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) or CAT5E (1000 Base-T) ethernet performance in A or B type housings with integrated LED's and complete shielding options we have your high-speed data requirements covered.

Features

- Class D (10/100 Base-T) or CAT5E (1000 Base-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.

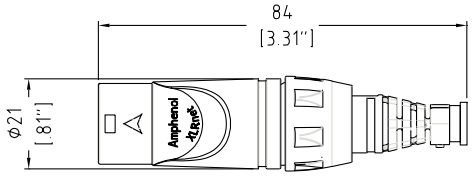
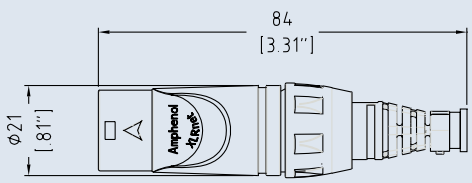
XLRnet SERIES

Features/Benefits:

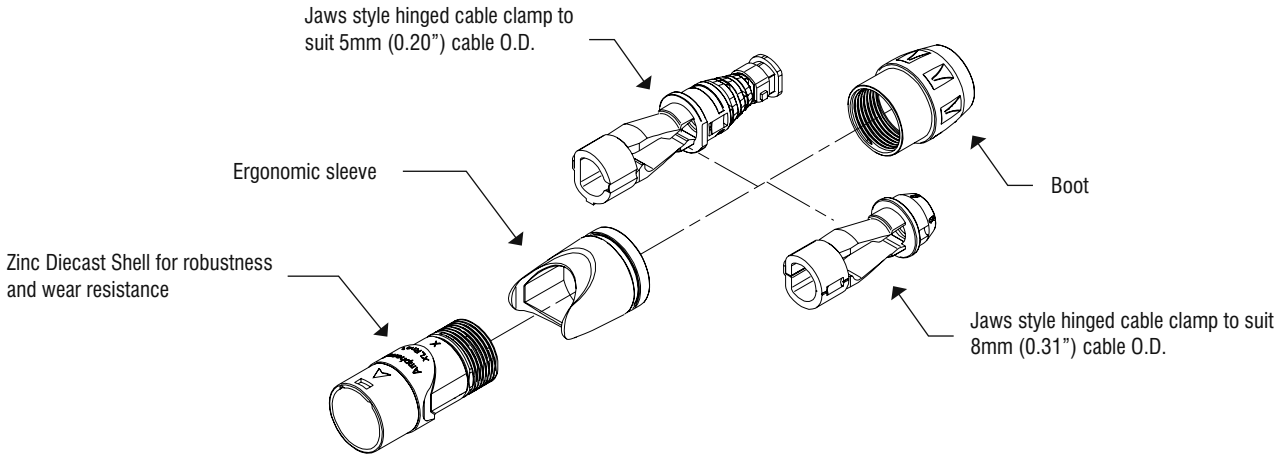
- XLR RJ45 Cable plug housing.
- Designed for pre-assembled RJ45 cables.
- Quick and simple installation.
- Cost effective method for harsh environments.
- No cabling in field required.
- No tools required for installation.
- Available in Nickel or Black housings.
- Coloured boots / Backshells

Specifications: Page 77
Part Number Breakdown : Page 77 **Assembly Instructions: Page 78**

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

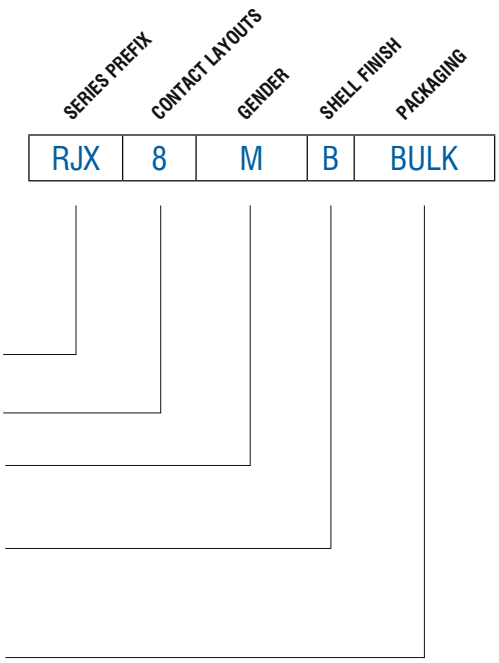
PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	VARIATIONS	PART NUMBER
		XLRnet, XLR cable plug housing to suit preassembled RJ45 cables, Nickel Finish	Standard	RJX8M
			Bulk Pack	RJX8M BULK
		XLRnet, XLR cable plug housing to suit preassembled RJ45 cables, Black Finish	Standard	RJX8MB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

