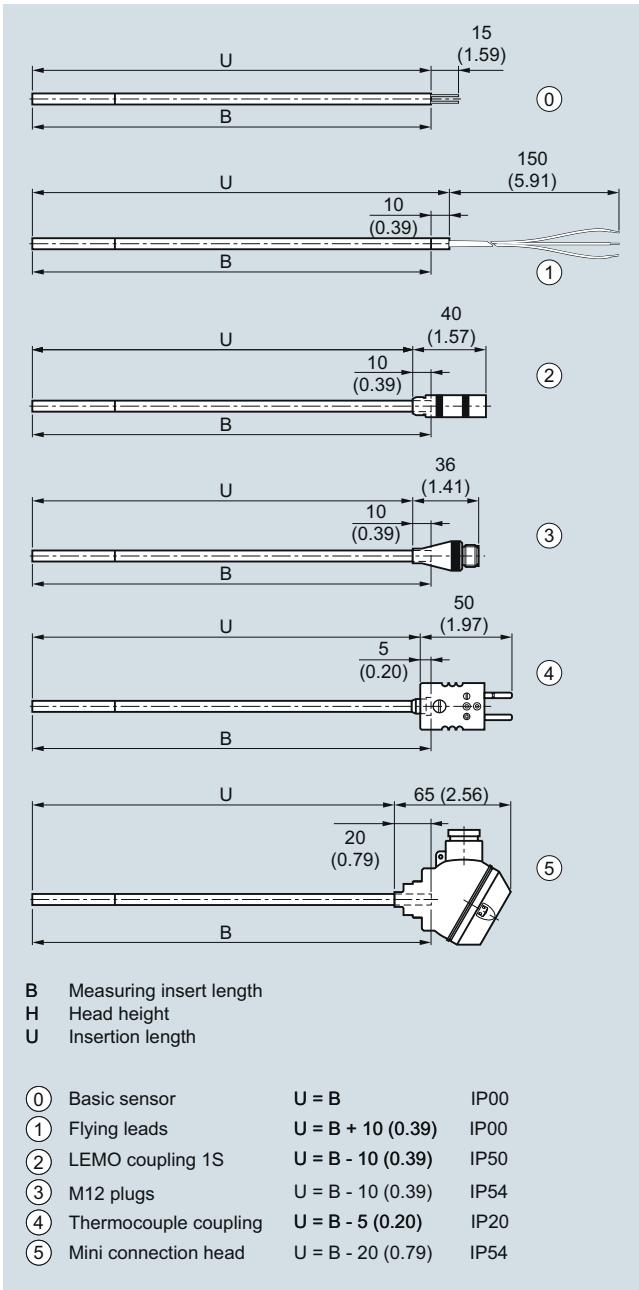


### Dimensional drawings



SITRANS TS200, temperature sensors in cable version, universal use, mineral-insulated version, for unfavorable space conditions, dimensions in mm (inch)

