



# PRODUCT SPECIFICATION

## INDUSTRIAL SEALED USB A&B PLUGS AND RECEPTACLES

### 1.0 SCOPE

This Product Specification covers the Sealed Industrial USB A&B Plug and Receptacle Connector Series.

### 2.0 PRODUCT DESCRIPTION

2.1 INDUSTRIAL USB A SHIELDED PLUG W/PIGTAIL	84727
2.2 INDUSTRIAL USB B SHIELDED PLUG W/PIGTAIL	84728
2.3 INDUSTRIAL USB A REC, PANEL MT W/USB A PLUG CORD	84729
2.4 INDUSTRIAL USB A REC, PANEL MT W/PC TAILS	84729
2.5 INDUSTRIAL USB A REC, PANEL MT W/LEADS	84729
2.6 INDUSTRIAL USB B SHIELDED REC, PANEL MT W/PC TAILS	84730
2.7 INDUSTRIAL USB A&B SHIELDED DUAL ENDED CABLE	84732

### 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

A. IEC IP67                      84727, 84728, 84729, 84730, 84732

### 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
1	Insulation Resistance	Unmated & dismounted connectors: apply a voltage of <b>100</b> VDC between adjacent terminals and between terminals to ground.	<b>100</b> Megohms MINIMUM
	Dielectric Withstanding Voltage	Unmated connectors: apply a voltage of <b>100</b> VAC for <b>1</b> minute between adjacent terminals and between terminals to ground.	No breakdown

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
<b>E</b>	EC No: <b>618943</b> DATE: <b>2019/06/11</b>	<b>PRODUCT SPECIFICATION for SEALED USB A &amp; B RECEPTACLE</b>	<b>1 of 2</b>
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
<b>PS-84727-002</b>	<b>G. GUSTAFSON</b>	<b>B. RUPERT</b>	<b>B. WOODMAN</b>



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## 5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	USB Connector mate and un-mate forces	Mate and un-mate USB connector (Male to Female) at a rate of 12.5mm (.50 in.) per minute	35 N (3.57 kgf) <b>MAXIMUM mating force</b> & 10 N (1.02 kgf) <b>MINIMUM un-mating force</b>
2	Bayonet Durability	Mate connector up to 200 cycles at a maximum rate of 10 cycles per minute	<b>Tactile feedback must be maintained</b>
3	Connector Durability	Mate and Un-mate connectors 500 cycles at a rate of 200 cycles per hour	<b>No physical damage</b>
4	Torque withstand	Mate coupling ring to receptacle with 20 lb in. Torque (max)	<b>No damage occurs to coupling ring or receptacle</b>

## 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

8.2 OVERMOLD MATERIAL: TPC, BLACK

8.3 CONTACT MATERIAL: COPPER ALLOY

8.4 CONTACT PLATING: .000030" MIN. GOLD IN CONTACT AREA, .000100" MIN. TIN IN PC TAIL AREA OVER .000050" MIN. 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  $\pm$  4 LB IN

8.7.2 RECOMMENDED PANEL THICKNESS: .10 IN MAX

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