XLRnet Connectors

XLRnet was designed in conjunction with the Amphenol Data / Telecom product group of Amphenol Canada Corp., a subsidiary of Amphenol Corporation. Utilising our combined expertise and knowledge of the professional audio and high-speed data markets we are proud to offer the XLRnet series. Featuring Class D (10/100 BASE-T), CAT5E (1000 BASE-T) or CAT6 (10GBASE-T) ethernet performance in A, B or D shell housings with integrated LED's and complete shielding options we have your high-speed data requirements covered.

Features

- Class D (10/100 BASE-T), CAT5E (1000 BASE-T) or CAT6 (10GBASE-T) ethernet performance
- A, B or D type chassis housings
- IDC or IDC 110 punch down terminals
- RJ45 feedthrough panel connectors
- Shielded or non-shielded
- LED indicators in a variety of colours.
- Compact design
- Cable plug housings
- Quick and simple installation

Options

- Horizontal or Vertical PCB contacts
- Bulk Packaging
- LED colour - Red, Green, Yellow or Blue combinations

Ordering Codes

We have listed the more common ordering codes in each section. Please contact us if you need any further assistance.

Simple steps to guide you in using this catalogue

1) Identify the product group listed in Contents on page 1 and go directly to that page number.
2) Each product group cover page then details information and options available.
3) Refer to the product detail pages and identify the product you require pictorially.
4) Read the product description column for the products standard features.
5) Use variations column to determine your choice.
6) Identify part number.
7) In the event the particular option you require is not listed please refer to the part number breakdown page at the end of each section.
8) Please contact us directly if you have any further problems.

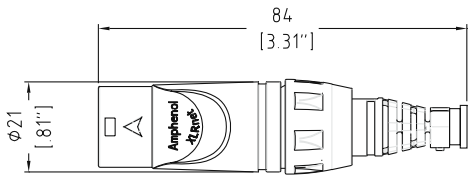
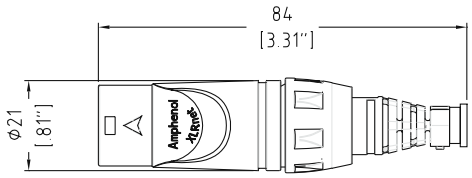
XLRNET SERIES CABLE CONNECTOR

Features/Benefits:

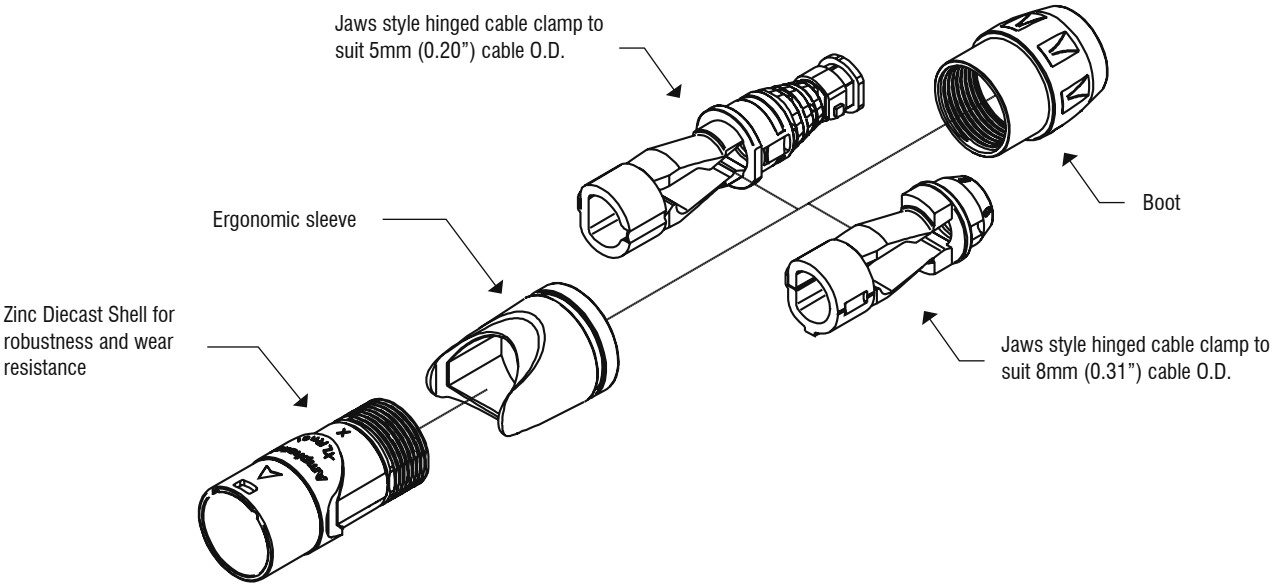
- XLR RJ45 Cable plug housing.
- Designed for pre-assembled RJ45 cables.
- Quick and simple installation.
- Cost effective method for harsh environments.
- No cabling in field required.
- No tools required for installation.
- Available in Nickel or Black housings.
- Coloured boots / Backshells

Specifications: Page 80
Part Number Breakdown : Page 80 **Assembly Instructions: Page 81**

NOTE*RJ45 preassembled cable sold separately and is not included with the XLRnet connector.

