JUMO GmbH & Co. KG
P.O. Box 1209
D-36039 Fulda, Germany
Telefon: +49 661 6003 321
Fax: +49 661 6003 9695
E-Mail: mail@jumo.net
Web: http://www.jumo.net

ООО «КОМТЕК», г. Санкт-Петербург
пр. Александровской Фермы,
д.29 литера ВГ, оф.218
Тел: +7 952 222 12 18
Тел: +7 995 596 01 67
E-Mail: jumo@jumo-russia.ru
Интернет: www.jumo-russia.ru

JUMO plastoSENS T02

Vibration-resistant plastic temperature probe

- For temperatures from -40 to +180 °C
- Vibration and shock-resistant
- Shock-resistant – thanks to temperature sensor that is completely surrounded by plastic
- Can be used in almost all liquids – even in chemicals
- High-performance plastic favors low natural frequency in case of oscillation, resulting in higher load capacity for the temperature probe
- Breakage resistance due to stable temperature sensor
- Can be used for motor oils, fuels, battery acids, and AdBlue®, for example



Basic type 904002/10, .../20, and .../30

Brief description

Particularly harsh environmental influences occur in moving components such as vehicle motors or machines. The largest problem for precise temperature measurement is vibration. Placing the temperature sensor in the probe tube so that it is in a secure position where it can withstand the prevailing vibrations can often be very complex with conventional probes. The sensor in the JUMO plastoSENS T02 is completely enclosed in plastic so that this especially developed variant of the temperature probe offers extremely high vibration resistance. Due to the use of different plastics in the basic type 904002/30, the temperature probe has different zones of heat conduction. A plastic with high heat conduction properties on the temperature sensor ensures a short response time; a plastic with low heat conduction properties at the cable outlet ensures a low heat conduction error.
A Pt1000 is used as the temperature sensor as standard according to DIN EN 60751:2009 / IEC 60751:2008, tolerance class B (F0.3) in a two-wire circuit. Versions with Pt100 or other temperature sensors are also possible.

JUMO GmbH & Co. KG
P.O. Box 1209
D-36039 Fulda, Germany
Telefon: +49 661 6003 321
Fax: +49 661 6003 9695
E-Mail: mail@jumo.net
Web: http://www.jumo.net

ООО «КОМТЕК», г. Санкт-Петербург
пр. Александровской Фермы,
д.29 литера ВГ, оф.218
Тел: +7 952 222 12 18
Тел: +7 995 596 01 67
E-Mail: jumo@jumo-russia.ru
Интернет: www.jumo-russia.ru

