PHT

SICK
Sensor Intelligence.

PHT

Technical data overview

Medium	Liquid, gaseous
Pressure type	Gauge pressure Absolute pressure Compound pressure (depends on variant)
Pressure unit	bar / psi (depends on variant)
Accuracy	≤ ± 0.25 % / ≤ ± 0.5 % (depends on variant)
Process connection	Clamp (DIN 32676) DN 32 Clamp (DIN 32676) DN 40 Clamp (DIN 32676) DN 50 Tri-Clamp 2" (DIN 32676) Tri-Clamp 1 ½" (DIN 32676) Clamp (ISO 2852) DN 33.7 Conical coupling (DIN 11851) DN 25 with union nut Conical coupling (DIN 11851) DN 40 with union nut Conical coupling (DIN 11851) DN 50 with union nut Coupling (DIN 11864-1) DN 40 form A with union nut Coupling (DIN 11864-1) DN 50 form A with union nut Flange (DIN 11864-2) DN 40 form A Clamp (DIN 11864-3) DN 40 form A SMS standard 1½" (SMS 1145) with union nut Varivent connection type F DRD Connector with clamping elements Clamp (ISO 2852) DN 40 Varivent connection type N (depends on variant)
Connection type	M12 round connector x 1, 4-pin L-connector (DIN EN 175301-803 A) Flying leads, 3 m Field housing
Enclosure rating	IP67 IP65 IP68 (depends on variant)
Process temperature	−20 °C ... +150 °C
Seal	Without seal / EPDM (depends on variant)
Communication interface	-
Output signal	4 mA ... 20 mA, 2-wire 0 V ... 10 V, 3-wire (depends on variant)
Supply voltage	10 V DC ... 30 V DC (depends on variant)

Product description

With the flush-mounted stainless-steel membranes and the numerous hygienic process connections, the PHT pressure transmitter is perfectly suited to demanding hygienic applications in the food, pharmaceutical, and cosmetics industries. Whether it be elevated media temperatures, resistance to corrosive media, or dead zone-free design with hygienic process connections: The PHT stands out through its excellent functionality, which is evidenced among other things by certificates from 3-A.
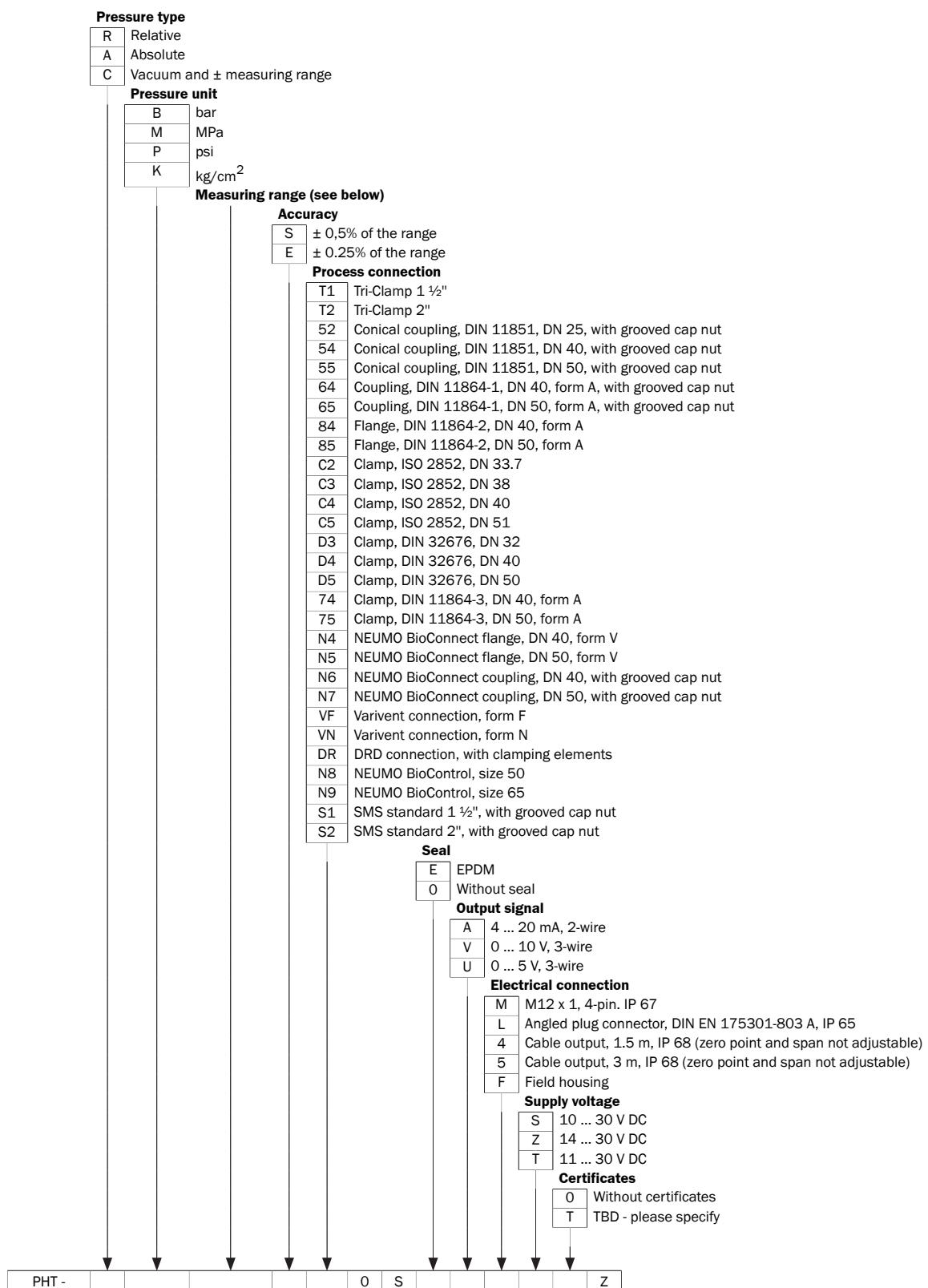
At a glance

