

HPM133 Ceramic Piezoresistive Pressure Transmitter



Nanjing Hangjia Electronic Technology Co.,Ltd.

Overview

HPM133 ceramic pressure transmitter adopts high performance ceramic sensor and high-precision electronic regulating circuit. Ceramic pressure transmitter adopts high performance ceramic sensor, with high-precision electronic regulating circuit, assembled and produced by strict process. It is assembled and produced by strict process. The product is cost-effective and has a variety of pressure interfaces and electrical interfaces. The product is cost-effective and has a variety of pressure interfaces and electrical interfaces.

The product is well-designed, not only compact structure, but also performance. The product is well-designed, not only the structure is exquisite, but also the performance is outstanding, with professional waterproof hammer impact, good electrical performance and long-term stability. Widely used in frequency conversion pumps, complete sets of water supply, compressor equipment and compressor equipment, etc.

Features

- Excellent waterproof hammer design
- Compact shape, suitable for installation space is narrow occasions
- Multiple pressure interfaces available
- Multiple electrical outlet options
- Low cost, cost-effective
- Good long-term stability

Applications

- ❖ Water treatment
- ❖ Variable speed pumps
- ❖ Compressors
- ❖ Complete water supply

Technical Parameters

Measuring Range	
Gauge pressure	0 ~ 1...50bar
Overload	200%FS
Measuring Medium	
type	All types of liquids and gases compatible with contact materials
Output Signal/Power supply	
Standard	2 wire: 4~20mA _{DC} / V _S =10~30 V _{DC}

Standard	3 wire: 0 ~ 5V _{DC}	/ V _S =8.5~30 V _{DC}
Standard	3 wire: 0 ~ 10V _{DC}	/ V _S =12~30 V _{DC}

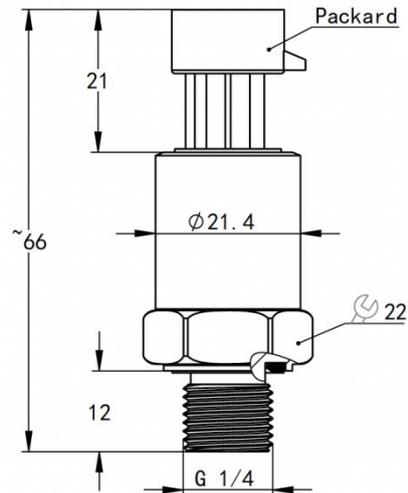
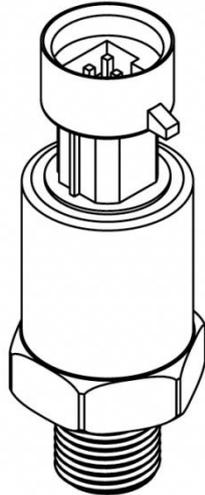
Performance	
Accuracy	±1.0%FS(liquid); ±0.5%FS(gas),@25 °C
Long-term stability	±1.0%FS/year
Environmental Conditions	
Temperature range	Ambient temperature: -20 ~ 85 °C
	Working temperature: -40 ~ 100 °C
	Storage temperature: -40 ~ 85 °C
Protection grade	IP65,DIN43650,packard connector IP66,aviation plug,cable outlet

Electrical Protection	
Short circuit protection	Permanent
Reverse polarity protection	No damage, circuit inoperative
Electromagnetic compatibility Conforms to EN 61326	Conforms to EN 61326

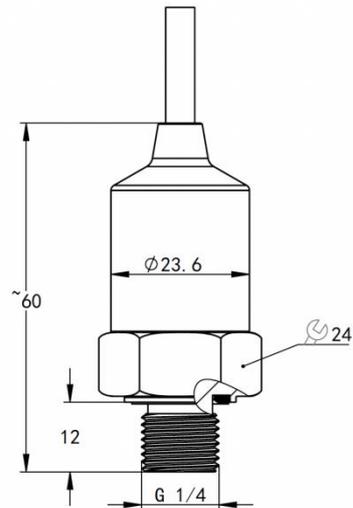
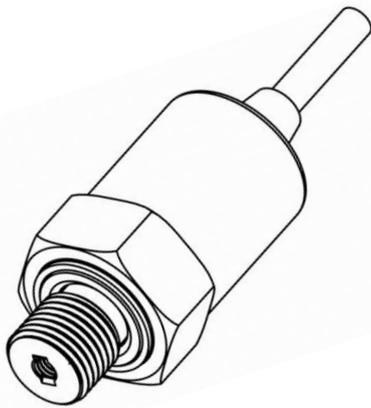
Mechanical Stability	
Vibration	10g(20~2000Hz)
Shock resistance	100g(11ms)
Insulation	
Insulation resistance	>20MΩ @500VDC
Dielectric strength	<2mA @ 500VAC 1min

