



TR10-2 Industrial RTD Assembly

Spring Loaded (Head Internal)

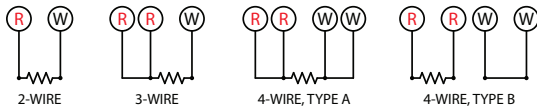
TR10-2 resistance temperature detectors (RTDs) are industrial assemblies supplied with or without a temperature transmitter. An extensive range of elements, connection heads, insertion lengths and neck lengths can be individually selected for the appropriate application.

RTDs in this series are designed to fit into a variety of thermowell configurations. Spring loading is achieved within the termination head utilizing a self-gripping spring or spring loaded DIN plate.

Replacement sensors can also be configured for this model.

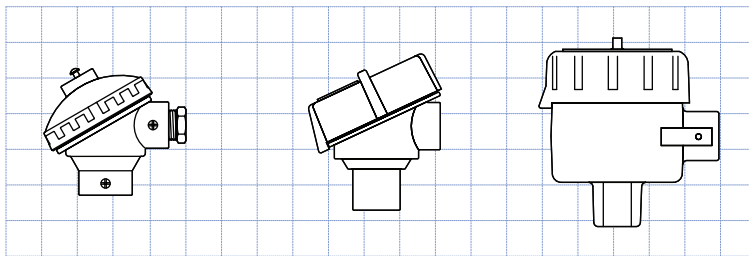
Features:

- The sensor is designed to be mounted into a thermowell.
- The assembly has electrical approvals for explosion proof hazardous locations, ingress protection and general purpose areas.
- Electrical authorities that have registered these approvals include CSA, FM and ATEX. The approvals can be with or without an attached thermowell. Our patented integral flame path fitting is required when supplied without a thermowell.
- The RTD sensor is spring-loaded ensuring a positive contact to the base of a thermowell bore.



Connection Heads

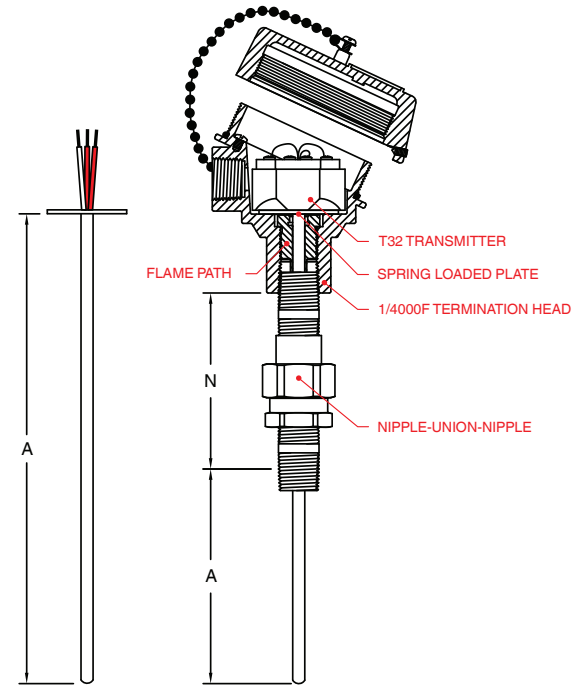
Imperial Grid 1" x 1"



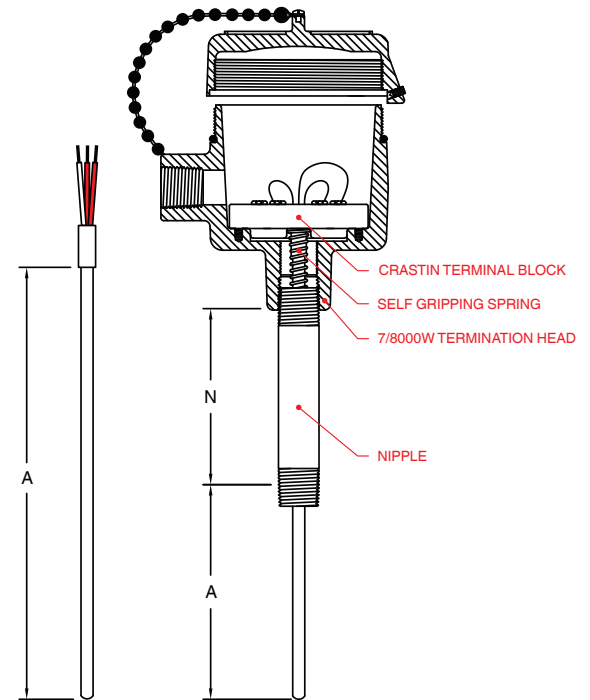
KN4-A
KN4-P

1/4000F
1/4000S

7/8000W



RTD ASSEMBLY SAMPLE
TR10-2-0-I-D-C-1AF13-6-FG-060-C-B-K-C-1-P-00600-Z



RTD ASSEMBLY SAMPLE
TR10-2-0-I-S-C-7AW13-1-EG-030-C-B-K-C-1-P-00600-Z

TR10-2-...

