

OFF-THE-SHELF (OTS) DISCRETE WIRE CABLE ASSEMBLIES

ADDING: OTS Mini50 Cable Assemblies

NPI EXTENSION

JANUARY 2024

creating connections for life

molex



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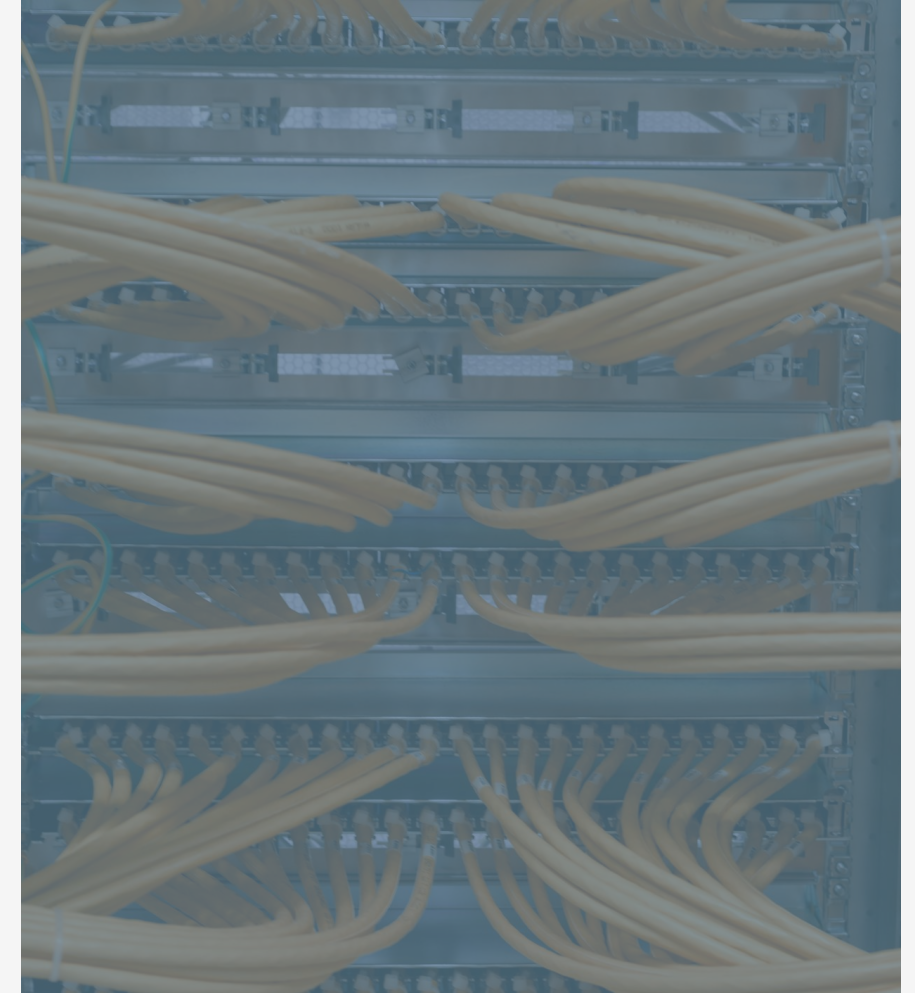
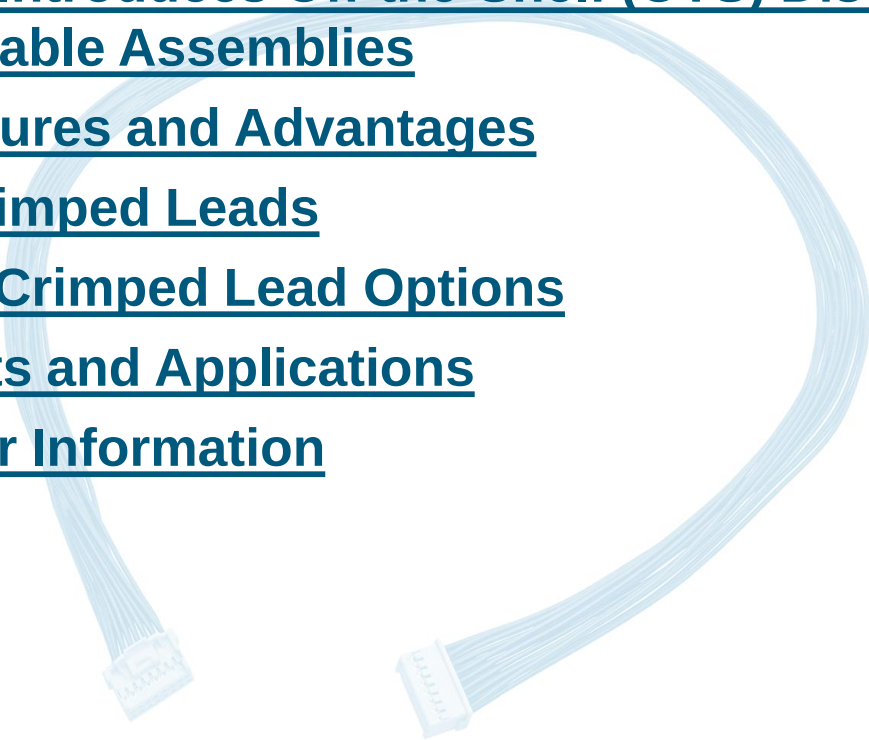
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CUSTOMER CHALLENGES



