



MĚŘÍCÍ A REGULAČNÍ TECHNIKA

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**Převodníky
 tlaku a
 teploty**



SILICON PRESSURE TRANSMITTER

series THPB1, THIPB1(HART)

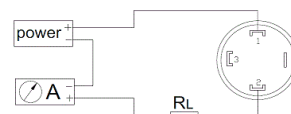


Specification:

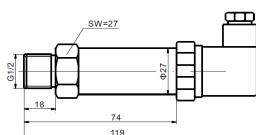
Based on piezo-resistive silicon technology, THPB1 silicon pressure transmitter uses isolated stainless steel diaphragm as sensing element. This product is fully tested by computer automatically, and trimmed by laser for zero and sensitivity in a wider temperature range. Its amplifier circuit is built in stainless steel housing, to transform sensor signal into standard output signal. This transmitter features integrated construction, rigid and robust, high measuring accuracy, good long term stability, and is suitable for pressure measurement in general industry applications. This product is widely used for pressure measurement and control of petroleum, chemical industry, metallurgy, power station and hydrology, etc.

Description:

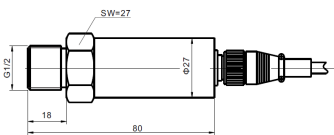
- Full stainless steel construction
- Suitable for the measurement of low pressure and vacuum pressure
- Automatic testing, laser trimming compensating zero & sensitivity
- Against thunder stroke, against radio-frequency interference
- Anti-corrosion, anti-abrusion, anti-impact
- Reversed-polarity, transient current & voltage protection



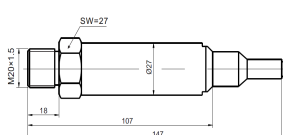
TECHNICAL PARAMETERS			
Pressure medium	gas or liquid compatible to stainless steel	Operating temperature range	-30~80°C
Pressure ranges	-1...0~0.1...1000bar	Storage temperature range	-40~120°C
Pressure type	gauge(G), absolute(A)	Process connection	G1/2 , G1/4, M12 x1,5, M20 x1,5, NTP1/2 etc.
Overload pressure	150%FS	Electrical connection	DIN 43650 or others
Output signal	4~20mA, 0~5V, 0~10V, 1~5V, 0.5~4.5V / 4~20mA HART / THIPB1	Material of wetted part	321
Accuracy	0.1%FS, 0.25%FS(standard), 0.5%FS	Material of pressure membrane	316L
Load resistance	RL=(U-12V)/0.02A (4~20mA current output) U—loop voltage (V)	Material of housing	321
Long-term stability	<0.2%FS/year	Sealing	n-Butyronitrile or fluoro-rubber sealing ring
Supply voltage	12~36VDC		



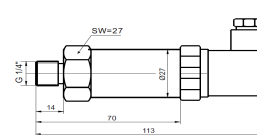
Hirschmann Connector



Aviation Connector



Water-proof Connector



Hirschmann Connector

Order code:

THPB1				
Range	Pressure type	Accuracy	Output signal	Others



THPB1, THIPB1(HART)				
	Range	measuring range: -1...0~0.1...1000bar		
	(X1~ X2)	X1: lower limit of actual measuring range. X2: higher limit of actual measuring range		
		Code	Pressure type	
		G	gauge	
		A	absolute	
			Code	Accuracy
			B	0,1%
			C	0,25%
			D	0,5%
			Code	Output signal
			O1	4 ~20mA
			O2	0 ~ 5V
			O3	1 ~ 5V
			O4	0 ~ 10V
			O5	0,5 ~ 4,5V
			Oz	customer request
			Code	Others
			E1	DIN 43650
			E2	aviation connector
			E3	water-proof conn.
			E4	cable(lock nut)
			Ez	other electrical conn.
			D1	3-1/2 LCD
			D2	3-1/2LED
			I1	Ex II CT6
			P1	G1/4
			P2	G1/2
			P3	1/4NPT
			P4	M20 x 1,5
			P9	flange type
			Pz	customer request

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



SANITARY PRESSURE TRANSMITTER series THPB2, THIPB2 (HART)



Specification:

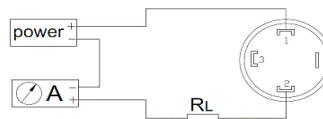
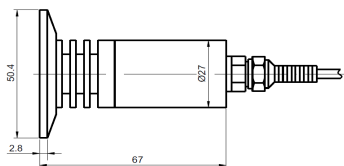
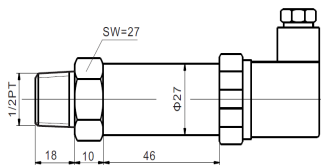
THPB2 sanitary pressure transmitter uses piezoresistive silicon chip as sensing element. THPB2 has clamping type, M21×1.5 thread type, and flange type for options. Its output signal can be made standard voltage

output signal, or, current output signal, or frequency output signal. This product is made with flush membrane structure, THPB2 has good ability on preventing fouling, crystallization and jamming of thick liquids. THPB2 is widely used in food, medicine, health and wine industry etc.

Description:

- Pressure ranges : -1...0~0.1...350bar
- Flush membrane structure without input pressure hole & cavity
- Automatic testing and laser trimming compensating
- High accuracy high strength, sanitary type, against fouling, dimensions can be customized

TECHNICAL PARAMETERS			
Pressure medium	gas or liquid compatible to stainless steel	Supply voltage	12~36VDC
Pressure ranges	-1...0~0.1...350bar	Operating temperature range	-30~+85°C
Pressure type	gauge(G), absolute(A)	Measured media temperature range	-40~+125°C
Overload pressure	150%FS	Process connection	G1/2 , G1/4, M12x1,5, M20x1,5, NTP1/2
Output signal	4~20mA, 0~5V, 0~10V, 1~5V 4~20mA HART / THIPB2	Electrical connection	DIN 43650 connector or others
Accuracy	0.25%FS, 0.5%FS(standard)	Material of wetted part	316 stainless steel
Load resistance	RL=(U-12V)/0.02A (4~20mA current output) U— loop voltage (V)	Material of pressure membrane	316L stainless steel
Long-term stability	<0.2%FS/year	Material of housing	stainless steel or aluminium alloy



Order code:

THPB2					
Range	Pressure type	Accuracy	Output signal	Process connection	Electrical connection

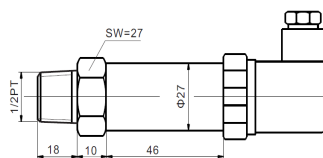


THPB2 - I	Type I	
THPB2 - II	Type II	
	Range	measuring range: -1...0~0.1...350bar
	(X1~ X2)	X1: lower limit of actual measuring range, X2: higher limit of actual measuring range
	Code	Pressure type
	G	gauge
	A	absolute
	Code	Accuracy
	B	0,1%
	C	0,25%
	D	0,5%
	Code	Output signal
	O1	4 ~20mA
	O2	0 ~ 5V
	O3	1 ~ 5V
	O4	0 ~ 10V
	Code	Process connection
	P2	G1/2
	P4	M20x1,5
	Pc	2"clamp
	Pz	customer request
	Code	Electrical connection
	E1	DIN 43650
	E2	aviation connector
	E3	shielded PVC cable
	Ez	customer request

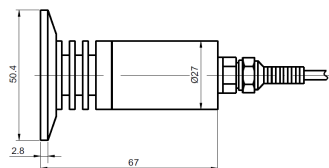
THPB2	(0-200)bar	G	D	O1	P2	E1
	Range	Pressure type	Accuracy	Output signal	Process connection	Electrical connection



Type I (PT 1/2)

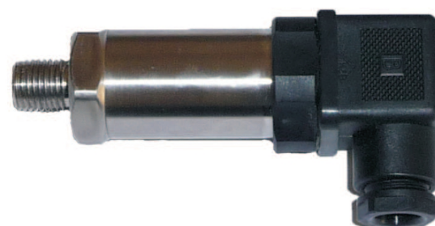


Type II (2"clamp)



CERAMIC PRESSURE TRANSMITTER

series THPB3, THIPB3 (HART)



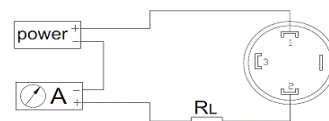
Specification:

THPB3 ceramic pressure transmitter is made integrated structure by using high quality thick-film ceramic sensors and special amplified circuits. The output of THPB3 is configured to 4~20mA current loop, or 0~5Vdc, or 0~10Vdc, or 1~5Vdc voltage signals. The pressure diaphragm of this transmitter is made from ceramic material, while its wetted parts is made from 316L stainless steel. Because of the thermal stability of ceramic and its thick-film resistance, the transmitter can be operated in a higher temperature range; at the same time, this also makes the zero & sensitivity thermal shifts over the whole operating temperature range of the transmitter is very small.

