Sensor Co.,LTD

PRODUCT OVERVIEW

PRESSURE MEASUREMENT

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PF401 PF402 Weighing Pressure Sensor

Characteristics

☆Small size, light weight, easy to install
☆Good long-term stability and high precision up to 0.2%F.S
☆Compatible with various weighing instruments
☆Good shock resistance and overload capacity
☆Corrosion & high temp. resistance, small temperature drift
☆It can be installed anywhere
☆Static and dynamic pressure measurement supported

Applications

☆Forklifts
☆Excavators
☆Loaders
☆Forklifts
☆Other weighing instruments

Profiles

PF400 series weighing pressure sensor is packaged with a metal-based pressure-sensitive chip, and is designed for weighing equipment such as loaders, forklifts, forklifts, and excavators that use hydraulic loading. With an accuracy class of 0.2% FS, the pressure sensor is ideal for dynamic and static measurement tasks, weighing objects in excavator buckets or determining the weight on forklift forks, and can be used as weight measurement in trade applications.

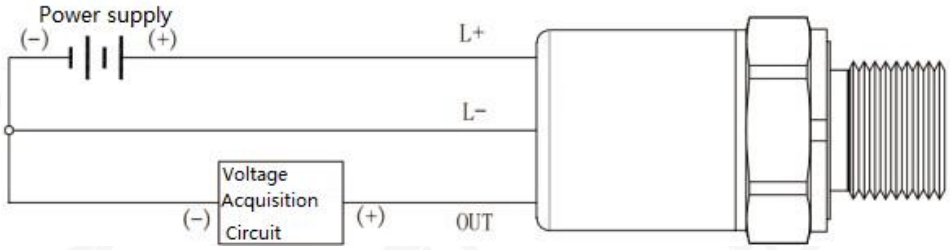
These weighing pressure sensors adopts an all-welded stainless steel compact design, which can effectively protect the sensor under harsh working conditions, with a wide range of output forms, electrical and pressure connections, and features strong shock and high temperature resistance, high reliability. It can work stably for a long time at -40~105℃, suitable for most applications.

PF400 series are IP65, IP67 rated, and have a solid internal structure design, which ensures that the sensors can work normally in a high-vibration environment.

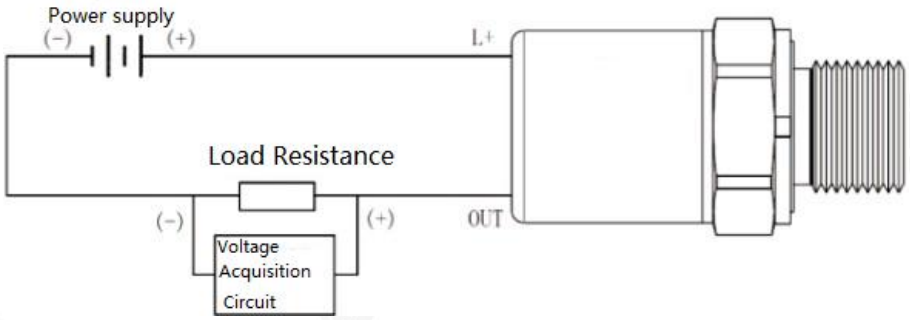
Specifications

Parameters	PF401/PF402			
Measuring range(MPa)	1-6	16-60	70	100
Overload pressure	200%	200%	150%	
Burst pressure	2000%	1000% and ≤400MPa	≤400MPa	
Accuracy	±0.2%F.S,±0.3%F.S			
Long-term stability	±0.2%F.S/year			
Output	4-20mA,mv signal			
Power Supply	8-32VDC,5VDC			
Zero point temperature drift	±0.1%F.S/10℃			
Full range temperature drift	±0.3%F.S/10℃			
Response time	≤1ms			
Durability	10^7 pressure circles			
Insulation resistance	≥1000MΩ/500VDC			
Sensitive component material	17-4PH			
Load	Current output type: RL≤50×(Vcc-8)Ω Voltage output type: RL≥2KΩ			
IP rating	IP65, IP67			
Medium temperature range	-40~+105℃			
Ambient temperature range	-40~+105℃			
Storage temperature range	-40~+105℃			
Random vibration	20g, GB/T2423.56-2006			
Sinusoidal vibration	14.1g,GB/T2423.10-2008			
Shock	50g,11ms, GB/T2423.5-1995			
EMC-electromagnetic field radiation immunity	GB/T 17626.3-2016			
EMC-electrostatic discharge immunity	GB/T 17626.2-2018			