ISO VIEW OF RJX8M



PART NUMBER BREAKDOWN

XLRnet SERIES



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

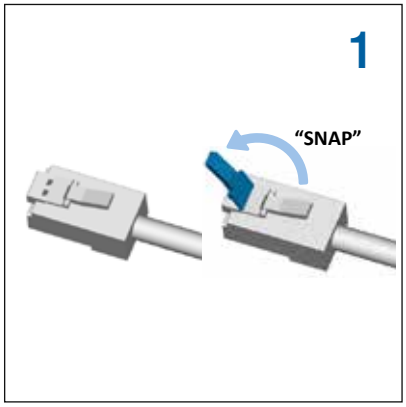
STANDARD DATA XLRnet SERIES

		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.

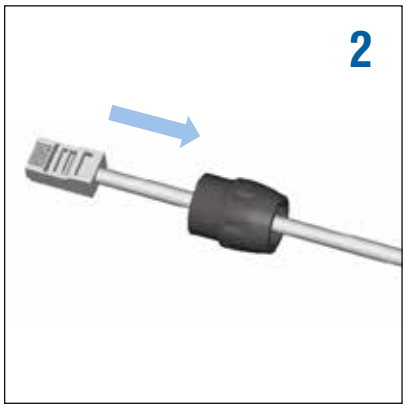
Rev 1 - 03/2013

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.*

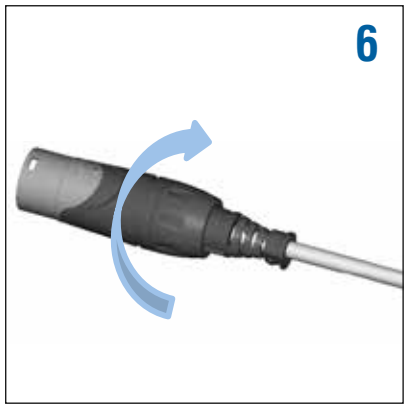


Slide the nut (backshell) onto the cable.

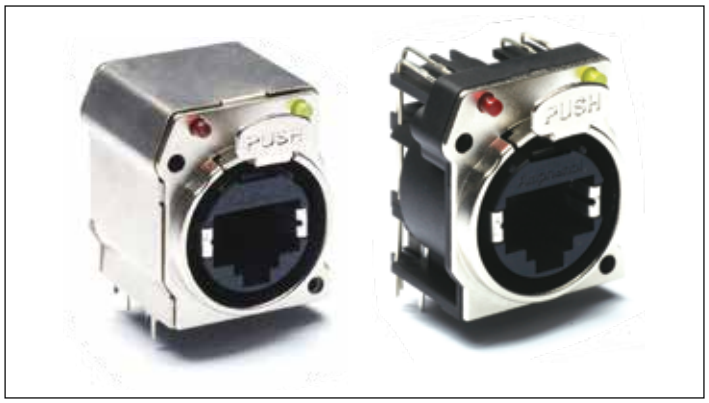
Install the cable clamp-boot.

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

Push clamp-boot & cable together into the shell



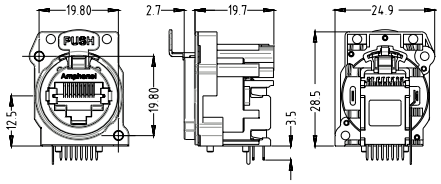
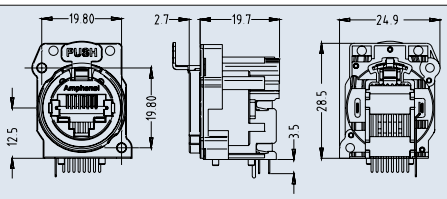
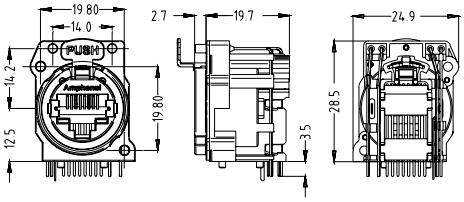
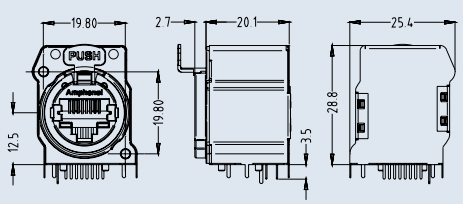
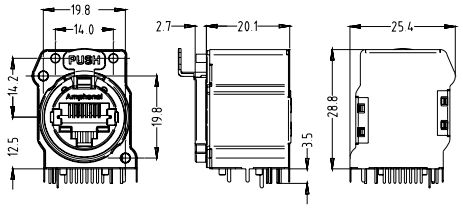
Thread the nut (backshell) onto the shell (torque 0.8Nm-1.2Nm) to close the connector assembly.



