



## XLNnet CONNECTORS

XLNnet 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 XLNnet 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.





## XLNet SERIES

### Features/Benefits:


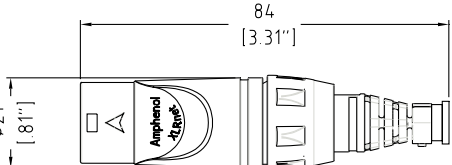

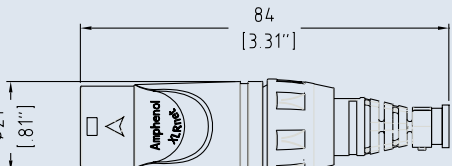
- XLR RJ45 Cable plug housing.
- Designed for pre-assembled RJ45 cables.
- Quick and simple installation.
- Cost effective method for harsh environments.
- No cabling in field required.
- No tools required for installation.
- Available in Nickel or Black housings.
- Coloured boots / Backshells

Specifications: Page 77

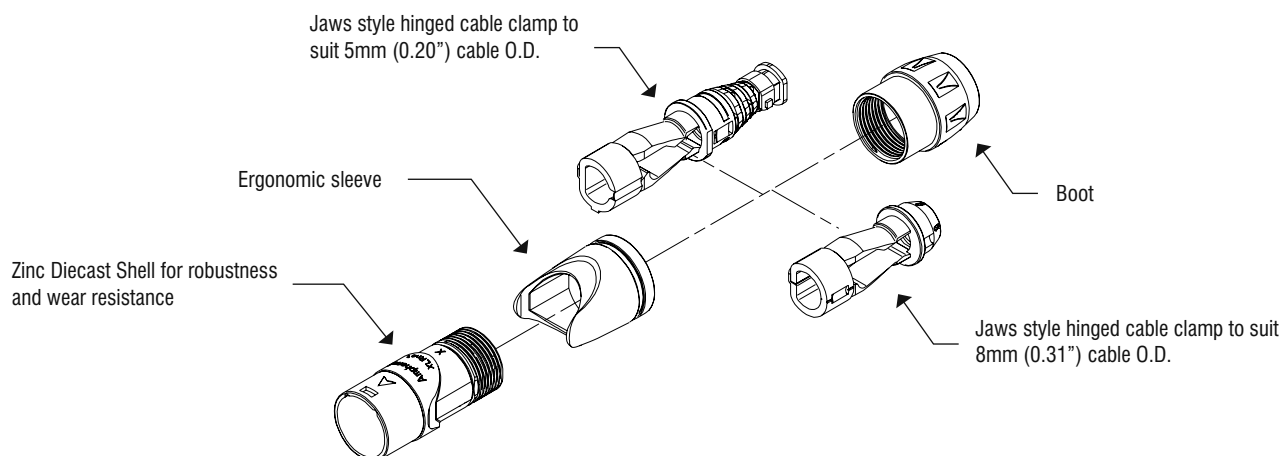
Part Number Breakdown : Page 77

Assembly Instructions: Page 78

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

PRODUCT - FIGURE	DRAWING	DESCRIPTION	VARIATIONS	PART NUMBER
		XLRnet, XLR cable plug housing to suit pre-assembled RJ45 cables, Nickel Finish	Standard	RJX8M
			Bulk Pack	RJX8M BULK
		XLRnet, XLR cable plug housing to suit pre-assembled 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

