

WMT-01- An Industrial RTD (Resistance Temperature Detector) with a Wallmount bracket and airflow tip is a rugged temperature sensor designed for easy installation and maintenance in industrial environments. This configuration includes IP68, NEMA 4x rated connection head and mounting bracket. The std termination head allows for use of std. terminal blocks and headmount transmitters. These RTDs are ideal for cold rooms, digester building, boiler rooms and many other applications.

Key Features

- Air flow perforated tip for stable temperature readings.
- Available with Pt100 , Ni120 Ohm or Pt1000 elements per IEC 60751 standard in Class A or Class B accuracy ratings.
- Available in 2-wire, 3-wire, or 4-wire configurations for enhanced accuracy and reduced lead wire resistance errors.
- Available with Polypropylene, Aluminum and Stainless Steel heads.
- Available with Explosion proof enclosure to use in hazardous locations.



Technical Specification

Insulation Resistance : 100 MG Ohms @ 250 vdc

Response Time : <5 Sec in circulating water @ 3ft/sec

Accuracy : As per IEC60751 (See tolerance chart)

Self Heating Error: < 0.30°F (0.17°C)

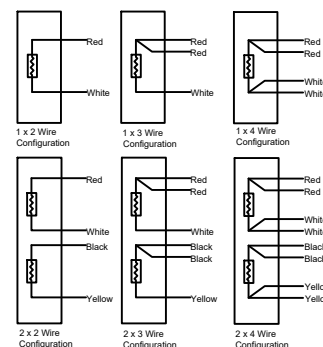
Time Constant : < 5 sec

RTD Wire Configuration

2 Wire: In 2 wire RTDs, one lead wire is connected to each wire of the RTD element. 2 Wire RTDs are an economical option for the applications where high accuracy is not required. Since there is no compensation wire, the accuracy of RTD can be affected if long lead wire is used.

3 Wire : 3 wire RTDs are the most common type of RTDs used in the industry. In 3 three-wire Rtd 1 wire is connected to the one side of the RTD element, and on the other side, 2 wires are connected to compensate for the resistance. With compensating wire, accuracy is very close to the element accuracy at the termination end.

4 wire: 4 wire RTDs are highly accurate. In 4 wire RTDs 2 wires are connected to each side of the RTD element. With additional wire on each side of the RTD element, the output at the termination is highly accurate. 4 wire RTDs are recommended where high accuracy and long lead wire is required.



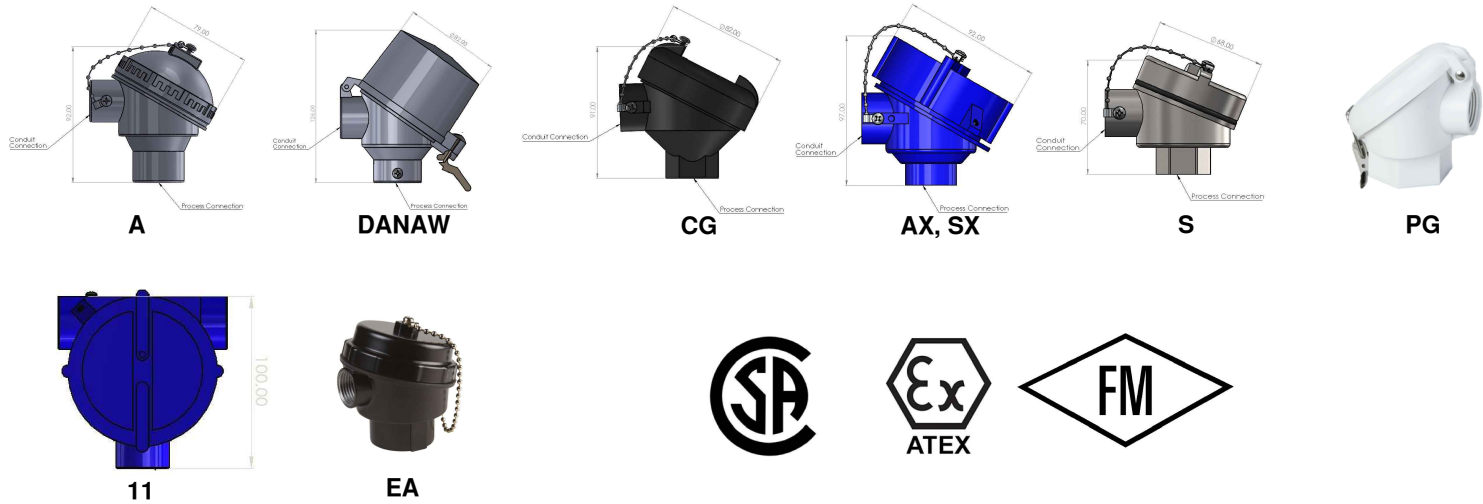
RTD Type Available				
Element Type	Pt100	Pt200	Pt1000	Ni120
Wire Wound	X	X		
Thin Film	X		X	X
Alpha Value	IEC 0.00385 JIS 0.00391	IEC 0.00385 JIS 0.00391	IEC 0.00385	0.00672

