

# JUMO PROCESStemp

## RTD temperature probes for process technology with Ex approval

- For temperatures from -200 to +600 °C
- With protection tubes made of stainless steel, titanium, tantalum, Inconel, and HASTELLOY®
- Available with two-wire transmitter (4 to 20 mA/HART®) in Ex version
- Ⓢ II 1/2 G Ex ia IIC T1...T6 Ga/Gb
- Ⓢ II 1/2 D Ex ia IIIC T80 °C...T400 °C Da/Db
- Ⓢ II 1/2 G Ex ia/d IIC T1...T6 Ga/Gb
- Ⓢ II 1/2 D Ex ia/tb IIIC T80 °C...T400 °C
- With interchangeable measuring insert (not for Ex basic types)

### Brief description

RTD temperature probes for process technology (in chemical plants, petrochemical industry, pressure vessels, etc.) are predominantly used for temperature measurement in liquids and gases.

The RTD temperature probes consist of a protection fitting according to DIN 43772 with various process connections, a terminal head, and an interchangeable measuring insert. The protection fitting is made of material 1.4571 as standard. Other materials are available for special applications.

All fittings are produced according to the German pressure vessel regulation ("Druckbehälterverordnung") and subjected to a pressure and leak test. The measuring insert is fitted with a Pt100 temperature sensor as a standard feature according to DIN EN 60751:2009 / IEC 60751:2008 (temperature coefficient  $\alpha = 3.850 \times 10^{-3} \text{ } ^\circ\text{C}^{-1}$ ), Class B in two-wire circuit; versions with two Pt100 measuring circuits can also be supplied, as well as three and four-wire circuits.

An analog or programmable transmitter with standard signal 4 to 20 mA can be installed for the transmission of measured values. Alternatively a HART® interface can be used.

Versions with flameproof enclosure or intrinsic safety are available for temperature measurement in potentially explosive areas.

For documentation purposes, the device parameters (measurement tolerance, material, etc.) can be confirmed with factory test certificates.

Push-in and screw-in RTD temperature probes with connection line and Ex approval are available upon request.

#### Note:

The specified operating temperatures are maximum values based on the applied sensing element. Operating temperatures in Ex areas are severely restricted. When determining the respective maximum operating temperature, please consult the operating manual (Chapter 5).

An RTD temperature probe that is installed in a separating wall between zone 0/1 (gas) and 20/21 (dust) and which does not have a protection tube with a zone separation of 1 mm stainless steel (extra code 292) requires the user to make sure that the complete measuring circuit corresponds to the intrinsically safe "ia" ignition protection type.

#### Explosion protection:

The maximum product-specific explosion protection depends on the design type of the RTD temperature probe. For an exact classification of the RTD temperature probe, please refer to the operating manual.



### Approvals and approval marks



**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

Terminal head	<p>Form B DIN EN 50446, aluminum die-cast, M20 × 1.5; IP65, ambient temperature -40 to +100 °C</p> <p>Form BUZ, aluminum die-cast, M20 × 1.5; IP65, ambient temperature -40 to +100 °C</p> <p>Form BUZH with or without LED display, aluminum die-cast, M20 × 1.5; IP65, ambient temperature -40 to +100 °C (with LED display -20 to +80 °C)</p> <p>Form BUZH with LED display and Ex approval, aluminum die-cast, M20 × 1.5; IP65, ambient temperature 0 to 60 °C</p> <p>Form BBKS, plastic (PA 6), M20 × 1.5; IP54, ambient temperature -30 bis +130 °C</p> <p>Form BEGF, stainless steel 1.4541, M20 × 1.5, IP65, ambient temperature -40 to +100 °C</p> <p>Form XD "Ex d IIC"/"Ex tb IIC" with or without LED display, stainless steel or aluminum die-cast, M20 × 1.5; IP66, ambient temperature -50 to +100 °C (with LED display -20 to +80 °C)</p> <p>Caution: reduced ambient temperature when using transmitters, data sheets 707010, 707030, 707050, 707060, and 707080</p> <p>Insofar as the design type allows it, yellow terminal heads are used for SIL and PL applications (extra codes 658 or 659). Exceptions to this are probes for use in alkaline environments and probes that are strictly required to be PWIS-free.</p>
Extension tube	Stainless steel 1.4571
Process connection	<p>Thread, stainless steel 1.4571</p> <p>Flange, stainless steel 1.4571</p> <p>Thermowell, stainless steel 1.4571 or steel 1.7335</p> <p>Highly corrosion-resistant materials and coatings are optionally available</p>
Protection tube	<p>Stainless steel 1.4571, Ø 6 mm, Ø 9 mm, Ø 11 mm, or Ø 12 mm</p> <p>Highly corrosion-resistant materials and coatings are optionally available</p>
Measuring insert	Exchangeable, Pt100 temperature sensor according to DIN EN 60751:2009 / IEC 60751:2008, Class B, two-wire circuit
Response times	t <sub>0,9</sub> approx. 50 s, flow velocity in water 0.2 m/s, Ø 9 mm
Vibration resistance	20 g (peak-to-peak) at the tip of the measuring insert
Transmitters	<p>Programmable transmitter, data sheet 707010</p> <p>Analog transmitter, data sheet 707030 (not for the Ex area)</p> <p>Programmable transmitter, data sheet 707050 (not for the Ex area)</p> <p>Programmable two-channel transmitter with HART®/SIL, data sheet 707080</p> <p>Programmable Wtrans B head transmitter with wireless data transmission, data sheet 707060 (not for the Ex area, suitable Wtrans receivers according to data sheet 902931)</p>
Accessories	Thermowells, data sheet 909710

## Functional safety

With this product, JUMO provides a number of different possibilities in terms of functional safety to realize a completely or partially certified solution.

If you require consulting with regard to the safety integrity level (SIL) or performance level (PL), you can contact us at [sil@jumo.net](mailto:sil@jumo.net) to arrange a personal appointment.

The safety data (MTBF, MTTFD, and FIT values) can also be accessed on demand for this item under [sensors@jumo.net](mailto:sensors@jumo.net).



**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



## Approvals and approval marks

ATEX Test facility Certificate/test no. Inspection basis Valid for	Eurofins Electrosuisse Product Testing AG SEV 15 ATEX 0118 EN 60079-0 + A11, EN 60079-1, EN 60079-11, EN 60079-26, EN 60079-31 Extra code 362
IECEX Test facility Certificate/test no. Inspection basis Valid for	Eurofins Electrosuisse Product Testing AG IECEX SEV 15.0006 IEC 60079-0, IEC 60079-1, IEC 60079-11, IEC 60079-26, IEC 60079-31 Extra code 362
SIL QUALIFIED Test facility Certificate/test no. Inspection basis Valid for	- - - Extra codes 658/659 in conjunction with declaration of manufacturer
PL QUALIFIED Test facility Certificate/test no. Inspection basis Valid for	- - - Extra codes 658/659 in conjunction with declaration of manufacturer

## Standardized versions

Basic type	Design type		D in mm	L2 in mm	EL in mm	Thread in inches
902820/10	Form 2G according to DIN 43772	Form B1 according to DIN 43765	9	-	160	G 1/2
		Form B2 according to DIN 43765	9	-	250	G 1/2
		Form B3 according to DIN 43765	9	-	400	G 1/2
		Form C1 according to DIN 43766	11	-	160	G 1
		Form C2 according to DIN 43766	11	-	250	G 1
902820/11	Form 3G according to DIN 43772	Form G1 according to DIN 43771	9	-	160	G 1
		Form G2 according to DIN 43771	9	-	220	G 1
		Form G3 according to DIN 43771	9	-	280	G 1
902820/50	Form 4 according to DIN 43772	Form D1 according to DIN 43771	12.5	140	65	-
		Form D2 according to DIN 43771	12.5	200	125	-
		Form D3 according to DIN 43771	12.5	200	65	-
		Form D4 according to DIN 43771	12.5	260	125	-

**Note:** DIN 43772 contains information for evaluating the mechanical and thermal resistance of cylindrical and conical protection tubes in industrial thermometers.

