

GP-2211 Flush Diaphragm Pressure Sensor

Features

- ✓ Range: 0kPa ~ 300kPa...35MPa
- ✓ Food class oil-filled
- ✓ 316L housing
- ✓ Flat diaphragm overload protection
- ✓ G1/4 Thread with pure flat diaphragm



Introduction

GP-2211 flush diaphragm pressure sensors built-in high-quality MEMS die, filled food class oil and metal diaphragm isolate the medium and the sensor die. The sensor has been strictly aging, screening, each sensor through the temperature compensation and output correction. Its pure flat membrane rear threaded structure, easy to install and clean, suitable for applications in food, health, and other viscous media pressure measurement occasions.

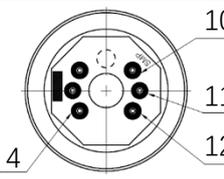
Parameters

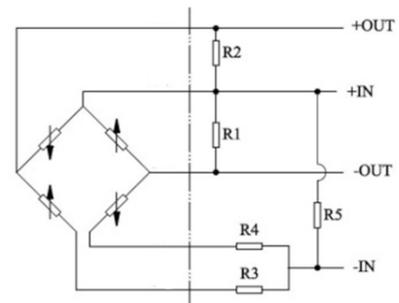
Item	Parameter
Housing	316L Stainless Steel
Connector	Golden Cover Pin / Silicon Wires
Seal Ring	FKM
Oil Material	White mineral oil (petroleum), CAS8042-47-5
Power Supply	≤2.0mA DC
Input Resistance	2.5kΩ ~ 5kΩ
Output Resistance	2.5kΩ ~ 5kΩ
Response Time	(10% ~ 90%): <1ms
Isolation	100MΩ, 100V DC
Over Pressure	2x FS
Burst Pressure	3x or 90MPa (take smaller one)
Vibration	No change at 10gRMS, (20 ~ 2000)Hz condition
Shock	100g, 11ms
Position Effect	Any angle ≤90°, Zero Drift ≤ ±0.01%FS
Standard Condition	Media temperature: 25±1°C Environment temperature: 25±1°C Humidity: 50%±10%RH Environment pressure: 86 ~ 106kPa Power supply: 1.5±0.0015mA DC

Specification

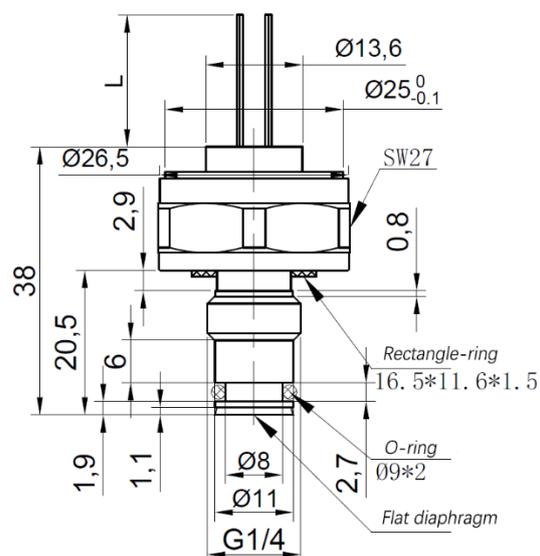
Item	Min.	Typ.	Max.	Unit
Linearity ¹		±0.15	±0.25	%FS, BFSL
Repeatability		±0.05	±0.075	%FS
Hysteresis		±0.05	±0.075	%FS
Zero Output			±2	mV DC
Full Scale Output	45	100		mV DC
Compensation Temperature	0 ~ 70			°C
Operating Temperature	-10 ~ 125			°C
Storage Temperature	-20 ~ 150			°C
Zero Temperature Error ²		±0.75	±1.0	%FS, @25°C
Full Temperature Error ²		±0.75	±1.0	%FS, @25°C
Long-term stability		±0.2		%FS/Year
Remarks:				
1. The above performance was valued under standard conditions.				
2. Temperature drift test temperature range is the compensation temperature range.				

Electrical Connection

Pin Code	Pin	Wire Color	Definition
	4	Red	OUT +
	10	Blue	OUT -
	11	Yellow	IN -
	12	Black	IN +



Dimensions (mm)



Order Guide

GP-2211		Flush Diaphragm Pressure Sensor		
	Code1	Pressure Range: 0kPa~300kPa~35MPa		
	08	0~350kPa	G, A	
	09	0~700kPa	G, A	
	10	0~1MPa	G, A	
	12	0~2MPa	G, A	
	13	0~3.5MPa	S	
	14	0~7MPa	S	
	15	0~10MPa	S	
	17	0~20MPa	S	
	18	0~35MPa	S	
		Code2	Type	
		G	Gauge	
		A	Absolute	
		S	Sealed Gauge	
			Code3	Electrical Connector
			1	Golden Covar Pin
			2	100mm Silicon Wires
GP2211	14	S	2	

Completed Sample: GP-2211-14-S-2

Tips:

1: The sensor diaphragm is extremely fragile. Any direct contact with hard objects may cause diaphragm deformation and damage to the sensor.

2: When soldering on the gold-plated Kovar leads, please use a soldering iron of 25W or less, solder at low temperature, and complete the soldering within 3 seconds to avoid heat transfer to the sensor.