Product D

Cables for Trailer EBS (TEBS4)

PD-272-020

Doc. No. Y107795 (EN - Rev. 001) August 2015

TEBS4

Function

Cables are used in trailer EBS systems to:

- provide electrical power to the components in the system.
- communicate signals to the ECU from sensors monitoring trailer characteristics.
- communicate control commands from the ECU to modulators/modules to enable any required braking intervention.
- communicate control commands from the towing vehicle.

Power Supply Cables are used to distribute electrical power from the towing vehicle to electrically powered braking and auxiliary equipment on the trailer. The main power supply to the trailer is through a plug or socket according to ISO 7638. The ISO 7638 connection



carries the CAN signal from/to the towing vehicle and so the EBS **Power Supply Cables** also provide the CAN signal to the ECU.

The cables are available in various lengths and are normally supplied with a bayonet connector to ensure easy and safe connection.

Modular Cables / Wiring Harnesses are available in many configurations and are used to supply electrical signals and power to auxiliary equipment including the external third modulator on 4S/3M systems.

Wheel Speed Sensor Cables are used to connect the ECU to the wheel speed sensors so that their wheel speed signals can be sent. The wheel speed sensor is supplied with only a short length of cable and so will often require a Wheel Speed Sensor Extension Cable to enable connection.

NOTES: The text in the 'Comments' columns describes the typical usage. Other connections are possible for most cables.

 The document starts with details of power cables, then shows modulator cables, wheel speed sensor cables and auxiliary cables.

Technical Features

Operating Temperature Range: -40 °C to +80 °C

See tables for other features.



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Colour Coding used in this document

ΒK	Black
ΒN	Brown
BU	Blue

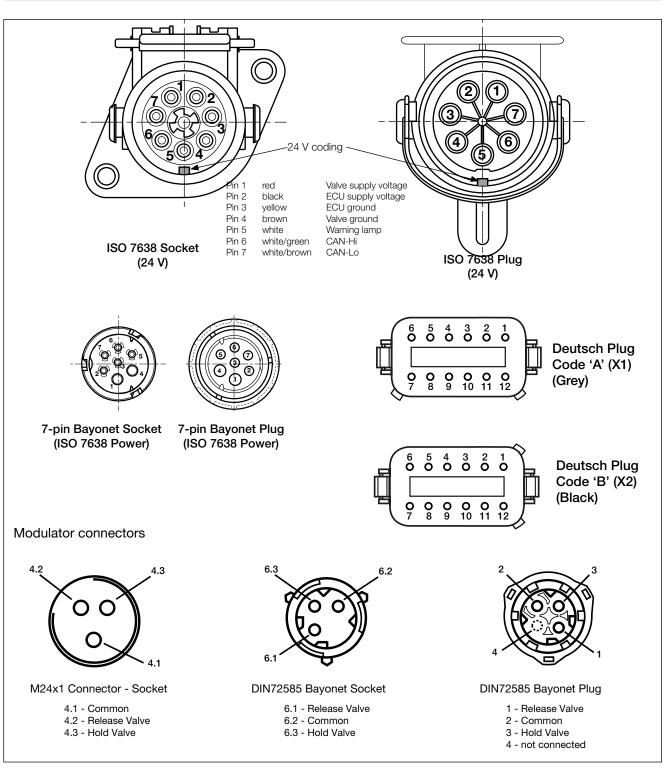
GN Green RD Red WH White YE Yellow

Other Documentation

For information on systems and components mentioned in this document please refer to:

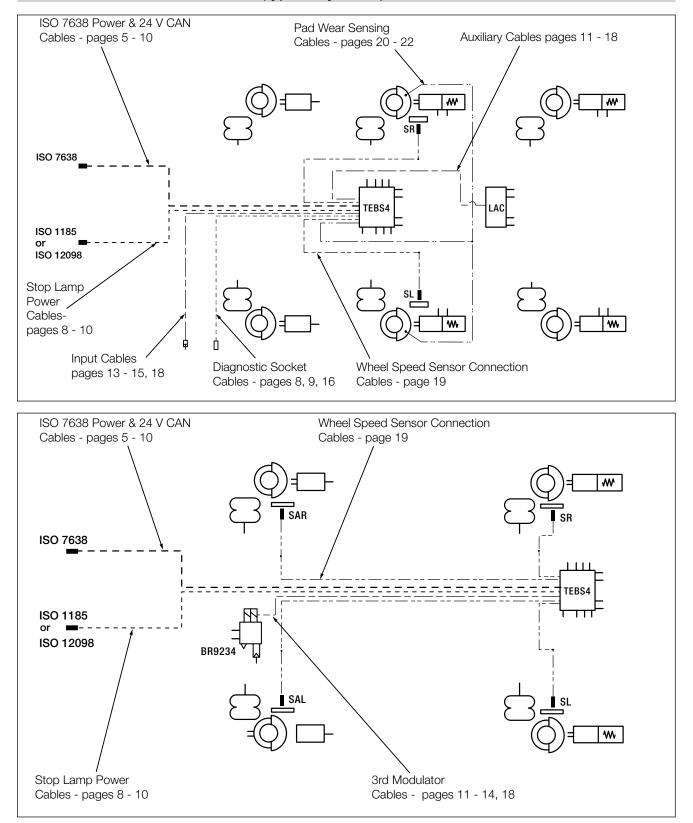
ABS Relay Modulator Valves	PD-200-200, Document No. Y011362
TEBS4 Brake Module	PD-214-100, Document No. Y011366
Wheel Speed Sensors	PD-261-000, Document No. Y011363
Pressure Sensor	PD-262-200, Document No. Y095830
Deflection Sensor	PD-264-200, Document No. Y095832
Cables for TEBS G2	PD-272-025, Document No. Y142784
Diagnostic Cables for Trailer ABS/EBS	PD-272-030, Document No. Y107796
Diagnostic Cables for TEBS G2	PD-272-035, Document No. Y138839
Tyre Pressure Monitoring System (TPMS)	PD-551-000, Document No. <i>Y095833</i>

Pin Configurations



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Cable Selection Guide - TEBS4 (typical systems)



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TEBS4 Cables for Trailer EBS (TEBS4)

Power Supply Cable Options

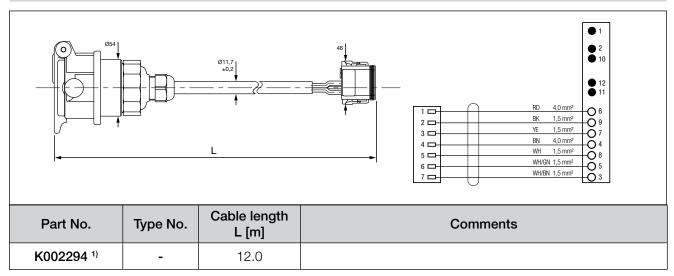
			Trailer		
			Semi-trailer	Drawbar or Centre-axle Trailer	
		ISO 7	7638 Connector direct to TEBS4 Brake M	lodule	
			Cable K002294 (page 6)		
1	SO 763	8 Connector only		-	
		ISO 7638 Conne	ector to TEBS4 Brake Module via interme	ediate connector	
			Cable EK3110 (page 6)	Cable EK3115 (page 7)	
1	0 762	either 8 Connector			
-		nediate connector	Cable K002288 / 89 / K004775 (page 7) + ISO 7638 Socket K002290 (page 23)	Cable K002288 / 89 / K004775 (page 7) + ISO 7638 Plug K002291 (page 23)	
	or				
	Intermediate connector to TEBS4 module (ISO 7638 only)		Cable K002286 (page 10)		
	or	Intermediate connector	Harness EK3108 (page 10)		
	plus	to TEBS4 module + ISO 1185 connection			
		Intermediate connector	Harness EK3101 (page 8)		
or plus to TEBS4 module + diagnostic socket		to TEBS4 module			
or Intermediate connector to TEBS4 module plus + diagnostic socket + ISO 1185 connection		Intermediate connector	Harness EK3100 / 07 (page 8, 9)		
		+ diagnostic socket			
Intermediate connector or to TEBS4 module plus + ISO 1185 connection + auxiliary socket		Intermediate connector	Harness EK3102 (page 9)		
		+ ISO 1185 connection			

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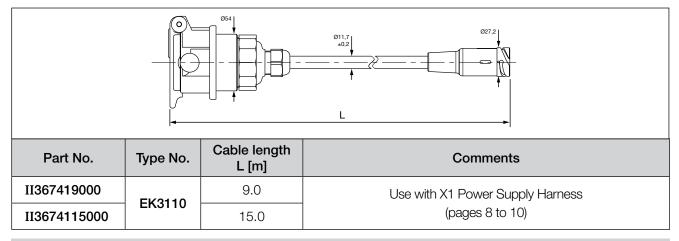
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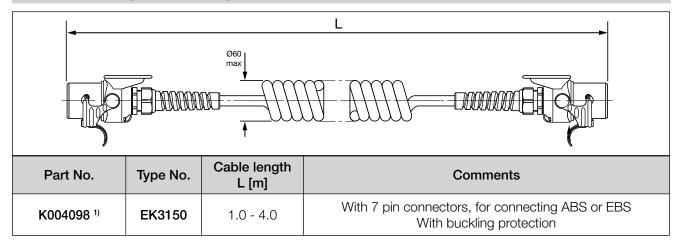
Power Cable (for semi-trailers) with ISO 7638 Socket and X1 Connector



