

Introduction :

A28 flush mount sensors are based on piezoresistive silicon pressure sensors packaged in a 316L stainless steel housing. The sensing package utilizes silicon oil to transfer pressure from the 316L diaphragm to the sensing element.

It is designed for o-ring mounting where the diaphragm must not be shrouded by a weld ring or fitting. Each sensor was strictly temperature compensated for both zero and span.

Features:

- Low cost OEM
- Pressure range:0-10kPa...2.5MPa
- Wide operable temperature range -40-125°C
- Compatible with corrosive media
- Standard mounting size
- Typical output: 0-100mV

Applications:

- Process control
- Medical instruments
- Food industry



Specifications of current excitation(1.5mA, 25°C)

Parameters		Min.	Typical	Max.
Accuracy (%FS)				
Non-	10kPa		±0.40	±0.60
Linearity ¹	≥20kPa		±0.10	±0.20
Hysteresis			±0.05	±0.1
Repeatability			±0.05	±0.1
Output (mV)				
Zero ²		-2	±1	2
Span (FS)	10kPa	38	45	55
	20kPa, 40kPa	60	75	90
	≥100kPa	90	120	160
Temp. characters				
Operation Temp. (°C) ³		-40		125
Compensation Temp (°C)	10kPa	0		50
	≥20kPa	-10		70
Zero Temp. error (%FS) ⁴			±0.75	±1.0
Span Temp. error (%FS) ⁴			±0.75	±1.0
Thermal hysteresis (%FS)			0.1	
Long term Stability				
Zero (±%FS annual)			0.2	
Span (±%FS annual)			0.1	
Supply Current		0.5mA	1.5mA	2mA
Input Resistance		2kΩ		4kΩ
Output Resistance		2.5kΩ		5.5kΩ
Load Resistance⁵		5MΩ		
Insulation Resistance (100V)⁶		100MΩ		

Specifications of voltage excitation (10VDC 25°C)

