



SP38M is a monosilicon pressure sensor which is designed for flow measurement. It can measure differential pressure, static pressure and temperature simultaneously. The core sensor is high precision monosilicon technology with SP38M.

The highest static pressure up to 40MPa. It's pressure ranges from 0-400mbar to 0-10 bar with accuracy 0.1%FS (full scale).

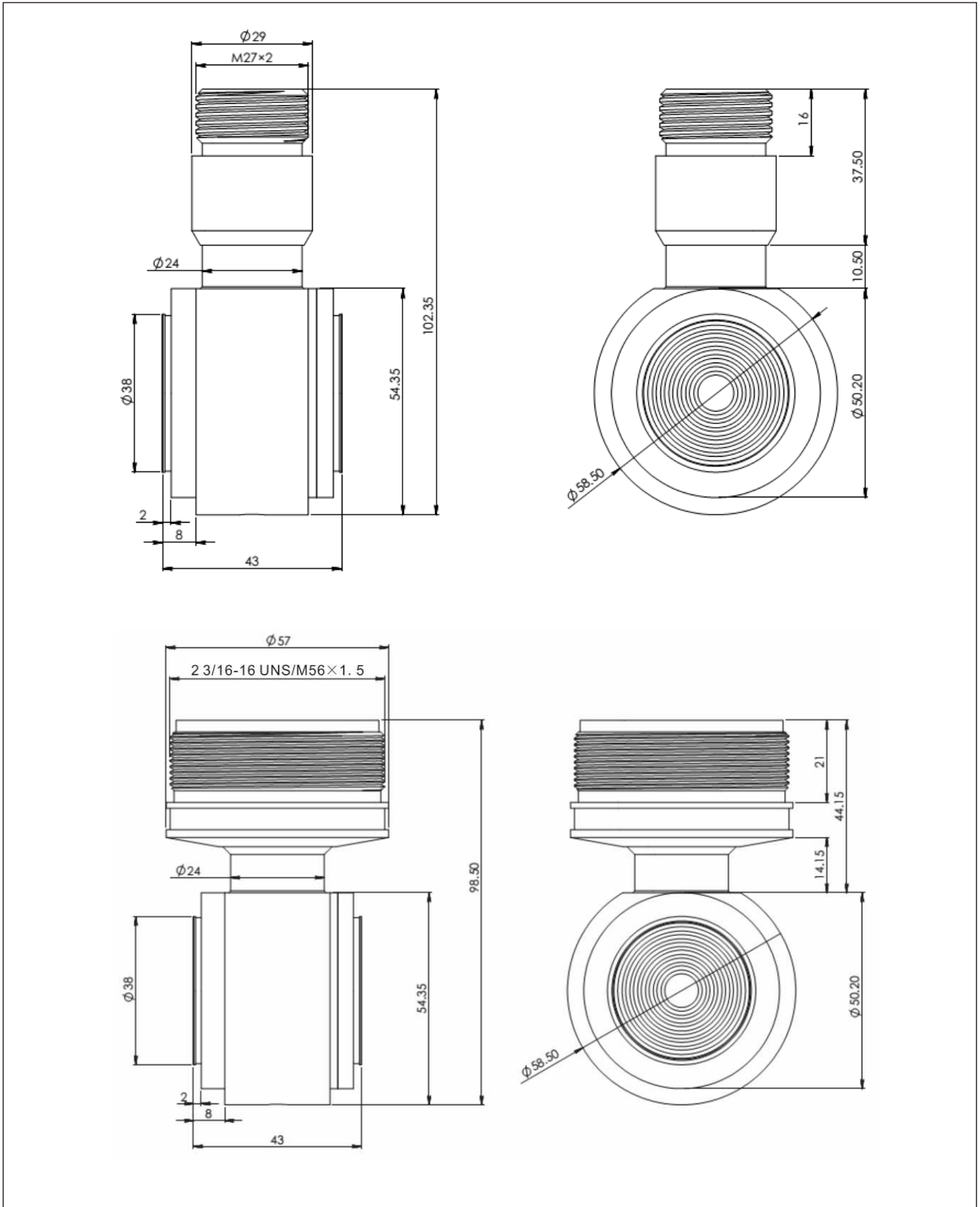
SP38M monosilicon pressure sensor is widely used in process control, flow measurement, environmental control, flow control, hydraulic and pneumatic equipment, servo valve and transmission, chemical products and chemical industry as well as medical instrument and so on.

