

tyco

Electronics

AMP

Multi-Beam XL™ Cable Assemblies

11/03 1654850

INTRODUCTION

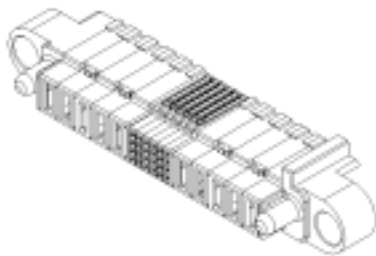
Multi-Beam XL Cable Assemblies allow designers freedom to connect power supplies and power distribution subassemblies in a wide variety of applications. Expanding beyond board-to-board applications the cable assemblies are available for both cable-to-board or panel mount applications and can terminate 8-14 AWG and 22-26 AWG wires all in one connector, without using adapter circuit boards. The use of high temperature glass filled housing materials, redundant contact retention and high conductivity contact materials allows the use of this connector in very high current density applications. The features work together to result in a highly durable and compact power connector which offers minimum millivolt drop through the connection.

The cable assemblies are all designed to specific customer requirements and manufactured in Tyco Electronics' internal cable assembly manufacturing facilities.



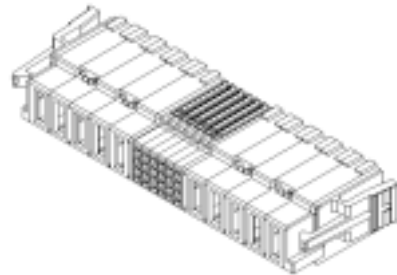
APPLICATIONS

Panel Mount
(PMT Series)



mates to Existing Tyco Electronics
Right Angle or Vertical Headers

Cable-to-Board
Squeeze-to-Release (STR) Series



mates to New Tyco Electronics
Vertical Headers

FOR MORE INFORMATION

Internet

<http://tycoelectronics.com>

Check-out product information at:

<http://mbxl.tycoelectronics.com>

Mike Blanchfield - Product Manager - Power Interconnects

Ph: (717) 986-3383, Fax: (717) 985-2833

E-mail: mablanchfield@tycoelectronics.com

Technical Support Center

1-800-522-6752

Multi-Beam XL Power Distribution Connector System – Catalog #1308662

New product

Multi-Beam XL™ Cable Assemblies

CONNECTOR FEATURES

- Single-piece contact design - eliminates multiple contact interfaces
- Insulation crimp on all contacts
- Installation to panel provides float in X, Y and Z directions
- Terminal Position Assurance / Secondary Locks on contacts assure no contact back-out
- Pre-assembled, made-to-order cable assemblies
- Easy to mate / disconnect with squeeze-to-release latch

SPECIFICATIONS

- Power Contacts – 50 Amps* on single 8 AWG wire
- Signal Contacts – 3 Amps on single 22 AWG wire
- 0.050" [1.27mm] minimum float in X, Y and Z Direction**
- Sequenced Mating – 3 Levels
 - Pwr/Gnd, Pwr & Signal, Signal
- 250 Cycle Durability
- Lead-Free, Beryllium-Free materials

* Based on Preliminary Verification Test Data.
End-Of-Life Qualification Tests in-process.

** Mated to Tyco Electronics Multi-Beam XL headers only

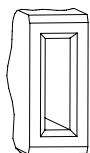
TECHNICAL DOCUMENTS

Product Specification

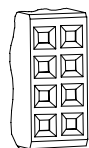
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CONFIGURATIONS / PART NUMBERS

Power Module Widths:
0.300" [7.62mm] (ACP)
0.250" [6.35mm] (P)
0.200" [5.08mm] (HDP)

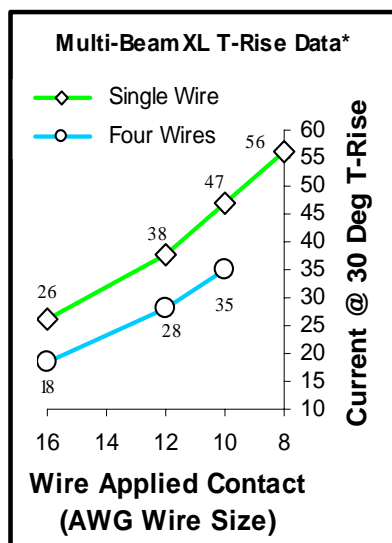


Signal Module Width
0.200" [5.08mm] (8 Contacts)



Module Designation	Maximum Wire Size		Max. Insulation Dia.	
	AWG	(mm ²)	inches	(mm)
300 (ACP)	8	(10.5)	0.272	(6.91)
250 (P)	10	(6.6)	0.215	(5.46)
200 (HDP)	12	(2.6)	0.156	(3.96)

Module Designation	Wire Range		Insulation Range	
	AWG	(mm ²)	inches	(mm)
Signals	22 – 26	(0.14 – 0.32)	0.036 – 0.054	(0.91 – 1.37)



Configuration	PMT Series Receptacle	Mating Headers		STR Series Receptacle	Mating Header Vertical
		Vertical	R / A		
2 ACP				1600698-2	1450509-1
3 ACP	1600606-2		1450123-3		
3P				1600698-3	1450509-2
4P				1600698-4	1450109-1
5P	1600606-1		1450123-6		
6P				1600698-1	1450509-3
1P/24S/1P	1600636-9	1450100-5	1450330-1	1600688-8	1450108-4
2P/24S/2P	1600636-2	1450500-3	1-1450330-4	1600688-1	1450508-2
3P/16S/3P	1600636-8	1450500-8			
4P/24S/2P	1600636-7		2-1450120-5		
4P/24S/4P	1600636-5	1450500-4			
4P/32S/4P				1600688-2	1450508-1
5P/24S/5P	1600636-1	1450500-1			
6P/32S/6P				1600688-7	1450508-9

PMT Series - Panel Mount for Hot-Swap Blind-Mate Applications

STR Series - Squeeze-to-Release for removable Cable-to-Board / I/O Applications

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