MĚŘÍCÍ A REGULAČNÍ TECHNIKA



# B.2.6.

PRESSURE TRANSDUCER FOR HIGH TEMPERATURES series THPB8, THIPB8 (HART)



#### DESCRIPTION:

suitable for high temperature measurements (max. 180°C)

 reliable performance, good long-term stability
 resistance to corrosion and vibrations
 protection from reverse polarity, current protection, overvoltage protection

## **APPLICATION:**

metallurgical industry
 power engineering
 food industry
 health care
 chemical industry

## **TECHNICAL PARAMETERS:**

measure ranges: -1-0...0,04- 1000bar
output signal: 4-20mA, 1-5V, 4-20mA HART/THIPB8
connection: G1/4 (G1/2, M20x1,5, 1/4 NPT)
supply voltage: 10-36V DC
accuracy class: 0,25% FS ; 0,5%FS (standard)
pressure type: relative, absolute

## SPECIFICATION:

Pressure transducer for high temperatures THPB8 is designed for measurements of high temperature mediums. THPB8 uses a special sensor, that may be in direct contact with the monitored medium. This technology enables compact size of THPB8.

Transducers cylindric case is made of stainless steel, including cooling and process connection. THPB8 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 high accuracy, high temperature resistance up to 180 °C and high stability of measurement independant on temperature change. THPB8 is suitable for pressure measuring in most industrial applications with high liquid and gases temperatures, in aviation, health care, power engineering, food and chemical industry.

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Technical parameters						
Medium	gas or liquid suitable for contact with Middle value stainless steel of range		-20+145°C or -20+175°C			
Range	-1-00,04-1000bar	Operational temperature range	-40+135°C			
Accuracy class	0,25%FS; 0,5%FS (standard)	Elect. connection	DIN 43650 and other see table			
Pressure type	relative (G), absolute (A)	Connection	G1/4 (G1/2, M20x1,5, 1/4NPT)			
Stability	<0,2%FS/year	Sealing	N-Butyronitril/fluor sealing ring			
Output signal	4-20mA, 1-5V	Connector	stainless steel 17 248/1.4341			
	4-20mA HART/THIPB8	material				
Stability	<0,5%FS/year	Response time	<1ms			
Loading resistance	RL=(U-10V)/0,02A (4-20mA current output)	Supply voltage	10-36V DC			
	U - loop voltage (V)	Overloading	200%FS (max. 150MPa)			



Dimensions in mm								
А	В	С	D	E	F	G	Μ	SW
10	4	50	3	98	144	30	M12x1	27

#### Wiring diagram



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Order code:

ТНРВ8, ТНІРВ8	B(HART)						
	Range	measure range: -1-00,04-1000bar					
	(X1-X2)bar	X1 - bottom limit of measure range, X2 - upper limit of measure range					
		Code					
		G	relative				
		Α	absolute				
			Code	e Accuracy class			
			C 0,25%				
			D	0,5%			
				Code	Output signal		
				01	4-20mA		
				02	0-5V		
				O3	1-5V		
				Oz	on request		
					Code	Connection	
					P1	G1/4	
					P2	G1/2	
					P3	1/4NPT	
					P4	M20x1,5	
					Pz	on request	
THPB7	(-1-10)bar	G	D	01	P2		
	Range	Pressure type	Accuracy class	Output signal	Other		

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