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	VARIATIONS	PART NUMBER
		XLRnet, XLR cable plug housing to suit preassembled RJ45 cables, Nickel Finish	Standard	RJX8M
			Bulk Pack	RJX8M BULK
		XLRnet, XLR cable plug housing to suit preassembled RJ45 cables, Black Finish	Standard	RJX8MB
			Bulk Pack	RJX8MB BULK

ISO VIEW OF RJX8M



PART NUMBER BREAKDOWN

XLRnet SERIES

SERIES PREFIX	CONTACT LAYOUTS	GENDER	SHELL FINISH	PACKAGING
RJX	8	M	B	BULK

E. G . **RJX8MB BULK**
RJX (Series Prefix), **8** contacts, **M** (Cable Connector), **B** (Black Finish),
Bulk Packaged

SERIES PREFIX	RJX	=	Series Prefix
CONTACT LAYOUT	8	=	RJ45 Cable Housing
GENDER	M	=	Male Cable Plug
SHELL FINISH	Blank	=	Nickel Plated Finish
	B	=	Metal - Black Finish
PACKAGING	Blank	=	Individual Bags
	BULK	=	Bulk Packed

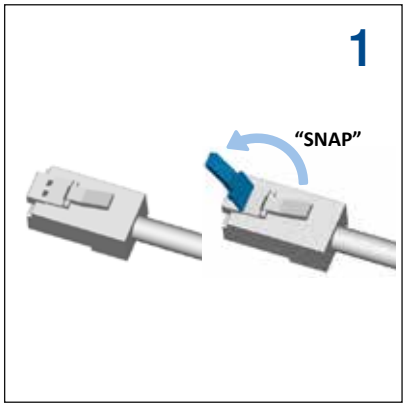
STANDARD DATA XLRnet SERIES

		VALUE
GENERAL CHARACTERISTICS	Termination	Preassembled RJ45 Cable (Not supplied)
	Environmental	Complies with EU RoHS 2 Directive 2011/65/EU
CLIMATIC CHARACTERISTICS	Protection Class	IP40
	Operating Temperature	-25˚C to +75˚C (-13°F to -167°F)
MECHANICAL CHARACTERISTICS	Insertion and Withdrawal force	≥10N - ≤20N
	Weight [2]	26g (0.057lb)
	Cable O.D. range	5 or 8mm (0.20” or 0.31”)
	Mechanical Operations	1000 mating cycles
MATERIALS	Connector shell - Metal Shell finish	Diecast Zinc Alloy Satin nickel or Black
	Boot / Backshell Finish	UL94V-0 Noryl N190 / Valox Black
	Cable clamp	PA6
	Sleeve	Valox

[2] Approximate weight only, does not include packaging. Please contact us for exact weight for shipping purposes.

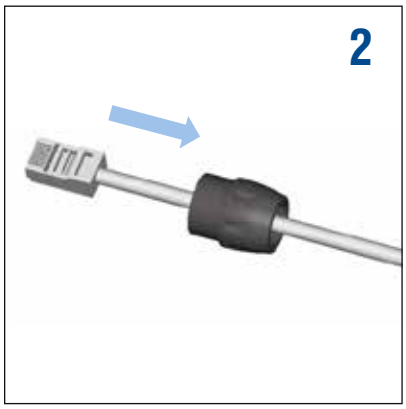
Rev 1 - 03/2013

XLRnet SERIES CABLE ASSEMBLY INSTRUCTIONS



Snap or cut off release tab of the RJ45 plug.

Failure to remove the RJ45's Release Tab will make the XLRnet assembly permanently latching. The XLRnet series has an independent panel side latching system.

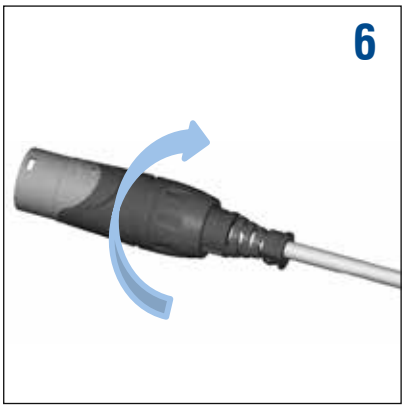


Slide the nut (backshell) onto the cable.

