High-temperature pressure transmitter
Model PY108

Applications

- Filling and packing machinery
- Dosing technology
- Level measurement
- General industrial applications
- Food and beverage industry
- Environmental protection, chemical, coating

Special features

- Measuring ranges : -1 ...2500 bar
- Accuracy: up to 0.1% F.S
- Wide range of applicable medium temperature
- Direct contact measurement of high temperature media, improve the pressure response frequency
- Provide low pressure, medium pressure, high pressure range of rich pressure range

PY 108 Pressure Transmitter

Description

PY 108 High-temperature pressure transmitters use high-temperature resistant pressure sensors as the signal measuring element.

The pressure of the measured medium is transmitted to the transmitter through the heat dissipation structure on the transmitter, and the high-precision signal processing circuit is located in the stainless steel housing. which converts the sensor output signal into standard output signal.

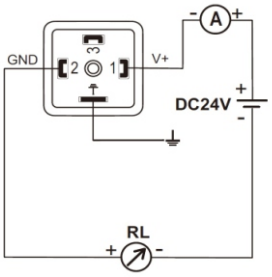
Suitable for use in industrial sites, food and pharmaceutical equipment, power generation, machinery manufacturing, steam and heat exchange fields.

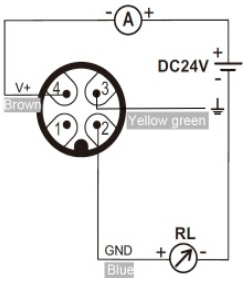
Specifcations

Basic information	
Pressure types	
Pressure ranges	-0.1 ... 2,500 bar
Accuracy	Standard: ≤±0.5 % of span Option: ≤±0.1 % or ≤±0.25%of span[1] 1) Only for measuring ranges ≥ 0.25 bar
Non-linearity (per IEC 61298-2)	≤±0.2%of span BFSL
Non-repeatability	≤±0.1%of span
Temperature error in rated temperature range	Rated temperature range: 0 ... 80 °C
Mean temperature coefcient of zero point	Measuring range > 0.25 bar:≤ ±0.2 % of span/10 K Measuring range ≤ 0.25 bar: < ±0.4 % of span/10 K
Mean temperature coefcient of span	≤±0.2 % of span/10 K
Adjustability of zero point and span	Adjustment is made using potentiometers inside the instrument. Zero point: ± 5 % Span: ± 5 %
Response Time	2ms
Output signal	■ Current (2-wire), 4～20mA DC (Load resistance ≤750Ω) ■ Current (3-wire), 0～10 mA DC (Load resistance ≤1.5KΩ) ■ Voltage (2-wire), 1～5V DC (Load resistance ≥250K) ■ Voltage (3-wire), 0～5V DC (Load resistance ≥250K) ■ Voltage (3-wire), 0~10V DC (Load resistance ≥250K)
Load in Ω	Depending on the signal type the following loads apply: ■ Current (2-wire):≤ (power supply - 10 V) / 0.02 A ■ Current (3-wire):≤ (power supply - 3 V) / 0.02 A ■ Voltage (3-wire): > max. output signal / 1 mA
Power supply	The power supply depends on the selected output signal ■ 4 ... 20 mA (2-wire): DC 10 ...30 V ■ 0 ... 20 mA (3-wire): DC 10 ...30 VDC ■ 1 ... 5 V(2-wire): DC 10 ...30 V ■ 0 ... 10 V: DC 14 ... 30 VDC ■ 0 ... 5 V: DC 10 ...30 V
Heat sink	■ 3 pieces, Medium temperature≤150°C ■ 5 pieces, Medium temperature≤250°C ■ 7 pieces, Medium temperature≤350°C
Overpressure	5bar or 3×FS, whichever is smaller
electrical connection	Hirschmann connector, waterproof connector optional
Thread	1/4NPT, 1/2NPT, G1/2, G1/4,Others can be customized
Material	316L
Ambient conditions	-40...85°C with air humidity ≤95%r.h.
Weight	620 g

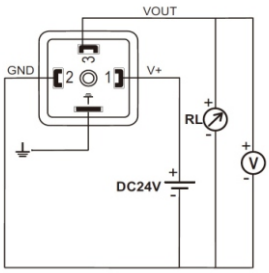
Wire

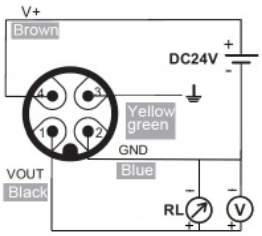
2-wire 4mA ~ 20mA Output





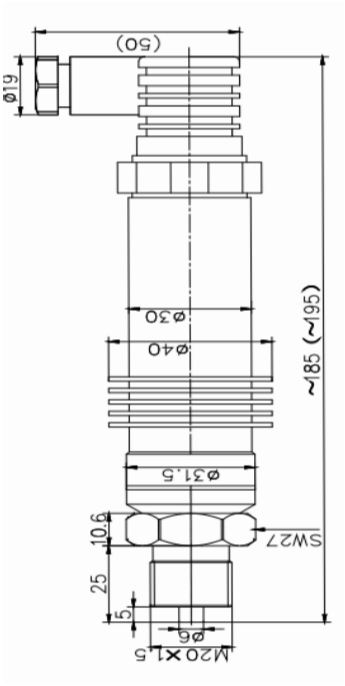
3-wire Voltage Output



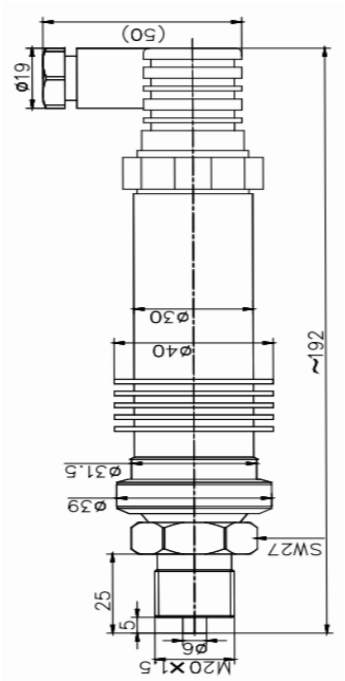


Dimension (Unit: mm)