Technical data

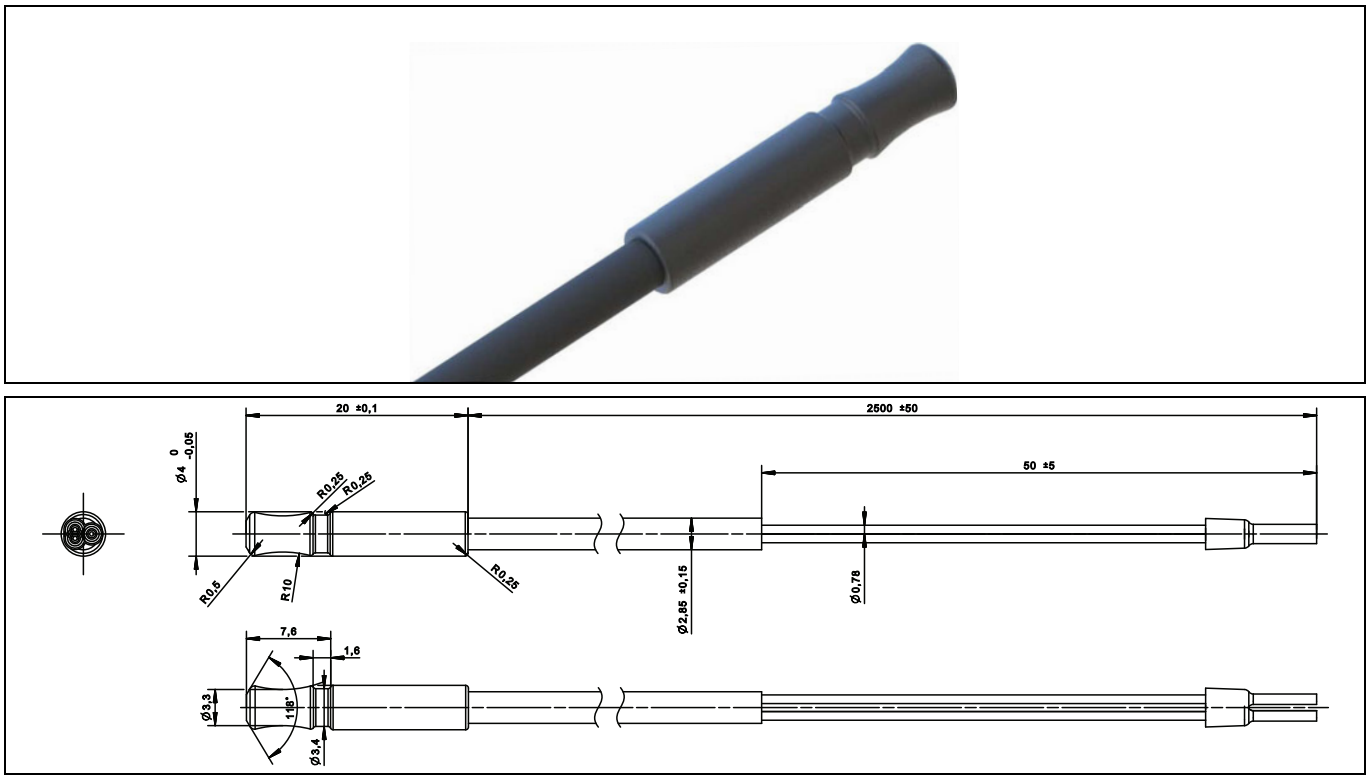
Dimensions of the temperature probe	Basic type 904002/10: Ø 4.0 × 20 mm Basic type 904002/20: Ø 5.0 × 40 mm Basic type 904002/30: Ø 6.0 × 50 mm
Protection type	IP65 according to DIN EN 60529
Response times	Basic type 904002/10 In water: • $t_{0.5}$: < 1.5 s • $t_{0.63}$: < 2 s • $t_{0.9}$: < 4 s In air: • $t_{0.5}$: < 12 s • $t_{0.63}$: < 16 s • $t_{0.9}$: < 33 s Basic type 904002/20 In water: • $t_{0.5}$: < 2.5 s • $t_{0.63}$: < 3 s • $t_{0.9}$: < 6 s In air: • $t_{0.5}$: < 18 s • $t_{0.63}$: < 24 s • $t_{0.9}$: < 50 s Basic type 904002/30 In water: • $t_{0.5}$: < 3.5 s • $t_{0.63}$: < 5 s • $t_{0.9}$: < 12 s In air: • $t_{0.5}$: < 25 s • $t_{0.63}$: < 34 s • $t_{0.9}$: < 73 s
Connecting cable	Silicone, ambient temperature -40 to +180 °C
Connection	Cable ends with ferrules

JUMO GmbH & Co. KG
P.O. Box 1209
D-36039 Fulda, Germany
Telefon: +49 661 6003 321
Fax: +49 661 6003 9695
E-Mail: mail@jumo.net
Web: http://www.jumo.net

