345**



Illustration may differ

At a glance

- Robust and precise pressure measurement technology
- Gauge measuring ranges from 0 ... 0.25 bar up to 0 ... 25 bar
- Available in 2 accuracy classes:
- Flush-mounted, hermetically sealed stainless steel membrane with roughness Ra < 0.4 µm
- Wetted parts stainless steel 1.4435, housing stainless steel 1.4571
- Large range of hygienic process connectors
- Stainless steel housing and field housing with enclosure rating of up to IP 68

Your benefits

- Perfectly suited for demanding hygienic applications in the food and beverage, pharmaceutical and cosmetics industries
- Safe hygienic operation through EHEDG and 3-A certifications
- High reliability due to robust design and use of high-grade materials
- Withstands CIP/SIP, ensuring high system availability and reliability
- Transmitter housing is easily cleaned
- Versatile configurability optimizes solutions



Features

Pressure type:	Gauge pressure
Measuring range:	0 bar ... 10 bar
Process temperature:	-20 °C ... 150 °C
CE-conformity:	✓
Output signal:	4...20 mA

Performance

Accuracy:	≤ +/- 0.5 % (of span)
Non-linearity:	≤ +/- 0.2 % (of span (Best Fit Straight Line, BFSL) according to IEC 61298-2)
Long-term drift/one-year stability:	≤ 0.2 % of span
Temperature coefficient in rated temperature range:	Mean TC of span: ≤ 0.2 % of span/ 10 K, Mean TC of zero: ≤ 0.2 % of span/ 10 K, with pressure ranges 0 bar ... 0.6 bar to 0 bar ... 25 bar, Mean TC of zero: ≤ 0.25 % of span/ 10 K with pressure range 0 bar ... 0.4 bar ≤ 0.25 % of span/ 10 K, with pressure range 0 bar ... 0.4 bar, Mean TC of zero: ≤ 0.4 % of span/ 10 K with pressure range 0 bar ... 0.25 bar
Rated temperature range:	0 °C ... 80 °C
Non-repeatability:	≤ +/- 0.1 % of span
Response time (10 % ... 90 %):	≤ 10 ms

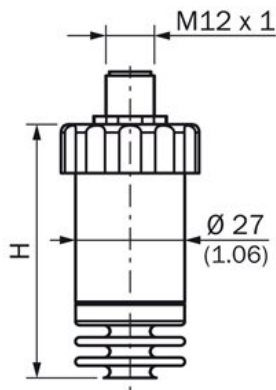
Mechanics/electronics

Process connection:	Tri-Clamp 2"
Wetted parts:	Stainless steel 1.4435
Seal:	Without seal
Housing material:	Stainless steel 1.4571
Enclosure rating:	IP 67
Connection type:	M12 x 1, 4-pin, IP 67
Supply voltage:	10 V DC ... 30 V DC
Electrical safety:	Short-circuit protection: QA towards M, Protection class: III, Overvoltage protection: 36 V DC, Reverse polarity protection: L+ towards M
Dielectric strength:	500 V DC, NEC Class 02 power supply (low voltage and low current max. 100 VA even under fault conditions)
Protection class III:	✓
Weight sensor:	500 g
CE-conformity:	EMC directive: 2004/108/EEC, EN 61326-2-3

Ambient data

Storage temperature:	-40 °C ... 100 °C
Ambient temperature:	-20 °C ... 80 °C
Shock load:	500 g according to IEC 60068-2-27 (mechanical shock)
Vibration load:	15g per IEC 60068-2-6 (vibration under resonance)

Dimensional drawing housing



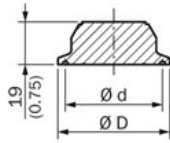
All dimensions in mm (inch)

With accuracy H

0.5 %	64 (2.52)
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0.25 %	84 (3.31)
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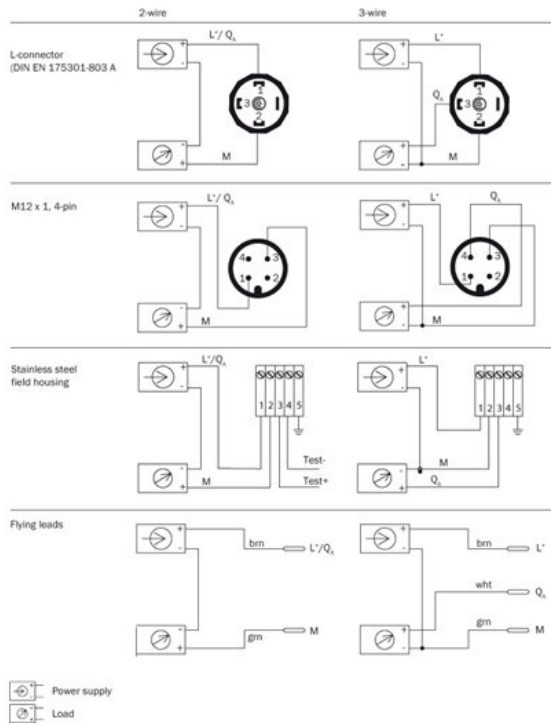
Dimensional drawing process connection



All dimensions in mm (inch)

Design		Ø D	Ø d
Tri-Clamp	1 ½"	50 (1.97)	43,5 (1.71)
	2"	64 (2.52)	56,6 (2.23)
DIN 32676	DN 32	50 (1.97)	43,5 (1.71)
	DN 40	50 (1.97)	43,5 (1.71)
	DN 50	64 (2.52)	56,6 (2.23)
ISO 2852	DN 33.7	50 (1.97)	43,5 (1.71)
	DN 38	50 (1.97)	43,5 (1.71)
	DN 40	64 (2.52)	56,6 (2.23)
	DN 51	64 (2.52)	56,6 (2.23)

Connection type



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