

# THERMOCOUPLE ASSEMBLY WITH SINGLE / DOUBLE PROTECTING TUBE

(FLANGED / SCREWED CONNECTION)

## MODEL CODE : ET02

• Reference Standard :- IEC - 584.2 / ANSI MC - 96.1

### SPECIAL FEATURES

- Assembly with KER 710 or KER 610 tube for high temperature application..
- Thermocouple element is available in different wire sizes..
- Available in various connections & sheath diameters
- Enclosures (Head)
  - Weatherproof IP - 67
  - Flameproof Gr. IIA, IIB
  - Explosion proof IIA, IIB, II C
- Transmitter output 4 - 20mA (Optional)

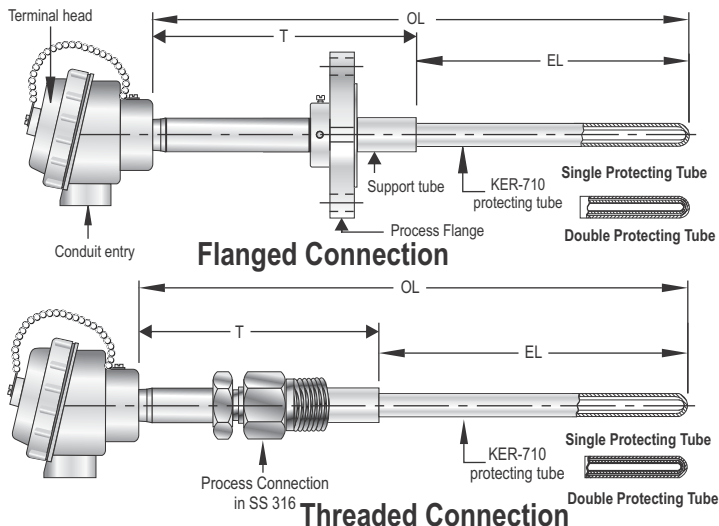
### APPLICATIONS

- Temperature measurement of furnaces, combustion chambers, recuperators and similar applications.

### STANDARD PRODUCT DETAILS

Thermocouple Type	- Beaded Element
No of Elements	- Simplex
Accuracy	- Class 2 as per IEC - 584.2 / ANSI MC - 96.1
Elements	- Platinum 13% Rhodium - Platinum (R type) Non MI beaded
Hot Junction Type	- Ungrounded Junction
Wire Diameter for Beaded Element	- 26 SWG (0.45 mm)
Terminal Head Type	- Screwed type, weatherproof, IP-67 in Die Cast Aluminum
No of Conduit Entry	- One
Conduit Entry Size	- 3/4" ET(F)
Head Extension Type	- Adjustable Flange
Support Tube Material	- SS 446
Protecting Tube Material	- KER 710
Protecting Tube Size	- 15 x 11 mm
Flange Material	- ASTM A105 (CS)
Flange Type/Size	- Adjustable Flange (1½" 150#RF)
Support Tube Length "T"	- 150 mm
Exposed Length 'EL'	- EL=500 mm
Overall Length "OL"	- 650 mm
Tag Plate	- SS Tag Plate

### DIMENSIONAL DETAILS



Notes : • Drawings are not to scale. • All Dimensions are in mm.

## HOW TO ORDER

### BASIC MODEL

### Optional Extras

(Select if you required options other than standard product details)

### No of Elements

2	Duplex (Above sheath dia. 3 mm)
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### Element Type

S	Platinum 10% Rhodium - Platinum (Non MI Beaded)
B	Platinum 6% Rhodium - Platinum 30% Rhodium (Non MI Beaded)

### Accuracy

1	Class 1 as per IEC - 584.2 / ANSI MC - 96.1
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### Hot Junction Type

G	Grounded Junction
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### Wire Diameter

Standard Wire Gauge (Beaded Element)	
24	24 SWG (0.55 mm)
25	25 SWG (0.50 mm)

### Terminal Head Type

F	Screwed type, Flameproof, IP-67, Gr. IIA IIB in Die-cast Aluminum
E	Screwed type, Explosionproof, IP-67, Gr. IIC in Die-cast Aluminum
H	Hinged type, Weatherproof, IP-67 in Die-cast Aluminum
3	Terminal Head in SS 304 - WP, IP-67
4	Terminal Head in SS 316 - WP, IP-67
5	Terminal Head in Cast Iron, IP-65