Features:

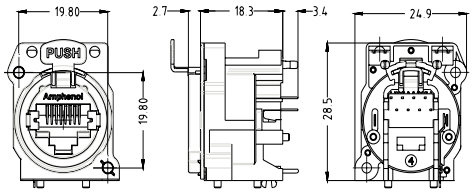
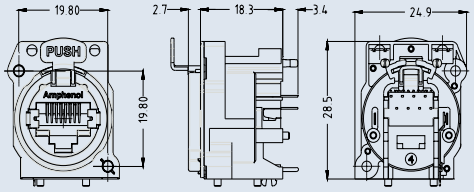
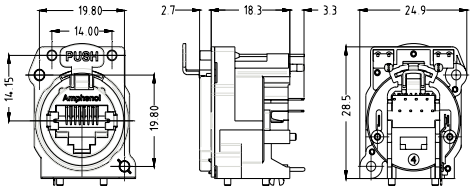
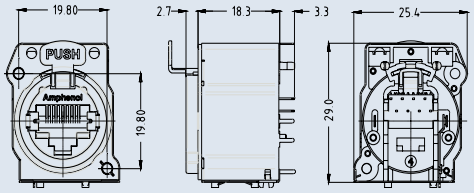
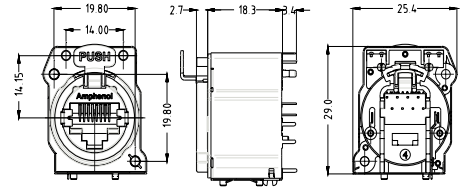
- RJ45 Class D (10/100 Base-T) or CAT5E (1000 Base-T) Ethernet performance
- A or B type chassis housings
- Shielded or non-shielded
- LED indicators in a variety of colours.
- Horizontal or Vertical PCB
- Mates with XLRnet cable plugs or standard RJ45 plug.

Part Number Breakdown: Page 81
Specifications: Page 85
PCB Footprints: PagePage 84
Recommended Fastener: Page 138

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	PACK	LED* LHS/RHS		PART NUMBER
		XLRnet chassis, Class D, A type, Horizontal PCB	Bulk Pack	-	-	RJX8FA3HB
		XLRnet chassis CAT 5e, B type, Horizontal PCB	Bulk Pack	-	-	RJX8FB5HB
		XLRnet chassis, CAT 5e, B type, LEDs, Horizontal PCB, Bulk packed	Bulk Pack	R	G	RJX8FB5HRGB
				R	Y	RJX8FB5HRYB
				R	R	RJX8FB5HRRB
				G	R	RJX8FB5HGRB
				G	Y	RJX8FB5HGYB
				U	U	RJX8FB5HUUB
		XLRnet chassis, CAT 5e, B type, Shielded Hood, Horizontal PCB, Bulk packed	Bulk Pack	-	-	RJX8FB5HEB
		XLRnet chassis, CAT 5e, B type, Shielded Hood, LEDs, Horizontal PCB, Bulk packed	Bulk Pack	R	G	RJX8FB5HRGEB
				R	Y	RJX8FB5HRYEB
				R	R	RJX8FB5HRREB
				G	R	RJX8FB5HGREB
				G	Y	RJX8FB5HGYEB
				U	U	RJX8FB5HUUEB

*Note: LED colours are denoted left to right from the panel side front view. Refer page 84
R = Red, G = Green, Y = Yellow, U = Blue