Temperature	Class B±	Class A±	Class AA± (1/3 DIN B)	Class 1/10 DIN B±
-50° C	0.55	0.25	0.19	0.060
0° C	0.30	0.15	0.10	0.030
100° C	0.80	0.35	0.27	0.070
200° C	1.30	0.55	0.44	0.120
250° C	1.55	0.65	0.53	0.160
300° C	1.80	0.75	0.61	0.220
350° C	2.05	0.85	0.70	-
400° C	2.30	0.95	0.78	-
450° C	2.55	1.05	0.87	-
500° C	2.80	1.15	0.95	-
550° C	3.05	1.25	1.04	-
600° C	3.30	1.35	1.12	-
650° C	3.55	1.45	1.21	-

Our RTD class offerings and Tolerance as per IEC60751 (pt100)

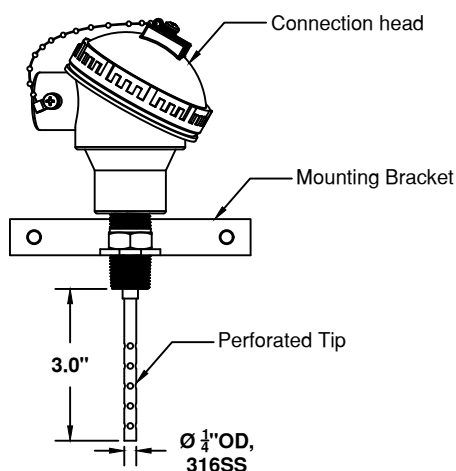
Tolerance Class	Temperature Range °C		Tolerance Values Ω	Tolerance values °C
	Wire Wound	Thin Film		
AA	-50 TO +250	0 TO +150	±0.04	± (0.1 + 0.0017 t)
A	-100 TO +450	-30 TO +300	±0.06	± (0.15 + 0.002 t)
B	-196 TO +600	-50 TO +500	±0.12	± (0.3 + 0.005 t)
C	-196 TO +600	-50 TO +600	±0.23	± (0.6 + 0.01 t)
a t = modulus of temperature in °C without regard to sign				
For 1/10 DIN B RTD is not standardize. The only accuracy defined is 1/10 of Class B accuracy at 0°C = 0.03°C				

Connection Heads



Transmitters and Displays

Model	TT-167	TT-267	TT-367	TT-467	TT-567
Transmitter					
Output					
4-20 mA	X	X			
HART®Protocol		X			
Input					
Thermocouple	K,J,R,S,T,N,E,B, Pt100, Pt1000	K,J,R,S,T,N,E,B, Pt100, Pt1000	K,J,R,S,T,N,E,B, Pt100, Pt1000	K,J,R,S,T,N,E,B, Pt100, Pt1000	K,J,R,S,T,N,E,B, Pt100, Pt1000
Approval					
Electrical		CE, CSA	CE, CSA	CE, CSA	CE, CSA
HazLoc		OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
Integral Display			X	X	X
Field Programmable		X	X	X	X



	1	2	3	4	5	6	7	8
WMTT-01								

For Example- WMTT01-01-A-S-03-LT-A-75-TB

1. RTD TYPE	
CODE	
01	Pt100 Ohm, 0.00385, Coefficient
02	Pt100 Ohm, 0.00392, Coefficient
04	Pt1000 Ohm, 0.00385 Coefficient

2. RTD ACCURACY	
CODE	
A	Class "A"

3. SENSOR ELEMENT	
CODE	
S	Single
D	Dual

4. WIRE CONFIGURATION	
CODE	
03	3 wire (Red/Red/White) STD
05	4 wire (Red/Red/White/White)

5. TEMPERATURE RANGE	
CODE	
LT	-50°C to 250°C, Thin Film

6. CONNECTION HEAD	
CODE	
A	Gen purpose Aluminum head IP68
S	SS general purpose
PG	Polypropylene
SX	SS Explosion proof
AX	Aluminum explosion proof (CSA,FM,ATEX,IECE'x approved)
06	"Fieldmount Temp Transmitter w/ Display Aluminum"
07	"Fieldmount Temp Transmitter w/ Display SS"

6. CONNECTION HEAD	
06X	"Exd Fieldmount Temp Transmitter w/ Display Aluminum"
07X	"Exd Fieldmount Temp Transmitter w/ Display SS"
09	General Purpose Transmitter w/ Loop Powered Indicator
08	GP Loop Powered Display head (AL)
10	Aluminum connection head (CCOE approved)
11	Wall mount Aluminum explosion proof head (CSA,FM,ATEX approved)
12	Wall mount SS explosion proof head (CSA,FM,ATEX approved)
DA	Dual entry Gen purpose Aluminum head
D-XD	Dual entry Aluminum explosion proof (CSA,FM,ATEX,IECE'x approved)

7. CONDUIT CONN.	
CODE	
50	1/2" NPT Plastic Cable Gland
75	3/4" NPT Plastic Cable Gland

8. TRANSMITTER STYLE	
CODE	
TB	Ceramic Terminal block
TRM	Standard 4-20 mA Transmitter
TRM-H	Standard 4-20 mA Transmitter w/ Hart
HTRM-H	High Accuracy 4-20 mA Transmitter w/ Hart (0.05% of span)
Note: Put "NA" if selected for option 06 to 09 in connection head	