TR10-4 Industrial RTD Assembly

**Spring Loaded (Neck Extension External)**

TR10-4 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.

Spring loading is achieved utilizing a spring loaded bushing as or as part of the neck extension. The spring loaded bushing can be combined with a nipple and union for ease of installation. An oil seal bushing with o-ring is also available for direct mount into the process.

Replacement sensors can also be configured for this model.

**Features:**

- The sensor is designed to be mounted into a thermowell or directly into the process (oil seal bushing).
- 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 must be with an attached WIKA thermowell.
- The RTD sensor is spring-loaded ensuring a positive contact to the required location.

**Connection Heads**

Imperial Grid 1" x 1"

- 2-WIRE
- 3-WIRE
- 4-WIRE, TYPE A
- 4-WIRE, TYPE B
- 1/4000F TERMINATION HEAD
- 7/8000W TERMINATION HEAD
- SPRING LOADED BUSHING
- CRASTIN TERMINAL BLOCK
- NIPPLE-UNION-SPRING LOADED BUSHING WITH OIL SEAL O-RING
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.

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<th>Part Number</th>
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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 **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

4 **Connection head**
   - 1AW 1/4000 F (Aluminum)
   - 1SW 1/4000 S (Stainless steel)
   - 7AW 7/8000 W (Aluminum)
   - KAW KN4-A (Aluminum)
   - KPW KN4-P (Polypropylene)
   - ZZZ Without

5 **Instrument x Conduit entry**
   - 1 1/2 NPT x 1/2 NPT
   - 3 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

6 **Terminal block / Transmitter**
   - 1 Crastin terminal block
   - 2 Ceramic terminal block
   - 3 T12, Digital transmitter, universally programmable
   - 8 T19, Analogue transmitter, configurable measuring ranges (bridges)
   - 4 T24, Analogue transmitter for Pt100, PC-configurable
   - 6 T32, Digital transmitter, HART®, universally programmable
   - 9 T33, Fieldbus transmitter, FOUNDATION Fieldbus, PROFIBUS® PA
   - T91.10, Analogue transmitter, fixed measuring range
   - B Without

7 **Neck extension**
   - **SL** Spring loaded bushing without oil seal (SS)
   - **OS** Spring loaded bushing with oil seal (SS)
   - **SU** Spring loaded bushing-Union-Nipple (SS)
   - **OU** Nipple-Union-Spring loaded bushing with oil seal (SS)

8 **N-Dimension (N) - Neck Extension Length**
   - 010 1.0 inch (25 mm) - Standard for Bushings only (no union)
   - 030 3.0 inch (76 mm)
   - 040 4.0 inch (102 mm)
   - 050 5.0 Inch (127 mm) - Standard for Union-Nipple
   - 060 6.0 inch (152 mm)
   - 080 8.0 Inch (204 mm)

9 **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** Pt100, class A (IEC 60751)
   - **J** Pt1000, class A (IEC 60751)
   - **I** Pt100, class AA (IEC 60751)

10 **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

11 **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
   - **Q** 0...+750 °C, wire wound
   - **G** 0...+150 °C, thin film

12 **Tip Construction**
   - **C** General Purpose
   - **F** Fast response (copper tip)

13 **Sensor diameter**
   - 1 1/4 inch / 0.250 inch (6.35 mm)
   - D 6.0 mm (0.236 Inch)

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

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

16 **Certificates**
   - 1 Yes
   - Z Without

Notes:
1See Data Sheet CERT.31 for certificate options and details.