Amphenol

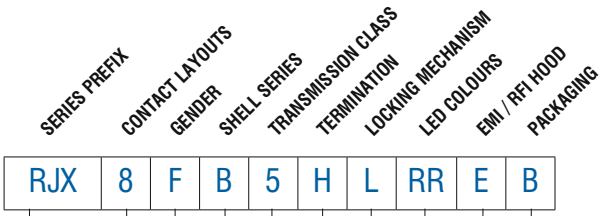
PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	PACK	LED* LHS/RHS		PART NUMBER
		XLRnet chassis, Class D, A type, Vertical PCB	Bulk Pack	-	-	RJX8FA3VB
		XLRnet chassis, CAT 5e, A type, Vertical PCB				RJX8FA5VB
		XLRnet chassis, Class D, B Type, Vertical PCB	Bulk Pack	-	-	RJX8FB3VB
		XLRnet chassis, CAT 5e, B type, Vertical PCB				RJX8FB5VB
		XLRnet chassis, CAT 5e, B type, LEDs, Vertical PCB, Bulk packed	Bulk Pack	R	G	RJX8FB5VRGB
				R	Y	RJX8FB5VRYB
				R	R	RJX8FB5VRRB
				G	R	RJX8FB5VGRB
				G	Y	RJX8FB5VGYB
				U	U	RJX8FB5VUUB
		XLRnet chassis, CAT 5e, B type, Shielded Hood, Vertical PCB, Bulk packed	Bulk Pack	-	-	RJX8FB5VEB
		XLRnet chassis, CAT 5e, B type, Shielded Hood, LEDs, Vertical PCB, Bulk packed	Bulk Pack	R	G	RJX8FB5VRGEB
				R	Y	RJX8FB5VRYEB
				R	R	RJX8FB5VRREB
				G	R	RJX8FB5VGREB
				G	Y	RJX8FB5VGYEB
				U	U	RJX8FB5VUUEB

*Note: LED colours are denoted left to right from the panel side front view. Refer page 84
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, **Bulk** Packaged.



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	= =	Class D CAT 5e
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

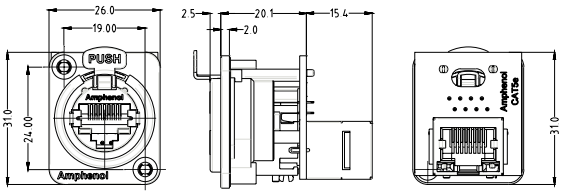
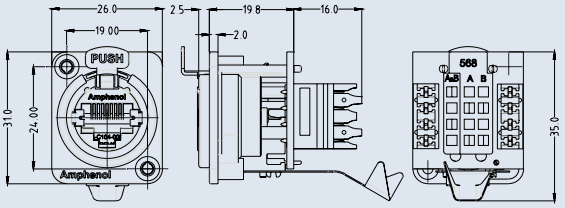
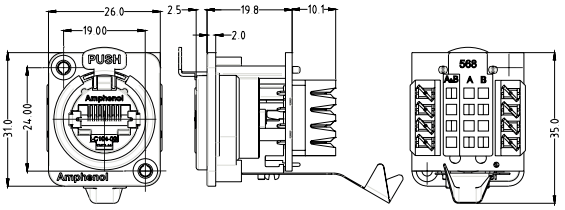
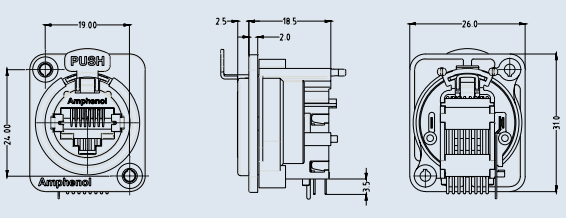
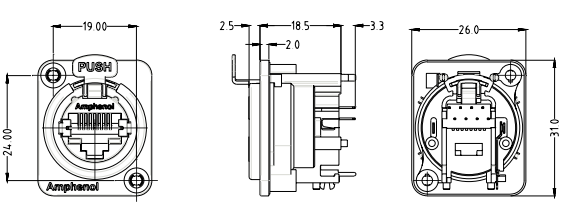
*Note: LED colours are denoted left to right from the panel side front view.
Refer Page 84

Amphenol

Features:

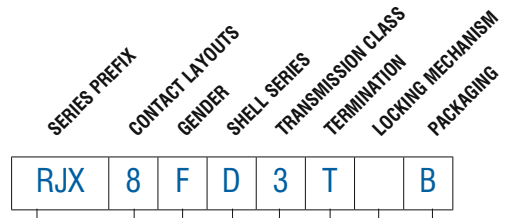
- RJ45 Class D (10/100 Base-T) or CAT5E (1000 Base-T) Ethernet performance
- D type XLR standard housings
- IDC Punchdown block
- Thru-adaptor / Feedthrough
- Horizontal or Vertical PCB

