Mini Coax Cable Assemblies

MATE-AX – Miniaturized Automotive Terminals for Coax

Perfectly Assembled Cables – Our USPs

› Hybrid cable assemblies
› (FAKRA (ISO 20860-1) – MATE-AX)
› Assembly of different cable types such as:
  RTK031 and RG174
› Special solutions
› Globally standardized machinery

Your Advantages

› Save up to 70 % of installation space
› Very high data rate with very short latency time
› Weight reduction
› Automated assembly with automated process monitoring

Technical Information

Electrical

Screening attenuation	≤ -50 dB up to 6 GHz
Return loss	≤ -15 dB up to 9 GHz
Crosstalk (NEXT)	≤ -50 dB up to 6 GHz

Mechanical

Engagement force	≤ 55 N
Cable retention force	≥ 100 N
	(depending on cable)
Angled pull	≥ 75 N
Keying efficiency	≥ 130 N
Dynamic load	Load level 2

Environmental

Temperature range	-40 °C up to +105 °C
	(depending on cable)

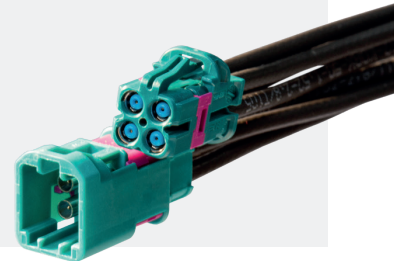*Specification according to TE datasheet*

Requirements

› Data cables for high-bitrate data transmission
  according to automotive quality standards
  while saving installation space and weight.
› Component tested according to LV 214 / USCAR
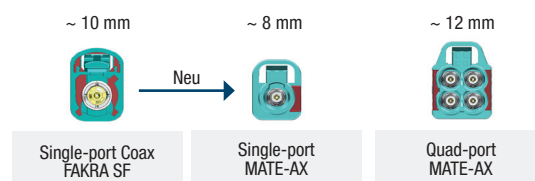
Applications

› Autonomous driving (LiDAR)
› Rear seat entertainment
› Driver assistance system
› Surround view
› Display applications

Protocols & Signals

› LVDS
› GMSL / FPD-Link
› APIX 3
› CoaXPress
› AM / FM / 5G
› Bluetooth / Wi-Fi
› GPS
› MIPI A-PHY

Dimensions FAKRA SF and MATE-AX

~ 10 mm	~ 8 mm	~ 12 mm
Single-port Coax FAKRA SF	Neu → Single-port MATE-AX	Quad-port MATE-AX

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MD in a Nutshell

The C.A.S.E. megatrend describes the four essential future topics for the automotive industry: Connected, Autonomous, Shared & Service and Electric. Data plays a central role and drives the future of the automotive industry. Data is generated, transferred, merged and evaluated. We are experts in the transmission of the rapidly increasing data volumes and have developed the latest technological solutions for this future topic.

25

years experience
in the automotive industry

100 %

automotive

Supplier of products for over **350 car models** from more than **60 OEMs**

Volume supplier – over 160 million products in more than 20,000 variants annually

Global production- & sales network in **NAFTA**, **Europe** and **APAC**

Stable ownership structure

Worldwide leading company for data transmission solutions in vehicles

Approx. **6,000 employees** worldwide

Accredited in-house test laboratory

Do you have any questions or need a data transmission solution in vehicles?
Please contact us: product-info@md-elektronik.com

www.md-elektronik.com