

Description

UPC3 ceramics pressure transducer is made based on advanced high temperature agglutination technology, it is designed for use in application where the pressure is created by the corrosive pressure medium. The pressure diaphragm of this transducer is made from ceramic material. Ceramics are well known material for its high elasticity, good corrosion resistance, anti-abrasion, anti-impact & vibration features.

Because of the good stability of ceramic and its thick-film resistance, this transducer can be operated in a higher temperature range; at the same time, this also makes the zero & sensitivity thermal shifts over the whole operating temperature range of the transmitter is very small. Ceramics' heat-stable characteristic and its heavy film resistance enable it to have the high operating temperature scope, and also guarantee its measuring accuracy and high stability simultaneously. The pressure act on the ceramic diaphragm's front surface without any liquid transmission in the transducer, which makes the diaphragm have small deformation. The thick- film resistance is printed on the ceramic diaphragm's back, and is connected to build the Wheatstone electrical bridge.

UPC3 is designed for use in most industrial application, and it is suitable for contacting most pressure medium (including corrosive medium) directly.

Features

- High measuring accuracy, high stability, high reliability
- Automatic testing, laser trimming compensation for temperature
- Small profile, light weight the weight, high frequency response
- Good ability of anti-corrosive, anti-abrasion, and anti-impact
- Wide operating temperature range

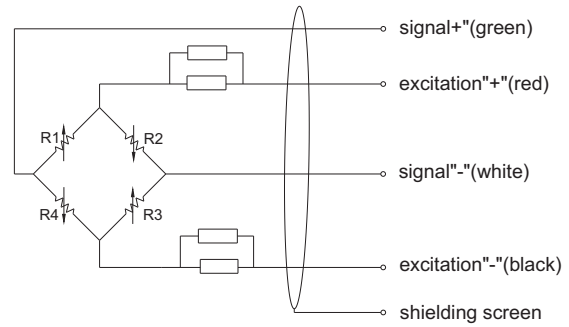


Specifications

pressure medium	gas or liquid compatible to stainless steel and ceramic
pressure ranges	0~1bar...200bar
overload pressure	150%FS
output signal	2~4mV/V
accuracy	0.25%FS, 0.5%FS(standard)
zero offset	<3%FS
long-term stability	<0.2%FS/year
excitation	5VDC~10VDC
compensated temperature range	0~70°C
operating temperature range	-10~90°C
storage temperature range	-30~100°C
temperature coefficient of zero	0.3%FS/10°C
temperature coefficient of span	0.3%FS/10°C
input/output resistance	10kΩ
insulation resistance	100MΩ@50VDC
response time	≤1ms
process connection	G1/4 or others
electrical connection	hirschmann connector and others
material of wetted part	1Cr18Ni9Ti
material of pressure membrane	ceramic
material of housing	1Cr18Ni9Ti
sealing	fluorine rubber sealing ring

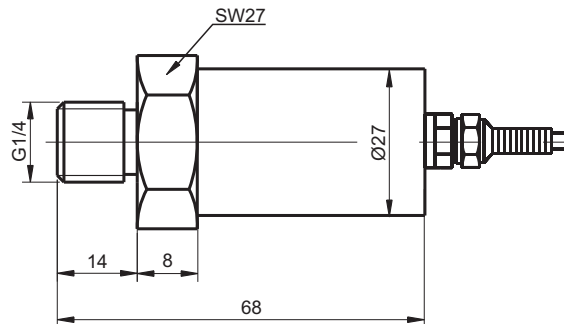
Electrical connection

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

UPC3			
UPC3	range (0~X)bar	measuring range: 0~1bar...200bar	
		X: actual measuring range	
	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		
UPC3	(0~20)bar	P1	E2