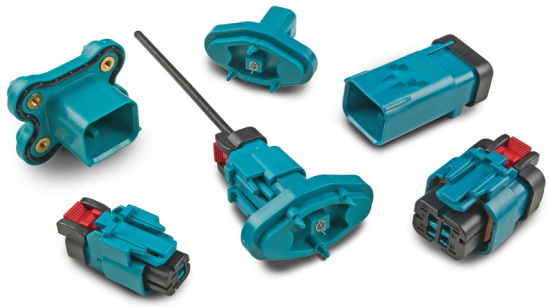

AMPSEAL 16 Connectors with MATE-AX Coaxial Terminals

Data Connectivity Solutions for Industrial & Commercial Transportation

TE Connectivity's (TE) AMPSEAL 16 connectors with MATE-AX miniaturized FAKRA coaxial system delivers analog signal up to 6 GHz and digital data transmission to reliably connect antennas, cameras, sensors, and displays within heavy-duty commercial and industrial vehicles. Their easy-to-use, flexible design utilizes widely available automotive-standard RTK031 and RG174 coaxial cable types to enable easy integration into existing coaxial architecture. They support a wide range of communication protocols, including FPD-LINK-II/III/IV, GMSL 2/3, Apix2/3, GNSS, GPS, 4G, and LTE.

AMPSEAL 16 connectors with coaxial terminals offer a higher packaging desity than simliar products with a robust sealed housing design. The integration of a family seal into the housing design not only eases assembly but can also reduce manfucturing and service costs by eliminating expensive heat shrink tubing and time-consuming application.

These products meet the vibration, mechanical shock and temperature requirements of rugged vehicles by utilizing the proven design of our AMPSEAL 16 housings along with the superior signal performance of our MATE-AX miniature coaxial terminals.

FEATURES & BENEFITS

Easy, Flexible Design

- Utilizes standard 50 ohm RTK031, RG174 coaxial cable.
- Simple latch and lock design for ease of connector mating.
- 4 color-coded keying options available
- Supports a wide range of communication protocols with 15 meter link and 2 in-line connections.

Reduce Manufacturing and Service Costs

- Integrated family seal helps eliminate the use of expensive heat shrink tubing and the associated time-consuming application.

Rugged and Reliable

- Housing design features locking CPA latch and a primary latch reinforcement (PLR) to help confirm contact positioning and avoid misalignment.
- Vibration and mechanical shock resistance.
- IP67/IP69K (with backshell) dust and water protection.

APPLICATIONS

Radar/ LiDAR | Camera Systems | Telemetry Units | Infotaiment | Antennas | V2X | ADAS

KEY INDUSTRIES

Agriculture | Construction | Truck | Bus

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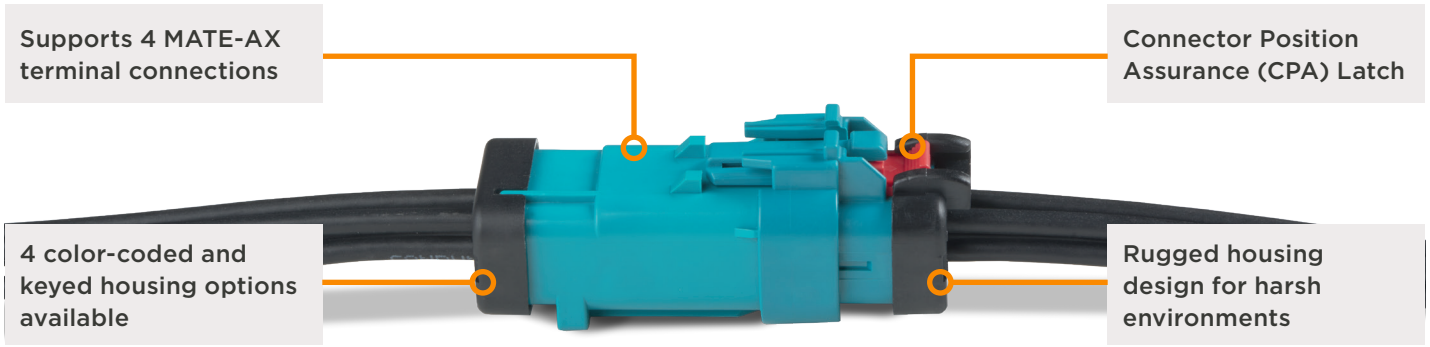
PRODUCT FEATURES