Power Cable (for semi-trailers) with ISO 7638 Socket



Power Connecting Cable - towing vehicle to trailer



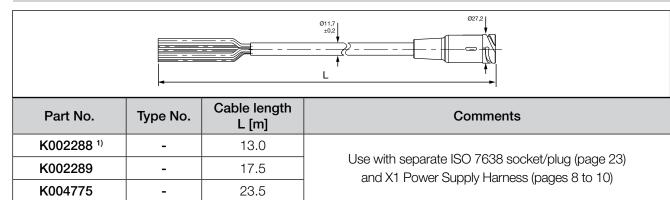
¹⁾ The part number will carry a suffix "N00" which defines that it is supplied without packaging. Example K004098N00

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Power Cable (for drawbar and centre-axle trailers) with ISO 7638 Plug

Part No.	Type No.	Cable length L [m]	Comments
II397938000		8.0	Line with V1 Dewer Overshul Jerrages
II3979310000	EK3115	10.0	Use with X1 Power Supply Harness (pages 8 to 10)
II3979312000		12.0	(pageo o to 10)

Power Cable without plug



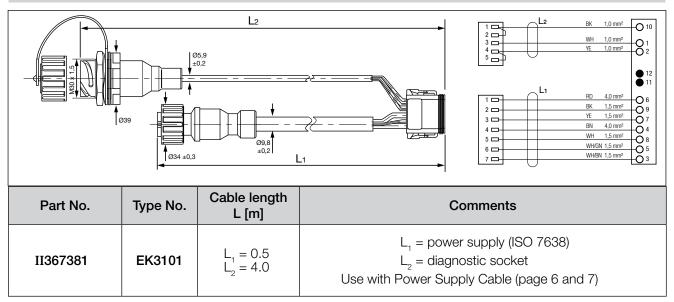
Power Connecting Cable

	027,2		
Part No.	Type No.	Cable length L [m]	Comments
K010712 ¹⁾	-	0.5	Adapter to connect TEBS G2 Power Cable to TEBS4

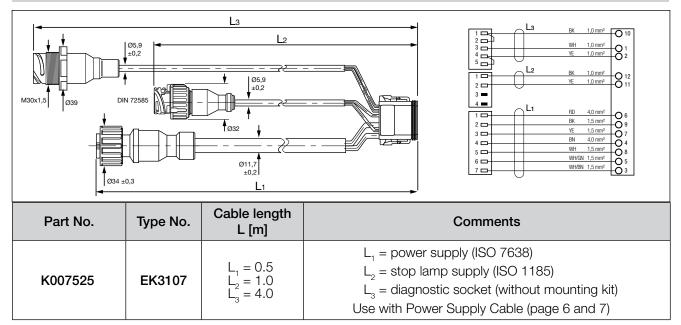
¹⁾ The part number will carry a suffix "N00" which defines that it is supplied without packaging. Example K010712N00

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X1 Power Supply Harness (ISO 7638 only) with Diagnostic Socket

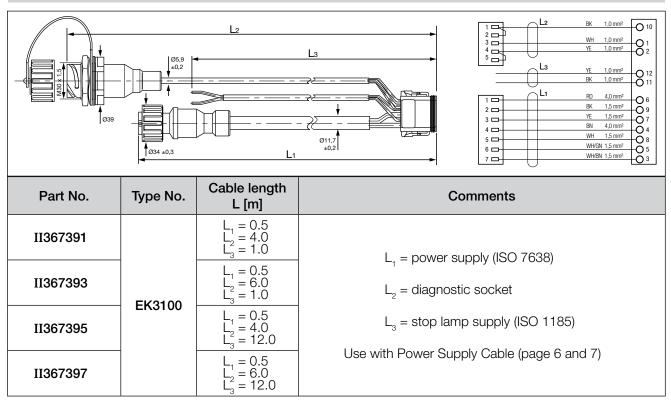


X1 Power Supply Harness (ISO 7638 and ISO 1185) with Diagnostic Socket



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Cables for Trailer EBS (TEBS4)



X1 Power Supply Harness (ISO 7638 and ISO 1185) with Diagnostic Socket (contd.)

