

Off-The-Shelf Mizu-P25 (Mini Type) Cable Assemblies

molex

Off-The-Shelf Mizu-P25 (Mini Type) Cable Assemblies feature 2.50mm pitch, up to 4.0A current and an IP67 rating with a variety of cable lengths

Features and Advantages

Positive lock

Eliminates any possibility of incomplete mating

Compact size

Space saving for tight-packaging applications

Integral seal stopper with proven performance

Delivers IP67 rating; prevents ingress of dust and water to ensure reliable connection

Raised-body male terminal design

Provides polarization to prevent mis-mating

Spring-beam terminal design

Provides high pressure and small deflection for high-vibration applications



Mizu-P25 (Mini Type) Cable Assemblies

Markets and Applications

Automotive

Door electronics
Lamp mirrors
Mirror harnesses
Parking sensors
Powered rear-view mirrors
Switches
Wipers
Steering controls

Consumer

Washing machines
Vending machines
Water heaters
Air conditioners

Industrial / Industrial Automation

LED lighting



Automotive



Consumer Appliances

Off-The-Shelf Mizu-P25 (Mini Type) Cable Assemblies



Specifications*

REFERENCE INFORMATION

Packaging: See product specs
UL File No.: E29179
Mates With: Mizu-P25 receptacle/plug
Terminals Used: Series 50147 and 50148
Designed In: millimeters
RoHS: Yes
Halogen-Free: No
V-O: Yes
Glow wire Compliant: No

ELECTRICAL

Voltage (max.): Upto 60V
Current (max.): Upto 4.0A
Contact Resistance: 10 milliohms
Dielectric Withstanding Voltage:
500V AC for 1 minute between adjacent terminals
Insulation Resistance (min.): 250 Megohms

PHYSICAL

Pitch: 2.50mm
Wire Gauge: 0.5 sq.mm
Housing: Polyester
Contact: Phosphor Bronze
Plating: Tin
Operating Temperatures: -40 to +105°C

MECHANICAL

Contact Insertion Force (max): 58.8N
Contact Retention to Housing (min): 29.4N
Mating Force: 49.0 N to 58.8N
(depending on number of circuits)
Unmating Force: 14.7 N to 49.0N
(depending on number of circuits)

*Information is based on Mizu-P25 connector specifications

Ordering Information

Series	Component	Circuits	Lengths (mm)
215310	Mizu-P25 (Mini Type) Cable Assemblies	2, 3 and 4	150, 300 and 600
215311			
215312			
215313			

Custom product	Description
Contact Molex	Mizu-P25 (Mini Type) Custom Cable Assemblies

www.molex.com/link/otscableassemblies.html

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Off-the-Shelf MX150 Cable Assemblies

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Off-the-Shelf MX150 Cable Assemblies deliver a 22.0A current rating and offer a variety of cable lengths for automotive and commercial vehicle applications

Features and Advantages

Mat seal technology for MX150 (1.50mm) terminals

Eliminates the need for individual cable seals, which affords reduced package size and reduced cost

1-piece 3.50mm-pitch housing

Eliminates unnecessary and costly assembly Operations; offers a compact connector

Preassembled terminal position assurance (TPA) housing

Ensures crimped terminal leads are properly locked into connector

Grommet cap

Protects the mat seal and assures proper alignment of the terminals

Flashover options (custom void patterns) available

Provides design flexibility

Connector position assurance (CPA) option available

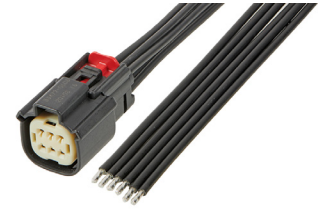
Assures connectors have been fully mated and prevents accidental disconnection

4 polarization and color options

Facilitates quick visual installation

USCAR interface

Has a released and approved interface for major North America OEMs



MX150 Cable Assemblies

Temperature class 4 (-40 to +125°C) and 22.0A current rating

Delivers superior performance

V0 versions available (UL1977 certified)

