

HOT

INDUSTRIAL PRESSURE TRANSMITTER

Description

The **HOT** is a high-quality, all-stainless steel pressure transmitter intended for use in the measurement of gasses and liquids compatible with stainless steel. With additional EMI/RFI protection, low static and thermal errors, and high resistance to shock and vibration as standard, the HOT ensures trouble-free operation at temperatures up to 125°C. The HOT's piezoresistive sensing element, coupled with the latest ASIC circuitry, ensures excellent accuracy, a choice of high-level outputs, and long-term stability, all protected within a rugged stainless steel housing.

The **HOT's** high-strength stainless steel construction contains no silicone oil and no internal O-rings. Measurements are available in gauge and absolute pressure, with ranges up to 2000 bar, backed by a one-year warranty.

Application

- Water treatment
- HVAC systems
- Machine tools
- Plant control and monitoring
- Hydraulics and Pneumatics
- Pumps and compressors control
- Oxygen pressure measurement
- Energy management systems



Main Features

■ Piezoresistive Technology	■ Media Temperature: -40 ... +125 °C
■ Pressure Type: Absolute, Gauge	■ Ambient Temperature: -40 ... +105 °C
■ Measuring Range: -1 ... 0 bar to -1 ... 60 bar 0 ... 600 mbar to 0 ... 2000 bar	■ Output Signal: 4 ... 20 mA, 0 ... 10 VDC, 0 ... 5 VDC 1 ... 5 VDC, 0.5 ... 4.5 VDC Ratiometric, I ² C
■ High Strength, Rugged Stainless Steel Design	■ Response Time: < 1 ms
■ Accuracy @ RT: ≤ ±0.5 %FS, acc. to IEC 61298-2	■ High Resistance to Shock and Vibration
■ Process Connection: G 1/4" Male, 1/8" NPT Male, 1/4" NPT Male M10 x 1.5 Male, M14 x 1.5 Male 3/8"-24 UNF Male, 7/16"-20 UNF Male, 7/16"-20 UNF Female	■ Electrical Connection: DIN EN 175301-803, Form A DIN EN 175301-803, Form C M12x1, 4-pin, Mat. Steel Packard Metri-Pack, 3-pin Cable Outlet

Technical Specification

Input Pressure

Pressure Type	Absolute, Gauge
Pressure Range [bar]	-1 ... 0 bar to -1 ... 60 bar, 0 ... 600 mbar to 0 ... 2000 bar
Overpressure [Max]	Up to 2x rated pressure
Burst Pressure [Min]	Up to 5x rated pressure
Vacuum Resistance	YES

Pressure Range

Code	Pressure Range [bar]	Code	Pressure Range [bar]	Code	Pressure Range [bar]	Code	Pressure Range [bar]
000.0	-1 ... 0	0005	0 ... 5	0030	0 ... 30	0300	0 ... 300
000.1	0 ... -1	0006	0 ... 6	0035	0 ... 35	0400	0 ... 400
000.6	0 ... 0.6	0007	0 ... 7	0040	0 ... 40	0500	0 ... 500
0000	1 ... 0	007.5	0 ... 7.5	0050	0 ... 50	0600	0 ... 600
0001	0 ... 1	0010	0 ... 10	0060	0 ... 60	0700	0 ... 700
001.6	0 ... 1.6	0013	0 ... 13	0100	0 ... 100	0800	0 ... 800
002.5	0 ... 2.5	0016	0 ... 16	0160	0 ... 160	1000	0 ... 1000
0003	0 ... 3	0020	0 ... 20	0200	0 ... 200	1600	0 ... 1600
0004	0 ... 4	0025	0 ... 25	0250	0 ... 250	2000	0 ... 2000

