

**JUMO GmbH & Co. KG**

Delivery address: Mackenrodtstraße 14  
36039 Fulda, Germany  
Postal address: 36035 Fulda, Germany  
Phone: +49 661 6003-0  
Fax: +49 661 6003-607  
Email: mail@jumo.net  
Internet: www.jumo.net

**JUMO Instrument Co. Ltd.**

JUMO House  
Temple Bank, Riverway  
Harlow, Essex, CM20 2DY, UK  
Phone: +44 1279 63 55 33  
Fax: +44 1279 62 50 29  
Email: sales@jumo.co.uk  
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**

6733 Myers Road  
East Syracuse, NY 13057, USA  
Phone: +1 315 437 5866  
Fax: +1 315 437 5860  
Email: info.us@jumo.net  
Internet: www.jumousa.com



# JUMO plastoSENS T04

## Surface-Optimized Plastic Temperature Probe

- For temperatures of -40 to +180 °C
- Precise pipe adaptation through full contact to surface area
- Simple and fast mounting without tools
- Heat-conductible plastic
- Water-tight, IP65

### Brief description

Surface temperatures at pipes (made from copper or stainless steel, for example) can be recorded with the surface RTD temperature probe in order to make conclusions about the temperature of the medium within the pipe. The JUMO plastoSENS T04 units are designed such that they are a precise fit for a pipe diameter and thus enable full-area contact with the pipe. This allows for optimum heat transfer.

The supplied accessories provide good protection against environmental influences (such as drafts), in addition to the option of toolless mounting. The insulation cap is manufactured from a plastic that is a poor heat conductor here, in order to ensure the best possible isolation of the temperature probe. The pipe clip provides the option of fastening the temperature probe on a pipe together with the insulation cap without using tools. This results in a fixed and secure connection that can also be released if required.

A Pt1000 according to DIN EN 60751:2009 / IEC 60751:2008 of the tolerance class B (F0.3) in a two-wire circuit is used as a temperature sensor as standard. Versions with Pt100 or other temperature sensors are also possible.



Basic type 904004/50

**JUMO GmbH & Co. KG**  
 Delivery address: Mackenrodtstraße 14  
 36039 Fulda, Germany  
 Postal address: 36035 Fulda, Germany  
 Phone: +49 661 6003-0  
 Fax: +49 661 6003-607  
 Email: mail@jumo.net  
 Internet: www.jumo.net

**JUMO Instrument Co. Ltd.**  
 JUMO House  
 Temple Bank, Riverway  
 Harlow, Essex, CM20 2DY, UK  
 Phone: +44 1279 63 55 33  
 Fax: +44 1279 62 50 29  
 Email: sales@jumo.co.uk  
 Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**  
 6733 Myers Road  
 East Syracuse, NY 13057, USA  
 Phone: +1 315 437 5866  
 Fax: +1 315 437 5860  
 Email: info.us@jumo.net  
 Internet: www.jumousa.com