**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

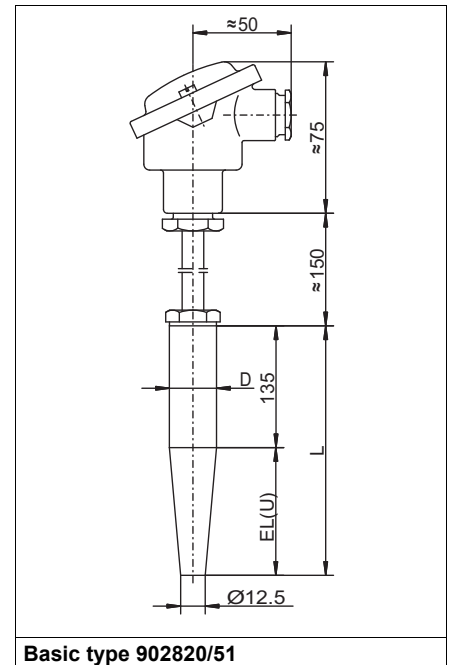
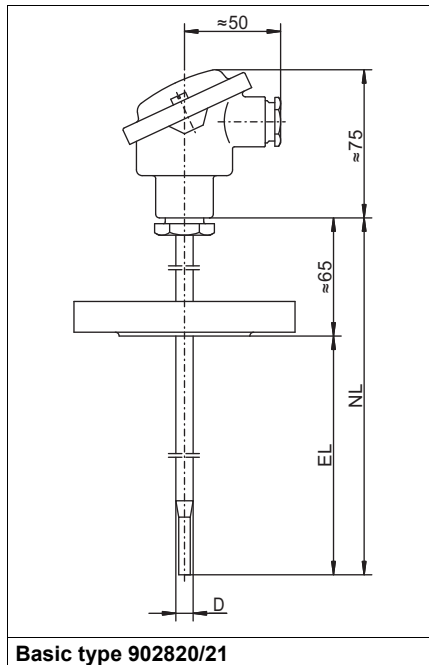
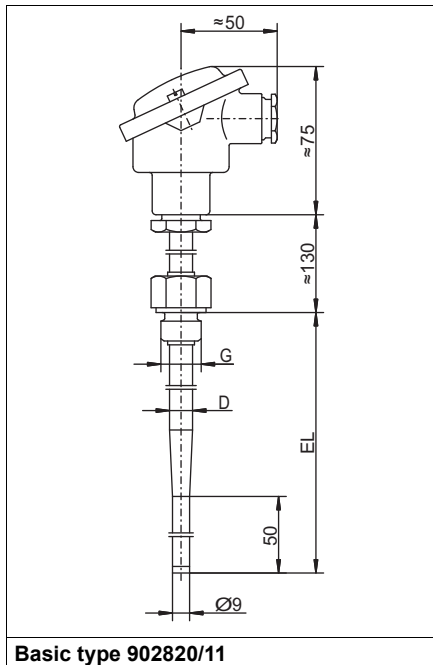
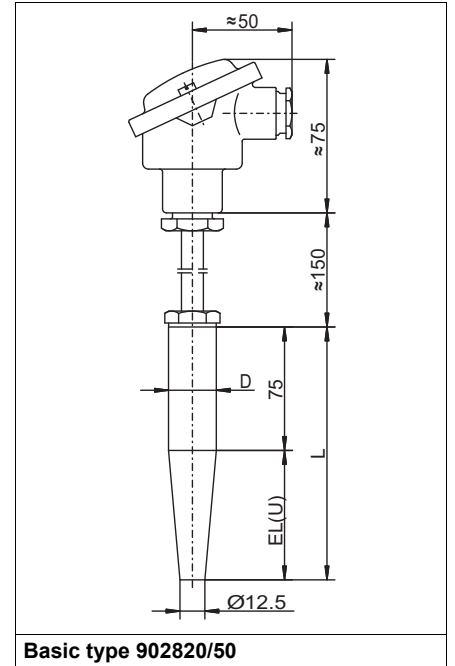
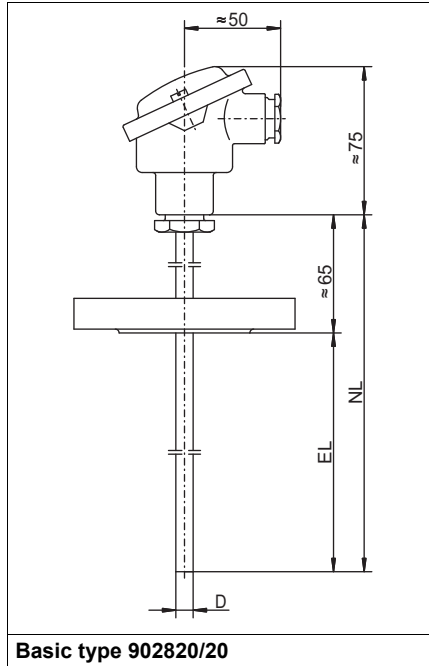
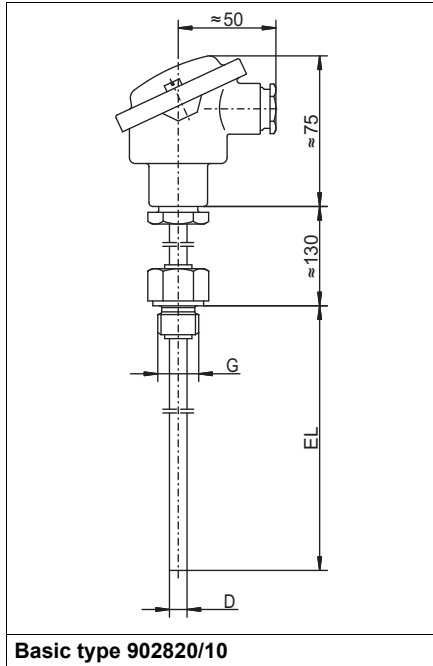
**JUMO Instrument Co. Ltd.**  
 JUMO House  
 Temple Bank, Riverway  
 Harlow, Essex, CM20 2DY, UK  
 Phone: +44 1279 63 55 33  
 Fax: +44 1279 62 50 29  
 Email: sales@jumo.co.uk  
 Internet: www.jumo.co.uk

**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



# Dimensions

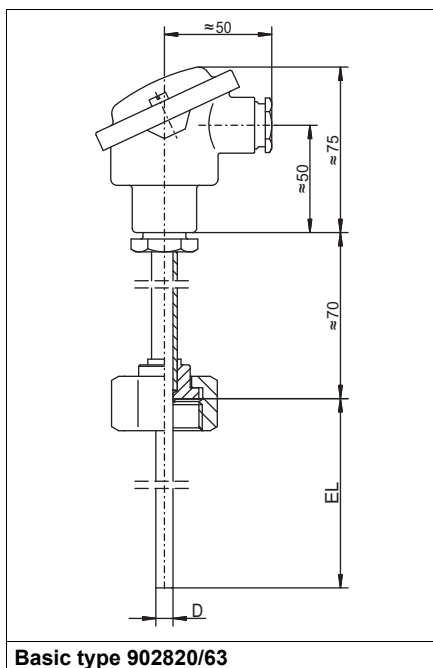
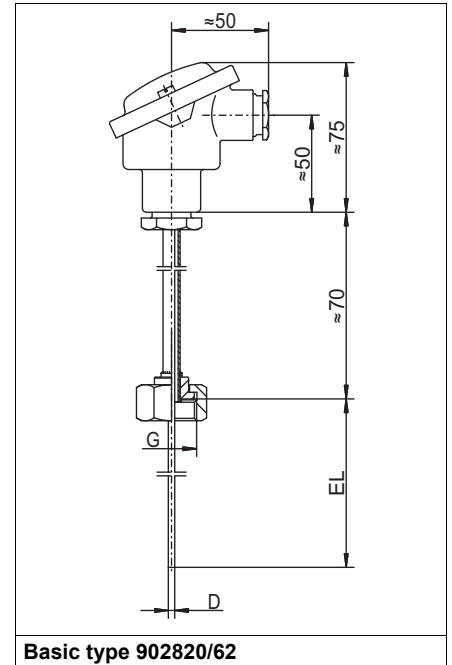
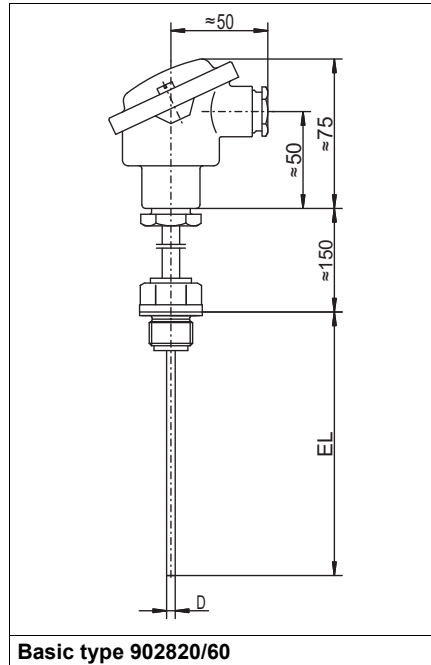
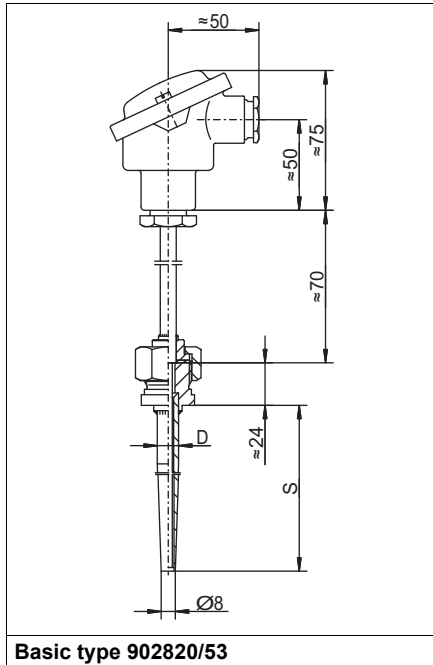
## RTD temperature probe dimensions



**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



Insofar as the design type allows it, yellow terminal heads are used for SIL and PL applications (extra codes 658 or 659). Exceptions to this are probes for use in alkaline environments and probes where it is strictly necessary that they are PWIS-free.

