

## TC15-2 Remote Mount Industrial Thermocouple Assembly

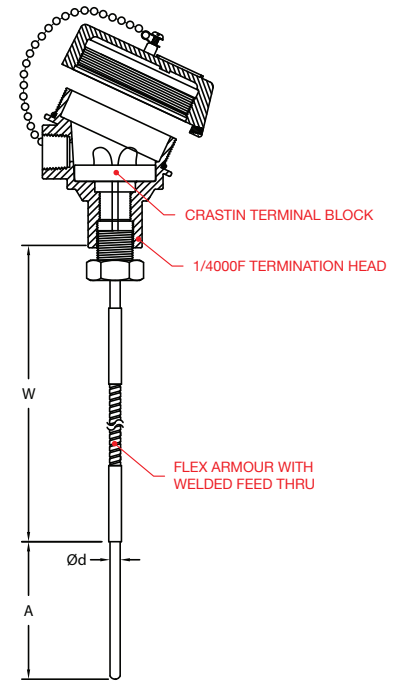
TC15 series thermocouples are remote mounted industrial assemblies supplied with or without a temperature transmitter. They are designed for applications where direct mounting is inaccessible, where there is excessive radiated or conducted heat, or applications where high vibrations exist.

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.

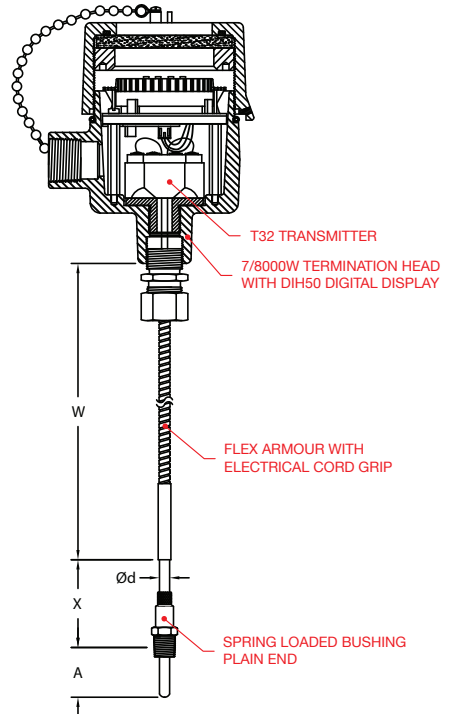
Thermocouples in this series can be inserted directly into a process or combined with a variety of thermowell designs.

### Features:

- The sensor can be mounted into a thermowell for directly into a process with the use of a spring loaded or compression process fitting.
- 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 thermocouple sensor can be spring-loaded ensuring a positive contact to the required location.
- 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 or PVC.



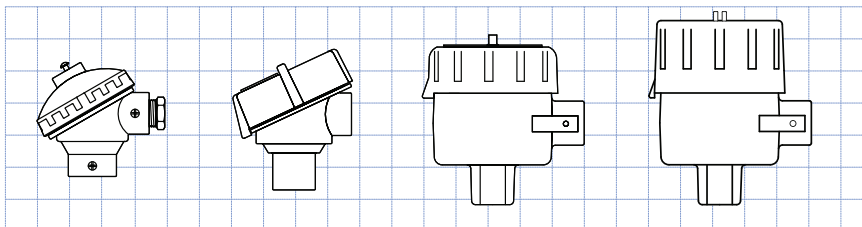
**THERMOCOUPLE ASSEMBLY SAMPLE**  
TC15-2-0IL-1AW131FW-B003601ZZZZZ-A-1-1-P00600-Z



**THERMOCOUPLE ASSEMBLY SAMPLE**  
TC15-2-0IL-DAW136FC-B003601JK0300-A-1-1-P00600-Z

### Connection Heads

Imperial Grid 1" x 1"



KN4-A  
KN4-P

1/4000F  
1/4000S

7/8000W

7/8000W  
WITH DIGITAL DISPLAY

# TC15-2-2-...

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	18	19
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Part Number  
 TC15-2-XXX-XXXXXXXXX-  
 XXXXXXXXXXXXXXXX-X-X-XXXXXX-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 Electrical approval	
L	CSA Ex-proof Class I Division 2
M	FM Ex-proof Class I Division 2
Z	Without