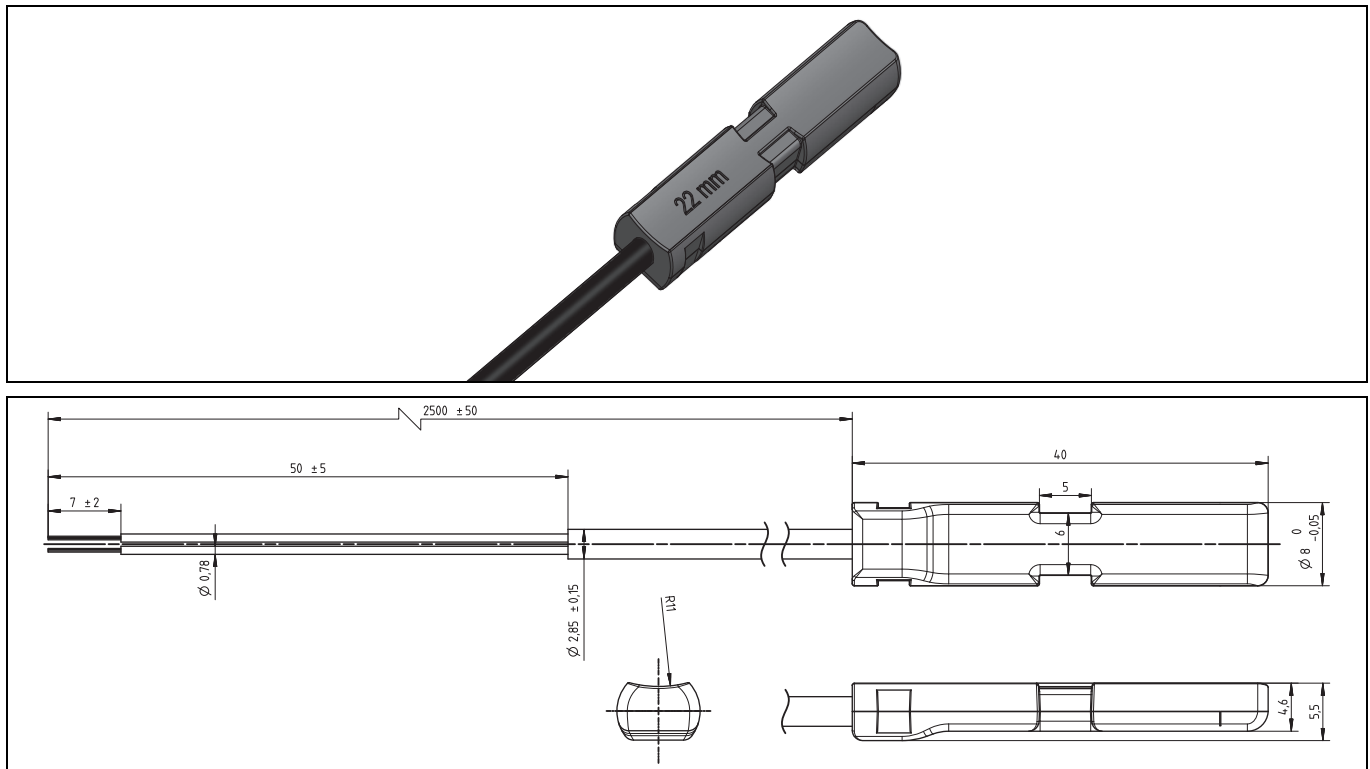


## Technical data

Dimensions of the temperature probe	Diameter: 8 mm Length: 40 mm Height: 5.5 mm
Fastening	Without accessories: e.g. cable ties, max. 5 mm wide With insulation cap: e.g. cable ties, max. 6 mm wide With insulation cap and pipe clip: no further accessories necessary
Protection type	IP65 according to DIN EN 60529
Response times	For pipe diameters up to 22 mm or 1": <ul style="list-style-type: none"> <li>• <math>t_{0.5}</math>: &lt; 5 s</li> <li>• <math>t_{0.63}</math>: &lt; 6 s</li> <li>• <math>t_{0.9}</math>: &lt; 15 s</li> </ul> For pipe diameters from 22 mm or 1": <ul style="list-style-type: none"> <li>• <math>t_{0.5}</math>: &lt; 8 s</li> <li>• <math>t_{0.63}</math>: &lt; 10 s</li> <li>• <math>t_{0.9}</math>: &lt; 20 s</li> </ul>
Connecting cable	Silicone, ambient temperature -40 to +180 °C
Connection	Cable ends with ferrules

