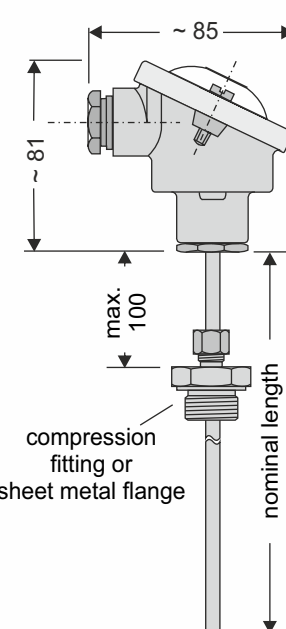
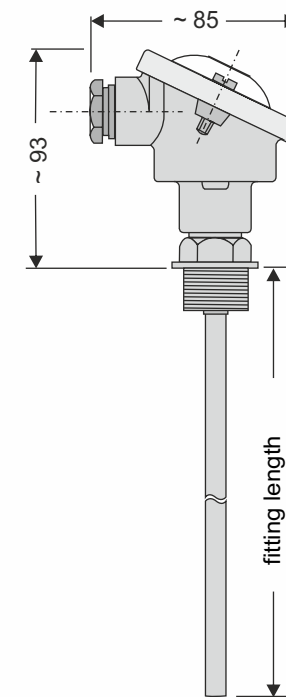
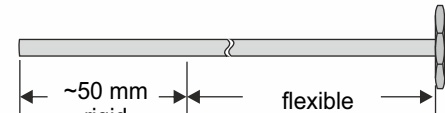


## Characteristics

1 - TEMPERATURE SENSOR - PROBE

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Thermocouple:</b> 1x type J (Fe-CuNi) / 1x type K (NiCr-Ni)<br/>2x type J / 2x type K</p> <p><b>Type:</b> standard element (S) / mineral insulated element (M)</p> <p><b>Model:</b> screw-in sensor (ES) / dip-in sensor (ET)</p> <p><b>Thermowell:</b> stainless steel 1.4571 (316Ti) for standard element<br/>stainless steel 2.4816 (Inconel 600) for M.I. element</p> <p><b>Ø Thermowell:</b><br/>standard element: ES: 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 15 mm<br/>ET: 5 / 6 / 7 / 8 / 9 / 10 / 11 / 15 mm<br/>M.I. element: ES: 3 / 6 mm<br/>ET: 6 mm</p> <p><b>Length:</b> 50 / 100 / 160 / 200 mm<br/>(fitting and nominal) maximum length: 200 mm<br/>option: according to details</p> <p><b>Process connection:</b> 1/4" / 3/8" / 1/2" / 1" / 1/4NPT / 3/8NPT / 1/2NPT<br/>maximum process pressure: PN16</p> <p><b>Bending radius:</b> minimum 5x thermowell</p> <p><b>Terminal head:</b> material: aluminum<br/>process connection: M24x1,5<br/>cable connection: M20x1,5<br/>connection: ceramic base with connection posts</p> <p><b>Protection class:</b> terminal head IP54</p> <p><b>Insulating resistance:</b> test voltage: 500 VDC</p> <p><b>Mineral insulator:</b> standard: aluminum oxide<br/>M.I. element: metal oxide</p> <p><b>Accuracy:</b> as per DIN EN 60584-2 class 1<br/>type J: <math>\pm 1,5^{\circ}\text{C}</math> (-40...375 <math>^{\circ}\text{C}</math>)<br/><math>\pm 0,004 t </math> (375...750 <math>^{\circ}\text{C}</math>)<br/>type K: <math>\pm 1,5^{\circ}\text{C}</math> (-40...375 <math>^{\circ}\text{C}</math>)<br/><math>\pm 0,004 t </math> (375...1000 <math>^{\circ}\text{C}</math>)</p> <p><b>Response time:</b> thermowell 6x0,5 mm: t<sub>90</sub>: 15 s / t<sub>50</sub>: 5 s<br/>thermowell 3x0,4 mm: t<sub>90</sub>: 6 s / t<sub>50</sub>: 4 s</p> <p><b>Accessories:</b> connection cable (max. 6 m)<br/>compression fitting<br/>sheet metal flange</p> | <p><b>GL</b> <b>Type approval</b><br/><b>TAA00002H3</b></p> <p>all dimensions in mm</p>  |
| <p><b>Ø Thermowell and wall:</b><br/>Standard tube: 3x0,4 / 4x0,5 / 5x0,5 / 6x0,5 / 6x1 / 7x0,5 / 7x1 / 8x1 / 9x1 / 10x1 / 11x2 / 15x2 mm</p> <p><b>Maximum operating temperature range:</b><br/>Thermocouple: type J: -200...700 <math>^{\circ}\text{C}</math> / type K: -200...1000 <math>^{\circ}\text{C}</math><br/>Thermowell: stainless steel 1.4571 (316Ti): up to 600 <math>^{\circ}\text{C}</math> /<br/>stainless steel 2.4816 (Inconel 600): up to 1100 <math>^{\circ}\text{C}</math><br/>Terminal head: up to 480 <math>^{\circ}\text{C}</math><br/>Compression fitting: -75...+250 <math>^{\circ}\text{C}</math></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <p>all dimensions in mm</p>                                                             |

