



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 mismatching of connectors.

This compact solution is available in single, dual and 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
- Multipoint 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

Four Old Newtown Road
Danbury, CT 06810

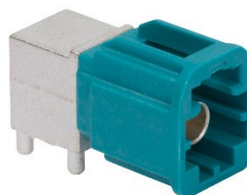
For more information visit www.amphenolrf.com
or call 800.627.7100

Ordering Information

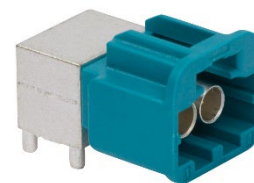
AUTOMATE Type A Mini-FAKRA PCB Connectors

Part Number	Description
FM1-NXRP-PCB-1	AUTOMATE Type A Mini-FAKRA Single-Port PCB Right-Angle Plug
FM2-NXRP-PCB-1	AUTOMATE Type A Mini-FAKRA Dual-Port PCB Right-Angle Plug
FM4-NXRP-PCB-1	AUTOMATE Type A Mini-FAKRA Quad-Port PCB Right-Angle Plug
FM4-NXSP-PCB-1	AUTOMATE Type A Mini-FAKRA Quad-Port PCB Straight Plug

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



FM1-NXRP-PCB-1



FM2-NXRP-PCB-1



FM4-NXRP-PCB-1



FM4-NXSP-PCB-1

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

Amphenol® RF

Technical Specifications

Electrical

Impedance	50Ω Nominal
Frequency Range	DC – 9 GHz
Return Loss	1.12 (-25dB) Max @ DC – 3 GHz
	1.22 (-20dB) Max @ DC – 3 GHz
	1.67 (-12dB) Max @ DC – 3 GHz
Dielectric Withstanding Voltage	750 VRMS (800 VRMS for Single & Dual Versions)
Current Rating	≤2A DC
Center Contact Resistance	<5mΩ
Outer Contact Resistance	<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

Body	Zinc Alloy, Matte Tin Finish
Outer Contact	Brass, Matte Tin Finish
Center Contact	Copper Nickel Alloy, Gold Plated
Housing	PA4T
Insulator	LCP

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

KEY CODE CHART

Keying							
Code	A	B	C	D	E	F	Z
Color	Jet Black 	Cream 	Signal Blue 	Claret Violet 	Leaf Green 	Nut Brown 	Water Blue 

Amphenol RF North America

Four Old Newtown Road
Danbury, CT 06810
+1 800-627-7100

Amphenol RF Europe

Hoofdveste 19
3992 HD Houten
The Netherlands
+31 30 635 8000

Amphenol RF Asia

Block DM2, TongWei Industrial District
TongWei Community
Feng Huang Street
Guang Ming New District
Shenzen, Guangdong Province
P.R. China 518132
+86 755 2754-9918

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