

IP67 Thumb Latching USB Type A

IP67-RATED RUGGEDIZED USB 3.0 TYPE A LATCHING CONNECTORS & CABLES MRUSERIES

Amphenol's MRU series of USB 2.0 & 3.0 Type A Connectors and Cables provide IP67 protection in a circular form factor for Cable-to-Panel applications.

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

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

- Provides a standard USB Type A mating interface
- IP67 protection for enclosures per IEC 60529
- RoHS-compliant
- UL94V-0 high temperature resistant housing
- Operating temperature range from -40°C to $+80^{\circ}\text{C}$
- Metal housing and latching construction with outer plastic body
- Thumb Latch Locking Mechanism
- Available as factory-made overmolded cable assemblies and adapters



TARGET MARKETS



FEATURES

- Standard USB Type A mating interface
- UL94V-0 rated high-temperature insulators
- Overmolded cable, adapter configurations
- Metal thumb latch on plugs
- RoHS-compliant
- USB 2.0 and USB 3.0 performance options
- Metal & plastic construction

BENEFITS

- Receptacle can be mated to standard IP20 USB plug
- Operating temperature range of -40°C to $+80^{\circ}\text{C}$
- Suitable for many user-defined configurations
- Easy to unmate, secure IP67 latching
- Meets environmental and safety standards
- Meets variety of data rate requirements
- Extremely durable for harsh environments

TECHNICAL INFORMATION

MATERIAL

- Housing: Zinc Alloy, Chrome plated
- Nut: Zinc Alloy, Chrome plated
- Clamp Body & End Cap: Aluminum Alloy
- USB Housing: Thermoplastic LCP, UL94V-0
- Internal PCB: FR-4 Fiberglass, lead-free, UL94V-0
- Grommets & O-Rings: Silicone Rubber
- Over-Molding: PVC
- USB Shield: Copper Alloy, Nickel Plated
- USB Contact: Copper Alloy Plated with Gold over Nickel
- Cable USB3.0: AWM 20276, 80°C 30V VW-1

ELECTRICAL PERFORMANCE

- Current Rating: 0.9A per Charging Contact 0.25A per Data Contact
- Voltage Rating: 5VDC
- Contact Resistance: 30mΩ max.
- DWV: 100 VAC/1 minute @ sea level
- Insulation Resistance: 100MΩ min.
- Data Rate: 5Gb/s

MECHANICAL PERFORMANCE

- Durability: 1500 mating cycles
- Wire Gauge:
 - 24AWG (Charging Contacts)
 - 28AWG (Data Contacts)

APPROVALS AND CERTIFICATIONS

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

PACKAGING

- Box

ENVIRONMENTAL

- Ingress Protection: IP67 Per IEC 60529 in mated condition
- Operating Temperature Range: -40°C to +80°C
- RoHS compliant per EU directive 2011/65/EU and amendments

TARGET MARKETS/APPLICATIONS



Datacom Telecom



HMI's



Server Storage



Energy Industrial



Medical



Robotics

PART NUMBERS

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

Description	Part Numbers
Cable Assembly, USB 3.0 Type A, IP67, Latch Lock Plug to IP20 Plug, 0.5m	MRU-BMD1-6050
Receptacle, USB 3.0 Type A, IP67, 4 Hole Flange Mount, Latch Lock, with Dust Cover	MRU-BF81-5100

* 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

—

B

M

D

1

—

6

0

XX

RUGGED USB SERIES CIRCULAR

USB Generation

B

B – USB-3.0 TYPE A (24mm SIZE)

Connector Type

M

M – Plug

F – Receptacle

Connector Engage & Mounting Feature

D

8-Thumb Latch, Metal, Panel Mount, 4 MTG Holes

D-Thumb Latch, Metal, Cable Assembly

Plating

1

1 – Gold Flash at Mating Area Standard

Termination

6

5 – Receptacle Adapter IP67 to IP20

6 – Cable IP67 Plug to IP20 Plug

8 – Cable IP67 Plug to IP67 Plug

Dust Cover Options

0

0 – No Dust Cover (Plug Only)

1 – With Attached Dust Cover (Receptacle Only)

Cable Length

XX

00 – No Cable

20 to 99 – Overall Cable Length in CM (20 To 99 CM)

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 = 1.0m
B7 = 2.7m

ACPAIP67TLUSBAMRU025EA4