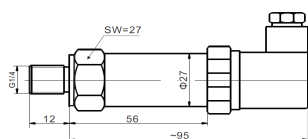
The compensated temperature range of THPB3 is 0~70℃. THPB3 is designed for use in most industrial application, and this product is suitable for measurement of most pressure medium (including corrosive medium) directly.

Description:

- Many measuring pressure range
- Wide application scope and long service life
- Automatic testing and laser trimming compensating zero & sensitivity
- High accuracy & long-term stability
- Good ability on anti-corrosion & anti-impact



TECHNICAL PARAMETERS			
Pressure medium	gas or liquid compatible with ceramic and stainless steel	Operating temperature range	-30~+95℃
Pressure ranges	0~1...200bar	Measured media temperature range	-40~+100℃
Pressure type	gauge(G), absolute(A)	Process connection	G1/4 ,1/4NPT, M20 x1,5
Overload pressure	150%FS	Electrical connection	DIN 43650 connector or others
Output signal	4~20mA, 0~5V, 0~10V, 1~5V 4~20mA HART / THIPB3	Material of wetted part	321
Accuracy	0.25%FS, 0.5%FS(standard)	Material of pressure membrane	ceramic
Load resistance	$RL = (U - 12V) / 0.02A$ (4~20mA current output) U—loop voltage (V)	Material of housing	321
Long-term stability	<0.2%FS/year	Sealing	n-Butyronitrile or fluoro-rubber sealing ring
Supply voltage	12~36VDC		



Order code:

THPB3						
	Range	Pressure type	Accuracy	Output signal	Process connection	Electrical connection



THPB3,THIPB3	Type								
	Range	measuring range: -0~ 1...200bar							
	(0~ X) bar	X: required measuring range							
		Code	Pressure type						
		G	gauge						
		A	absolute						
			Code	Accuracy					
			C	0,25%					
			D	0,5%					
				Code	Output signal				
				O1	4 ~20mA				
				O2	0 ~ 5V				
				O3	1 ~ 5V				
				O4	0 ~ 10V				
					Code	Process connection			
					P1	G1/4			
					P3	1/4NPT			
					P4	M20x1,5			
					Pz	customer request			
				Code	Electrical connection				
				E1	DIN 43650				
E2	aviation connector								
E3	shielded PVC cable								
	Ez	customer request							

THPB3	(0-200) bar	G	D	O1	P3	E1
	Range	Pressure type	Accuracy	Output signal	Process connection	Electrical connection

HIGH FREQUENCY RESPONSE PRESSURE TRANSMITTER

series THPB4, THIPB4 (HART)



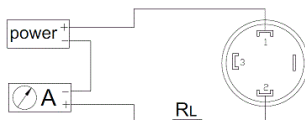
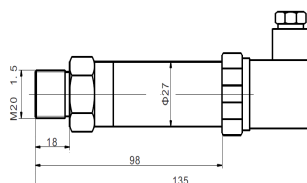
Specification:

THPB4 high frequency response pressure transmitter is made of THPB4 high frequency response and special amplifying circuit with high frequency characteristic, its frequency response characteristic has been decided by these two parts. THPB4 high frequency response pressure transmitter's dynamic frequency response is extremely high (max.1MHz), it may response to the lowest to zero frequency, highest to almost natural frequency, and the level rising time is only microsecond. The special-purpose amplifying circuit's natural frequency is also reach 1MHz(max.), the concrete resonance frequency concerns with its enlargement's multiple. THPB4 series pressure transmitter is suitable for dynamic pressure real-time measurement in the military engineering, melt exploding experiment, petroleum, oil well logging, the material, mechanics, construction engineering, soil and rock mechanics, wound medicine, hydraulic pressure power generator experiment, and in modernization instruments and meters etc.

Description:

- Based on MEMS silicon chips
- High accuracy high reliability
- Flush structure option, good dynamic frequency response
- Good long term stability

TECHNICAL PARAMETERS			
Dynamic frequency response	1 MHz max.	Long-term stability	<0.2%FS/year
Pressure medium	gas or liquid compatible to stainless steel	Power supply	12~32VDC
Pressure ranges	0~0,1...1000bar	Operating temperature range	-10~+80°C
Pressure typ	gauge(G), absolute(A)	Storage media temperature range	-40~+100°C
Overload pressure	≥200%FS	Process connection	M20 x1,5, G1/4, M12 x1
Output signal	0~5V and other voltage output signal 4~20mA HART/ THIPB4	Electrical connection	DIN43650 connector or others
Accuracy	0.1%FS, 0.25%FS, 0.5%FS(standard)	Material of wetted part	321
		Material of housing	321



Order code:

THPB4					
Range	Pressure type	Accuracy	Output signal	Process connection	Electrical connection



THPB4,THIPB4	Type					
	Range	measuring range: 0~ 0,1...1000bar				
	(0~ X) bar	X: high limit of actual measuring range				
		Code	Pressure type			
		G	gauge			
		A	absolute			
			Code	Accuracy		
			B	0,1%		
			C	0,25%		
			D	0,5%		
				Code	Output signal	
				O1	0 ~5V or others	
				Code	Process connection	
				P1	G1/4	
				P4	M20x1,5	
				P6	M12x1	
				Pz	dle požadavku	
Code	Electrical connection					
E1	DIN 43650					
E2	aviation connector					
E3	shielded PVC cable					
Ez	customer request					

THPB4	(0-10)bar	G	D	O1	P1	E1
	Range	Pressure type	Accuracy	Output signal	Process connection	Electrical connection



STRAIN GAUGE PRESSURE TRANSMITTER series THPB7, THIPB7 (HART)

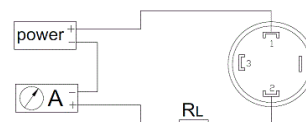


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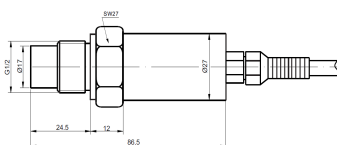
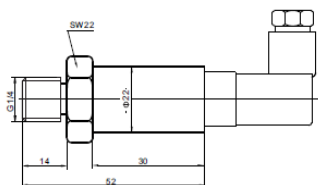
THPB7 strain gauge pressure transmitter uses advanced metal foil strain gauges as sensing element. Those strain gauges consist a Wheatstone bridge and can feel the changes of the strain gauge's resistance and convert these changes to "mV" electrical signal, the signal will be amplified to standard current or voltage output after it is conducted by the special amplifiers. As the sizes of strain gauges are very small and can be designed so many different types to suit different situations, the transmitter's pressure port is designed flush diaphragm or cavity for user's option, the application of THPB7 strain gauge pressure transmitter is very wide these days, it is suitable for the measurement of middle pressure and high pressure .

Description:

- Good sealing, high accuracy
- Wide application scope, long service life
- Good long term stability
- Anti corrosion anti attrition anti impact
- Suitable for the measurement of middle pressure and high pressure



TECHNICAL PARAMETERS			
Pressure medium	gas or liquid compatible to stainless steel	Supply voltage	12~36VDC
Pressure ranges	0~10...5000bar	Operating temperature range	-20~+80°C
Pressure typ	gauge(G), absolute(A)	Storage temperature range	-30~+100°C
Overload pressure	150%FS	Process connection	G1/4, G1/2, M20x1,5, M22 x 1,5
Output signal	4~20mA, 0~5V, 0~10V, 1~5V 4~20mA HART / THIPB7	Electrical connection	DIN43650 connector or others
Accuracy	0.1%FS, 0.25%FS, 0.5%FS(standard)	Material of wetted part	321
Load resistance	$RL = (U - 12V) / 0.02A$ (4~20mA current output) U—loop voltage (V)	Material of pressure membrane	17- 4PH
Long-term stability	<0.2%FS/year	Material of housing	321



Order code:

THPB7					
	Range	Pressure type	Accuracy	Output signal	Others



THPB7, THIPB7(HART)					
	Range	measuring range: 0~ 10...5000bar			
	(0~ X) bar	X: actual measuring range			
		Code	Pressure type		
		G	gauge		
		A	absolute		
			Code	Accuracy	
			B	0,1%	
			C	0,25%	
			D	0,5%	
				Code	Output signal
				O1	4 ~20mA
				O2	0 ~ 5V
				O3	1 ~ 5V
				O4	0 ~ 10V
				O5	0,5 ~ 4,5V
				Oz	customer request
				Code	Others
				E1	DIN 43650
				E2	aviation connector
				E3	shielded PVC cable
				Ez	other electrical conn.
				D1	3-1/2 LCD
				D2	3-1/2LED
				P1	cavity type G1/4
				P2	cavity type G1/2
				P4	cavity type M20x1,5
				P7	cavity type M22x1,5 for high pressure
				P8	Flush diaphragm (G1/2): 0 – 10bar 1200bar
				Pz	customer request

