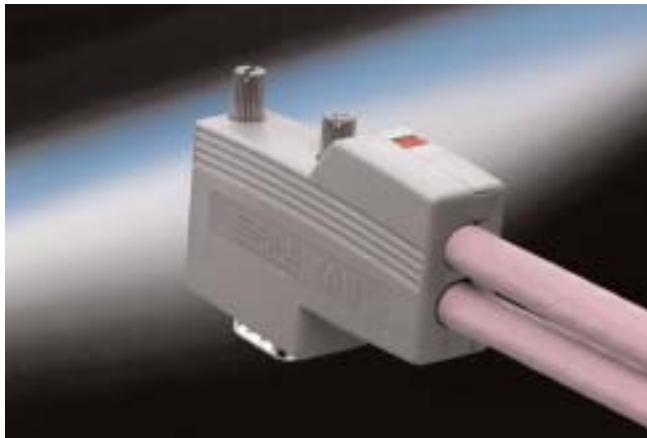


## ERbic CAN Bus



The CAN bus, originally developed for automobile engine management, is distinguished by its particularly high reliability. Among other things, this necessitates a more complicated protocol, which leads to lower data rates and cable lengths. This can be compensated for in part by larger cable cross sections. Data rates reach 1 Mbit/s. The 9-pin D-Sub connector is standardized as the interface to the device. In some cases, a version with a shield coupling capacitor is available as an option (cable shield <-> housing D-Sub).

### Electrical and mechanical characteristics

Interface connector	D-Sub, 9-pin, female
Cable termination	2 x horizontal, 2 x vertical, MAX: 2 x axial
Cable diameter	1 cable outlet can be sealed with blanking plate
Cross section of individual conductor	4.5 mm (0.177") – 8.0 mm (0.315")
Termination type	Screw terminal: 0.14 – 0.5 mm <sup>2</sup> ; HLG: 1.5 mm <sup>2</sup>
Data transmission rate	MAX: 0.14 – 1 mm <sup>2</sup> (HLG)
Temperature range	Cage-clamp terminal: 0.08 – 0.5 mm <sup>2</sup> (0.75 mm <sup>2</sup> ) (HLG)
Permissible humidity	Screw terminal, cage-clamp terminal
Protection class	According to CAN specification, max. 1 Mbit/s
Housing material	-20 °C – +70 °C
Sub-D screw	Max. 75 % at +25 °C, non-condensing
UL approval	IP 40 MAX: IP 30
CE marking	Thermoplast UL94V-1 MAX: ZnAl, galvanized
to be identified with the CE marking according to EU directives.	
#4/40 UNC, knurled with cross-head	
UL E84703 *	
ERbic connectors are passive components and do not need	

\* Due to continuous advancement, it is possible that the UL approval of a new version may not have been completed at the time of going to press.

### Pin configuration (HLG-Version)

Terminal	D-Sub Pin	Signal
1,6	3	CAN-GND
2,4	2	CAN-L
3,5	7	CAN-H
-	5	CAN-SHLD

### Pin configuration (no HLG-Version)

Terminal	D-Sub	Signal
1,9	9	V+
2,10	6	V+ GND
3,8	3	CAN-GND
4,6	2	CAN-L
5,7	7	CAN-H
-	5	CAN-SHLD

## ERbic CAN Bus

### Ordering Information

ERbic Type	Color	Cable outlet	D-Sub 9-pin	Screw	Preferred <sup>1)</sup>	Part Number
<b>CAN Bus with external switch and cage clamp</b>						
CAN Bus Standard HLG*	anthracit	horizontal	Female	#4/40 UNC	yes	<b>144744</b>
<b>CAN Bus with external switch and screw terminal</b>						
CAN Bus Standard	anthracit	vertical	Female	#4/40 UNC	yes	<b>154824</b>
<b>CAN Bus with external switch, screw terminal and metal housing</b>						
CAN Bus MAX Standard HLG*	silver	axial	Female	#4/40 UNC	yes	<b>154039</b>
<b>CAN Bus node with screw terminal</b>						
CAN Bus Standard	anthracit	horizontal	Female	#4/40 UNC	yes	<b>103668</b>
CAN Bus with service/PU connection	anthracit	horizontal	Female and Male (PU connection)	#4/40 UNC		<b>134149</b>
CAN Bus with shield decoupling capacitor	anthracit	horizontal	Female	#4/40 UNC		<b>103642</b>
CAN Bus with shield decoupling capacitor, reversed	anthracit	horizontal	Female	#4/40 UNC		<b>104320</b>
CAN Bus with shield decoupling capacitor HLG*	anthracit	horizontal	Female	#4/40 UNC	yes	<b>124620</b>
CAN Bus with shield decoupling capacitor HLG*, reversed	anthracit	horizontal	Female	#4/40 UNC	yes	<b>124654</b>
CAN Bus Standard	anthracit	vertical	Female	#4/40 UNC		<b>103669</b>
CAN Bus with shield decoupling capacitor and service/PU connection	anthracit	horizontal	Female and Male (PU connection)	#4/40 UNC		<b>103662</b>
CAN Bus with shield decoupling capacitor	anthracit	vertical	Female	#4/40 UNC	yes	<b>103652</b>



## ERbic Profibus

### Ordering Information

ERbic Type	Color	Cable outlet	D-Sub 9-pin	Screw	Preferred <sup>1)</sup>	Part Number
<b>CAN Bus termination with screw terminal</b>						
CAN Bus Standard	green	horizontal	Female	#4/40 UNC	yes	<b>103643</b>
CAN Bus with service/PU connection	green	horizontal	Female and Male (PU connection)	#4/40 UNC		<b>104670</b>
CAN Bus with shield decoupling capacitor	green	horizontal	Female	#4/40 UNC		<b>103644</b>
CAN Bus with shield decoupling capacitor, reversed	green	horizontal	Female	#4/40 UNC		<b>104321</b>
CAN Bus with shield decoupling capacitor HLG*	green	horizontal	Female	#4/40 UNC	yes	<b>124621</b>
CAN Bus with shield decoupling capacitor HLG*, reversed	green	horizontal	Female	#4/40 UNC		<b>124655</b>
CAN Bus Standard	green	vertical	Female	#4/40 UNC	yes	<b>103653</b>

\*HLG, only CAN High, CAN Low and CAN Ground can be connected.

Packaging: Single box with enclosed assembly instructions.

1) Preferred types are generally available from stock.