Overview:

The HPM180 general purpose pressure transmitter uses a high precision and highly stable diffused silicon pressure core as a sensitive element, assembled and produced through a strict The HPM180 is assembled and produced by a strict process. The built-in signal conditioning circuitry converts the pressure sensor signal into a standard current or voltage signal output, which can be directly connected to computers, control instruments, display instruments, etc. It can be directly connected to computers, control instruments, display instruments, etc. The product has a stainless steel robust housing, a variety of output signals stainless steel housing, various output signals, wide temperature compensation, strong anti-interference, good long-term stability The product is modular in design and has a wide range of output signals. The product is modular in design and has a variety of electrical The modular design of the product offers a wide range of electrical and pressure interface combinations. A wide range of options is available to meet almost any pressure measurement requirement in industry. A wide range of options is available to meet almost all pressure measurement requirements in industry.

The product adopts a modular design and has a variety of electrical interfaces and pressure interface combinations. Diverse options can meet almost all pressure measurement needs in the industrial field.

Features:

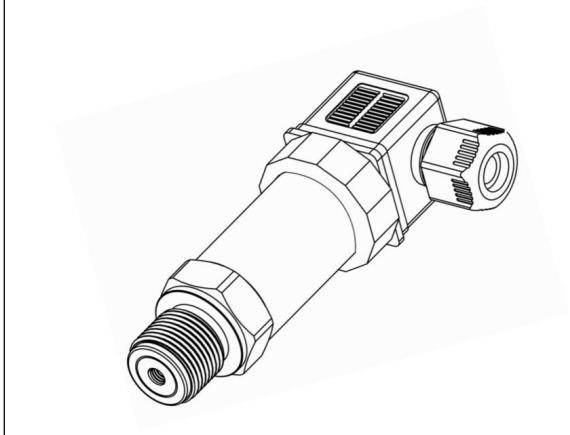
- Wide range for measuring gauge, absolute and sealed gauge pressures
- Universal use for oil, water and gas
- Various pressure interfaces available
- Various output signals available
- Wide temperature range compensation, small temperature drift
- Good long-term stability

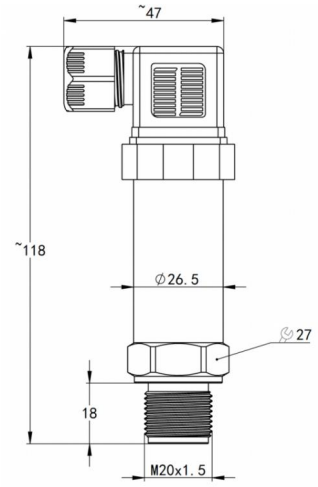
Technical Parameters:

Pressure Range(Gauge pressure)	-100kPa…0 ~ 10kPa…100MPa
Pressure Range(Absolute pressure)	0 ~ 10kPa…10MPa
Overload	1.5x of full scale
Measuring medium	various liquid, gas or steam compatible with 304 or 316L stainless steel
Output Signal	4~20mA,4~20mA+Hart, 0-5V,0-10V
Accuracy	±0.5%FS(default) ±0.2%FS (Customized)
Long-term Stability	±0.25%FS/year
Current resolution	≤0.01%
Response time	about 1ms
Boot time	≤200ms
Compensation temperature range	0 ~ 70℃ (0.5 % accuracy) -10 ~ 80℃ (0.2% accuracy) -20 ~ 85℃ (0.1% accuracy)
Temperature Coefficient of Zero	±1.0%FS/℃（Reference 25℃）
Temperature Coefficient of Full Scale	±1.0%FS/℃（Reference 25℃）
Ambient Temperature	-40 ~ 100℃
Medium Temperature	-40 ~ 125℃
Storage Temperature	-40 ~ 85℃
Protection Grade	IP65(DIN43650); IP67(Cable outlet)
Vibration	10g(20~2000Hz)
Impact resistance	100g(11ms)
Insulation resistance	>20MΩ @500VDC
Dielectric strength	<2mA @ 500VAC 1min

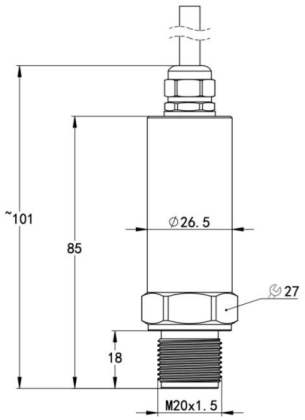
Structure Drawing (unit:mm)