THPB7	(0-100)bar	G	D	O1	E1(D2)P4
	Range	Pressure type	Accuracy	Output signal	Others

HIGH TEMPERATURE PRESSURE TRANSMITTER

series THPB8, THIPB8 (HART)



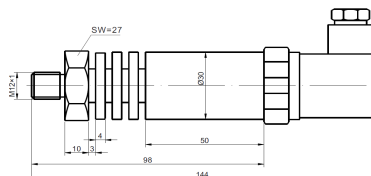
Specification:

THPB8 high temperature pressure transmitter is designed for the measurement of high temperature medium, it uses special pressure sensors whose pressure diaphragm can be contacted by pressure medium directly. This product uses temperature radiation to isolate its amplifying circuits, this not only guarantees THPB8's small volume and good performance, but also make this product enhance the measured medium temperature range. The performance of THPB8 is very reliable after strict tests and aged screening, it is suitable for pressure measurement in many industrial sites. THPB8 high temperature pressure transmitter presently is widely used for measurement of high temperature gas or liquid in aerospace, petroleum chemical industry, metallurgy, electric power, food, medicine, scientific research etc.

Description:

- suitable for the measurement of high temperature (max.175°C, low temperature, and normal temperature medium
- reliable performance, good long-term stability
- anti-impact, anti-vibration, anti-corrosive
- reversed polar protection and current limiting protection

TECHNICAL PARAMETERS			
Pressure medium	gas or liquid compatible to stainless steel	Supply voltage	10~36VDC
Pressure ranges	-1...0~0.04bar...1000bar	Operating temperature range	-40~+135°C
Pressure type	gauge(G), absolute(A)	Medium temperature range	-20~+145°C or -20~+175°C
Overload pressure	200%FS and 150MPa/choose smaller/	Process connection	G1/4, G1/2, M20x1.5, 1/4NTP
Output signal	4~20mA, 1~5V 4~20mA Hart / THIPB8	Electrical connection	DIN 43650 others
Accuracy	0.25%FS, 0.5%FS /standard/	Material of wetted part and housing	321
Load resistance	RL=(U-10V)/0.02A(4~20mA current output) U—loop voltage V	Response time	<1ms
Long-term stability	<0.5%FS/year		



Order code:

THPB8					
	Range	Pressure type	Accuracy	Output signal	Others



THPB8, THIPB8(HART)						
	Range	measuring range: -1...0~ 0,4...1000bar				
	(X1~ X2) bar	X1 – lower limit of actual measuring range X2 higher limit of (X1~X2)bar ;: actual measuring				
		Code	Pressure type			
		G	gauge			
		A	absolute			
				Code	Accuracy	
				C	0,25%	
				D	0,5%	
					Code	Output signal
					O1	4 ~20mA
					O2	0 ~ 5V
					O3	1 ~ 5V
					Oz	customer request
					Code	Others
		P1	G1/4			
		P2	G1/2			
		P3	1/4NPT			
P4	M20x1,5					
Pz	customer request					

THPB8	(-1~10)bar	G	D	O1	P2
	Range	Pressure type	Accuracy	Output signal	Others

INDUSTRIAL PRESSURE TRANSMITTER

series THPB9, THIPB9



Specification:

THPB9 pressure transmitter uses high quality pressure sensors with isolated stainless steel diaphragm as sensing elements, it is tested by computer automatically and made laser trimming compensation for zero and sensitivity. The output of THPB9 is amplified to 4~20mA standard output by using special amplifier, simultaneously the output signal can be displayed through LCD indicator at working site. After long-term aging tests and stability tests, this product's performance is very reliable, it is suitable for the pressure measurement and control in bad working conditions, and presently widely used in petroleum, chemical industry, metallurgy, electric power etc.

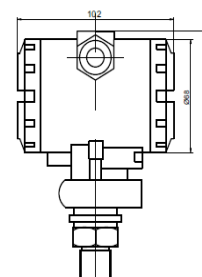
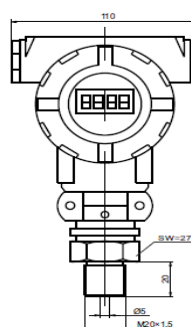
Description:

- 31/2 LED displaying at working site, simultaneously give 4~20mA signal output
- High performance-to-price ratio, high accuracy, long-term stability
- Electric shell is cast-aluminium material , IP65 protection
- Reversed protection, current limiting protection
- Anti-impact, the anti-attrition, the anti-corrosive
- Flush membrane and the tantalum diaphragm option

TECHNICAL PARAMETERS			
Pressure medium	gas or liquid compatible to stainless steel	Compensated temperature range	0~70℃
Pressure ranges	-1...0bar~0.1...600bar	Storage temperature range	-40~+100℃
Pressure type	gauge(G), absolute(A)	Process connection	G1/2, M20x1,5
Overload pressure	150%FS~300%FS(determined by measuring range)	Electrical connection	M20×1. 5(female thread)
output signal	4~20mA,0~5V, 0~10V, 1~5V 4~20mA HART / THIPB9	Material of wetted part	321
Accuracy	0.25%FS, 0.5%FS /standard/	Material of pressure membrane	316L
Load resistance	RL=(U-12V)/0.02A(4~20mA current output) U—loop voltage V	Material of housing	cast aluminium
Long-term stability	<0.2%FS/year	Sealing	fluoro-rubber sealing ring
Supply voltage	12~36VDC		

Order code:

THPB9					
	Range	Pressure type	Accuracy	Output signal	Others





THPB9, THIPB9(HART)					
	Range	measuring range: -1...0~ 0,35...600bar			
	(X1~ X2) bar	X1 – lower limit of actual measuring range X2 higher limit of (X1~X2)bar ,: actual measuring			
		Code	Pressure type		
		G	gauge		
		A	absolute		
			Code	Accuracy	
			C	0,25%	
			D	0,5%	
				Code	Output signal
				O1	4 ~20mA
				O2	0 ~ 5V
				O3	1 ~ 5V
				Oz	customer request
				Code	Others
				P2	G1/2
				P4	M20x1,5
				Pf	flange
				Pz	customer request
				I1	ATEX
				I2	flame proof
				M1	3-1/2LCD
				M2	3-1/2LED

THPB9	(-1~10)bar	G	D	O1	P2(I1M1)
	Range	Pressure type	Accuracy	Output signal	Others

CERAMIC CAPACITIVE MICRO- PRESSURE TRANSMITTER

series THPB10,THIPB10



Specification:

Based on ceramic capacitive technology, THPB10 micro-pressure transmitter is constructed of stainless steel, designed for micro-pressure measurement for corrosive media in harsh environments. Selecting high quality ceramic sensors and special amplifiers, THPB10 is designed integrated stainless steel structure, and small size with good stability and high anti-corrosive ability. This product can resist strong pressure impact, it is widely used for low pressure measurement and control in petroleum, chemical industry, hydrology, electric power etc.

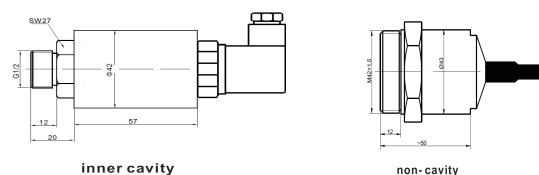
Description:

- Suitable for min. 0.5kPa pressure measurement
- Small profile, good ability on anti-attrition, good long term stability
- High overload pressure, resisting strong pressure impact
- Reversed protection, current limiting protection
- Good corrosion resistance

TECHNICAL PARAMETERS					
Pressure medium	gas or liquid compatible to stainless steel and ceramic			Supply voltage	12~30VDC
Sensor ranges	0~5kPa	0~10kPa	0~20kPa	Environment temperature range -	-30~70℃
Pressure ranges	-2.5... -0.5~0.5...5kPa	-10... -1~0...10kPa	0~2...20kPa	Medium temperature range	-30~+80℃
Pressure type	gauge(G), absolute(A)			Storage temperature range	-30~+85
Overload pressure	400kPa,600kPa(for range 20kPa)			Process connection	G1/2, M20x1,5, M42x1,5
Output signal	4~20mA 4~20mA HART / THIPB10			Electrical connection	DIN 43650 or others
Accuracy	0.5%FS, 1%FS /standard/			Material of wetted part and housing	321
Load resistance	RL=(U-12V)/0.02A(4~20mA current output) U—loop voltage V			Material of pressure membrane	ceramic
Long-term stability	<0.5%FS/year			Sealing	fluoro-rubber sealing ring