## Thermowell Mantle Element

|                                                                                     |  |
|-------------------------------------------------------------------------------------|--|
|  |  |
|-------------------------------------------------------------------------------------|--|

● **Order Code**

| Product code: KC                                        |                                             |                         |
|---------------------------------------------------------|---------------------------------------------|-------------------------|
| <b>Type thermocouple</b>                                | <input type="checkbox"/>                    |                         |
| 0 1x type J                                             |                                             |                         |
| 1 1x type K                                             |                                             |                         |
| 2 2x type J                                             |                                             |                         |
| 3 2x type K                                             |                                             |                         |
| <b>Type</b>                                             | <input type="checkbox"/>                    |                         |
| 0 standard element (S)                                  |                                             |                         |
| 1 mineral insulated element (M)                         |                                             |                         |
| <b>Model</b>                                            | <input type="checkbox"/>                    |                         |
| 0 screw-in sensor (ET)                                  |                                             |                         |
| 1 dip-in sensor (ES)                                    |                                             |                         |
| <b>Material thermowell</b>                              | <input type="checkbox"/>                    |                         |
| 0 stainless steel 1.4571 (316Ti) (S)                    |                                             |                         |
| 1 stainless steel 2.4816 (Inconel 600) (M)              |                                             |                         |
| <b>Ø thermowell</b>                                     | <input type="checkbox"/>                    |                         |
| 1 3 mm (S, M), ES types only                            |                                             |                         |
| 2 4 mm (S), ES type only                                |                                             |                         |
| 4 5 mm (S)                                              |                                             |                         |
| 5 6 mm (S, M)                                           |                                             |                         |
| 6 7 mm (S)                                              |                                             |                         |
| 7 8 mm (S)                                              |                                             |                         |
| 8 9 mm (S)                                              |                                             |                         |
| 9 10 mm (S)                                             |                                             |                         |
| A 11 mm (S)                                             |                                             |                         |
| B 15 mm (S)                                             |                                             |                         |
| <b>Fitting length / Nominal length</b>                  | <input type="checkbox"/>                    | <input type="text"/> mm |
| 0 50 mm                                                 |                                             |                         |
| 1 100 mm                                                |                                             |                         |
| 2 160 mm                                                |                                             |                         |
| 3 200 mm                                                |                                             |                         |
| 4 other length (maximum 200 mm)                         |                                             |                         |
| <b>Process connection</b>                               | <input type="checkbox"/>                    |                         |
| 0 1/4"                                                  |                                             |                         |
| 1 3/8"                                                  |                                             |                         |
| 2 1/2"                                                  |                                             |                         |
| 3 1"                                                    |                                             |                         |
| 4 1/4NPT                                                |                                             |                         |
| 5 3/8NPT                                                |                                             |                         |
| 6 1/2NPT                                                |                                             |                         |
| <b>Used temperature range</b>                           |                                             |                         |
| please specify                                          | <input type="text"/> - <input type="text"/> | °C                      |
| * S = standard element<br>M = mineral insulated element |                                             |                         |