Pressure

OEM Piezoresistive Pressure Transmitter

P046

For pressure, hydraulic & pneumatic equipment, anti-interference, long-term stability, provides multi-ple types of pressure connections

| Features |

- Compact structure, small size.
- Strong anti-interference, good long-term stability.
- Can measure absolute pressure, gauge pressure.
- A variety of electrical connections, easy to install and use.
- Liquid contacting diaphragm 316L.
- Minimum order quantity 10pcs.

| Introduction |

P046 Pressure transmitter is specially designed for small and medium equipment applications, is designed with compact structure which especially applies to the instal-lation in small space. Such as booster pumps, air compressors and air conditioning system.

Also suitable for a variety of other industrial applications, with a variety of structures, output forms and pressure connections to meet the requirements of most applications.

Application :
Air compressor / Hydraulic and pneumatic equipment / Air conditioning systems / Piping systems / Water treatment plant / Industrial process control

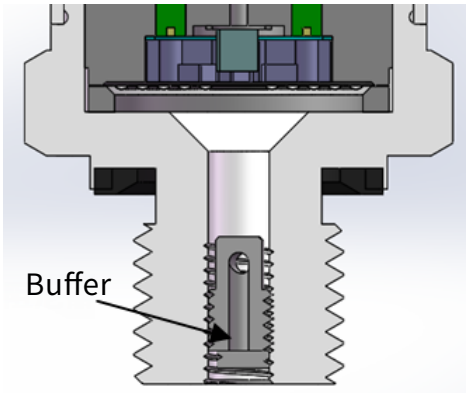
| Specification |

Item	Function & Parameter
Measuring range	-1 ... 400 bar
Pressure type	Relative pressure, absolute pressure
Output signal / Power supply	4 ... 20mA, 0 ... 5V, 0 ... 10V(12 ... 30VDC)
	0.5 ... 4.5V R/M(5VDC)
Accuracy	±0.5%F.S.(typ.)
Hysteresis & repeatability	≦ ±0.1%F.S.
Temperature drift	≦ ±1.5%F.S.(-20 ... 85°C)
Response time	＜ 4ms
Ambient Temp.	-20 ... 80°C
Medium Temp.	-30 ... 105°C
Storage Temp.	-40 ... 120°C
Mechanical vibration	Sine curve：20g, 25Hz ... 2kHz
	Random：7.5grms, 5Hz ... 1kHz
Impact resistance	Shock：200g/1ms
	Free fall：1m
IP rating	IP65
Material	Wetted parts：SUS316L
	Housing：SUS304
	Electrical connection：PA66
	NBR：less than 60 mpa
	Viton：more than 60 mpa
Net weight	50g ... 90g

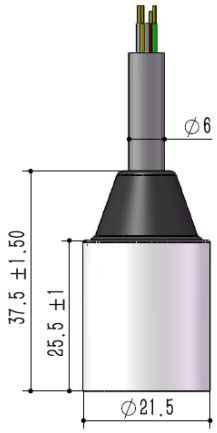
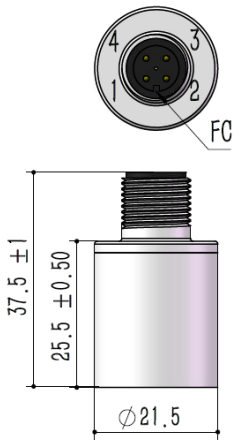
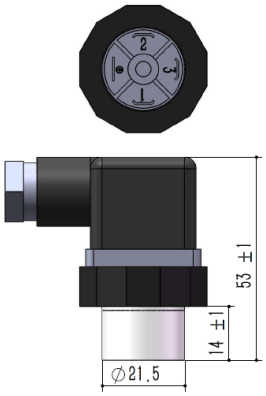
| Buffer selection |

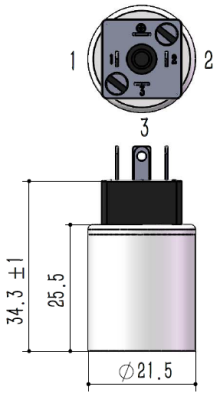
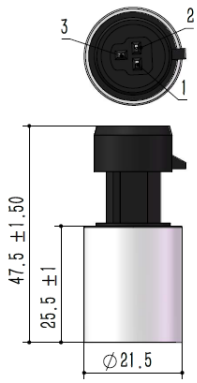
Application

Cavitation, liquid hammer and pressure peak may occur in air or hydraulic 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.