## Dimensions

### Temperature sensor



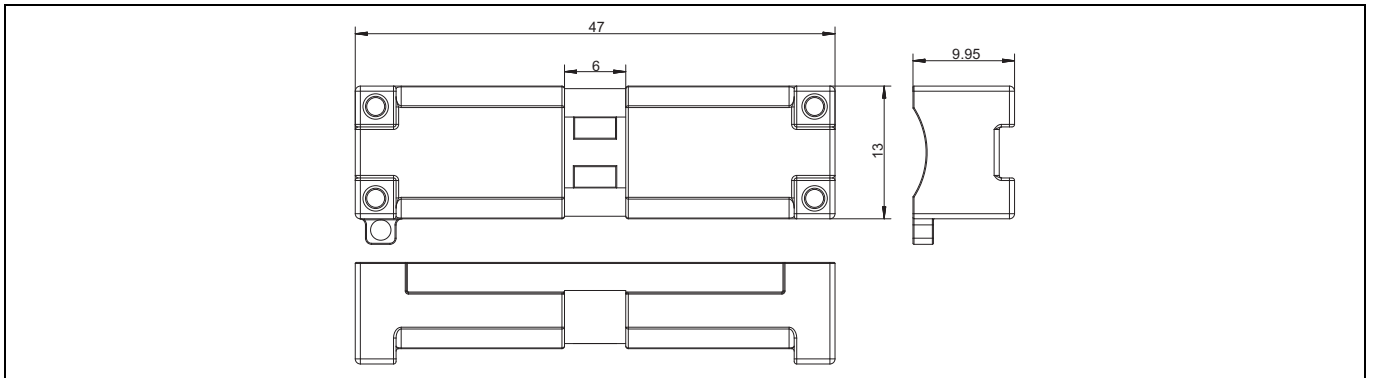
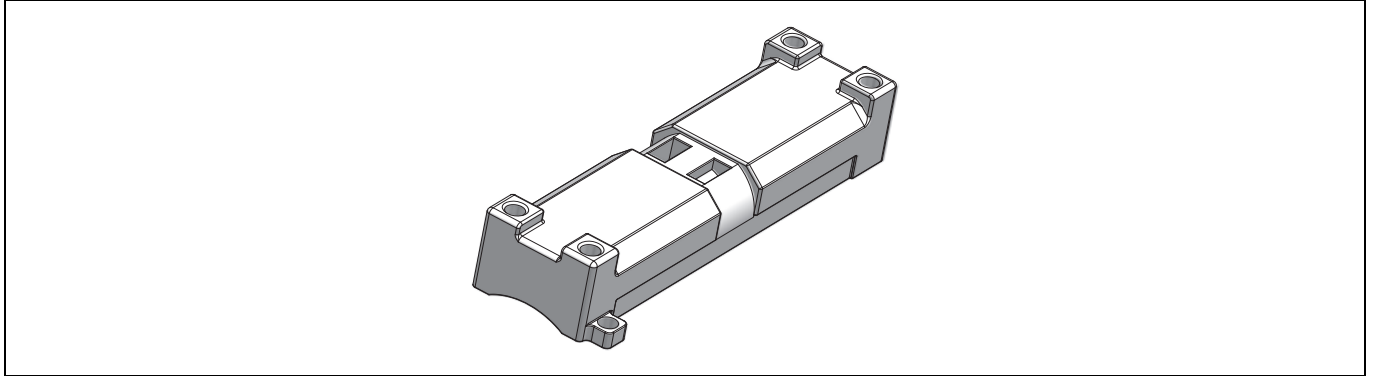
**JUMO GmbH & Co. KG**  
 Delivery address: Mackenrodtstraße 14  
 36039 Fulda, Germany  
 Postal address: 36035 Fulda, Germany  
 Phone: +49 661 6003-0  
 Fax: +49 661 6003-607  
 Email: mail@jumo.net  
 Internet: www.jumo.net

**JUMO Instrument Co. Ltd.**  
 JUMO House  
 Temple Bank, Riverway  
 Harlow, Essex, CM20 2DY, UK  
 Phone: +44 1279 63 55 33  
 Fax: +44 1279 62 50 29  
 Email: sales@jumo.co.uk  
 Internet: www.jumo.co.uk

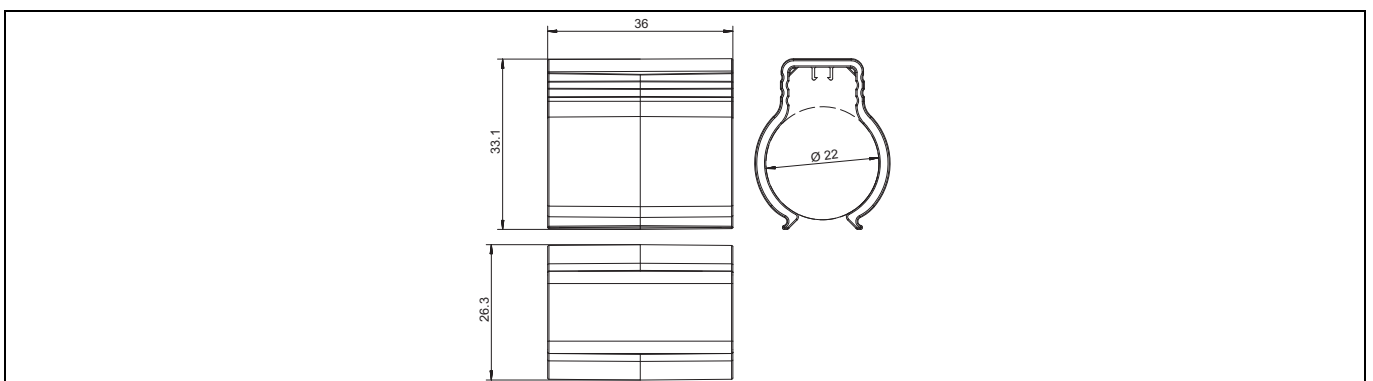
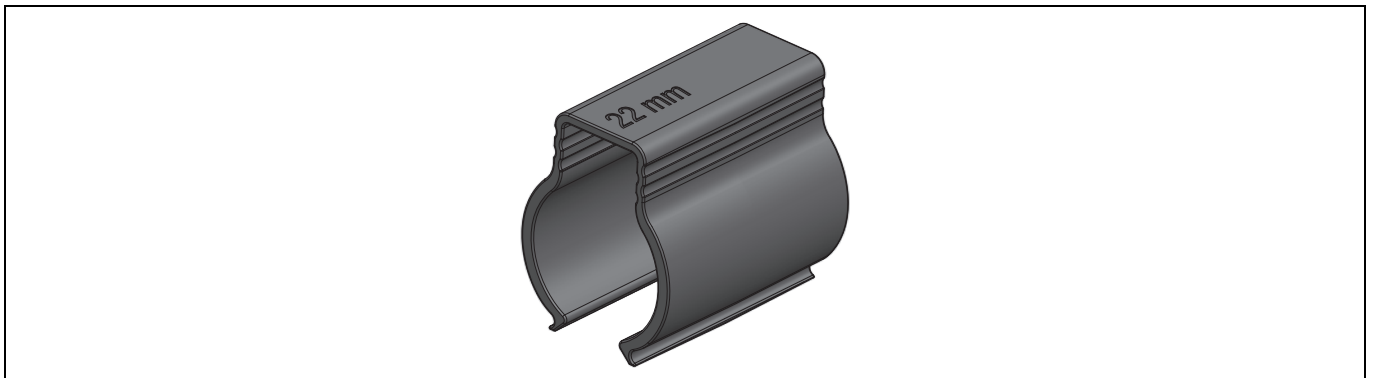
**JUMO Process Control, Inc.**  
 6733 Myers Road  
 East Syracuse, NY 13057, USA  
 Phone: +1 315 437 5866  
 Fax: +1 315 437 5860  
 Email: info.us@jumo.net  
 Internet: www.jumousa.com