Prototyping for UL Testing

Prototyping cable assemblies requires tooling to crimp terminals. Therefore, costs generated to prototype a system for UL testing can be significant.

Manufacturing Hurdles

Once prototyping is complete, customers typically need to create drawings and assign resources to find a supplier to build cable assemblies for end products.

Product Quality

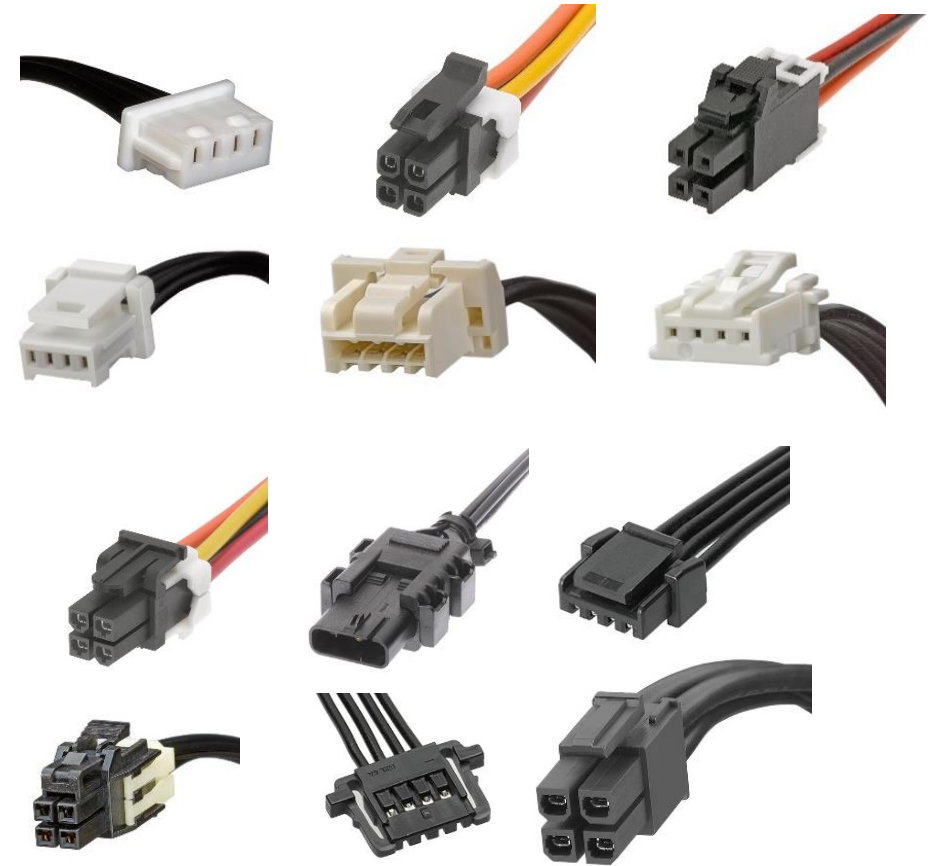
Various connector challenges can result in end-product failures such as mis-mated connectors, terminal backout and other assembly errors.

