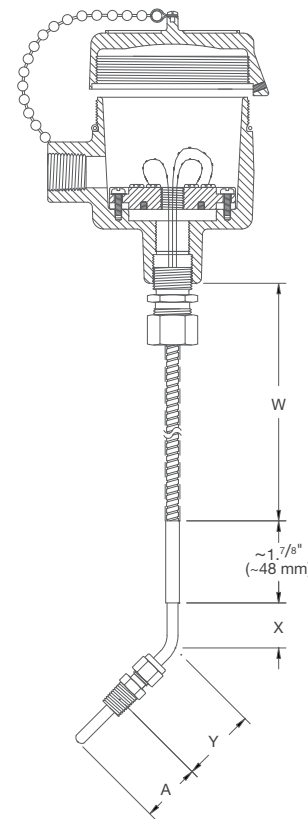


## TR15 Remote Mount Industrial RTD Assembly

TR15 series resistance temperature detectors (RTDs) are remote mounted industrial assemblies supplied with or without a temperature transmitter. They are designed for applications where direct mounting is inaccessible, where there is excessive radiated or conducted heat, or applications where high vibrations exist.

An extensive range of elements, connection heads, insertion lengths and process connections can be individually selected for the appropriate application. Replacement sensors can also be configured for this model.

RTDs in this series can be inserted directly into a process or combined with a variety of thermowell designs.



### Applications:

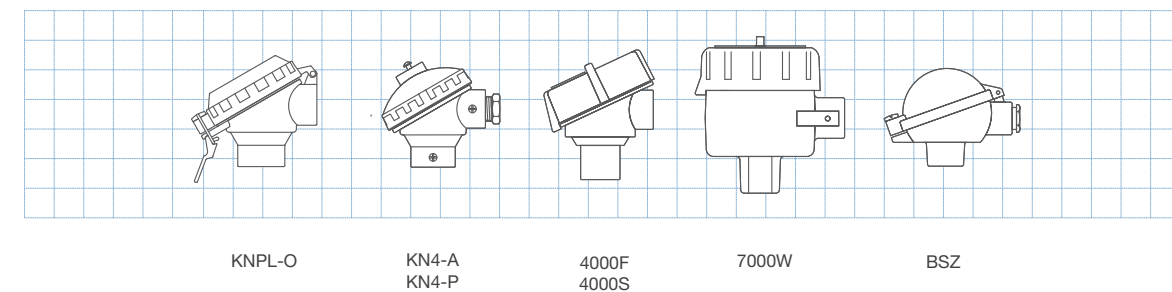
TR15 series assemblies are suitable for most industrial and commercial applications including:

- Air-conditioning and refrigeration systems
- Chemical and petrochemical industries
- Electronics and semiconductor industries

- Energy and power plant technology
- Machinery, plant and tank measurement
- Oil and gas industries
- Offshore exploration and drilling
- Pipeline control and custody transfer
- Power and utilities
- Pulp and paper
- Water and wastewater treatment

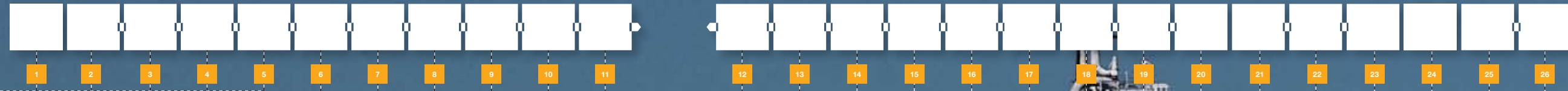
### Connection Heads

Imperial Grid 1" x 1"