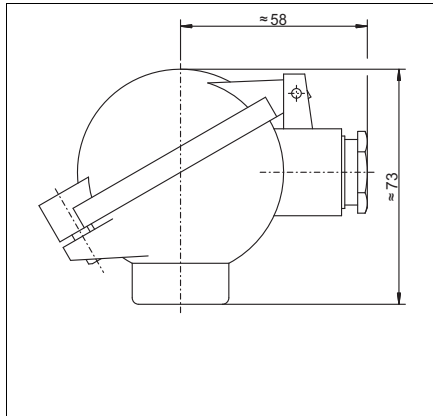
**JUMO GmbH & Co. KG**  
 Delivery address: Mackenrodtstraße 14  
 36039 Fulda, Germany  
 Postal address: 36035 Fulda, Germany  
 Phone: +49 661 6003-0  
 Fax: +49 661 6003-607  
 Email: mail@jumo.net  
 Internet: www.jumo.net

**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

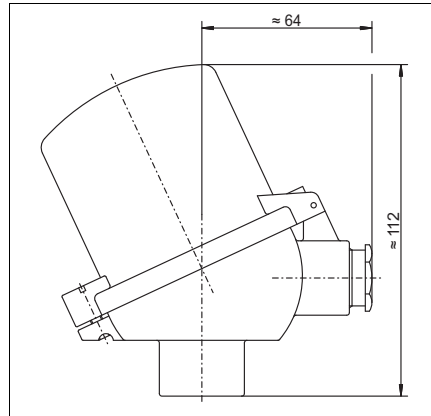
**JUMO Process Control, Inc.**  
 6733 Myers Road  
 East Syracuse, NY 13057, USA  
 Phone: +1 315 437 5866  
 Fax: +1 315 437 5860  
 Email: info.us@jumo.net  
 Internet: www.jumousa.com



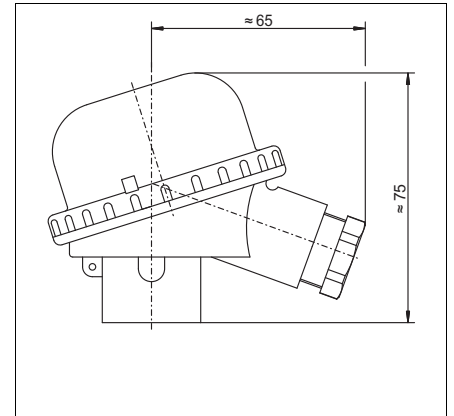
## Dimensions of the terminal heads



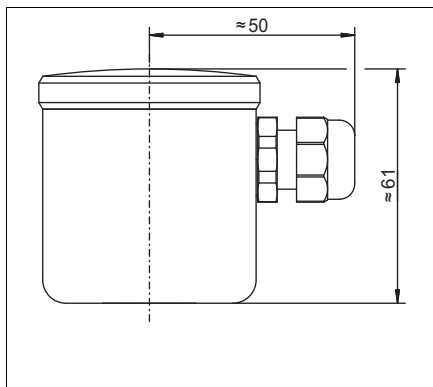
**Terminal head form BUZ**  
 Extra code 320



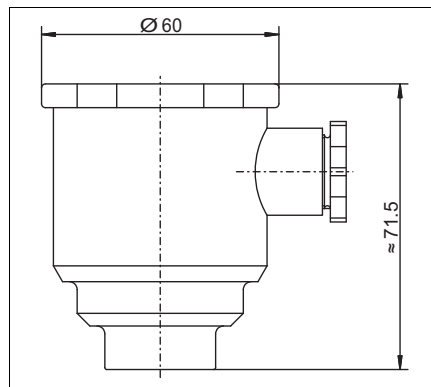
**Terminal head form BUZH**  
 Extra code 321  
 With LED display  
 Ex ia extra code 321 and 661



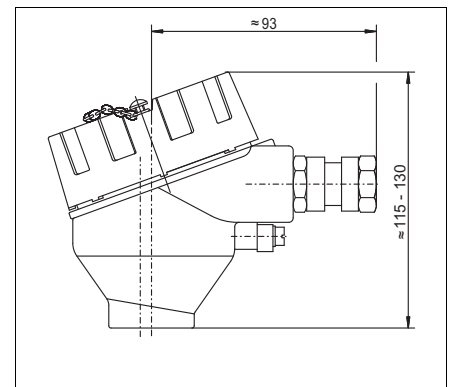
**Terminal head form BBKS**  
 Extra code 324



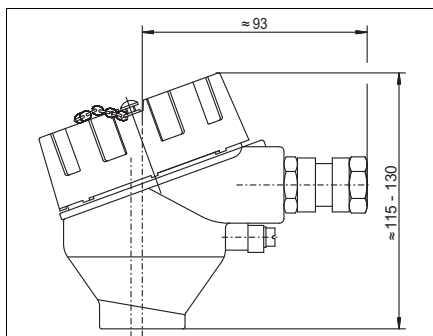
**Terminal head form KGI-1**  
 Extra code 326



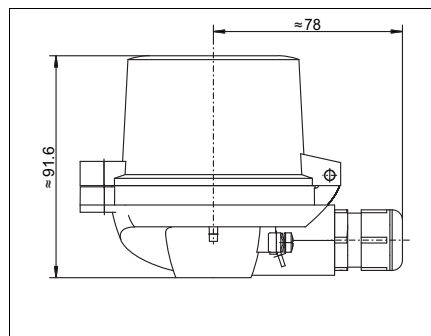
**Terminal head form BEGF**  
 Extra code 397



**Terminal head form XD-A**  
 Extra code 399  
 With LED display  
 Ex ia extra code 399 and 661  
 Ex ib extra code 399 and 789



**Terminal head form XD-S**  
 Extra code 541  
 With LED display  
 Ex ia extra code 541 and 661  
 Ex ib extra code 541 and 789



**Terminal head form AB7**  
 Extra code 924

**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



## Wtrans B – head transmitter with wireless data transmission

The Wtrans B head transmitter with wireless data transmission (data sheet 707060) is used in conjunction with a Wtrans receiver (data sheet 902931) for stationary or mobile acquisition of temperatures with RTD temperature probes or thermocouples.

The measured values are transmitted wirelessly to the receiver of the Wtrans measuring system. The measured values are displayed on the receiver and are available in digital format on the RS485 interface and as analog outputs. Alternatively, different alarms can be signaled with two relay outputs.

This head transmitter, designed for industrial applications, comprises a transmitter with integrated transmission unit and an antenna-battery housing. The transmitter is designed for mounting in form B terminal heads and works in an ambient temperature range of -30 to +85 °C.

The radio frequency of the Wtrans measuring system is 868.4 MHz. This frequency is largely impervious to external interference and allows data to be transmitted even in harsh industrial environments. When using the antenna holder for wall mounting with the 3 m antenna cable for the receiver, the open air range is 300 m.

A 3.6 V, 2.2 Ah (size AA) lithium battery is used for the head transmitter voltage supply.

A setup program is available as an accessory for easy configuration and parameterization of the head transmitter and the Wtrans receiver on a PC. The OnlineChart function can be used optionally to record the measured values on a PC.



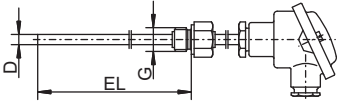
**JUMO GmbH & Co. KG**  
 Delivery address: Mackenrodtstraße 14  
 36039 Fulda, Germany  
 Postal address: 36035 Fulda, Germany  
 Phone: +49 661 6003-0  
 Fax: +49 661 6003-607  
 Email: mail@jumo.net  
 Internet: www.jumo.net

**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>	
902820/10	Screw-in RTD temperature probe with continuous protection tube	
	<b>(2) Operating temperature (additional versions upon request)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)	
x 386	-50 to +260 °C (thin film temperature sensor)	
x 402	-50 to +400 °C (thin film temperature sensor)	
x 415	-50 to +600 °C (thin film temperature sensor)	
	<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in 3-wire circuit	
x 1003	1× Pt100 in 2-wire circuit	
x 1011	1× Pt100 in 4-wire circuit	
x 2001	2× Pt100 in 3-wire circuit	
x 2003	2× Pt100 in 2-wire circuit	
x 2011	2× Pt100 in four-wire circuit (only in conjunction with terminal head 321)	
	<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008 (additional versions upon request)</b>	
x 1	Class B (standard) (-50 to +500 °C)	
x 2	Class A (-30 to +300 °C)	
x 3	Class AA (0 to 150 °C)	
	<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x 9	Ø 9 × 1 mm	
x 11	Ø 11 × 2 mm	
	<b>(6) Insertion length EL in mm (EL up to 1000 mm)</b>	
...	Specification in plain text	
	<b>(7) Process connection (additional versions upon request)</b>	
x 104	Screw connection G 1/2	
x 106	Screw connection G 1	
x 144	Screw connection 1/2-14 NPT	
x 146	Screw connection 1-11.5 NPT	
	<b>(8) Protection tube material</b>	
x 26	Stainless steel 1.4571	
x 60	Titanium, upon request	
x 80	Tantalum, upon request	
x 81	Inconel, upon request	
x 82	HASTELLOY®, upon request	
	<b>(9) Extra codes</b>	
x 000	None	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 320	Terminal head form BUZ	
x 321	Terminal head form BUZH	
x 324	Terminal head form BBKS	
x 326	Terminal head form KGI-1	
x 547	Terminal head form BUZH with LED display	
x 924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 866 or 867)	





