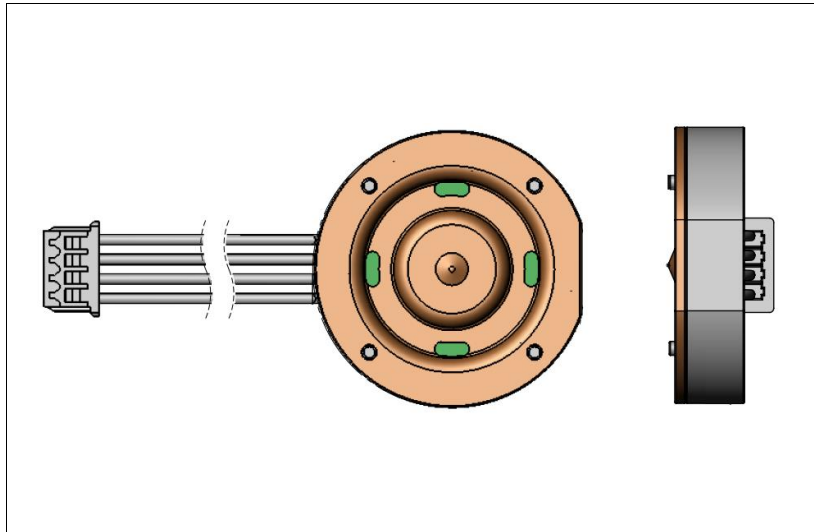


Silicon Resistance MEMS technology



Features:

- Small size
- High sensitivity
- High force overload capability
- High reliability
- mV Output: 20mV/V (Typ.)
- Low drift
- Fast response time
- Long cycle life

Description:

PS-CZ00001 is a highly reliable force sensor, providing 1% accuracy in the full-scale range at an affordable cost.

The PS-CZ00001 adopts Amphenol Sensors' unique "Highly Reliable Glass Microfusion" (HRGM) process, which is originally developed for the aviation industry. Based on the principle of micromechanical piezoresistive strain, a special glass-based silicon strain gauge is fused to a stainless-steel diaphragm at a high temperature.

Compared to conventional epoxy resins, the HRGM process can reduce the material hysteresis and creep, and increase the service life of the force sensor, enhance the long-term stability. The PS-CZ00001 is a high-sensitivity force sensor with an excellent high overload capability which is very useful when coming any unexpected force spike.

The PS-CZ00001 is a good choice for force measurement applications, like reusable or disposable medical equipment, home appliances, sports equipment and other consumable applications.

Applications:

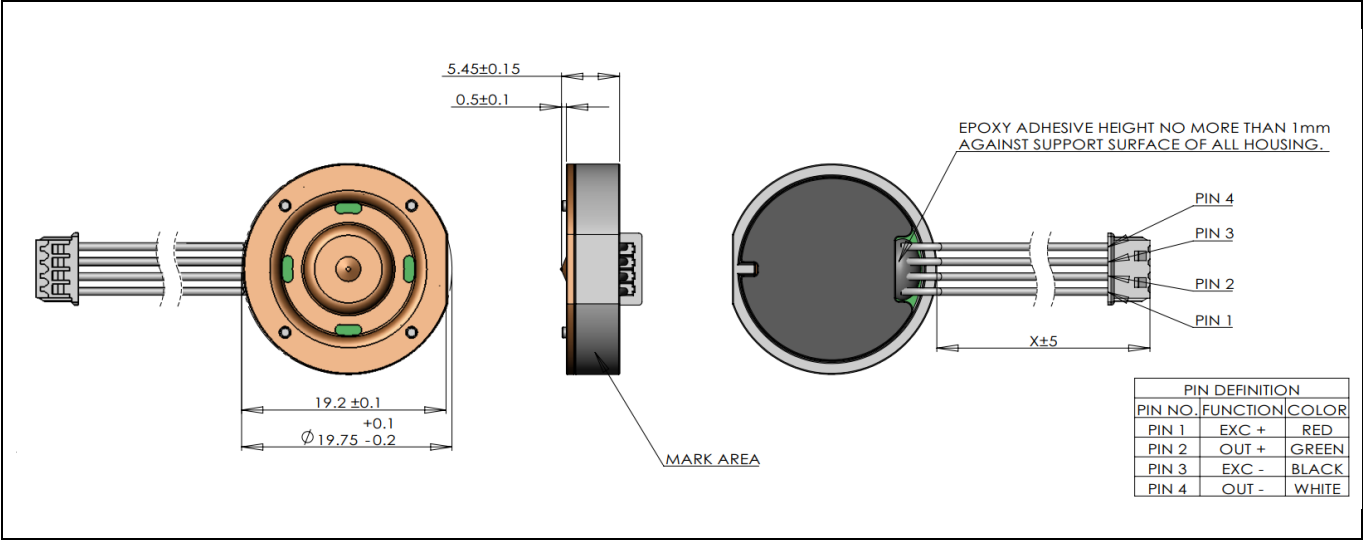
- Infusion Pump /Syringe Pump
- Massage and exercise equipment
- Physical therapy devices
- Locking force measurement
- E-tooling
- Consumable volume monitoring: Copier and vending machine
- Load monitoring (water weight + extraction efficiency) : washing machine, dryer
- Appliance position balance monitoring

Performance & Parameters:

Parameter	Unit	Minimum	Typical	Maximum	Notes
Range	lbf	0		100	
V Excitation	V	1.0	5.0	6.0	
Zero-offset	mV/V	-15		15	
FSO	mV/V	16	20	24	
Linearity	%Span	-1		1	BFSL
Hysteresis	%Span	-0.8		0.8	
TC. Zero-offset	%Span/°C	-0.05		0.05	
TC. FSO	%Span/°C	-0.05		0.05	
R insulation	MΩ	50			@500VDC
Over-force	%FS		250		
T operating	°C	0		50	
T storage	°C	-40		85	
Creep	%Span			0.5	F.S. Span in 3 min
Zero drift				0.5	Load F.S. in 3 min
Zero repeatability	%Span	-0.8		0.8	
FSO repeatability	%Span	-0.8		0.8	
Humidity	%R.H.	0		90	
Deflection	mm		0.05		Load F.S.
R input	KΩ	2.4	3	3.6	
R output	KΩ	1.76	2.2	2.64	

1 lbf=0.45 kgf =4.45 Newton

Drawing :



Order Information :

PS-CZ00001



服务热线 : 400 620 8986

www.amphenol-sensors.cn

www.amphenol-sensors.com

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