Meets stringent safety requirements



Conforms to USCAR-2/USCAR-21/GMW3191

Is for use in on-engine, high-vibration, under-hood and under-chassis environments at temperature class 4

Off-the-Shelf MX150 Cable Assemblies



Markets and Applications

Automotive and Commercial Vehicles

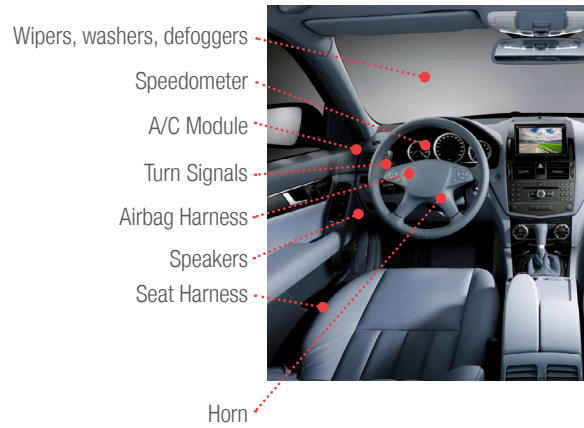
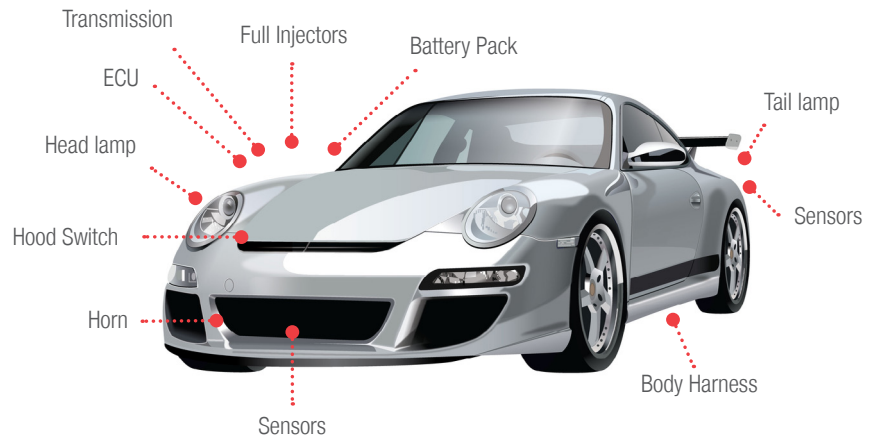
- Transmissions
- Head/tail lamps
- Body harnesses
- Wipers, washers, defoggers
- Speedometers
- A/C modules
- Turn signals
- Airbag harnesses
- Speakers
- Door connectors
- Brake modules
- Horns
- Marine equipment

Consumer/Home Appliances

- White goods
- LED lightings

Industrial

- Automation equipment
- Process control equipment
- Construction equipment



Off-the-Shelf MX150 Cable Assemblies



Specifications

REFERENCE INFORMATION

Packaging: Bulk (connectors); reels (terminals)
 UL File No.: N/A
 CSA File No.: N/A
 Use With: 14 AWG
 Insulation Diameter: 2.5mm
 Designed In: Millimeters
 RoHS: Yes
 Halogen-Free: No
 Glow Wire Compliant: No
 IP Rating: IP67

ELECTRICAL

Voltage (max.): 14V DC
 Current (max.): Up to 22.0A
 Contact Resistance (max.): 10 milliohms
 Dielectric Withstanding Voltage: 1000V AC (unmate connectors for 1 minute between adjacent terminals and between terminals to ground)
 Insulation Resistance (min.): 20 Megohms

MECHANICAL

Terminal Insertion Force (max): 30N
 Terminal Retention to Housing (min): 90N
 Mating Force (max.): 75N
 Unmating Force (min.): 110N
 Durability (max.): 25 cycles

PHYSICAL

Housing: SPS/nylon
 Contact: Copper Alloy
 Plating:
 Contact Area – Tin
 Underplating – Tin
 Operating Temperatures: -40 to +125°C

