

TC13

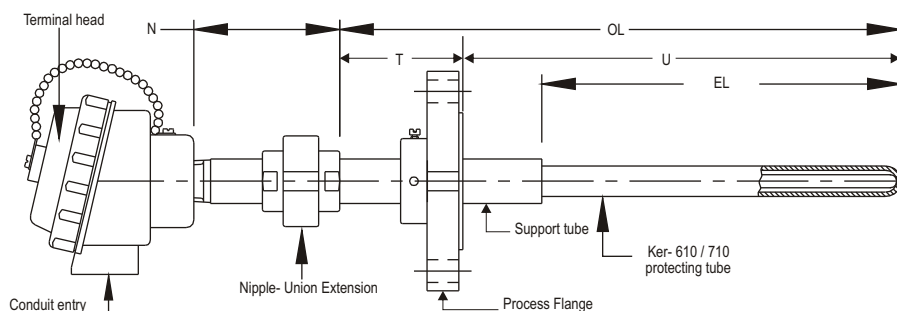
Thermocouple Assembly KER - 610/710 Single / Double
Protection Tube (Flanged Connection)

SPECIAL FEATURES:

- Assembly with ker 710/610 tube for high temperature application.
- Thermocouple element is available in different wire size.
- Enclosures in all material - Die cast Aluminium / Cast Iron / SS 304 / SS 316
- Enclosures in all categories (Weatherproof, IP-65 to IP-68),
Flameproof GR. IIA IIB and Explosionproof, GR. IIA IIB IIC for H₂ service application.

APPLICATIONS:

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



• Reference standard :- IEC - 584.2



HOW TO ORDER

Code	Thermocouple Type
MI	Mineral Insulated Metal Sheathed
BE	TC Element With Ceramic Insulators (Beaded Element)

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Code	No. Of Elements
1	Simplex
2	Duplex
3	Triplex

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Code	Accuracy
CL1	Class 1 as per IEC - 584.2
CL2	Class 2 as per IEC - 584.2

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Code	Elements
K	Chromel-Alumel
R	Plat. 13% Rhod. - Plat.
S	Plat. 10% Rhod. - Plat.
B	Plat. 6% Rhod. - Plat. 30% Rhod.
N	Nicrosil - Nisil

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Code	Hot Junction Type
G	Grounded Junction
UG	Ungrounded Junction

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Code	Sheath Diameter For MI. Thermocouple	Or	Code	Wire Diameter For Beaded Element
3	3.0 mm		24 A	24 AWG
4.5	4.5 mm	20 A	20 AWG	
6	6.0 mm	18 A	18 AWG	
8	8.0 mm	16 A	16 AWG	
10	10.0 mm	14 A	14 AWG	
12	12.0 mm	8 A	8 AWG	

Consult factory for other size.

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STANDARD PRODUCT DETAILS

Thermocouple Type	- Thermocouple Element With Ceramic Insulators (Beaded Element)
No of Elements	- Simplex
Accuracy	- Class 2 as per IEC - 584.2
Elements	- Plat. 13% Rhod. - Plat
Hot Junction Type	- Ungrounded Junction
Wire Diameter for Beaded Element	- 24 AWG
Sheath Material	- None
Terminal Head Type	- Screwed type, weatherproof, IP-65 in die-cast Aluminium
No. Of Conduit Entries	- One
Conduit Entry Size	- 3/4" ET(F)
Head Extension Type	- Head Only
Support Tube Material	- SS 446
Protecting Tube Material	- Recrystallised Alumina
Protecting Tube Size	- 15x2.5 mm
Flange Material	- ASTM A105 (CS)
Flange Type/Size	- Adjustable Flange (1.5"150#RF)
Extension Length "T" mm	- Not Applicable
Overall/Insertion/Exposed Length	- OL=500/EL=300 mm
Extension Length "N" mm	- Not Applicable
Option Description	- S.C. cable gland in nickel plated brass

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

Code	Sheath Material
INC.6	Inconel 600
X	None

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Code	Terminal Head Type
SWP	Screwed type, weatherproof, IP-65 in die-cast Aluminium
SFP	Screwed type, flamerproof Gr. IIA IIB in die-cast Aluminium
SEP	Screwed type, explosionproof Gr.IIC in die-cast Aluminium
JWP	Junction box, weatherproof, IP-65 in die-cast Aluminium
JFP	Junction box, flamerproof Gr. IIA IIB in die-cast Aluminium
JEP	Junction box, explosionproof Gr.IIC in die-cast Aluminium
BWP	Weatherproof Head, IP-65 in die-cast Aluminium with cover fitted with two screws.

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Code	No. Of Conduit Entry/Entries
1	One
2	Two
	Other, Please Specify

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Code	Conduit Entry Size
A	3/4" ET(F)
B	1/2"NPT(F)
C	3/4"NPT(F)
	Other, Please Specify

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Code	Head Extension Type
X	Head Only
NU	Head With Nipple & Union

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Code	Support Tube Material
INC.6	Inconel 600
INC.8	Incolloy 800
310	SS 310
446	SS 446

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Code	Protecting Tube Material
KER-710	Recrystallised Alumina
KER-610	Pythagoras

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Code	Protecting Tube Size
6	6x1.0 mm
8	8x1.5 mm
10	10x2.0 mm
12	12x2.0 mm
15	15x2.5 mm
20	20x2.5 mm
24	24x3.0 mm

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Code	Flange Material
A105	ASTM A105 (CS)
F304	A182 F304
F316	A182 F316
	Consult factory for other material.

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Code	Flange Type / Size
FF	Fixed Flange (Specify Size)
AF	Adjustable Flange (Specify Size)

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Code	Overall/Insertion/Exposed Length
U/EL	Specify in mm.
OL/EL	Specify in mm.

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Code	Extension Length "T"mm
T	Specify in mm.
X	Not Applicable

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Code	Extension Length "N"mm
N	Specify in mm.
X	Not Applicable

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Code	Option Description
0	None
3	Terminal head in SS 304
4	Terminal head in SS 316
5	Terminal head in Cast Iron
6	S.C. cable gland in nickel plated brass
7	D.C. cable gland in nickel plated brass
8	S.C. cable gland in SS 304
9	D.C. cable gland in SS 304
11	S.C. cable gland in SS 316
12	D.C. cable gland in SS 316
13	Head mounted temp. transmitter
14	S.S. base plate suitable for Temperature Transmitter mounting
15	Head Extension in SS 304.
16	Head Extension in SS 316.
20	Plug for conduit entry in Carbon Steel [ASTM A105]
21	Plug for conduit entry in SS 304
22	Plug for conduit entry in SS 316
23	Plug for conduit entry in Aluminium
PW	Five Point Factory Calibration Certificate
SX	SS Tag Plate

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Note :

- When selecting option "PW", please also specify measuring temperature range.(For e.g. 0/300°C)
- Explanations of Abbreviations used:
SC = Single Compression
DC = Double Compression
SS = Stainless Steel

(Ordering Example)

TC 13 Series	BE	1	CL2	R	UG	24	X	SWP	1	A	X	446	KER-710	15	A105	AF(1.5"150#RF)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	OL=500/EL=300		X	X	6											
	17	18	19	20												