

MULTI-BEAM XLE Connectors

DESCRIPTION

Tyco Electronics' new MULTI-BEAM XLE connectors are the latest addition to the MULTI-BEAM XL power connector product family. MULTI-BEAM XLE connectors feature a new 3-beam contact, made from a thicker / higher conductivity material than the original single beam or 4-beam designs.

The new 3-beam design allows for a greater angular mis-alignment between mating connectors and offers a lower mating force. In addition, MULTI-BEAM XLE connectors offer a slimmer housing design that reduces the overall pcb footprint and has the option of using a low power contact -- the industry proven Universal Power Module (UPM) contact.

The new contacts and housing design allows more power in the same footprint -- over 35% more current in the same space. MULTI-BEAM XLE connectors are as modular as the original MULTI-BEAM XL connectors in that they can be designed to fit specific customer needs.

MULTI-BEAM XLE connectors are also available as pre-assembled cable assemblies. Contact your local Tyco Electronics' Sales Representative for more information.

APPLICATIONS

- Modular hot-swappable power supplies
- 1U / 2U servers
- High-end computer & telecommunications equipment
- Power distribution circuit boards
- Power distribution cable assemblies

KEY FEATURES

- Two NEW hot-pluggable power contacts to choose from:
 - 50 Amp high power contact
 - 20 Amp low power contact
- Over 40% lower mating force than original MULTI-BEAM XL connectors
- Over 40% more current in the same over all pcb space

- Low-wear contact design passes Telcordia environmental exposure requirements
- New design allows more angular mis-alignment

TECHNICAL DOCUMENTS

Product Specification: 108-2292

Application Specification: 114-13251

FOR MORE INFORMATION

Technical Support

Internet: <http://www.tycoelectronics.com>

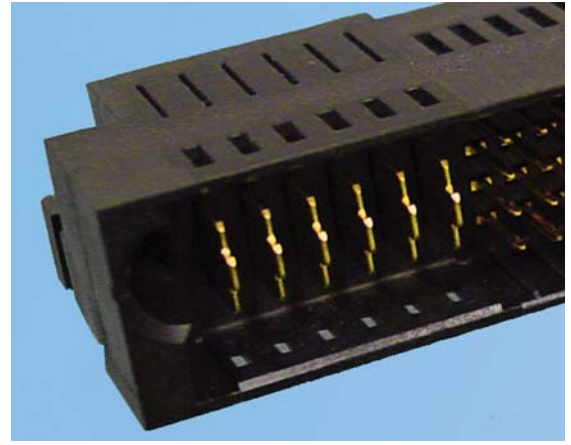
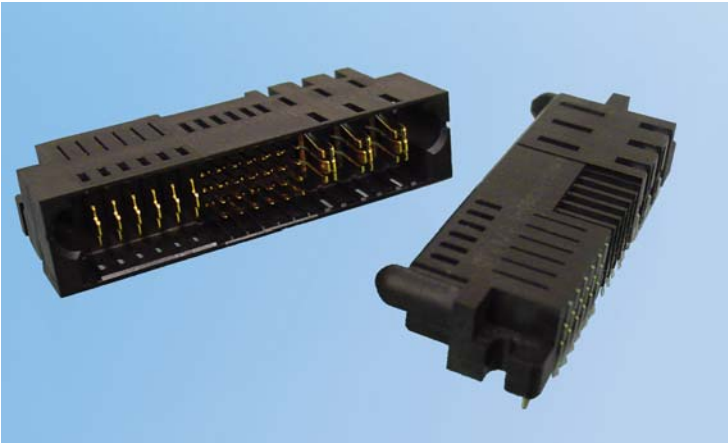
USA: 1-800-522-6752

Canada: 1-905-470-4425

UK: 44-1908-574289

Japan: 81-44-844-8013

MULTI-BEAM XLE Connectors



LP Contacts

ELECTRICAL

- Current Carrying Capacity:
 - 50 Amp high power contact (over 40% increase compared to MULTI-BEAM XL product)
 - 20 Amp low power contact (occupies 50% pcb space than MULTI-BEAM XL power contact)
- Contact resistance: 0.7 milliohm per contact at rated current

MECHANICAL

- Mis-alignment / gatherability: +/- 2mm radial misalignment
- Mating Force:
 - High power: 5N max. per contact
 - Low power: 2N max. per contact
 - Signal: 1.7N max. per contact

MATERIALS

All materials used meet RoHS requirements.

PRODUCT DIMENSIONS

Overall housing envelope dimensions is similar to MULTI-BEAM XL connectors. Length expandable depending on number of contacts.