**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



<b>(1) Basic type</b>		
902820/11	Screw-in RTD temperature probe with reduced protection tube	
<b>(2) Operating temperature (additional versions upon request)</b>		
x	150	-200 to +600 °C (wire-wound temperature sensor)
x	386	-50 to +260 °C (thin film temperature sensor)
x	402	-50 to +400 °C (thin film temperature sensor)
x	415	-50 to +600 °C (thin film temperature sensor)
<b>(3) Measuring insert (additional versions upon request)</b>		
x	1001	1× Pt100 in 3-wire circuit
x	1003	1× Pt100 in 2-wire circuit
x	1011	1× Pt100 in 4-wire circuit
x	2001	2× Pt100 in 3-wire circuit
x	2003	2× Pt100 in 2-wire circuit
x	2011	2× Pt100 in four-wire circuit (only in conjunction with terminal head 321)
<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008 (additional versions upon request)</b>		
x	1	Class B (standard) (-50 to +500 °C)
x	2	Class A (-30 to +300 °C)
x	3	Class AA (0 to 150 °C)
<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>		
x	9	Ø 9 × 1 mm reduced to Ø 6 mm
x	12	Ø 12 × 2.5 mm reduced to Ø 9 mm
<b>(6) Insertion length EL in mm (EL up to 700 mm)</b>		
	...	Specification in plain text
<b>(7) Process connection (additional versions upon request)</b>		
x	104	Screw connection G 1/2
x	106	Screw connection G 1
x	144	Screw connection 1/2-14 NPT
x	146	Screw connection 1-11.5 NPT
<b>(8) Protection tube material</b>		
x	26	Stainless steel 1.4571
x	60	Titanium, upon request
x	80	Tantalum, upon request
x	81	Inconel, upon request
x	82	HASTELLOY®, upon request
<b>(9) Extra codes</b>		
x	000	None
x	658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)
x	659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)
x	320	Terminal head form BUZ
x	321	Terminal head form BUZH
x	324	Terminal head form BBKS
x	326	Terminal head form KGI-1
x	547	Terminal head form BUZH with LED display
x	924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 866 or 867)
x	925	Terminal head form BUZH with LC plug-in display (only in conjunction with extra code 866 or 867)

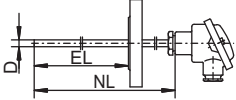


**JUMO GmbH & Co. KG**  
 Delivery address: Mackenrodtstraße 14  
 36039 Fulda, Germany  
 Postal address: 36035 Fulda, Germany  
 Phone: +49 661 6003-0  
 Fax: +49 661 6003-607  
 Email: mail@jumo.net  
 Internet: www.jumo.net

**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



		<b>(1) Basic type</b>	
902820/20		Push-in RTD temperature probe with continuous protection tube	
		<b>(2) Operating temperature (additional versions upon request)</b>	
x	150	-200 to +600 °C (wire-wound temperature sensor)	
x	386	-50 to +260 °C (thin film temperature sensor)	
x	402	-50 to +400 °C (thin film temperature sensor)	
x	415	-50 to +600 °C (thin film temperature sensor)	
		<b>(3) Measuring insert (additional versions upon request)</b>	
x	1001	1× Pt100 in 3-wire circuit	
x	1003	1× Pt100 in 2-wire circuit	
x	1011	1× Pt100 in 4-wire circuit	
x	2001	2× Pt100 in 3-wire circuit	
x	2003	2× Pt100 in 2-wire circuit	
x	2011	2× Pt100 in four-wire circuit (only in conjunction with terminal head 321)	
		<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008 (additional versions upon request)</b>	
x	1	Class B (standard) (-50 to +500 °C)	
x	2	Class A (-30 to +300 °C)	
x	3	Class AA (0 to 150 °C)	
		<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x	9	Ø 9 × 1 mm	
x	11	Ø 11 × 2 mm	
		<b>(6) Insertion length EL in mm (EL up to 1000 mm)</b>	
	...	Specification in plain text	
		<b>(7) Process connection (additional versions upon request)</b>	
x	000	None	
x	642	Flange B DN 25/PN 40, DIN EN 1092-1	
x	644	Flange B DN 40/PN 40, DIN EN 1092-1	
		<b>(8) Protection tube material</b>	
x	26	Stainless steel 1.4571	
x	60	Titanium, upon request	
x	80	Tantalum, upon request	
x	81	Inconel, upon request	
x	82	HASTELLOY®, upon request	
		<b>(9) Extra codes</b>	
x	000	None	
x	658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x	659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x	320	Terminal head form BUZ	
x	321	Terminal head form BUZH	
x	324	Terminal head form BBKS	
x	326	Terminal head form KGI-1	
x	547	Terminal head form BUZH with LED display	
x	924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 866 or 867)	
x	925	Terminal head form BUZH with LC plug-in display (only in conjunction with extra code 866 or 867)	
x	424	Terminal head with M12 machine connector (can only be selected in the case of measuring inserts with max. 4 wires, e.g., 1003, 1011, or 2003)	

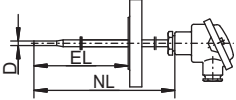


**JUMO GmbH & Co. KG**  
 Delivery address: Mackenrodtstraße 14  
 36039 Fulda, Germany  
 Postal address: 36035 Fulda, Germany  
 Phone: +49 661 6003-0  
 Fax: +49 661 6003-607  
 Email: mail@jumo.net  
 Internet: www.jumo.net

**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



	<b>(1) Basic type</b>	
902820/21	Push-in RTD temperature probe with reduced protection tube	
	<b>(2) Operating temperature (additional versions upon request)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)	
x 386	-50 to +260 °C (thin film temperature sensor)	
x 402	-50 to +400 °C (thin film temperature sensor)	
x 415	-50 to +600 °C (thin film temperature sensor)	
	<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in 3-wire circuit	
x 1003	1× Pt100 in 2-wire circuit	
x 1011	1× Pt100 in 4-wire circuit	
x 2001	2× Pt100 in 3-wire circuit	
x 2003	2× Pt100 in 2-wire circuit	
x 2011	2× Pt100 in four-wire circuit (only in conjunction with terminal head 321)	
	<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008 (additional versions upon request)</b>	
x 1	Class B (standard) (-50 to +500 °C)	
x 2	Class A (-30 to +300 °C)	
x 3	Class AA (0 to 150 °C)	
	<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x 9	Ø 9 × 1 mm reduced to Ø 6 mm	
x 12	Ø 12 × 2.5 mm reduced to Ø 9 mm	
	<b>(6) Insertion length EL in mm (EL up to 1000 mm)</b>	
...	Specification in plain text	
	<b>(7) Process connection (additional versions upon request)</b>	
x 000	None	
x 642	Flange B DN 25/PN 40, DIN EN 1092-1	
x 644	Flange B DN 40/PN 40, DIN EN 1092-1	
	<b>(8) Protection tube material</b>	
x 26	Stainless steel 1.4571	
x 60	Titanium, upon request	
x 80	Tantalum, upon request	
x 81	Inconel, upon request	
x 82	HASTELLOY®, upon request	
	<b>(9) Extra codes</b>	
x 000	None	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 320	Terminal head form BUZ	
x 321	Terminal head form BUZH	
x 324	Terminal head form BBKS	
x 326	Terminal head form KGI-1	
x 547	Terminal head form BUZH with LED display	
x 924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 866 or 867)	
x 925	Terminal head form BUZH with LC plug-in display (only in conjunction with extra code 866 or 867)	
x 424	Terminal head with M12 machine connector (can only be selected in the case of measuring inserts with max. 4 wires, e.g., 1003, 1011, or 2003)	

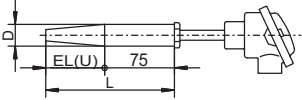


**JUMO GmbH & Co. KG**  
 Delivery address: Mackenrodtstraße 14  
 36039 Fulda, Germany  
 Postal address: 36035 Fulda, Germany  
 Phone: +49 661 6003-0  
 Fax: +49 661 6003-607  
 Email: mail@jumo.net  
 Internet: www.jumo.net