Structural Drawings(unit:mm)

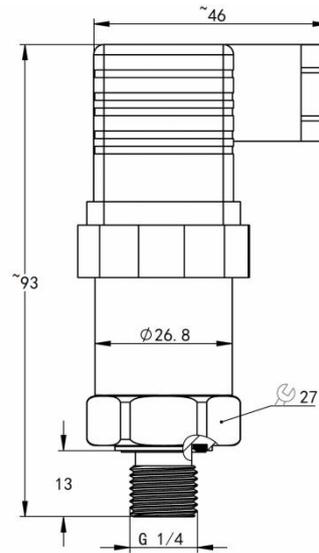
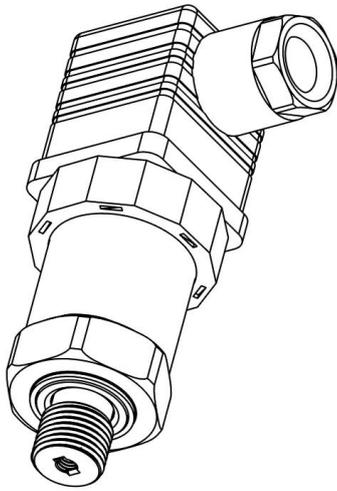
Packard connector (ordering code C4)



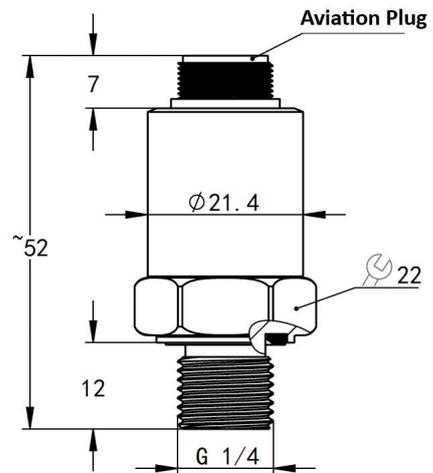
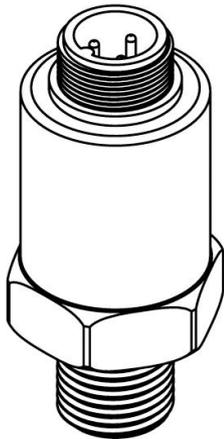
Cable outlet (ordering code C2)



DIN43650 (ordering code C1)



Aviation plug (ordering code C3)



Notes:

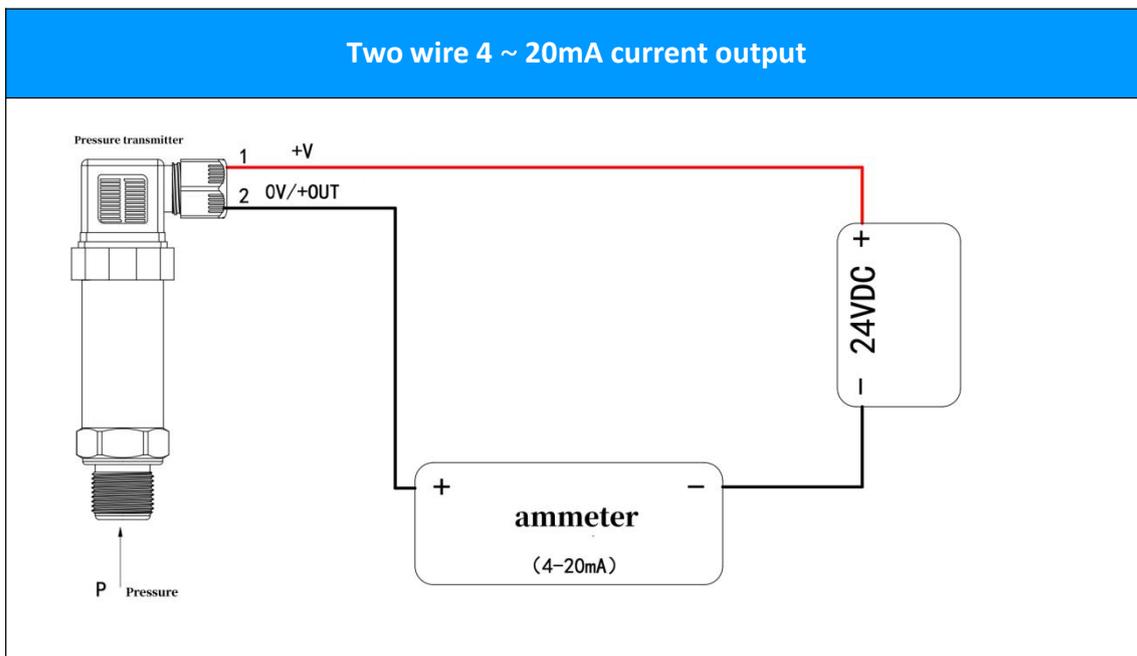
- 1.The dimensions listed in the picture may change with the update of the process
- 2.Please consult the sales engineer for other shapes and sizes.

