



# SMART PRESSURE TRANSMITTER BPT362 (with HART® Protocol)

- 4 – 20 output + HART® Protocol
- 0.065% (0,04% accuracy on request)
- Rangeability 20:1
- 0 - 12,5 KPa till -1/0 - 800 bar (80MPa)
- ATEX Certificate Exia and Exd
- Local zero, span and damping adjustment
- Display with backlight
- Indication in engineering units
- AISI 316L or Hasteloy C276
- Small and light weight
- Weather-proof housing IP67

## GENERAL DESCRIPTIONS

BASI Model BPT362 Smart pressure transmitters are applicable to the measurement of the pressure, underpressure and absolute pressure of gases, vapours and liquids. The active sensing element is a piezoresistant silicon sensor separated from the medium by a diaphragm and by specially selected type of manometric liquid. The casing is made of aluminium alloy cast, degree of protection IP66/IP67. The design of the casing enables the use of a local display, rotation of the display by 90°, rotation of the casing by 0–360° relative to the sensor, and a choice of cable direction..

## TECHNICAL SPECIFICATIONS

### Functional Specifications

- Process fluid** : Liquid, gas or vapor  
**Range** : 0-0,0125 to -1-0-800bar  
**Output signal** : Two-wire 4-20mA + HART® Protocol  
**Power supply** : 14,5 - 45 VDC  
(Ex ia:14,5...28 VDC; Ex d: 14,5...45 VDC)
- Load limitation** : 0 - 600Ω for 24VDC  
**Indicator** : LCD indicator with backlight  
**Hazardous area** : IP67 weather-proof, intrinsically safe and explosionproof EEx ia, T4, T5  
EExd IIC, T6, T5 for Zon 0 IIA, IIB, IIC
- Zero and span** : Non-interactive local adjustment  
**Ambient.temp** : -40 to 85°C  
**Process.temp** : -40 to 120°C,  
**Storage.temp** : -40 to 85°C  
**Turn-on time** : Performs within specifications in less than 120 milliseconds after power is applied.
- Overpressure** : 400%  
**Humidity limits** : 0 - 100% RH  
**Damping adj.** : Adjustable  
**Configuration** : By pushbutton on the transmitter or HHT, PC using HART® Protocol



### Performance Specifications

- Resolution** : ±0.01%  
**Accuracy** : ±0.065% (0,04% on request)  
**Temperature effect** : ± 0,1%/10K Zero and Span  
**Power supply effect** : Negligible between 14 and 45 VDC  
**Mounting position effect** : Any position. No span effect.  
**EMC** : EN 50081-1, EN 50082-2, 89/336/EEC

### Physical Specifications

- Electrical connection** : M20x1,5 or ½"-14NPT  
**Process connection** : G½, G1/4", M20, G½ NPT, M30, 1"  
**Wetted parts** : SS 316L or Hasteloy C276  
**Filling fluid** : Silicone oil  
**Electronic housing** : Injected aluminum with polyester painting (RAL 5014) NEMA 4X, IP67
- Identification plate** : 304 SST  
**Approximate weight** : 1,1 kg
- Mounting** : Directly supported by piping or optionally with mounting bracket for 2" pipes or with direct or remote seals.



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No. DS 20:2-E Issue: 5 18/10/18