**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



	<b>(1) Basic type</b>	
902820/50	Screw-in RTD temperature probe with thermowell DIN 43772, form 4	
	<b>(2) Operating temperature (additional versions upon request)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)	
x 386	-50 to +260 °C (thin film temperature sensor)	
x 402	-50 to +400 °C (thin film temperature sensor)	
x 415	-50 to +600 °C (thin film temperature sensor)	
	<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in 3-wire circuit	
x 1003	1× Pt100 in 2-wire circuit	
x 1011	1× Pt100 in 4-wire circuit	
x 2001	2× Pt100 in 3-wire circuit	
x 2003	2× Pt100 in 2-wire circuit	
x 2011	2× Pt100 in four-wire circuit (only in conjunction with terminal head 321)	
	<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008 (additional versions upon request)</b>	
x 1	Class B (standard) (-50 to +500 °C)	
x 2	Class A (-30 to +300 °C)	
x 3	Class AA (0 to 150 °C)	
	<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x 24	Ø 24 mm reduced to Ø 12.5 mm	
	<b>(6) Thermowell dimensions (insertion length/total length)</b>	
x 205	65 mm/140 mm (previously form D1 according to DIN 43767)	
x 325	125 mm/200 mm (previously form D2 according to DIN 43767)	
...	Upon request (Code: U + L)	
	<b>(7) Thermowell material</b>	
x 26	Stainless steel 1.4571 (operating temperature 600 °C)	
x 36	Steel 1.7335 (operating temperature 540 °C)	
	<b>(8) Protection tube material</b>	
x 26	Stainless steel 1.4571	
	<b>(9) Extra codes</b>	
x 000	None	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 320	Terminal head form BUZ	
x 321	Terminal head form BUZH	
x 324	Terminal head form BBKS	
x 326	Terminal head form KGI-1	
x 547	Terminal head form BUZH with LED display	
x 924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 866 or 867)	
x 925	Terminal head form BUZH with LC plug-in display (only in conjunction with extra code 866 or 867)	
x 424	Terminal head with M12 machine connector (can only be selected in the case of measuring inserts with max. 4 wires, e.g., 1003, 1011, or 2003)	
x 330	1 analog transmitter (type 707031 according to data sheet 707030), output 4 to 20 mA, (only for measuring insert 1× Pt100 in two or three-wire circuit, not in conjunction with extra codes 658 or 659)	
x 331	1 programmable transmitter (type 707014 according to data sheet 707010), output 4 to 20 mA/20 to 4 mA, (only for measuring insert 1× Pt100, not in conjunction with extra codes 658 or 659, suitable setup program part no. 00605080)	





**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



	<b>(1) Basic type</b>	
902820/51	Screw-in RTD temperature probe with thermowell DIN 43772, form 4	
	<b>(2) Operating temperature (additional versions upon request)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)	
x 386	-50 to +260 °C (thin film temperature sensor)	
x 402	-50 to +400 °C (thin film temperature sensor)	
x 415	-50 to +600 °C (thin film temperature sensor)	
	<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in 3-wire circuit	
x 1003	1× Pt100 in 2-wire circuit	
x 1011	1× Pt100 in 4-wire circuit	
x 2001	2× Pt100 in 3-wire circuit	
x 2003	2× Pt100 in 2-wire circuit	
x 2011	2× Pt100 in four-wire circuit (only in conjunction with terminal head 321)	
	<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008 (additional versions upon request)</b>	
x 1	Class B (standard) (-50 to +500 °C)	
x 2	Class A (-30 to +300 °C)	
x 3	Class AA (0 to 150 °C)	
	<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x 24	Ø 24 mm reduced to Ø 12.5 mm	
	<b>(6) Thermowell dimensions (insertion length/total length)</b>	
x 265	65 mm/200 mm (previously form D4 according to DIN 43767)	
x 385	125 mm/260 mm (previously form D5 according to DIN 43767)	
...	Upon request (Code: U + L)	
	<b>(7) Thermowell material</b>	
x 26	Stainless steel 1.4571 (operating temperature 600 °C)	
x 36	Steel 1.7335 (operating temperature 540 °C)	
	<b>(8) Protection tube material</b>	
x 26	Stainless steel 1.4571	
	<b>(9) Extra codes</b>	
x 000	None	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 320	Terminal head form BUZ	
x 321	Terminal head form BUZH	
x 324	Terminal head form BBKS	
x 326	Terminal head form KGI-1	
x 547	Terminal head form BUZH with LED display	
x 924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 866 or 867)	
x 925	Terminal head form BUZH with LC plug-in display (only in conjunction with extra code 866 or 867)	
x 424	Terminal head with M12 machine connector (can only be selected in the case of measuring inserts with max. 4 wires, e.g., 1003, 1011, or 2003)	
x 330	1 analog transmitter (type 707031 according to data sheet 707030), output 4 to 20 mA, (only for measuring insert 1× Pt100 in two or three-wire circuit, not in conjunction with extra codes 658 or 659)	
x 331	1 programmable transmitter (type 707014 according to data sheet 707010), output 4 to 20 mA/20 to 4 mA, (only for measuring insert 1× Pt100, not in conjunction with extra codes 658 or 659, suitable setup program part no. 00605080)	

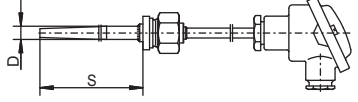


**JUMO GmbH & Co. KG**  
 Delivery address: Mackenrodtstraße 14  
 36039 Fulda, Germany  
 Postal address: 36035 Fulda, Germany  
 Phone: +49 661 6003-0  
 Fax: +49 661 6003-607  
 Email: mail@jumo.net  
 Internet: www.jumo.net

**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



	<b>(1) Basic type</b>	
902820/53	Screw-in RTD temperature probe with weld-in sleeve	
	<b>(2) Operating temperature (additional versions upon request)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)	
x 386	-50 to +260 °C (thin film temperature sensor)	
x 402	-50 to +400 °C (thin film temperature sensor)	
x 415	-50 to +600 °C (thin film temperature sensor)	
	<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in 3-wire circuit	
x 1003	1× Pt100 in 2-wire circuit	
x 1011	1× Pt100 in 4-wire circuit	
x 2001	2× Pt100 in 3-wire circuit	
x 2003	2× Pt100 in 2-wire circuit	
x 2011	2× Pt100 in four-wire circuit (only in conjunction with terminal head 321)	
	<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008 (additional versions upon request)</b>	
x 1	Class B (standard) (-50 to +500 °C)	
x 2	Class A (-30 to +300 °C)	
x 3	Class AA (0 to 150 °C)	
	<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x 12	Ø 12 mm reduced to Ø 8 mm	
	<b>(6) Insertion length S (80 to 500 mm)</b>	
x 80	80 mm, steel	
x 140	140 mm, steel	
x 170	170 mm, steel or stainless steel	
x 200	200 mm, steel or stainless steel	
	<b>(7) Process connection</b>	
x 815	Welding protective sleeve with external thread, fastening with union nut	
	<b>(8) Welding protective sleeve material</b>	
x 01	Steel 1.0345	
x 26	Stainless steel 1.4571	
	<b>(9) Extra codes</b>	
x 000	None	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 320	Terminal head form BUZ	
x 321	Terminal head form BUZH	
x 324	Terminal head form BBKS	
x 326	Terminal head form KGI-1	
x 547	Terminal head form BUZH with LED display	
x 924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 866 or 867)	
x 925	Terminal head form BUZH with LC plug-in display (only in conjunction with extra code 866 or 867)	
x 424	Terminal head with M12 machine connector (can only be selected in the case of measuring inserts with max. 4 wires, e.g., 1003, 1011, or 2003)	
x 330	1 analog transmitter (type 707031 according to data sheet 707030), output 4 to 20 mA, (only for measuring insert 1× Pt100 in two or three-wire circuit, not in conjunction with extra codes 658 or 659)	

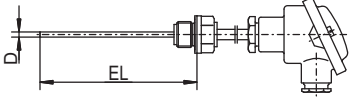


**JUMO GmbH & Co. KG**  
 Delivery address: Mackenrodtstraße 14  
 36039 Fulda, Germany  
 Postal address: 36035 Fulda, Germany  
 Phone: +49 661 6003-0  
 Fax: +49 661 6003-607  
 Email: mail@jumo.net  
 Internet: www.jumo.net