- Robust and precise pressure measurement technology
- Flush-mounted, hermetically sealed stainless steel membrane with roughness Ra < 0.4 μm
- Wetted parts stainless steel 1.4435, housing stainless steel 1.4571
- CIP/SIP resistant
- Large range of hygienic process connectors
- Stainless steel housing with enclosure rating of up to IP 68
- Field housing available (IP 67)

Your benefits

- Perfectly suited for demanding hygienic applications in the food, pharmaceuticals and cosmetic industry
- Safe to use in hygienic areas through 3-A certification
- Rugged design and use of high-quality materials ensure high reliability and availability
- High plant availability thanks to CIP and SIP capability
- Easy to clean sensor housing
- Optimal solutions due to versatile configurability

Type code

Other models and accessories ➜ www.sick.com/PHT

Pressure type

R	Relative
A	Absolute
C	Vacuum and ± measuring range

Pressure unit

B	bar
M	MPa
P	psi
K	kg/cm^2

Measuring range (see below)

Accuracy

S	± 0,5% of the range
E	± 0.25% of the range

Process connection

T1	Tri-Clamp 1 ½"
T2	Tri-Clamp 2"
52	Conical coupling, DIN 11851, DN 25, with grooved cap nut
54	Conical coupling, DIN 11851, DN 40, with grooved cap nut
55	Conical coupling, DIN 11851, DN 50, with grooved cap nut
64	Coupling, DIN 11864-1, DN 40, form A, with grooved cap nut
65	Coupling, DIN 11864-1, DN 50, form A, with grooved cap nut
84	Flange, DIN 11864-2, DN 40, form A
85	Flange, DIN 11864-2, DN 50, form A
C2	Clamp, ISO 2852, DN 33.7
C3	Clamp, ISO 2852, DN 38
C4	Clamp, ISO 2852, DN 40
C5	Clamp, ISO 2852, DN 51
D3	Clamp, DIN 32676, DN 32
D4	Clamp, DIN 32676, DN 40
D5	Clamp, DIN 32676, DN 50
74	Clamp, DIN 11864-3, DN 40, form A
75	Clamp, DIN 11864-3, DN 50, form A
N4	NEUMO BioConnect flange, DN 40, form V
N5	NEUMO BioConnect flange, DN 50, form V
N6	NEUMO BioConnect coupling, DN 40, with grooved cap nut
N7	NEUMO BioConnect coupling, DN 50, with grooved cap nut
VF	Varivent connection, form F
VN	Varivent connection, form N
DR	DRD connection, with clamping elements
N8	NEUMO BioControl, size 50
N9	NEUMO BioControl, size 65
S1	SMS standard 1 ½", with grooved cap nut
S2	SMS standard 2", with grooved cap nut

