HPM1510 Micro-fused Pressure Transmitter

Nanjing Hangjia Electronic Technology Co., LTD

Overview

HPM1510 Micro-Fused Pressure Transmitter utilizes glass micro-fusing technology with a modular design offering extensive flexible configuration options. The wetted parts are constructed from 17-4PH or 304 stainless steels, featuring an integrated pressure chamber without an oil-filled cavity or sealing ring structure, eliminating the risk of pressure leakage. The electrical circuit incorporates reverse voltage protection and output short-circuit protection.

This product is suitable for measuring various liquid or gas pressures, particularly in applications involving sewage, corrosive liquids, and pressure surges. For OEM customers requiring bulk usage, this product offers excellent cost-performance.

Features

- Oil-free, all-stainless-steel construction with no leakage risk
- Excellent overload capacity and impact resistance
- Compact and robust design
- Reverse polarity protection
- Output short-circuit protection

Technical Parameters

Measuring Range (Gauge pressure)	0~0.5MPa…250MPa
Overload Pressure	2 times of FS, maximum not exceeding 250MPa
Rupture Pressure	4 times of FS, maximum not exceeding 250MPa
Pressure Cycle Life	>1×10^7, zero-to-full-scale pressure cycles
Measuring Medium	Liquid and Gas compatible with 17-4PH or SS304
Output Signal /Power Supply	4~20mA / Vs=9~36 VDC 0~5V，1~5V /Vs=9~36 VDC 0~10V，1~10V /Vs=13~36 VDC 0.5~4.5V /Vs=5±0.25VDC I^{2}C signal /Vs =3.3 or 5VDC
Accuracy*	±0.25%FS
Long-term Stability	±0.25%FS/ year
Response time	≤2ms (Voltage output) ≤3ms (Current output) (w/o damper)
*Accuracy conforms to IEC 60770 (nonlinearity, hysteresis, repeatability)	
Compensation temperature range	0~70℃； other range on demand.
Comprehensive Precision	≤1.5%FS （In compensation temperature range）
Ambient Temperature	-40~80℃
Medium Temperature	-40~125℃
Storage Temperature	-40~80℃
Protection Grade	IP65(DIN43650) IP67(Cable outlet, M12×1)

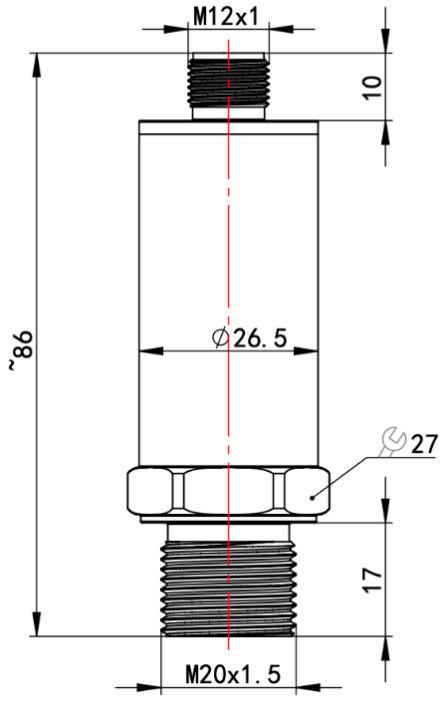
Short circuit protection	With
Reverse polarity protection	No damage, circuit does not work
Vibration	20g(20~5000Hz)
Shock resistance	50g(11ms)
Insulation resistance	>200MΩ @500VDC
Dielectric strength	<2mA 500VAC 1min