Performance

Accuracy @ RT	% of the range (gauge and vacuum sensors) < 0.5 BFSL ≤ 0.125	(incl. non-linearity, hysteresis, repeatability, zero offset and final offset acc. to IEC 61298-2)
Non-linearity	% of the range ≤ 0.15	
Repeatability	% of the range ≤ 0.10	
Stability / Year	% of the range ≤ 0.10	
Response Time (10 ... 90 %)	1 ms	
Pressure Cycles	> 10 million	

Environment

Media Temperature	-40 ... +125 °C	
Ambient Temperature	-40 ... +105 °C	
Storage Temperature	-40 ... +125 °C	
Compensated Temperature	-20 ... +85 °C	
Mean TC Offset	% of the range ≤ 0.15 / 10K	Temperature Coefficient within the Compensated Range
Mean TC Range	% of the range ≤ 0.15 / 10K	
Shock Resistance	1000 g, 11 ms, 1/2 Sin	
Vibration Resistance	25 g, peak, (20 ... 2000 Hz)	
Ingress Protection	IP65, IP67, IP69K (optional)	

Electronic

Output Signal	Supply
4 ... 20 mA / 2-wire	10 ... 32 VDC
0 ... 10 VDC / 3-wire	12 ... 32 VDC
0 ... 5 VDC / 3-wire	10 ... 32 VDC
1 ... 5 VDC / 3-wire	10 ... 32 VDC
0.5 ... 4.5 VDC Ratiometric / 3-wire	5 VDC
I ² C	5 VDC
Output Impedance	< 100 Ω
Current Consumption	< 10 mA
Reverse Voltage Protection	YES

Electrical Definition

Code		Definition
+V	+	Supply Voltage +
-V	-	Supply Voltage -
I Out	-	Current Output
+V Out	V out	Voltage Output
N.C	nc	No Connection
⏏	⏏	Grounding

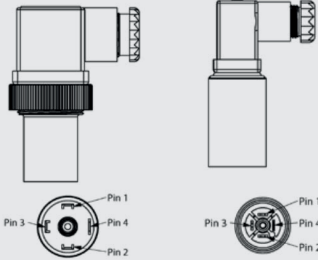
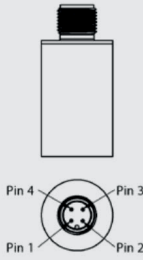
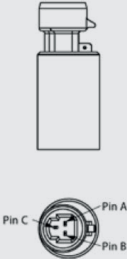
Mechanic

Feature	Type
Housing Material	Stainless Steel 304
Wetted Parts Material	Stainless Steel 304 Stainless Steel 17-4PH (optional) FKM Seal
Process Connection	G 1/4" Male, 1/8" NPT Male, 1/4" NPT Male M10 x 1.5 Male, M14 x 1.5 Male 3/8"-24 UNF Male, 7/16"-20 UNF Male, 7/16"-20 UNF Female
Electrical Connection	DIN EN 175301-803, Form A DIN EN 175301-803, Form C M12x1, 4-pin, Mat. Steel Packard Metri-Pack, 3-pin Cable Outlet

