



UPX30 OEM Silicon Differential Pressure Sensor

Description

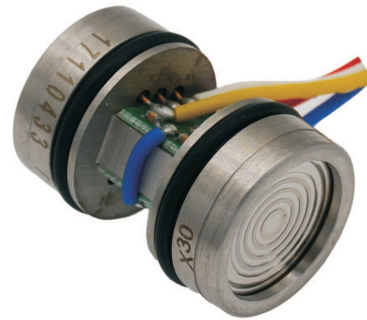
Based on piezoresistive silicon technology, UPX30 is manufactured from piezoresistive silicon dies. This sensor has two flush diaphragms facing the pressure medium, it is able to measure differential pressure of gas or liquids. The diaphragm form a chamber, in which oil is filled to isolate the sensing element and transfer pressure. The measured differential pressure is transmitted to the piezoresistive silicon sensing element through 316L isolated diaphragm and internal medium, thus to realize the precise transformation of electrical signal from pressure. This isolation enables the sensor to measure the pressures of corrosive fluids as well as electro conductive liquids.

This sensor is tested by computer automatically, and is compensated by compensation board for zero and sensitivity. Its profile and assembly size have good interchangeability with some overseas' general products.

UPX30 pressure sensor is designed for easy installation with O-rings as sealing method, it is widely used for differential pressure measurement in many industrial process control areas.

Features

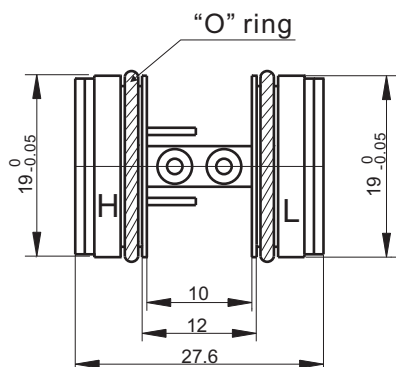
- Good performance, high reliability
- Imported pressure silicon dies
- Integrated, high static pressure 200bar
- Isolated-type structure, suitable for many kinds of medium measurement



Specifications

pressure medium	gas or viscous fluid or fluid with grains compatible to stainless steel
pressure ranges	0~0.2,0~0.35,0~0.7,0~1,0~2.5,0~4,0~6,0~10,0~16,0~25,0~35 (bar)
pressure type	differential
overload pressure	250%FS(positive end),100%FS(negative end)
system pressure	1000%FS or 10MPa (select the lower)
output signal	$\geq 70\text{mV}$ (typical)
accuracy	0.25%FS(standard), 0.5%FS
zero offset	$\leq \pm 3\text{mV}$
system pressure effect	$\leq 0.5\text{mV/MPa}$
excitation	1.5mA or 5V DC (1.5mA standard)
compensated temperature range	-10~+70°C (0~60°C for range 0.2bar,0.35bar)
operating temperature range	-40~+125°C
storage temperature range	-40~+125°C
temperature coefficient of zero	0.2%FS/10°C
temperature coefficient of span	0.2%FS/10°C
input/output resistance	2~6k Ω
insulation resistance	100M Ω @50VDC
response time(10%~90%)	$\leq 1\text{ms}$
electrical connection	4 color silicon rubber shielded flexible wires
housing and diaphragm material	316L stainless steel
filled oil	silicon oil
service life	$> 1 \times 10^8$ times

Dimensions



Electrical connection

<u>connection</u>	<u>cable color</u>
excitation“+”	red
excitation“-”	blue
signal“+”	yellow
signal“-”	white

Ordering code

UPX30			
	code	pressure range and pressure type	
	06	0~0.2bar	
	07	0~0.35 bar	
	08	0~0.7 bar	
	09	0~1 bar	
	10	0~2.5 bar	
	11	0~4 bar	
	12	0~6 bar	
	13	0~10 bar	
	14	0~16 bar	
	15	0~25 bar	
	16	0~35 bar	
		code	compensation method
		C1	constant current power compensation (1.5mA standard)
		C2	constant voltage power compensation(5V DC)
UPX30	08		