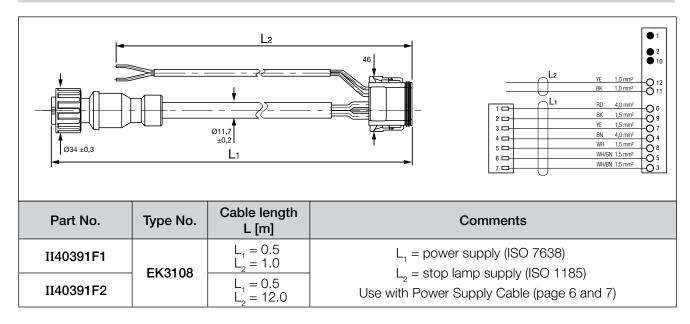
X1 Power Supply Harness (ISO 7638 and ISO 1185) with Auxiliary Socket (Aux 4)

$\begin{array}{ c } \hline \\ \hline $			
Part No.	Type No.	Cable length L [m]	Comments
K002950		$L_1 = 0.5$ $L_2 = 12.0$ $L_3 = 6.0$	L ₁ = power supply (ISO 7638)
K004754	EK3102	$L_1 = 0.5$ $L_2 = 1.0$ $L_3 = 4.0$	$L_2 = $ stop lamp supply (ISO 1185) $L_3 = $ auxiliary socket (Aux 4)
K004756		$L_1 = 0.5$ $L_2 = 12.0$ $L_3 = 4.0$	Use with Power Supply Cable (page 6 and 7)

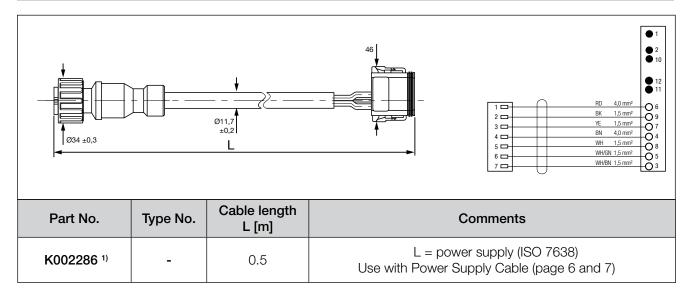


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X1 Power Supply Harness (ISO 7638 and ISO 1185)



X1 Power Supply Harness (ISO 7638)



¹⁾ The part number will carry a suffix "N00" which defines that it is supplied without packaging. Example K002286N00

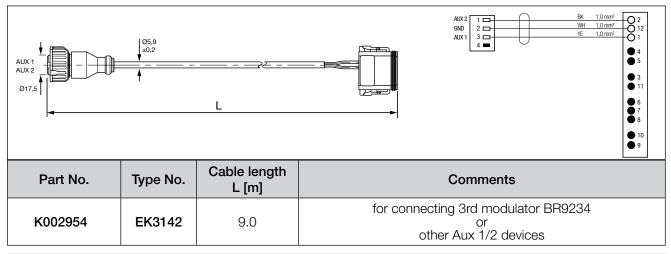
II397884

PD-272-03

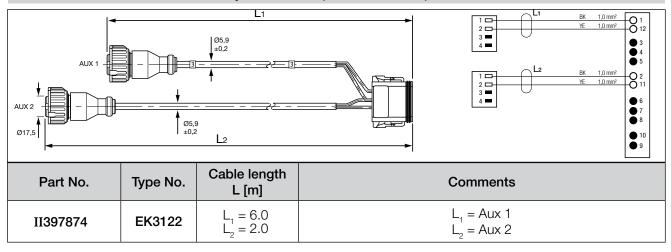
X2 Connector Harness with Auxiliary Connector (Aux 1) 1,0 mm² 81 12 1.0 mm² 2 🗖 GND 3 ● 3 ● 4 ● 5 +0 2 AUX 1 8 Ø17.5 6 • 7 • 8 • 10 9 Cable length Part No. Type No. Comments L [m] II397882 4.0 II397883 EK3123 6.0

X2 Connector Harness with Auxiliary Connector (3rd Modulator or Aux 1 & 2)