Miscellaneous

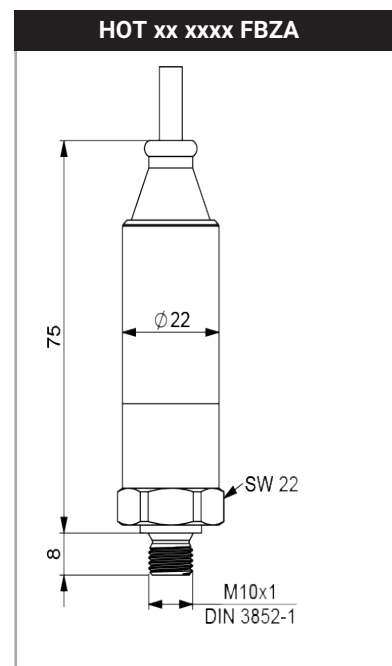
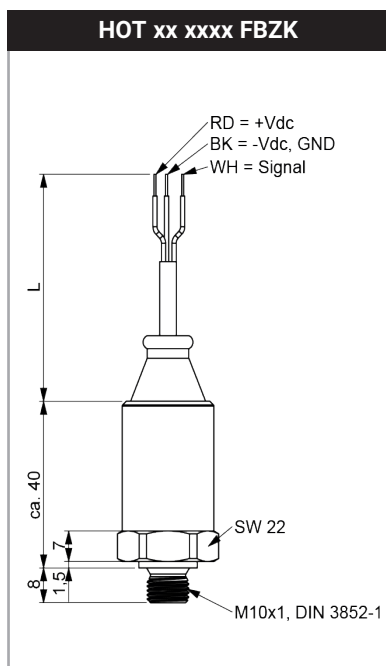
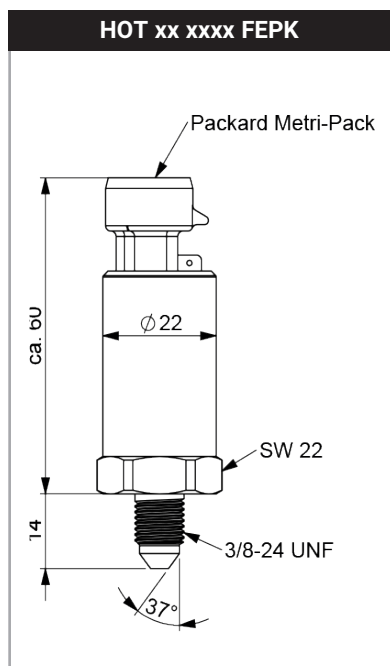
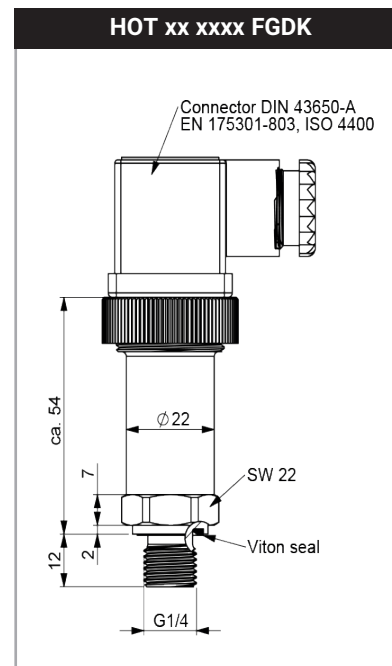
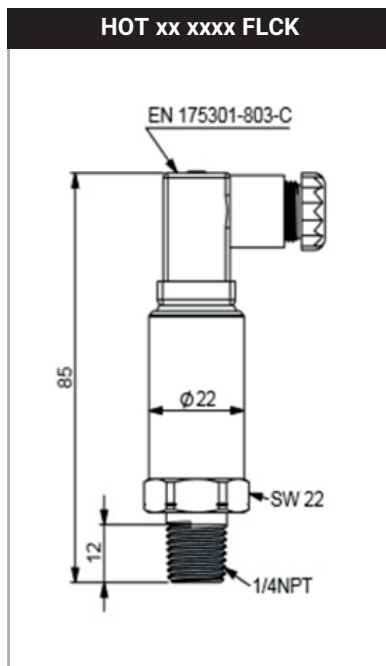
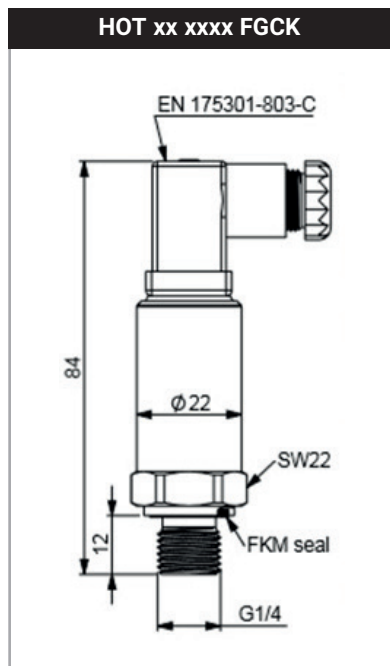
Feature	Description
Weight	Approx. 140 g
Mounting Force	Max. 25 Nm
Calibration	Output is calibrated at zero & full scale