OFF-THE-SHELF (OTS) DISCRETE WIRE CABLE ASSEMBLIES

Molex Introduces Off-the-Shelf (OTS) Discrete Wire Cable Assemblies

Standard discrete wire cable assemblies deliver OTS solutions with a broad offering of Molex connectors and a variety of cable lengths to facilitate both prototyping and global production.

Single-row (SR) and double-row (DR) options are available with a variety of connectors for a wide range of applications.



[OTS Cable Assemblies
Web Overview](#)

CABLE ASSEMBLY FEATURES AND ADVANTAGES



*Pico-Lock Standard
Discrete Cable Assemblies*

Pico-Lock Cable Assembly offers a low profile, high current and positive locks

Ideal for applications requiring space savings and secure mating retention



*Pico-Clasp Standard Discrete Wire
Cable Assemblies*

Pico-Clasp Cable Assembly offers a small 1.00mm pitch and 1.0A current rating with positive lock

Delivers space savings and prevents wire hooking



*PicoBlade Standard Discrete Wire Cable
Assemblies*

PicoBlade Cable Assembly capable of carrying a maximum 1.0A of current with 1.25mm pitch

Provides the same current as 2.00mm pitch systems but in a more compact design. Ideal for high-density harness applications

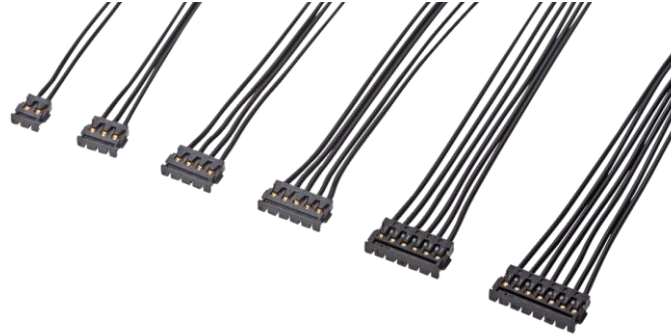
CABLE ASSEMBLY FEATURES AND ADVANTAGES



OTS Pico-Spox 1.5 Tin Discrete Wire Cable Assemblies

Pico-Spox 1.5 Tin Discrete Wire Cable Assemblies deliver up to 3.0A of current and offer a variety of circuit sizes

Provides latch protection with unique friction lock and helps secure terminal retention; Facilitates both prototyping and global preproduction



Pico-EZmate Discrete Wire Cable Assemblies

Pico-EZmate Discrete Wire Cable Assemblies deliver up to 5.0A of current with 1.00, 1.20 or 1.80mm pitch

Provides high current capacity for space-constrained applications with a low profile and a dual-locking system for secure retention and reliable operation



MicroClasp Standard Discrete Wire Cable Assemblies

MicroClasp Cable Assembly capable of carrying a maximum 3.0A of current with 2.00mm pitch

Provides space savings and easy mating/unmating compared to similar 2.00- and 2.50mm-pitch wire-to-board systems

CABLE ASSEMBLY FEATURES AND ADVANTAGES



OTS Micro-Latch 2.0 Discrete Wire Cable Assemblies

OTS Micro-Latch 2.0 Discrete Wire Cable Assemblies deliver up to 2.5A of current with a 2.00mm pitch and offer a variety of circuit sizes and cable lengths
Provides compact electrical and mechanical reliability that meets automotive, consumer and manufacturing industry requirements



OTS Micro-Lock Plus Discrete Wire Cable Assemblies

Micro-Lock Plus Cable Assembly offers 1.25mm-pitch form factor and carries 1.5A with positive lock
Secures mating retention without sacrificing compactness



