



High-performance MX150™ Unsealed connectors achieve significant space and cost savings whilst simplifying assembly processes for mid-power harness applications in the Transportation market

The MX150™ unsealed connector system for direct connect or in-line mid-power applications provides reduced package size compared to conventional 1.50mm connection systems.

Molex’s design-to-cost approach provides a high-performance connector at a competitive cost via an integrated TPA lock on the hinge, minimal mold costs and low production cycle times.

This connection system utilises the existing and proven MX150™ terminal and offers compatibility with Yazaki YESC terminals. For additional information visit: www.molex.com/link/mx150unsealed.html

Features and Benefits

Connector designed with legacy MX150™ low-insertion-force terminal system	Provides a high-performance connector for mid-power (14 to 22 AWG wire) applications
Utilises existing MX150™ sealed connector system field-service tools deployed at numerous harness manufacturers	Provides cost efficiency by eliminating additional tooling charges
Reduces package sizes versus USCAR 1.50mm counterparts; female receptacles are 52% smaller; male in-line connectors are 28% smaller	Overall 37% space savings achieved over traditional USCAR 1.500mm connectors
Integrated Terminal Position Assurance (TPA) lock molded into receptacle housing	Assures crimped terminal leads are properly locked into connector, TPA will not seat into final locked position and connector system will not latch if terminal is not locked Provides applied cost savings
Integral locking latch	Confirms positive mating of connector and proper latching
Connector Position Assurance (CPA) option available	Secures latching; CPA will not seat into final locked position and connector system will not latch if terminals is not locked
Enlarged push surface with ergonomic design	Convenient mating and unmating USCAR-25 compliant
Two-circuit version available with custom clip-shots; three-and four-circuit versions to follow	Provides design flexibility
Four polarisation options: black, natural, grey and dark grey	Facilitates quick visual installation

MX150™ Unsealed Connector System 3.50mm Pitch

- 34796 Single-row, 2-circuit receptacles
- 34797 Single-row, 2-circuit Male in-line connectors



Male Connector



Female Connector



MX150™ Unsealed Connector System

Applications

Automotive

- Interior lighting consoles
- Vanity mirrors
- Center High Mounted Stop Lights (CHIMSL)
- Seat interconnections
- Door locks

Commercial vehicle

- Unsealed in-vehicle interconnections:
 - Interior lighting consoles
 - Door locks in the dry zone
- All Terrain vehicles (ATVs), 2- and 3-wheelers, Segways, scooters; dependent on customer IP rating requirements

Consumer

- White goods:
 - Washing machines
 - Refrigerators
 - Air conditioners
 - Stoves
 - Exercise equipment
- Vending machines
- Slot and gaming consoles
- Heating Ventilation and Air Conditioning (HVAC)



Automotive (Interior)



Automotive



Exercise Equipment



Refridgerators

Specifications

REFERENCE INFORMATION

Packaging:

Housings – 4-cell bulk pack
Terminals –reels

Use with:

Receptacle terminals – Series 33012
Blade terminals – Series 33000

Designed in: Millimeters

RoHS: Yes

Halogen free: Yes

ELECTRICAL

Voltage (max.): 500V

Current (max.): 22.0A

Contact resistance: 10 milliohms max.

Dielectric withstanding voltage:
1500V AC min.

Insulation resistance:
100 Megohms min.

PHYSICAL

Housing: PBT unfilled

Contact: Copper (Cu) alloy

Plating:

Contact area — Tin (Sn)

Underplating — Nickel (Ni)

Wire gauge: 2.00 to 0.35mm²
(14 to 22 AWG and M3)

Insulation diameter: 2.70 to 1.50mm

Operating temperature:

-40 to +105°C

Flammability:

Per ISO3795 or GMW3191

Burn rate: 100.00mm/ Mn max.

Material must be self-extinguishing

MECHANICAL

Contact insertion force: 12N max.

Contact forward push stop: 50N min.

Contact insertion with TPA locked:
35N min.

Contact retention to housing: 90N min.

Contact retention/ TPA locked:
100N min.

Terminal to cavity polarization: 20N min.

TPA closure: 30N max.

TPA closure with term detection:
65N min.

Connector mating force: 22N max.

Connector un-mating force: 22N max.



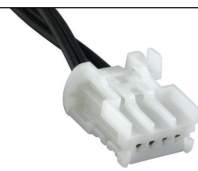
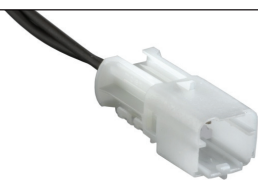
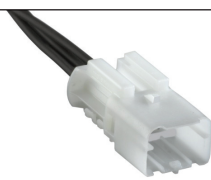

Connector un-mating, with primary
lock engaged: 110N min.

Hinge cycling: 10 operations min.

Product Family Overview

MX150™ Unsealed Connector System

**MX150™ Unsealed
Connector System
3.50mm Pitch**

	2 Circuit (available)	3 Circuit (coming soon)	4 Circuit (coming soon)
Receptacle			
In-Line Male Connector	 With GM style clip-slot	 With Ford style clip-slot	 With GM style clip-slot and CPA option

- Custom clip-slot for male in-line connectors (GM and Ford type already tooled)
- Additional circuit counts can be developed upon request
- CPA option available for both styles for critical applications
- Four polarisation options available: A-Black / B-Natural / C-Grey / D-Dark grey

Ordering Information

Male and Female Connectors

Circuits	Polarisation	Color	Receptacle Order No.	Mating Male Connector*	
				With GM Style Clip-Slot	With Ford Style Clip-Slot
2	A	Black	34796-0201	34797-0201	34797-0205
	B	Natural	34796-0202	34797-0202	34797-0206
	C	Gray	34796-0203	34797-0203	34797-0207

*Custom slots available upon request to Product Manager; volume depending