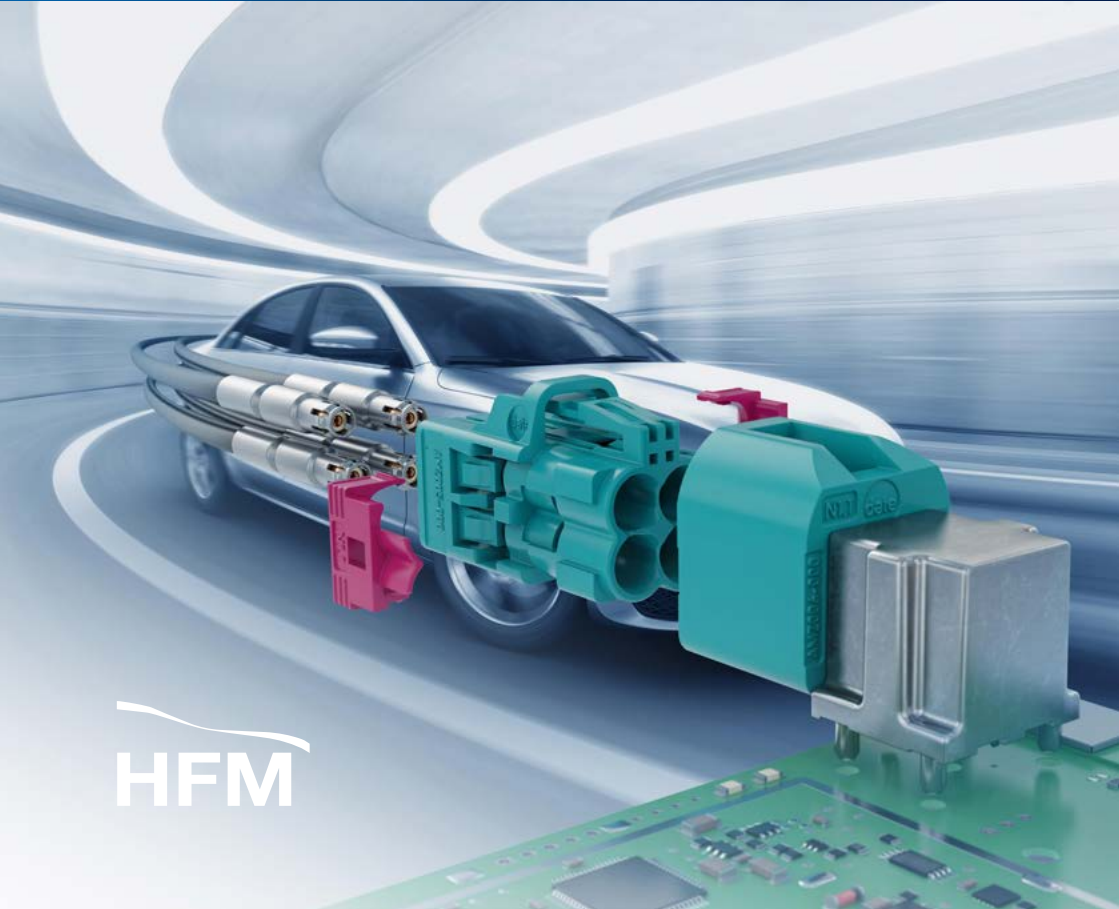


# Rosenberger

Automotive Connector System up to 15 GHz | 20 Gbps  
HFM<sup>®</sup> – High-Speed FAKRA-Mini

AUTOMOTIVE



HFM



HFM

## INTRODUCTION

### Car-to-X Communication – Connected Car

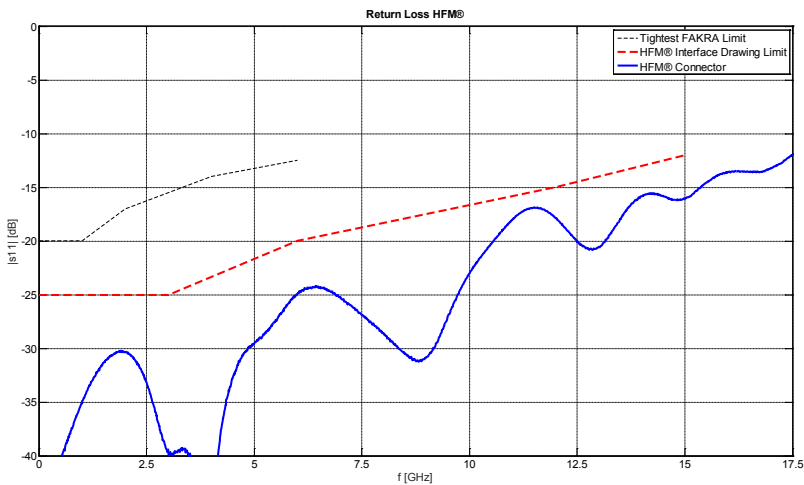
The priority of autonomous driving and driver assistance systems is to ensure safety. It is required to determine exact positions, to continuously calculate routes and to detect and classify objects. High data volumes from several cameras, diverse sensors and navigation sources must be combined and transported for this purpose – in real time.

