

# HT 4071 High temperature laboratory thermocouple

## Protection tube

|                      |                     |
|----------------------|---------------------|
| Construction         | Gastight ceramic    |
| Insertion length "L" | Customer to specify |
| Diameter             | 7 mm                |
| Material             | Ceramic 710 (C799)  |
| Temperature          | 1400°C maximum      |

## Connection head

|             |                  |
|-------------|------------------|
| Model       | KS               |
| Material    | Cast aluminium   |
| Cable entry | PG 9 cable gland |

## Measuring insert

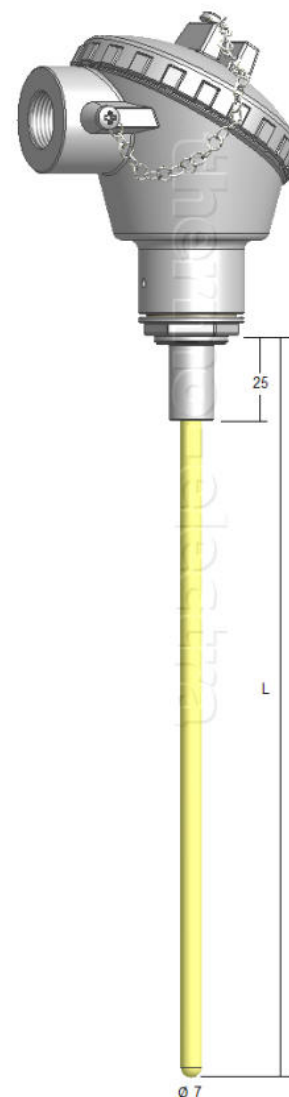
|            |             |
|------------|-------------|
| Insulation | Ceramic rod |
|------------|-------------|

## Thermocouple

|             |                                    |
|-------------|------------------------------------|
| Calibration | B, R or S                          |
| For duplex  | BB, RR or SS                       |
| Wire size   | 0.35 or 0.5 mm Customer to specify |
| Accuracy    | According IEC 584-1 / DIN43710     |

## Options

|                     |                                        |
|---------------------|----------------------------------------|
| Connection head     | Other options possible                 |
| Transmitter 4-20 mA | Please select from transmitter chapter |



## Thermokoppel kleurcodes

| Thermocouple<br>Extension Type   | ANSI | IEC |
|----------------------------------|------|-----|
| JX + Iron<br>- Constantan ®      |      |     |
| KX + Chromel ®<br>- Alumel ®     |      |     |
| TX + Copper<br>- Constantan ®    |      |     |
| EX + Chromel ®<br>- Constantan ® |      |     |
| NX + Nicrosil ®<br>- Nisil ®     |      |     |
| SX + Copper<br>RX - Alloy 11     |      |     |
| BX + Copper-S<br>- Copper-E      |      |     |

## Toleranties volgens IEC 584-2

| Type    | Class | Temperature range   | Fixed value °C | Tolerance to temp. t (°C) |
|---------|-------|---------------------|----------------|---------------------------|
| T       | 1     | - 40°C to + 350°C   | ± 0,5          | ± 0,004 · t               |
|         | 2     | - 40°C to + 350°C   | ± 1            | ± 0,0075 · t              |
|         | 3     | - 200°C to + 40°C   | ± 1            | ± 0,015 · t               |
| E       | 1     | - 40°C to + 800°C   | ± 1,5          | ± 0,004 · t               |
|         | 2     | - 40°C to + 900°C   | ± 2,5          | ± 0,0075 · t              |
|         | 3     | - 200°C to + 40°C   | ± 2,5          | ± 0,015 · t               |
| J       | 1     | - 40°C to + 750°C   | ± 1,5          | ± 0,004 · t               |
|         | 2     | - 40°C to + 750°C   | ± 2,5          | ± 0,0075 · t              |
|         | 3     | -                   | -              | -                         |
| K and N | 1     | - 40°C to + 1000°C  | ± 1,5          | ± 0,004 · t               |
|         | 2     | - 40°C to + 1200°C  | ± 2,5          | ± 0,0075 · t              |
|         | 3     | - 200°C to + 40°C   | ± 2,5          | ± 0,015 · t               |
| R and S | 1     | 0°C to + 1600°C     | ± 1,0          | ± [1+0,003 ·(t-1100)]°C   |
|         | 2     | 0°C to + 1600°C     | ± 1,5          | ± 0,0025 ·t               |
|         | 3     | -                   | -              | -                         |
| B       | 1     | -                   | -              | -                         |
|         | 2     | + 600°C to + 1700°C | ± 1,5          | ± 0,0025 ·t               |
|         | 3     | + 600°C to + 1700°C | ± 4            | ± 0,005 ·t                |

## Ordering code

|                  |         |  |  |  |
|------------------|---------|--|--|--|
| Model            | HT 4071 |  |  |  |
| Calibration      |         |  |  |  |
| Length "L" in mm |         |  |  |  |
| Wire size        |         |  |  |  |

H4-1 Rev. 07/07



**thermo-electra**  
temperature sensor solutions

Thermo Electra B.V.  
Weteringweg 10  
2641KM Pijnacker  
The Netherlands

Phone +31 (0)15 - 3621200  
Fax +31 (0)15 - 3694082  
Email sales@thermo-electra.com  
http://www.thermo-electra.com

