

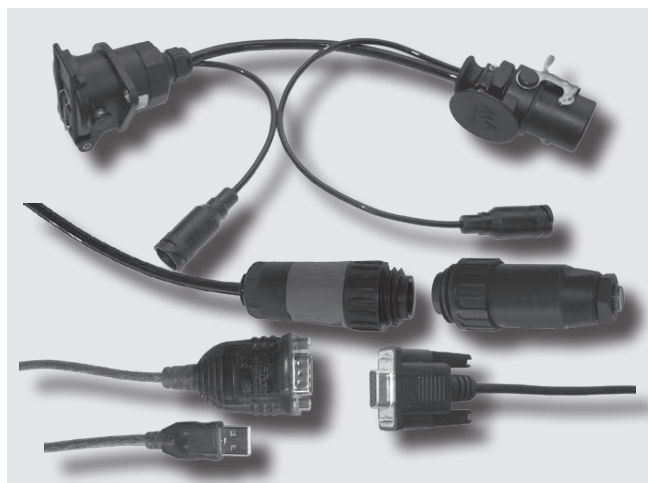
#### Function

**Diagnostic Cables** are used in trailer ABS and EBS systems to:

- provide electrical power to the diagnostic equipment where necessary
- supply status information to the diagnostic equipment

Newer EBS-equipped trailers can be diagnosed through the ISO 7638 connection. Older EBS-equipped trailers and newer ABS-equipped trailers will have a diagnostic socket installed. Details of the cables/harnesses with diagnostic socket are shown in PD-272-010, Document No. Y095697 for ABS systems and PD-272-020, Document No. Y107795 for TEBS4 systems.

Included in this document are details of various diagnostic cables and the Universal Diagnostic Interface which is required to diagnose KB4TA ABS and TEBS4 systems using the Knorr-Bremse ECUtalk® diagnostic software.



#### Technical Features

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

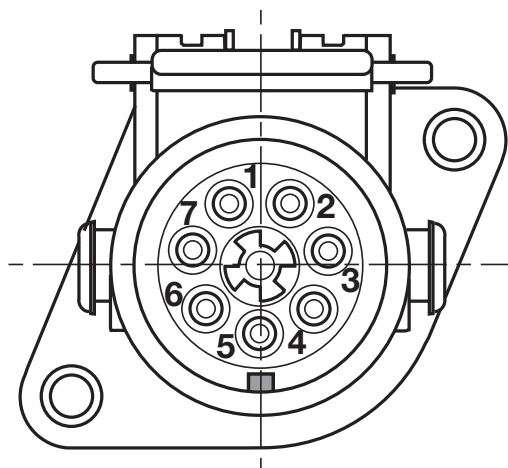
See tables for other features.

# TABS/TEBS

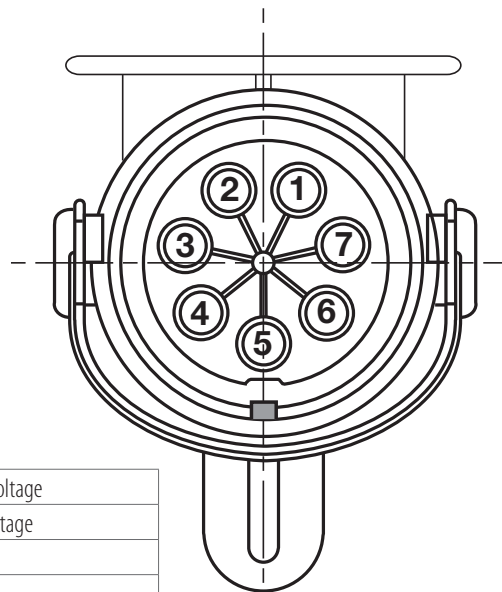
## Diagnostic Cables for Trailer ABS and TEBS4

### Pin Configurations

ISO 7638 Socket  
(24 V)



ISO 7638 Plug  
(24 V)

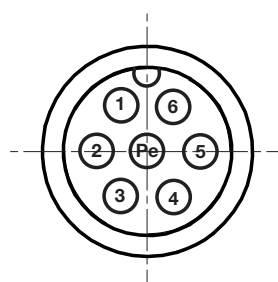


Pin 1	red	Valve supply voltage
Pin 2	black	ECU supply voltage
Pin 3	yellow	ECU ground
Pin 4	brown	Valve ground
Pin 5	white	Warning lamp
Pin 6	white/green	CAN-Hi
Pin 7	white/brown	CAN-LO