Wiring

DIN EN 175301-803, Form A and C	Output	PIN 1	PIN 2	PIN 3	PIN 4
	4 ... 20 mA	+V	I Out	N.C	–
	0 ... 10 VDC	+V	-V	+V Out	–
	0 ... 5 VDC				
	1 ... 5 VDC				
	0.5 ... 4.5 VDC				
	I ² C	–	–	–	–
M12x1, 4-pin	Output	PIN 1	PIN 2	PIN 3	PIN 4
	4 ... 20 mA	+V	N.C	I Out	N.C
	0 ... 10 VDC	+V	N.C	-V	+V Out
	0 ... 5 VDC				
	1 ... 5 VDC				
	0.5 ... 4.5 VDC				
	I ² C	+V	-V	SCL	SDA
Packard Metri-Pack, 3-pin	Output	PIN A	PIN B	PIN C	–
	4 ... 20 mA	+V	I Out	N.C	–
	0 ... 10 VDC	+V	-V	+V Out	–
	0 ... 5 VDC				
	1 ... 5 VDC				
	0.5 ... 4.5 VDC				
	I ² C	–	–	–	–
Cable Outlet	Output	Red	Black	White	Green
	4 ... 20 mA	+V	I Out	N.C	–
	0 ... 10 VDC	+V	-V	+V Out	–
	0 ... 5 VDC				
	1 ... 5 VDC				
	0.5 ... 4.5 VDC				
	I ² C	+V	-V	SCL	SDA

Dimension

(unit:mm)



How to Order

Series	
Industrial Pressure Transmitter	HOT
Flush Diaphragm Pressure Transmitter	HOF
Low Pressure Transmitter	HOM
High Pressure Transmitter	HOD
Compact Pressure Transmitter	EOT

Pressure Type	
K	Gauge
A	Absolute

Electrical Connection	
C	DIN EN 175301-803, Form C
D	DIN EN 175301-803, Form A
M	M12x1, 4-pin, Mat. Steel
P	Packard Metri-Pack, 3-pin
Z	Cable Outlet
X	Customized

Process Connection	
A	1/8" NPT Male
L	1/4" NPT Male
G	G 1/4" Male
B	M10 x 1.5 Male
V	M14 x 1.5 Male
M	M18 x 1.5 Male
E	3/8"-24 UNF Male
H	7/16"-20 UNF Male
R	7/16"-20 UNF Female
X	Customized

Output Signal	
4 ... 20 mA / 2-wire	H
0 ... 10 VDC / 3-wire	J
0 ... 5 VDC / 3-wire	F
1 ... 5 VDC / 3-wire	A
0.5 ... 4.5 VDC Ratiometric / 3-wire	R
I ² C	I
Customized	X

Positive / Negative Pressure	
Positive Pressure	null
Negative Pressure (Vacuum or Compound)	C

Pressure Range	
Please use the Code from the Pressure Range table	

Unit	
bar	F
KPa	R
psi	P

Example

HOTH0025FGCK

HOT → Hogller Industrial Pressure Transmitter: HOT Series

H → Output Signal: 4 ... 20 mA

C0025F → Compound Pressure Range: -1 ... 25 bar

G → Process Connection: G 1/4" Male

C → Electrical Connection: DIN EN 175301-803, Form C

K → Pressure Type: Gauge

Note:

1. The **power supply** depends on the selected **output signal** (please refer to the Electronics table on page 3).