



Overview

The AUTOMATE® Mini-FAKRA connector series, the latest in automotive interconnect technology, is a space-conscious, high-performance interface central to the next generation of vehicle applications. Supporting up to 20 Gbps data transmission, AUTOMATE connectors reduce installation space requirements by up to 80% compared to previous FAKRA products. Color coded housings provide visual guidance during the assembly process and mechanical keying options prevent mis-mating of connectors.

This compact solution is available in a quad-port configurations in a variety of standard key codes. These connectors are intermateable with all industry standard options.

Features and Benefits

- Compact, modular housing
- Multiport configuration
- Saves installation space by up to 80%
- Low engagement and disengagement forces
- Impact resistance

Applications

- 360-degree surround view cameras
- ECUs and Compute modules
- Autonomous vehicles
- Advanced Driver Assistance Systems (ADAS)
- GPS navigation
- 3D instrument cluster
- High bandwidth infotainment
- Remote start and vehicle controls
- V2X communication

Amphenol RF

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For more information visit www.amphenolrf.com
or call 800.627.7100



Ordering Information

AUTOMATE Type B Mini-FAKRA PCB Connectors

| Part Number | Description |
|----------------|---|
| FMB4NxRP-PCB-1 | AUTOMATE Type B Mini-FAKRA Quad-Port PCB Right-Angle Plug |

Note: See Key Code Chart on reverse side for all available codes.
Contact factory for mating assembly information.

AUTOMATE Type B Mini-FAKRA Cable Mount Connectors

| Part Number | Description |
|----------------|--|
| FMB4NxSJ-C01W0 | AUTOMATE Type B Mini-FAKRA Quad-Port PCB Straight Plug RG-174, RG-188, RG-316 |

Custom Solutions

AUTOMATE Cable Assemblies – Application specific solutions designed per customer requirements

AUTOMATE Sealed Solutions – Increased protection for harsh environment applications

Contact Amphenol RF sales for additional information

AUTOMATE® Type B is intermateable with TE's MATE-AX® series.

Technical Specifications

Electrical

| | |
|---------------------------|---------------------------------------|
| Impedance | 50Ω Nominal |
| Frequency Range | DC – 15 GHz (20 Gb/s Data Throughput) |
| Return Loss | ≥20 dB, DC – 6 GHz |
| | ≥15 dB, 6 – 9 GHz |
| Test Voltage | 750 VRMS |
| Working Voltage | 60 VDC |
| Current Rating | ≤3A DC |
| Center Contact Resistance | <15mΩ |
| Outer Contact Resistance | <7.5mΩ |

Mechanical

| | |
|---------------------|---------------|
| Mating Cycles | 25 Cycles Min |
| Engagement Force | ≤50N |
| Disengagement Force | ≤5N |

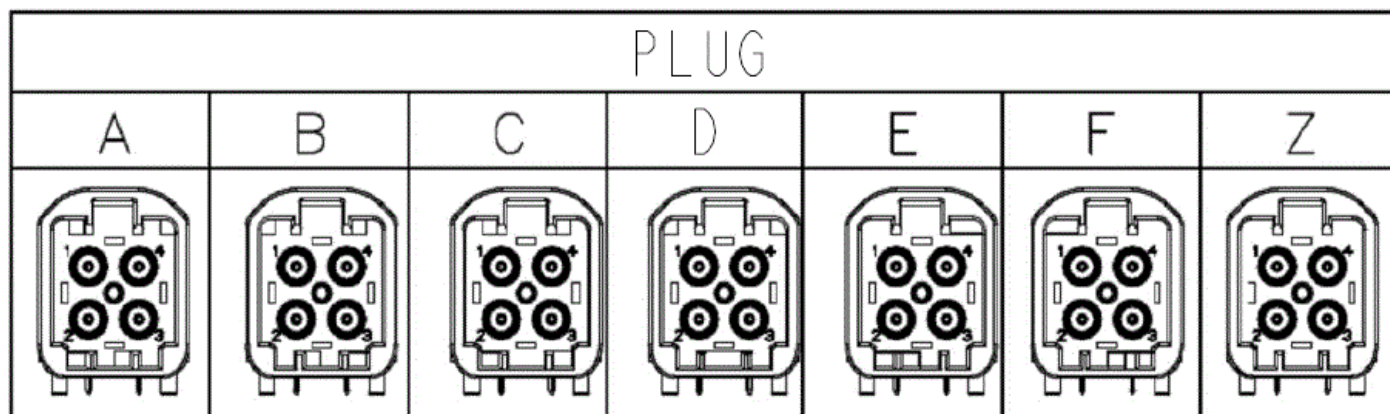
Environmental

| | |
|-------------------|-----------------------------|
| Temperature Range | -40°C to +105°C |
| RoHS | Compliant with exemption 6C |

Materials

| | PCB | Cable |
|----------------|------------------------------|-----------------------------------|
| Body | Zinc Alloy, Matte Tin Finish | N/A |
| Outer Contact | Brass, Matte Tin Finish | Phosphor Bronze, Matte Tin Finish |
| Center Contact | Brass, Gold Finish | Spring Copper Alloy, Gold Finish |
| Housing | Nylon | PBT |
| Insulator | LCP | PTFE |

Note: Technical specifications are typical and may vary by specific part number and design. See component drawing for additional details.



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