I: Technical specifications:
Pressure range and Static Pressure

Type	Range	Code	One side overload pressure	Static pressure
SP38M	-40-40kPa	403	16MPa	40MPa
SP38M	-100-100kPa	104	16MPa	40MPa
SP38M	-250-250kPa	254	16MPa	40MPa
SP38M	-0.5-1MPa	105	16MPa	40MPa

Technical specifications		Unit	Range
Full-span output		mV	≥70(5V power supply)
Zero output		mV	±25
Accuracy(constant temperature)		%FS	0.1
Static pressure deviation		%FS/bar	≤±0.005
Stability		%FS/year	≤±0.1
Stimulation(Voltage)		VDC	5-12
Input resistance		KΩ	6±1
Output resistance		KΩ	6±1
Temperature element	Working temperature	°C	-40-125
	Voltage signal		0.7V@25°C @0.1mA
	Sensitivity		-1.6mV/°C@0.1mA
Temperature effect on zero		%F.S/°C	±0.05
Temperature effect on span		%F.S/°C	-0.25±0.05
Storage temperature		°C	-40-125
Media temperature		°C	-40-125
Working temperature		°C	-40-85

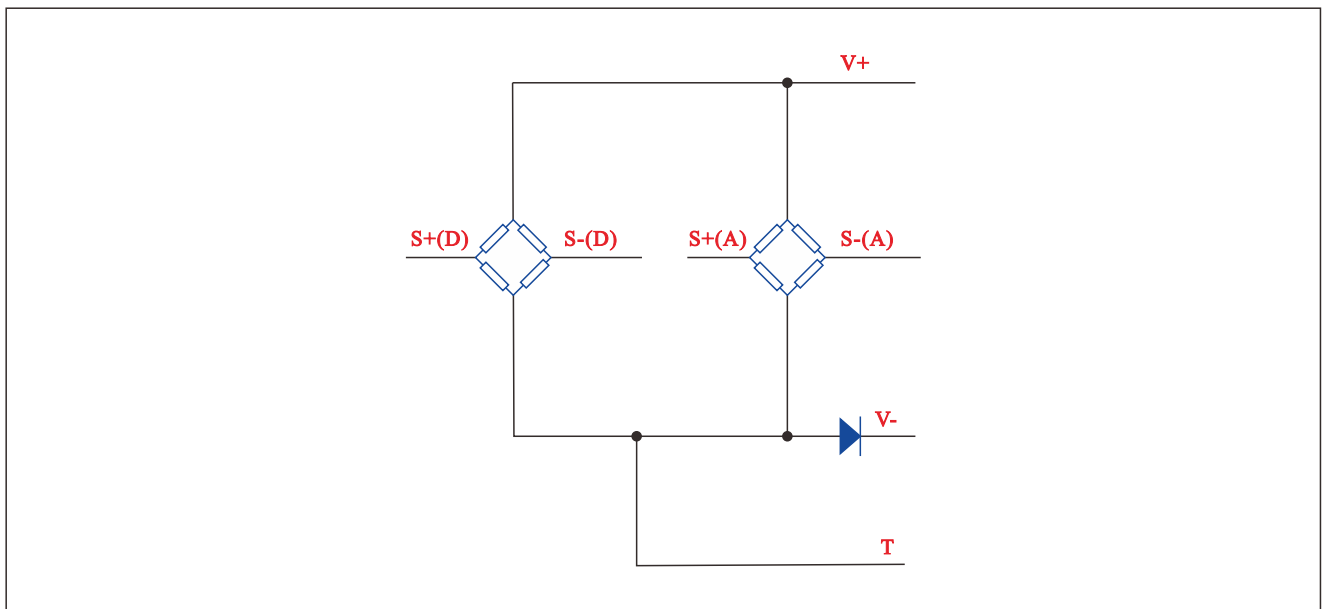
II: Dimension (mm)



III: Wiring :

Wiring color	Definition
Black	V+
Yellow	T
Red	S+(D)
Blue	S-(D)
White	V-
Orange	S+(A)
Green	S-(A)

Figure



IV. Selection table

SP38M	Monosilicom pressure sensor					
	Code	Diaphragm material				
	S	316L				
	C	Hastelloy C				
		Code	Pressure range			
		403D	40kPa			
		104D	100kPa			
		254D	250kPa			
		105D	1MPa			
			Code	Static pressure range		
			305A	3MPa		
			106A	10MPa		
			256A	25MPa		
			406A	40MPa		
			Code	Mechanical connection for housing		
			2	M27*2(M)		
			4	M56*1.5(M)		
			5	2 3/16-16UNS		
				Code	Seal	
				S	O-ring, FKM	
				Code	Electrical connection	
				N8	100mm silicone rubber soft wire	
SP38M	S	403D	106A	4	S	N8