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

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

## STANDARD DATA XLRnet SERIES

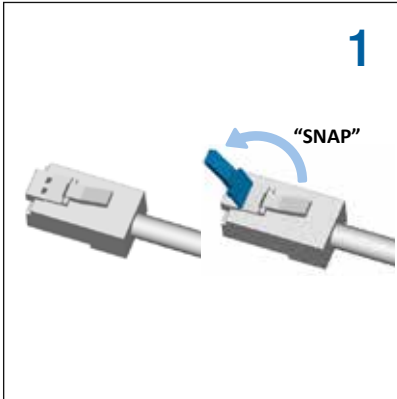


		VALUE
<b>GENERAL CHARACTERISTICS</b>	Termination	Preassembled RJ45 Cable (Not supplied)
	Environmental	Complies with EU RoHS 2 Directive 2011/65/EU
<b>CLIMATIC CHARACTERISTICS</b>	Protection Class	IP40
	Operating Temperature	-25 °C to +75 °C (-13°F to +167°F)
<b>MECHANICAL CHARACTERISTICS</b>	Insertion and Withdrawal force	≥10N - ≤20N
	Weight <sup>2)</sup>	26g (0.057lb)
	Cable O.D. range	5 or 8mm (0.20" or 0.31")
	Mechanical Operations	1000 mating cycles
<b>MATERIALS</b>	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

<sup>2)</sup> Approximate weight only, does not include packaging. Please contact us for exact weight for shipping purposes.

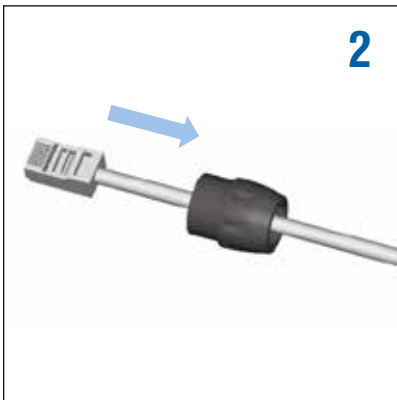
Rev 1 - 03/2013

## XLRnet SERIES CABLE ASSEMBLY INSTRUCTIONS



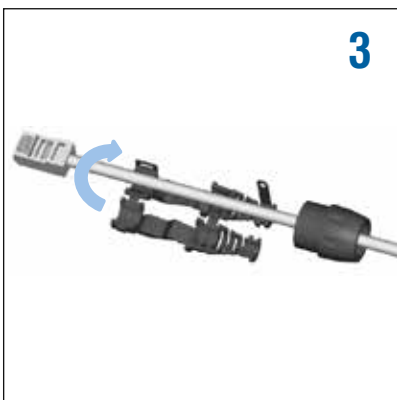
**1**

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.



**2**

Slide the nut (backshell) onto the cable.



**3**

Install the cable clamp-boot.



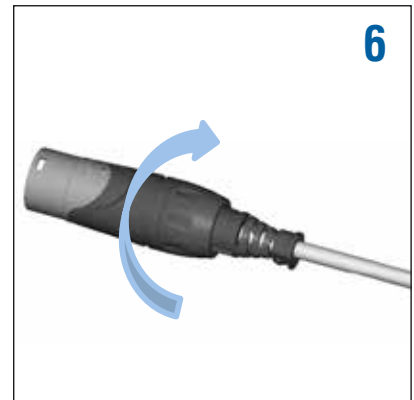
**4**

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



**5**

Push clamp-boot & cable together into the shell



**6**

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**


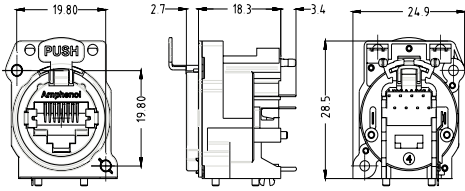

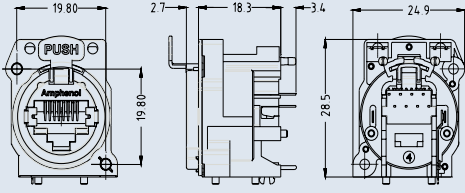

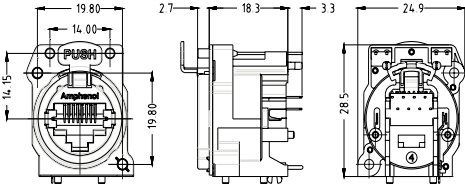

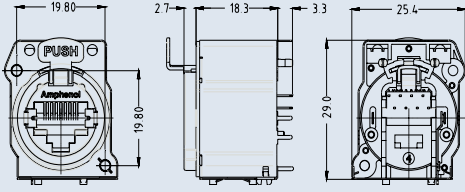

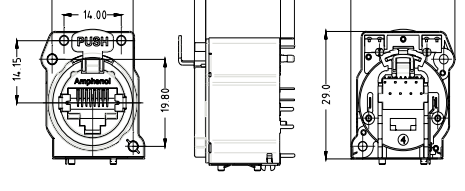
**PCB Footprints: Page 84**

**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	RJX8FB5HGYP
					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	RJX8FB5HRRB
					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