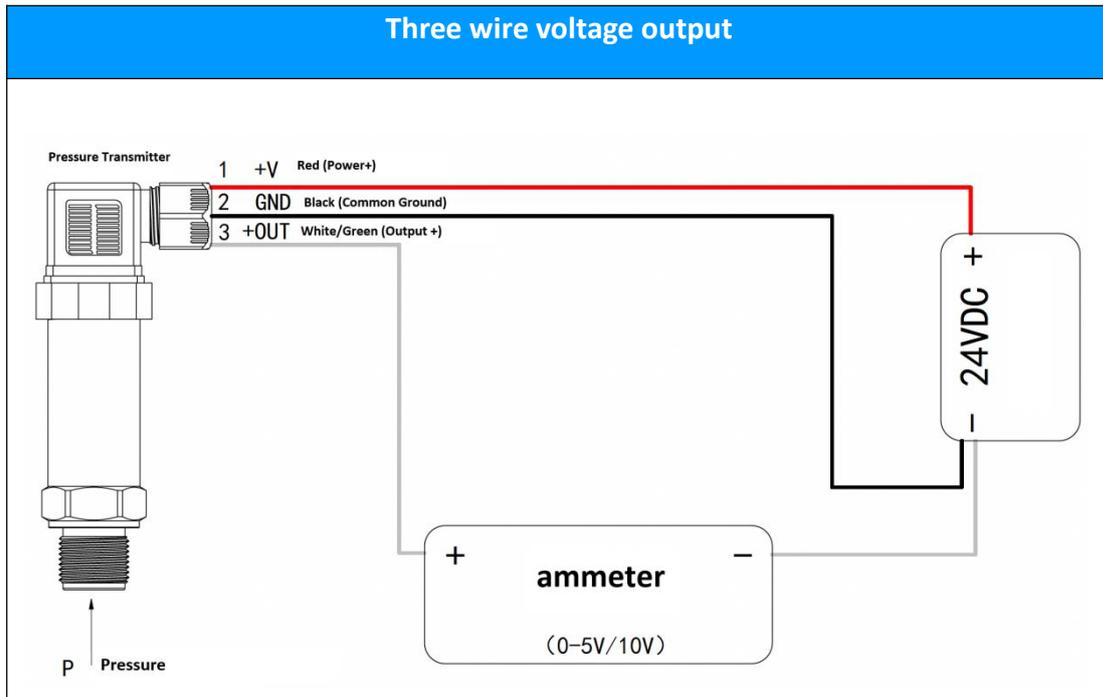
Electrical Connection

Two wire 4 ~ 20mA current output		
Signal definition	Power+ (+V)	Power- (0V/+OUT)
DIN43650	1	2
Cable outlet	red	black
Aviation plug,with cable	red	black
Packard connector,with cable	red	black

Three wire 0~5V/10V voltage output			
Signal definition	Power+(+V)	Power-(GND)	Signal+(+OUT)
DIN43650	1	2	3
Cable outlet	red	black	white or green
Aviation plug,with cable	red	black	white or green
Packard connector,with cable	red	black	white or green

Wiring Diagram





Ordering Guide

Model	Type						
HPM133	ceramic piezoresistive pressure transmitter						
	Range	Measuring Range					
	(0 ~ X)bar	fill out x directly					
		Code	Output Signal				
		B1	(4 ~ 20)mA				
		B3	(0~10)V				
		B6	(0.5~4.5)V				
		Code	Process Connection				
		P3	G1/4 Male				
		P6	R1/4 Male				
		P8	NPT1/4 Male				
		Code	Electrical Connexion				
		C1	DIN43650				
		C2	Cable outlet				
		C3	Aviation Plug				
		C4	Packard connector				
		Code	Housing Material				
		S4	304				
		S6	316L				
			Code	Sensor			
			M5	ceramic piezoresistive pressure transmitter			
			Code	Additional functions			
			V24	24V supply (default)			
			V5	5V power supply			
E.g. HPM133	(0 ~ 10)bar	B1	P3	C2	S4	M5	V24