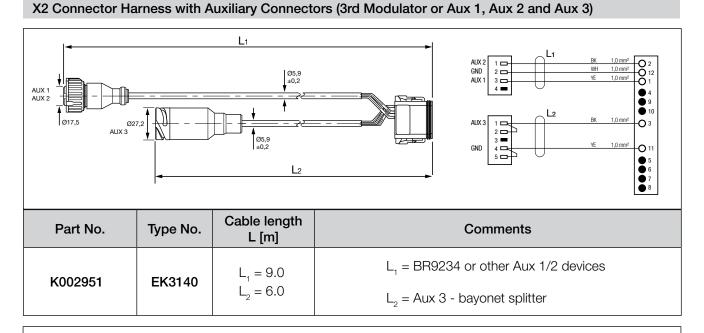
2.0

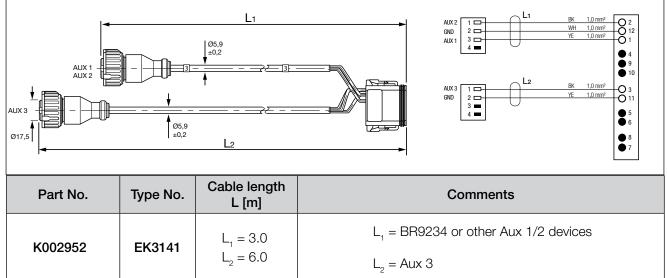


X2 Connector Harness with Auxiliary Connectors (Aux 1 and Aux 2)



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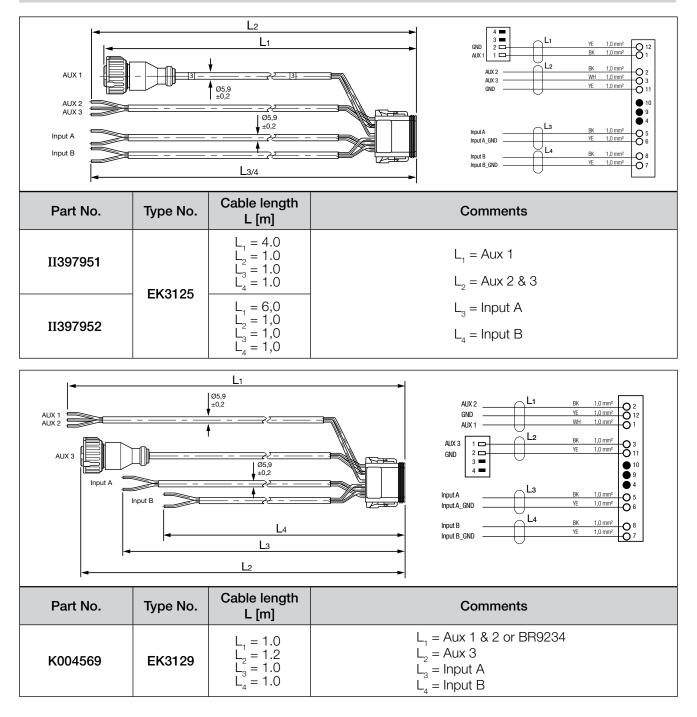




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TEBS4 Cables for Trailer EBS (TEBS4)

X2 Connector Harness with Auxiliary Connectors and input cables



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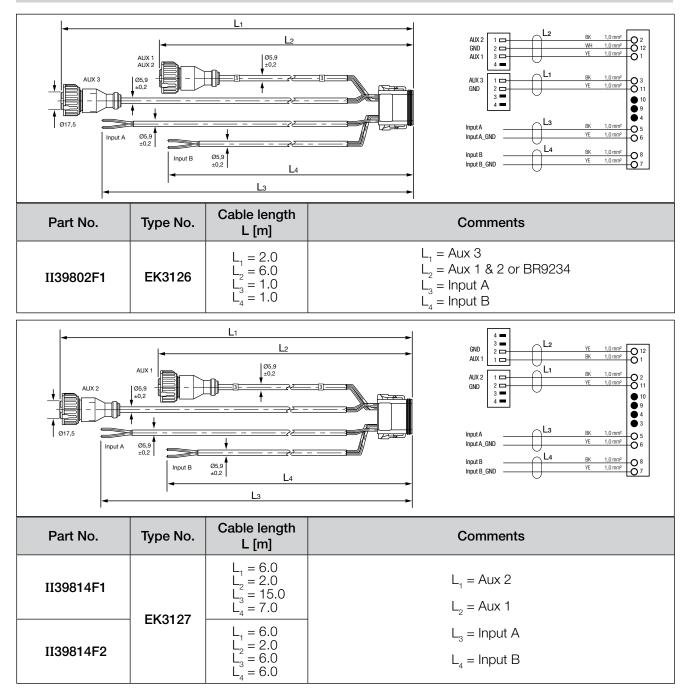
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TEBS4 Cables for Trailer EBS (TEBS4)

X2 Connector Harness with Auxiliary Connectors and input cables (contd.)