OTS Micro-Lock Plus 2.00mm Discrete Wire Cable Assembly

OTS Micro-Lock Plus 2.0 Discrete SR Cable Assembly offers a 2.00mm pitch in single-row, off-the-shelf Tin-plated solution with a variety of cable lengths
Delivers secure mating retention without sacrificing compactness. Facilitates both prototyping and global preproduction

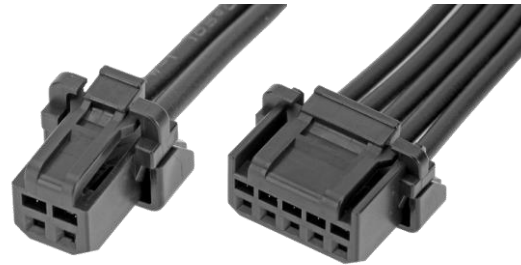
CABLE ASSEMBLY FEATURES AND ADVANTAGES



OTS EdgeLock Discrete Wire Cable Assemblies

EdgeLock Discrete Wire Cable Assemblies deliver up to 3.0A of current for wire-to-edge applications in a variety of circuit sizes

Features polarization rib to prevent mis-mating and dual cantilever crimp terminal design for long-term electrical reliability



OTS Micro-One Discrete Wire Cable Assemblies

Micro-One Discrete Wire Cable Assemblies deliver up to 4.0A of current for harsh environments and demanding applications

Provides integrated independent secondary lock (ISL) to prevent terminal back-outs and simplify assembly operations



OTS Milli-Grid Discrete Wire Cable Assemblies

OTS Milli-Grid Discrete Wire Cable Assemblies offer a 2.00mm pitch and up to 2.0A of current in dual-row solution with a variety of cable lengths

Delivers blind-mate interface (BMI) capability with a fully shrouded header design for easier installation in confined spaces

CABLE ASSEMBLY FEATURES AND ADVANTAGES



*Nano-Fit TPA Standard
Discrete Cable Assemblies*

Nano-Fit TPA Cable Assembly has up to a 6.5A current rating in a small package

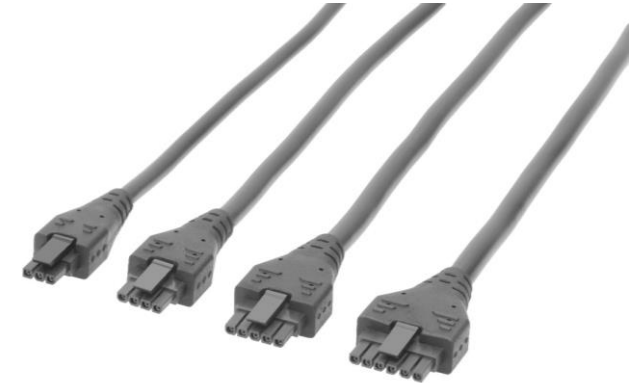
Brings space savings for design flexibility



OTS Micro TPA Cable Assemblies

Micro TPA Cable Assemblies delivers off-the-shelf solutions with a broad offering of Molex connectors and uses popular crimp terminals

Provides ease of design, prototyping and production, meets current cable assembly standards, and ensures availability and wide tooling installation base in market

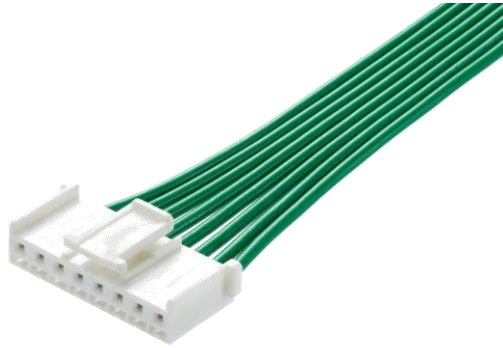


OTS Micro-Fit SR Overmolded Cable Assemblies

OTS Micro-Fit Single Row Overmolded Cable Assembly delivers an off-the-shelf solution with a variety of cable lengths and a 3.00mm-pitch connector with a 5.6A maximum current rating

Provides quick availability for development and production programs and customized versions for final designs

