Automotive Connector System up to 15 GHz | 20 Gbps

HFM® – High-Speed FAKRA-Mini
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)
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
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
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
## HFM® PCB Connectors

<table>
<thead>
<tr>
<th>Rosenberger No.</th>
<th>Connector Type</th>
<th>Product</th>
</tr>
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<tbody>
<tr>
<td>AMS22A-40MZ5-y*</td>
<td>PCB Plug single</td>
<td>![Product Image]</td>
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<tr>
<td>AMS22B-40MZ5-y*</td>
<td>PCB Plug double</td>
<td>![Product Image]</td>
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<tr>
<td>AMS22D-40MZ5-y*</td>
<td>PCB Plug quad</td>
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<tr>
<td>AMS22E-40MZ5-y*</td>
<td>PCB Plug quint</td>
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*Please fill in: y - coding*
## HFM® Cable Connectors

<table>
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<th>Rosenberger No.</th>
<th>Connector Type</th>
<th>Product</th>
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<tbody>
<tr>
<td>AMS11A-1xxZ5-y*</td>
<td>Cable Plug straight single</td>
<td>![Image]</td>
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<tr>
<td>AMS11B-1xxZ5-y*</td>
<td>Cable Plug straight double</td>
<td>![Image]</td>
</tr>
<tr>
<td>AMK12A-1xxZ5-y*</td>
<td>Cable Jack straight single</td>
<td>![Image]</td>
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<tr>
<td>AMK12B-1xxZ5-y*</td>
<td>Cable Jack straight double</td>
<td>![Image]</td>
</tr>
<tr>
<td>AMK12D-1xxZ5-y*</td>
<td>Cable Jack straight quad</td>
<td>![Image]</td>
</tr>
<tr>
<td>AMK12E-1xxZ5-y*</td>
<td>Cable Jack straight quint</td>
<td>![Image]</td>
</tr>
<tr>
<td>AMK20A-1xxZ5-y*</td>
<td>Cable Jack right angle single</td>
<td>![Image]</td>
</tr>
</tbody>
</table>

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