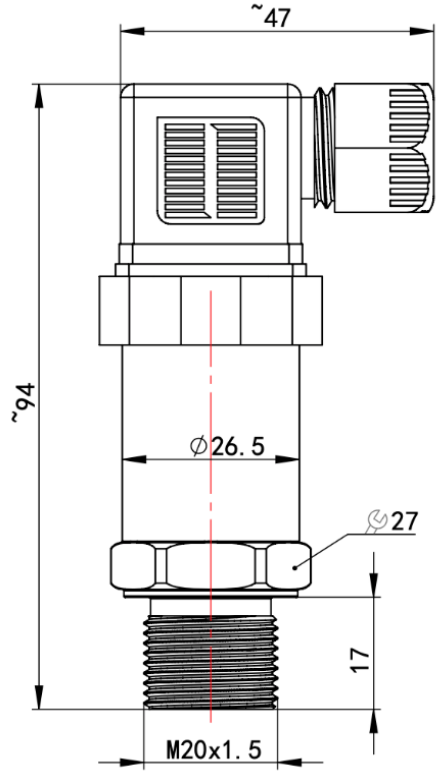
Structure Material

Code	Part	Instruction
CO	Pressure Interface	Diaphragm: 17-4PH, Thread: 304 (default)
PH		Entire unit: 17-4PH
X		Customized

Structure Drawings (unit: mm)

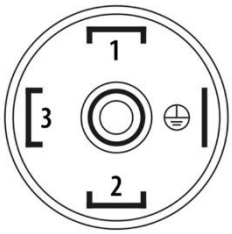
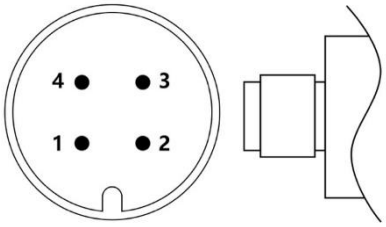
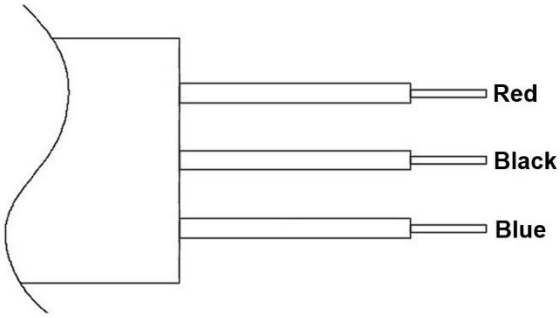
M12×1	DIN43650/Hirschmann connector





Note: The dimensions listed may vary with updates to manufacturing processes. Please consult a sales engineer for specific details.

Electrical Connection

Hirschmann DIN43650 FORM A

M12×1

Cable outlet


2 wires current output		
	Power supply+ （+V）	Power supply- （0V/+OUT）
DIN43650	1	2
M12×1	1	3
Cable outlet	RED	BLACK

3 wires voltage output			
	Power supply+ （+V）	COMMON （GND）	Output （+OUT）
DIN43650	1	2	3
M12×1	1	3	2
Cable outlet	RED	BLACK	BLUE

Ordering Guide

Model	Type							
HPM1510	Microfused Pressure Transmitter							
	Range	Measure Range						
	[0 ~ X]MPa	fill X directly						
		Code	Ouput					
		B1	(4 ~ 20)mA					
		B3	(0 ~ 10)V					
		B4	(0 ~ 5)V					
		B5	(1 ~ 5)V					
		B6	(0.5 ~ 4.5)V					
			Code	Electrical Connection				
			C1	DIN43650				
			C2	Cable outlet				
			C5	M12×1				
			C5X	M12×1 with cable				
				Code	Damper			
				N	with			
				Y	without			
					Code	Sensor		
					M9	Microfused		
						Code	Pressure Interface Material	
						CO	Diaphragm: 17-4PH Thread: 304 (default)	
						PH	Entire unit 17-4PH	
						X	Customized	
							Code	Others
							G	Gauge(Default)
							C	Composite pressure
							QF	Factory inspection report
							R1	CE certification
								Other customized
HPM1510	[0 ~ 200]MPa	B1	C1	N	M9	CO	G	

Certification Information

Factory certification	
Certification organization	CQM
Quality management system	ISO 9001:2015
Certification scope	Research, development and manufacture of pressure transmitter and temperature transmitter
Certificate No.	00223Q21711R1S

CE	
Certification organization	ECM
Certification range	Pressure Transmitter
Standard	EN61326-1:2013
	EN61326-2-3:2013
	EN61000-6-2:2005/AC:2005
	EN61000-6-4:2007+A1:2011
Register No.	3Z200408.NHET098