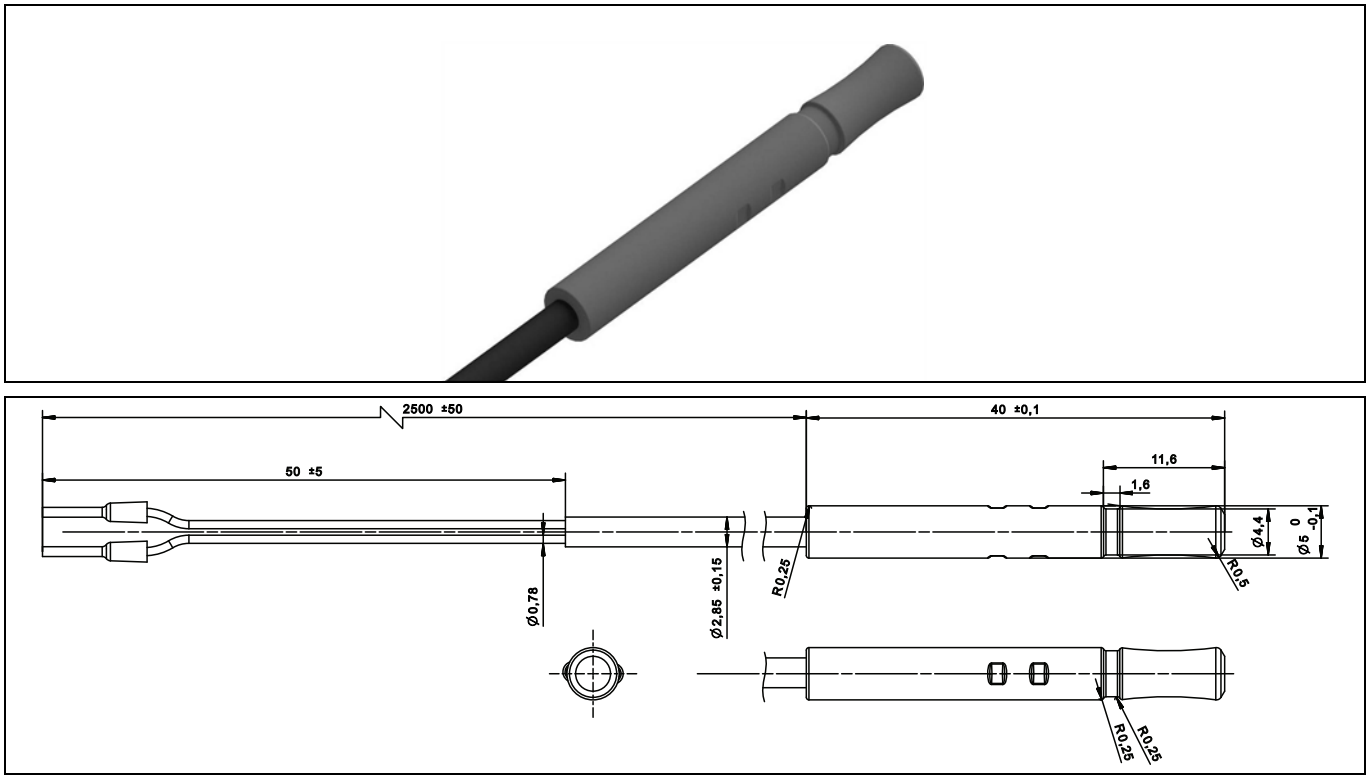
ООО «КОМТЕК», г. Санкт-Петербург
пр. Александровской Фермы,
д.29 литера ВГ, оф.218
Тел: +7 952 222 12 18
Тел: +7 995 596 01 67
E-Mail: jumo@jumo-russia.ru
Интернет: www.jumo-russia.ru

