

PS10SR-2380 Piezoresistive Pressure Transducer

Features

- Full stainless steel construction;
- Thread connection optional;
- Constant current supply;
- Laser trimming compensating zero and FS thermal error;
- Using high reliable and stable solid piezoresistive pressure cell;
- Cable connection or plug connection



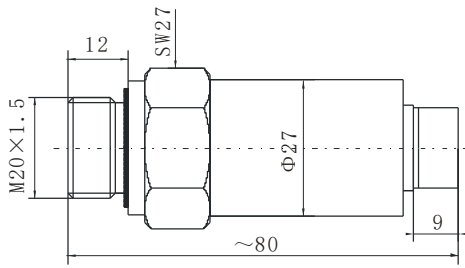
Introduction

General PS10SR-2380 pressure transducer is produced by build-in an OEM piezoresistive pressure sensor into stainless steel housing. Due to stainless steel pressure port and housing, the product has good media compatibility, stable performance and high accuracy, it can be used for static gas and liquid media pressure measurement. Flush diaphragm PS10SR-2380 pressure transducer has G1/2 male pressure port and Viton sealed washer for fact type seal. Flush diaphragm MPM380 transducer has 0 ~70kPa...35MPa pressure range, it can be used for food, medicine, sanitation fields which is easy to be dirty.

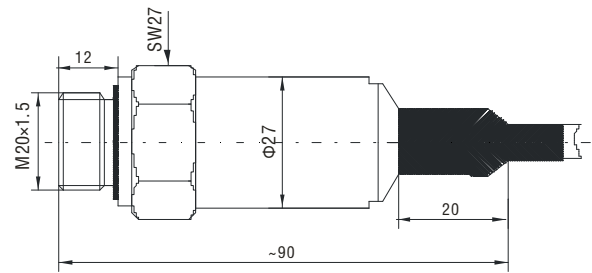
Specifications

| @1.5mADC, 25°C | |
|-------------------------|---|
| Pressure range | -100kPa...0kPa~20kPa...100MPa |
| Overpressure | 1.5 times FS or 110MPa (min.value is valid) |
| Power supply | 1.5mADC |
| Signal | ≥70mVDC (0~20kPa, ≥50mVDC) |
| Accuracy | ±0.1%FS (min.) ±0.25%FS (typ.) ±0.5%FS (max.) |
| Long-term stability | ±0.3%FS/year |
| Compensation temp. | 0°C~50°C |
| Operation temp. | -30°C~80°C -10°C~70°C (Cable) |
| Storage temp. | -40°C~120°C -20°C~85°C (Cable) |
| Zero temp. coefficient | ±0.02%FS/°C (typ.) ±0.04%FS/°C (max.) |
| FS temp. coefficient | ±0.02%FS/°C (typ.) ±0.04%FS/°C (max.) |
| Housing | Stainless steel 1Cr18Ni9Ti |
| Diaphragm | Stainless steel 316L |
| O-ring | Viton |
| Cable | Polythene |
| Response time (10%~90%) | ≤1ms |
| Insulation resistance | 100MΩ, 100VDC |
| Production | IP65 (cable connection) |

Outline Construction(Unit: mm)



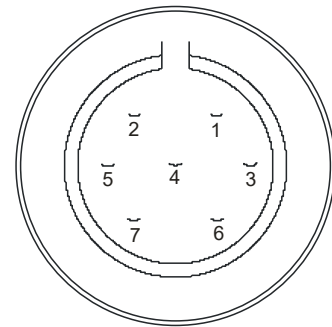
Code I



Code II

Electric Connection

| Color | Pin | Connection |
|--------|-----|------------|
| Black | 3 | +IN |
| Yellow | 5 | -IN |
| White | 1 | -IN |
| Red | 2 | +OUT |
| Blue | 4 | -OUT |



Note: standard electric connection is plug connection; cable connection is optional.

Order guide

| PS10SR-2380 Piezoresistive Pressure Transducer | | | | | |
|--|------------------|--|------|----------------|------------------|
| Code | Pressure range | Ref. | Code | Pressure range | Ref. |
| 0B | 0~20kPa | G | 12 | 0~2MPa | G, A |
| 0A | 0~35kPa | G | 13 | 0~3.5MPa | G, A, S |
| 02 | 0~70kPa | G, A | 14 | 0~7MPa | A, S |
| 03 | 0~100kPa | G, A | 15 | 0~10MPa | S |
| 07 | 0~200kPa | G, A | 17 | 0~20MPa | S |
| 08 | 0~350kPa | G, A | 18 | 0~35MPa | S |
| 09 | 0~700kPa | G, A | 19 | 0~70MPa | S |
| 10 | 0~1000kPa | G, A | 20 | 0~100MPa | S |
| | Code | Pressure type | | | |
| | G | Gauge | | | |
| | A | Absolute | | | |
| | S | Sealed gauge | | | |
| | Code | Electric connection | | | |
| | I | Plug connection | | | |
| | II | Cable connection | | | |
| | Cable length (m) | 1.5m cable is free of charge; the extra cable should be paid additionally. | | | |
| | Code | Pressure port | | | |
| | P | G1/2 male flush diaphragm | | | |
| PS10SR-2380 | 10 | G | II | 5 | P the whole spec |

Notes

1. We can also provide the user with voltage power supply product, the power supply is more than 9V; please note it when you select option codes;
2. When the user install flush diaphragm product at local place, please pay attention to correct sealing method to prevent the stress affecting product stability; please use attached seal-ring to install and seal, but not use face type sealing or wrap tetrafluoroethylene belt on the thread;
3. If the customer has special requirement, please feel free to contact our company.