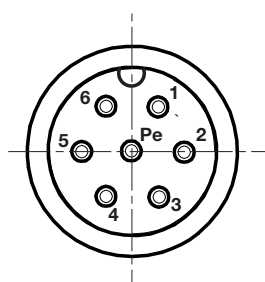
### DIAGNOSTIC CONNECTORS

#### Older Amphenol Connector

Diagnostic Socket



Diagnostic Plug

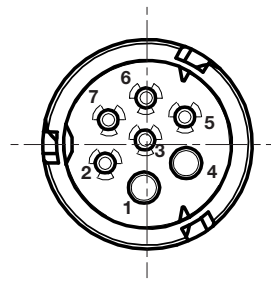


1	24V
2	not connected
3	24 V (linked to Pin 1)
4	DIA-K
5	DIA-K (linked to Pin 4)
6	DIA-K (linked to Pin 4)
Pe	GND

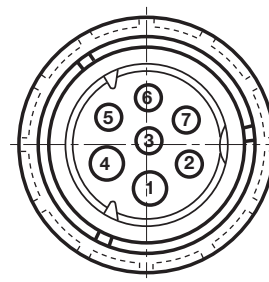
1	24V
2	not connected
3	not connected
4	DIA-K
5	not connected
6	not connected
Pe	GND