### No of Conduit Entry / Entries

2	Two
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### Conduit Entry Size

B	½" NPT(F)
C	¾" NPT(F)
	Other, Please Specify

### Head Extension Type

A	Adjustable Threaded Connection
F	Fixed Flanged Connection
N	Fixed Flanged Connection with NUN

Example

KT02

X

X

X

X

24

X

X

X

X

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## Support Tube Material

1	SS 316
3	SS 310
6	Inconel 600

## Outer Protecting Tube Material for Single or Double Protection

6	Pythagoras (KER - 610)
F	Kanthal AF
P	Kanthal APM
S	Silicon Carbide
T	Tungsten Carbide
Others, Please specify.	

## Outer Protecting Tube for Single or Double Protection

10	10 x 6 mm
12	12 x 8 mm
15	15 x 10 mm
20	20 x 15 mm
24	24 x 18 mm
Others, Please specify.	

## Inner Protecting Tube Material for Double Protection Only

6	Pythagoras (KER - 610)
X	Not Applicable

## Inner Protecting Tube Dia for Double Protection Only

06	6 x 4 mm (Select Outer tube size 12 x 8 mm)
08	8 x 5 mm (Select Outer tube size 15 x 10 mm)
10	10 x 7 mm (Select Outer tube size 20 x 15 mm)
12	12 x 8 mm (Select Outer tube size 20 x 15 mm)
15	15 x 11 mm (Select Outer tube size 24 x 18 mm)
XX	Not applicable

## Flange / Threaded Connection Material

2	A182 F304
3	A182 F316
Consult factory for other material.	

## Adjustable / Threaded Connection Type / Size

6BM	1" BSP (M)
7BM	1 1/2" BSP (M)
8BM	2" BSP (M)
6NM	1" NPT (M)
7NM	1 1/2" NPT (M)
8NM	2" NPT (M)

(As per ANSI B 16.5)\*

B15	3/4" 150 #	B21	1" 150 #	B39	2" 150 #
B16	3/4" 300 #	B22	1" 300 #	B40	2" 300 #
B17	3/4" 600 #	B23	1" 600 #	B41	2" 600 #
		B33	1 1/2" 150 #	B51	3" 150 #
		B34	1 1/2" 300 #	B52	3" 300 #
		B35	1 1/2" 600 #	B53	3" 600 #

(\* Please mention the flange face and flange finish)  
Please consult factory for other flanges.

X

## Overall / Exposed Length

EL - Specify in mm.
OL - Specify in mm.

X

## Support Tube Length

T - Specify in mm.
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## NUN Length (If Applicable)

N - Specify in mm.
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## Other options

21	Plug for conduit entry in Carbon Steel
22	Plug for conduit entry in SS 304
23	Plug for conduit entry in SS 316
32	S. C. cable gland in Nickel plated Brass - WP
33	D. C. cable gland in Nickel plated Brass - WP
34	S. C. cable gland in SS 304 - WP
35	D. C. cable gland in SS 304 - WP
36	S. C. cable gland in SS 316 - WP
37	D. C. cable gland in SS 316 - WP
38	S. C. cable gland in Nickel plated Brass - FLP
39	D. C. cable gland in Nickel plated Brass - FLP
40	S. C. cable gland in SS 304 - FLP
41	D. C. cable gland in SS 304 - FLP
42	S. C. cable gland in SS 316 - FLP
43	D. C. cable gland in SS 316 - FLP
EC	Head with Nipple extension 50 mm in CS
E4	Head with Nipple extension 50 mm in SS 304
E6	Head with Nipple extension 50 mm in SS 316
UC	Head with Nipple extension 100 mm in CS
U4	Head with Nipple extension 100 mm in SS 304
U6	Head with Nipple extension 100 mm in SS 316
NC	Head with Nipple extension 150 mm in CS
N4	Head with Nipple extension 150 mm in SS 304
N6	Head with Nipple extension 150 mm in SS 316
PW	Calibration Certificate

### Note :

- When selecting option "PW", please also specify temp. Points at which calibration is to be carried out .
- Explanations of Abbreviations used:  
SC = Single Compression  
DC = Double Compression  
SS = Stainless Steel  
WP = Weatherproof  
FLP = Flameproof

## Ordering Example:

**ET02 - X - X - X - X - 24 - X - X - X - X - X - XX - X - XX - X - 6NM - 500mm / 650mm - 150mm - 100mm - XX**

**For parameters & specifications other than the above, refer to our nearest sale office.**

Note : Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing.

Modifications may take place and materials specified may be replaced by others without prior notice.

**THERMOCOUPLE**