

# HOM

## LOW PRESSURE TRANSMITTER



### Description

The **HOM** offers a robust design with a stainless steel housing like the HOT but utilizes a silicon-based sensitive measuring cell for low-pressure applications from 10 mbar to 500 mbar.

With additional EMI/RFI protection, low static and thermal errors, and high resistance to shock and vibration as standard, the **HOM** ensures trouble-free operation at temperatures up to 85°C.

### Application

- Leak testing
- Laboratory testing
- Automotive testing
- HVAC systems
- Environmental engineering
- Air and gas pressure monitoring
- Hydrostatic level measurement



### Main Features

<ul style="list-style-type: none"> <li>■ Silicon-based Sensitive Measuring Cell</li> </ul>	<ul style="list-style-type: none"> <li>■ Media Temperature: -20 ... +85 °C</li> </ul>
<ul style="list-style-type: none"> <li>■ Pressure Type: Gauge</li> </ul>	<ul style="list-style-type: none"> <li>■ Ambient Temperature: -20 ... +85 °C</li> </ul>
<ul style="list-style-type: none"> <li>■ Measuring Range: 0 ... 10 mbar to 0 ... 500 mbar</li> </ul>	<ul style="list-style-type: none"> <li>■ Output Signal: 4 ... 20 mA, 0 ... 10 VDC, 0 ... 5 VDC 1 ... 5 VDC, 0.5 ... 4.5 VDC Ratiometric</li> </ul>
<ul style="list-style-type: none"> <li>■ High Resistance to Shock and Vibration</li> </ul>	<ul style="list-style-type: none"> <li>■ High Strength, Rugged Stainless Steel Design</li> </ul>
<ul style="list-style-type: none"> <li>■ Accuracy @ RT: <math>\leq \pm 1</math> %FS</li> </ul>	<ul style="list-style-type: none"> <li>■ Response Time: &lt; 2 ms</li> </ul>
<ul style="list-style-type: none"> <li>■ 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</li> </ul>	<ul style="list-style-type: none"> <li>■ 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</li> </ul>

## Technical Specification

Input Pressure	
Pressure Type	Gauge
Pressure Range [bar]	0 ... 10 mbar to 0 ... 500 mbar
Overpressure [Max]	See Pressure Range table
Burst Pressure [Min]	See Pressure Range table
Vacuum Resistance	YES

Pressure Range			
Code	Pressure Range (mbar)	Overpressure (mbar)	Burst Pressure (mbar)
0060	0 ... 60	120	180
0100	0 ... 100	200	300
0250	0 ... 250	500	750
0400	0 ... 400	800	1200
0500	0 ... 500	1000	1500

Performance		
Total Error @ RT (1)	< 1.0 %FS	(1) Total accuracy in BFSL includes: non-linearity, hysteresis, offset and gain failures.
Total Error (-10 ... +50 °C) (2)	< 1.5 %FS	(2) Total accuracy (1), Repeatability and temperature effects (new parts, max. drift per year 0.2 %FS)
Total Error (-40 ... +105 °C) (2)	< 3.5 %FS	
Non-linearity	< 0.2 %FS	
Repeatability	< 0.2 %FS	
Stability / Year	< 0.15 %FS	
Response Time	Max. 2 ms	Measured from initial value to output at 90%
Pressure Cycles	> 10 million	

Environment	
Media Temperature	-20 ... +85 °C
Ambient Temperature	-20 ... +85 °C
Storage Temperature	-40 ... +125 °C
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
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 Silicon membrane, Silicone Glue, PA6.6 (Polyamide) NBR / FKM O-ring
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