Install the cable clamp-boot.

Close clamp-boot, fasten the two tabs together to lock.

Push clamp-boot & cable together into the shell



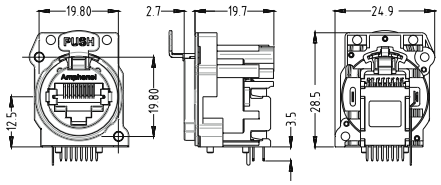
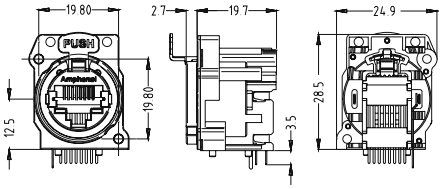
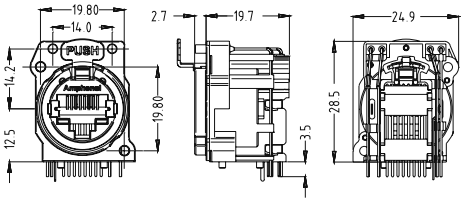
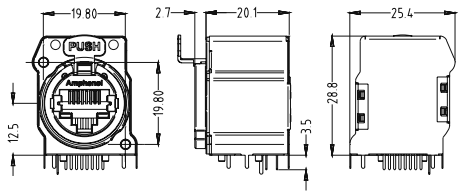
Thread the nut (backshell) onto the shell (torque 0.8Nm-1.2Nm) to close the connector assembly.

XLRNET SERIES A & B TYPE CHASSIS RECEPTACLES

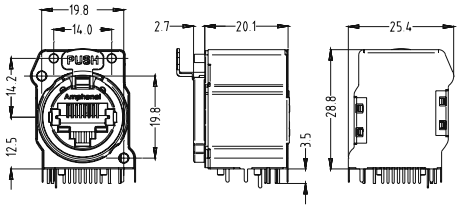
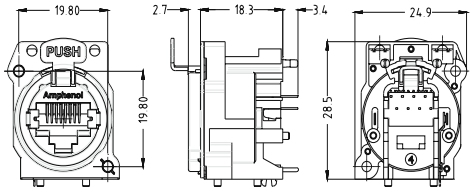
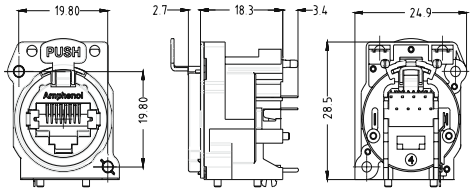
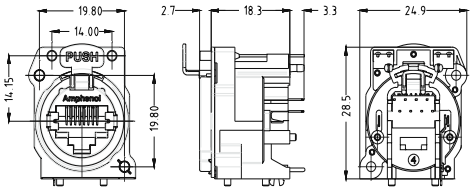
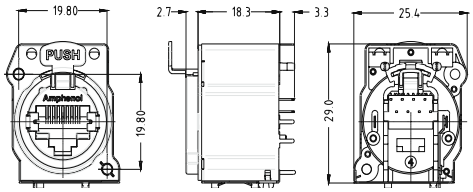
Features:

- RJ45 Class D (10/100 BASE-T), CAT5E (1000 BASE-T) or CAT6 (10GBASE-T) Ethernet performance
- A or B type chassis housings
- Shielded or non-shielded
- LED indicators in a variety of colours.
- Horizontal or Vertical PCB
- Mates with XLRnet cable plugs or standard RJ45 plug.

Part Number Breakdown: Page 84
Specifications: Page 89 **PCB Footprints: Page 88**
Recommended Fastener: Page 135

PRODUCT - FIGURE	DRAWING (Dimensions in mm (inches))	DESCRIPTION	TYPE	LED* LHS	LED* RHS	PART NUMBER
		XLRnet chassis, A type, Horizontal PCB	Class D	-	-	RJX8FA3HB
			CAT5E			RJX8FA5HB
			CAT6			RJX8FA6HB
		XLRnet chassis B type, Horizontal PCB	Class D	-	-	RJX8FB3HB
			CAT5E			RJX8FB5HB
			CAT6			RJX8FB6HB
		XLRnet chassis, B type, LEDs, Horizontal PCB, Bulk packed	CAT5E	R	G	RJX8FB5HRGB
				R	Y	RJX8FB5HRYB
				R	R	RJX8FB5HRRB
				G	R	RJX8FB5HGRB
				G	Y	RJX8FB5HGYB
				U	U	RJX8FB5HUUB
			CAT6	R	G	RJX8FB6HRGB
				R	Y	RJX8FB6HRYB
				R	R	RJX8FB6HRRB
				G	R	RJX8FB6HGRB
				G	Y	RJX8FB6HGYB
				U	U	RJX8FB6HUUB
		XLRnet chassis, B type, Shielded Hood, Horizontal PCB, Bulk packed	Class D	-	-	RJX8FB3HEB
			CAT5E			RJX8FB5HEB
			CAT6			RJX8FB6HEB

