



# UPX18 TO-8 Housing Silicon Pressure Sensor

## Description

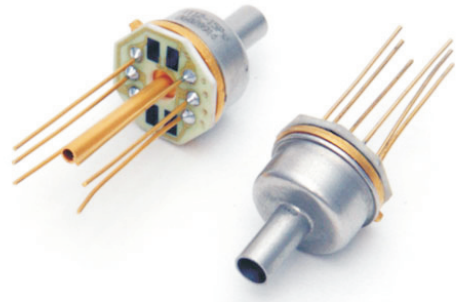
Based advanced ion implantation and micro-mechanical processing technology, UPX18 TO-8 housing piezoresistive pressure sensor is manufactured based on silicon chip which has Wheatstone Bridges and precise mechanical structure. The measured pressure acts on silicon chip through pressure port directly, and the pressure value is transformed to output voltage signal in linearity-relationship.

UPX18 TO-8 housing piezoresistive pressure sensor is suitable for installation in small space, and compatible for non-conductive & non-corrosive liquid or dry gas gauge pressure, absolute pressure or differential pressure measurement.

UPX18 has been widely used for air pressure control, physiology guarding, medicine equipment, blood-pressure meter etc.

## Features

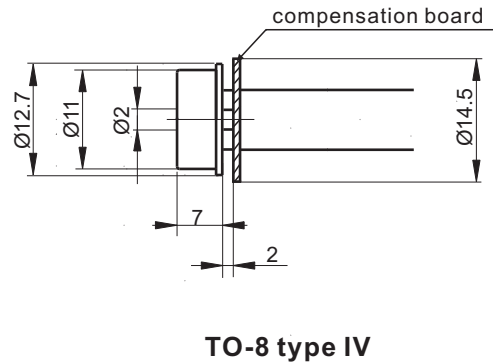
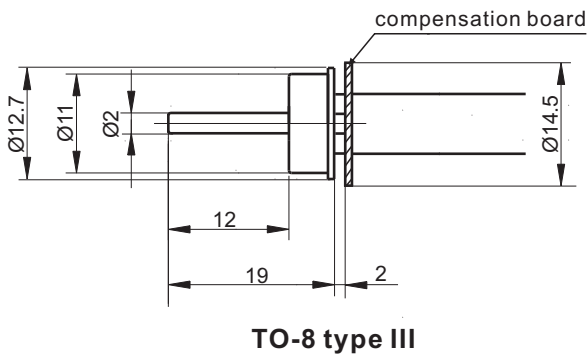
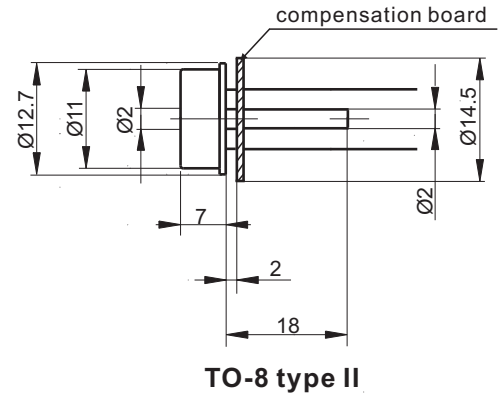
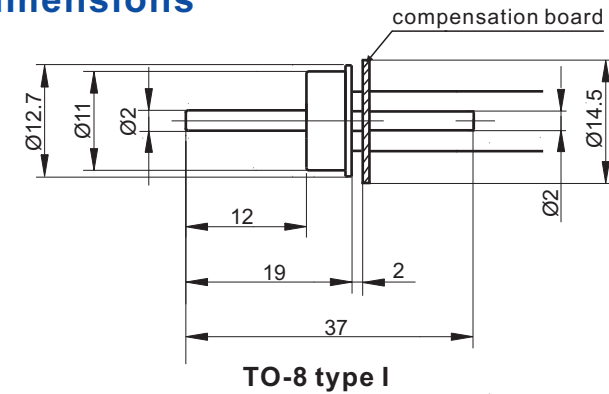
- Measuring range:0~0.01...10bar
- Gauge, absolute and differential pressure
- Suitable for measurement of non-conductive & non-corrosive media
- TO8 packing, enable for PCB installation
- Low cost, small size



## Specifications

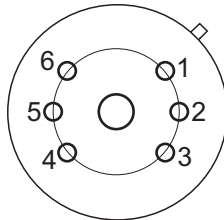
pressure medium	non-conductive & non-corrosive gas or liquid
pressure ranges	0~0.01...10 bar
pressure type	gauge(G), absolute(A), sealed gauge(S)
overload pressure	150%FS
output signal	$\geq 70\text{mV}$ (typical)
accuracy	0.25%FS(standard), 0.5%FS
zero offset	$\leq \pm 2\text{mV}$
long-term stability	$< 0.2\% \text{FS/year}$
excitation	$< 2\text{mA}$
compensated temperature range	0~+50°C
operating temperature range	-20~+85°C
storage temperature range	-40~+125°C
temperature coefficient of zero	0.25%FS/10°C
temperature coefficient of span	0.2%FS/10°C
input/output resistance	3~6k $\Omega$
insulation resistance	100M $\Omega$ @50VDC
response time(10%~90%)	$\leq 1 \mu \text{s}$
electrical connection	6 pin(gold coated kovar wires)
housing material	316L
position effect	deviate 90° at any direction, zero change $\leq 0.05\% \text{FS}$
impact	100g, 11ms
net weight	about 4g

## Dimensions



## Electrical connection

connection	pin
excitation“+”	6
excitation“-”	3
signal“+”	5
signal“-”	1



pin 2,4 not connected

## Ordering code

UPX18			
	range	measuring range: 0~0.01...10bar	
	(0~X)bar	X: range of sensor	
	code	pressure type	
	G	gauge (type I, type II, type III, type IV)	
	A	absolute (type III, type IV)	
	D	differential(type I, type II)	
UPX18	0~0.05	G type I	