Dimensions

Temperature sensor basic type 904002/10



Temperature sensor basic type 904002/20

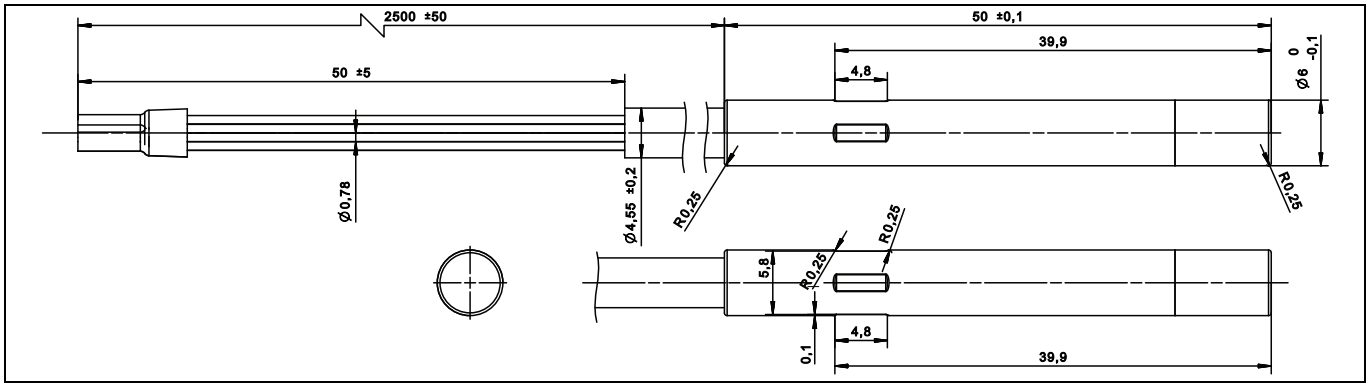


JUMO GmbH & Co. KG
P.O. Box 1209
D-36039 Fulda, Germany
Telefon: +49 661 6003 321
Fax: +49 661 6003 9695
E-Mail: mail@jumo.net
Web: http://www.jumo.net

ООО «КОМТЕК», г. Санкт-Петербург
пр. Александровской Фермы,
д.29 литера ВГ, оф.218
Тел: +7 952 222 12 18
Тел: +7 995 596 01 67
E-Mail: jumo@jumo-russia.ru
Интернет: www.jumo-russia.ru

Temperature sensor basic type 904002/30





JUMO GmbH & Co. KG
P.O. Box 1209
D-36039 Fulda, Germany
Telefon: +49 661 6003 321
Fax: +49 661 6003 9695
E-Mail: mail@jumo.net
Web: http://www.jumo.net

ООО «КОМТЕК», г. Санкт-Петербург
пр. Александровской Фермы,
д.29 литера ВГ, оф.218
Тел: +7 952 222 12 18
Тел: +7 995 596 01 67
E-Mail: jumo@jumo-russia.ru
Интернет: www.jumo-russia.ru

Order details

				(1)	**Basic type**
			904002/10		JUMO plastoSENS T02 Vibration-resistant plastic temperature probe Ø 4.0 × 20 mm, IP65
			904002/20		JUMO plastoSENS T02 Vibration-resistant plastic temperature probe Ø 5.0 × 40 mm, IP65
			904002/30		JUMO plastoSENS T02 Vibration-resistant plastic temperature probe Ø 6.0 × 50 mm, IP65
				(2)	**Operating temperature in °C**
x	x	x	485		-40 to +180 °C
				(3)	**Measuring insert**
x	x	x	1001		1× Pt100 in 3-wire circuit
x	x	x	1003		1× Pt100 in 2-wire circuit
x	x	x	1005		1× Pt1000 in 2-wire circuit (standard)
	x	x	1011		1× Pt100 in 4-wire circuit
	x	x	2003		2× Pt100 in 2-wire circuit
		x	2005		2× Pt1000 in 2-wire circuit
				(4)	**Tolerance class according to DIN EN 60751:2009 / IEC 60751:2008**
x	x	x	1		Class B (standard)
x	x	x	2		Class A
				(5)	**Connecting cable end**
x	x	x	11		Ferrules
				(6)	**Connecting cable length AL in mm (AL 500 to 10000 mm)**
x	x	x	2500		2500 mm
			...		Specifications in plain text (increments of 500 mm)
				(7)	**Extra codes**
x	x	x	000		None

	(1)		**(2)**		**(3)**		**(4)**		**(5)**		**(6)**		**(7)**
Order code		-		-		-		-		-		/	
Order example	904002/10	-	485	-	1005	-	1	-	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.

Trademark information

- AdBlue® is a registered trademark of VDA Verband der Automobilindustrie e.V., 10117 Berlin, DE.