- Depth: 0.930" [23.6mm]
- Height at mating face: 0.574" [14.6mm]

CONTACT SPACING

- High power: 0.300" [0.762mm] - up to 300 VAC
- 0.250" [0.635mm] - up to 150 VDC
- 0.200" [0.508mm] - for connection to same voltage
- Low power: 0.115" [0.292mm] - up to 300 VDC applications (in groups of 2 contacts)
- Signal: 0.100" [0.254] grid

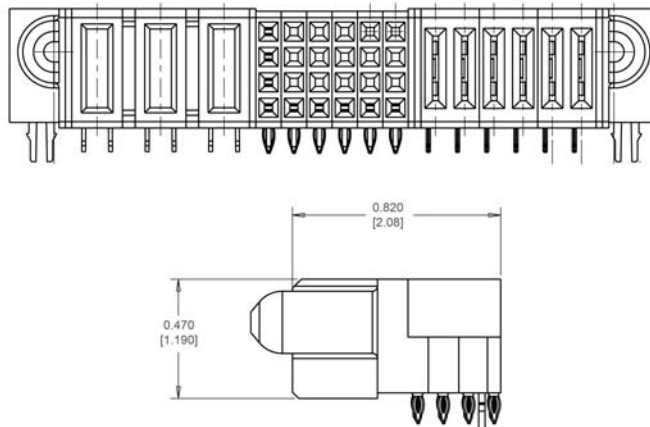
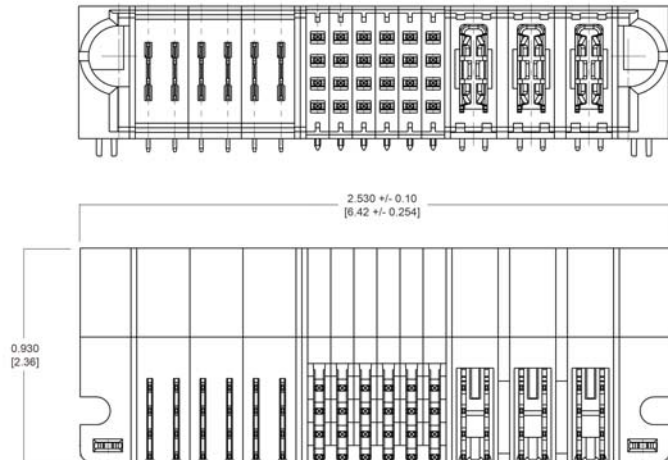
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PART NUMBERS

Part Numbers:

6450830-2
Right angle plug

6450880-1
Right angle receptacle



MULTI-BEAM XLE Part Numbers

Available Configurations	Part Numbers			Mating Part Numbers	
	Right Angle Plugs	Vertical Plugs	Overall Length of Plug	Right Angle Receptacle	Vertical Receptacle
1P/24S/1P	6450840-7	6450820-2	1.54" [39.12mm]	6450870-5	6450850-3
2LP/8S/2LP	6450830-1	--	1.175" [29.84mm]	--	6450860-1
6LP/24S/3P	6450830-2	--	2.555" [64.89mm]	6450880-1	6450850-2
2P/32S/2LP	6450830-4	--	2.020" [51.30mm]	6450870-1	--
2P/24S/2P	6450830-5	--	2.040" [51.81mm]	6450870-3	--
3P/24S/3P	6450830-9	--	2.54" [64.52mm]	6450870-4	--
3P/32S/3P	6450820-3	--	2.79" [70.87mm]	6450870-8	--
32S/4LP	6450831-1	--	1.750" [44.45mm]	6450871-1	--
6LP/24S/10P	1-6450830-0	--	3.86" [97.92mm]	--	6450860-5
12P/48S/8LP	6450840-3	--	5.600" [142.24mm]	6450880-4	6450860-3
4ACP/48S/12HDP	6450840-4	6450810-1	5.390" [136.90mm]	6450880-3	6450860-2

Configuration Description

ACP	P	HDP	LP	S
.300" [7.62mm] spacing	0.250" [6.35mm] spacing	0.200" [5.08mm] spacing	0.115" [2.92 mm] spacing	0.100" [2.54mm] spacing
300 Volts	200 Volts	50 Volts	200 Volts	50 Volts

ACP indicates the high power contact on 300 VAC spacing.

P indicates the high power contact on 200 VDC spacing.

LP indicates the low power contact on 200 VDC spacing.

S indicates the signal contact on 200 VDC spacing.

APPLICATION TOOLING

- Right angle plugs: Flat-rock seating tools (no unique tools required)
- Right angle receptacles: Flat-rock seating tools (no unique tools required)
- Vertical plugs: Contact Tyco Electronics for required seating tools
- Vertical receptacles: Flat-rock seating tools (no unique tools required)

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At Tyco Electronics, we're ready to support your RoHS requirements. We've assessed more than 1.5 million end items/components for RoHS compliance, and issued new part numbers where any change was required to eliminate the restricted materials. Part numbers in this catalog are identified as:

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NOTE: For purposes of this Catalog, included within the definition of RoHS Compliant are products that are clearly "Out of Scope" of the RoHS Directive such as hand tools and other non-electrical accessories.

NOTE: Information regarding RoHS compliance is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information provided by our suppliers. This information is subject to change. For latest compliance status, refer to our website referenced at right.

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- Cross-Reference from Non-compliant to Compliant Products
- Ability to browse RoHS Compliant Products in our on-line catalog
- Downloadable Technical Data Customer Information Presentation
- More detailed information regarding the definitions used above
- So whatever your questions when it comes to RoHS, we've got the answers at www.tycoelectronics.com/leadfree



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Dimensions are in millimeters with inches (if shown) in brackets. Specifications subject to change.

For more information, contact your Tyco Electronics sales engineer at the numbers listed below, or visit our Website at: <http://www.tycoelectronics.com>.

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S. America: 55-11-2103-6000

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Netherlands: 31-73-6246-999

Mexico & C. America: 52-55-1106-0814

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