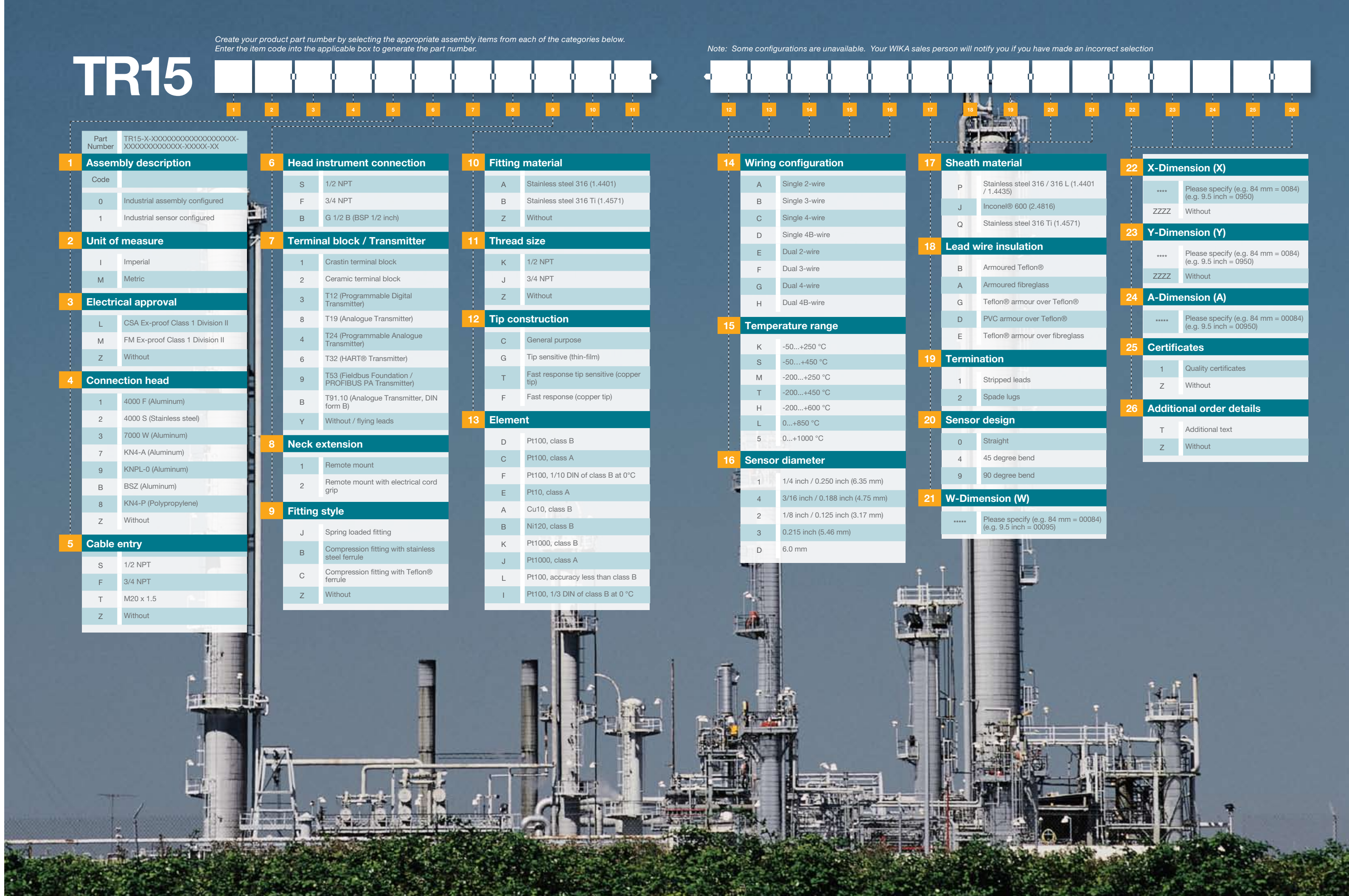
Create your product part number by selecting the appropriate assembly items from each of the categories below. Enter the item code into the applicable box to generate the part number.

# TR15



Note: Some configurations are unavailable. Your WIKA sales person will notify you if you have made an incorrect selection