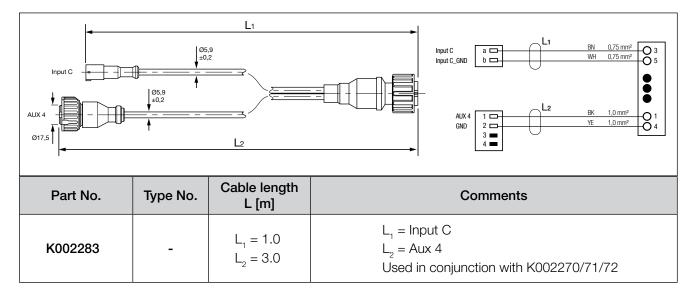


TEBS4

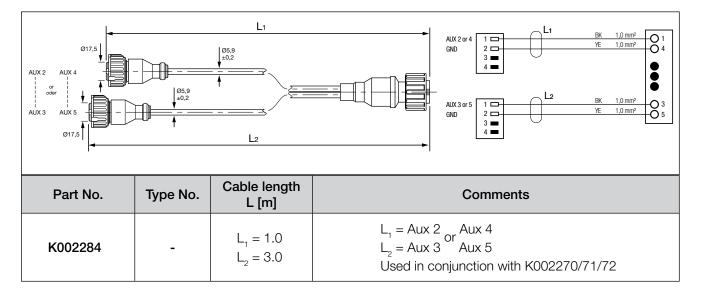
Cables for Trailer EBS (TEBS4)

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Connecting Cable for Aux 4 and Input C



Connecting Cable - Bayonet Splitter



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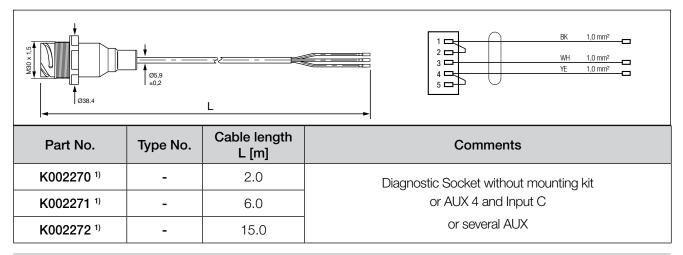
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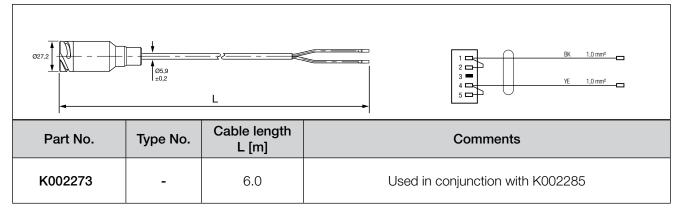


Doc. No. Y107795 (EN - Rev. 001) August 2015

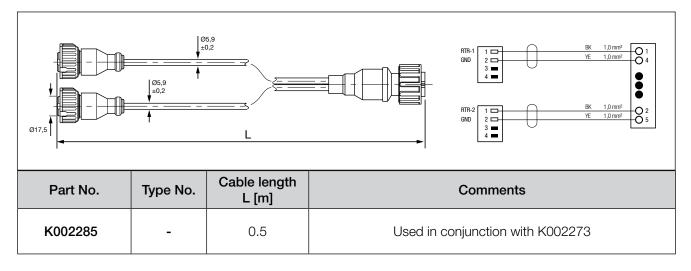
Connecting Cable for Diagnostic Socket



Connecting Cable - Bayonet Splitter



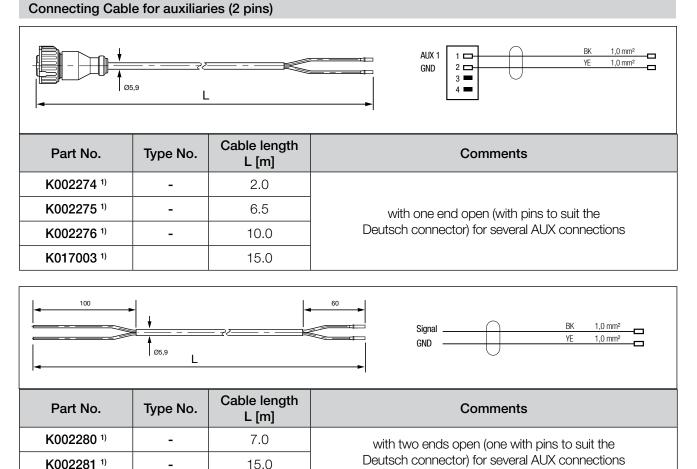
Connecting Cable - 2 x reset to ride height outputs