#### Application Areas

- Autonomous Driving
- Driver Assistance Systems
- Navigation
- Infotainment
- Fond-Entertainment
- Internet
- Next Generation WLAN:  
"WiGig" (Wireless Gigabit)

#### Application Devices

- Camera Systems 4K
- Sensors and On-board Computers for high data rates
- High Resolution Systems
- 3D Instrument Cluster
- Navigation Systems
- Mobile Radio
- Remote Control via Smartphone
- Digital Antenna
- HMI (Human Machine Interface)



Electric High-Performance

## HFM® – High-Speed FAKRA-Mini

### HFM® – The next generation of automotive coax connectors for high data transmissions up to 20 Gbps

Operating the multitude of devices, screens and cameras in vehicle electronics requires a powerful infrastructure. Rosenberger HFM® connectors allow for high-bitrate data transmission while saving installation space and weight.

#### HFM® Advantages

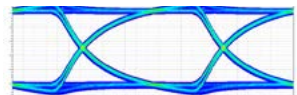
- Lower engaging forces
- Optimal use of installation space
- Optional CPA possibility
- Ergonomic handling
- Electric high-performance interface

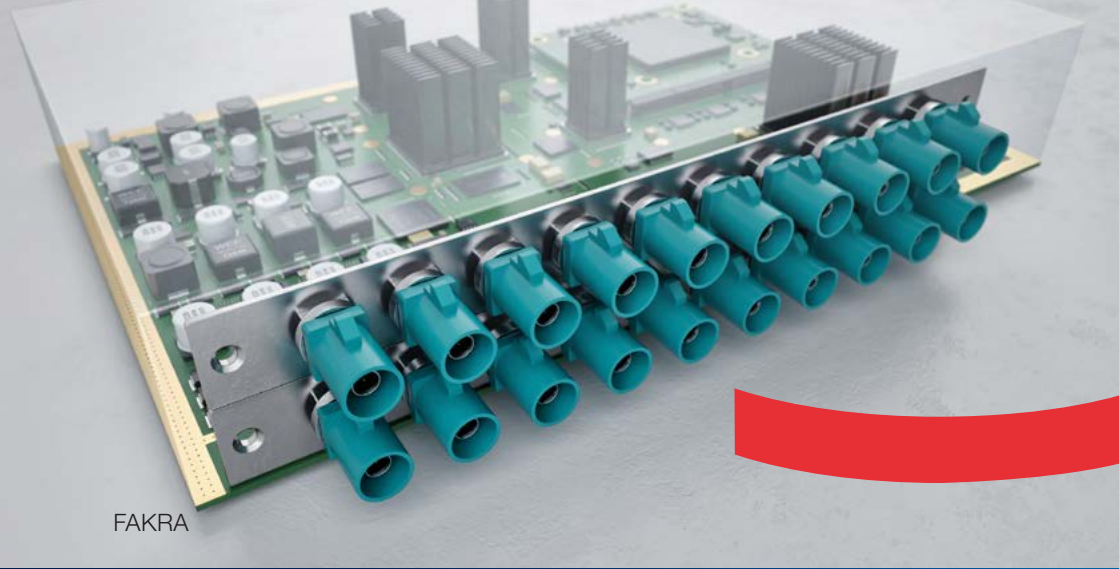
#### Optimal mechanical properties / robust design

- Mechanical ruggedness of latch
- Optimized for transverse tension
- Coding efficiency
- Impact resistance

#### Electrically optimized

- 2.5-fold bandwidth -> max. data rate 20 Gbps





FAKRA

# COMPARISON

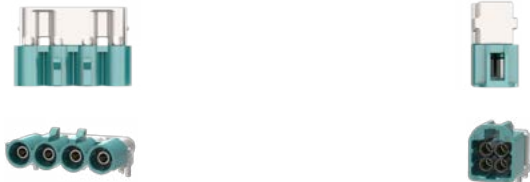
## Saving up of Installation Space up to 80 %

