

# STANDARD PRESSURE TRANSDUCER series THPB1, THIPB1 (HART)



#### DESCRIPTION:

- completely stainless steel construction
- suitable for low pressure and vacuum measurements
  - automatic testing, laser zero setting
- resistant to high-frequency shocks and interference
  - resistant to corrosion, impact and wear
- protection from reverse polarity, current protection, overvoltage protection
  - connector material: 17 248/ 1.4541
  - membrane material: 17 348/ 1.4571

#### APPLICATION:

- chemical industry
  - hydrology
- power engineering
  - metallurgy

#### TECHNICAL PARAMETERS:

- measuring ranges: -1-0-...0,1-1000bar
- output signal: 4-20mA; 0-5V; 0-10V; 1-5V; 0,5-4,5V  
4-20mA HART/THIPB1
- connection: G1/2 (G1/4, M12x1,5, M20x1,5, 1/2 NPT)
  - supply voltage: 12-36V DC
- accuracy class: 0,1% FS; 0,25% FS (standard); 0,5%FS
  - pressure type: relative, absolute

#### SPECIFICATION:

Pressure transducer THPB1 works on the principle of piezo-resistant technology, as a sensor unit THPB1 uses a stainless steel membrane.

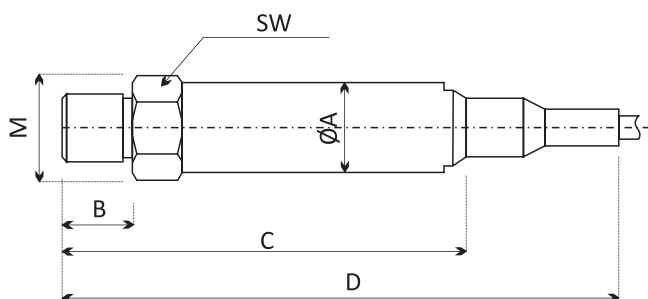
Transducers cylindrical case is made of stainless steel, including process connection.

THPB1 is fully tested on computer and zero value is set by means of laser with high sensitivity in wide range of temperature ranges.

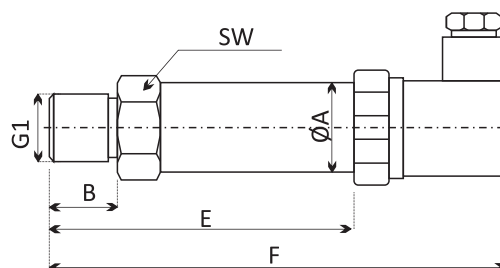
Some of the assets of the transducer are its integrated construction, sturdy and heavy-duty design, high accuracy and long-term stability. THPB1 is suitable for pressure measurements in most of industrial operations, widely used for pressure measuring in chemical industry, metallurgy, power engineering, hydrology, etc.

Technical parameters			
Medium	gas or liquid suitable for direct contact with stainless steel	Storing temperature	-40+120°C
Range	-1-0...0,1-1000bar	Working temp. range	-30+80°C
Accuracy class	0,1%FS; 0,25%FS (standard); 0,5%FS	Electric. connect.	DIN 43650 and other see table
Pressure type	relative (G), absolute (A)	Connection	G1/2 (G1/4, M12x1,5, M20x1,5, 1/2NPT)
Output signal	4-20mA; 0-5V; 0-10V; 1-5V; 0,5-4,5V 4-20mA HART/THIPB1	Connect. material	stainless steel 17 248/1.4541
		Membrane mater.	stainless steel 17 348/1.4571
Stability	<0,2%FS/year	Case material	aluminium
Loading resistance	$RL=(U-12V)/0,02A$ (4-20mA current output) U - loop voltage (V)	Sealing	N-butyronitril or fluor sealing ring
Power supply voltage	12-36V DC	Overloading	150%FS

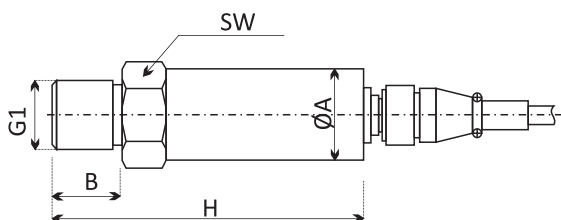
- Waterproof connector



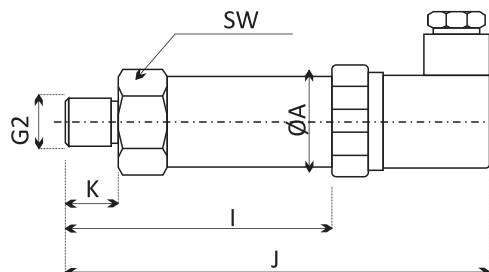
- DIN 43650 connector



- Cable connector

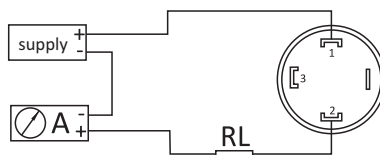


- DIN 43650 connector



Dimensions in mm													
A	B	C	D	E	F	G1	G2	H	I	J	K	M	SW
27	18	107	147	74	119	G1/2	G1/4	80	70	113	14	M20x1,5	27

#### Wiring diagram



Order code:

THPB1, THIPB1(HART)	
Range	measuring range: -1-0...0,1-1000bar
(X1-X2)	X1 - lower limit, X2 - upper limit of the measuring range
Code	Pressure type
G	relative
A	absolute
Code	Accuracy class
B	0,1%
C	0,25%
D	0,5%
Code	Output signal
O1	4-20mA
O2	0-5mA
O3	1-5mA
O4	0-10mA
O5	0,5-4,5mA
Oz	on request
Code	Other
E1	DIN 43650
E2	cable connector
E3	waterproof connector
E4	cable (locknut)
Ez	other electric. connection
D1	3-1/2 LCD
D2	3-1/2LED
I2	Ex II CT6
P1	G1/4
P2	G1/2
P3	1/4NPT
P4	M20x1,5
P9	flange
Pz	on request

THPB1	(0-10)bar	G	D	O1	E1(D2I1)P2
	Range	Pressure type	Accuracy class	Output signal	Other

