



# UPB5 Silicon Differential Pressure Transmitter

## Description

Based on piezo-resistive silicon technology, UPB5 differential pressure transmitter uses silicon differential pressure sensor with stainless steel isolated diaphragm as measuring elements. Made from 316L stainless steel and designed of rigid and robust construction, UPB5 differential pressure transmitter is suitable for application in harsh environment and measurement with corrosive pressure media.

This product has widely been used for measurement of differential pressure of pipeline fluids in petroleum industry, chemical industry, electric power hydrology etc.



G1/4 male thread

G1/4 female thread

LCD Display

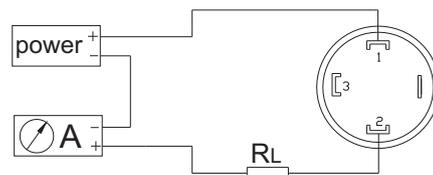
LED Display

## Features

- Reliable performance, good long term stability
- Good static pressure, good ability of anti-impact and overload pressure
- Strong reversed polarity protection and current limiting protection
- Light weight, easy installation
- Integrated stainless steel construction design, small volume

## Electrical connection

Connection	Cable Color(pin)
Power“+”:	Red(1)
Signal“+”:	Black(2)

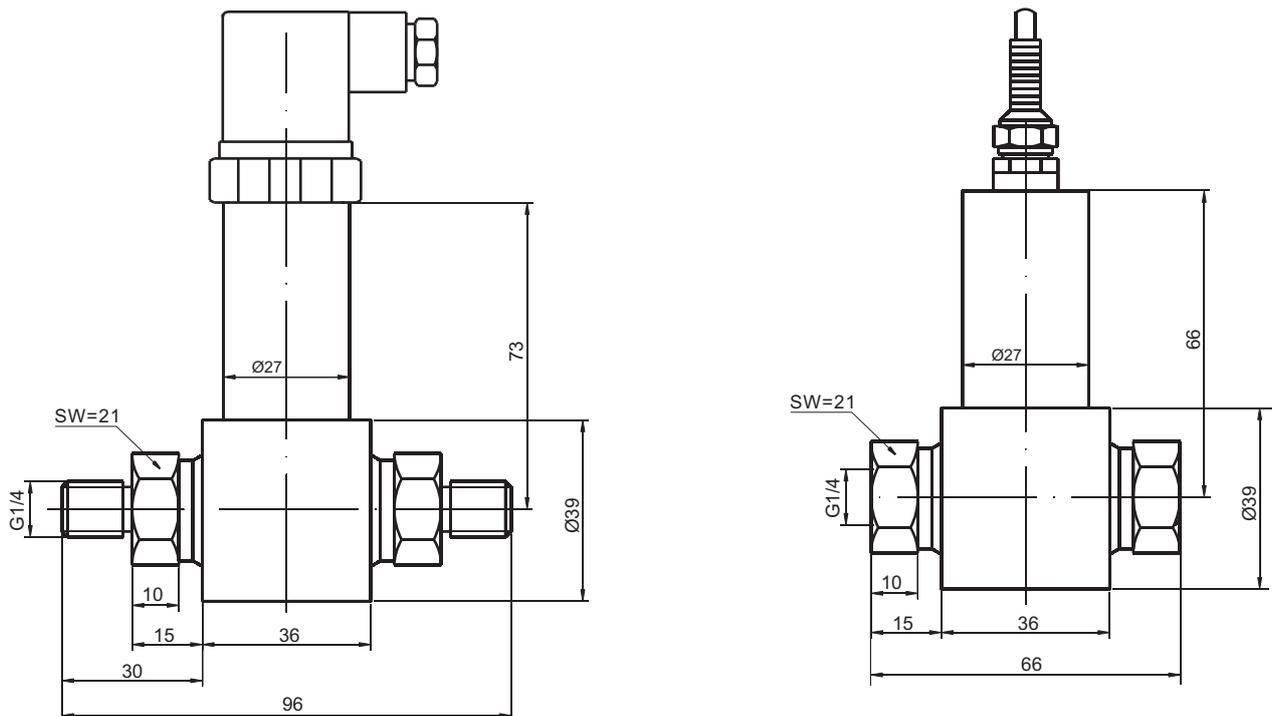


Wiring drawing of 2-wire 4~20mA output (hirschmann connector)

## Specifications

pressure medium	gas or dilute liquid compatible to stainless steel
pressure ranges	0~0.1bar...35bar
pressure type	differential(D)
overload pressure	200%FS(positive pressure side),100%FS(negative pressure side)*
system pressure	1000%FS
output signal	4~20mA, 0~5V, 0~10V, 1~5V,0.5~4.5V
accuracy	0.1%FS(range>1bar),0.25%FS(standard), 0.5%FS
system pressure effect	0.05%FS/bar
load resistance	$RL=(U-12V)/0.02A$ (4~20mA current output) U—loop voltage (V)
long-term stability	<0.2%FS/year
supply voltage	12~36VDC
compensated temperature range	-10~+70°C (0~60°C for range 0.2bar,0.35bar)
operating temperature range	-20~+100°C
storage temperature range	-40~+120°C
temperature coefficient of zero	0.2%FS/10°C
temperature coefficient of span	0.2%FS/10°C
insulation resistance	100MΩ@50VDC
process connection	G1/4 male thread or others
electrical connection	hirschmann connector or others
material of wetted part and housing	1Cr18Ni9Ti
material of pressure membrane	316L
sealing	n-Butyronitrile or fluoro-rubber sealing ring

## Dimensions





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## Ordering code

UPB5				
	range	measuring range: 0~0.1bar...35bar		
	(0~X)bar	X: actual measuring range		
		code	accuracy	
		B	0.1%FS	
		C	0.25%FS	
		D	0.5%FS	
			code	output
			O1	4~20mA
			O2	0~5V
			O4	0~10V
			Oz	customer request
			code	Others
			E1	hirschmann connector
			E2	aviation connector
			E3	3m PVC cable(lock nut)
			Ez	other electrical connection
			D1	5 digit LCD digital indicator
			D2	4 digit LED digital indicator
			Pn	G1/4 female thread
			Pa	Air faucet
			P6	M12×1 male thread
			Pz	customer request
UPB5	(0~1)bar	D	O1	E1(D1)*Pn

\*: The users determines whether to choose the options in the parenthesis option according to the working site.

\*\* : Please note the transmitter's line pressure is <200bar, and the pressure in positive & negative cavity should not exceed the required value.