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

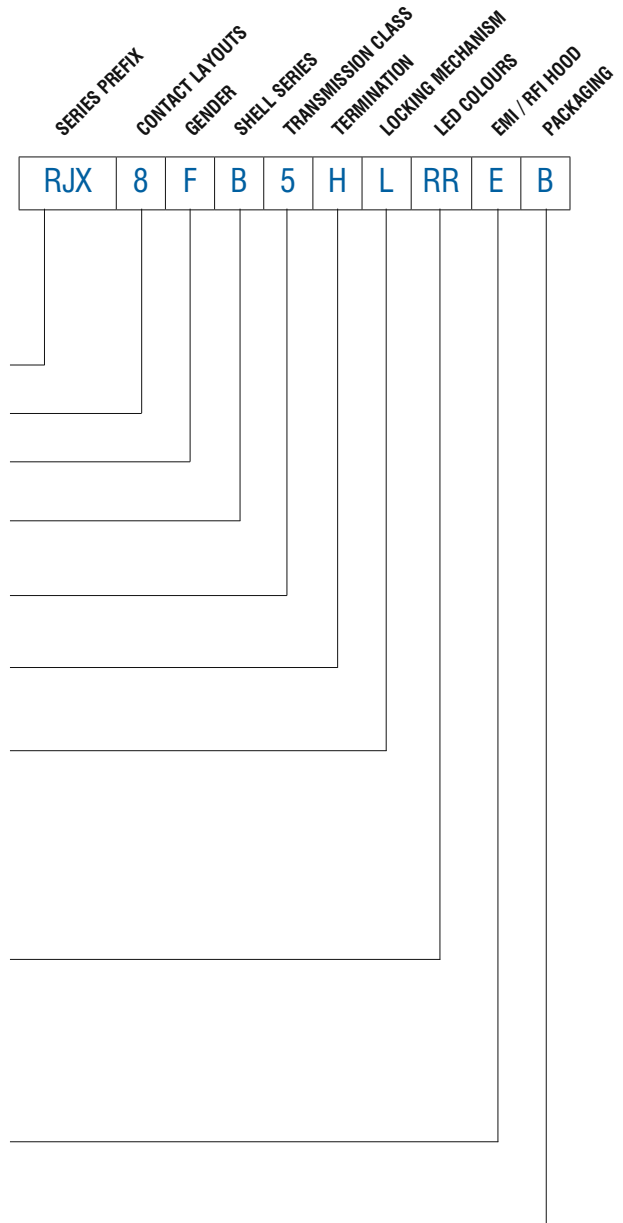
\*Note: LED colours are denoted left to right from the panel side front view. Refer page 84  
R = Red, G = Green, Y = Yellow, U = Blue

## 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 Horizontal, Latchless,  
**Red** - Red LEDs, **EMI** / RFI Hood, **Bulk** Packaged.

<b>SERIES PREFIX</b>	RJX	=	Series Prefix
<b>CONTACT LAYOUT</b>	8	=	RJ45 type
<b>GENDER</b>	F	=	Receptacle housing
<b>SHELL SERIES</b>	A B	=	A Type B Type
<b>TRANSMISSION CLASS</b>	3 5	=	Class D CAT 5e
<b>TERMINATION</b>	H V	=	Horizontal Printed Circuit Board Vertical Printed Circuit Board
<b>LOCKING MECHANISM</b>	Blank P	=	Latching Push lever supplied separately for customer installation (Contact factory for detailed fitting instructions)
<b>LED COLOUR SEQUENCE*</b>	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
<b>EMI / RFI SHIELDING HOOD</b>	Blank E	=	No shield hood EMI / RFI shield hood
<b>PACKAGING</b>	Blank B	=	Individual Bulk packed