¹⁾ The part number will carry a suffix "N00" which defines that it is supplied without packaging. Example K002272N00

TEBS4

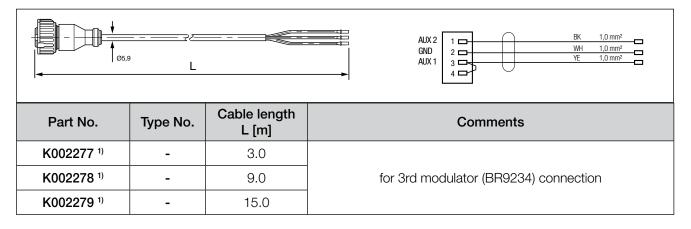
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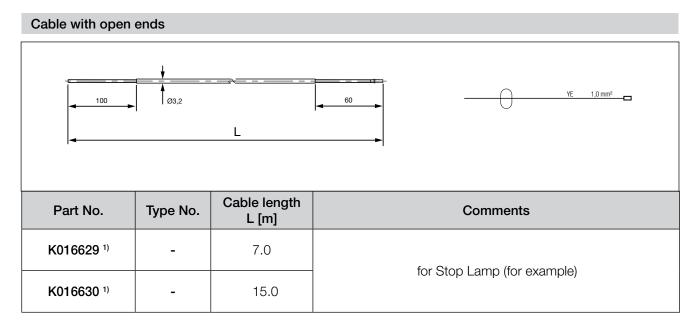


¹⁾ The part number will carry a suffix "N00" which defines that it is supplied without packaging. Example K002281N00

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Connecting Cable for auxiliaries with Bayonet Connector (3 pins)





¹⁾ The part number will carry a suffix "N00" which defines that it is supplied without packaging. Example K016630N00

Wheel Speed Sensor Extension Cable

TEBS4

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Cables for Trailer EBS (TEBS4)

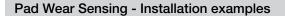
Part No.	Type No.	Cable length L [m]	Comments
II367562000		2.0	
II367563000		3.0	
II367564000		4.0	
II367565000		5.0	
II367566000	EK3130	6.0	For extending the wheel speed sensor cable to enable connection to the brake module
II367568000	8.0 10.0	8.0	
II3675610000		10.0	
II3675612000		12.0	
II3675615000		15.0	

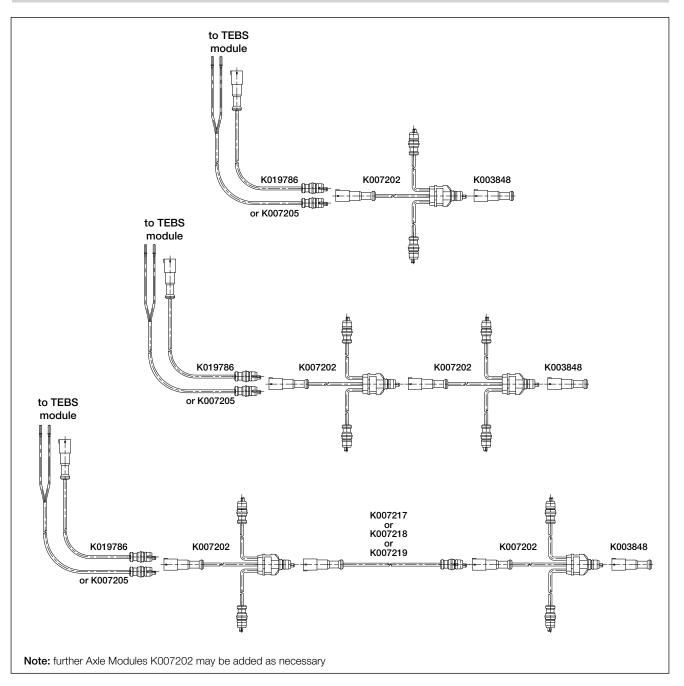
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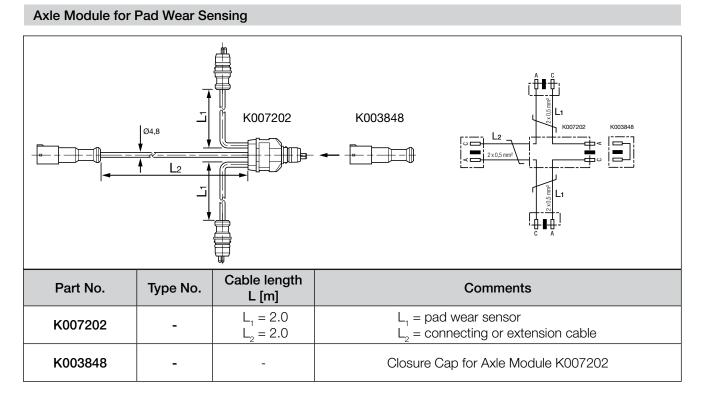
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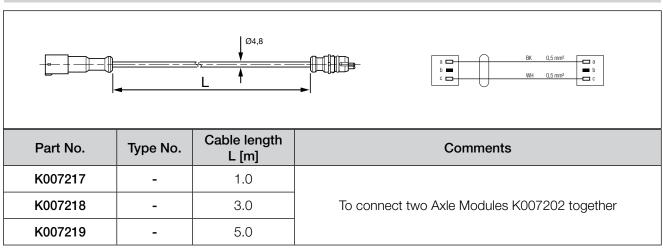