Order code:

THPB10					
	Range	Pressure type	Accuracy	Pressure port	Others





THPB10, THIPB10(HART)					
	Range	measuring range X1 lower limit of measuring range X2 higher I , limit of measuring range			
	(X1~ X2) kPa	Code	Pressure range		
		R1	-2,5...0,5 ~ 0,5....5kPa		
		R2	-10...-1 ~ 1...10kPa		
		R3	0 ~ 2...20kPa		
		Code	Pressure type		
		G	gauge		
		A	absolute		
			Code	Accuracy	
			D	0,5%	
			E	1%	
				Code	Pressure port
				P4	G1/2
				Px	M42 x 1,5
				Pz	customer request
				Code	Others
				E1	DIN 43650
				E2	Water-proof cable
				I	ATEX EX II CT6

THPB10	(-2~10)kPa	G	D	P4	E1I (I)
	Range	Pressure type	Accuracy	Pressure port	Others

CERAMIC CAPACITIVE PRESSURE TRANSMITTER

series THPB11,THIPB11



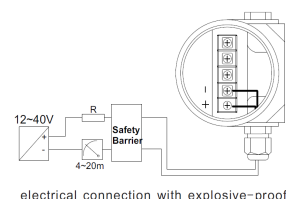
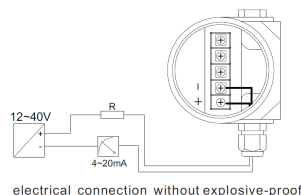
Specification:

THPB11 series ceramic capacitive pressure transmitters uses advanced ceramic capacitive sensor as sensing element. Coordinating high accuracy electronic components, THPB11 pressure transmitter are assembled through strict technological process. By using dry-type (without Intermediate liquid) pressure measurement technology, and heavy film electronic technology, as well as SMT (surface mounting technology) technology & PFM signal transmission technology, THPB11 series pressure transmitters have displayed the technical superiority of ceramic capacitive pressure transmitter fully, and also enables THPB11 have outstanding technical performances. THPB11 series ceramic capacitive pressure transmitters have been widely used in the industries such as petroleum, chemical, metallurgy, electric power, drugs manufacturing, food etc.

Description:

- Good ability of anti overload pressure and anti impact, small temperature drift
- Using imported ceramic capacitive sensor as sensing element, output signal is big, High combined error and good stability
- Wide pressure ranges from 5mbar to 1000bar, optional negative pressure range to positive range
- Good ability on anti-jamming, waterproof, dust-proof, quake-proof, explosive-proof, anti-corrosion
- Intrinsic safety EXIICT5

TECHNICAL PARAMETERS			
Pressure medium	gas or liquid compatible to stainless steel and ceramic	Environment temperature range -	-20~80°C
Pressure ranges	-1bar...0~5mbar...1000bar	Operating temperature range	-40~+85°C
Overload pressure	300%FS~10000%FS(determined by measuring ranges)	Measured media temperature range	-40~+125
Output signal	4~20mA, 0~5V, 0~10V, 1~5V 4~20mA HART/ THIPB11	Process connection	G1/2, M20x1,5
Accuracy	0.25%FS, 0,5%FS /standard/	Electrical connection	M20×1. 5(female thread) or 1/2NPT(female thread)
Load resistance	$RL = (U - 12V) / 0.02A$ (4~20mA current output) U—loop voltage V	Material of wetted part	316 stainless steel
Long-term stability	<0.2%FS/year	Material of housing	aluminium alloy
Supply voltage	12~36VDC	Protection	IP65



Order code:

THPB11						
Range	Pressure type	Accuracy	Output signal	Process connection	Material of wetted part	Others



THPB11, THIPB11(HART)									
	Range	measuring range: -1...0~0.005bar...1000bar							
	(X1~ X2) bar	X1 – lower limit of actual measuring range X2 higher limit of actual measuring range							
		Code	Pressure type						
		G	gauge						
		A	absolute						
			Code	Accuracy					
			B	0,1%					
			C	0,25%					
			D	0,5%					
				Code					
				O1	4 ~20mA				
				H	4 ~20mA HART protocol				
					Code	Process connection			
					P2	G1/2.			
					P4	M20x1,5			
					P9	flange typ			
					Pt	thread screwing in type			
					Pk	clamping type			
					Pq	quick screwing type			
					Pz	customer request			
							Code	Material of wetted part	
							A	321	
	B						316L		
	C	hastelloy-C							
	D	brass							
	Z	customer request							
			Code	Others					
			M0	withou display meter					
M2			Digital meter						
D1			ATEX						

THPB11	(0~200)bar	G	D	O1	P2	A	M0D1
	Range	Pressure type	Accuracy	Output signal	Process connection	Material of wetted part	Others

CORROSION PROOF PRESSURE TRANSMITTER

series THPB3-c, THIPB3-c



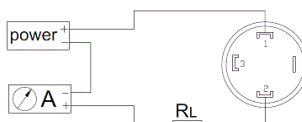
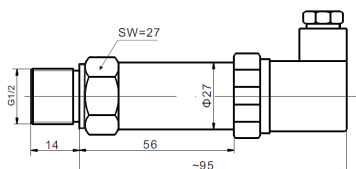
Specification:

THPB3-c corrosion proof pressure transmitter adopts same ceramic pressure sensor and amplifier as our standard THPB3-c model. The pressure diaphragm of THPB3-c is made from ceramic material (while its wetted parts are made from Polyvinylidene Fluoride (PVDF), which makes the transmitter has a higher degree of chemical corrosion resistance. 96%AL2O3), The compensated temperature range of THPB3-c is 0~70 THPB3-c is designed for measuring corrosive pressure medium in most industrial application, including hydraulics and pneumatics, refrigeration & air conditioning, as well as process control systems.

Description:

- Application for corrosive media which is not compatible with stainless steel material
- Polyvinylidene Fluoride PVDF as wetted part material Ceramic diaphragm(96%Al2O3)
- Measuring range from 0~1bar to 0~200bar Standard accuracy 0.5%FS

TECHNICAL PARAMETERS			
Pressure medium	gas or liquid compatible with ceramic and PVDF material	Compensated temperature range	0~70°C
Pressure ranges	0~1bar...200bar	Operating temperature range	-30~+95°C
Pressure type	gauge(G), absolute(A)	Storage temperature range	-40~+100°C
Overload pressure	150%FS	Process connection	G1/4, G1/2, M20x1,5 , 1/2NTP
Output signal	4~20mA, 0~5V, 0~10V, 1~5V 4~20mA HART / THIPB3	Electrical connection	DIN 43650 connector or others
Accuracy	0.25%FS, 0,5%FS /standard/	Material of wetted part	Polyvinylidene Fluoride (PVDF)
Load resistance	RL=(U-12V)/0.02A(4~20mA current output) U—loop voltage V	Material of pressure membrane	ceramic(96%AL2O3)
Long-term stability	<0.2%FS/year	Material of housing	321
Supply voltage	12~36VDC		



Order code:

THPB3-c						
	Range	Pressure type	Accuracy	Output signal	Process connection	Electrical connection

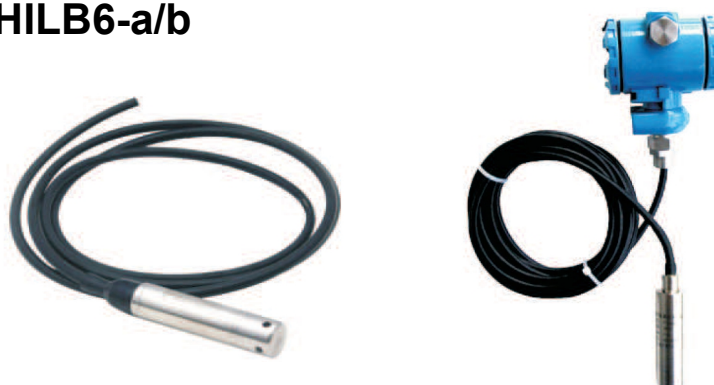


THPB3 -c, THIPB3-c(HART)								
	Rozsah	measuring range: 0~1bar...200bar						
	(0~ X) bar	X :required measuring range						
		Code	Pressure type					
		G	gauge					
		A	absolute					
			Code	Accuracy				
			C	0,25%				
			D	0,5%				
				Code	Output signal			
				O1	4 ~20mA			
				O2	0 ~ 5V			
				O3	1 ~ 5V			
				O4	0 ~ 10V			
					Code	Process connection		
					P2	G1/2		
					P3	1/2NPT		
			P4		M20x1,5			
Pz	customer request							
	Code	Electrical connection						
	E1	DIN 43650						
	E2	aviation connector						
	E3	shielded PVC cable						
	Ez	customer request						

THPB3-c	(0 ~ 200)bar	G	D	O1	P2	E1
	Range	Pressure type	Accuracy	Output signal	Process connection	Electrical connection

SUBMERSIBLE LEVEL TRANSMITTER

series THLB6–a/b, THILB6-a/b



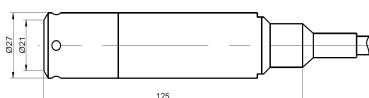
Specification:

THLB6 series submersible liquid level transmitter is made from stainless steel with rigid and robust construction. The protection cap with a small hole not only protect the diaphragm, but also let the liquids contact the diaphragm freely. The exquisite sealing technology as well as good assembly techniques guarantee THLB6 level transmitter's outstanding quality & performance. The product has a waterproof cable with vent hose which is designed for submersible applications. THLB6 series is designed with IP68 protection, it is widely applied in petroleum, chemical industry, medicine, metallurgy, hydrology exploration etc.