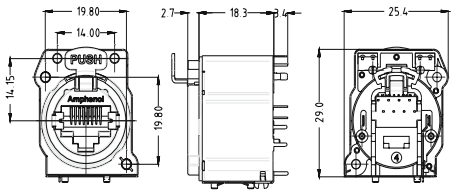
*Note: LED colours are denoted left to right from the panel side front view. Refer page 88
R = Red, G = Green, Y = Yellow, U = Blue

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	TYPE	LED* LHS	LED* RHS	PART NUMBER
		XLRnet chassis, B type, Shielded Hood, LEDs, Horizontal PCB, Bulk packed	CAT5E	R	G	RJX8FB5HRGEB
				R	Y	RJX8FB5HRYEB
				R	R	RJX8FB5HRREB
				G	R	RJX8FB5HGREB
				G	Y	RJX8FB5HGYEB
				U	U	RJX8FB5HUUEB
			CAT6	R	G	RJX8FB6HRGEB
				R	Y	RJX8FB6HRYEB
				R	R	RJX8FB6HRREB
				G	R	RJX8FB6HGREB
				G	Y	RJX8FB6HGYEB
				U	U	RJX8FB6HUUEB
		XLRnet chassis, A type, Vertical PCB	Class D	-	-	RJX8FA3VB
			CAT5E			RJX8FA5VB
			CAT6			RJX8FA6VB
		XLRnet chassis, B Type, Vertical PCB	Class D	-	-	RJX8FB3VB
			CAT5E			RJX8FB5VB
			CAT6			RJX8FB6VB
		XLRnet chassis, B type, LEDs, Vertical PCB, Bulk packed	CAT5E	R	G	RJX8FB5VRGB
				R	Y	RJX8FB5VRYB
				R	R	RJX8FB5VRRB
				G	R	RJX8FB5VGRB
				G	Y	RJX8FB5VGYB
				U	U	RJX8FB5VUUB
			CAT6	R	G	RJX8FB6VRGB
				R	Y	RJX8FB6VRYB
				R	R	RJX8FB6VRRB
				G	R	RJX8FB6VGRB
				G	Y	RJX8FB6VGYB
				U	U	RJX8FB6VUUB
		XLRnet chassis, B type, Shielded Hood, Vertical PCB, Bulk packed	Class D	-	-	RJX8FB3VEB
			CAT5E			RJX8FB5VEB
			CAT6			RJX8FB6VEB

*Note: LED colours are denoted left to right from the panel side front view. Refer page 88
R = Red, G = Green, Y = Yellow, U = Blue

Data Connectors

XLRnet Series A & B Type Chassis Receptacles

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	TYPE	LED* LHS/RHS		PART NUMBER
		XLRnet chassis, B type, Shielded Hood, LEDs, Vertical PCB, Bulk packed	CAT5E	R	G	RJX8FB5VRGEB
				R	Y	RJX8FB5VRYEB
				R	R	RJX8FB5VRREB
				G	R	RJX8FB5VGREB
				G	Y	RJX8FB5VGYEB
				U	U	RJX8FB5VUUEB
			CAT6	R	G	RJX8FB6VRGEB
				R	Y	RJX8FB6VRYEB
				R	R	RJX8FB6VRREB
				G	R	RJX8FB6VGREB
				G	Y	RJX8FB6VGYEB
				U	U	RJX8FB6VUUEB

*Note: LED colours are denoted left to right from the panel side front view. Refer page 88
R = Red, G = Green, Y = Yellow, U = Blue

PART NUMBER BREAKDOWN

XLRnet A and B Type Printed Circuit Board Connectors

E. G . **RJX8FB5HLRREB**
RJX (Series Prefix), **8** (Contacts), **F**emale **B** type, **5** Cat5E **H**orizontal, **L**atchless,
Red - **R**ed LEDs, **E**MI / RFI Hood, **B**ulk Packaged.

