

FEATURES

- SS 316L diaphragm structure
- High accuracy, all stainless steel structure
- Small size and light weight
- Storage anti-interference, good long-term stability
- Diversified formal structures, easy installation and use
- Wide pressure range, can measure the absolute pressure, gauge pressure and sealed gauge pressure
- Anti-vibration, shock resistance
- Zero, full span adjustable

APPLICATIONS

- Process control
- Aerospace
- Automobile and medical Equipment
- Pipeline system



PRODUCT OVERVIEW

PT303 economic pressure transmitter adopts diffused silicon pressure sensor as pressure sensing element. Through internal ASIC, the millivolt signal of sensor is transmitted into standard current signal. PT303 can be directly connected with computer interface card, control instruments, intelligent meters or PLC etc. conveniently. Long-distance transmission can use current output. PT303 features with small size, light weight, all stainless steel sealing structure and ability to work in corrosive environments. The product is easy to install and has extremely high vibration and shock resistance. PT303 is widely used in process control, aviation, aerospace, automobile, medical equipment, HVAC and other fields.

PERFORMANCE PARAMETERS

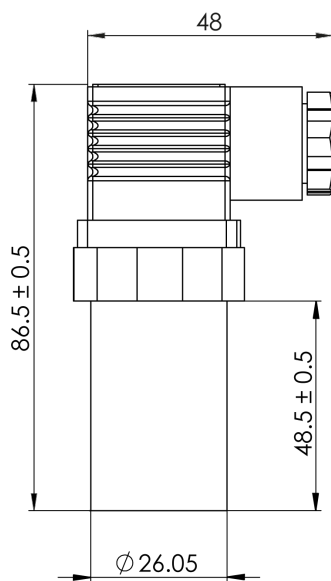
Pressure range	: 0~0.35...600bar
Pressure reference	: Gauge pressure, Absolute pressure, Sealed gauge pressure
Accuracy	: 0.5% FS
Hysteresis	: 0.1% FS
Repeatability	: 0.1% FS
Temperature drift	: 0.35bar: ±2% FS (0°C~60°C) Other ranges: ±1.5% FS (-20°C~85°C)
Response time	: ≤1ms (Up to 90% FS)
overpressure	: Refer to Table for Pressure Range Selection
Service life	: ≥10x10 ⁶ pressure cycles
Long-term stability	: ±0.2% of FS/year
Ambient temperature	: -20°C...85°C
Process temperature	: -20°C...85°C
Storage temperature	: -40°C...125°C
Insulation resistance	: ≥100MΩ / 500V DC (200MΩ/250V DC)
Vibration resistance	: Sine curve: 20g, 25HZ~2kHz; IEC 60068-2-6 Random: 7.5grms, 5Hz~1kHz; IEC 60068-2-64
Shock resistance	: Shock: 200g/1ms; IEC60068-2-27 Free falling body: 1m; IEC 60068-2-32
Protection grade	: IP65
Medium compatibility	: All kinds of media compatible with SS316L
Hexagon	: HEX27
Ex-proof grade	: Intrinsically safe explosion-proof Exia II CT6 (only for 4~20mA)
Net weight	: ~209 g

OUTPUT AND POWER SUPPLY

Output	: 4~20mA
Power supply	: 12~30V DC

ELECTRICAL CONNECTION & WIRING MODE

J5: DIN43650 / ISO 4400



Wiring method (2 wire current)	Pin 1: Power supply+ (Red wire)
	Pin 2: Current output (Green wire)
Wiring method (3 wire voltage)	Pin 1: Power supply+ (Red wire)
	Pin 2: Common-ground (green wire)
	Pin 3: Voltage output (yellow wire)

*All dimensions are in mm.