**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



	<b>(1) Basic type</b>	
902820/60	Screw-in RTD temperature probe for thermowell with internal thread	
	<b>(2) Operating temperature (additional versions upon request)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)	
x 386	-50 to +260 °C (thin film temperature sensor)	
x 402	-50 to +400 °C (thin film temperature sensor)	
x 415	-50 to +600 °C (thin film temperature sensor)	
	<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in 3-wire circuit	
x 1003	1× Pt100 in 2-wire circuit	
x 1011	1× Pt100 in 4-wire circuit	
x 2001	2× Pt100 in 3-wire circuit	
x 2003	2× Pt100 in 2-wire circuit	
x 2011	2× Pt100 in four-wire circuit (only in conjunction with terminal head 321)	
	<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008 (additional versions upon request)</b>	
x 1	Class B (standard) (-50 to +500 °C)	
x 2	Class A (-30 to +300 °C)	
x 3	Class AA (0 to 150 °C)	
	<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x 6	Ø 6 mm	
	<b>(6) Insertion length EL in mm (EL up to 1000 mm)</b>	
...	Specification in plain text	
	<b>(7) Process connection (additional versions upon request)</b>	
x 126	Screw connection M18 × 1.5	
	<b>(8) Protection tube material</b>	
x 26	Stainless steel 1.4571	
	<b>(9) Extra codes</b>	
x 000	None	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 320	Terminal head form BUZ	
x 321	Terminal head form BUZH	
x 324	Terminal head form BBKS	
x 326	Terminal head form KGI-1	
x 547	Terminal head form BUZH with LED display	
x 924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 866 or 867)	
x 925	Terminal head form BUZH with LC plug-in display (only in conjunction with extra code 866 or 867)	
x 424	Terminal head with M12 machine connector (can only be selected in the case of measuring inserts with max. 4 wires, e.g., 1003, 1011, or 2003)	
x 330	1 analog transmitter (type 707031 according to data sheet 707030), output 4 to 20 mA, (only for measuring insert 1× Pt100 in two or three-wire circuit, not in conjunction with extra codes 658 or 659)	
x 331	1 programmable transmitter (type 707014 according to data sheet 707010), output 4 to 20 mA/20 to 4 mA, (only for measuring insert 1× Pt100, not in conjunction with extra codes 658 or 659, suitable setup program part no. 00605080)	
x 333	1 analog transmitter (type 707033 according to data sheet 707030), output 0 to 10 V, (only for measuring insert 1× Pt100 in two or three-wire circuit, not in conjunction with extra codes 658 or 659)	

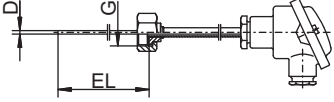


**JUMO GmbH & Co. KG**  
 Delivery address: Mackenrodtstraße 14  
 36039 Fulda, Germany  
 Postal address: 36035 Fulda, Germany  
 Phone: +49 661 6003-0  
 Fax: +49 661 6003-607  
 Email: mail@jumo.net  
 Internet: www.jumo.net

**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



		<b>(1) Basic type</b>	
902820/62		Screw-in RTD temperature probe with union nut and replaceable measuring insert for thermowell with external thread	
		<b>(2) Operating temperature (additional versions upon request)</b>	
x	150	-200 to +600 °C (wire-wound temperature sensor)	
x	386	-50 to +260 °C (thin film temperature sensor)	
x	402	-50 to +400 °C (thin film temperature sensor)	
x	415	-50 to +600 °C (thin film temperature sensor)	
		<b>(3) Measuring insert (additional versions upon request)</b>	
x	1001	1× Pt100 in 3-wire circuit	
x	1003	1× Pt100 in 2-wire circuit	
x	1011	1× Pt100 in 4-wire circuit	
x	2001	2× Pt100 in 3-wire circuit	
x	2003	2× Pt100 in 2-wire circuit	
x	2011	2× Pt100 in four-wire circuit (only in conjunction with terminal head 321)	
		<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008 (additional versions upon request)</b>	
x	1	Class B (standard) (-50 to +500 °C)	
x	2	Class A (-30 to +300 °C)	
x	3	Class AA (0 to 150 °C)	
		<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x	6	Ø 6 mm	
		<b>(6) Insertion length EL in mm (EL up to 1000 mm)</b>	
	...	Specification in plain text	
		<b>(7) Process connection (additional versions upon request)</b>	
x	165	Union nut, thread G 3/4	
		<b>(8) Protection tube material</b>	
x	26	Stainless steel 1.4571	
		<b>(9) Extra codes</b>	
x	000	None	
x	658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x	659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x	320	Terminal head form BUZ	
x	321	Terminal head form BUZH	
x	324	Terminal head form BBKS	
x	326	Terminal head form KGI-1	
x	547	Terminal head form BUZH with LED display	
x	924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 866 or 867)	
x	925	Terminal head form BUZH with LC plug-in display (only in conjunction with extra code 866 or 867)	
x	424	Terminal head with M12 machine connector (can only be selected in the case of measuring inserts with max. 4 wires, e.g., 1003, 1011, or 2003)	
x	330	1 analog transmitter (type 707031 according to data sheet 707030), output 4 to 20 mA, (only for measuring insert 1× Pt100 in two or three-wire circuit, not in conjunction with extra codes 658 or 659)	
x	331	1 programmable transmitter (type 707014 according to data sheet 707010), output 4 to 20 mA/20 to 4 mA, (only for measuring insert 1× Pt100, not in conjunction with extra codes 658 or 659, suitable setup program part no. 00605080)	
x	333	1 analog transmitter (type 707033 according to data sheet 707030), output 0 to 10 V, (only for measuring insert 1× Pt100 in two or three-wire circuit, not in conjunction with extra codes 658 or 659)	



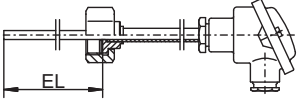


**JUMO GmbH & Co. KG**  
 Delivery address: Mackenrodtstraße 14  
 36039 Fulda, Germany  
 Postal address: 36035 Fulda, Germany  
 Phone: +49 661 6003-0  
 Fax: +49 661 6003-607  
 Email: mail@jumo.net  
 Internet: www.jumo.net

**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



	<b>(1) Basic type</b>	
902820/63	Screw-in RTD temperature probe with union nut and non-replaceable measuring insert for thermowell with external thread	
	<b>(2) Operating temperature (additional versions upon request)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)	
x 386	-50 to +260 °C (thin film temperature sensor)	
x 402	-50 to +400 °C (thin film temperature sensor)	
x 415	-50 to +600 °C (thin film temperature sensor)	
	<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in 3-wire circuit	
x 1003	1× Pt100 in 2-wire circuit	
x 1011	1× Pt100 in 4-wire circuit	
x 2001	2× Pt100 in 3-wire circuit	
x 2003	2× Pt100 in 2-wire circuit	
x 2011	2× Pt100 in four-wire circuit (only in conjunction with terminal head 321)	
	<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008 (additional versions upon request)</b>	
x 1	Class B (standard) (-50 to +500 °C)	
x 2	Class A (-30 to +300 °C)	
x 3	Class AA (0 to 150 °C)	
	<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x 6	Ø 6 mm	
x 9	Ø 9 mm	
	<b>(6) Insertion length EL in mm (EL up to 1000 mm)</b>	
...	Specification in plain text	
	<b>(7) Process connection (additional versions upon request)</b>	
x 165	Union nut, thread G 3/4	
	<b>(8) Protection tube material</b>	
x 26	Stainless steel 1.4571	
	<b>(9) Extra codes</b>	
x 000	None	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866, and 867)	
x 320	Terminal head form BUZ	
x 321	Terminal head form BUZH	
x 324	Terminal head form BBKS	
x 326	Terminal head form KGI-1	
x 547	Terminal head form BUZH with LED display	
x 924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 866 or 867)	
x 925	Terminal head form BUZH with LC plug-in display (only in conjunction with extra code 866 or 867)	
x 424	Terminal head with M12 machine connector (can only be selected in the case of measuring inserts with max. 4 wires, e.g., 1003, 1011, or 2003)	
x 330	1 analog transmitter (type 707031 according to data sheet 707030), output 4 to 20 mA, (only for measuring insert 1× Pt100 in two or three-wire circuit, not in conjunction with extra codes 658 or 659)	
x 331	1 programmable transmitter (type 707014 according to data sheet 707010), output 4 to 20 mA/20 to 4 mA, (only for measuring insert 1× Pt100, not in conjunction with extra codes 658 or 659, suitable setup program part no. 00605080)	
x 333	1 analog transmitter (type 707033 according to data sheet 707030), output 0 to 10 V, (only for measuring insert 1× Pt100 in two or three-wire circuit, not in conjunction with extra codes 658 or 659)	



**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

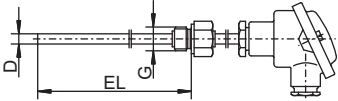
**JUMO Instrument Co. Ltd.**  
 JUMO House  
 Temple Bank, Riverway  
 Harlow, Essex, CM20 2DY, UK  
 Phone: +44 1279 63 55 33  
 Fax: +44 1279 62 50 29  
 Email: sales@jumo.co.uk  
 Internet: www.jumo.co.uk

**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



- ⊗ II 1/2 G Ex ia IIC T1...T6 Ga/Gb
- ⊗ II 1/2 D Ex ia IIIC T80 °C...T400 °C Da/Db
- ⊗ II 1/2 G Ex ia/d IIC T1...T6 Ga/Gb
- ⊗ II 1/2 D Ex ia/tb IIIC T80 °C...T400 °C



<b>(1) Basic type</b>	
902820/10	Screw-in RTD temperature probe with continuous protection tube
	
