

PT190 Relay Output Series



Features

Pressure range: 0 ~ 3.5MPa to 0 ~ 200MPa

Accuracy: $\pm 0.5\%$ 、 $\pm 0.25\%$

Short-circuited or screw auto zero

Relay output
Special coating diaphragm corrosion resistance

Special designed circuit board for anti-jamming

PT190 seires melt pressure sensors are used in the working temperature up to 400°C, with relay output function for more safe and intelligent usage.

Specificaion

Pressure range	0 ~ 3.5MPa to 0 ~ 200MPa
Accuracy	$\pm 0.5\%$ 、 $\pm 0.25\%$
Output signal	3 WIRES 4 ~ 20mA、 3.33mV/V
Power supply	12 ~ 36Vdc (4 ~ 20mA) 、 10Vdc (3.33mV/V)
Response speed	30ms
Bridge resistance	350Ω
Diaphragm Temp.	400°C (Standard) 、 550°C (Alloyed Diaphragm)
Work Temp.	-30 ~ 85°C
E-connection	6pin 7pin 8pin
Calibration	80%FSO
Process connection	1/2-20UNF、 M14×1.5、 M18×1.5
Relay output	10% ~ 100%FSO optional
Relay supply	220Vdc, 1A
Relay accuracy	2%FSO
Thermocouple	J、 K、 E、 pt100

Relay output spec

Power Supply	Output	Relay output
On	None	Open
On	< Alarm Point	Close
On	> Alarm point	Close
On	< 3.6mA	Close



Ordering Guide

Serial No.	PT190	-	X	-	X	-	X	-	X	X	-	X	-	X	-	X	-	X	-	X	-	X	
Pressure Unit	MPa		空																				
	bar		B																				
	psi		P																				
	kg/cm ²		KG																				
Pressure Range	35bar																						
	50bar																						
	70bar																						
	100bar																						
	200bar																						
	350bar																						
	500bar																						
	700bar																						
	1000bar																						
	1400bar																						
2000bar																							
Process Connection	1/2-20UNF																						
	M14×1.5																						
	M18×1.5																						
Rigid Stem	6 inch (152mm)																						
	9 inch (229mm)																						
	12.5 inch (318mm)																						
	15 inch (381mm)																						
	18 inch (460mm)																						
Flex Stem	0 inch																						
	18 inch (460mm)																						
	24 inch (610mm)																						
	30 inch (760mm)																						
Output signal	Sheet as follows										Sx												
Thermocouple	None thermocouple																						
	J type																						
	K type																						
	E type																						
	Pt100																						
Relay output	GCX sheet as follows													GCX									
Filled Media	Standard																						
	Alloy filled(Not suitable for 20Mpa 30Mpa)																						
Accuracy	Accuracy: 0.5%																						
	Accuracy: 0.25级%																						
Diaphragm	17-4PH(Standard)																						
	Hastelloy (Anti Abration)																						
	Inconel718(corrosion)																						
	17-4PH (optional design)																						

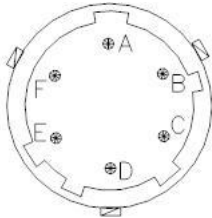


Pressure range				Code
3.5MPa	35bar	500psi	35kg/cm ²	5C
5MPa	50bar	750psi	50kg/cm ²	7.5C
7MPa	70bar	1000psi	70kg/cm ²	1M
10MPa	100bar	1500psi	100kg/cm ²	1.5M
20MPa	200bar	3000psi	200kg/cm ²	3M
35MPa	350bar	5000psi	350kg/cm ²	5M
50MPa	500bar	7500psi	500kg/cm ²	7.5M
70MPa	700bar	10000psi	700kg/cm ²	10M
100MPa	1000bar	15000psi	1000kg/cm ²	15M
140MPa	1400bar	20000psi	1400kg/cm ²	20M
200MPa	2000bar	30000psi	2000kg/cm ²	30M

Alarm %	Code
10%	GC1
20%	GC2
30%	GC3
40%	GC4
50%	GC5
60%	GC6
70%	GC7
80%	GC8
90%	GC9
100%	GC10

E-Connection

6 PIN

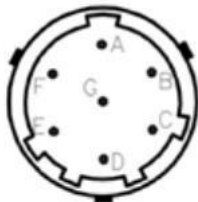


4-20mA Zero Screw (code: S1)		
6-pin	Pin	Wire Color
A	power+	red
B	signal	blac
D	power-	green
E-F	Relay output	blue-orange