Create your product part number by selecting the appropriate assembly items from each of the categories below. Enter the item code into the applicable box to generate the part number.
 Note: Some configurations are unavailable. Your WIKA sales representative will notify you if you have made an incorrect selection.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Part Number
 TR10-2-X-X-X-XXXXX-X-XX-
 XXX-X-X-X-X-XXXXX-X

1 Assembly description

Code	Description
0	Industrial assembly configured
1	Industrial sensor configured (no termination head)

2 Unit of measure

Code	Description
I	Imperial (inch)
M	Metric (mm)

3 Spring design

Code	Description
S	Self gripping spring
D	Spring loaded DIN plate (required for transmitter)

4 Electrical approval

Code	Description
C	CSA Ex-proof Class I Division 1
F	FM Ex-proof Class I Division 1
J	ATEX ZONE 1 gas Ex. d IIB+H2 T6 acc. to directive 94/9/EC
Z	Without

5 Connection head

Code	Description
1AF	1/4000 F (Aluminum) with Flame Path ¹
1SF	1/4000 S (Stainless steel) with Flame Path ¹
7AF	7/8000 W (Aluminum) with Flame Path ¹
1AW	1/4000 F (Aluminum) without Flame Path
1SW	1/4000 S (Stainless steel) without Flame Path
7AW	7/8000 W (Aluminum) without Flame Path
KAW	KN4-A (Aluminum)
KPW	KN4-P (Polypropylene)
ZZZ	Without

6 Instrument x Conduit entry

Code	Description
11	1/2 NPT x 1/2 NPT
13	1/2 NPT x 3/4 NPT
12	1/2 NPT x M20x1.5
31	3/4 NPT x 1/2 NPT (reducer)
33	3/4 NPT x 3/4 NPT
32	3/4 NPT x M20x1.5
ZZ	Without

7 Terminal block / Transmitter

Code	Description
1	Crastin terminal block
2	Ceramic terminal block
5	T15, Digital transmitter, 4...20mA, universally programmable
6	T32, Digital transmitter, HART®, universally programmable
9	T53, Fieldbus transmitter, FOUNDATION Fieldbus, PROFIBUS® PA
B	T91.10, Analogue transmitter, fixed measuring range
Y	Without

8 Neck extension

Code	Description
FG	Nipple-Union-Nipple - Galvanized steel
EG	Nipple - Galvanized steel
UG	Nipple-Union (protection tube only) - Galvanized steel
FS	Nipple-Union-Nipple - Stainless steel
ES	Nipple - Stainless steel
US	Nipple-Union (protection tube only) - Stainless steel
BS	Nipple-Union-O-ring Seal Bushing - Stainless steel ³
ZZ	Without

9 N-Dimension (N) - Neck Extension Length

Code	Description
***	N-Dimension in units (e.g. 6.0" = 060, 150 mm = 150) Up to 12.0" (300 mm) Use Increments of 1.0" (25 mm)
ZZZ	Without

10 RTD Sensor

Code	Description
D	Pt100, class B (IEC 60751)
C	Pt100, class A (IEC 60751)
F	Pt100, 1/10 DIN of class B at 0°C
E	Pt10, class A (IEC 60751)
A	Cu10, class B
B	Ni120, class B
K	Pt1000, class B (IEC 60751)
J	Pt1000, class A (IEC 60751)
M	Pt100, class AA (IEC 60751)

11 Wiring configuration

Code	Description
A	Single 2-wire
B	Single 3-wire
C	Single 4-wire
D	Single 4B-wire
E	Dual 2-wire
F	Dual 3-wire
G	Dual 4-wire
H	Dual 4B-wire

Notes:

- ¹Flame path required for Explosion Proof assemblies not assembled to WIKA thermowell.
- ²See Data Sheet CERT.31 for certificate options and details.
- ³Rated to 100 psi @ 86°C, hydrostatic tested in H₂O

12 Temperature range

Code	Description
K	-50...+250 °C, thin film
A	-50...+500 °C, thin film
M	-196...+250 °C, wire wound
T	-196...+450 °C, wire wound
H	-196...+600 °C, wire wound
Q	0...+750 °C, wire wound
G	0...+150 °C, thin film

13 Tip Construction

Code	Description
C	General Purpose (Default)

14 Sensor diameter

Code	Description
1	1/4 inch / 0.250 inch (6.35 mm)
D	6.0 mm (0.235 inch)

15 Sheath material

Code	Description
P	Stainless steel 316 / 316 L (1.4401 / 1.4435)
J	Inconel® 600 (2.4816)

16 A-Dimension (A) - Sensor Insertion Length

Code	Description
****	Please specify (e.g. 84 mm = 00084) (e.g. 9.5 inch = 00950)

17 Certificates

Code	Description
1	Yes ²
Z	Without

Replacement Sensor 'A'-Dim (MI Cable)

Code	Description	Replacement Sensor 'A'-Dim (Tubing)
	Self gripping spring without Flame Path	'A'+N'+1 7/8"
	Self gripping spring with Flame Path	'A'+N'+2 3/8"
	Spring loaded plate without Flame Path	'A'+N'+1 7/8"
	Spring loaded plate with Flame Path	'A'+N'+1 7/8"

Replacement Sensor 'A'-Dim (Tubing)

Code	Description	Replacement Sensor 'A'-Dim (Tubing)
	Self gripping spring without Flame Path	'A'+N'+2 7/8"
	Self gripping spring with Flame Path	'A'+N'+3 3/8"
	Spring loaded plate without Flame Path	'A'+N'+2 7/8"
	Spring loaded plate with Flame Path	'A'+N'+2 7/8"