Hirschmann/DIN43650

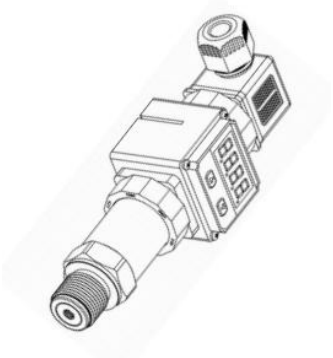


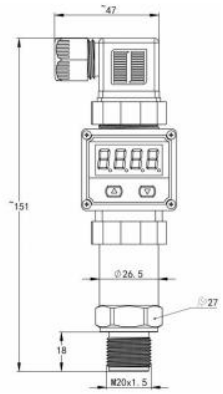


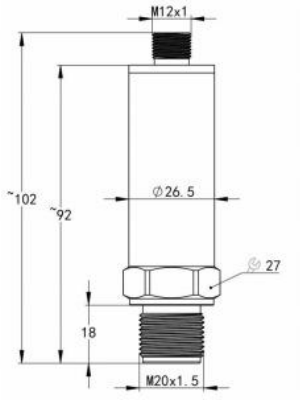
Cable outlet



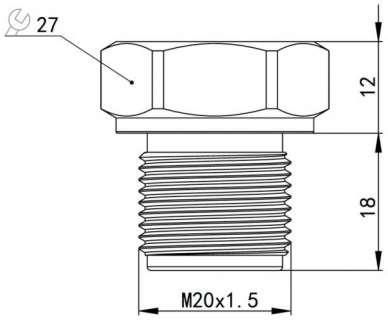
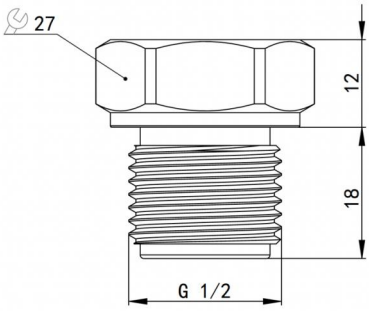
Hirschmann/DIN43650 with LED Display



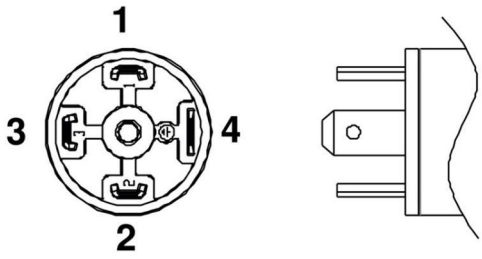
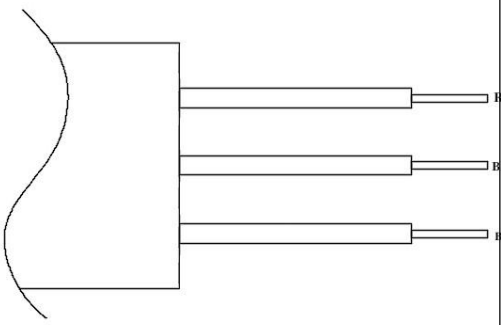


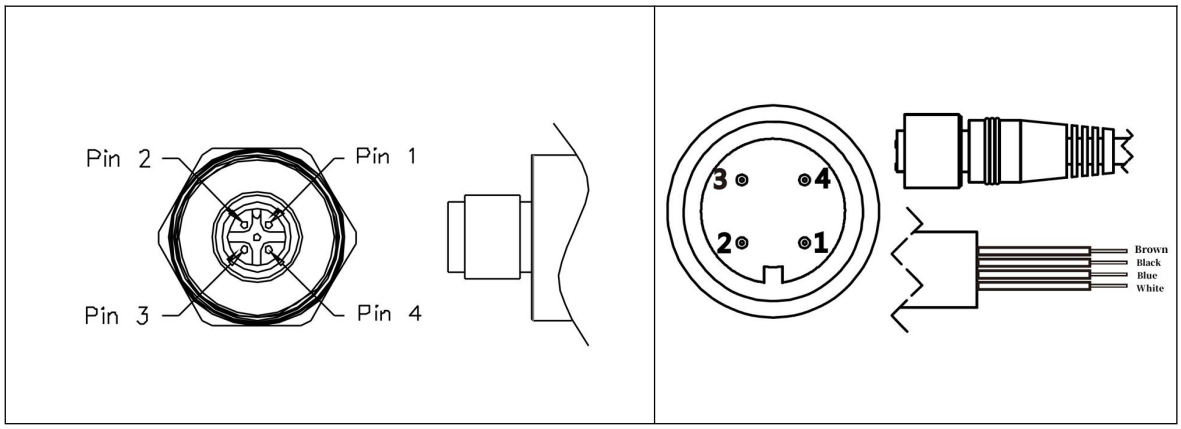
M12*1	
	

Process connection:

M20*1.5	G1/2
	

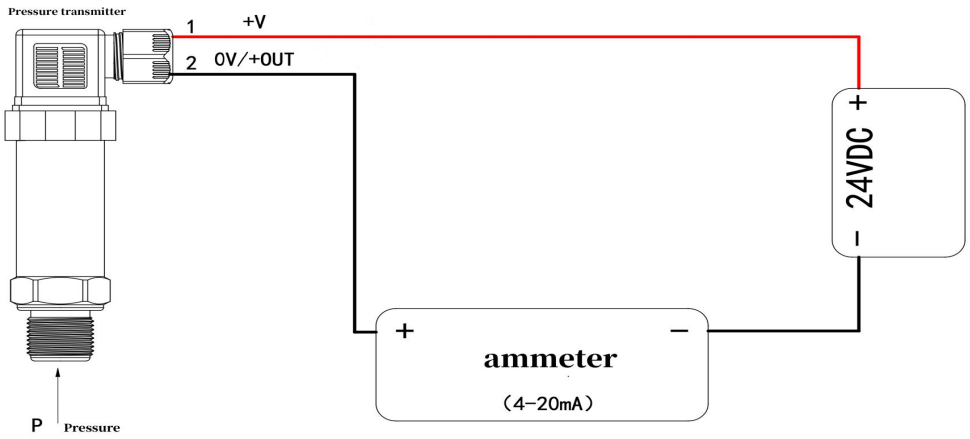
Electrical Connection:

Hirschmann/DIN43650	Cable Outlet
	
M12*1	M12*1, with cable

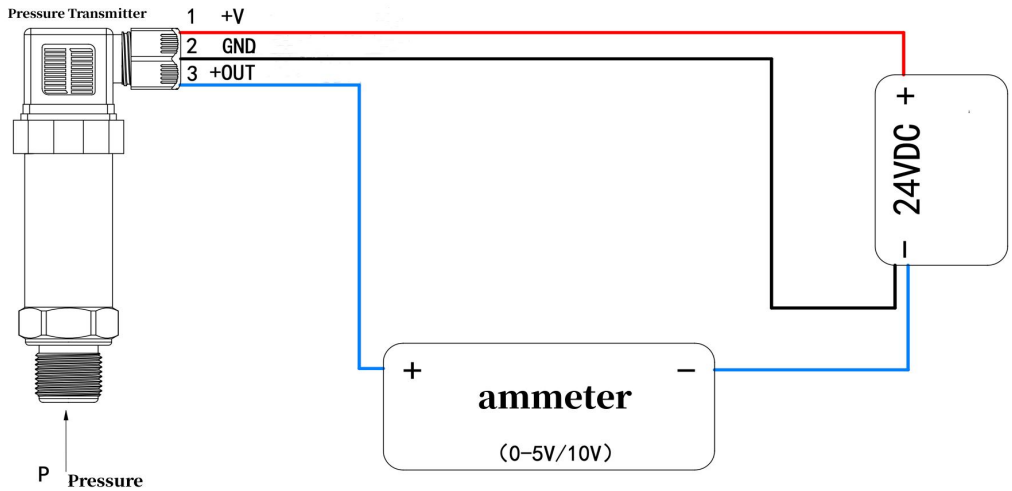


Electrical Connection Diagram:

Two-wire current



Three-wire voltage



Ordering Guide:

Model Name	Type								
HPM180	Universal Pressure Transmitter								
	Pressure	Measuring							
	(X_1 ~ X_2)kPa	Fill out X directly							
		Code	Output						
		B1	(4~20)mA						
		B7	RS485						
		B8	HART						
		B3	(0~10)V						
		B4	(0~5)V						
		B5	(1~5)V						
		B15	(1~10)V						
			Code	Power					
			V1	24VDC					
			V3	3.6V lithium battery					
				Code	Pressure				
				P1	M20×1.5				
				G12	G1/2 external				
				G14	G1/4 external				
					Code	Electrical			
					C1	Hirschmann			
					C2	Cable outlet			
					C5	M12×1			
					C5X	M12×1 with cable			
						Code	Diaphram		
						M1	316L		
						M2	Titanium		
						M3	Tantalum		
						M4	Hastelloy		
							Code	Pressure port	
							S4	304	
							S6	316L	
								Code	Additional Functions
								G	Gauge pressure(Default)
								S	Sealed gauge pressure
								A	Absolute pressure
								NB	NBR Nitrile seal (default)
								FK	FKM Viton sealing ring
								ED	EPDM sealing ring
								HB	HNBR Hydrogenated nitrile seal ring
								D1	LED display
								D2	LCD display
								J05	0.05% accuracy
								J1	0.1% accuracy
								J2	0.2%accuracy
								J3	0.3% accuracy
								J5	0.5% accuracy(Default)
EX: HPM180	(0~200)kPa	B1	V1	P1	C1	M1	S4	G NB J5	