Part Number Breakdown: Page 83
Specifications: Page 85
PCB Footprints: Page 84
Recommended Fastener: Page 138

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	PACK	PART NUMBER
		XLRnet chassis, CAT 5e, D type, Feedthrough, Nickel Finish	Standard	RJX8FD5T
			Bulk Pack	RJX8FD5TB
		XLRnet chassis, CAT 5e, D type, IDC Terminals, 110 type, Nickel Finish	Standard	RJX8FD5110
			Bulk Pack	RJX8FD5110B
		XLRnet chassis, CAT 5e, D type, IDC Terminals, Nickel Finish	Standard	RJX8FD5I
			Bulk Pack	RJX8FD5IB
		XLRnet chassis, Class D, D type, Horizontal PCB, Nickel Finish	Bulk Pack	RJX8FD3HB
		XLRnet chassis, CAT 5e, D type, Horizontal PCB, Nickel Finish		RJX8FD5HB
		XLRnet chassis, Class D, D type, Vertical PCB, Nickel Finish	Bulk Pack	RJX8FD3VB
		XLRnet chassis, CAT 5e, D type, Vertical PCB, Nickel Finish		RJX8FD5VB

PART NUMBER BREAKDOWN

XLRnet D TYPE Chassis Connectors



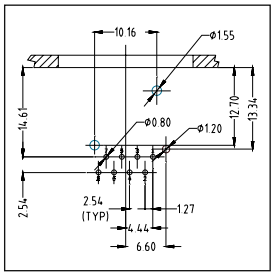
E. G . **RJX8FD3TB**
RJX (Series Prefix), **8** (Contacts), **F**emale **D** type, **3** Class D **T**hru Adaptor, **B**ulk Packaged

SERIES PREFIX	RJX	=	Series Prefix
CONTACT LAYOUT	8	=	RJ45 type
GENDER	F	=	Receptacle housing
SHELL SERIES	D	=	D Type
TRANSMISSION CLASS	3 5	= =	Class D CAT 5e
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

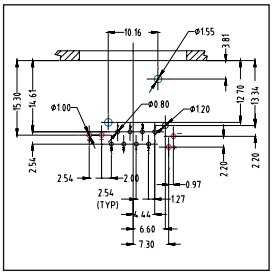
*Note: LED colours are denoted left to right from the panel side front view.