SERIES PREFIX	CONTACT LAYOUTS	GENDER	SHELL SERIES	TRANSMISSION CLASS	TERMINATION	LOCKING MECHANISM	LED COLOURS	EMI / RFI HOOD	PACKAGING
RJX	8	F	B	5	H	L	RR	E	B

SERIES PREFIX	RJX	=	Series Prefix
CONTACT LAYOUT	8	=	RJ45 type
GENDER	F	=	Receptacle housing
SHELL SERIES	A B	= =	A Type B Type
TRANSMISSION CLASS	3 5 6	= = =	Class D CAT 5e CAT 6
TERMINATION	H V	= =	Horizontal Printed Circuit Board Vertical Printed Circuit Board
LOCKING MECHANISM	Blank P	= =	Latching Push lever supplied separately for customer installation (Contact factory for detailed fitting instructions)
LED COLOUR SEQUENCE*	Blank RG RY RR GR GY GG YR YY YG UU	= = = = = = = = = = =	No LEDs Red / Green Red / Yellow Red / Red Green / Red Green / Yellow Green / Green Yellow / Red Yellow / Yellow Yellow / Green Blue / Blue
EMI / RFI SHIELDING HOOD	Blank E	= =	No shield hood EMI / RFI shield hood
PACKAGING	Blank B	= =	Individual Bulk packed

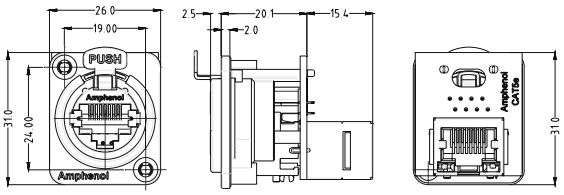
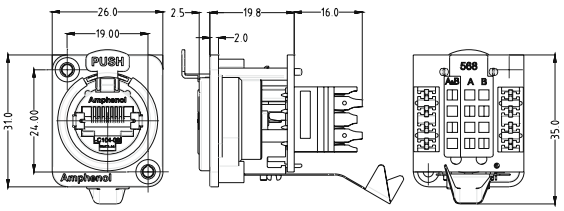
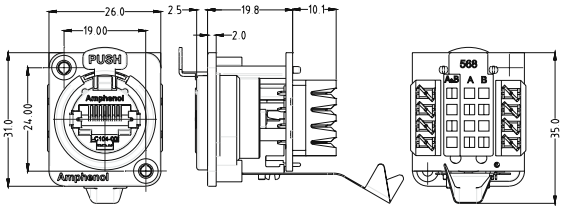
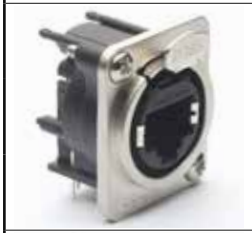
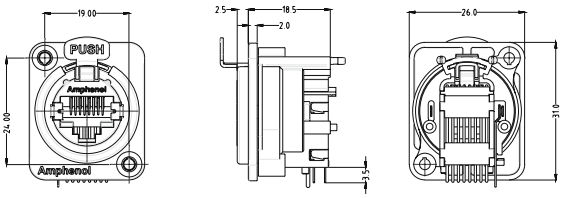
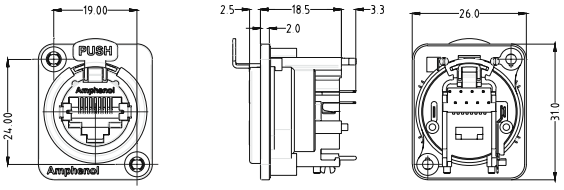
*Note: LED colours are denoted left to right from the panel side front view.
Refer Page 88

XLRNET SERIES D TYPE CHASSIS RECEPTACLES

Features:

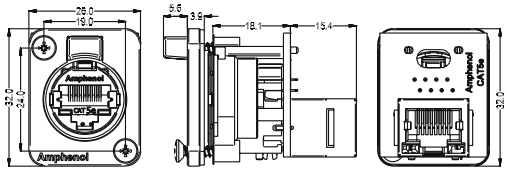
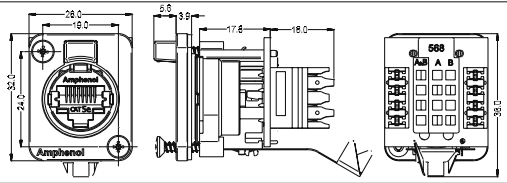
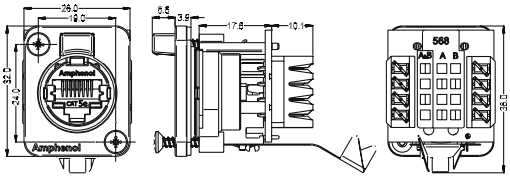
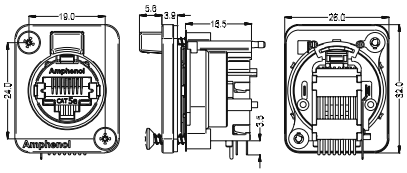
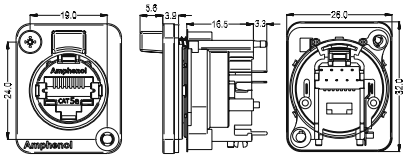
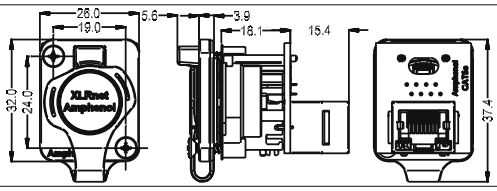
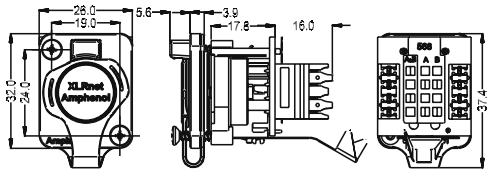
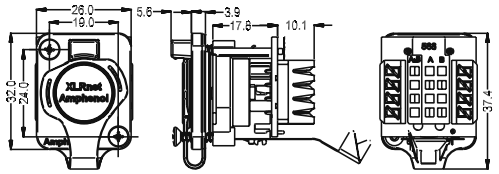
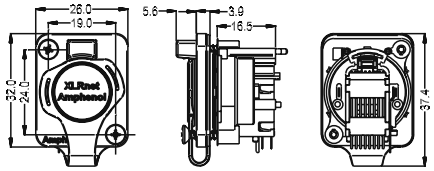
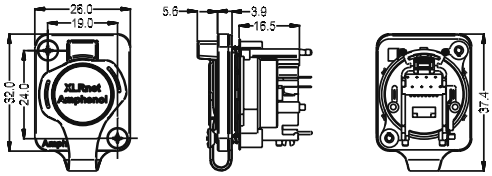
- RJ45 Class D (10/100 Base-T), CAT5E (1000 Base-T) or CAT6 (10GBASE-T) Ethernet performance
- D type XLR standard housings
- IDC Punchdown block
- Thru-adaptor / Feedthrough
- Horizontal or Vertical PCB

Part Number Breakdown: Page 87
Specifications: Page 89
PCB Footprints: Page 88
Recommended Fastener: Page 135

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	TYPE	PART NUMBER
		XLRnet chassis, D type, Feedthrough, Nickel Finish	CAT5E	RJX8FD5T
		XLRnet chassis, D type, IDC Terminals, 110 type, Nickel Finish	CAT5E	RJX8FD5110
			CAT6	RJX8FD6110
		XLRnet chassis, D type, IDC Terminals, Nickel Finish	CAT5E	RJX8FD5I
			CAT6	RJX8FD6I
		XLRnet chassis, D type, Horizontal PCB, Nickel Finish	Class D	RJX8FD3HB
			CAT5E	RJX8FD5HB
			CAT6	RJX8FD6HB
		XLRnet chassis, D type, Vertical PCB, Nickel Finish	Class D	RJX8FD3VB
			CAT5E	RJX8FD5VB
			CAT6	RJX8FD6VB

Data Connectors

XLRnet Series D Type Chassis Receptacles

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	TYPE	PART NUMBER
		XLRnet chassis, D type (IP54), Feedthrough, Nickel Finish	CAT5E	RJXS8FD5T
		XLRnet chassis, D type (IP54), IDC Terminals, 110 type, Nickel Finish	CAT5E	RJXS8FD5110
			CAT6	RJXS8FD6110
		XLRnet chassis, D type (IP54), IDC Terminals, Nickel Finish	CAT5E	RJXS8FD5I
			CAT6	RJXS8FD6I
		XLRnet chassis, D type (IP54), Horizontal PCB, Nickel Finish	Class D	RJXS8FD3HB
			CAT5E	RJXS8FD5HB
			CAT6	RJXS8FD6HB
		XLRnet chassis, D type (IP54), Vertical PCB, Nickel Finish	Class D	RJXS8FD3VB
			CAT5E	RJXS8FD5VB
			CAT6	RJXS8FD6VB
		XLRnet chassis with Protective cap, D type (IP54), Feedthrough, Nickel Finish	CAT5E	RJXS8FG5T
		XLRnet chassis with Protective cap, D type (IP54), IDC Terminals, 110 type, Nickel Finish	CAT5E	RJXS8FG5110
			CAT6	RJXS8FG6110
		XLRnet chassis with Protective cap, D type (IP54), IDC Terminals, Nickel Finish	CAT5E	RJXS8FG5I
			CAT6	RJXS8FG6I
		XLRnet chassis with Protective cap, D type (IP54), Horizontal PCB, Nickel Finish	Class D	RJXS8FG3HB
			CAT5E	RJXS8FG5HB
			CAT6	RJXS8FG6HB
		XLRnet chassis with Protective cap, D type (IP54), Vertical PCB, Nickel Finish	Class D	RJXS8FG3VB
			CAT5E	RJXS8FG5VB
			CAT6	RJXS8FG6VB