3.33mV/V (code: S2)		
6-pin	Pin	Wire Color
A	signal+	red
	-	
C	power+	white
D	power-	green
E-F	Relay output	Blue-orange

4-20mA short-circuited(code: S3)		
7-pin	Pin	Wire Color
F	power+	yellow
C	signal	white
B	power-	black
D-G	Relay output	green-gray
A-E	Short circuited	red-blue

7 PIN



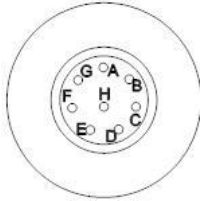
4-20mA Zero Screw (code:S4)		
7-pin	Pin	Wire Color
F	power+	yellow
C	signal	white
B	power-	black
D-G	Relay output	green-grey
A-E	80% signal output	red-blue

3.33mV/(Code: S5)		
7-pin	Pin	Wire Color
A	power+	red
B	signal+	blac
C	power-	white
D	signal+	green
E-F	Relay output	blue-yellow



E-connection

8 pin General

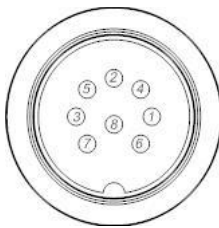


4-20mA Short circuited(code:S6)		
8-pin	Pin	Wire color
A	power+	red
B	signal	blac
C	power-	white
D-F	Auto zero	Green-
E-F	80%	yellow
G-H	Relay output	Blue-yellow Grey-brown

4-20m Azero screw(code: S7)		
8-pin	Pin	Wire color
A	power+	red
B	signal	black
C	power-	white
E-F	80%	blue-yellow
G-H	Relay output	Grey-brown

3.33mV/V (code: S8)		
8-pin	Pin	Wire color
A	power+	red
C	power-	white
D	signal+	gree
E-F	80%	Blue&yellow
G-H	Relay output	Grey-brown

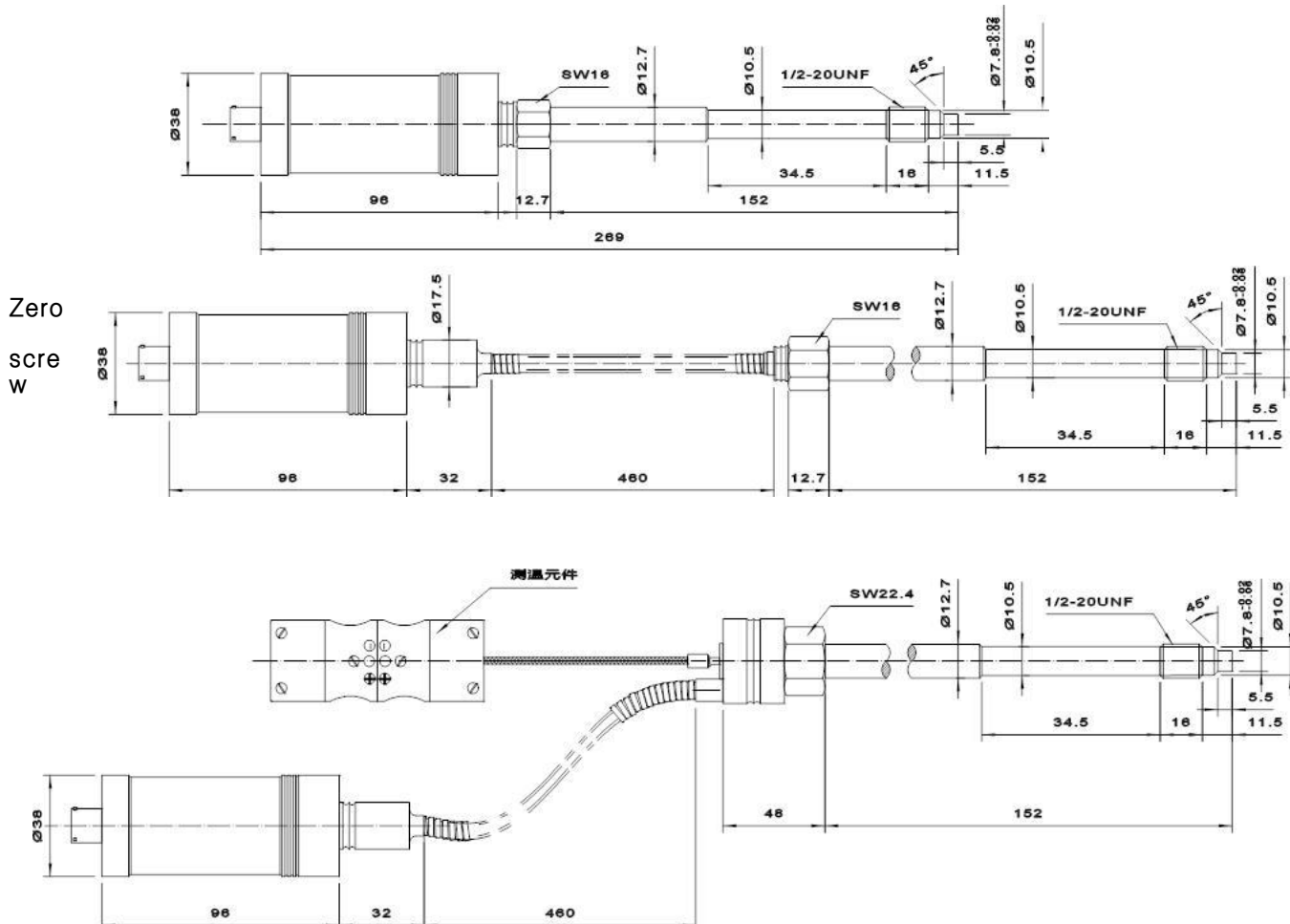
8 Pin (Binder)