**MECHANICAL SPECIFICATIONS**

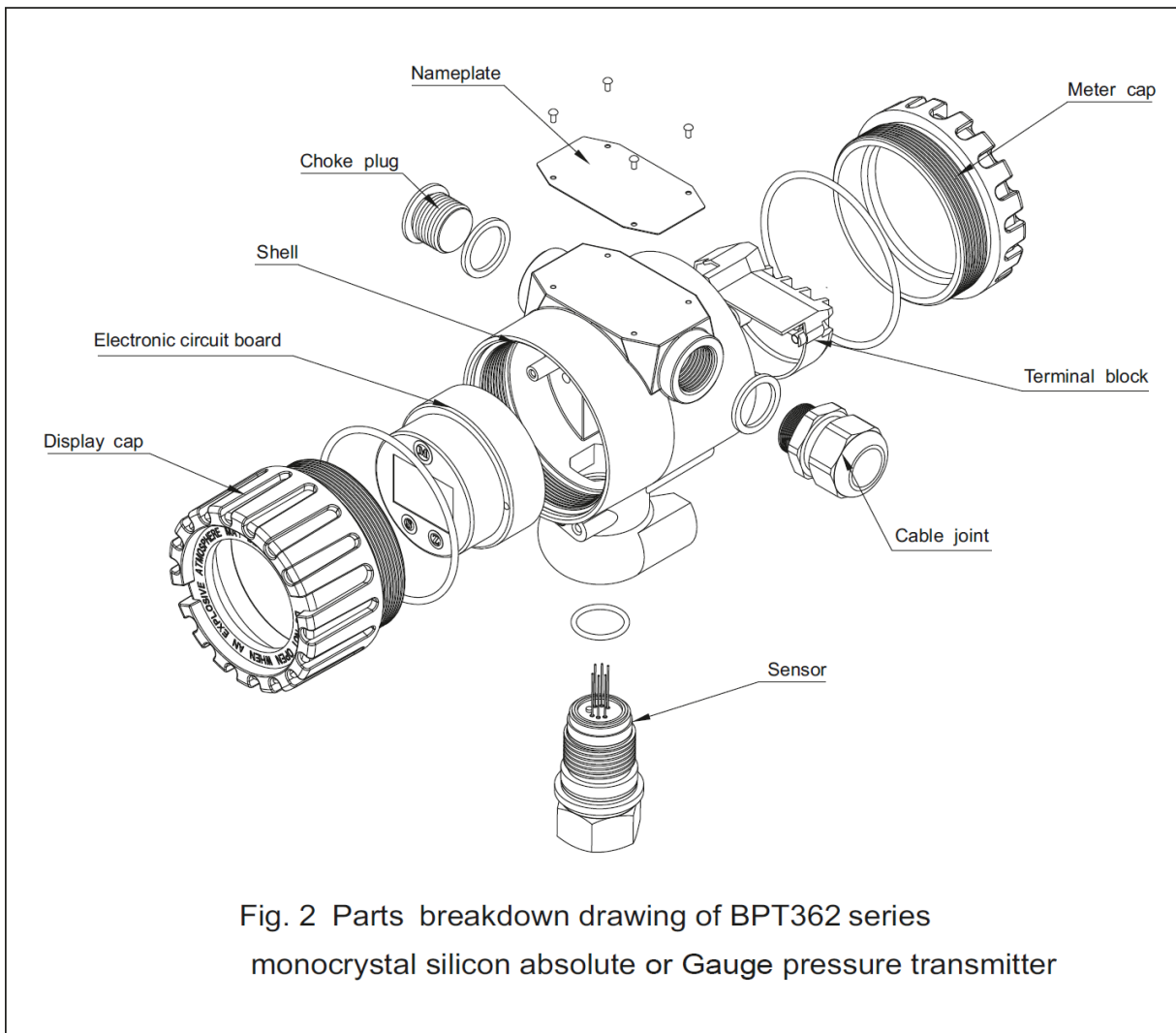


Fig. 2 Parts breakdown drawing of BPT362 series monocrystal silicon absolute or Gauge pressure transmitter