PART NUMBER BREAKDOWN

XLRnet D TYPE Chassis Connectors

E. G . **RJX8FD3TB**
RJX (Series Prefix), **8** (Contacts), **F**emale **D** type, **3** Class D **T**hru Adaptor, **B**ulk Packaged

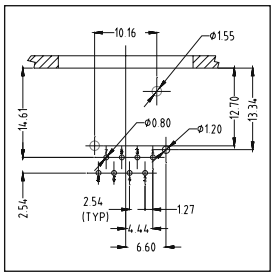
SERIES PREFIX	CONTACT LAYOUTS	GENDER	SHELL SERIES	TRANSMISSION CLASS	TERMINATION	LOCKING MECHANISM	PACKAGING
RJX	8	F	D	3	T		B

SERIES PREFIX	RJX	=	Series Prefix
CONTACT LAYOUT	8	=	RJ45 type
GENDER	F	=	Receptacle housing
SHELL SERIES	D	=	D Type
TRANSMISSION CLASS	3 5 6	= = =	Class D CAT 5e CAT 6
TERMINATION	H I 110 T V	= = = = =	Horizontal Printed Circuit Board IDC Punch Down Block IDC 110 Punch Down Block Thru adaptor / Feedthrough Vertical Printed Circuit Board
LOCKING MECHANISM	Blank P	= =	Latching Push lever supplied separately for customer installation (Contact factory for detailed fitting instructions)
PACKAGING	Blank B	= =	Individual Bulk packed

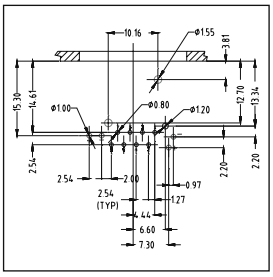
*Note: LED colours are denoted left to right from the panel side front view. Refer Page 88

XLRNET A, B AND D TYPE SERIES

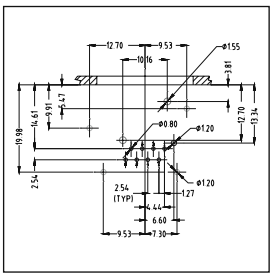
*** Applicable to 3 (Class D), 5 (CAT5E) and 6 (CAT6), where available**