<b>1 Assembly description</b>		<b>6 Head instrument connection</b>		<b>10 Fitting material</b>		<b>14 Wiring configuration</b>		<b>17 Sheath material</b>		<b>22 X-Dimension (X)</b>	
Code		S 1/2 NPT F 3/4 NPT B G 1/2 B (BSP 1/2 inch)		A Stainless steel 316 (1.4401) B Stainless steel 316 Ti (1.4571) Z Without		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		p Stainless steel 316 / 316 L (1.4401 / 1.4435) J Inconel® 600 (2.4816) Q Stainless steel 316 Ti (1.4571)		Please specify (e.g. 84 mm = 0084) (e.g. 9.5 inch = 0950) ZZZZ Without	
0 Industrial assembly configured 1 Industrial sensor configured		<b>7 Terminal block / Transmitter</b>		<b>11 Thread size</b>		<b>15 Temperature range</b>		<b>18 Lead wire insulation</b>		<b>23 Y-Dimension (Y)</b>	
<b>2 Unit of measure</b>		1 Crastin terminal block 2 Ceramic terminal block 3 T12 (Programmable Digital Transmitter) 8 T19 (Analogue Transmitter) 4 T24 (Programmable Analogue Transmitter) 6 T32 (HART® Transmitter) 9 T53 (Fieldbus Foundation / PROFIBUS PA Transmitter) B T91.10 (Analogue Transmitter, DIN form B) Y Without / flying leads		K 1/2 NPT J 3/4 NPT Z Without		K -50...+250 °C S -50...+450 °C M -200...+250 °C T -200...+450 °C H -200...+600 °C L 0...+850 °C 5 0...+1000 °C		B Armoured Teflon® A Armoured fibreglass G Teflon® armour over Teflon® D PVC armour over Teflon® E Teflon® armour over fibreglass		Please specify (e.g. 84 mm = 0084) (e.g. 9.5 inch = 0950) ZZZZ Without	
I Imperial M Metric		<b>8 Neck extension</b>		<b>12 Tip construction</b>		<b>16 Sensor diameter</b>		<b>19 Termination</b>		<b>24 A-Dimension (A)</b>	
<b>3 Electrical approval</b>		1 Remote mount 2 Remote mount with electrical cord grip		C General purpose G Tip sensitive (thin-film) T Fast response tip sensitive (copper tip) F Fast response (copper tip)		1 1/4 inch / 0.250 inch (6.35 mm) 4 3/16 inch / 0.188 inch (4.75 mm) 2 1/8 inch / 0.125 inch (3.17 mm) 3 0.215 inch (5.46 mm) D 6.0 mm		1 Stripped leads 2 Spade lugs		Please specify (e.g. 84 mm = 00084) (e.g. 9.5 inch = 00950)	
L CSA Ex-proof Class 1 Division II M FM Ex-proof Class 1 Division II Z Without		<b>9 Fitting style</b>		<b>13 Element</b>		<b>20 Sensor design</b>		<b>21 W-Dimension (W)</b>		<b>25 Certificates</b>	
<b>4 Connection head</b>		J Spring loaded fitting B Compression fitting with stainless steel ferrule C Compression fitting with Teflon® ferrule Z Without		D Pt100, class B C Pt100, class A F Pt100, 1/10 DIN of class B at 0 °C E Pt100, class A A Cu10, class B B Ni120, class B K Pt1000, class B J Pt1000, class A L Pt100, accuracy less than class B I Pt100, 1/3 DIN of class B at 0 °C		0 Straight 4 45 degree bend 9 90 degree bend		Please specify (e.g. 84 mm = 00084) (e.g. 9.5 inch = 00095)		1 Quality certificates Z Without	
1 4000 F (Aluminum) 2 4000 S (Stainless steel) 3 7000 W (Aluminum) 7 KN4-A (Aluminum) 9 KNPL-0 (Aluminum) B BSZ (Aluminum) 8 KN4-P (Polypropylene) Z Without		<b>5 Cable entry</b>		<b>16 Sensor diameter</b>		<b>26 Additional order details</b>		T Additional text Z Without			
S 1/2 NPT F 3/4 NPT T M20 x 1.5 Z Without											



## TR15 - Remote Mount Industrial RTD Assembly

Sensor Element: Pt100, Pt1000, Pt10, Cu10, or Ni120

Measuring range: -200 °C to +1000 °C (depending upon element)

Wiring configuration: 2, 3, and 4 wire (single or dual)

Classification tolerance:

- Class B to DIN EN 60751
- Class A to DIN EN 60751
- 1/3 of DIN Class B
- 1/10 of DIN Class B
- Less than class B

Electrical approvals: CSA, FM

Options:

- Lengths and diameters standard or customer specific
- Transmitter mounted directly within connection head
- Calibration - single point, multiple points, and to Callendar-Van Dusen coefficients
- Material traceability of the conductors, metal sheath and mineral insulation
- Selectable accuracy tolerance
- Special designs and materials
- Explosion protection: CSA, FM
- RTD transmitter matching

## Features:

- The sensor can be mounted into a thermowell or directly into a process with the use of a spring loaded or compression process fitting.
- The assembly can be supplied with or without a transmitter. Transmitters convert the resistance signal from the RTD to a linear analogue or digital output (commonly 4-20 mA). This signal reduces potential inaccuracies by negating the need for compensating output lead wires.
- 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 and FM. The approvals can be with or without an attached thermowell.
- The RTD sensors available for this assembly consist of a variety of sheath materials including stainless steels, corrosion resistant and high temperature oxidation resistant alloys. For temperatures greater than 600°C it is advisable to utilize an Inconel 600 sheath in place of stainless steel.
- RTD diameters range from 0.125 inch to 0.250 inch and 6 mm. Standard diameters are 0.125 inch or 0.250 inch and 6 mm.
- RTD temperature ranges are dependent on the RTD element, sheath material, element accuracy and the tip construction:
  - General purpose the temperature range is -200°C to 1000°C
  - Fast response copper tip, the temperature range is -200°C to 250°C
  - Tip sensitive thin film, the temperature range is -50°C to 1000°C
  - Fast response/tip sensitive copper tip, including the vibration proof construction the temperature range is -50°C to 250°C
- For applications that are exposed to outside weather conditions or where moisture is present, the flexible armour extension can be provided with a moisture-proof jacket of PTFE (Teflon) or PVC.
  - An external spring-loaded fitting or a compression fitting can be provided for mounting directly into a process or thermowell.
    - The spring-loaded fitting ensures a positive contact to the base of a thermowell bore.
    - The compression fitting rigidly holds the sensor in place in applications of high process pressure.
- The flexible armour into the connection head can be secured with an electrical compression gland (cord grip) or with a rigid, fixed fitting.

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## TR15 Remote Mount Industrial RTD Assembly



Part of your business



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