Refer Page 84

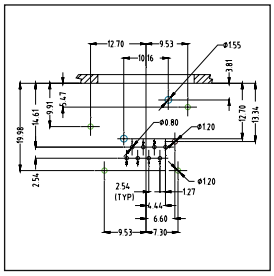
XLRNET A, B AND D TYPE SERIES



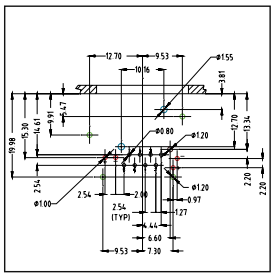
RJX8FA3H
RJX8FA3HB
RJX8FB5H
RJX8FB5HB



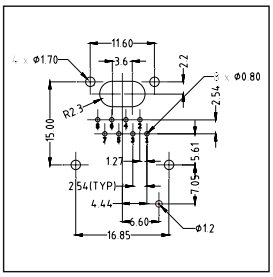
RJX8FB5HRGB
RJX8FB5HRYB
RJX8FB5HRRB
RJX8FB5HGRB
RJX8FB5HGYB
RJX8FB5HGGB



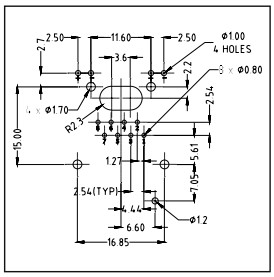
RJX8FB5HEB



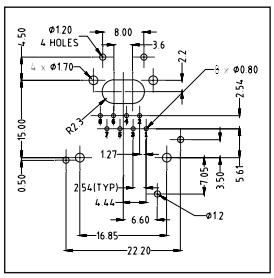
RJX8FB5HRGEB
RJX8FB5HRYEB
RJX8FB5HRREB
RJX8FB5HGREB
RJX8FB5HGYEB
RJX8FB5HGGEB



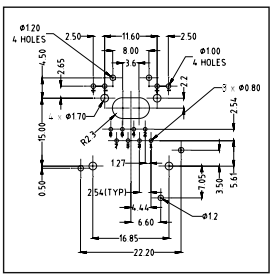
RJX8FA3VB
RJX8FA5VB
RJX8FB3VB
RJX8FB5VB



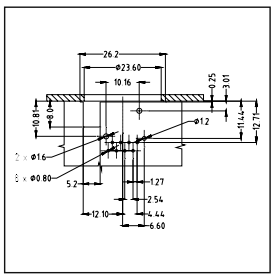
RJX8FB5VRGB
RJX8FB5VRYB
RJX8FB5VRRB
RJX8FB5VGRB
RJX8FB5VGYB
RJX8FB5VUUB



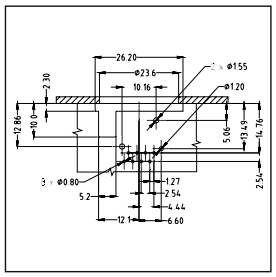
RJX8FB5VEB



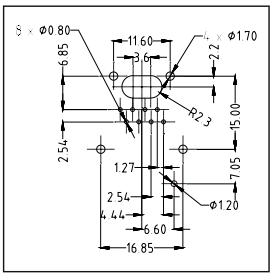
RJX8FB5VRGEB
RJX8FB5VRYEB
RJX8FB5VRREB
RJX8FB5VGREB
RJX8FB5VGYEB
RJX8FB5VUUEB



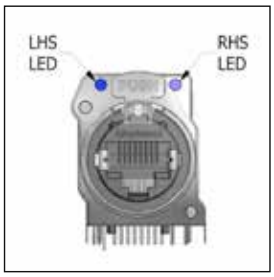
RJX8FD3HB
RJX8FD5HB
(Front Mounting)



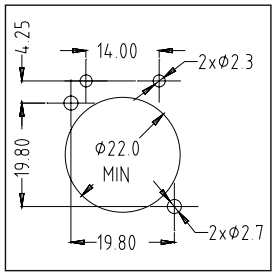
RJX8FD3HB
RJX8FD5HB
(Rear Mounting)



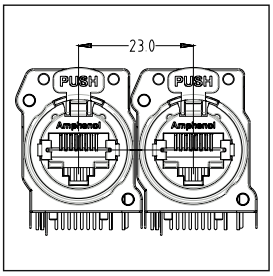
RJX8FD3VB
RJX8FD5VB



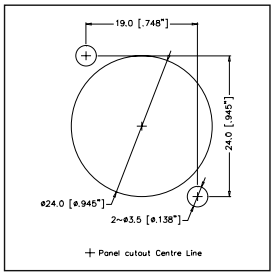
LED Arrangement (Front view)



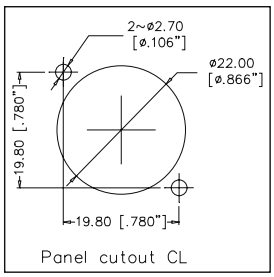
PANEL CUTOUT
A and B type with LED's



XLRnet MOUNTING PITCH / A and B Type



D Type



A and B Type

CONDUCTOR	Alternative-A (MDI-X)	Alternative-A (MDI)	Alternative-A (All)
1	Negative V_{PSE}	Positive V_{PSE}	
2	Negative V_{PSE}	Positive V_{PSE}	
3	Positive V_{PSE}	Negative V_{PSE}	
4			Positive V_{PSE}
5			Positive V_{PSE}
6	Positive V_{PSE}	Negative V_{PSE}	
7			Negative V_{PSE}
8			Negative V_{PSE}

XLRnet PoE+ PSE Pinout Alternatives

STANDARD DATA XLRnet CHASSIS RECEPTACLES

		VALUE - Class D	VALUE - CAT 5e
GENERAL CHARACTERISTICS	Number of contacts	8	
	Contact Arrangement	RJ45	
	Termination	Printed Circuit Board (PCB) - through hole	
	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	
	Frequency Bandwidth	1 - 100Mhz	1 - 250Mhz
	Transmission Specification / Class	10/100 Base-T	1000 Base-T
	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 (-40°F to +176°F)	
MECHANICAL CHARACTERISTICS	Weight** - A & B Housing - Shielded Housing	11g (0.024lb) 17g (0.037lb)	
	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	

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

Rev 2 - 05/2014