#### 4 Connection head

1AW	1/4000 F (Aluminum)
1SW	1/4000 S (Stainless steel)
7AW	7/8000 W (Aluminum)
DAW	7/8000 W (Aluminum) with DIH50 Digital Display (Transmitter required)
KAW	KN4-A (Aluminum)
KPW	KN4-P (Polypropylene)
ZZZ	Without

#### 5 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

6 Terminal block / Transmitter	
1	Crastin terminal block
2	Ceramic terminal block
7	T16, 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

7 Neck extension	
FW	Flex armour with welded feed thru
FC	Flex armour with electrical cord grip

#### 8 Lead wire insulation

B	Armoured PTFE, application range -50...+250 °C
A	Armoured Fiberglass, application range -50...+400 °C
G	PTFE Armour over PTFE, application range -50...+250 °C
D	PVC® Armour over PTFE, application range -50...+250 °C

#### 9 W-Dimension (W) - Lead Wire Length

*****	Please specify (e.g. 84 mm = 00084) (e.g. 9.5 inch = 00095)
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#### 10 Termination

1	Stripped leads
2	Spade lugs (no termination head)

11 Process fitting style	
J	Spring loaded bushing (plain end bushing - SS)
E	Spring loaded bushing (double threaded bushing - SS)
D	Spring loaded bushing with o-ring seal (double threaded bushing - SS) <sup>3</sup>
B	Compression fitting with SS ferrule
C	Compression fitting with PTFE ferrule
Z	Without

#### 12 Process fitting thread size

K	1/2 NPT (male)
J	3/4 NPT (male)
W	1/8 NPT (male) - Compression fitting only
N	1/4 NPT (male) - Compression fitting only
Z	Without

#### 13 X-Dimension (X) - Process location start

****	Please specify (e.g. 84 mm = 0084) (e.g. 9.5 inch = 0950)
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#### 14 Thermocouple sensor

A	Type K (NiCr-NiAl) / 0...+1260 °C
B	Type K (NiCr-NiAl) / 0...+1260 °C Special Limits of Error <sup>1</sup>
C	Type J (Fe-CuNi) / 0...+760 °C
D	Type J (Fe-CuNi) / 0...+760 °C Special Limits of Error <sup>1</sup>
E	Type N (NiCr-Si-NiS) / 0...+1260 °C
F	Type N (NiCr-Si-NiS) / 0...+1260 °C Special Limits of Error <sup>1</sup>
G	Type E (NiCr-CuNi) / 0...+870 °C
H	Type E (NiCr-CuNi) / 0...+870 °C Special Limits of Error <sup>1</sup>
J	Type T (Cu-CuNi) / -200...+370 °C
K	Type T (Cu-CuNi) / -200...+370 °C Special Limits of Error <sup>1</sup>

15 Thermocouple junction	
1	Single Ungrounded
2	Single Grounded
3	Dual Ungrounded
4	Dual Grounded

#### 16 Sensor diameter

1	1/4 inch / 0.250 inch (6.35 mm)
2	1/8 inch / 0.125 inch (3.17 mm)
4	3/16 inch / 0.188 inch (4.75 mm)
5	1/16 inch / 0.063 inch (1.59 mm)
8	3/8 inch / 0.375 inch (9.53 mm)
D	6.0 mm (0.236 inch)

#### 17 Sheath material

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

#### 18 A-Dimension (A) - Sensor Insertion Length

*****	Please specify (e.g. 84 mm = 00084) (e.g. 9.5 inch = 00950)
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#### 19 Certificates

1	Yes <sup>1</sup>
Z	Without

Notes:

<sup>1</sup>As per ASTM E230.

<sup>2</sup>See Data Sheet CERT.31 for certificate options and details.

<sup>3</sup>Rated to 100 psi @ 86°C, hydrostatic tested in H<sub>2</sub>O