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



# Amphenol

## XLNet CHASSIS CONNECTORS



### 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

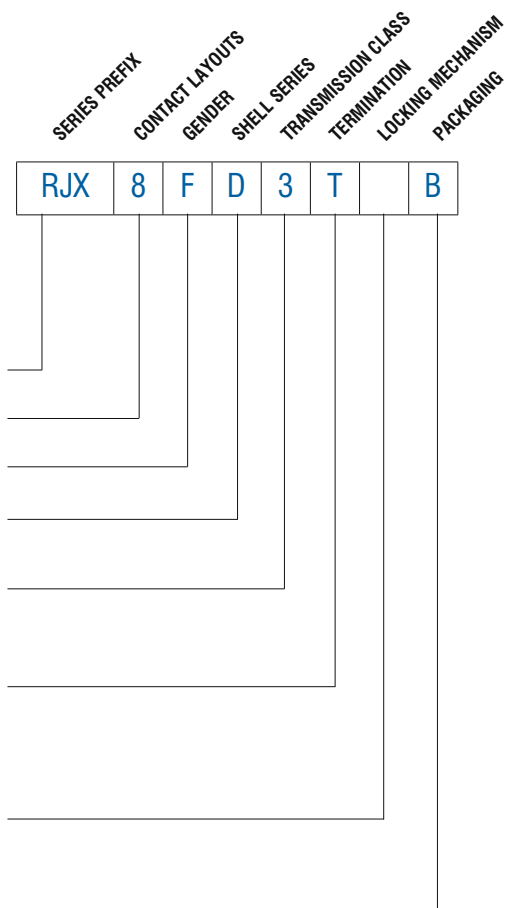


## PART NUMBER BREAKDOWN

### 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

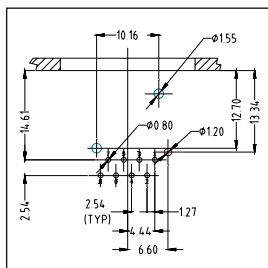
<b>SERIES PREFIX</b>	RJX	=	Series Prefix
<b>CONTACT LAYOUT</b>	8	=	RJ45 type
<b>GENDER</b>	F	=	Receptacle housing
<b>SHELL SERIES</b>	D	=	D Type
<b>TRANSMISSION CLASS</b>	3	=	Class D
	5	=	CAT 5e
<b>TERMINATION</b>	H	=	Horizontal Printed Circuit Board
	I	=	IDC Punch Down Block
	110	=	IDC 110 Punch Down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



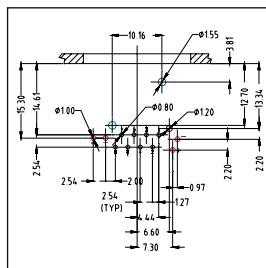
\*Note: LED colours are denoted left to right from the panel side front view.  
Refer Page 84



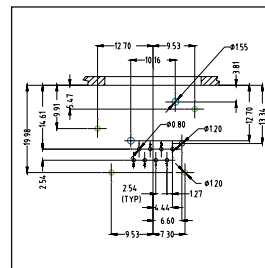
## XLRNET A, B AND D TYPE SERIES



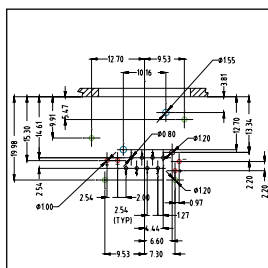
RJX8FA3H  
RJX8FA3HB  
RJX8FB5H  
RJX8FB5HB



