TR10-2 Industrial RTD Assembly

Spring Loaded (Head Internal)

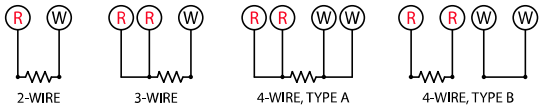
TR10-2 resistance temperature detectors (RTDs) are industrial assemblies supplied with or without a temperature transmitter. An extensive range of elements, connection heads, insertion lengths and neck lengths can be individually selected for the appropriate application.

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

Replacement sensors can also be configured for this model.

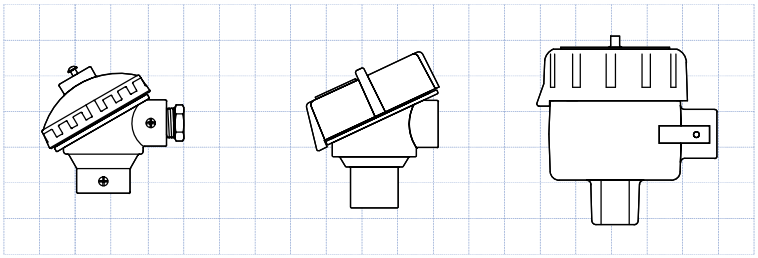
Features:

- 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

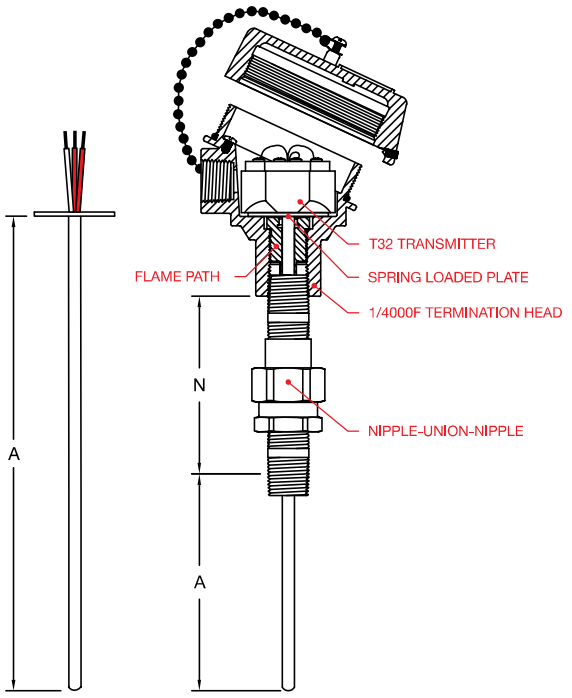
Imperial Grid 1" x 1"



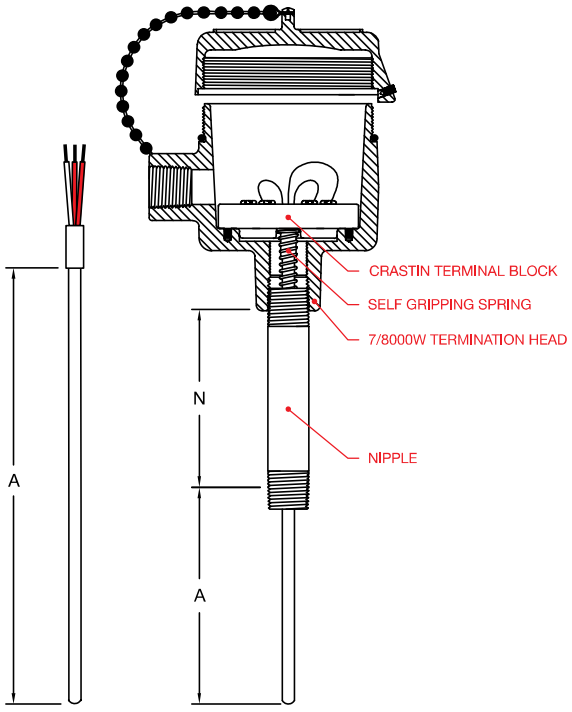
KN4-A
KN4-P

1/4000F
1/4000S

7/8000W



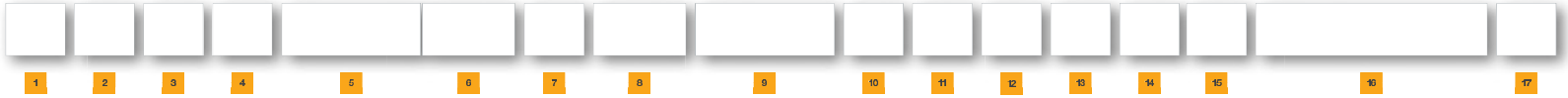
RTD ASSEMBLY SAMPLE
TR10-2-0-I-D-C-1AF13-6-FG-060-C-B-K-C-1-P-00600-Z



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.



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

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

2	Unit of measure
I	Imperial (inch)
M	Metric (mm)

3	Spring design
S	Self gripping spring
D	Spring loaded DIN plate (required for transmitter)

4	Electrical approval
C	CSA Ex-proof Class I Division 1
F	FM Ex-proof Class I Division 1
J	EEx-d (ATEX) acc. to directive 94/9/EC
Z	Without

5	Connection head
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
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
1	Crastin terminal block
2	Ceramic terminal block
3	T12, Digital transmitter, universally progammable
8	T19, Analogue transmitter, configurable measuring ranges (bridges)
4	T24, Analogue transmitter for Pt100, PC-configurable
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
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-Oil Seal Bushing - *Stainless steel*
Z	Without

9	N-Dimension (N) - Neck Extension Length
***	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
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)
I	Pt100, class AA (IEC 60751)

11	Wiring configuration
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:

[1]Flame path required for Explosion Proof assemblies not assembled to WIKA thermowell.
[2]See Data Sheet CERT.31 for certificate options and details.

12	Temperature range
K	-50...+250 °C, thin film
A	-50...+500 °C, thin film
M	-200...+250 °C, wire wound
T	-200...+450 °C, wire wound
H	-200...+600 °C, wire wound
L	-20...+750 °C, thin film
B	-50...+750 °C, wire wound
G	0...+150 °C, thin film

13	Tip Construction
C	General Purpose (Default)

14	Sensor diameter
1	1/4 inch / 0.250 inch (6.35 mm)
D	6.0 mm (0.235 Inch)

15	Sheath material
P	Stainless steel 316 / 316 L (1.4401 / 1.4435)
J	Inconel® 600 (2.4816)

16	A-Dimension (A) - Sensor Insertion Length
*****	Please specify (e.g. 84 mm = 00084) (e.g. 9.5 inch = 00950)

17	Certificates
1	Yes[2]
Z	Without

Replacement Sensor 'A'-Dimension	
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"