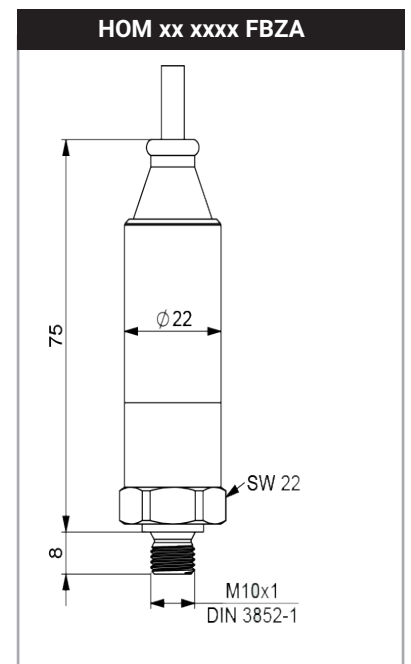
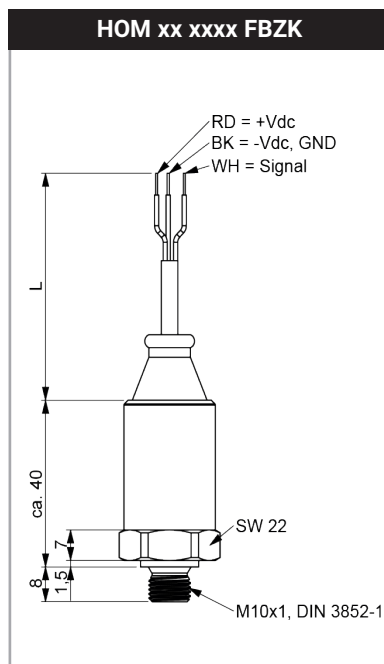
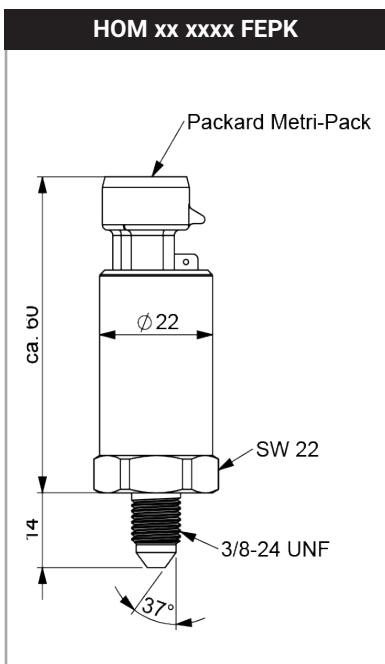
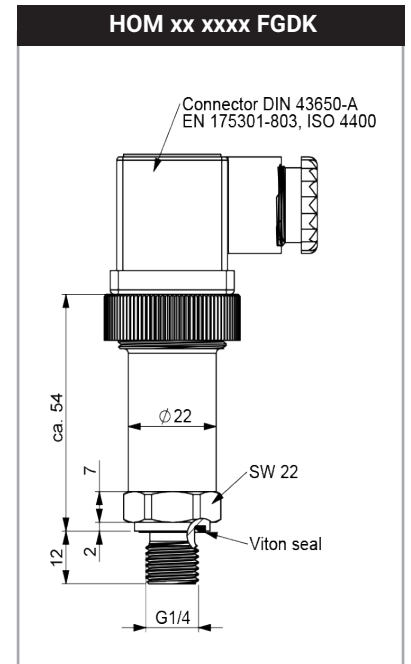
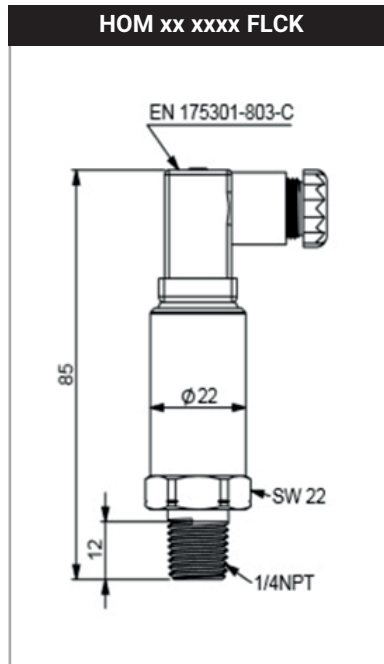
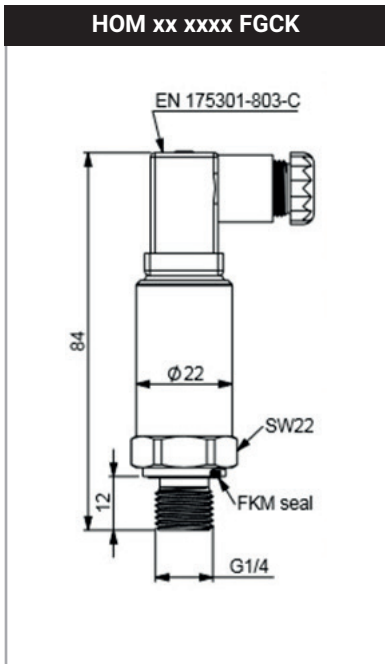
Feature	Description
Weight	Approx. 140 g
Mounting Force	Max. 25 Nm
Calibration	Output is calibrated at zero & full scale

## 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				
	0 ... 5 VDC	+V	-V	+V Out	-
	1 ... 5 VDC				
	0.5 ... 4.5 VDC				
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				
	0 ... 5 VDC	+V	N.C	-V	+V Out
	1 ... 5 VDC				
	0.5 ... 4.5 VDC				
Packard Metri-Pack, 3-pin	Output	PIN A	PIN B	PIN C	-
	4 ... 20 mA	+V	I Out	N.C	-
	0 ... 10 VDC				
	0 ... 5 VDC	+V	-V	+V Out	-
	1 ... 5 VDC				
	0.5 ... 4.5 VDC				
Cable Outlet	Output	Red	Black	White	Green
	4 ... 20 mA	+V	I Out	N.C	-
	0 ... 10 VDC				
	0 ... 5 VDC	+V	-V	+V Out	-
	1 ... 5 VDC				
	0.5 ... 4.5 VDC				

## Dimension

(unit:mm)



## How to Order

HOM X X X X X X

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

1 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
Customized	X

Pressure Range
Please use the <b>Code</b> from the <b>Pressure Range</b> table

Unit	
bar	F
KPa	R
psi	P

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
E	3/8"-24 UNF Male
H	7/16"-20 UNF Male
R	7/16"-20 UNF Female
X	Customized

## Example

### HOMH0100FGCK

HOM → Hogller Low Range Pressure Transmitter: HOM Series

H → Output Signal: 4 ... 20 mA

0100F → Pressure Range: 0 ... 100 mbar

G → Process Connection: G 1/4" Male

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

K → Pressure Type: Gauge

#### Notes:

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