



PRODUCT SPECIFICATION

INDUSTRIAL SEALED USB3.0 TYPE A PLUGS AND RECEPTACLES

1.0 SCOPE

This product specification defines the product performance requirements for sealed USB3.0 Receptacle & Plug assemblies.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER(S)

USB3.0 Receptacle Cable Type A

USB3.0 Plug Cable Type A

Part Number Series

84733

84734

Product description

USB3.0 TYPE A receptacle assemblies

USB3.0 TYPE A cable assemblies

2.2 DIMENSIONS, MATERIALS, PLATING AND MARKING

Refer to appropriate sales drawing.

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

See sales drawings and other sections of this specification for the relevant reference documents. In cases where the specification differs from the drawings, the sales drawings take precedence.

4.0 RATINGS

4.1 VOLTAGE

30 Volts AC (RMS)

4.2 CURRENT

1.0 AMP

4.3 TEMPERATURE

Operating: - 40°C to + 80°C

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5.1.1	Insulation Resistance	Mate connectors, apply 100 VDC between adjacent terminal or ground. Per EIA-364-21.	100 Megohms Min

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5.1.2	Dielectric Withstanding Voltage	Mate connectors, apply 500 VAC (RMS) for 1 minute between adjacent terminal or ground. Per EIA-364-20	No breakdown
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5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5.2.1	Insertion Force	At a maximum of 12.5mm (0.492") per minute. Per EIA-364-13	35N (3.5kgf) max.
5.2.2	Extraction Force	At a maximum rate of 12.5mm (0.492") per minute. Per EIA-364-13	10 N minimum No burrs or sharp edges are allowed on top of locking latches (hook surfaces which will rub against receptacle shield).
5.2.3	Bayonet Durability	EIA-364-09 150 Maximum Manual mating/unmating cycles per hr.	No evidence of physical damage
5.2.4	Connector Durability	Mate and Un-mate connectors 500 cycles at a rate of 200 cycles per hour	No physical damage
5.2.5	Torque withstand	Mate coupling ring to receptacle with 20 lb in. Torque (max)	No damage occurs to coupling ring or receptacle

6.0 ENVIRONMENTAL REQUIREMENTS

6.1 SEAL RATING; IP67

6.2 RoHS Compliant: Yes

7.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage.

8.0 PHYSICAL ATTRIBUTES

8.1 HOUSING MATERIAL: THERMOPLASTIC PBT, BLACK, UL94V-0

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- 8.2 OVERMOLD MATERIAL: PVC, BLACK
- 8.3 CONTACT MATERIAL: COPPER ALLOY
- 8.4 CONTACT PLATING: GOLD IN CONTACT AREA, TIN IN PC TAIL
AREA OVER NICKEL OVERALL
- 8.5 GASKET SEAL MATERIAL: NITRILE, BLACK
- 8.6 COUPLING RING MATERIAL: THERMOPLASTIC PBT, BLACK
- 8.7 LOCKNUT MATERIAL: THERMOPLASTIC PBT, BLACK
 - 8.7.1 RECOMMENDED TORQUE: 24 LBF-IN ±4 LB IN
 - 8.7.2 RECOMMENDED PANEL THICKNESS: .10 IN MAX

9.0 CABLE LENGTHS

Maximum cable lengths are based on USB3.0 Wire gauge table 11.4.7.
 28 AWG 0.8M (Molex cable A) see USB3.0 Sales Drawings SD-84733-XXX, SD-84734-XXX
 22 AWG 3.0M (Molex cable B) see USB3.0 Sales Drawings SD-84733-XXX, SD-84734-XXX
 End users shall determine if cable length variations other than stated within the USB3.0 Specification will work in specific applications. Molex products are designed to meet USB3.0 length requirements,

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