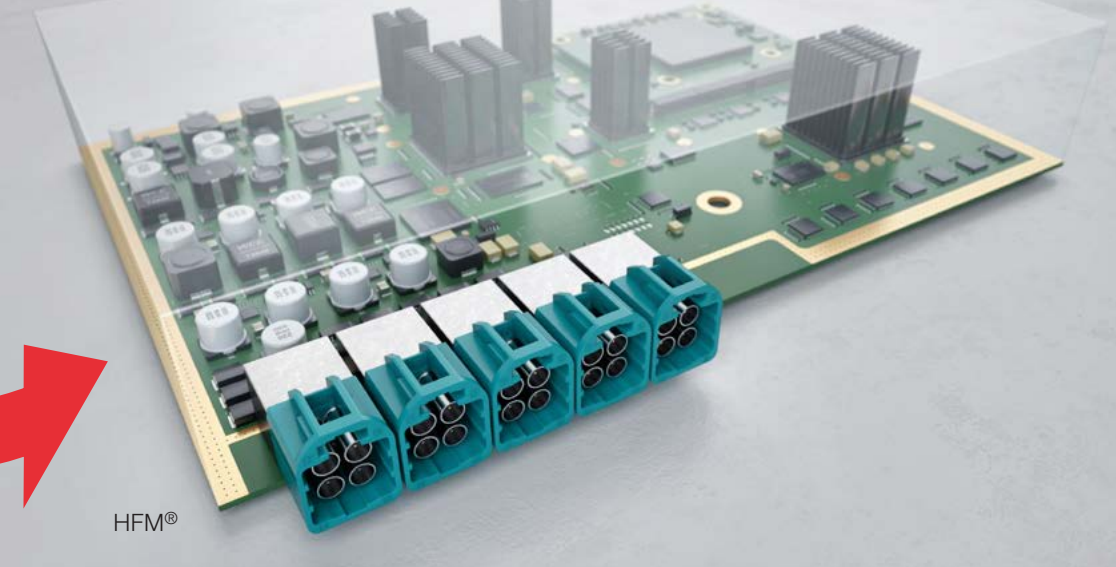
The small size makes it possible to place different modules on minimum installation space and to save up to 80 % of space compared to the conventional FAKRA generation.

- Comparison FAKRA (12x) – HFM® (3x4)



- Comparison FAKRA quad – HFM® quad





HFM®

## MODULAR DESIGN

### Modular Packages

- Standard connectors with various housings for the control device

single



double



quad

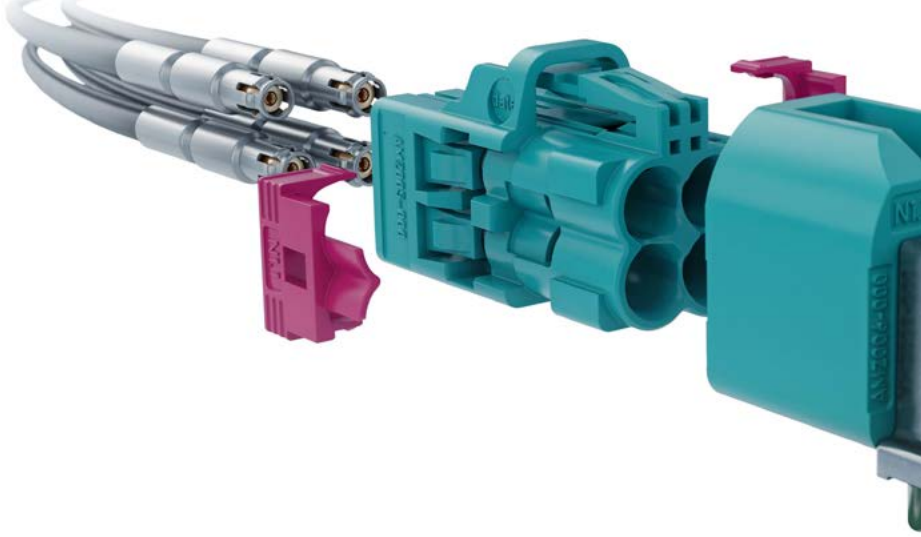


quint







- Optimized use of space for cameras – high data rate 4K





## PRODUCT PORTFOLIO








### HFM® PCB Connectors

Rosenberger No.	Connector Type	Product
AMS22A-40MZ5-y*	PCB Plug single	
AMS22B-40MZ5-y*	PCB Plug double	
AMS22D-40MZ5-y*	PCB Plug quad	
AMS22E-40MZ5-y*	PCB Plug quint	

\*Please fill in: y - coding



## HFM® Cable Connectors

Rosenberger No.	Connector Type	Product
AMS11A-1xxZ5-y*	Cable Plug straight single	
AMS11B-1xxZ5-y*	Cable Plug straight double	
AMK12A-1xxZ5-y*	Cable Jack straight single	
AMK12B-1xxZ5-y*	Cable Jack straight double	
AMK12D-1xxZ5-y*	Cable Jack straight quad	
AMK12E-1xxZ5-y*	Cable Jack straight quint	
AMK20A-1xxZ5-y*	Cable Jack right angle single	

\*Please fill in: xx – cable group M4, 02, H1, y - coding



## Website

For more information refer to our website:  
[www.rosenberger.com/hfm](http://www.rosenberger.com/hfm)

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Order No.

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