Description:

- Rigid and robust construction, IP68 protection
- Wide application scope, long service life
- Reversed polarity protection and current limiting protection
- Against thunder stroke, against radio-frequency interference
- Intrinsic safety, or flame-proof safety optional

TECHNICAL PARAMETERS			
Measuring ranges	0~1mH ₂ O...200mH ₂ O	Supply voltage	12~36VDC
Overload pressure	200%FS	Compensated temperature range	0~70℃
Pressure type	gauge(G), absolute(A)	Storage temperature range	-40~+100℃
Accuracy	0.1%FS, 0.25%FS /standard/ 0.5%FS	Electrical connection	Φ7.6mm shielded cable with vent hose
Output signal	4~20mA, 0~5V, 0~10V, 1~5V 4~20mA HART / THILB6	Material of wetted part and housing	321
Load resistance	RL=(U-12V)/0.02A(4~20mA current output) U—loop voltage V	Material of pressure membrane	316L or tantalum
Long-term stability	<0.1%FS/year	Sealing	n-Butyronitrile or fluoro-rubber sealing ring



Order code:

THLB6					
Range	Pressure type	Accuracy	Output signal	Need explosive proof or not	



THLB6- a THILB6- a (HART)					
THLB6- b, THILB6-b (HART)					
	Range	measuring range: 0~1mH ₂ O...200mH ₂ O			
	(0~XmH ₂ O) L	X:actual measuring range L =cable length			
		Code	Pressure type		
		G	gauge		
		A	absolute		
			Code	Accuracy	
			B	0,1%	
			C	0,25%	
			D	0,5%	
				Code	Output signal
				O1	4 ~20mA
				O2	0 ~ 20mA
				O3	0 ~ 5V
				O4	1~ 5V
				O5	0 ~ 10V
				Oz	customer request
				Code	Need explosive proof or not
				N	not need explosive proof
				Y1	ATEX
				Y2	flame proof

THLB6	(0~20mH ₂ O)21	G	C	O1	N
	Range	Pressure type	Accuracy	Output signal	Need explosive proof or not



THLB6 - a



THLB6 - b

SILICON DIFFERENTIAL PRESSURE TRANSMITTER

series THPB5, THIPB5

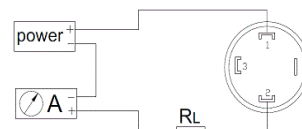


Specification:

Based on piezo-resistive silicon technology, THPB5 differential pressure transmitter uses silicon differential pressure sensors with stainless steel isolated diaphragm as measuring elements. Made from 316L stainless steel and designed of rigid and robust construction, THPB5 differential pressure transmitter is suitable for application in harsh environment and measurement with corrosive pressure media. This product has widely been used for measurement of differential pressure of pipeline fluids in petroleum industry, chemical industry, electric power hydrology etc.

Description:

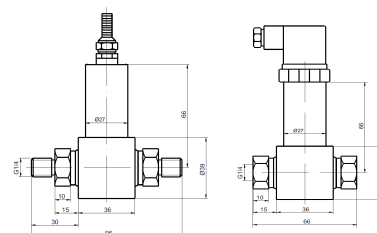
- Reliable performance, good long term stability
- Good static pressure, good ability of anti-impact and overload pressure
- Strong reversed polarity protection and current limiting protection
- Light weight, easy installation
- Integrated stainless steel construction design, small volume



TECHNICAL PARAMETERS			
Pressure medium	gas or dilute liquid compatible to stainless steel	Supply voltage	12~36VDC
Pressure ranges	0~0.1bar...35bar	Compensated temperature range	0~70°C
Pressure type	differential (D)	Operating temperature range	-20~+80°C
Overload pressure	200%FS (positive pressure side), 100%FS (negative pressure side)	Storage temperature range	-40~+100°C
System pressure	1000%FS	Process connection	G1/4 internal thread ,M12x1
Output signal	4~20mA, 0~5V, 0~10V, 1~5V, 0.5~4.5V 4~20mA HART / THIPB5	Electrical connection	DIN43650 connector or others
Accuracy	0.1%FS (range>1bar), 0.25%FS (standard), 0.5%FS	Material of wetted part and housing	321
System pressure effect	0,05%FS/bar	Material of pressure membrane	316L
Load resistance	$RL = (U - 12V) / 0.02A$ (4~20mA current output) U—loop voltage V	Sealing	n-Butyronitrile or fluoro-rubber sealing ring
Long-term stability	<0.2%FS/year		

Order code:

THPB5					
	Range	Pressure type	Accuracy	Output signal	Others





THPB5, THIPB5 (HART)					
	Range	measuring range: 0~0,1bar...35bar			
	(0~ X) bar	X : actual measuring range			
		Code	Pressure type		
		D	differential		
			Code	Accuracy	
			B	0,1%	
			C	0,25%	
			D	0,5%	
				Code	Output signal
				O1	4 ~20mA
				O2	0 ~ 5V
				O4	0 ~ 10V
				Oz	customer request
				Code	customer request
				E1	DIN 43650
				E2	aviation connector
				E3	shielded PVC cable
				Ez	other Electrical connection
				D1	3-1/2LCD
				D2	3-1/2 LED
				Pn	G 1/4 female thread
				Pa	Air faucet
				P6	M12x1 male thread
				Pz	customer request

THPB5	(0 -1)bar	D	D	O1	E1(D1)Pn
	Range	Pressure type	Accuracy	Output signal	Others


LCD display

LED display

SILICON DIFFERENTIAL PRESSURE TRANSMITTERS

series THPB40,TH1PB40



Specification:

THPB40 series high system pressure silicon differential pressure transmitters are one kind of differential pressure measurement instrument with light weight, high performance and high working pressure. The products use small type silicon differential pressure sensor assembly (outer diameter 40mm), which have compact structure and system pressure protection. The superior characteristics of sensors enable THPB40 can be assembled to not only industrial standard type differential pressure transmitters (e.g. 3351 series), also composed to easy general type of micro-differential pressure transmitter with high working pressure. Meanwhile, for general type of THPB40, it have exhaust valve for option THPB40 series high system pressure silicon differential pressure transmitters are designed for precision measuring for liquid, or gas's pressure, differential pressure and negative pressure. When UPB40 is coordinating throttling element, it can also measure liquid's flow. Besides 4~20mA analog output, UPB40 can also be made with HART Protocol or RS232, RS485 communication interface. THPB40 are widely used for pressure measurement and control in many industrial process.

