

Project Documentation | CABLE-000700 – Sensor Connector Cable, UV, 10m, RS485

Project Number:

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SMS Project Number:

...

Project Title:

Sensor Connector Cable, UV, 10m, RS485

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CABLE-000700 (Sensor connector cable, UV, UMRR-0Axxxx, 10m, RS485).docx

Document state:

- In progress
- Ready for review
- X Released
- Outdated

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2 Reference Documents

No.	Document	SVN-ID	Notes
[1]	Anne Eberle		Document created
[2]			
[3]			
[4]			
[5]			

Table 1: Reference documents

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3 Cable-000700

3.1 Label

Active Plattform	Active Hardware	Active Modification	Active Revision
CABLE	00	07	00

3.2 Designated use

This **service cable** connects UMRR-0A sensors to Power, RS485 (half-duplex) and CAN.

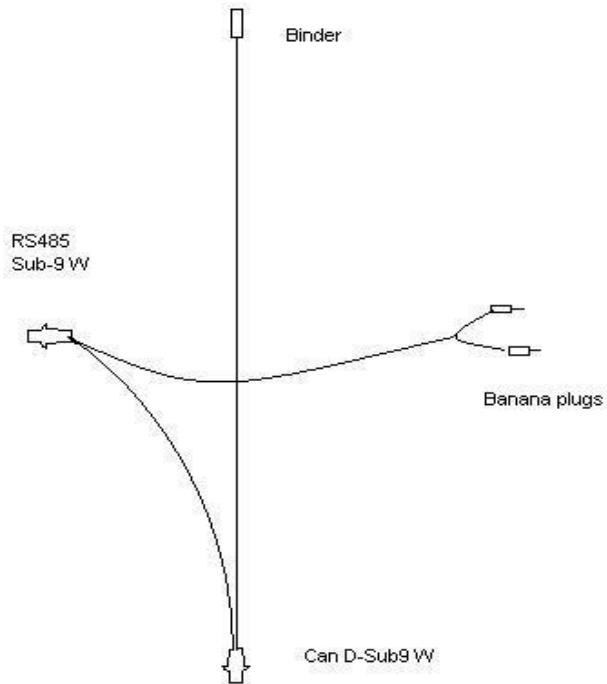
3.3 Cable Photograph Sensor connector + RS 485 + CAN + Power



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3.4 Layout



Pin layout Binder-female	Binder Color	Label	DSUB-9-f CAN	DSUB-9-f RS 485	Banana plug Power
1	pink	Sensor RS485 TX/RX L		4	
2	blue	GND	3	5	black (blue wire)
3	grey	Sensor RS485 TX/RX H		3	
4	yellow	<u>CAN L</u>	2		
5	green	<u>CAN H</u>	7		
6	brown				
7	red	+12V			red (brown wire)
8	white				

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3.5 Technical data

3.5.1 Cable Type

Cable type (power)	H03VVH2-F; 2 strands; oval; grey; 1,5m
Cable type (CAN, RS485)	Data Cable AWG 2-pairs ; grey; 0,5m
Cable type (MAIN)	UL/cUL LIHC11Y 4x2xAWG28 black

3.5.2 Cable Connector

Type	D-Sub 9 female (CAN)
Type	D-Sub 9 female (RS 485)

3.5.3 Cable length

Binder to D-Sub9 Can	approx. 1m
Can to RS485	approx. 0,5m
RS485 to Banana	approx. 1,5m

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4 Material Data Sheet



DATENBLATT - DATASHEET

Leitungstyp/Type:
 UL/cUL LIHC11Y 4x2x AWG28 schwarz (9005)
 Style 21317/11030 - 30V-80 °C AWM
MEDI-Artikelnummer: 9DB280431C01
MEDI-article number:








Aufbaubeschreibung./construction

Leiter, conductor:	Kupfer blank nach EN 13602, copper bare according to EN 13602
Leiteraufbau, construction:	28 AWG 7x0,127mm, 7x0,127mm
Aderisolation, core insulation:	UL-mPPE 105 °C, UL-mPPE 105 °C
Shorehärte, shore hardness:	A 91 ±3
Wandstärke, wall thickness:	min. 0,16mm
Aderdurchmesser, outer diameter:	0,70 ±0,05mm
Aderanzahl, core numbers:	8
Farbcode, colour code:	DIN 47100, DIN 47100
Verseilung, twisting:	Paare im Z Schlag ca. 25mm, pairs in Z stroke app. 25mm
Verseilung, twisting:	je 2 Adern zum Paar verseilt, 2 cores twisted together as pair
Aderseilschlaglänge, wire-ropelength of lay:	41mm Z
Schirmung, screen:	CU Geflecht verzinkt; Bedeckung >85%, copper braid tinned; coverage >85%,
Bewicklung, wrapping:	Polyesterfolie, polyester foil
Mantelisolation, jacket insulation:	PUR - (11Y) / UL-AWM758, PUR - (11Y) / UL-AWM758
Shorehärte, shore hardness	A 96 ±3
Mantelfarbe, jacket colour:	RAL 9005 schwarz, RAL 9005 black
Wandstärke, wall thickness:	min. 0,55mm
Außendurchmesser, outer diameter:	4,40 ±0,15mm

Elektrische und mechanische Werte./electrical and mechanical dimensions

Prüfspannung Ader/Ader, testing voltage core/core:	900V AC
Prüfspannung Spark Test, spark test voltage:	1500V AC
Betriebsspannung UL, nominal voltage UL:	30V AC
Isolationswiderstand, insulation resistance:	min. 20 MOhm x km bei/at 20 °C
Leiterwiderstand, conductor resistance:	max. 204,00 Ohm/km bei/at 20 °C
Wellenwiderstand, impedance:	nom. 122Ohm
Kapazität, capacity:	nom. 71pF/m
Temperaturbereich statisch, temperature range-static:	-40 bis/to 80 °C
Temperaturbereich dynamisch, temperature range-dynamic:	-25 bis/to 80 °C
Biegeradius statisch, bending radius static:	8,0 x Außendurchmesser 8,0 x outer diameter
Biegeradius dynamisch, bending radius dynamic:	15,0 x Außendurchmesser 15,0 x outer diameter
Eigenschaften, properties:	flammwidrig nach CSA 22.2, FT1, flame retardant acc. to CSA 22.2, FT1 flammwidrig nach UL1581 VW-1, flame retardant acc. to UL1581 VW-1

   		
700592	Artikel:	Stand:
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Angaben entsprechen dem aktuellen Stand - Änderungen behalten wir uns vor. These statements reflect the current state - changes we reserve.
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 Eine Prüfung der Eignung des Produktes für den beabsichtigten Verwendungszweck unterliegt dem Kunden. The qualification for the intended use of the product is subject to customer.
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 Abweichungen bei Zukaufware möglich. Repurchased goods can differ.

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DATENBLATT - DATASHEET

Kennzeichnung / marking

Bedruckung, <i>printing</i> :	Bedruckung und Label <i>printing and label</i>
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Zulassungen / approvals






Norm, <i>standard</i> :	UL 758 - AWM, UL 758 - AWM
Verwendung, <i>use</i> :	Internal wiring and external interconnection in Class 2 circuits of electronic equipment.

Erweiterte Daten

<p>Betriebskapazität und Impedanz sind rechnerische Werte bei 100 MHz</p> <p>UV-Beständigkeit: ja, nach Herstellerangaben Microbenresistent: ja, nach Herstellerangaben Hydrolyse resistent: 7 Tage 80 °C nach VDE 282 Teil 10 Ölbeständigkeit: 7 Tage 100 °C nach VDE 282 Teil 10</p> <p>Mit Meterbedruckung</p>
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Expand data

<p>Capacitance and impedance are calculated at 100 MHz</p> <p>UV resistance: yes, according to the manufacturer's instructions Microbenresistance: yes, according to the manufacturer's instructions Hydrolysis resistant: 7 days 80 °C according to VDE 282 part 10 Oil resistance: 7 days 100 °C according to VDE 282 part 10</p> <p>with meter printing</p>

				
700592	Artikel:	Stand:		MEDI Kabel GmbH Daimler Str. 47 DE 84478 Waldkraiburg www.medikabel.de
Seite/Page: 2 von/of 2	9DB280431C01 UL/cUL LIHC11Y 4x2x AWG28 schwarz (9005)	2015-12-14 15:14:57		Christian Hartl

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