#### Later Bayonet Connector

Diagnostic Socket



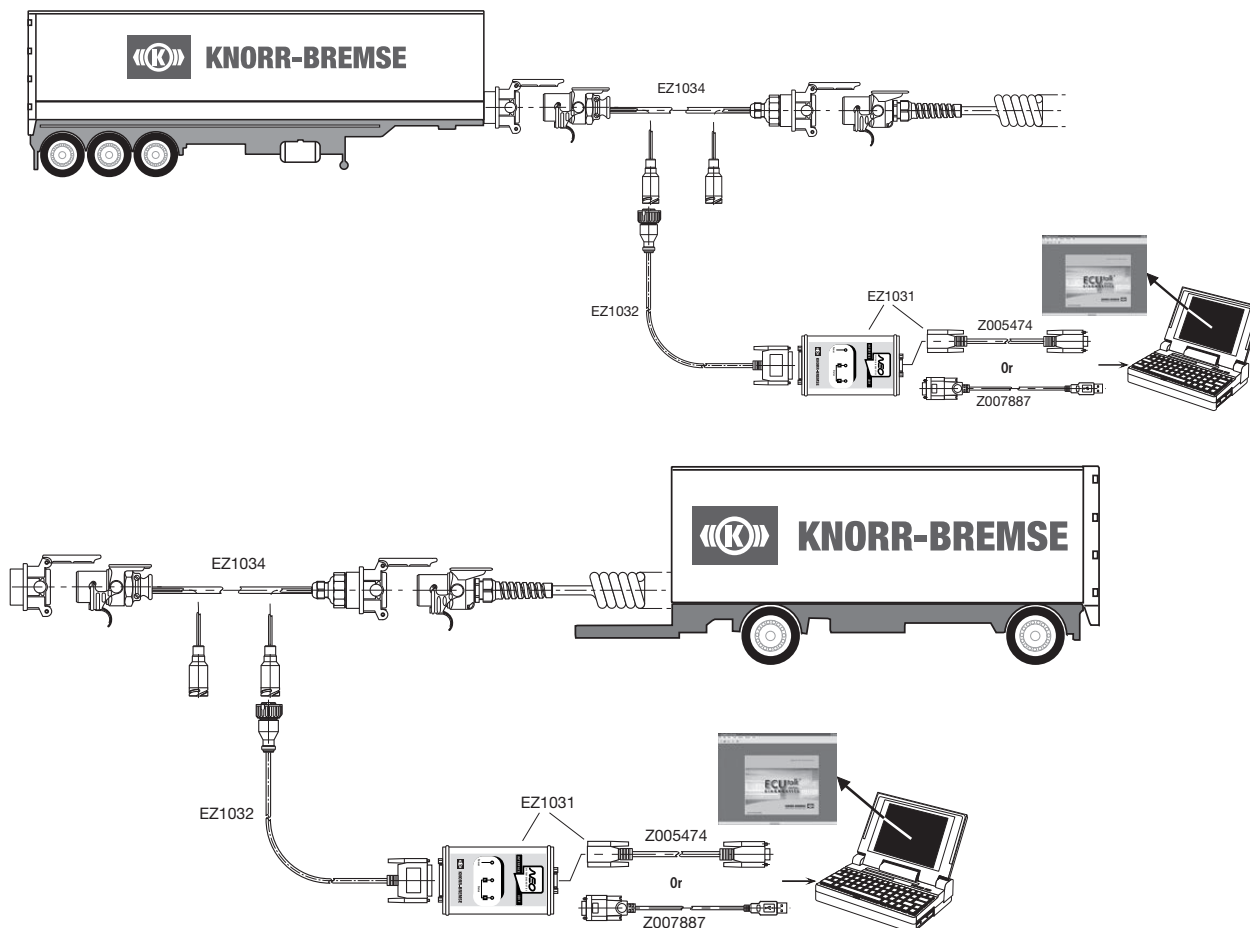
Diagnostic Plug



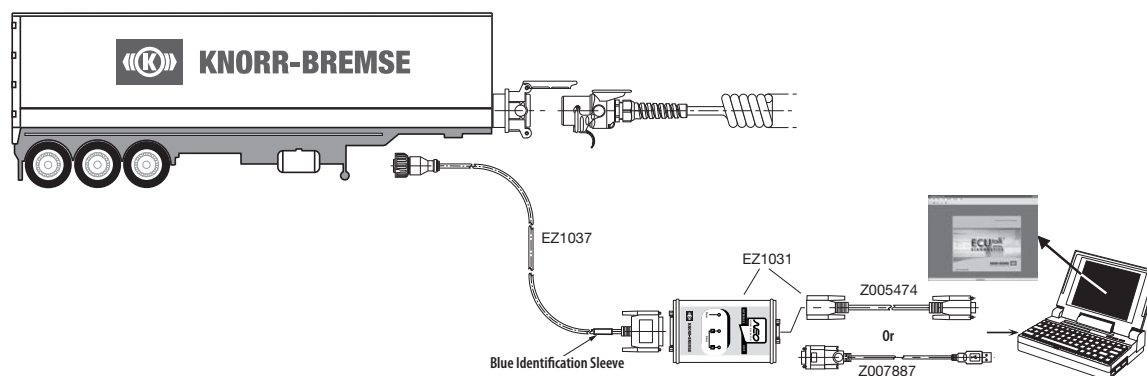
1	not connected
2	24 V
3	DIA-K
4	not connected
5	GND
6	CAN-L
7	CAN-H

