

# UPB1-b Low Cost Piezoresistive Silicon Pressure Transmitter

#### **Description**

Based on piezo-resistive silicon technology, UPB1-b silicon pressure transmitter uses isolated stainless steel diaphragm as sensing element. Its amplifier circuit is built in stainless steel housing, to transform sensor signal into standard output signal. This transmitter features integrated construction, rigid and robust, high measuring accuracy, good long term stability, and is suitable for pressure measurement in general industry applications.

This product is widely used for pressure measurement and control of petroleum, chemical-industry, metallurgy, power station and hydrology, etc.

#### **Features**

- Many measuring pressure range
- Wide application scope and long service life
- High accuracy & long-term stability
- Good ability on anti-corrosion & anti-impact



### **Specifications**

pressure medium	gas or liquid compatible with ceramic and stainless steel			
pressure ranges	0~0.1bar1000bar			
overload pressure	150%FS			
output signal	4~20mA, 0~5V, 0~10V, 1~5V			
accuracy	0.25%FS, 0.5%FS(standard)			
load resistance	R⊾=(U-12V)/0.02A(4~20mA current output) U—loop voltage(V)			
long-term stability	<0.2%FS/year			
supply voltage	12~36VDC			
compensated temperature range	<b>0~70</b> °C			
operating temperature range	- <b>30~80</b> ℃			
storage temperature range	-40~100℃			
temperature coefficient of zero	0.2%FS/10℃			
temperature coefficient of span	0.2%FS/10℃			
insulation resistance	100MΩ@50VDC			
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			
sealing	n-Butyronitrile or fluoro-rubber sealing ring			

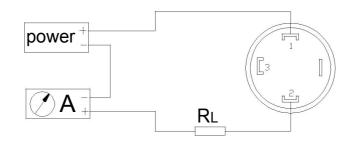
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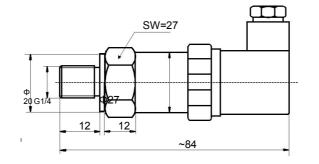
### **Electrical connection**

<u>connection</u>	cable color(pin)		
power"+"	red(1)		
signal"+"	black(2)		



wiring drawing of two-wire 4~20mA output (hirschmann)

### Dimensions



note: this product can be made according to customer's required dimensions.

## Ordering code

UPB1-	b						
	range	measuring range: 0~1bar200bar					
	(0~X)bar	X: required	ed measuring range				
		code	output				
		01	4~20mA				
		O2	0~5V				
		O3	1~5V				
		O4	0~10V				
			code	accuracy			
			С	0.25%FS			
			D	0.5%FS			
				code	process conr	nection	
				P1	G1/4		
				P3	1/4NPT		
				P4	M20×1.5		
				Pz	customer request		
					code	electrical connection	
					E1	hirschmann connector	
					E2	aviation connector	
					E3	shielded PVC cable	
					Ez	customer request	
UPB1-b	(0~200)bar	01	D	P3	E1		

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