Description:

- Two types: industrial standard type UPB40 a and generally -) simple type (UPB40-b)
- Advanced diaphragm manufacturing and weld process, entirely sealed oil-filled isolation technology, unidirectional system pressure protection, can withstand max. rated working pressure
- Good long term stability, high accuracy
- Measuring range continuously adjustable, and rangeability can be positive and negative

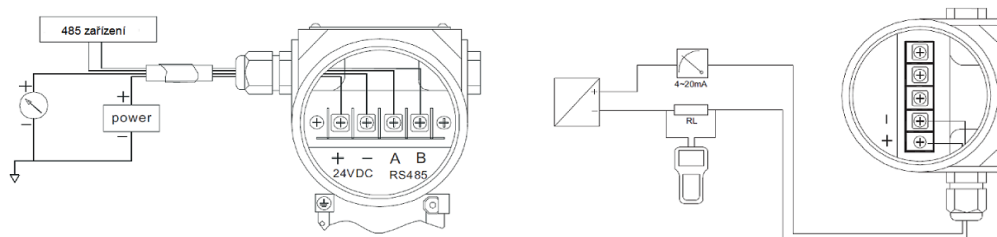
TECHNICAL PARAMETERS				
Model	UPB40-a(industrial standard type)	UPB40-b(generally simple type)	Accuracy	0.075%FS, 0.1%FS, 0.2%FS(standard), 0.5%FS
Measuring ranges	0~0.6kPa...6MPa	0~2.5kPa...6MPa	Load resistance	RL=(U-10.5V)/0.02A (4~20mA current output) U—loop voltage V
System pressure	1MPa (for pressure range < 6kPa), 16MPa, 25MPa, 40MPa	6.4MPa (for pressure range < 10kPa), 16MPa, 25MPa, 40MPa	Long-term stability	<0.5%FS/year
Rangeability	analog 4:1; intelligent from 20:1 to 100:1 intelligent 10:1		Supply voltage	12~45VDC
Output signal	analog 4~20mA; intelligent (HART or other)		Storage temperature range	-40~100°C
Sealing	fluorine rubber teflon	welded	Operating temperature range	-40~+80°C (-40~+100°C optional)
Protection	IP67	IP65	Measured media temperature range	-40~+100°C
Sealing	fluororubber or polyfluortetraethylene	welded sealing	System pressure effect	zero & span error ≤ 0.4% for system pressures ≤ 6.4MPa zero & span error ≤ 0.6%FS for system pressure > 6.4MPa
Housing material	cast aluminum	316 stainless steel	Filled oil	silicon oil
Process connection	1/4"NPT female (1/2"NPT flange optional)	G1/4 male or others	Explosive proof	intrinsic safety Exd ia II CT6
Electrical connection	M20×1.5 female, 1/2"NPT fem.	hirschmann connec. or others		

Order code:

THPB40	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Range	Accuracy	Output signal	Electrical connection	Process connection	Material	Others

THPB40-a THIPB40-a(HART)	Industrial standard type			
THPB40-b THIPB40-b(HART)	Generally sample type			
	Code	Measuring range THPB40 - a	Measuring range T THPB40 - b	
	A	0 ~0,6...25kPa	A1 0~2,5kPa	A2 0~4kPa
	B	0 ~1,6...60kPa	B1 0~6kPa	B2 0~10kPa
	C	0 ~10...40kPa	C1 0~16kPa	C2 0~25kPa
	D	0 ~25...100kPa	D1 0~40kPa	D2 0~60kPa
	E	0 ~60...200kPa	E1 0~100kPa	E2 0~160kPa
	F	0 ~160...600kPa	F1 0~250kPa	F2 0~400kPa
	G	0 ~0,24...1,6MPa	G1 0~600kPa	G2 0~1MPa
	H	0 ~1...4MPa	H1 0~1,6MPa	H2 0~2,5MPa
	I	0 ~2,5...6MPa	I1 0~4MPa	I2 0~6MPa
	Code	Accuracy		
	A	0,075%		
	B	0,1%		
	C	0,2%		
	D	0,5%		
	Code	Output signal		
	O1	4 ~20mA		
	H	4 ~20mA HART protocol		
	R	RS485 MODBUS protocol		
	Code	Electrical connection		
	E0	1/2NPTnebo M20x1,5		
	E1	DIN 43650		
	E2	aviation connection		
	E3	cable		
	Code	Process connection		
	S1	1/4NPT(THPB40a)		
	S2	1/2NPT(THPB40a with flange)		
	P1	G1/4 male thread (THPB40b)		
	Pn	G1/4 female thread (THPB40b)		
	Pz	Customer request		
	Code	Materials: flange, exhaust vlave, diaphragm		
	12	nickle plated carbon steel		
	22	316, 316L		
	Code	Other functions		
	D0	no display meter		
	D1	linear display meter.0~100% scale		
	D2	3-1/2LCD		
	E0	no explosive proof		
	E1	Flame proof EX IICT6		
	E2	ATEX -ES IICT6		

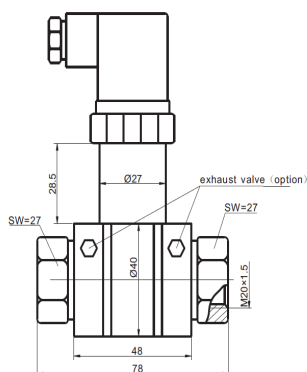
THPB40	C	C	H	E0	S1	12	D1E2
	Range	Accuracy	Output signal	Electrical connection	Process connection	Material	Others



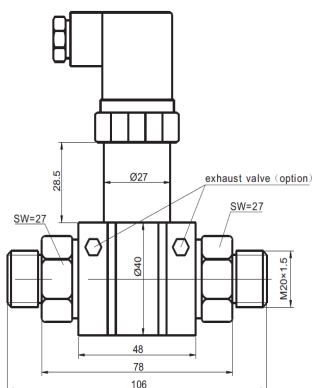


THPB40- a, Industrial standard type

THPB40-b, Generally simple type



male thread



female thread

DIGITAL PRESSURE GAUGE

series 3321



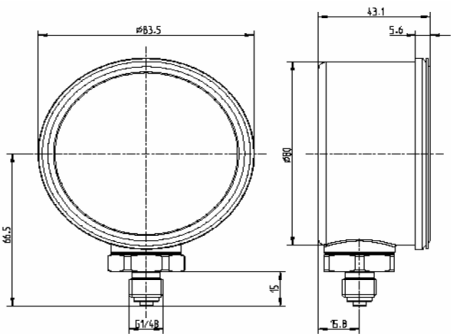
Specification:

Digital pressure gauge type 3321 is ideal for local transferable digital measuring with wider range of functions. Thanks to built-in long life-time batteries you are independent on local power supply. Compared to basic digital pressure gauge DPG, this one has graphic image of all range of measured value, Min/Max record and other functions.

Description:

- stainless steel case and connection
- graphic image in all range
- memory functions
- accuracy 0,5%

TECHNICAL PARAMETERS			
Pressure medium	gas or liquids compitable to wetted stainless steel	Display range	-1999~9999
Pressure ranges	0bar~700bar	Long-term stability	<0.1%FS/year
Pressure type	gauge(G), absolute(A)	Operating temperature range	-30~+60°C
Overload	2X, max 1000 bar	Process connection	G1/4
Accuracy	0.5%FS	Material of housing	stainless steel
LCD display	dynamic 4-digit LCD	Functions	Min/Max , Tara,unit switch, graphic image in all range



INTELLIGENT PRESSURE GAUGE

serie THİY6



Specification:

THİY6 Intelligent pressure gauge is made with entire electronic structure, and uses battery as power supply. It is easy for field installation. THİY-6 intelligent pressure gauges are using high accuracy piezoresistive pressure sensors, which is located in the front end of UIY6. The output signal of the pressure sensor is processed and amplified by high accuracy and low temperature coefficient amplifier, and then transferred to A/D switch to transform digital signal which can be processed by microprocessor. After processing operation, the pressure gauge will demonstrates the actual value of the pressure by LCD indicator. THİY6 has automatic turn-off function in 1~15min. The use of THİY6 intelligent pressure gauge is obviously flexible, and its operation is very simple, and the adjustment of this gauge is easy, safe and reliable. THİY6 intelligent pressure gauge is widely used in such industries as water and electricity, running water, petroleum, chemical, and machinery, for the measurement and demonstration of fluid medium's pressure.