## Diagnostic set up

### PC Diagnostics via 24 V CAN - TEBS4

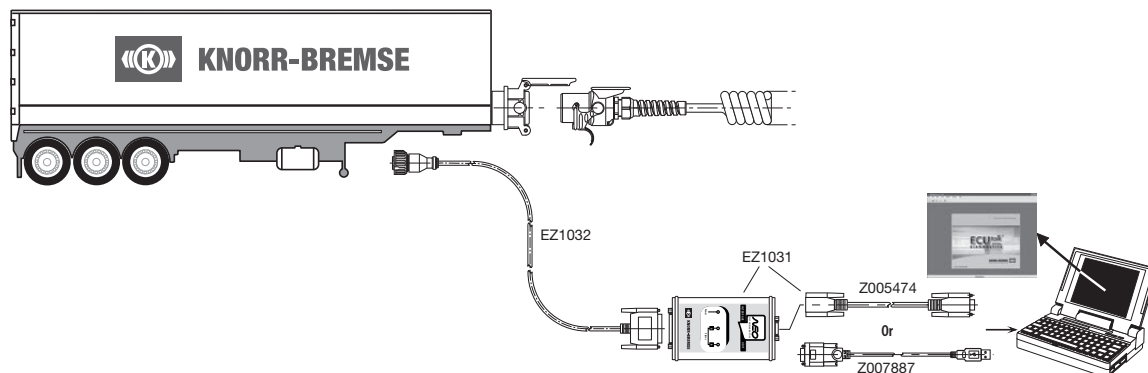


### PC Diagnostics via Diagnostic Socket (Bayonet 5 V CAN) - KB4TA

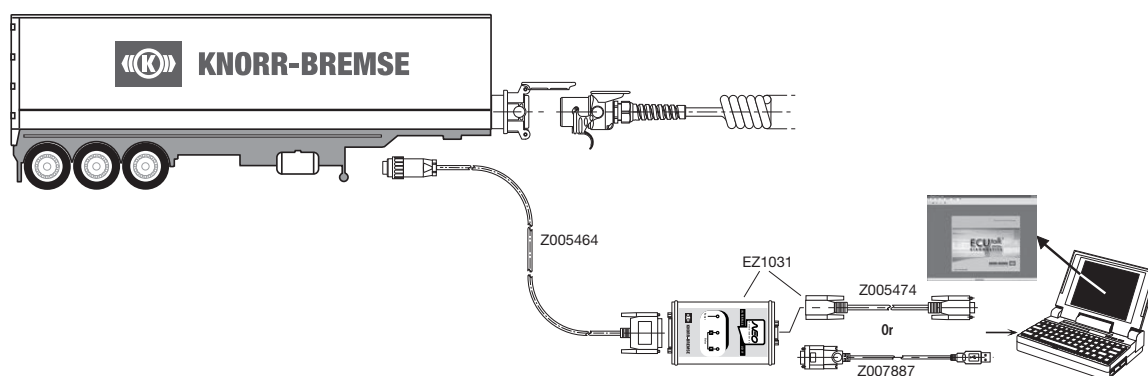


### Diagnostic set up (contd.)

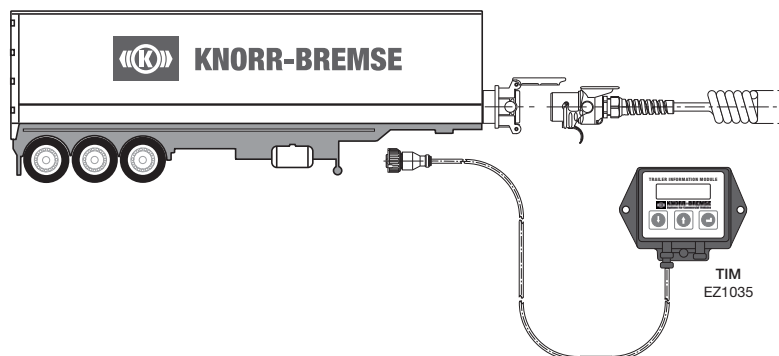
#### PC Diagnostics via Diagnostic Socket (Bayonet K-Line) - TEBS4 and A18



#### PC Diagnostics via Diagnostic Socket (Amphenol K-Line) - TEBS4 and A18



#### TIM Diagnostics via Diagnostic Socket (Bayonet K-Line) - TEBS4



## Range Overview - Diagnostic Cables

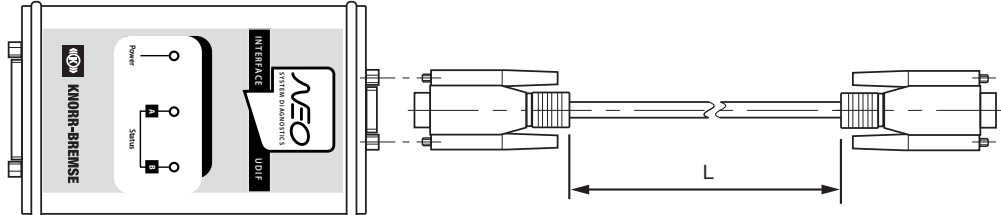
### ISO 7638 Plug/Socket 24 V CAN Adaptor Cable - TEBS4

Part No.	Type No.	Cable length [m]	Drawing	Comments
I139808F	EZ1034	L <sub>1</sub> = 0.45 L <sub>2</sub> = 0.60 L <sub>3</sub> = 0.35	A	Suits all types of trailer with 24 V system
K028584		L <sub>1</sub> = 0.60 L <sub>2</sub> = 0.45 L <sub>3</sub> = 0.35	B	Suits all types of trailer with 12 V system

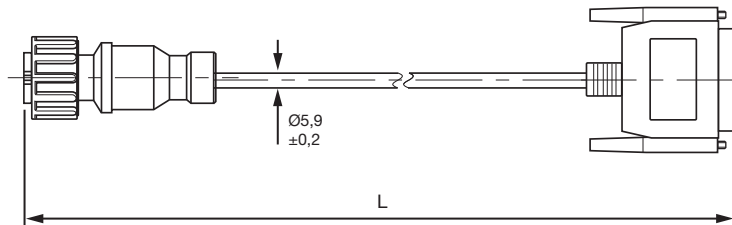
## Diagnostic Cables for Trailer ABS and TEBS4