with angular connector DIN 175301-803 A



with angular connector DIN 175301-803 C



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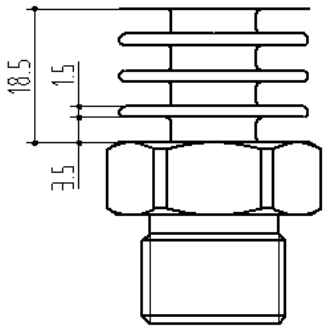
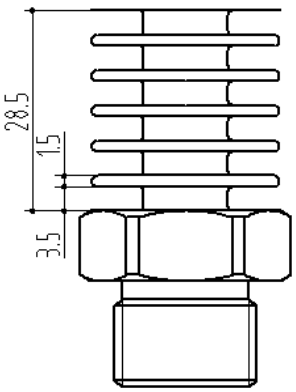
Heat sink (Unit: mm)

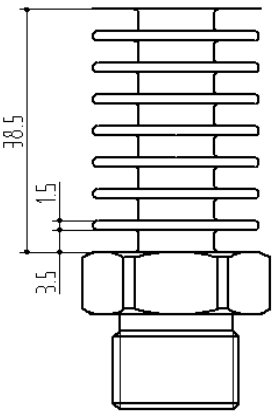
3 pieces,Medium temperature≤150



5 pieces,Medium temperature≤250



7 pieces,Medium temperature≤350



Measuring ranges,gauge pressure

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
GP0.16	0...0.16	0.2(0.25,0.5)	Gas/Liquid	4X
GP 0.25	0...0.25	0.2(0.25,0.5)	Gas/Liquid	4X
GP 0.4	0...0.4	0.2(0.25,0.5)	Gas/Liquid	3X
GP 0.6	0...0.6	0.2(0.25,0.5)	Gas/Liquid	3X
GP 1	0...1	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 1.6	0...1.6	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 2.5	0...2.5	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 4	0...4	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 6	0...6	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 10	0...10	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 16	0...16	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 25	0...25	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 40	0...40	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 60	0...60	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 100	0...100	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 160	0...160	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 250	0...250	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 400	0...400	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 600	0...600	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 1000	0...1000	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 1600	0...1600	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 2000	0...2000	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
GP 2500	0...2500	0.1(0.2,0.25,0.5)	Gas/Liquid	3X

Measuring ranges,absolute pressure

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
AP 0.25	0...0.25	0.2(0.25,0.5)	Gas	4X
AP 0.4	0...0.4	0.2(0.25,0.5)	Gas	3X
AP 0.6	0...0.6	0.2(0.25,0.5)	Gas	3X
AP 1	0...1	0.1(0.2,0.25,0.5)	Gas	3X
AP 1.6	0...1.6	0.1(0.2,0.25,0.5)	Gas	3X
AP 2.5	0...2.5	0.1(0.2,0.25,0.5)	Gas	3X
AP 4	0...4	0.1(0.2,0.25,0.5)	Gas	3X
AP 6	0...6	0.1(0.2,0.25,0.5)	Gas	3X
AP 10	0...10	0.1(0.2,0.25,0.5)	Gas	3X

Measuring ranges,vacuum and +/- measuring ranges

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
VP -0.25	-0.25...0.25	0.2(0.25,0.5)	Gas/Liquid	3X
VP -0.4	-0.4...0.4	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
VP -0.6	-0.6...0.6	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
VP 0	-1...0	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
VP0.6	-1...0.6	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
VP 1	-1...1	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
VP 1.6	-1...1.6	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
VP 2.5	-1...2.5	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
VP 4	-1...4	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
VP 6	-1...6	0.1(0.2,0.25,0.5)	Gas/Liquid	3X
VP 10	-1...10	0.1(0.2,0.25,0.5)	Gas/Liquid	3X

Order code

Order code					
Model	**Accuracy**	**Pressure ranges**	**Output**	**Process connection**	**Medium temperature (Heat sink)**
PY 108	A010(0.1%F.S) A020(0.2%F.S) A025(0.25%F.S) A050(0.5%F.S)	Table of reference measuring ranges	A: 4～20mA DC B: 0～10 mA DC C: 1～5V DC D: 0～5V DC E: 0～10V DC	1/4NPT 1/2NPT G1/2 M20*1.5 G1/4 Other	T1: ≤150°C(3 pieces) T2: ≤250°C(5 pieces) T3: ≤350°C(7 pieces) T0: other
Example order number **PY108-A020-GP40(0...40)bar-1/4NPT-T1** PY 108 with 1/4NPT, 0.2%F.S, 4-20 mA, 0...10bar ,≤150°C(3 pieces Heat sink)					