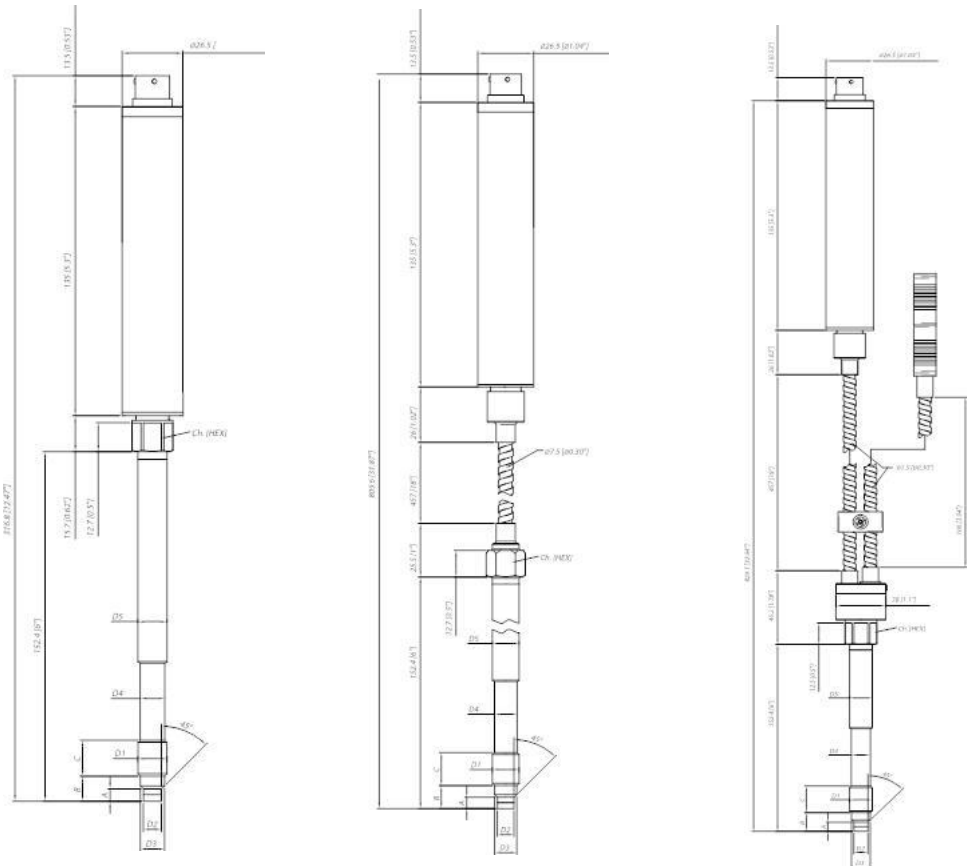
4-20mA Short Circuited(Code: S9)		
8-pin	pin	Wire Color
2	power+	red
4	signal	black
6	power-	green
7-3	relay output	blue-yellow
5-8	short circuited	grey-brown



Dimension



Short circuited



D1	1/2 - 20UNF
D2	ø7.8 -0.05
D3	ø10.5
D4	ø10.5
D5	ø12.7
A	5.5
B	11.5
C	16
Ch [Hex]	16