### Range Overview - Diagnostic Cables (contd.)

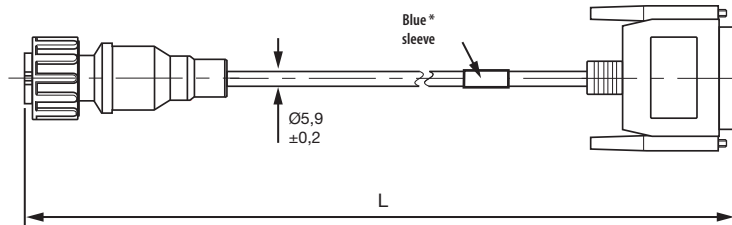
#### Universal Diagnostic Interface (UDIF) and Cable - TEBS4, KB4TA and A18

				
Part No.	Type No.	Cable length [m]	Drawing	Comments
II39809F	EZ1031	1.5	A	Includes UDIF K018631 and Cable Z005474 with RS232 Sub-D 9-pin Connectors

#### 24 V CAN to UDIF Cable - TEBS4

				
Part No.	Type No.	Cable length [m]	Drawing	Comments
II39812F	EZ1032	3.0	A	For use with Adaptor Cable II39808F-EZ1034 UDIF Connector is Sub-D 25-pin

#### Diagnostic Plug (Bayonet) to UDIF Cable - KB4TA

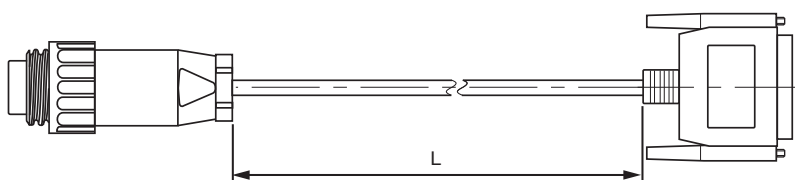
				
Part No.	Type No.	Cable length [m]	Drawing	Comments
K010837 <sup>1)</sup>	EZ1037	3.0	A	* Blue identification sleeve on cable UDIF Connector is Sub-D 25-pin

1) The part number will carry a suffix "N00" which defines that it is supplied without packaging. Example K010837N00

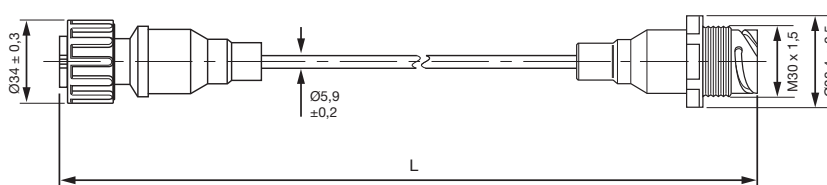
## Diagnostic Cables for Trailer ABS and TEBS4

### Range Overview - Diagnostic Cables (contd.)

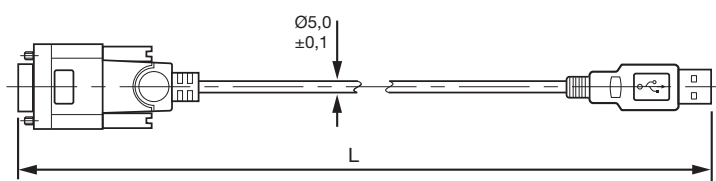
#### Diagnostic Plug (Amphenol) to UDIF Cable - TEBS4 and A18

				
Part No.	Type No.	Cable length [m]	Drawing	Comments
Z005464	-	3.0	A	for Amphenol Diagnostic Socket

#### Diagnostic Socket (Bayonet) Extension Cable - TEBS4, KB3-TA and A18

				
Part No.	Type No.	Cable length [m]	Drawing	Comments
K002301	EK3135	10.0	A	

#### RS232 Sub-D 9-pin Connector to PC USB Adaptor Cable - TEBS4, KB4TA and A18

				
Part No.	Type No.	Cable length [m]	Drawing	Comments
Z007887	-	1.8	A	For use with UDIF and Cable I139809F-EZ1031

**Revision Details**

Rev. 002	April 2019	New Layout

**KNORR-BREMSE****Knorr-Bremse Systems for Commercial Vehicles**

Moosacher Strasse 80 | 80809 Munich | Germany

Tel: +49 89 3547-0

Fax: +49 89 3547-2767

truckservices.knorr-bremse.com

**Note**

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