**BPT362 series monocrystal silicon absolute or gauge pressure transmitter**

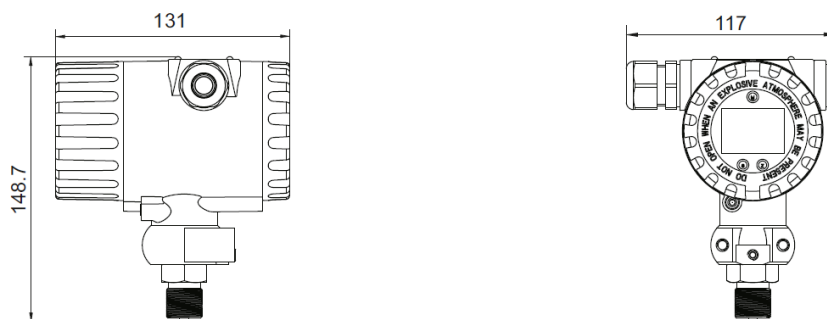
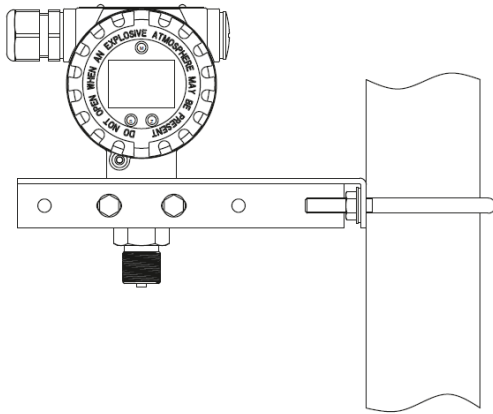
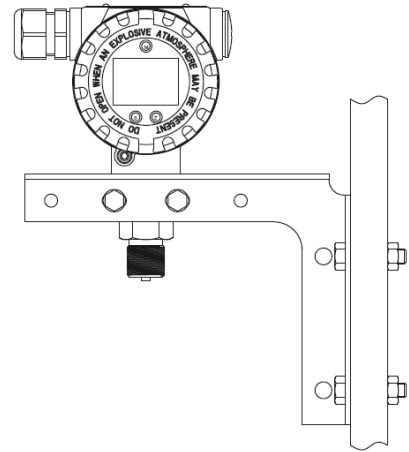


Fig. 3 Dimensional drawing for transmitter



Piping rack installation mode (Code of this option: B4)



Flat bracket installation mode (Code of this option: B5)

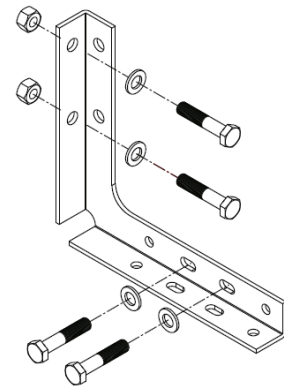
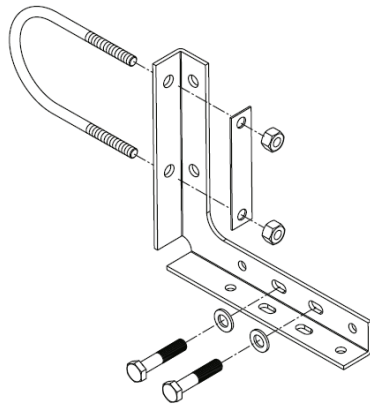
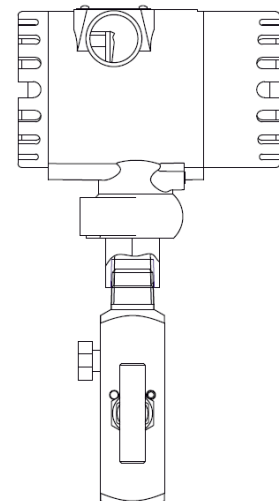
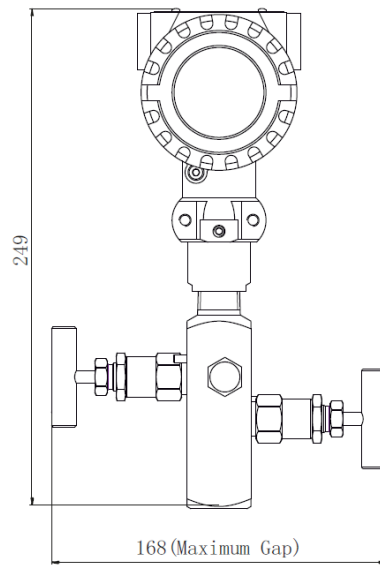