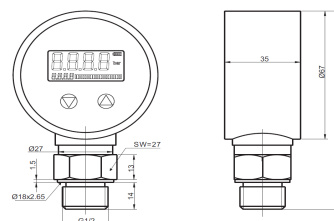
Description:

- LCD display, high resolution, without apparent value error
- Peak value recording function, record the max. pressure value during measuring process
- Selectable ranges: MPa, psi, bar, kPa, kg/cm²
- 1~15min automatic turn-off function
- Parameter revision function, can revise the gauge's zero error on the spot

TECHNICAL PARAMETERS			
Pressure medium	gas or liquid compitable to stainless steel	Battery power supply	9V DC
Pressure ranges	-1...0bar~0.1...1000bar	Compensated temperature range	0~+50°C
Pressure type	gauge(G), absolute(A)	Operating temperature range	-20~+70°C
Overload pressure	150%FS	Selectable ranges	MPa, psi, bar, kPa, kg/cm ²
Accuracy	0.1%FS, 0.25%FS(standard), 0.5%FS	Sampling speed	4 times/sec.
LCD display	4-digit	Process connection	G1/2, G1/4, M20x1.5, 1/2NPT
Display range	-1999~9999	Material of housing	cast alaluminium
Long-term stability	<0.1%FS/year		

Order code:

THİY6				
	Range	Pressure type	Accuracy	Process connection





THIY6						
	Range	measuring range: -1...0~0,1bar...1000bar				
	(X1~ X2) bar	X1 – lower limit of actual measuring range , X2- higher limit of actual measuring range				
		Code	Pressure type			
		G	gauge			
		A	absolute			
			Code	Accuracy		
			B	0,1%		
			C	0,25%		
			D	0,5%		
				Code	Process connection	
				P1	G1/4	
				P2	G1,2	
P4	M20 x 1,5					
P5	1/2NPT					
	Pz	customer request				

THIY6

(0-20)bar

G

C

P2

Range

Pressure
type

Accuracy

Process connection

DIGITAL TEMPERATURE TRANSMITTER

serie THT2, THTI2



Specification:

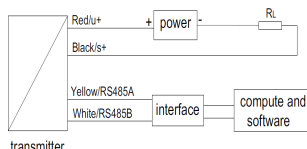
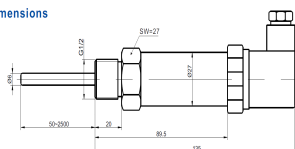
THTI2 is made with integrated construction for the direct measurement of various of liquid, gas and solid's surface temperature in the range of -200 ~500 This product is made of imported temperature element, and uses special temperature module to adjust the temperature element's linearity and output standard analog signal. THTI2 is featured with good performance and stability. It is sealed with epoxy resin, this construction makes THTI2 have good ability on anti-shock and withstand high temperature, also have high mechanical strength , is suitable for the application in bad working condition. THT2 can emit digital signal to carry on data transmission with computers directly.THT2 has widely been used for temperature measurement in such industries as petroleum industry, chemical industry, spinning and weaving, mine, medicine, electric power, environmental protection, municipal administration, food industry as well as scientific research and so on.

Description:

- Compact size easy installation
- Can be made with living display
- Using Pt100 thermal resistor
- RS485 half-duplex communication baudrate can be choosed, communication address can be set.

TECHNICAL PARAMETERS			
Temperature measurement element	Pt100 or other thermal resistor	Temperature limit	120% of measured range
Measured medium	solid, gas or liquid compatible to stainless steel	Power supply	10~30VDC(15~30VDC for with indicator
Measured medium's temperature	-200℃~+500℃	Long term stability	0.15%FS/year
Insert depth	50mm~2500mm(can be made upon customer's request	Circuit temperature shift	<±0.75%FS/50℃
Communication	MODBUS protocol (RS485 interface)	Response time	<1ms
Output signal	4~20mA	Process connection	G1/2 , M20x1,5, 1/2NTP
Accuracy	0.2%FS,0.5%FS(standard),1%FS	Electrical connection	DIN 43650
Circuit working temperature range	-30℃~+80℃	Material of housing	stainless steel
Storage temperature range	-40℃~+125℃		

Dimensions



Order code:

THT2						
Range	Accuracy	Output signal	Process connection	Electrical connection	Length	



THT2, THT12						
	Range	measuring range: -200°C ~+500°C				
	(X1~ X2)°C	X1 – lower limit of actual measured temperature, X2- higher limit of actual measured temperature				
		Code	Accuracy			
		C	0,25%			
		D	0,5%			
		E	1%			
			Code	Output signal		
			R	MODBUS protokol (RS485)		
				Code	Process connection	
				P2	G1/2	
				P4	M20x1,5	
				P5	1/2NPT	
				Pz	customer request	
				Code	Electrical connection	
				E1	DIN 43650	
				E2	aviation connector	
				Ez	customer request	
				Code	Length	
				L	50mm – 2 500mm	

THT2	(-50~ 200)°C	D	R	P2	E1	50mm
	Range	Accuracy	Output signal	Process connection	Electrical connection	Length

GENERAL TEMPERATURE TRANSMITTER

serie THTB3



Specification:

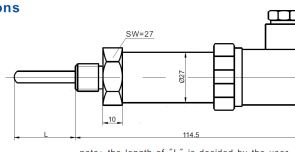
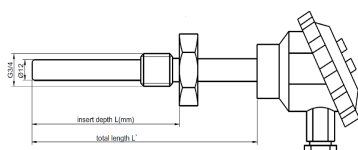
THTB3 general temperature transmitter uses Pt100 thermal resistor as sensing element. The thermal resistor transforms the measured temperature into electrical signal, after this signal is processed, it will be amplified to 4~20mA or other standard simulated signals on industry scene. THTB3 is featured with good performance and stability. It is sealed with epoxy resin, this construction makes THTB3 have good ability on anti-shock and withstand high temperature, also have high mechanical strength, is suitable for the application in bad working condition. THTB3 is made with integrated construction for the direct measurement of various of liquid, gas and solid's surface temperature in the range of 200 ~500. THTB3 has widely been used for temperature measurement in such industries as petroleum industry, chemical industry, spinning and weaving, mine, medicine, electric power, environmental protection, municipal administration, food industry as well as scientific research and so on.

Description:

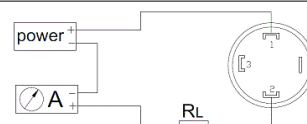
- Use Pt100 or other thermal resistors as sensing element.
- High accuracy low power consumption wide operating ambient temperature range
- Integrated construction, easy installation
- Use full metal sealed construction coordinate high temperature radiation trough

TECHNICAL PARAMETERS			
Temperature measurement element	Pt100 or other thermal resistors	Temperature limit	120% of measured range
Measured medium	solid, gas or liquid compatible to stainless steel	Power supply	10~30VDC(15~30VDC for products with indicator)
Measured medium's temperature	—200℃~+500℃	Long term stability	0.15%FS/year
Insert depth	can be made upon customer's request	Circuit temperature shift	≤±0.75%FS/50℃
Output signal	4~20mA(0~5V,1~5V option)	Response time	<1ms
Accuracy	0.5%FS(standard)	Process connection	M12 x1,5 , G1/4, 1/2NTP
Circuit working temperature range	-30℃~80℃	Electrical connection	hirschmann connector
Storage temperature range	-40℃~125℃	Material of housing	stainless steel

Dimensions



note: the length of "l" is decided by the user

**Order code:**

THTB3					
	Range	Output signal	Process connection	Electrical connection	Lenght



THTB3- I	typ I				
THTB3- II	typ II				
	Range	measuring range: -200°C ~+500°C			
	(X1~ X2)°C	X1 – lower limit of actual measured temperature, X2- higher limit of actual measured temperature			
		Code	Output signal		
		O1	4 ~20mA		
		O2	0 ~ 5V		
		O3	1 ~ 5V		
			Code	Process connection	
			P1	G1/4	
			P5	1/2NPT	
			P6	M12x1,5	
			Pz	customer request	
				Code	Electrical connection
				E1	DIN 43650
				E2	kabelový konektor
				Ez	customer request
				Code	Lenght
				L	20mm ~ 500mm

THTB3 -I	(0 ~ 100)°C	O1	P1	E1	50mm
	Range	Output signal	Process connection	Electrical connection	Lenght

EXPLOSIVE-PROOF TEMPERATURE TRANSMITTER

serie THTB4



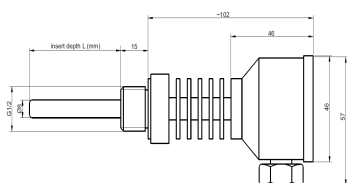
Specification:

THTB4 temperature transmitter is composed by temperature sensor, compensated electric circuit and switching circuit. It is featured stable performance, high sensitivity, good reliability. THTB4 uses entire welding structure and high strength outer housing, it is widely used for temperature measurement and control in many automatic temperature measurement & control systems such as petroleum machinery, chemical machinery, pump and compressor, electric power, boiler, natural gas etc.