<b>(2) Operating temperature (additional versions upon request)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)
x 415	-50 to +600 °C (thin film temperature sensor)
<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in three-wire circuit (not in conjunction with transmitter 331 or 336)
x 1003	1× Pt100 in two-wire circuit (not in conjunction with transmitter 331 or 336)
x 1011	1× Pt100 in 4-wire circuit
x 2001	2× Pt100 in 3-wire circuit
x 2003	2× Pt100 in two-wire circuit (not in conjunction with transmitter 331 or 336)
<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008</b>	
x 1	Class B (standard) (-50 to +500 °C)
x 2	Class A (-30 to +300 °C)
x 3	Class AA (0 to 150 °C)
<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x 9	∅ 9 × 1 mm (for use in zone 0 or 20, upon request)
x 11	∅ 11 × 2 mm
<b>(6) Insertion length EL in mm (EL up to 1000 mm)</b>	
...	Specification in plain text
<b>(7) Process connection (additional versions upon request)</b>	
x 104	Screw connection G 1/2
x 106	Screw connection G 1
x 144	Screw connection 1/2-14 NPT
x 146	Screw connection 1-11.5 NPT
<b>(8) Protection tube material</b>	
x 26	Stainless steel 1.4571
x 60	Titanium, upon request
x 80	Tantalum, upon request
x 81	Inconel, upon request
x 82	HASTELLOY®, upon request
<b>(9) Extra codes</b>	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 331, 336, 868, and 869)
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 331, 336, 868, and 869)
x 362	<b>Ex-protection Ex according to Directive 2014/34/EU (ATEX)</b>
x 292	Separation element according to IEC 60079
x 320	Terminal head form BUZ
x 321	Terminal head form BUZH
x 326	Terminal head form KGI-1
x 397	Terminal head form BEGF
x 399	Terminal head form XD-A "Ex D IIC" and "Ex tb IIIC" made from die-cast aluminum
x 541	Terminal head form XD-S "Ex D IIC" and "Ex tb IIIC" made from stainless steel



**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

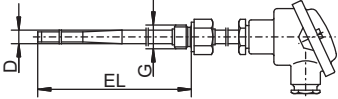
**JUMO Instrument Co. Ltd.**  
 JUMO House  
 Temple Bank, Riverway  
 Harlow, Essex, CM20 2DY, UK  
 Phone: +44 1279 63 55 33  
 Fax: +44 1279 62 50 29  
 Email: sales@jumo.co.uk  
 Internet: www.jumo.co.uk

**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



- ⊗ II 1/2 G Ex ia IIC T1...T6 Ga/Gb
- ⊗ II 1/2 D Ex ia IIIC T80 °C...T400 °C Da/Db
- ⊗ II 1/2 G Ex ia/d IIC T1...T6 Ga/Gb
- ⊗ II 1/2 D Ex ia/tb IIIC T80 °C...T400 °C



<b>(1) Basic type</b>	
902820/11	Screw-in RTD temperature probe with reduced protection tube
	
<b>(2) Operating temperature (additional versions upon request)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)
x 415	-50 to +600 °C (thin film temperature sensor)
<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in three-wire circuit (not in conjunction with transmitter 331 or 336)
x 1003	1× Pt100 in two-wire circuit (not in conjunction with transmitter 331 or 336)
x 1011	1× Pt100 in 4-wire circuit
x 2001	2× Pt100 in 3-wire circuit
x 2003	2× Pt100 in two-wire circuit (not in conjunction with transmitter 331 or 336)
<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008</b>	
x 1	Class B (standard) (-50 to +500 °C)
x 2	Class A (-30 to +300 °C)
x 3	Class AA (0 to 150 °C)
<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x 12	∅ 12 × 2.5 mm reduced to ∅ 9 mm (for use in zone 0 or 20 upon request)
<b>(6) Insertion length EL in mm (EL up to 1000 mm)</b>	
...	Specification in plain text
<b>(7) Process connection (additional versions upon request)</b>	
x 104	Screw connection G 1/2
x 106	Screw connection G 1
x 144	Screw connection 1/2-14 NPT
x 146	Screw connection 1-11.5 NPT
<b>(8) Protection tube material</b>	
x 26	Stainless steel 1.4571
x 60	Titanium, upon request
x 80	Tantalum, upon request
x 81	Inconel, upon request
x 82	HASTELLOY®, upon request
<b>(9) Extra codes</b>	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 331, 336, 868, and 869)
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 331, 336, 868, and 869)
x 362	<b>Ex-protection Ex according to Directive 2014/34/EU (ATEX)</b>
x 292	Separation element according to IEC 60079
x 320	Terminal head form BUZ
x 321	Terminal head form BUZH
x 326	Terminal head form KGI-1
x 397	Terminal head form BEGF
x 399	Terminal head form XD-A "Ex D IIC" and "Ex tb IIIC" made from die-cast aluminum
x 541	Terminal head form XD-S "Ex D IIC" and "Ex tb IIIC" made from stainless steel
x 547	Terminal head form BUZH with LED display



**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



- ⊗ II 1/2 G Ex ia IIC T1...T6 Ga/Gb
- ⊗ II 1/2 D Ex ia IIIC T80 °C...T400 °C Da/Db
- ⊗ II 1/2 G Ex ia/d IIC T1...T6 Ga/Gb
- ⊗ II 1/2 D Ex ia/tb IIIC T80 °C...T400 °C



<b>(1) Basic type</b>	
902820/20	Push-in RTD temperature probe with continuous protection tube
<b>(2) Operating temperature (additional versions upon request)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)
x 415	-50 to +600 °C (thin film temperature sensor)
<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in three-wire circuit (not in conjunction with transmitter 331 or 336)
x 1003	1× Pt100 in two-wire circuit (not in conjunction with transmitter 331 or 336)
x 1011	1× Pt100 in 4-wire circuit
x 2001	2× Pt100 in 3-wire circuit
x 2003	2× Pt100 in two-wire circuit (not in conjunction with transmitter 331 or 336)
<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008</b>	
x 1	Class B (standard) (-50 to +500 °C)
x 2	Class A (-30 to +300 °C)
x 3	Class AA (0 to 150 °C)
<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x 9	∅ 9 × 1 mm (for use in zone 0 or 20, upon request)
x 11	∅ 11 × 2 mm
<b>(6) Insertion length EL in mm (EL up to 1000 mm)</b>	
...	Specification in plain text
<b>(7) Process connection (additional versions upon request)</b>	
x 000	None
x 642	Flange B DN 25/PN 40, DIN EN 1092-1
x 644	Flange B DN 40/PN 40, DIN EN 1092-1
<b>(8) Protection tube material</b>	
x 26	Stainless steel 1.4571
x 60	Titanium, upon request
x 80	Tantalum, upon request
x 81	Inconel, upon request
x 82	HASTELLOY®, upon request
<b>(9) Extra codes</b>	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 331, 336, 868, and 869)
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 331, 336, 868, and 869)
x 362	<b>Ex-protection Ex according to Directive 2014/34/EU (ATEX)</b>
x 292	Separation element according to IEC 60079
x 320	Terminal head form BUZ
x 321	Terminal head form BUZH
x 326	Terminal head form KGI-1
x 397	Terminal head form BEGF
x 399	Terminal head form XD-A "Ex D IIC" and "Ex tb IIIC" made from die-cast aluminum
x 541	Terminal head form XD-S "Ex D IIC" and "Ex tb IIIC" made from stainless steel
x 547	Terminal head form BUZH with LED display





**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

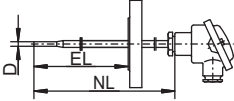
**JUMO Instrument Co. Ltd.**  
 JUMO House  
 Temple Bank, Riverway  
 Harlow, Essex, CM20 2DY, UK  
 Phone: +44 1279 63 55 33  
 Fax: +44 1279 62 50 29  
 Email: sales@jumo.co.uk  
 Internet: www.jumo.co.uk

**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



- ⊗ II 1/2 G Ex ia IIC T1...T6 Ga/Gb
- ⊗ II 1/2 D Ex ia IIIC T80 °C...T400 °C Da/Db
- ⊗ II 1/2 G Ex ia/d IIC T1...T6 Ga/Gb
- ⊗ II 1/2 D Ex ia/tb IIIC T80 °C...T400 °C



<b>(1) Basic type</b>	
902820/21	Push-in RTD temperature probe with reduced protection tube
	
<b>(2) Operating temperature (additional versions upon request)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)
x 415	-50 to +600 °C (thin film temperature sensor)
<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in three-wire circuit (not in conjunction with transmitter 331 or 336)
x 1003	1× Pt100 in two-wire circuit (not in conjunction with transmitter 331 or 336)
x 1011	1× Pt100 in 4-wire circuit
x 2001	2× Pt100 in 3-wire circuit
x 2003	2× Pt100 in two-wire circuit (not in conjunction with transmitter 331 or 336)
<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008</b>	
x 1	Class B (standard) (-50 to +500 °C)
x 2	Class A (-30 to +300 °C)
x 3	Class AA (0 to 150 °C)
<b>(5) Protection tube diameter D in mm (additional versions upon request)</b>	
x 12	∅ 12 × 2.5 mm reduced to ∅ 9 mm (for use in zone 0 or 20 upon request)
<b>(6) Insertion length EL in mm (EL up to 1000 mm)</b>	
...	Specification in plain text
<b>(7) Process connection (additional versions upon request)</b>	
x 000	None
x 642	Flange B DN 25/PN 40, DIN EN 1092-1
x 644	Flange B DN 40/PN 40, DIN EN 1092-1
<b>(8) Protection tube material</b>	
x 26	Stainless steel 1.4571
x 60	Titanium, upon request
x 80	Tantalum, upon request
x 81	Inconel, upon request
x 82	HASTELLOY®, upon request
<b>(9) Extra codes</b>	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 331, 336, 868, and 869)
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 331, 336, 868, and 869)
x 362	<b>Ex-protection Ex according to Directive 2014/34/EU (ATEX)</b>
x 292	Separation element according to IEC 60079
x 320	Terminal head form BUZ
x 321	Terminal head form BUZH
x 326	Terminal head form KGI-1
x 397	Terminal head form BEGF
x 399	Terminal head form XD-A "Ex D IIC" and "Ex tb IIIC" made from die-cast aluminum
x 541	Terminal head form XD-S "Ex D IIC" and "Ex tb IIIC" made from stainless steel
x 547	Terminal head form BUZH with LED display
x 924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 868 or 869)



