

Rugged MRU Series USB Type-C Connectors and Cable Assemblies

IP67-RATED RUGGEDIZED USB TYPE-C LATCHING CONNECTORS & CABLES MRU SERIES

Amphenol's MRU series of USB Type-C Connectors and Cables provides IP67 protection for Cable-to-Panel applications.

These connectors have a metal/plastic body construction with a metal Thumb Latch Coupling and 4-hole screw mount rectangular flange receptacles.

This series of connectors and cables is designed to provide solutions for a variety of environments and applications, including Industrial, Telecommunications, Datacom, Medical, Energy, Transportation, etc.

- Provides a standard USB Type-C mating interface
- IP67 protection for enclosures per IEC 60529
- RoHS-compliant
- UL 94 V-0 high temperature resistant housing
- Operating temperature ranges from -45° C to +85 °C
- Metal housing and latching construction with outer plastic body
- Thumb Latch Locking Mechanism
- Available as factory-made over-molded cable assemblies and adapters



TARGET MARKETS



FEATURES

- Standard USB Type C mating interface
- UL 94 V-0 rated high-temperature insulators
- Over molded cable, adapter configurations
- Metal thumb latch on plugs
- RoHS-compliant
- Metal & plastic construction

BENEFITS

- Receptacle can be mated to standard IP20 USB plug
- Operating temperature range of -45 °C to +85 °C
- Suitable for many user-defined configurations
- Easy to unmate, secure IP67 latching
- Meets environmental and safety standards
- Extremely durable for harsh environments

TECHNICAL INFORMATION

MATERIAL

- Housing: Thermoplastic PBT, UL 94 V-0
- USB Housing: Thermoplastic LCP, UL 94 V-0
- Internal PCB: FR-4 Fiberglass, lead-free, UL 94 V-0
- Gasket: Silicone Rubber
- Over-Molding: PVC
- USB Shell: Stainless Steel, Nickel Plated
- USB Contact: Copper Alloy Plated with Gold over Nickel
- Cable: UL AWM 2725, 80 °C 30 V VW-1

ELECTRICAL PERFORMANCE

- Current Rating: Up to 5 A when following USB type C spec
- Voltage Rating: 20 V
- Contact Resistance: 30 mΩ max.
- DWV: 100 V AC
- Insulation Resistance: 10 MΩ min.

MECHANICAL PERFORMANCE

- Durability: 10000 mating cycles
- Wire Gauge:
 - 21 AWG (Charging Contacts)
 - 30 AWG (Data Contacts)

PACKAGING

- Box for connector
- Plastic bag & carton for cable

APPROVALS & CERTIFICATION

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

ENVIRONMENTAL

- Ingress Protection: IP67 Per IEC 60529 in mated condition
- Operating Temperature Range: -45°C to +85°C
- RoHS compliant per EU directive 2011/65/EU and amendments

TARGET MARKETS/APPLICATIONS



Telecom
Datacom
IoT



Human Machine Interface (HMI)



Data Management
Cybersecurity



Manufacturing
Power Generation
Oil & Gas



Healthcare
Automotive
Retail



Digital Health & Telemedicine
Biotechnology

PART NUMBERS

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

Description	Part Numbers
Rugged connector USB Type C Receptacle to Receptacle Adapter	MRU-CF81-5100
USB Cable Assembly Type C Latch Lock Plug to Type C Standard Plug, cable length 0.5 m	MRU-CMB1-6050
USB Cable Assembly Type C Latch Lock Receptacle to Type C Standard Plug Adapter, cable length 0.5 m	MRU-CF81-6150

* Other cable lengths and configurations available – Consult Amphenol Sales

PART NUMBER SELECTOR

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

MRU

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C

M

8

1

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6

0

XX

Series

Rugged IP67 Waterproof USB Series

USB Generation

C C – USB- TYPE C

Connector Type

M M – Plug
F – Receptacle

Connector Engage & Mounting Feature

8 8 – Latch lock-metal-panel mount-4 MTG holes, screws & nuts
B – Latch lock-over mold cable assembly

Plating

1 1 – Gold at Mating Area Standard

Cable Length

XX 00 – No Cable
See table for different cable length codes

Dust Cover Options

0 0 – No Dust Cover
1 – With Dust Cover

Termination

6 5 – Receptacle to matching USB type receptacle adapter
6 – Cable to matching USB type plug (standard USB plug with over-mold)

Cable Length

First X		Second X	
Code	Meters	Code	Meters
A	1.0	0	0
		1	0.1
B	2.0	2	0.2
		3	0.3
C	3.0	4	0.4
		5	0.5
D	4.0	6	0.6
		7	0.7
E	5.0	8	0.8
		9	0.9

Example:

A0 = 1.0 m

B7 = 2.7 m

EXPLORE THE PRODUCT DETAILS ONLINE

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