*Information is based on MX150 connector specifications

Ordering Information

	Component	Circuits	Lengths (mm)
216280	Off-the-Shelf MX150 Cable Assemblies	2,3, 4 and 6	150, 300 and 600
216281			
216282			
216283			
216285			
216286			
216287			
216288			

Custom product	Description
Contact Molex	Off-the-Shelf MX150 Custom Cable Assemblies

www.molex.com/link/otscableassemblies.html

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Off-the-Shelf (OTS) Squba Discrete Wire Cable Assemblies >

OTS Squba Discrete Wire Cable Assemblies offer a 1.80mm pitch and an IP68 NEMA rating, and they are available in a variety of cable lengths to facilitate both prototyping and global production

FEATURES AND ADVANTAGES

Sealed components with proven performance

Provides IP68 NEMA rating. Prevents ingress of dust and water to ensure reliable connection

UL 1061 discrete wires for cable assemblies

Ready to use in electronic appliance applications. Provide ease of design, prototyping and production

Meets 2011/65/EU RoHS Compliance

Decreases engineering time and resources

OTS Squba Discrete Wire Cable Assemblies deliver 5.0A per circuit with a 1.80mm pitch

Delivers reliable power for a wide range of space constrained applications



Squba Cable Assembly Family

Assembled in ISO/TS16949-certified facilities

Ensures high quality. Meets current automotive industry standards

Pin-to-pin mapping from receptacle to PCB header

Provides ready-to-use, plug-and-play connections

Custom assemblies for production also available

Meets design needs after prototyping is complete. Molex's extensive design and manufacturing expertise can meet the unique challenges of the most demanding applications

APPLICATIONS

Consumer

- HVAC
- Landscaping equipment
- Liquid dispensing equipment
- Outdoor lighting
- Security systems

Commercial Vehicle

- ATVs
- Buses
- Forklifts
- Marine: Under-dash wiring, lighting
- Recreational vehicles
- Trucks

Industrial Automation

- Food processing equipment
- Industrial controls
- Industrial machines and motors
- Robotics



ATV



Security Systems



HVAC



Outdoor Lighting



Industrial Automation



Bus

Off-the-Shelf (OTS) Squba Discrete Wire Cable Assemblies >

SPECIFICATIONS

REFERENCE INFORMATION

Receptacle Packaging: Tray
 Plug Packaging: Bulk
 Crimp Terminal Packaging: Reels
 UL File No.: TBD
 CSA File No.: TBD
 Use With: 22 AWG 1016 wire
 Designed In: Millimeters
 RoHS: Yes
 Halogen Free: No
 Glow Wire Compliant: TBD
 IP Rating: IP68

ELECTRICAL

Voltage (max.): 125V
 Current (max.): 5.0A
 Contact Resistance: 10 milliohms
 Dielectric Withstanding Voltage: Leakage < 5mA
 Insulation Resistance (min.): 100 Megohms

MECHANICAL

Terminal Insertion Force (max.): 5N
 Terminal Retention to Housing (min.): 30N
 Mating Force (max.): 45N
 Un-mating Force (max.): 35N
 Durability (max.): 10 Cycles

PHYSICAL

Housing: Plastic
 Contact: Copper Alloy
 Plating:
 Overall — Tin
 Under-plating — Nickel
 Operating Temperature: -40 to +105 C

ORDERING INFORMATION

Series No.	Component	Circuit Count	Lengths
45145	Receptacles	2, 4, 6, 8, 10	150.00mm, 300.00mm, 1.0m
45146	Plugs	2, 4, 6, 8, 10	

Custom Product	Description
Contact Molex	Squba Discrete Wire Cable Assemblies Custom Lengths and Other Options

www.molex.com/link/otscableassemblies.html

Off-the-Shelf Squba 3.60mm-Pitch Sealed Wire-to-Wire Connector System >

Off-the-Shelf Squba 3.60mm-Pitch Sealed Wire-to-Wire Connector System is a patent-pending design that offers an IP68 NEMA rating and carries 14.0A of current to deliver reliable power in a wide range of space-constrained applications

FEATURES AND ADVANTAGES

Protected, low-profile

Prevents wire from getting caught on latch and damaging it. Minimizes latch size to prevent latch from adding to connector's package size