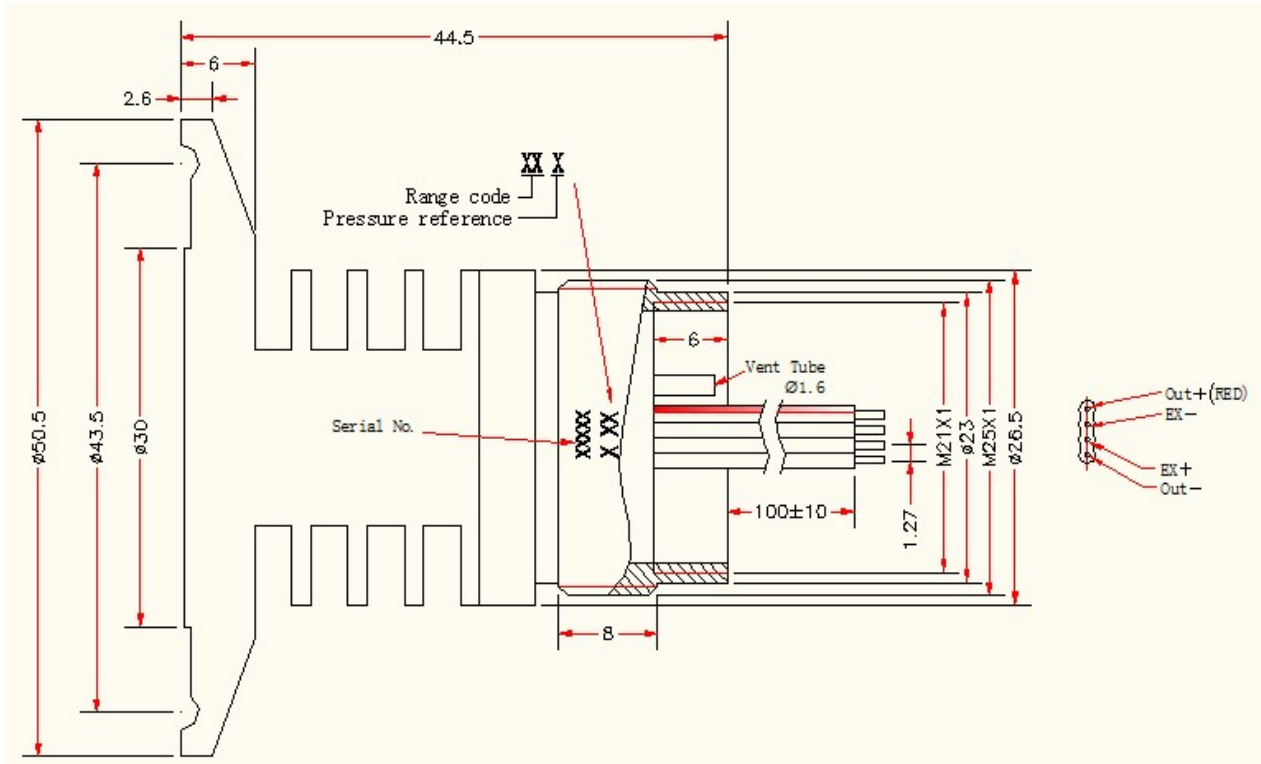
Parameters		Min.	Typical	Max.
Accuracy(%FS)				
Non-	10kPa		±0.40	±0.60
Linearity ¹	≥20kPa		±0.10	±0.20
Hysteresis			±0.05	±0.1
Repeatability			±0.05	±0.1
Output (mV)				
Zero ²		-2	±1	2
Span (FS)	10kPa	68	70±1	72
	20kPa...2.5MPa	98	100±1	102
Temp. characters				
Operation Temp. (°C) ³		-40		125
Compensation Temp (°C)	10kPa	0		50
	≥20kPa	-10		70
Zero Temp. error (%FS) ⁴			±0.75	±1.0
Span Temp. error (%FS) ⁴			±1	±1.2
Thermal hysteresis (%FS)			0.1	
Long term Stability				
Zero (±%FS annual)			0.2	
Span (±%FS annual)			0.1	
Supply Voltage			10VDC	14VDC
Input Resistance		4.5kΩ		10kΩ
Output Resistance		2.5kΩ		5.5kΩ
Load Resistance⁵		5MΩ		
Insulation Resistance(100V)⁶		100MΩ		

Pressure Range	0-10kPa...2.5MPa	
Pressure	10kPa;20kPa	10 X Rated pressure range
Overload	≥40kPa	2.5 X Rated pressure range
Pressure Media	Liquids and Gases compatible with 316L Stainless Steel	

※Remark:

1. Best fit straight line.
2. Measured at vacuum for absolute (A), ambient for gage (G).
3. Maximum temperature range for product with standard cable is -40° C to +105° C.
4. Over the compensated temperature range with respect to 25° C.
5. Load resistance to reduce measurement errors due to output loading.
6. Between case and sensing element.

Dimensions (mm) :



Ordering Information

Model	Description				
A28	Flush mount pressure sensor (2" Flang)				
	Code	Power Supply			
	C	Constant Current			
	V	Constant Voltage			
	Code	Pressure Range	Gauge	Absolute	
	10k	0-10kPa	*		
	20k	0-20kPa	*		
	40K	0-40kPa	*		
	100K	0-100kPa	*	*	
	160K	0-160kPa	*	*	
	400K	0-400kPa	*	*	
	600K	0-600kPa	*	*	
	1M	0-1MPa	*	*	
	1.6M	0-1.6MPa	*	*	
	2.5M	0-2.5MPa	*	*	
	XX	Special			
	Code	Pressure Reference			
	G	Vent Gauge Pressure (W/O vent tube as default)			
	A	Absolute Pressure			
	S	Sealed Gage			
		Code	Electrical Connection		
		2	Ribbon Cable(90mm as default)		
		X	Special		
Example:	A28	C	1M	A	2
		Current Supply	0-1MPa	Absolute	cable
					Model : A28C-1M-A2