**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

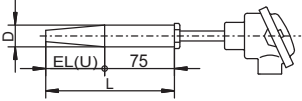
**JUMO Instrument Co. Ltd.**  
 JUMO House  
 Temple Bank, Riverway  
 Harlow, Essex, CM20 2DY, UK  
 Phone: +44 1279 63 55 33  
 Fax: +44 1279 62 50 29  
 Email: sales@jumo.co.uk  
 Internet: www.jumo.co.uk

**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



- ⊗ II 1/2 G Ex ia IIC T1...T6 Ga/Gb
- ⊗ II 1/2 D Ex ia IIIC T80 °C...T400 °C Da/Db
- ⊗ II 1/2 G Ex ia/d IIC T1...T6 Ga/Gb
- ⊗ II 1/2 D Ex ia/tb IIIC T80 °C...T400 °C



	<b>(1) Basic type</b>	
902820/50	Screw-in RTD temperature probe with thermowell DIN 43772, form 4	
	<b>(2) Operating temperature (additional versions upon request, for restrictions see DIN 43772)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)	
x 415	-50 to +600 °C (thin film temperature sensor)	
	<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in three-wire circuit (not in conjunction with transmitter 331 or 336)	
x 1003	1× Pt100 in two-wire circuit (not in conjunction with transmitter 331 or 336)	
x 1011	1× Pt100 in 4-wire circuit	
x 2001	2× Pt100 in 3-wire circuit	
x 2003	2× Pt100 in two-wire circuit (not in conjunction with transmitter 331 or 336)	
	<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008</b>	
x 1	Class B (standard) (-50 to +500 °C)	
x 2	Class A (-30 to +300 °C)	
x 3	Class AA (0 to 150 °C)	
	<b>(5) Thermowell diameter D in mm (additional versions upon request)</b>	
x 24	Ø 24 mm reduced to Ø 12.5 mm	
	<b>(6) Thermowell dimensions (insertion length/total length)</b>	
x 205	65 mm/140 mm (previously form D1 according to DIN 43767)	
x 325	125 mm/200 mm (previously form D2 according to DIN 43767)	
...	Upon request (Code: U + L)	
	<b>(7) Thermowell material</b>	
x 26	Stainless steel 1.4571 (operating temperature 600 °C)	
x 36	Steel 1.7335 (operating temperature 540 °C)	
	<b>(8) Protection tube material</b>	
x 26	Stainless steel 1.4571	
	<b>(9) Extra codes</b>	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 331, 336, 868, and 869)	
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 331, 336, 868, and 869)	
x 362	<b>Ex-protection Ex according to Directive 2014/34/EU (ATEX)</b>	
x 292	Separation element according to IEC 60079	
x 320	Terminal head form BUZ	
x 321	Terminal head form BUZH	
x 326	Terminal head form KGI-1	
x 397	Terminal head form BEGF	
x 399	Terminal head form XD-A "Ex D IIC" and "Ex tb IIIC" made from die-cast aluminum	
x 541	Terminal head form XD-S "Ex D IIC" and "Ex tb IIIC" made from stainless steel	
x 547	Terminal head form BUZH with LED display	
x 924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 868 or 869)	
x 925	Terminal head form BUZH with LC plug-in display (only in conjunction with extra code 868 or 869)	
x 661	LED display Ex "ia" (only in conjunction with extra code 321, 399, or 541)	
x 789	LED display Ex "ib" (only in conjunction with extra code 399 or 541)	



**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

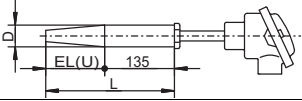
**JUMO Instrument Co. Ltd.**  
 JUMO House  
 Temple Bank, Riverway  
 Harlow, Essex, CM20 2DY, UK  
 Phone: +44 1279 63 55 33  
 Fax: +44 1279 62 50 29  
 Email: sales@jumo.co.uk  
 Internet: www.jumo.co.uk

**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



- ⊗ II 1/2 G Ex ia IIC T1...T6 Ga/Gb
- ⊗ II 1/2 D Ex ia IIIC T80 °C...T400 °C Da/Db
- ⊗ II 1/2 G Ex ia/d IIC T1...T6 Ga/Gb
- ⊗ II 1/2 D Ex ia/tb IIIC T80 °C...T400 °C



	<b>(1) Basic type</b>	
902820/51	Screw-in RTD temperature probe with thermowell DIN 43772, form 4	
	<b>(2) Operating temperature (additional versions upon request, for restrictions see DIN 43772)</b>	
x 150	-200 to +600 °C (wire-wound temperature sensor)	
x 415	-50 to +600 °C (thin film temperature sensor)	
	<b>(3) Measuring insert (additional versions upon request)</b>	
x 1001	1× Pt100 in three-wire circuit (not in conjunction with transmitter 331 or 336)	
x 1003	1× Pt100 in two-wire circuit (not in conjunction with transmitter 331 or 336)	
x 1011	1× Pt100 in 4-wire circuit	
x 2001	2× Pt100 in 3-wire circuit	
x 2003	2× Pt100 in two-wire circuit (not in conjunction with transmitter 331 or 336)	
	<b>(4) Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008</b>	
x 1	Class B (standard) (-50 to +500 °C)	
x 2	Class A (-30 to +300 °C)	
x 3	Class AA (0 to 150 °C)	
	<b>(5) Thermowell diameter D in mm (additional versions upon request)</b>	
x 24	Ø 24 mm reduced to Ø 12.5 mm	
	<b>(6) Thermowell dimensions (insertion length/total length)</b>	
x 265	65 mm/200 mm (previously form D4 according to DIN 43767)	
x 385	125 mm/200 mm (previously form D2 according to DIN 43767)	
...	Upon request (Code: U + L)	
	<b>(7) Thermowell material</b>	
x 26	Stainless steel 1.4571 (operating temperature 600 °C)	
x 36	Steel 1.7335 (operating temperature 540 °C)	
	<b>(8) Protection tube material</b>	
x 26	Stainless steel 1.4571	
	<b>(9) Extra codes</b>	
x 658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150, not in conjunction with extra codes 331, 336, 868, and 869)	
x 659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 331, 336, 868, and 869)	
x 362	<b>Ex-protection Ex according to Directive 2014/34/EU (ATEX)</b>	
x 292	Separation element according to IEC 60079	
x 320	Terminal head form BUZ	
x 321	Terminal head form BUZH	
x 326	Terminal head form KGI-1	
x 397	Terminal head form BEGF	
x 399	Terminal head form XD-A "Ex D IIC" and "Ex tb IIIC" made from die-cast aluminum	
x 541	Terminal head form XD-S "Ex D IIC" and "Ex tb IIIC" made from stainless steel	
x 547	Terminal head form BUZH with LED display	
x 924	Terminal head form AB7 with LC plug-in display (only in conjunction with extra code 868 or 869)	
x 925	Terminal head form BUZH with LC plug-in display (only in conjunction with extra code 868 or 869)	
x 661	LED display Ex "ia" (only in conjunction with extra code 321, 399, or 541)	
x 789	LED display Ex "ib" (only in conjunction with extra code 399 or 541)	



**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



## Accessories

### Accessories for programmable two-wire transmitter, type 707010

Designation	Part no.
PC interface with USB/TTL converter	00456352
Special programming (standard measuring range 0 to 100 °C)	-
Setup program on CD-ROM, multilingual	00605080

### Accessories for programmable two-wire transmitter, type 707050

Designation	Part no.
Setup program on CD-ROM, multilingual	00574959
USB cable, type A USB connector on Mini-B USB connector, length 3 m	00506252

### Accessories for programmable Wtrans B head transmitter with wireless data transmission, type 707060

Designation	Part no.
Lithium battery 3.6 V, 2.2 Ah (size AA)	00547559
PC interface with USB/TTL converter	00456352
Setup program on CD-ROM, multilingual	00488887
Setup program including OnlineChart on CD-ROM, multilingual	00549067
OnlineChart activation	00549188

### Accessories for programmable two-channel transmitter with HART®, type 707080 or programmable two-channel transmitter with HART®/SIL, type 707081

Designation	Part no.
HART® modem USB	00443447
JUMO dTRANS T07 B 707080 – Device Type Manager (DTM) software program	00687789

## Trademark information

- HART® is a registered trademark of FieldComm Group Inc., Austin, TX 78759, US.