Sealed components with proven performance

Delivers IP68 NEMA rating. Prevents ingress of dust and water to ensure reliable connection

Wraparound insulation crimp

Provides security against seal punctures

Primary lock enables 40N terminal retention

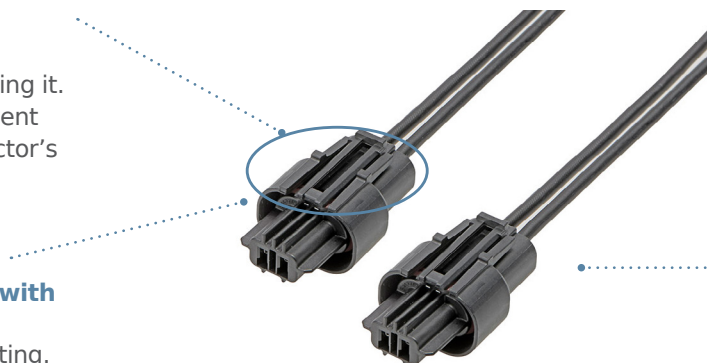
Delivers a reliable connection. Withstands vibration

Clean-body terminals

Avoids seal punctures



Squba 3.60mm-Pitch
cable Assemblies



Miniature size (3.60mm pitch)

Alleviates space constraints

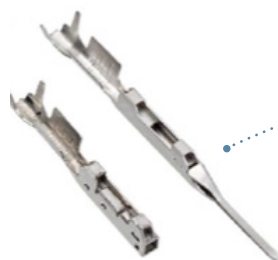
Seal caps

Protect seals from damage during shipping, handling and use. Align terminals to prevent seal from being punctured during assembly



Seal cap's protective terminal channels

Align terminals during insertion to prevent punctures to seal during connector assembly



Off-the-Shelf Squba 3.60mm-Pitch Sealed Wire-to-Wire Connector System >

APPLICATIONS

Consumer

Liquid dispensing equipment
Hvac equipment
Security systems
Outdoor lighting
Landscaping equipment

Commercial Vehicle

ATV
Marine: under-dash wiring, lighting
Forklifts
Trucks
Buses
Aviation
Recreational vehicles

Industrial

Robotics
Industrial machines and motors
Food processing equipments/plants
Industrial controls

Equipment

Liquid dispensers



Security Systems



Robotic Arm



HVAC



ATV

SPECIFICATIONS

REFERENCE INFORMATION

Packaging: Bulk (Connectors); Reels (Terminals)
UL File No.: E29179
CSA File No.: N/A
Use With: 16 AWG
Insulation Diameter: 1.90 to 2.40mm
Designed In: millimeters
RoHS: Yes
Halogen Free: No
Glow Wire Compliant: Yes
IP Rating: IP68

**Information is based on Squba 3.60mm-Pitch connector specifications*

ELECTRICAL

Voltage (max.): 600V
Current (max.): up to 14.0A
Contact Resistance: 10 milliohms
Dielectric Withstanding Voltage: 2200 VAC
(Unmate connectors for 1 minute between adjacent terminals and between terminals to ground)
Insulation Resistance: 1000 Megohms

MECHANICAL

Terminal Insertion Force (max.): 15N
Terminal Retention to Housing: 40N
Mating Force: 50N
Unmating Force: 10N
Durability (max.): 25 Cycles

PHYSICAL

Housing: Nylon
Contact: Copper Alloy
Plating:
Contact Area — Tin
Underplating — Tin
Operating Temperatures: -40 to +105 C

Off-the-Shelf Squba 3.60mm-Pitch Sealed Wire-to-Wire Connector System >

ORDERING INFORMATION

Series	Component	Circuits	Lengths (mm)
216620	Squba 3.60mm-Pitch Cable Assemblies	2, 3 and 4	150, 300 and 600
216621			
216622			
216623			

Custom product	Description
Contact Molex	Squba 3.60mm-Pitch Custom Cable Assemblies

www.molex.com/link/otscableassemblies.html