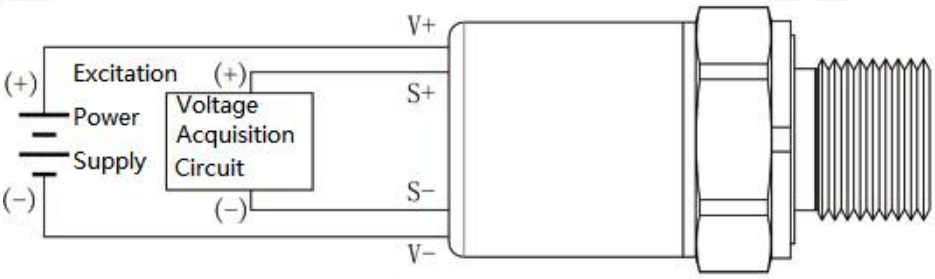
Wiring



Voltage output

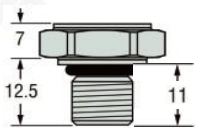
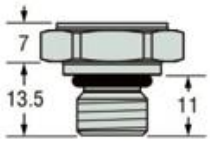
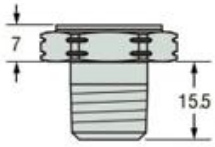
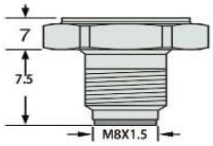
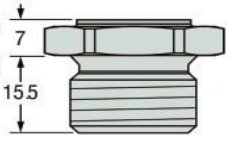
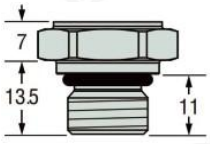
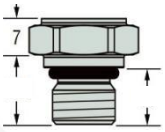


Current output

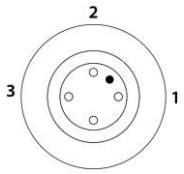
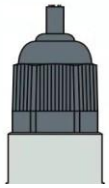
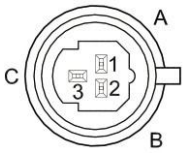
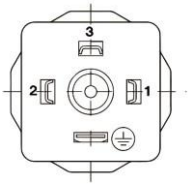
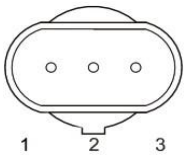


mV output

Pressure Connections

Code	G2	M3	G1	G5
Overall dimensions	 G1/4-19	 M12x1.5	 G1/8	 G1/4-19A
Code	M1	G4	M4	M2
Overall dimensions	 M8X1.25 female	 G1/2	 M14X1.5	 M10x1

Electrical Connections

Code	01		02		03	
Port form	M12X1 		Direct cable outlet 		Packard connector 	
Pin definition	Current	Voltage	Current	Voltage	Current	Voltage
	1:Power+ 2:Loop 3:/ 4:/	1:Power+ 2:Signal 3:GND 4:/	Red:Power Black:Loop	Red:Power Black:GND Blue: Signal+ White:Signal-	A: Loop B: Power + C: /	A: GND B: Power+ C:Signal
Code	**04**		**05**			
Port form	Hirschmann connector 		AMP Connector 			
Pin definition	Current	Voltage	Current	Voltage		
	1:Power 2:Loop 3: / 4: +	1:Power+ 2:Signal 3:GND 4:/	1:/ 2:Loop 3:Power+	1:Signal 2:GND 3:Power+		

Order Information

Selection / Item	401	05	A	S26	G2	166	7
Model	401=PF401(mv signal) 402=PF402(with adjustment)						
Electrical Connection	01=M12X1 02=Direct cable outlet 03=Packard connector 04=Hirschmann connector 05=AMP connector						
Output	A= 4-20mA	I=mV signal					
Power Supply	S26=8~32Vdc	S6=5VDC					
Pressure connection	G2=G1/4-19 G1=G1/8 G4=G1/2 M1=M8X1.25 female	M3=M12X1.5 G5=G1/4-19A M4=M14X1.5 M2=M10X1					
Pressure Measurement	166=16 MPa 406=40 MPa	206=20 MPa 506=50 MPa	256=25 MPa 606=60 MPa				
Accuracy	7=0.2%F.S	12=0.3%F.S					

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