APPLICATION OF DAMPER

Applications

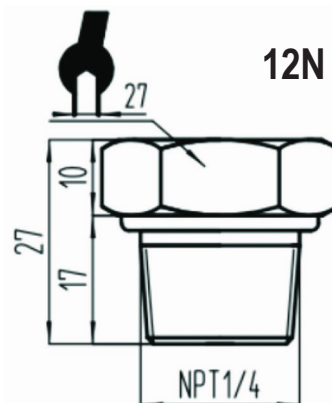
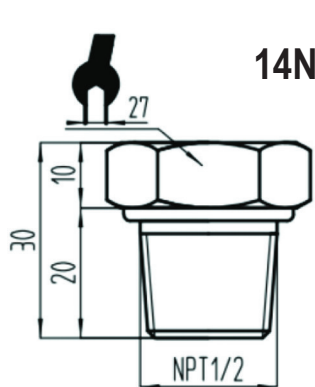
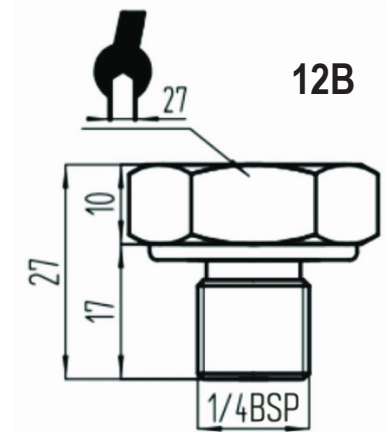
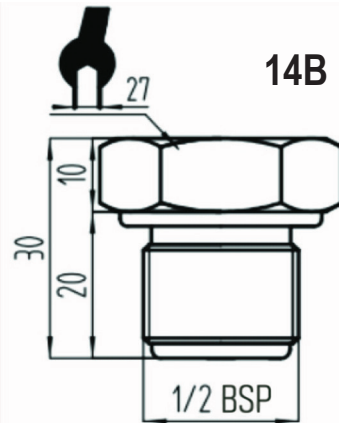
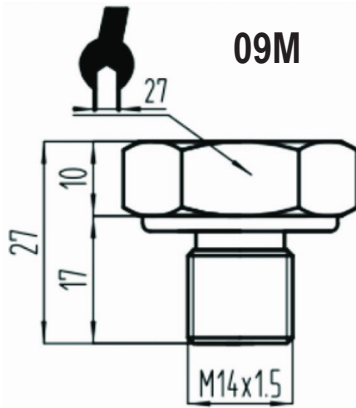
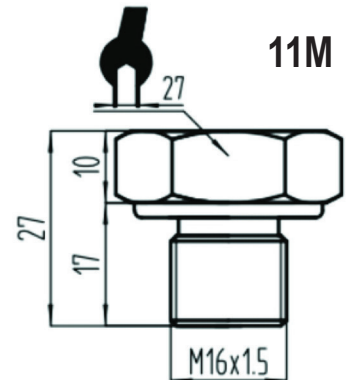
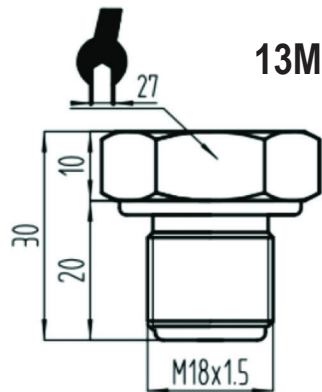
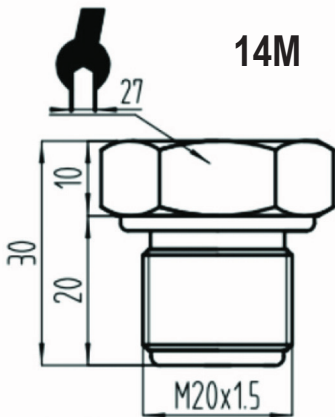
Cavitation, liquid hammer and pressure peak may occur in air or fluid systems with varying flow rates, such as the rapid closing of the valve or the start and stop of the pump.

Even at relatively low operating pressures, these problems may occur at the entrance and exit.

Media condition

In the liquid containing particles, nozzle clogging may occur. The vertical mounting of pressure transmitter minimizes the risk of clogging because the flow of fluid happens in initial start only, the volume of the rear of the nozzle is fixed and the nozzle has a relatively large aperture (1.2mm). The effect of medium viscosity on response time is small. Even if the viscosity reaches 100 CST, the response time will not exceed 4ms.

PRESSURE CONNECTION



*All dimensions are in mm.

NOTE:The torque depends on all kinds of factors, such as gasket material, kitting material, thread lubrication and pressure.

ORDERING CODES**1. APPROVAL**

NA	Non-hazardous area	NA
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2. ACCURACY

CL3	0.5% FS	CL3
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3. RANGE

XXX	Refer Range Table (Page 05)	XXX
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4. OUTPUT SIGNAL

HC	4~20mA	HC
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5. PRESSURE TYPE

GA	Gauge	GA
AS	Absolute	
SE	Sealed gauge	

6. ELECTRICAL CONNECTION

ND2	DIN 43650	ND2
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7. PROCESS CONNECTION

14M	M20x1.5 mm (M)	14M
13M	M18x1.5 mm (M)	
11M	M16x1.5 mm (M)	
09M	M14x1.5 mm (M)	
14B	1/2" BSP (M)	
12B	1/4" BSP (M)	
14N	1/2" NPT (M)	
12N	1/4" NPT (M)	

Ordering Example : PT303-NA-CL3-XXX-HC-GA-ND2-14M

NOTES

1. Do not touch the diaphragm with hard objects, which may cause damage to the diaphragm.
2. Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product.
3. Strictly follow the wiring method for wiring, otherwise it may cause product damage or other potential faults.
4. Misuse of the product may cause danger or personal injury.
5. Do not misuse documentation.
6. The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
7. Complete installation, operation, and maintenance information is provided in the instructions of the product.

STANDARD RANGES

Pressure Range Code	Pressure Reference	Pressure Range	Overpressure	Burst Pressure
F11	G	0...100mbar	300%FS	600%FS
F14	G	0...200mbar	300%FS	600%FS
F16	G,A	0...350mbar	300%FS	600%FS
F20	G	0...700mbar	300%FS	600%FS
B02	G,A	0...1bar	200%FS	500%FS
B03	G,A	0...1.6bar	200%FS	500%FS
B05	G,A	0...2.5bar	200%FS	500%FS
B06	G,A	0...4bar	200%FS	500%FS
B07	G,A	0...6bar	200%FS	500%FS
B09	G,A	0...10bar	200%FS	500%FS
B11	G,A,S	0...16bar	200%FS	500%FS
B13	G,A,S	0...25bar	200%FS	500%FS
B16	S	0...40bar	200%FS	400%FS
B17	S	0...60bar	200%FS	400%FS
B19	S	0...100bar	200%FS	400%FS
B21	S	0...160bar	200%FS	400%FS
B24	S	0...250bar	150%FS	400%FS
B27	S	0...400bar	150%FS	300%FS
B29	S	0...600bar	150%FS	300%FS

NOTES

1. G stands for gauge pressure, A, absolute pressure, S, sealed gauge pressure.
2. select the non-oil filling pressure sensor, and the measurement medium must be clean gas.