

Description

UPC1 pressure transducer is piezoresistive pressure transducer by using piezoresistive sensing element based on advanced MEMS technology, suitable for the measurement of gauge pressure, absolute pressure and sealed gauge pressure. This product has such features as wide measuring ranges, good long term stability and excellent flexibility.

UPC1 pressure transducer is now widely used in many industries and laboratories for pressure measurement and control of various fluids.

Features

- Using MEMS silicon pressure dies
- High accuracy, stability and reliability
- Have gauge pressure, absolute pressure and sealed gauge pressure
- Compact size, light weight and high frequency response
- Constant current or constant voltage power supply

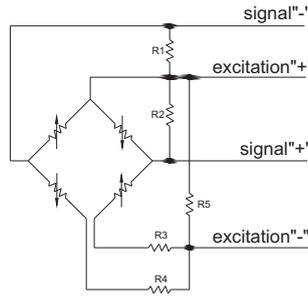


Specifications

| | |
|---------------------------------|--------------------------------------------------|
| pressure medium | gas and liquid compatible to stainless steel |
| pressure ranges | -1...0bar~0.1...1000bar |
| pressure type | gauge(G), absolute(A), sealed gauge(S) |
| overload pressure | 150%FS |
| output signal | $\geq 70\text{mV}$ (0~10kPa $\geq 35\text{mV}$) |
| accuracy | 0.1%FS, 0.25%FS(standard), 0.5%FS |
| zero offset | <2mV |
| long-term stability | <0.2%FS/year |
| excitation | 1.5mA or 5VDC |
| compensated temperature range | -10~70°C (0~60°C for range 0.2bar,0.35bar) |
| operating temperature range | -30~100°C |
| storage temperature range | -40~100°C |
| temperature coefficient of zero | 0.02%FS/°C |
| temperature coefficient of span | 0.02%FS/°C |
| input/output resistance | 2~6k Ω |
| insulation resistance | 100M Ω @50VDC |
| response time | $\leq 1\text{ms}$ |
| process connection | G1/4 or others |
| electrical connection | hirschmann connector or others |
| material of wetted part | 1Cr18Ni9Ti |
| material of pressure membrane | 316L |
| material of housing | 1Cr18Ni9ti |

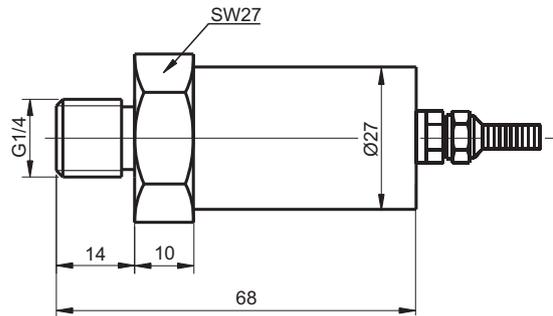
Electrical connection

| connection | cable color |
|---------------|-------------|
| excitation“+” | red |
| excitation“-” | black |
| signal“+” | green |
| signal“-” | white |



note : please refer to the user manual for the actual wiring

Dimensions



Ordering code

| UPC1 | | | | | | | |
|------|-----------------------|-----------------------------------------|---|----|----|----|--|
| UPC1 | range | pressure range: -1bar...0~0.2...1000bar | | | | | |
| | (0~X)bar | X: required measuring range | | | | | |
| | code | pressure type | | | | | |
| | G | gauge | | | | | |
| | A | absolute | | | | | |
| | S | sealed gauge | | | | | |
| | code | accuracy | | | | | |
| | B | 0.1%FS | | | | | |
| | C | 0.25%FS | | | | | |
| | D | 0.5%FS | | | | | |
| | code | process connection | | | | | |
| | P1 | G1/4 | | | | | |
| | P4 | M20×1.5 | | | | | |
| | P6 | M12×1 | | | | | |
| Pz | customer request | | | | | | |
| code | electrical connection | | | | | | |
| E1 | hirschmann connector | | | | | | |
| E2 | aviation connector | | | | | | |
| E3 | cable(lock nut) | | | | | | |
| Ez | customer request | | | | | | |
| code | excitation | | | | | | |
| S1 | 1.5mA | | | | | | |
| S2 | 5VDC | | | | | | |
| UPC1 | (0~20)bar | G | D | P1 | E2 | S2 | |