

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

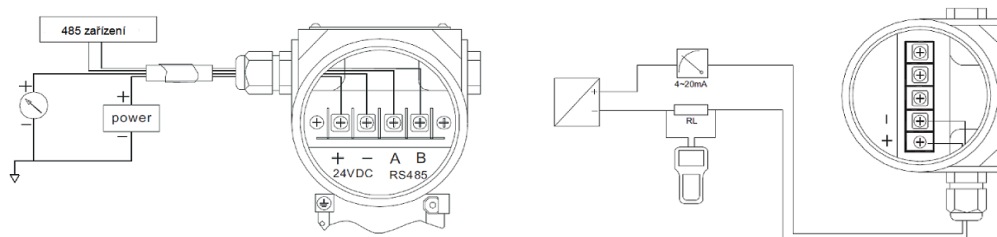
TECHNICAL PARAMETERS				
Model	UPB40-a(industrial standard type)	UPB40-b(generally simple type)	Accuracy	0.075%FS, 0.1%FS, 0.2%FS(standard), 0.5%FS
Measuring ranges	0~0.6kPa...6MPa	0~2.5kPa...6MPa	Load resistance	RL=(U-10.5V)/0.02A (4~20mA current output) U—loop voltage V
System pressure	1MPa (for pressure 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							
	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 valve, 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		

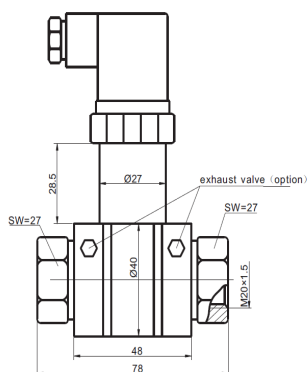
THPB40	C	C	H	E0	S1	12	D1E2
	Range	Accuracy	Output signal	Electrical connection	Process connection	Material	Others



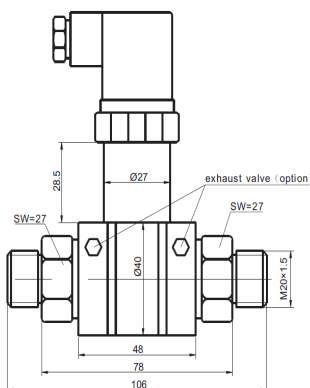


THPB40- a, Industrial standard type

THPB40-b, Generally simple type



male thread



female thread