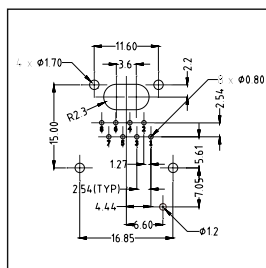
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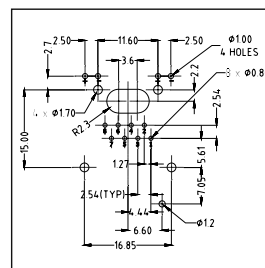
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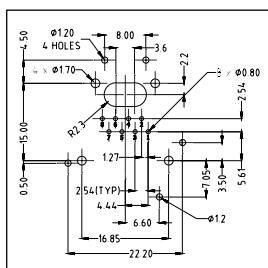
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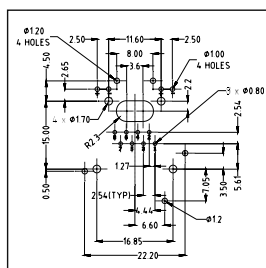
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RJX8FA5VB  
RJX8FB3VB  
RJX8FB5VB



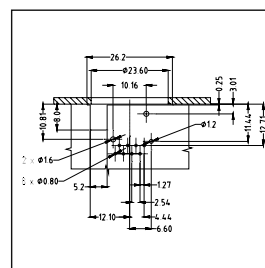
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RJX8FB5VUUB



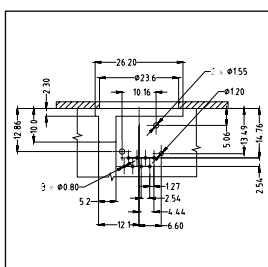
RJX8FB5VEB



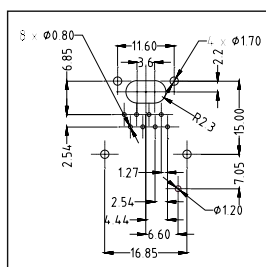
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RJX8FB5VRYEB  
RJX8FB5VRRB  
RJX8FB5VGREB  
RJX8FB5VGYEB  
RJX8FB5VUUEB



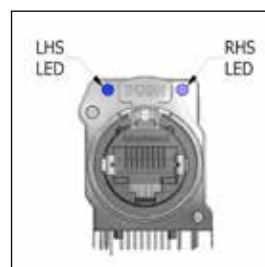
RJX8FD3HB  
RJX8FD5HB  
(Front Mounting)



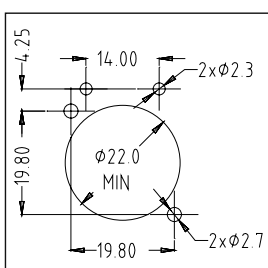
RJX8FD3HB  
RJX8FD5HB  
(Rear Mounting)



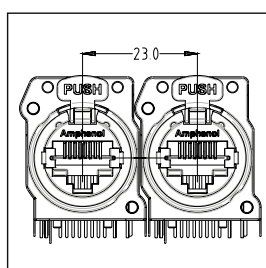
RJX8FD3VB  
RJX8FD5VB



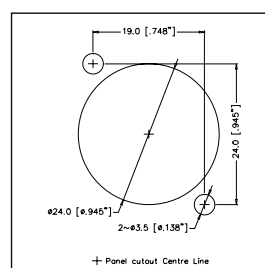
LED  
Arrangement  
(Front view)



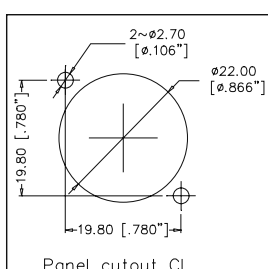
PANEL CUTOUT  
A and B type  
with LED's



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
<b>GENERAL CHARACTERISTICS</b>	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	
<b>ELECTRICAL CHARACTERISTICS</b>	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	
<b>CLIMATIC CHARACTERISTICS</b>	Protection Class	IP40 (with EMI/RFI shield)	
	Operating Temperature	-40°C to +80°C (-40°F to +176°F)	
<b>MECHANICAL CHARACTERISTICS</b>	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	
<b>MATERIALS</b>	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)	Diecast 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