Seal

E	EPDM
0	Without seal

Output signal

A	4 ... 20 mA, 2-wire
V	0 ... 10 V, 3-wire
U	0 ... 5 V, 3-wire

Electrical connection

M	M12 x 1, 4-pin. IP 67
L	Angled plug connector, DIN EN 175301-803 A, IP 65
4	Cable output, 1.5 m, IP 68 (zero point and span not adjustable)
5	Cable output, 3 m, IP 68 (zero point and span not adjustable)
F	Field housing

Supply voltage

S	10 ... 30 V DC
Z	14 ... 30 V DC
T	11 ... 30 V DC

Certificates

0	Without certificates
T	TBD - please specify

PHT - ☐ ☐ ☐ ☐ ☐ 0 S ☐ ☐ ☐ ☐ ☐ Z

Not all variants of the type code can be combined! Not all available variants are shown.

Measuring range

	Gauge pressure measuring range	Overload limit
X25	0 ... 0.25 bar	2 bar
X40	0 ... 0.4 bar	2 bar
X60	0 ... 0.6 bar	4 bar
1X0	0 ... 1 bar	5 bar
1X6	0 ... 1.6 bar	10 bar
2X5	0 ... 2.5 bar	10 bar
4X0	0 ... 4 bar	17bar
6X0	0 ... 6 bar	35 bar
010	0 ... 10 bar	35 bar
016	0 ... 16 bar	80 bar
025	0 ... 25 bar	80 bar

	Absolute pressure measuring range	Overload limit
X25	0 ... 0.25 bar abs	2 bar abs
X40	0 ... 0.4 bar abs	2 bar abs
1X0	0 ... 1 bar abs	5 bar abs
1X6	0 ... 1.6 bar abs	10 bar abs
2X5	0 ... 2.5 bar abs	10 bar abs
4X0	0 ... 4 bar abs	17 bar abs
6X0	0 ... 6 bar abs	35 bar abs
010	0 ... 10 bar abs	35 bar abs
016	0 ... 16 bar abs	80 bar abs

	± measuring range	Overload limit
1X0	−1 ... 0 bar	5 bar
1X6	−1 ... +0.6 bar	10 bar
4X0	−1 ... +3 bar	17 bar
6X0	−1 ... +5 bar	35 bar
010	−1 ... +9 bar	35 bar
016	−1 ... +15 bar	80 bar

	Gauge pressure measuring range	Overload limit
5X0	0 ... 5 psi	29 psi
010	0 ... 10 psi	29 psi
030	0 ... 30 psi	145 psi
060	0 ... 60 psi	246 psi
100	0 ... 100 psi	500 psi
160	0 ... 160 psi	500 psi
200	0 ... 200 psi	1,160 psi
300	0 ... 300 psi	1,160 psi

	Absolute pressure measuring range	Overload limit
015	0 ... 15 psi abs	72.5 psi abs
025	0 ... 25 psi abs	145 psi abs
050	0 ... 50 psi abs	240 psi abs
100	0 ... 100 psi abs	500 psi abs
250	0 ... 250 psi abs	1,160 psi abs

	± measuring range	Overload limit
015	−14.5... 0 psi	72.5 psi

	Gauge pressure measuring range	Overload limit
40M	0 ... 0.04 MPa	0.08 MPa
X10	0 ... 0.1 MPa	0.2 MPa
X25	0 ... 0.25 MPa	0.5 MPa
X40	0 ... 0.4 MPa	0.8 MPa
X60	0 ... 0.6 MPa	1.2 MPa
1X0	0 ... 1 MPa	2 MPa
1X6	0 ... 1.6 MPa	3.2 MPa
2X5	0 ... 2.5 MPa	5 MPa

	Absolute pressure measuring range	Overload limit

	± measuring range	Overload limit
X10	-0.1 ... +0 MPa	
X40	-0.1 ... +0.3 MPa	0.6 MPa
1X6	-0.1 ... +1.5 MPa	3 MPa

	Gauge pressure measuring range	Overload limit
2X5	0 ... 2.5 kg/cm²	5 kg/cm²
4X0	0 ... 4 kg/cm²	8 kg/cm²
6X0	0 ... 6 kg/cm²	12 kg/cm²
010	0 ... 10 kg/cm²	20 kg/cm²
016	0 ... 16 kg/cm²	32 kg/cm²
025	0 ... 25 kg/cm²	50 kg/cm²

	Absolute pressure measuring range	Overload limit

	± measuring range	Overload limit
1X0	−0.1 ... 0 kg/cm²	

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

WORLDWIDE PRESENCE:

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