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August 2015



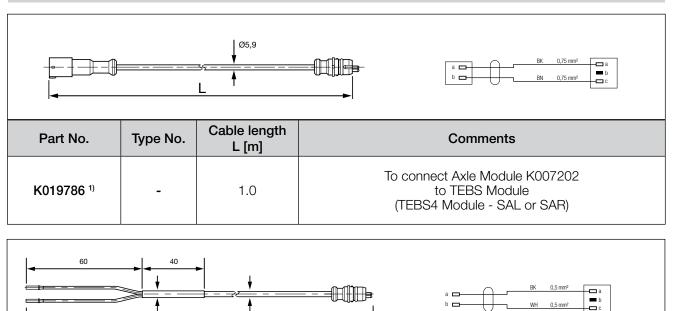
Extension Cable for Pad Wear Sensing





TEBS4

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Part No.	Type No.	Cable length L [m]	Comments
K007205	-	1.0	To connect Axle Module K007202 to TEBS Module (Deutsch plug)

Ø4,8

Ø5,9

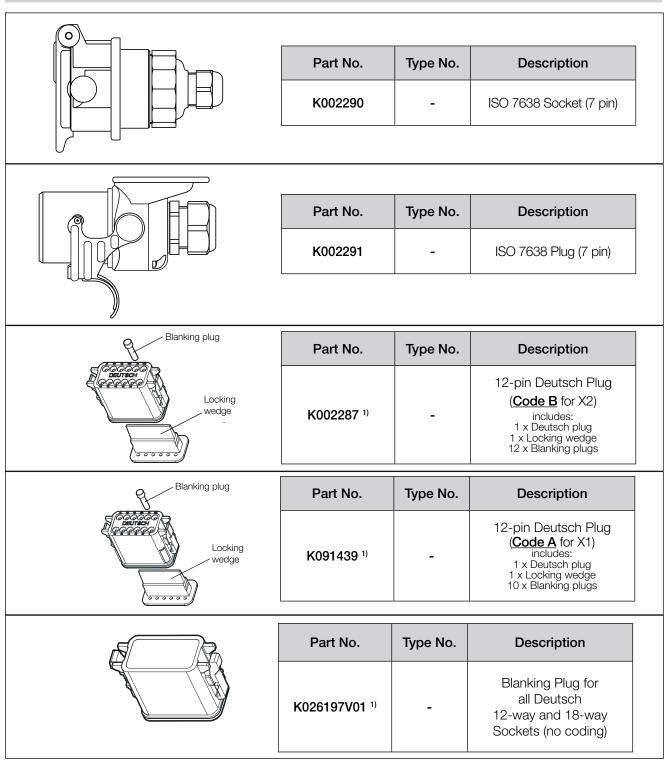
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¹⁾ The part number will carry a suffix "N00" which defines that it is supplied without packaging. Example K019786N00

TEBS4

Cables for Trailer EBS (TEBS4)

Accessories



¹⁾ The part number will carry a suffix "N00" which defines that it is supplied without packaging. Example K026197V01N00

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D-272-020

Part No. Type No. Description K005378 - Mounting kit for Diagnostic Socket			
K005378 - Mounting kit for Diagnostic Socket	Part No.	Type No.	Description
	K005378	-	Mounting kit for Diagnostic Socket

Revision Details

Rev. 000	March 2012
Rev. 001	May 2015
Rev. 001	August 2015

New document Amended to include only TEBS4 cables. Obsolete part numbers deleted. Correction to K091439..



