IP67 Latching RJ45 Plugs & Jacks

IP67-RATED RUGGEDIZED RJ45 LATCHING CONNECTORS
MRK SERIES

Amphenol's MRK series of RJ45 Connectors provides IP67 protection in a circular form factor for Cable-to-Panel applications.

MRK plug housings are designed to be used with user-supplied standard RJ45 cable-mounted plugs. Plug housings are available with metal/plastic construction and Metal Thumb Latch Coupling, or all-metal construction with Bayonet Coupling. The mating receptacles feature an integrated RJ45 Jack and matching IP20 RJ45 jack on the termination side, and a square mounting flange with 4 screw mount holes.

This series are designed to provide Ethernet or other protocol connectivity solutions for a variety of environments and applications, including Industrial, Telecommunications, Datacom, Medical, Energy, Transportation, etc.

TARGET MARKETS

- Provides an IP67 standard RJ45 mating interface per IEC 60529
- RoHS-compliant
- UL94V-0 high-temperature resistant housing
- Operating temperature range from -40°C to +80°C
- Thumb Latch Locking or Bayonet Coupling mechanism
- MRK plug housings accept standard IP20 RJ45 cable mounted plugs (user-supplied) and feature a rear cable grommet with compression nut to seal to the cable jacket
- MRK receptacles feature a square flange with integrated IP67 panel gasket and 4 screw mounting holes
- Receptacles provide an IP20 RJ45 jack on the rear side for connection to the user's equipment with a standard RJ45 plug
- Available as factory made cable assemblies and adapters

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FEATURES	BENEFITS
▪ Standard HDMI mating interface	▪ Mates to IP67 plug, or standard IP20 RJ45 plug
▪ UL94V-0 rated high-temperature housing and inserts	▪ Operating temperature range of -40°C to +80°C
▪ IP67 plug housing accepts user-supplier plug/cable	▪ Suitable for many user defined configurations
▪ IP67 receptacle terminated to IP20 RJ45 jack	▪ Connects to user-equipment using standard IP20 plug
▪ Metal Bayonet Coupling Ring or Thumb Latch on Plug	▪ Secure latching to ensure IP67 performance
▪ Suitable for many user defined configurations	▪ Ensures correct mating orientation
▪ Metal & plastic construction	▪ Extremely durable for harsh environments
▪ RoHS-compliant	▪ Meets environmental and safety standards

TECHNICAL INFORMATION

MATERIAL

▪ Latch Lock Design:

  ▪ Outer Housing: Engineering thermoplastic, UL94V-0

  ▪ Inner Housing: Die-cast Zinc Alloy, Chrome-plated

  ▪ Internal Insulator: Engineering thermoplastic, UL94V-0

  ▪ Latch: Die-cast Zinc Alloy, Chrome-plated

  ▪ Rear Cable Nut: Engineering thermoplastic, UL94V-0

  ▪ Grommets & O-Rings: Silicone Rubber

  ▪ HDMI Insulator: Engineering thermoplastic, UL94V-0

  ▪ HDMI Contacts: Copper Alloy, with Gold over Nickel plating

▪ Bayonet Design:

  ▪ Outer Housing: Aluminum Alloy, Anodized

  ▪ Coupling Ring: Aluminum Alloy, Anodized

  ▪ Rear Cable Nut: Aluminum Alloy, Anodized

  ▪ Grommets & O-Rings: Silicone Rubber

  ▪ Internal Insulator: Engineering thermoplastic, UL94V-0

  ▪ HDMI Insulator: Engineering thermoplastic, UL94V-0

  ▪ HDMI Contacts: Copper Alloy, with Gold over Nickel plating

ELECTRICAL PERFORMANCE

▪ Current Rating: 1.5A per contact

▪ Voltage Rating: 125VAC

▪ Contact Resistance: 20mΩ max.

▪ Dielectric Withstanding Voltage (DWV): 500VAC/1 minute @ sea level

▪ Insulation Resistance: 1000MΩ min.