**Insulation cap**



**Pipe clip for pipe diameters of 22 mm (example); for additional pipe clips see accessories**



**JUMO GmbH & Co. KG**  
 Delivery address: Mackenrodtstraße 14  
 36039 Fulda, Germany  
 Postal address: 36035 Fulda, Germany  
 Phone: +49 661 6003-0  
 Fax: +49 661 6003-607  
 Email: mail@jumo.net  
 Internet: www.jumo.net

**JUMO Instrument Co. Ltd.**  
 JUMO House  
 Temple Bank, Riverway  
 Harlow, Essex, CM20 2DY, UK  
 Phone: +44 1279 63 55 33  
 Fax: +44 1279 62 50 29  
 Email: sales@jumo.co.uk  
 Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**  
 6733 Myers Road  
 East Syracuse, NY 13057, USA  
 Phone: +1 315 437 5866  
 Fax: +1 315 437 5860  
 Email: info.us@jumo.net  
 Internet: www.jumousa.com



## Order details

		<b>(1) Basic type</b>	
	904004/10	JUMO plastoSENS T04 Surface-optimized plastic temperature probe with insulation cap and pipe clip	
	904004/50	JUMO plastoSENS T04 Surface-optimized plastic temperature probe without accessories	
		<b>(2) Operating temperature in °C</b>	
x	x	485	-40 to +180 °C
		<b>(3) Measuring insert</b>	
x	x	1003	1× Pt100 in two-wire circuit
x	x	1005	1× Pt1000 in two-wire circuit (standard)
		<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008</b>	
x	x	1	Class B (standard)
x	x	2	Class A
		<b>(5) Surface shape (further versions upon request)</b>	
x	x	012	For pipe diameters of 12 mm
x	x	016	For pipe diameters of 16 mm
x	x	018	For pipe diameters of 18 mm
x	x	022	For pipe diameters of 22 mm
x	x	028	For pipe diameters of 28 mm
		<b>(6) Connecting cable end</b>	
x	x	11	Ferrules
		<b>(7) Connecting cable length AL in mm (AL 500 to 10000 mm)</b>	
x	x	2500	2500 mm
		...	Specifications in plain text (increments of 500 mm)
		<b>(8) Extra codes</b>	
x	x	000	None

Order code  -  -  -  -  -  -  /   
 Order example 904004/10 - 485 - 1005 - 1 - 012 - 11 - 2500 / 000

## Information about order details

Please note that not all feature combinations directly generate deliverable products. They merely describe production-based versions that are possible. Due to the special manufacturing conditions the minimum order quantity for non-standard versions is 500 pieces.

## Accessories

Designation	Part no.
Insulation cap	00712258
Pipe clip for pipe diameters of 12 mm	00712262
Pipe clip for pipe diameters of 16 mm	00712266
Pipe clip for pipe diameters of 18 mm	00712267
Pipe clip for pipe diameters of 22 mm	00712270
Pipe clip for pipe diameters of 28 mm	00712271