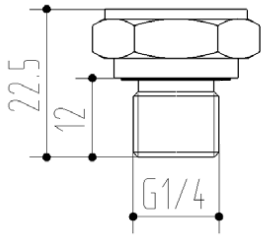
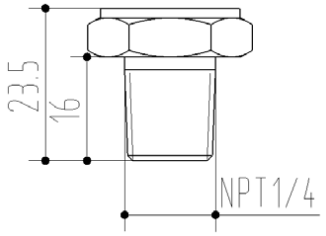
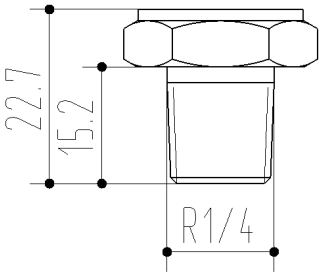
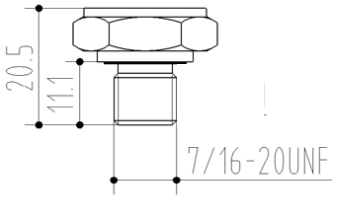
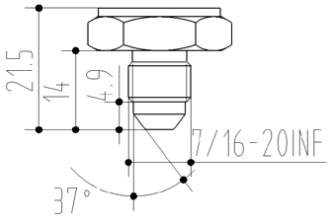
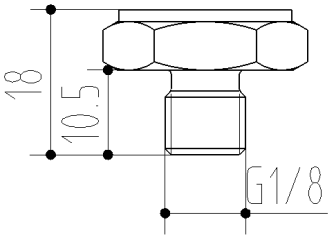
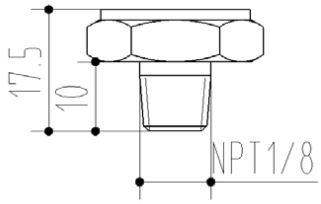
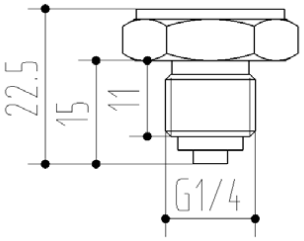
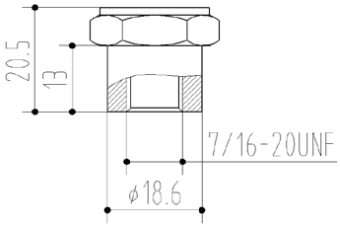


| Electrical connection & Connection method |

Connector type	Wire-out	M12：Quick connector	DIN 43650 / DINEN / DIN175301-803-A
Dimension Unit：mm			
Wiring method (2-Wire / AC)	Red：supply+ Green：current output	1：Supply+ 2：Current output	1：Supply+ 2：Current output
Wiring method (3-Wire / DC)	Red：supply+ Green：ground Yellow：voltage output	1：Supply+ 2：Voltage output 3：Ground	1：Supply+ 2：Ground 3：Voltage output

Connector type	Mini din (DIN175301-803-C)	Round packard
Dimension Unit：mm		
Wiring method (2-wire / AC)	1：Supply+ 2：Current output 3：Pending	1：Supply+ 2：Current output
Wiring method (3-wire / DC)	1：Supply+ 2：Ground 3：Voltage output	1：Supply+ 2：Ground 3：Voltage output

| Connecting thread |

Code	1:G1/4"	2:NPT1/4"	3:R1/4"
Dimension Unit:mm			
Code	**4:7/16-UNF**	**5:7/16-UNF 37°**	**6:G1/8"**
Dimension Unit:mm			
Code	**7:NPT1/8"**	**8:G1/4A"(EN 837)**	**9:7/16-20UNF Female**
Dimension Unit:mm			

Note: Recommended torque 15 ... 25 Nxm, depends on various factors such as material of gasket, supporting aterials, lubrication of thread and pressure.

| Measuring range selection |

Measuring range	Overpressure	Burst pressure
0 ... 0.7 bar	300 %F.S.	600 %F.S.
0.7 bar ... 25 bar	200 %F.S.	500 %F.S.
40 bar ... 60 bar	200 %F.S.	400 %F.S.
100 bar ... 400 bar	200 %F.S.	300 %F.S.

| Fitting |

Model	Picture	Description	Note
M4 Damper		1. Can refer to the use of the damper 2. Thread code is 7/16-20UNF 37°, 7/16-20UNF female, G1/4A" pressure port not applicable.	Option

| Ordering Guide | Note：Minimum order quantity 10pcs

P046 - [Pressure type] [Pressure range] [Output] [Connecting thread] [Electrical connector]

Pressure type

0
- 0：Absolute pressure
- 1：Relative pressure

Pressure range

11
- 00：-1 ... 0 bar
- 11：0 ... 1 bar
- 12：0 ... 1.6 bar
- 13：0 ... 2.5 bar
- 14：0 ... 4.0 bar
- 16：0 ... 6.0 bar
- 21：0 ... 10 bar
- 22：0 ... 16 bar
- 23：0 ... 25 bar
- 24：0 ... 40 bar
- 25：0 ... 60 bar
- 26：0 ... 100 bar
- 27：0 ... 160 bar
- 28：0 ... 250 bar
- 29：0 ... 400 bar

Output

1
- 1：4 ... 20mA
- 6：0 ... 10V
- 7：0 ... 5V
- 8：0.5 ... 4.5V

Connecting thread

2
- 1：G1/4”
- 2：NPT1/4”
- 3：R1/4”
- 4：7/16-UNF
- 5：7/16-UNF 37°
- 6：G1/8”
- 7：NPT1/8”
- 8：G1/4A”(EN 837)
- 9：7/16-20UNF Female

Electrical connector

2
- 1：DIN43650
- 2：M12 with 2m cable
- 3：Wire-Out
- 4：MINI DIN 175301-803-C
- 5：Round packard

| Additional option (ILAC／TAF) Test report |

Additional option：Yuden standard calibration laboratory test report (TAF accreditation: 3032) complying with ISO /IEC 17025. TAF has mutual recognition arrangement with ILAC MRA

Project	Measurand level or range
Pressure gauge	Gauge pressure：10 ... 7000kPa (5 basic points or 3 basic points)
	Absolute pressure：20 ...170kPa (5 basic points or 3 basic points)