#### JUMO GmbH & Co. KG

Postal address: Phone: Fax: E-mail: Internet:

Delivery address: Mackenrodtstraße 14, 36039 Fulda, Germany 36035 Fulda, Germany +49 661 6003-0 +49 661 6003-607 mail@jumo.net 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 63 52 62 E-mail: sales@jumo.co.uk Internet: www.jumo.co.uk

JUMO Process Control, Inc. 8 Technology Boulevard Canastota, NY 13032, USA Phone: 315-697-JUMO 1-800-554-JUMO Fax: 315-697-5867 E-mail: info@jumo.us Internet: www.jumo.us



Data sheet 90.2880

Page 1/3

### Level and temperature probes for utility vehicles as well as construction and agricultural machinery

- Temperature range from -40 to +140 °C
- As level or combined level and temperature probes
- Connection line: cross-linked polyester
- Installation position: standing or suspended
- Measuring path of 50 mm or 62 mm

For optimum motor or gear operation, several parameters must be continuously monitored and corrected in the event of deviations.

The oil level and the oil temperature are two of these parameters.

The combined level and temperature probe supports the vehicle diagnosis of modern utility vehicles, construction and agricultural machinery. This level probe operating according to the hotwire principle allows to determine the filling level of gear or motor oil throughout a measuring path of up to 100 mm. Only the filling level monitoring will ensure that the motor does not operate with excessive or insufficient oil. This will prevent damage to the motor.

The level probe can also be provided with an additional temperature sensor. The level and temperature probe is equipped with a Pt1000 temperature sensor as per DIN EN 60751, cl. B in 2wire circuit. The design with Pt100 or Pt500 temperature sensors as well as NTC and semi-conductors are also possible.

The voltage signal transmitted by the hot-wire and the resistance signal from the temperature sensor are separately transmitted to the vehicle electronics for evaluation.

Depending on the customer requirements, the housing can be made of stainless steel, steel or heavy-duty plastics.

The level and temperature probe is designed for a temperature range from -40 to +140 °C in permanent operation.

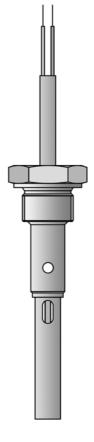
# **Technical Data**

Connection

Cable **Process connection** Thermowell **Temperature probe** Level sensor Measuring path Installation position

Cable ends stripped bare,

with connector DIN 72585 (quarter-turn type connector) or as per customer requirements Cross-linked polyester, ambient temperature -40 to +150 °C Screw connection M 24x1.5 or as desired by the customer Stainless steel or galvanized steel (heavy-duty plastics on request) Pt1000 DIN EN 60751, cl. B, 2-wire-circuit Hot-wire principle, ±3 mm tolerance 50 mm or 62 mm (different measuring paths on request) standing (process connection in the media) suspended (process connection not in the media)



#### JUMO GmbH & Co. KG

Postal address: Phone: Fax: E-mail: Internet:

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

JUMO Instrument Co. Ltd. JUMO House Temple Bank, Riverway Harlow - Essex CM20 2DY, UK

Phone: +44 1279 63 55 33 +44 1279 63 52 62 Fax: E-mail: sales@jumo.co.uk Internet: www.jumo.co.uk

JUMO Process Control, Inc. 8 Technology Boulevard

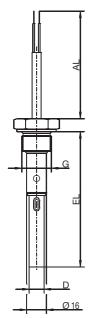
Canastota, NY 13032, USA Phone: 315-697-JUMO 1-800-554-JUMO 315-697-5867 Fax: E-mail: info@jumo.us Internet: www.jumo.us



Data sheet 90.2880

Page 2/3

### **Dimensions**



Type 902880/10

#### 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

 E-mail:
 mail@jumo.net

 Internet:
 www.jumo.net

JUMO Instrument Co. Ltd. JUMO House Temple Bank, Riverway

Temple Bank, Riverway Harlow - Essex CM20 2DY, UK Phone: +44 1279 63 55 33 Fax: +44 1279 63 52 62 E-mail: sales@jumo.co.uk Internet: www.jumo.co.uk JUMO Process Control, Inc. 8 Technology Boulevard Canastota, NY 13032, USA Phone: 315-697-JUMO 1-800-554-JUMO Fax: 315-697-5867 E-mail: info@jumo.us Internet: www.jumo.us



Data sheet 90.2880

Page 3/3

## Order details: Level and temperature probes for utility vehicles as well as construction and agricultural machinery

		(1)	Basic type	
	902880/10		Level and temperature probes for utility vehicles as well as construction and agricultur- al machinery	
×	481	(2)	Operating temperature range in °C/cable type -40 to +140 °C	
x x		(3)	<b>Measuring path</b> 50 mm 62 mm	
× × × ×	x 1003 x 1004 x 1005	(4)	Measuring insert without temperature probe 1x Pt100 in 2-wire circuit 1x Pt500 in 2-wire circuit 1x Pt1000 in 2-wire circuit different sensors on request (please specify in plain text)	
×	12	(5)	<b>Thermowell diameter D in mm</b> Ø 12 mm	
× × × × × ×	40 40 40 40 40 40 40 40 40 40 40 40 40 4	(6)	Fitting length EL in mm 110 mm 140 mm 170 mm 180 mm 200 mm 220 mm	
x x		(7)	<b>Process connection</b> Screw connection M 24x1.5 Customer specification (please specify in plain text)	
x x x	x 79	(8)	<b>Cable termination</b> stripped wires Connector DIN 72585 (quarter-turn type connector) Customer specification (please specify in plain text)	
x x x x x	400 550 1000	(9)	Connection cable length AL in mm (110 $\leq$ AL $\leq$ 10000) 110 mm 400 mm 550 mm 1000 mm Please specify in plain text (50 mm steps)	
x x	1 2		) Installation position standing (process connection in the media) suspended (process connection not in the media)	
x x	000	(11)	) Extra codes None PA6 corrugated hose around the connection line	
Order code				(6)         (7)         (8)         (9)         (10)         (11)           220         -         133         -         -         -         -         /         /