



SH308-C Series Ceramic Capacitive Pressure Transmitter

Overview

SH308-C series ceramic capacitive pressure transmitters, using alumina ceramics Al_2O_3 (99%) as diaphragm material, are suitable for pressure measurement of corrosive gas or liquid measurement. The SH-308-C series pressure transmitter features internationally advanced precision digital temperature compensation and nonlinear correction technology. It boasts a reliable explosion-proof design and exceptional overload resistance.

Applications

- Water Supply System
- Vacuum Equipment
- Gas Compression Equipment
- Wastewater Treatment Control
- Hydraulic Machinery Equipment
- Fire Water System

Technical Specifications

Performance	
Pressure type	Gauge pressure(also negative pressure), absolute pressure
Range	0~2.5Kpa.....7Mpa
Accuracy	0.075%,0.1%
Stability	$\leq \pm 0.1\%$ URL (12 months)
Install position affect	Position affect can be corrected through zero calibration.
Temperature drift	$\leq \pm 0.01\%$ F.S/10 °C (within temperature compensation)
Response time	0.25s
Power supply affect	$\leq \pm 0.005\%$ /URL/V
Vibration affect	$\leq \pm 0.25\%$ /URL/g
Temperature compensation	-20~80 °C
Overload resistance	500% of full range

Applicable Operation Conditions

Operation temperature	Fluids Temperature (-40~80°C)
Storage temperature	-40~85°C
Humidity	$\leq 95\%$ RH

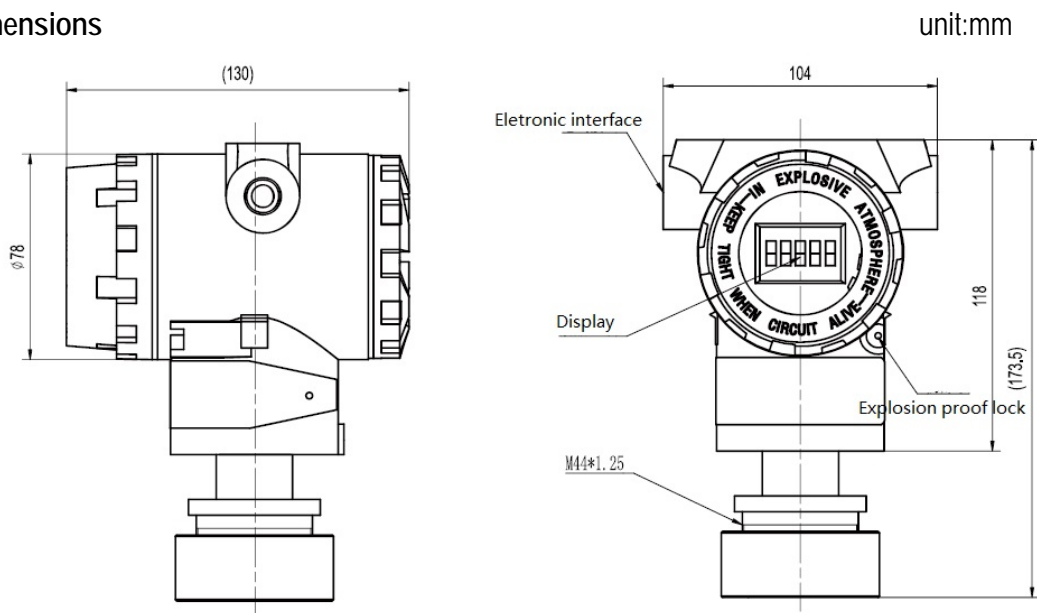
Transmitters

Output	4-20mA +HART,MODBUS,RS485
Display	LCD display
Power supply	10-32V DC
Load range	Current load resistance $\leq (U_s-U_{min})/0.026$
Diagnostic function	Output alarm current when failure occurs.
Display variables	%,current,pa,Kpa,Mpa,mbar,psi,mmH2O,etc

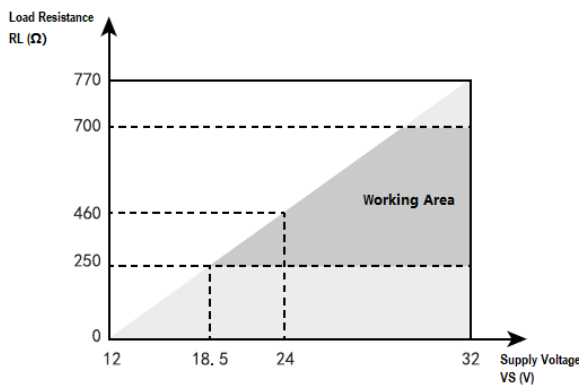
Material

Housing	Cast Aluminum Alloys (Std.),SUS304,SUS316
IP level	IP65(Std.),IP67
Sensor diaphragm material	alumina ceramics Al_2O_3
Sealing ring	Fluororubber(Std.),FFKM,EPDM
Housing sealing	Nitrile rubber
Name Plate	SUS304

Dimensions



Power supply and load resistance



Load Resistance RL Calculation Formula:
 $RL = (Vs - 12) / 0.026 \text{ (}\Omega\text{)}$
 RL-Load Resistance value (Ω)
 Vs-Power Supply Voltage (V)

Model Selection

Item	Code	Description	
Type	A	4-20mA Output	
	S	4-20mA Output & Hart Protocol	
	R	Modbus RS485	
Product	SH308	Pressure transmitter	
Sensor type	C	Ceramic capacitive pressure	
Pressure Type	A	Absolute pressure	
	G	Gauge Pressure	
	Y	Gauge pressure (also for negative pressure)	
Digital Display	3	Digital Display	
Measuring Range & Pressure type	1	0-2.5 Kpa	G/Y
	2	0-10 Kpa	G/A/Y
	3	0-20 Kpa	G/A/Y
	4	0-40 Kpa	G/Y
	6	0-100 Kpa	G/A/Y
	7	0-200 Kpa	G
	8	0-400 Kpa	G/A/Y
	10	0-1Mpa	G/Y
	11	0-2Mpa	G/Y
	12	0-4Mpa	G/Y
	13	0-7Mpa	G/Y
	Process connections	1	M20* 1.5 (M)
		2	1/2"NPT (M)
5		G1/2 (M)	
6		M42 *1.5 (M)	
7		M44 *1.25 (M)	
3		Others(please specify)	
Explosion proof		I	Intrinsically safe Exia II CT6
	E	Explosion proof Exd II CT6	
Process Connection Material	22	SUS 316L (Std.)	
	24	PP	
	25	PVDF	
Ingress protection:	P5	IP65	
	P7	IP67	
Others (options)	R	High Temp. Radiator:R1=150°C;R2=250°C;R3=350°C	
	H	H1=SUS 304 housing,H2=SUS 316 housing	