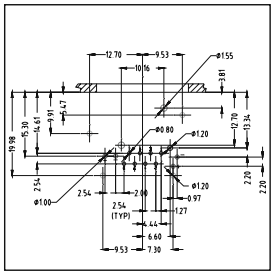
RJX8FA*H
RJX8FA*HB



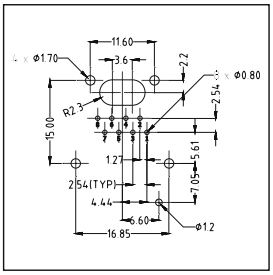
RJX8FB*HRGB
RJX8FB*HRYB
RJX8FB*HRRB
RJX8FB*HGRB
RJX8FB*HGYB
RJX8FB*HGGB



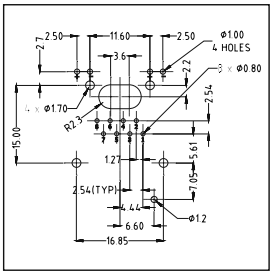
RJX8FB*HEB



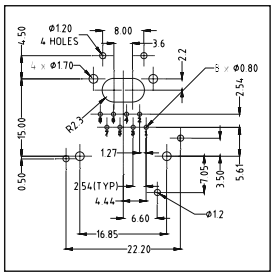
RJX8FB*HRGEB
RJX8FB*HRYEB
RJX8FB*HRREB
RJX8FB*HGREB
RJX8FB*HGYEB
RJX8FB*HGGEB



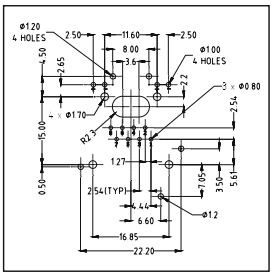
RJX8FA*VB
RJX8FB*VB



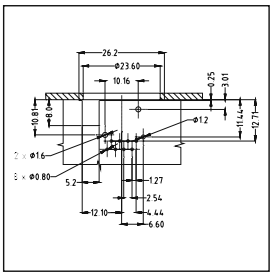
RJX8FB*VRGB
RJX8FB*VRYB
RJX8FB*VRRB
RJX8FB*VGRB
RJX8FB*VGYB
RJX8FB*VUUB



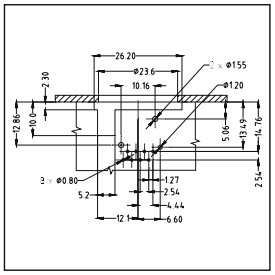
RJX8FB*VEB



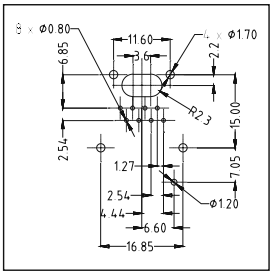
RJX8FB*VRGEB
RJX8FB*VRYEB
RJX8FB*VRREB
RJX8FB*VGREB
RJX8FB*VGYEB
RJX8FB*VUUEB



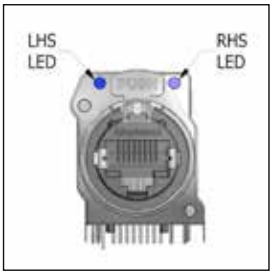
RJX8FD*HB
(Front Mounting)



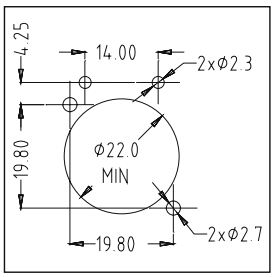
RJX8FD*HB
(Rear Mounting)



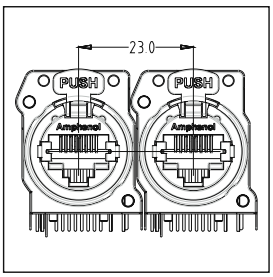
RJX8FD*VB



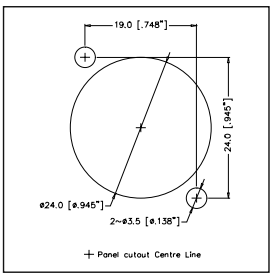
LED Arrangement (Front view)



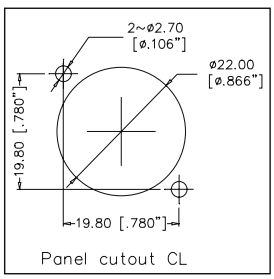
PANEL CUTOUT A and B type with LED's



XLRnet MOUNTING PITCH / A and B Type



D Type



A and B Type

STANDARD DATA XLRnet CHASSIS RECEPTACLES

		VALUE		
		Class D	CAT5E	CAT6
GENERAL CHARACTERISTICS	Number of contacts	8		
	Contact Arrangement	RJ45		
	Termination	Printed Circuit Board (PCB) - through hole, Feedthrough, IDC Terminal		
	Flammability	UL94V-0		
	Environmental	Complies with EU RoHS 2 Directive 2011/65/EU		
	Solderability	MIL-STD 202, Method 208		
ELECTRICAL CHARACTERISTICS	Rated current per contact	1.5 A		
	Rated Voltage	125V AC		
	Typical Contact Resistance	20mΩ		
	Insulation Resistance	> 500MΩ		
	Dielectric Strength	1000 VAC, 60 secs		
	Max. Frequency	100Mhz	100MHz	250MHz
	Ethernet Standard	10/100 BASE-T	1000 BASE-T	10GBASE-T
	Transmission Spec.	EIA/ TIA568-C.2, ISO/IEC 11801, EN50173		
	PoE+	802.3at Type 2		
	LED Type	Round, single pole, indicator		
CLIMATIC CHARACTERISTICS	Protection Class	IP40 (with EMI/RFI shield)		
	Operating Temperature	-40°C to +80°C (-40ºF to +176ºF)		
MECHANICAL CHARACTERISTICS	Weight** - A & B Housing - Shielded Housing - D Shell	11g (0.024lb) 17g (0.037lb) 25g (0.055lb)		
	Mechanical Operations	1000		
	Insertion and Withdrawal Force	≤ 21N		
	Latch	Spring Steel		
	Panel Thickness max.	3mm		
	Mounting screw torque max.	0.35Nm		
	Fastener	Self-Tapping screw M2.5		
MATERIALS	Connector Shell / Housing	Thermoplastic, DSM Stanyl UL94V-0, 30% GF / PA66 30% GF		
	Flange (A type)	Thermoplastic, DSM Stanyl UL94V-0, 30% GF		
	Flange (B type)	Diescast Zinc Alloy 3		
	Flange Finish (B type)	Satin Nickel		
	Contact	Phosphor Bronze		
	Contact Finish - Ground - RJ45	0.38μm Au over 1.27μm Ni 1.27μm Au over 1.27μm Ni		
	Metal Hood Shield EMI/RFI	Brass, nickel plated		
	Latch lock and Spring	Spring steel		

Rev 4 - 11/2021

**Approximate weight in grams not including packaging. Please contact us for exact weight for shipping purposes.