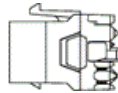


## AX102281 Modular Connectors - 10GX Modular Jack -KeyConnect



For more Information  
please call

1-800-Belden1



### General Description:

10GX Modular Jack, Category 6A, RJ45, KeyConnect style, Almond

### Usage (Overall)

<b>Suitable Applications:</b>	IBDN System 10GX, TIA Category 6A, ISO Class EA, 10GBASE-T
<b>Related Parts:</b>	Compatible with KeyConnect Faceplates, Adapters, Boxes and Patch Panels

### Physical Characteristics (Connectivity)

#### Dimensions

Dimensions:

Height (in.)	Width (in.)	Depth (in.)
0.900	0.673	1.130

#### Materials

Materials:

Description	Type	Material
Front Connection	Flexible PCB	Flexible PCB with 50u inch Gold over Nickel
Rear Connection	IDC	Phosphor Bronze with Tin Plating over Nickel
Connector Body	N/A	Plastic - UL940V-0

#### Color

**Color:** Almond

#### Wiring Scheme

**Wiring Scheme:** T568A/B

#### Weight

**Weight:** 0.016 lbs.

#### Included Parts

**Included Parts:** 1 X-Bar

#### 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	750 cycles
Rear	IDC Connection	20 terminations

**Cable/Connector Retention:** 15 lbs.

**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

**Tool Compatibility:** Belden 110 Connecting Tool

### 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):** 07/01/2006

## AX102281 Modular Connectors - 10GX Modular Jack -KeyConnect

MII Order #39 (China RoHS):	EUP 50
Telecommunications Standards:	ISO/IEC 11801:2002 Amendment 2
Third Party Performance Verification:	ETL - Verified Category 6A
Safety Listing:	ACA, Bi-national Standard Listed

### Suitability

Suitability - Indoor:	Yes - Indoor
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### 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	0.050	75.000	77.000	75.000	80.000
4.000	0.100	0.050	75.000	77.000	71.100	75.100
8.000	0.100	0.050	75.000	77.000	65.000	69.000
10.000	0.100	0.050	74.000	77.000	63.100	67.100
16.000	0.100	0.060	69.900	72.900	59.000	63.000
20.000	0.100	0.070	68.000	71.000	57.100	61.100
25.000	0.100	0.080	66.000	69.000	55.100	59.100
31.250	0.110	0.090	64.100	67.100	53.200	57.200
62.500	0.160	0.140	58.100	61.100	47.200	51.200
100.000	0.200	0.180	54.000	57.000	43.100	47.100
200.000	0.280	0.260	48.000	51.000	37.100	41.100
250.000	0.320	0.300	46.000	49.000	35.100	39.100
300.000	0.350	0.330	42.900	46.700	33.600	37.600
400.000	0.400	0.380	37.900	42.900	31.100	35.100
500.000	0.450	0.430	34.000	40.000	29.100	33.100
625.000		0.480		37.100		31.200

Mated Connection Table - Footnote:

\* TIA/EIA-568-B.2-10-2008 Category 6A Standard.

\*\* Worst-case performance for a 10GX mated connection using 10GX modular plugs.

Mated Connection Table 2:

Frequency (MHz)	Min. Return Loss TIA* (dB)	Min. Return Loss Belden** (dB)	Min. PSANEXT TIA* (dB)	Min. PSANEXT Belden** (dB)	Min. PSAACRF TIA* (dB)	Min. PSAACRF Belden** (dB)	Min. Balanced TCL TIA* (dB)	Min. Balanced TCL Belden** (dB)
1.000	30.000	34.100	70.500	72.000	67.000	72.000	40.000	45.000
4.000	30.000	34.100	70.500	72.000	67.000	72.000	40.000	45.000
8.000	30.000	34.100	70.500	72.000	67.000	72.000	40.000	45.000
10.000	30.000	34.100	70.500	72.000	67.000	72.000	40.000	45.000
16.000	30.000	34.100	70.500	72.000	67.000	72.000	40.000	45.000
20.000	30.000	34.100	70.500	72.000	67.000	72.000	40.000	45.000
25.000	30.000	34.100	70.500	72.000	67.000	72.000	40.000	45.000
31.250	30.000	34.100	70.500	72.000	67.000	72.000	38.100	45.000
62.500	30.000	34.100	70.500	72.000	67.000	72.000	32.100	39.100
100.000	28.000	30.000	70.500	72.000	67.000	72.000	28.000	35.000
200.000	22.000	24.000	64.500	66.000	61.000	66.000	22.000	29.000
250.000	20.000	22.000	62.500	64.000	59.000	64.000	20.000	27.000
300.000	18.500	20.500	61.000	62.500	57.500	62.500	18.500	25.500
400.000	16.000	18.000	58.500	60.000	55.000	60.000	16.000	23.000
500.000	14.000	16.000	56.500	58.000	53.000	58.000	14.000	21.000
625.000		13.000		56.100		56.100		19.100

Dielectric Strength: 1,000 V RMS @ 60 Hz for 1 minute

Current Rating: 1.500 A

Insulation Resistance: 50 M-Ohm Minimum

Max. Contact Resistance: 20 m-Ohm

Termination Resistance: 2.5 m-Ohm

### Notes (Overall)

Notes: Please see Installation Guide PX103771.

### Product Family

Part Number List:

Item Number	Color
AX102280	Gray
AX102281	Almond

## AX102281 Modular Connectors - 10GX Modular Jack -KeyConnect

AX102282	Elec. White
AX102283	Black
AX102284	Orange (TIA 606)
AX102285	Red (TIA 606)
AX102286	Yellow (TIA 606)
AX102287	Green (TIA 606)
AX102288	Blue (TIA 606)
AX102289	Purple (TIA 606)
AX103073	Ivory
AX104152	Orange
AX104153	Red
AX104154	Yellow
AX104155	Green
AX104156	Blue
AX104157	Purple

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
AX102281	1 EA	0.024 LB			10GX JACK KCONN ALMOND

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