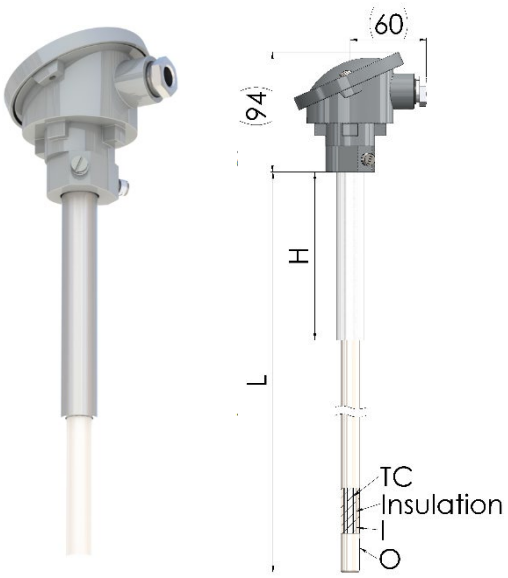
THERMOCOUPLE THERMOMETER **Measuring insert: Fixed**	**Type: TC-AC/ACC**	**5151-E040624V3.2**

Application:

- Measurement of high temperatures in large ovens and channels for flue gases and air
- Field of application: Up to 1700°C (depending on thermocouple)
- Usually applied in: Tile works, refuse disposal plants and processing plants

Properties:

- Thermocouple thermometer type T, J, E, K, N, S, R or B in accordance with IEC 60584-1
- Constructed in accordance with DIN EN 50446
- Measuring insert: Fixed
- Process attachment: Adjustable flange or coupling.
- Gas-proof ceramic internal tube protects thermocouple against pollution.
- Outer protective sheath: Heat-proof steel or stainless acid-proof steel
- Modular construction and standard length minimize the number of spare parts
- Can be delivered with head mounted transmitter



MECHANICAL SPECIFICATIONS

Protective tube O: ----------
Ceramics KER610 according to DIN EN 50446
Ceramics KER799 according to DIN EN 50446

Internal tube I: ----------
Ceramics KER610 according to DIN EN 50446
Ceramics KER799 according to DIN EN 50446
None

Sensor diameter Ø [mm]: ----------
Ø15
Ø24

Nominal length L [mm]: ----------
500
710
1000
1400
Others on request

Retained tube length H [mm]: ----------
EN 1.4845 Ø21.3x2.65x150
EN 1.0305 Ø32x2x200
Others on request

Process attachment: ----------
1" BSP
1 1/4" BSP
Ø22 flange acc. to DIN EN 50446
Ø32 flange acc. to DIN EN 50446

Protection head: ----------
A (aluminium, enamelled, low cap, IP62)
A special (aluminium, enamelled, low cap, IP65)
AHSH (aluminium, enamelled, high cap, IP54)
Others on request

Cable gland (pre-mounted in head): ----------
None (standard – cable entry M20x1.5)
Plastic
Nickle platted brass
Stainless acid-proof steel

Please specify cable diameter: ----------

ELECTRICAL SPECIFICATIONS

Plug (pre-mounted in head): ----
M12 (for M20)
Harting (specify type)
Others on request
None

Cable (pre-mounted in head): ----
PP (Plastic-Plastic)
SBS (Silicone-Inner Braided-Silicone)
TBT (Teflon-Inner Braided-Teflon)
Others on request
None

Cable length [m]: ---

Sensor type: ----
Type T (Cu-CuNi) max. +300°C
Type J (Fe-CuNi) max. +700°C
Type E (NiCr-CuNi) max. +800°C
Type K (NiCr-Ni) max. +1150°C
Type N (NiCrSi-Ni) max. +1250°C
Type S (Pt10Rh-Pt) max +1600°C
Type R (Pt13Rh-Pt) max +1600°C
Type B (Pt30Rh-Pt6Rh) max +1700°C
Others on request