MECHANICAL PERFORMANCE

▪ Durability: 1500 mating cycles

▪ Cable Outside Diameter (plug): 5 to 9mm

PACKAGING

▪ Box

APPROVALS & CERTIFICATION

▪ RoHS-compliant per EU directive 2011/65/EU and amendments

ENVIRONMENTAL

▪ Ingress Protection: IP67 Per IEC 60529 in Mated Condition

▪ Operating Temperature: -40°C to +80°C

▪ RoHS compliant per EU directive 2011/65/EU andamendments

TARGET MARKETS/APPLICATIONS

Datacom Telecom

HMIs

Server Storage

Energy Industrial

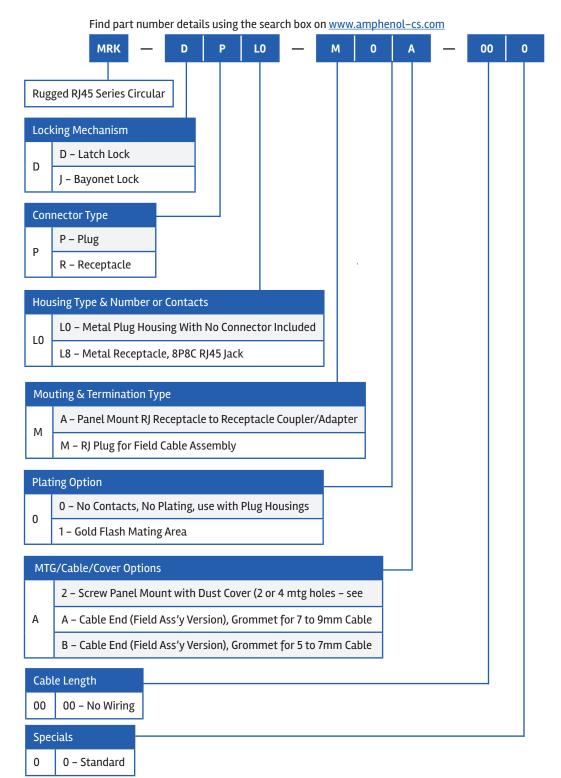Medical

Robotics

PART NUMBERS

Description	Part Numbers
Plug Housing, RJ45, IP67 Latch lock, excludes RJ45 Plug (User–supplied), Cable Diameter 7 to 9mm	MRK–DPL0–M0A–000
Plug Housing, RJ45, IP67 Latch lock, excludes RJ45 Plug (User–supplied), Cable Diameter 5 to 7mm	MRK–DPL0–M0B–000
Receptacle, RJ45, IP67, Latch Lock, 4 Hole Flange to IP20 Receptacle with Dust Cover	MRK–DRL8–A12–000
Plug Housing, RJ45, IP67, Bayonet, excludes RJ45 Plug (User–supplied), Cable Diameter 7 to 9mm	MRK–JPL0–M0A–000
Plug Housing, RJ45, IP67, Bayonet, excludes RJ45 Plug (User–supplied), Cable Diameter 5 to 7mm	MRK–JPL0–M0B–000
Receptacle, RJ45, IP67, Bayonet, 4 Hole Flange to IP20 Receptacle	MRK–JRL8–A13–000

Find part number details using the search box on www.amphenol-cs.com

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PART NUMBER SELECTOR

Find part number details using the search box on www.amphenol-cs.com

MRK	—	D	P	L0	—	M	0	A	—	00	0

Rugged RJ45 Series Circular

Locking Mechanism

D	D – Latch Lock
	J – Bayonet Lock

Connector Type

P	P – Plug
	R – Receptacle

Housing Type & Number or Contacts

L0	L0 – Metal Plug Housing With No Connector Included
	L8 – Metal Receptacle, 8P8C RJ45 Jack

Mouting & Termination Type

M	A – Panel Mount RJ Receptacle to Receptacle Coupler/Adapter
	M – RJ Plug for Field Cable Assembly

Plating Option

0	0 – No Contacts, No Plating, use with Plug Housings
	1 – Gold Flash Mating Area

MTG/Cable/Cover Options

A	2 – Screw Panel Mount with Dust Cover (2 or 4 mtg holes – see
	A – Cable End (Field Ass'y Version), Grommet for 7 to 9mm Cable
	B – Cable End (Field Ass'y Version), Grommet for 5 to 7mm Cable

Cable Length

00	00 – No Wiring

Specials

0	0 – Standard