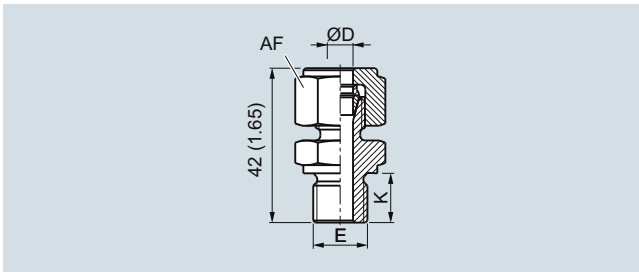
# Temperature Measurement

## SITRANS TS200

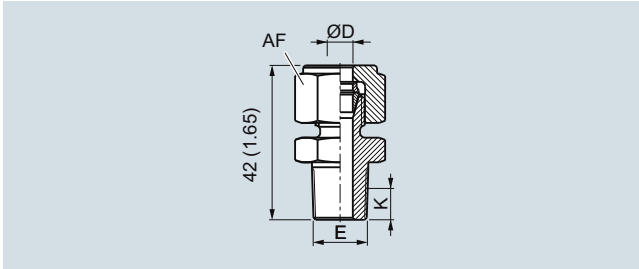
### Compact mineral-insulated

Selection and Ordering data	Article No.
<b>SITRANS TS200</b> <b>Temperature sensors in compact version, universal use, mineral-insulated version, for unfavorable space conditions</b> ↗ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.	<b>7MC7212-</b>
<b>Sensor diameter</b> 6 mm (0.24 inch)	6
<b>Length of sensor element B, effective length U see dimensional drawing on page 2/43</b> 200 mm (7.87 inch) 500 mm (19.68 inch) 750 mm (29.53 inch)	C D E
<b>Customer-specific length of sensor element B, effective length U see dimensional drawing on page 2/43</b> enter customer specific length with Y44, see Order codes below 70 ... 100 mm (2.76 ... 3.94 inch) Initial: 100 mm (3.94 inch) 101 ... 250 mm (3.98 ... 9.84 inch) Initial: 200 mm (7.87 inch) 251 ... 500 mm (9.88 ... 19.68 inch) Initial: 500 mm (19.68 inch) 501 ... 750 mm (19.72 ... 29.53 inch) Initial: 750 mm (29.53 inch) 751 ... 1 000 mm (29.57 ... 39.37 inch) Initial: 1 000 mm (39.37 inch) 1 001 ... 1 500 mm (39.4 ... 59.00 inch) Initial: 1 500 mm (59.00 inch)	B C D E F G
<b>Sensor</b> Please note: The accuracy class range can be lower than the measuring range. For more information, see page 2/16 Pt100, basis, -50 ... +400 °C (-58 ... +752 °F) Pt100, vibration-resistant, -50 ... +400 °C (-58 ... +752 °F) Pt100, expanded range, -196 ... +600 °C (-320.8 ... +1 112 °F) Thermocouple Type K, -40 ... +1 000 °C (-40 ... +1 832 °F) Thermocouple Type J, only class 2, -40 ... +750 °C (-40 ... +1 382 °F)	A B C K J
<b>Number/Accuracy</b> Single, basic accuracy (Class 2/Class B) 1 Single, increased accuracy (Class 1/Class A) 2 Single, highest accuracy (Class AA) 3 Double, basic accuracy (Class 2/Class B) 4 Double, increased accuracy (Class 1/Class A) 5 Double, highest accuracy (Class AA) 6	
<b>Design of connection side</b> Solid wire ends (sensor element) 0 Flying leads 1 LEMO coupling 1S 2 M12 connector, not for double Pt100 3 Thermocouple coupling, from TC-material (2xTC on request) 4 Mini connection head, aluminum, not for double Pt100 5	

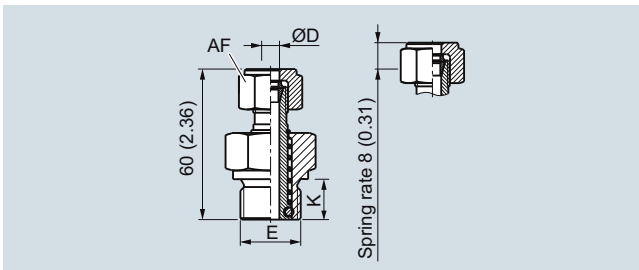
Selection and Ordering data	Order code
<b>Further designs</b> Add "-Z" to Article No. and specify Order code.	
<b>Customer-specific length of sensor element B, effective length, U see dimensional drawing on page 2/43</b> Select range, enter desired length in plain text (No entry = standard length)	Y44
<b>Additional configurations on page after next page!</b> <b>You find ordering examples on page 2/38.</b>	



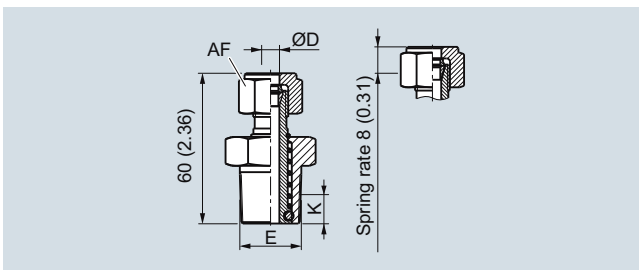
Compression fitting, metric (A30, A31), dimensions in mm (inch)



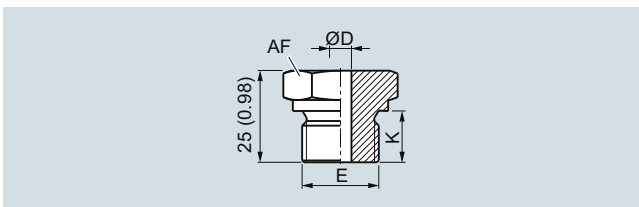
Compression fitting NPT (A32), dimensions in mm (inch)