Number of thermocouples: ----
1xTC
2xTC
Others on request

Tolerance in acc. with IEC 60584-1: ----
Class 1 for T (i.e. ±0,5°C or ±(0,0040xT)
Class 1 for J, E, K, N (i.e. ±1,5°C or ±(0,0040xT)
Class 1 for S, R (±1,0°C [±1,0°C+(T (actual)-1100°C)]°C)
Class 2 for T (i.e. ±1,5°C or ±(0,0075xT)
Class 2 for J, E, K, N (i.e. ±2,5°C or ±(0,0075xT)
Class 2 for S (i.e. ±1,25°C or ±(0,0025xT)
Class 2 for R, B (i.e. ±1,5°C or ±(0,0025xT)

Date:

Part No.:

Kjaerulf Pedersen a/s, Taastrupgaardsvej 8-10, DK-2630 Taastrup, Tel.: +45 39760203, sales@kp-as.com, www.kp-as.com

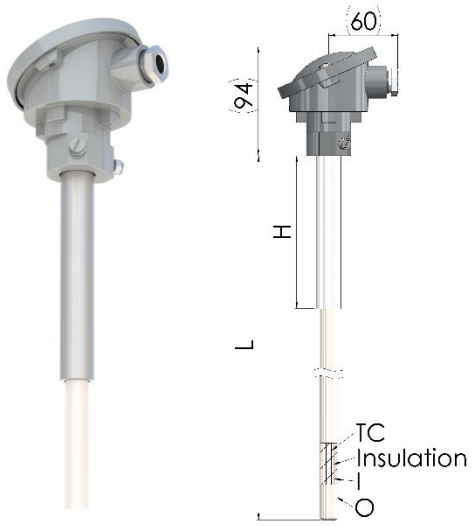
THERMOCOUPLE THERMOMETER **Measuring insert: Fixed**	**Type: TC-AC/ACC**	5151-E040624V3.2

Calibration:
Temperature calibration are used to verify and certify the sensor to have the correct accuracy. We can do either: “In house” or “Accredited” calibration. Accredited is certified by 3rd part. Normally, we do a calibration in 3 points.

Enhanced performance services:
Cold applications (below -50°C) will influence the material and the measurement. CRYO treatment is needed to ensure a correct and working sensor down to -196°C.

A sensor will always drift over time, especially when there are high temperature fluctuations.
With “Ageing treatment” we stabilize the sensor to ensure a minimum drift over time. The benefits are long term stability, more correct measurement and easier planning of calibration periods.

Documentation:
Please order the correct documentation when ordering the sensor.



SIGNAL PROCESSING

Enclosure:

Ceramic socket mounted in terminal head ----------( )

Prepared for transmitter w/o ceramic socket ----------( )
w/long leads

Programmable head mounted transmitter ----------( )
Measuring range min/max: -200/+850°C
Output: 2-wire, 4-20 mA
Min. span: 25°C
Ambient temperature min./max.: -40/+85°C

5334A Uninsulated for TC
5334D EEX Uninsulated for TC
5331A Galvanic Isolated RTD / TC
5331D EEX Galvanic Isolated RTD / TC
5335A Hart 5 Protocol Standard
5335D Hart 5 Protocol CSA, FM, ATEX, IECEx
5337A Hart 5 & 7 Protocol
5337D Hart 5 & 7 Protocol CSA, FM, ATEX, IECEx

Transmitter Type:			
4 mA =	C°	20 mA =	C°

Link to further information:

Transmitter Overview

Programmable rail mounted transmitter

TC Tolerance

CALIBRATION

None ----**Calibration:**
In house (Span)
Accredited – in laboratory

1.	Point	°C
2.	Point	°C
3.	Point	°C

Enhanced performance services

( ) -----**Cryo treatment**:
Recommended for temperature applications below -50°C

( ) -----**Ageing:**
For long term stability

( ) -----**Documentation**
Certificate: 3.1 Material certificate
Certificate of origin
Certificate of conformity

Date:

Part No.:

Kjaerulf Pedersen a/s, Taastrupgaardsvej 8-10, DK-2630 Taastrup, Tel.: +45 39760203, sales@kp-as.com, www.kp-as.com