

HR320 Series Intelligence Pressure Transmitter

Overview

HR320 series intelligence pressure transmitter uses top quality pressure components with mixed signal processing technology and unique compensation methods to realize F S digital linearity correction, full temperature digital temperature compensation to improve the precision of the transmitter. Circuit part with power and watchdog monitor improve the reliability of the whole transmitter.

Rich product series, they are widely used in pressure measurement of oil and gas industry, hydrology and water conservancy, geological prospecting, shipping industry etc.



HR3200



HR3202



HR3205



HR3208

Features

- High stable pressure sensing element;
- Digital correction;
- Factory calibration, no need of potentiometer adjustment, with high reliability
- With strong over load, anti-corrosion
- Reverse power protection, over voltage protection
- Anti-surge, electromagnetic interference

Specification

Main performance indicators	
Accuracy	$\pm 0.25\%$ (typ.) , $\pm 0.5\%$ F·S (max.)
Range	-0.1~0 ----- 0.01~100 MPa
Long-term stability	0.1%F·S/year
Overload capability	1.5 X F·S
Pressure type	Gauge pressure (atmospheric reference), absolute pressure, gauge pressure (sealed reference)
Temperature characteristics	
Compensation temperature	0~70°C
Operating temperature	-20~85°C
Storage temperature	-40~125°C
Electrical characteristics	
Power Supply	DC12 ~ 30V
Power Protection	Anti-reverse connection, over voltage protection
Output method	Two-wire system 4 ~ 20mA, 4 ~ 20mA+HART (Optional)
	Three-wire 0/1 ~ 5V/10V
Load	(U-12)/0.02 (Ω) (output)
Structural characteristics	
Measuring medium	Compatible with stainless steel and fluoro rubber
Pressure interface	M20*1.5 male, G1/2 male, or customized
Housing material	1Cr18Ni9Ti stainless steel
Diaphragm material	316L stainless steel

Cable material	Polyurethane or PVC optional
Environmental characteristics	
Protection level	IP65
Explosion-proof grade	Exia IIC T6
Insulation	100MΩ@50V
Vibration	20g, 20 ~ 5000Hz
Shock	20g, 11ms

Electrical connections

- Two-wire current output connection

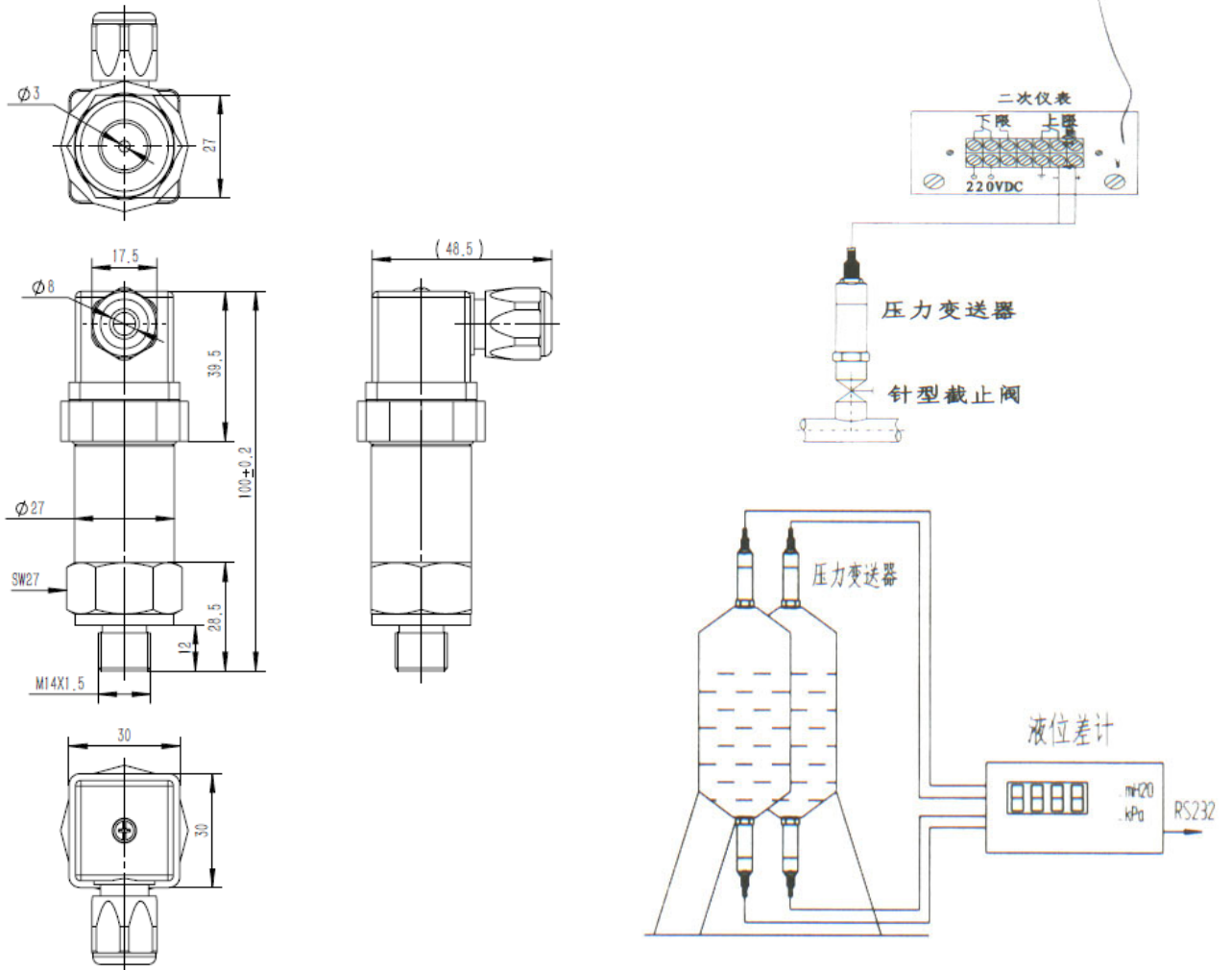
No.	Color	Definition
1	Red	+V
2	Blue	OV/OUT

- Three-wire current output connection

No.	Color	Definition
1	Red	+V
2	Blue	+OUT
3	Yellow	(GND)

Outline Construction: (Unit:mm)

Typical Application



Order Guide

HR320X	Smart Pressure Transmitter		
	Range		
	[0~X] KPa/MPa		
		Code	Output Signal

		E	4 ~ 20mA (two-wire)					
		O	4 ~ 20mA+HART (two-wire)					
		I	0 ~ 5V (three-wire)					
		J	1 ~ 5V (three-wire)					
		L	0 ~ 10V (three-wire)					
		T	Customized					
				Code	Construction Material			
					Housing	Diaphragm	Process connection	
				S1	Stainless Steel	316L	Stainless Steel	
				S2	316L	316L	316L	
				Code	Others			
					C1	M20×1.5 male, face type seal		
					C2	M20×1.5 male, waterline seal		
C3	Flush diaphragm, G1/2 male							
DN	DN25clamp connection (sanitary type)							
B1	Hirschmann plug connection							
B2	Cable connection, default cable length: 1.5m							
LM	Current limiting module							
G	Gauge pressure type (atmospheric reference)							
S	Gauge pressure type((sealed reference)							
A	Absolute pressure							
HR3202	[0 ~ 10]MPa	E	S2	C1B1G	Full model example			

Note:HR3208 housing is alum.