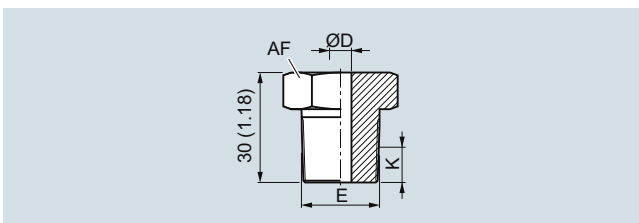
Spring-loaded compression fitting, metric, dimensions in mm (inch)



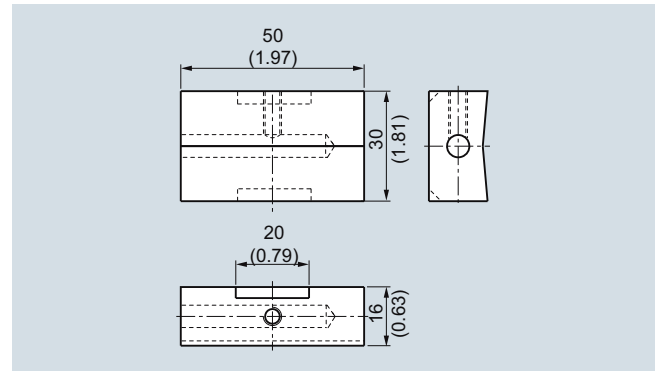
Spring-loaded compression fitting NPT, dimensions in mm (inch)



Soldering nipple, metric (A20, A21, A23), dimensions in mm (inch)



Soldering nipple NPT (A22), dimensions in mm (inch)



Surface connection piece (A50), dimensions in mm (inch)

## Temperature Measurement

### SITRANS TS200

#### Compact mineral-insulated

#### Selection and Ordering data

Order code

##### Options

Add **"-Z"** to Article No., add options, separate extensions with "+".

##### Process connection

Soldering nipple G $\frac{1}{4}$ ", enclosed	<b>A20</b>
Soldering nipple G $\frac{1}{2}$ ", enclosed	<b>A21</b>
Soldering nipple NPT $\frac{1}{2}$ ", enclosed	<b>A22</b>
Soldering nipple M18x1.5, enclosed	<b>A23</b>
Compression fitting G $\frac{1}{4}$ ", enclosed	<b>A30</b>
Compression fitting G $\frac{1}{2}$ ", enclosed	<b>A31</b>
Compression fitting NPT $\frac{1}{2}$ ", enclosed	<b>A32</b>
Surface connection piece, enclosed (non Ex)	<b>A50</b>

##### Explosion protection

Without explosion protection requirements (Europe, Australia, New Zealand)	<b>E00</b>
Intrinsic safety "i"/"IS1" according to ATEX and IECEx (Europe, Australia, New Zealand)	<b>E01</b>
Without explosion protection requirements (USA, Canada)	<b>E17</b>
Intrinsic safety "i"/"IS <sup>1</sup> " according to cCSAus (USA, Canada)	<b>E18</b>
Without explosion protection requirements (China)	<b>E54</b>
Intrinsic safety "i"/"IS <sup>1</sup> " according to NEPSI (China)	<b>E55</b>
Without explosion protection requirements (EAC)	<b>E80</b>
Intrinsic safety "i"/"IS <sup>1</sup> " according to EACEx (EAC)	<b>E81</b>

##### Marine approvals

Det Norske Veritas Germanischer Lloyd (DNV GL)	<b>D01</b>
Bureau Veritas (BV)	<b>D02</b>
Lloyd's Register of Shipping (LR)	<b>D04</b>
American Bureau of Shipping (ABS)	<b>D05</b>

##### Certificates and approvals

EN 10204-3.1 Inspection certificate for materials coming into contact with media	<b>C12</b>
EN 10204-3.1 Inspection certificate visual, measurement and functional inspection	<b>C34</b>
EN 10204-2.1: Declaration of compliance with the order	<b>C35</b>
ISO 9001 grease-free (cleaned for e.g. oxygen applications)	<b>C51</b>
Setting, designation, calibration	
Stainless steel TAG plate , Enter lettering in plain text	<b>Y15</b>
Plant calibration per 1 point, enter temperature in plain text. Attention: For devices with built-in head transmitters, select test points within the set measurement range	<b>Y33</b>

1) Please select Ex i version of the optional transmitter.

**You find ordering examples on page 2/38.**

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