Description:

- Anti-vibration, good stability and high accuracy
- High strength stainless steel housing, anti-impact, withstand high pressure
- Many kinds of connection modes, many kinds of output signal
- Explosion-proof: Exd II Ct4 (flame-proof)
- Many kinds of structures, can be made as customer's request

TECHNICAL PARAMETERS			
Measuring media	gas or liquids compitable stainless steel	Allowed deviation $\Delta^{\circ}\text{C}$	class A } (0.15+0.002 t)
Measuring range	-50~+300 $^{\circ}\text{C}$	Long term stability	0.15%FS/year
Output signal	4~20mA ,1~5V	Time response time	<30S
Accuracy	0.5%FS(standard), 1%FS	Circuit temperature shift	< $\pm 0.75\%$ FS/50 $^{\circ}\text{C}$
Ambient temperature range	-40 $^{\circ}\text{C}$ ~+85 $^{\circ}\text{C}$	Let-through current	$\leq 5\text{mA}$
Relative humidity	5%~95%	Explosive-proof	ExiaIIBT4, ExdIIBT4



Oder code:

THTB4					
	Range	Output signal	Process connection	Others	Insert depth



THTB4			
	Range	Measuring range: -50°C ~+300°C	
	(X1~ X2)°C	(X1,X2 is lower limit and higher limit of measuring temperature respectively)	
		Code	Output signal
		O1	4 ~20mA
		O2	0 ~ 5V
		Oz	customer request
		Code	Process connection
		T0	fixed thread
		T1	fixed flange
		T2	movable thread
		T3	movable flange
		Tz	customer request
		Code	Other functions
		To	PVC cable
		T1	DIN 43650
		T2	aviation connector
		E0	no explosive-proof
		E1	flame proof EX II CT6
		E2	ATEX EX II CT6
		T	customer request
		Code	Insert depth L (mm)

THTB4	0~200°C	O1	T0(G1/2)	P2	80
	Range	Output signal	Process connection	Others	Insert depth

INTEGRATED TEMPERATURE TRANSMITTER

serie THTI8



Specification:

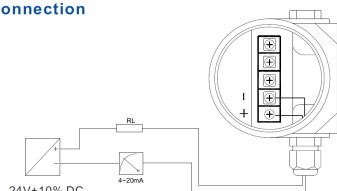
THTI8 integrated temperature transmitter uses thermocouple or thermal resistor as temperature sensitive element, it can measure temperature of all kinds of liquid, steam and gas medium from -200 to 1800 and transform thermocouple's or thermal resistance's signal to 4~20mA standard signal, simultaneously has real-time indication function on the spot. THTI8 integrated temperature transmitter has firm & artistic housing, two-layer construction, 3-1/2 LCD or LED display, 0-100% indicator optional. THTI8 uses integrated electric circuit, which guarantee its stable signal and clear display, this is very convenient to calibrate and inspect the gauges on the scene. THTI8 has general type and explosive-proof type. THTI8 has been widely used in chemical industry, petroleum industry, metallurgy industry, light industry, food, electric power, and energy management etc.

Description:

- Range:-200 ~1800°c
- Integrated structure can display its real-time measuring value
- High accuracy, anti-interference, good long-term stability
- Signal is precise, can remote transmission (max. 1000 meters)

TECHNICAL PARAMETERS			
Measuring	gas or liquids compatible stainless steel	Operating temperat. range	-20~+60℃
Temperature range	thermocouple: E、K、S、B thermal resistor: PT100,Cu50	Display	LCD digital indicator in ℃ unit, -1999~1999
Insert depth	50mm~2000mm(as customer's request)	Process connection	M27×2 (male),G1/2
Accuracy	thermoresistor: 0.25%FS, 0.5%FS(standard); thermocouple: 0.75%FS	Electrical connection	1/2NPT or M20×1.5 (female)
Output signal	4~20mA	Material of wetted part	321
Long term stability	<0.25%FS/year	Material of housing	cast alaluminium
Supply voltage	24V± 10% DC	Explosive-proof	ExialIBT6,ExdIIBT6
Load resistance	RL(max.) =(V-12)/0.02, V:power supply of transmitter	Protection	IP65

Electrical connection



Oder code:

THTI8					
	Range	Diameter of protective	Process connection	Others	Insert depth



THT18					
Code		Measuring range			
E		thermocouple 0~ 750°C			
K		thermocouple 0~ 1200°C			
S		thermocouple 0~ 1300°C			
C		Cu50 thermal resistor: 0~ 1600°C			
P		Pt100 thermal resistor: -200~ 500°C			
Z		customer request			
		Code		Diameter of protective pipe	
		L1		10mm	
		L2		12mm	
		L3		customer request	
		Code		Process connection	
		0		fixed thread G1/2	
		1		movable thread M27x2, M20x1,5	
		2		fixed flange	
		3		movable flange	
		Z		customer request	
		Code		Other functions	
		D0		without display	
		D1		LCD display	
		D2		LED display	
		D3		0~ 100% indicator	
		E0		no explosive-proof	
		E1		EXD II BT6	
		E2		EXIA II BT6	
		Code		Insert depth L(mm)	

THT18	P 0-200°C	L1	1	D1E0	80
	Range	Diameter of protective	Process connection	Others	Insert depth

ELECTRNIC TEMPERATURE SWITCH

serie THTS2



Specification:

THTS2 temperature switch is intelligent & digital temperature measurement and control products with functions of temperature measurement, display, output and control. THTS2 is made with complete electronic structure, Pt100 temperature probe is located at its front end, the output signal is processed by amplifier, which is with high precision and low temperature drift, then sent into high precision A/D converter, to be converted to digital signal for microprocessor, the signal after processed will control two relay output, and realize the temperature measurement for system. The use of THTS2 is very flexible. THTS2 is also very easy to operate and adjust. This product is widely used for liquid temperature measurement, display and control in electricity, water, petroleum, chemical, mechanical, hydraulic and other industries.

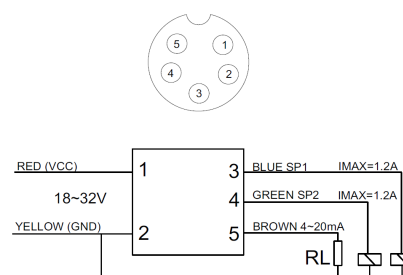
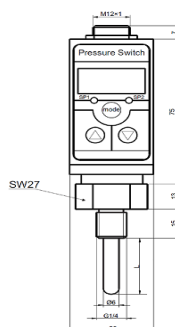
Description:

- 4 digit to display temperature
- Present temperature switch point and relay switch output
- Switch can be set from zero to full scale
- The outer case is equipped with light emitting diode (LED), is easy for operation
- 4~20mA analog output (optional)

TECHNICAL PARAMETERS			
Measurement medium	gas or liquid compatible with stainless steel	Service life of switch	>1million times
Temperature ranges	-50~+200	Power consumption	<3W
Output signal	4~20mA(option)	Load capacity	<24V, 1. 2A
Control accuracy	0.5%FS(standard)	Process connection	G1/4, G1/2 , M20x1,5
Display accuracy	0.1%FS	Electrical connection	aviation connector or others
Long term stability	0.2%FS/year	Material of wetted part	321
Supply voltage	18~32V DC	Relative humidity	0~80%
Ambient temperature range	-30°C~+70°C	Protection	IP65
Storage temperature range	-20°C~+100°C		

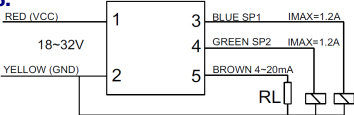
Oder code:

THTS2				
	Range	Process connection	Electrical connection	Insert depth



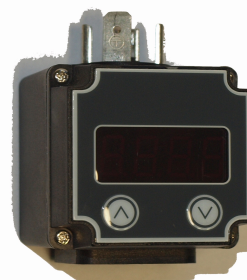
THTS2					
	Range	measuring range: -50°C ~+200°C			
	(X1~ X2)°C	X1 –the min.measuring temperature, X2- the max.measuring temperature			
		Code	Process connection		
		P1	G1/4		
		P2	G1/2		
		P4	M20x1,5		
		Pz	customer request		
			Code	Electrical connection	
			E1	DIN 43650	
			E2	aviation connector	
			E3	M12 connector	
			Ez	customer request	
				Insert depth L (mm)	

THTS2	(0 ~ 100)°C	P2	E3	50
	Range	Process connection	Electrical connection	Insert depth



VISUAL DISPLAY UNIT ZED601

for connector DIN 43 650 DIN 43650



Specification:

Microprocessor visual display unit ZED601 is built-in to a current loop of a transducer 4...20 mA, which does not require any auxiliary power supply. It is possible to connect with any type of transducer using DIN 43 650 connector. ZED601 is equipped with a sturdy plastic case and is installed between power supply and the transducer. Comes with 3 1/2 local display, height 7,6 mm, turning in 90° angle.

Description:

- 3 1/2 for display
- 4 digit to display temperature
- simple operation, easy operation
- 4~20mA analog output (optional)

TECHNICAL PARAMETERS			
Measurement medium	gas or liquid compatible with stainless steel	Ambient temperature range	0°C~+60°C
Output signal	4~20mA	Storage temperature range	-30°C~+60°C
Accuracy	0.2%FS(standard)	Electrical connection	DIN 43650
Display accuracy	0.1%FS	Protection	IP65
Temperature drift	0,1%	Dimensions	42 x 42 x 42mm
Voltage drop	<5		

