

# Detailed Specifications & Technical Data



## ENGLISH MEASUREMENT VERSION

### AX100648 Modular Connectors - CAT5E EZ-MDVO Modular Jack - MDVO style



For more Information  
please call

1-800-Belden1



#### General Description:

CAT5E EZ-MDVO Modular Jack, RJ45, MDVO-style, Black

#### Usage (Overall)

Suitable Applications: IBDN System 1200, TIA Category 5e, ISO Class D, 1000BASE-T

Related Parts: Compatible with Interface and MDVO Style Faceplates, Adapters, Boxes and Patch Panels,

#### Physical Characteristics (Connectivity)

##### Dimensions

Dimensions:

Height (in.)	Width (in.)	Depth (in.)
0.710	0.750	1.250

##### Materials

Materials:

Description	Type	Material
Front Connection	Lead Frame	Copper Alloy with 50u inch Gold over Nickel
Rear Connection	IDC	Copper Alloy with Nickel Plating
Connector Body		Plastic - UL940V-0

##### Color

Color: Black

##### Wiring Scheme

Wiring Scheme: T568A/B

##### Weight

Weight: 0.013 lbs.

##### Included Parts

Included Parts: Center Stuffercap Coded A/B

##### Packaging

Packaging: Individually packaged in a plastic bag. Standard pack of 50 units.

#### Mechanical Characteristics (Connectivity)

Footprint/Type: MDVO-Style

Plug / Jack Compatibility: RJ45, RJ11

##### Termination Interface:

Termination	Connection	Durabilities
Front	Mated Connection	1,000 cycles
Rear	Gas Tight IDC Connection	20 terminations

Connector/Hardware Retention: 20 lbs.

Plug/Connector Retention: 11.250 lbs.

Storage Temperature Range: -40°C To +70°C

Installation Temperature Range: -10°C To +60°C

Operating Temperature Range: -10°C To +60°C

#### Applicable Specifications and Agency Compliance (Overall)

##### Applicable Standards & Environmental Programs

Other Standards: FCC Part 68, Subpart F, IEC 60603-7

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2006

MII Order #39 (China RoHS): EUP 50

Telecommunications Standards: Category 5e - TIA 568.B.2, Category 5 - ISO/IEC 11801:2002 Ed.2

# Detailed Specifications & Technical Data



## ENGLISH MEASUREMENT VERSION

### AX100648 Modular Connectors - CAT5E EZ-MDVO Modular Jack - MDVO style

**Safety Listing:** ACA, Bi-national Standard Listed

#### Suitability

**Suitability - Indoor:** Yes - Indoor

#### Transmission Characteristics (Connectivity)

Mated Connection Table 1:

Frequency (MHz)	Max. Insertion Loss TIA* (dB)	Max. Insertion Loss Belden** (dB)	Min. NEXT TIA* (dB)	Min. NEXT Belden** (dB)	Min. FEXT TIA* (dB)	Min. FEXT Belden** (dB)
1.000	0.100	0.100	65.000	77.000	65.000	67.000
4.000	0.100	0.100	65.000	72.300	63.100	65.000
8.000	0.100	0.100	64.900	66.200	57.000	58.900
10.000	0.100	0.100	63.000	64.300	55.100	57.000
16.000	0.100	0.100	58.900	60.200	51.000	52.900
20.000	0.100	0.100	57.000	58.300	49.100	51.000
25.000	0.100	0.100	55.000	56.300	47.100	49.000
31.250	0.110	0.100	53.100	54.400	45.200	47.100
62.500	0.160	0.120	47.100	48.400	39.200	41.100
100.000	0.200	0.160	43.000	44.300	35.100	37.000
160.000		0.210		40.200		32.900

Mated Connection Table - Footnote:

\* TIA/EIA-568-B.2-2001 Category 5E Standard.

\*\* Worst-case performance for a CAT5E mated connection using CAT5E modular plugs.

Mated Connection Table 2:

Frequency (MHz)	Min. Return Loss TIA* (dB)	Min. Return Loss Belden** (dB)
1.000	30.000	32.000
4.000	30.000	32.000
8.000	30.000	32.000
10.000	30.000	32.000
16.000	30.000	32.000
20.000	30.000	32.000
25.000	30.000	32.000
31.250	30.000	32.000
62.500	24.100	28.100
100.000	20.000	24.000
160.000		19.900

**Dielectric Strength:**

1,000 V RMS @ 60 Hz for 1 minute

**Current Rating:**

1.500 A

**Insulation Resistance:**

500 M-Ohm Minimum

**Max. Contact Resistance:**

20 m-Ohm

**Termination Resistance:**

2.5 m-Ohm

#### Notes (Overall)

Notes: Please See Installation Guide PX102753

#### Product Family

Part Number List:

Item Number	Color
AX100645	Gray
AX100646	Almond
AX100647	White
AX100648	Black
AX100649	Orange (TIA 606)
AX100650	Red (TIA 606)
AX100651	Yellow (TIA 606)
AX100652	Green (TIA 606)
AX100653	Blue (TIA 606)
AX100654	Purple (TIA 606)
AX100655	Brown (TIA 606)

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
AX100648	1 EA	0.024 LB			EZ-MDVO UTP MODULE, CAT5E,

## AX100648 Modular Connectors - CAT5E EZ-MDVO Modular Jack - MDVO style

Revision Number: 0 Revision Date: 04-26-2013

© 2015 Belden, Inc.  
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.