Fig. 4: Installation structure of transmitter, with optional mounting bracket



Component dimension figure of two valve group (unit: mm)



Table 1: BPT362G series monocrystal silicon pressure transmitter

Model	Product description	
BPT362G-	Monocrystal silicon pressure transmitter	
Code	Range	Overpressure
1	12.5~250KPa	500KPa
2	0.15~3MPa	6MPa
3	0.5~10MPa	20MPa
4	2~20MPa	60MPa
5	5~40MPa	80MPa
6	16~80MPa	120MPa
Code	Filling liquid	Diaphragm
1	Silicone oil	316L stainless steel
2	Fluorocarbon oil	316L stainless steel
3	Silicone oil	Hastelloy C
4	Fluorocarbon oil	Hastelloy C
Code	Process interface	
F	NPT1/2 (F) internal thread	
M	NPT1/2 (M) external thread	
A	M20×1.5 external thread/inner bore Φ3 (standard)	
B	M20×1.5 external thread/inner bore Φ10 (viscous medium)	
Code	Electrical interface	
A	ANSI NPT1/2(F) internal thread	
M	ISO M20×1.5 internal thread	
Code	Header	
-M	LCD display (with setting button)	
-N	No header (lower than -20℃)	
Code	Options for the hazardous occasion certification	
N	Ordinary type (no anti-explosion)	
D	Flame-proof Exd II CT6	
I	Intrinsic-safety type Exia II CT6	
Code	Mounting bracket	
B4	Piping support (2" pipe)	
B5	Plate bracket	
Code	Installation selection of valve group integration ( can be selected ) <sup>(1)</sup>	
V2	Two valves manifold	
Code	Configuration options	
Q4	Verification certificate (please contact Wide Plus corporation)	
C4	High alarm	
CN	Low alarm (The default setting is low alarm.)	
Typical model BPT362G-11FA-MDB4		

Note: if needing higher precision, please contact the marketing representatives of the corporation.

Note(1): Installation selection of valve group integration, this item can be choose according to your require, we offer you 316ss material as standard choice. If you have other requirement, please contact with sales representative.



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BPT362

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Table 1: BPT362A series monocrystal silicon absolute pressure transmitter

Model	Product description	
BPT362A-	Monocrystal silicon absolute pressure transmitter	
Code	Range	Overpressure
1	12.5~250KPa	500KPa
2	0.5~10MPa	20MPa
3	2~20MPa	60MPa
4	5~40MPa	80MPa
5	16~80MPa	120MPa
Code	Filling liquid	Diaphragm
1	Silicone oil	316L stainless steel
2	Fluorocarbon oil	316L stainless steel
3	Silicone oil	Hastelloy C
4	Fluorocarbon oil	Hastelloy C
Code	Process interface	
F	NPT1/2 (F) internal thread	
M	NPT1/2 (M) external thread	
A	M20×1.5 external thread/inner bore Φ3 (standard)	
B	M20×1.5 external thread/inner bore Φ10 (viscous medium)	
Code	Electrical interface	
A	ANSI NPT1/2(F) internal thread	
M	ISO M20×1.5 internal thread	
Code	Header	
-M	LCD display (with setting button)	
-N	No header (lower than -20℃)	
Code	Options for the hazardous occasion certification	
N	Ordinary type (no anti-explosion)	
D	Flame-proof Exd II CT6	
I	Intrinsic-safety type Exia II CT6	
Code	Mounting bracket	
B4	Piping support (2" pipe)	
B5	Plate bracket	
Code	Installation selection of valve group integration ( can be selected) <sup>(1)</sup>	
V2	Two valves manifold	
Code	Configuration options	
Q4	Verification certificate (please contact with BASI)	
C4	High alarm	
CN	Low alarm (The default setting is low alarm.)	
Typical model BPT362A-11FA-MDB4		

Note: if needing higher precision, please contact the marketing representatives of the corporation.

Note(1): Installation selection of valve group integration, this item can be choose according to your require, we offer you 316ss material as standard choice. If you have other requirement, please contact with sales representative.



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