Communication Protocols	Gigabit Multimedia Serial Link (GMSL) 2/3 15 meters Flat Panel Display Link (FPD-LINK) II/III/IV 15 meters
Cable Type	RTK031, RG174 type 50 ohm coaxial cable
Application	15 m channel link with up to 2 in-lines
Sealing Performance	IP67 and IP69K (with backshell)
Operating Temperature	-40°C to +105°C
Connections	Cable-to-cable, bulkhead mount, cable-to-board/device
Terminal System	MATE-AX coaxial terminals
Standards & Specifications	Application Specification: 114-94667 Product Specification (connectors): 108-94799 Product Specification (terminals): 108-94515



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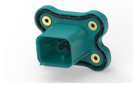
CONNECTORS

Type		Housings				Bulkhead (Male)		180° PCB Mount Headers	
Position	Keying	Plug Assembly (Female)		In-Line Assembly (Male)					
1	A		2355843-1		2374559-1		2449917-1		2355844-1
4			2338212-1		2338211-1		2339729-1		2356408-1

Type		180° PCB Mount Headers With Dispensed Seal		90° PCB Mount Headers With Dispensed Seal	
Position	Keying				
4	A		2439715-5		2394674-5
	B		-		2394674-6

ACCESSORIES & TERMINALS

Description			Part Number	Use With
1p PCB Terminal 180° Assembly			2356413-2	2379753-1 (PCB/Interface Cover)
AMPSEAL 16 Cavity Plug (Yellow)			776363-1	2338212-X, 2338211-X, 2339729-X
1P Sealing Plug			2461552-1	2374559-X 2449917-X
	Backshells	Smooth exit, no window	2452956-1	2355843-X
		NW7.5 exit, no window	2452956-2	2355843-X
		Smooth exit, window	2452956-3	2355843-X
		NW7.5 exit, window	2452956-4	2355843-X
	Backshell Kits	4p Plug (Female)	2292799-X	2338212-X
		4p In-line (Male)	2292862-X	2338211-X, 2339729-X
	Mounting Clips (Straight)	20.5 mm	1924487-1	2338211-1, 2374559-1
		20.5 mm, anti-rotation post	1924487-2	
		11 mm	1924487-3	

Note: There are three options for each backshell Male and Female -1,-2,-3. -1s are smooth cable exit, -2 and -3 are for corrugated tubing.

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MATE-AX CABLE ASSEMBLIES

Cable Type	Configuration	Cable Length (m)	Part Number
RTK031 (Typically DACAR 302-3)	Female-to-Female	0.5	2362355-1
		1.0	2362355-2
		1.5	2362355-3
		3.0	2362355-4
		5.0	2362355-5
	Male-to-Female	0.5	2362356-1
		1.0	2362356-2
		1.5	2362356-3
		3.0	2362356-4
		5.0	2362356-5
RG174 (Typically DACAR 462-2)	Female-to-Female	0.5	2362358-1
		1.0	2362358-2
		1.5	2362358-3
		3.0	2362358-4
		5.0	2362358-5
	Male-to-Female	0.5	2362359-1
		1.0	2362359-2
		1.5	2362359-3
		3.0	2362359-4
		5.0	2362359-5

Non-standard cable lengths are available upon request.

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NOTES

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ABOUT TE CONNECTIVITY

TE Connectivity is a global industrial technology leader creating a safer, sustainable, productive, and connected future. Our broad range of connectivity and sensor solutions, proven in the harshest environments, enable advancements in transportation, industrial applications, medical technology, energy, data communications, and the home.

With more than 85,000 employees, including over 8,000 engineers, working alongside customers in approximately 140 countries, TE ensures that EVERY CONNECTION COUNTS. Learn more at **www.te.com** and on LinkedIn, Facebook, WeChat and Twitter.

LET'S CONNECT

We make it easy to connect with our experts and are ready to provide all the support you need. For additional information or product assistance, please contact your field representative or our customer service department. Additional information is also available on the website **te.com/ict.**

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