CABLE ASSEMBLY FEATURES AND ADVANTAGES



OTS Mini-Lock Discrete Wire Cable Assemblies

Mini-Lock Discrete Wire Cable Assemblies deliver up to 3.5A of current and a 2.50mm pitch with a variety of circuit sizes

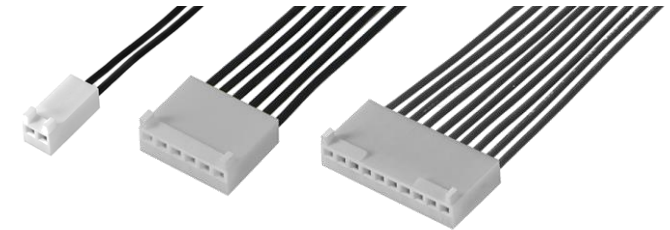
Delivers versatile and proven capability, with terminal position assurance (TPA) and positive lock features available



OTS C-Grid III Discrete Wire Cable Assemblies

C-Grid III Discrete Wire Cable Assemblies deliver up to 3.0A of current with a variety of circuit sizes

Offers single- and dual-row options with polarization, friction lock and easy breakaway features for design flexibility

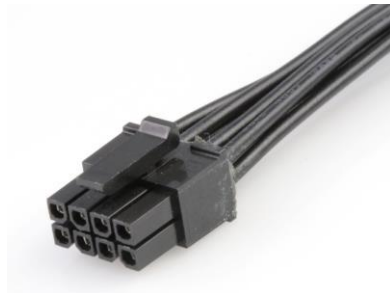


KK and KK Plus Discrete Wire Cable Assemblies

KK and KK Plus Discrete Wire Cable Assemblies deliver up to 11.0A of current with several pitch and wire size options

Delivers extensive wire-to-board and board-to-board versatility with KK Plus high-power connectors and KK low-to-mid-power connectors

CABLE ASSEMBLY FEATURES AND ADVANTAGES



Non-TPA version



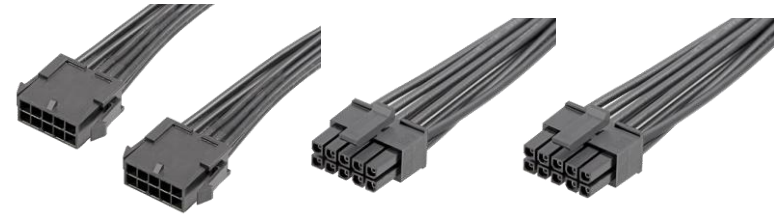
TPA version

Micro-Fit Standard Discrete Wire Cable Assemblies

Micro-Fit TPA Cable Assembly has a maximum 5.0A current rating and a 3.00mm pitch

Delivers a high-density, lower power connection.

Reduced terminal back-out

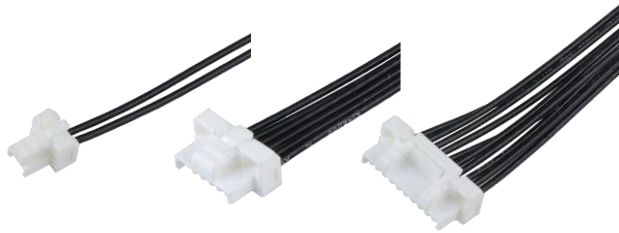


Micro-Fit 3.0 Cable Assemblies

Micro-Fit 3.0 Cable Assembly delivers a current rating of 6.5 to 8.5A with a 3.00mm pitch in a range of circuits

Delivers a high-density, lower power connection and design flexibility

CABLE ASSEMBLY FEATURES AND ADVANTAGES



CLIK-Mate 1.25 Standard Discrete Cable Assemblies

CLIK-Mate Cable Assembly carries 1.0A with a 1.25mm pitch

Offers more signal lines in less space and saves 60% of space than the 2.00mm version



CLIK-Mate 1.5 Standard Discrete Cable Assemblies

CLIK-Mate Cable Assembly carries 2.5A with a 1.50mm pitch

Offers more signal lines in less space and features the widest variety of choices, including single- and dual-row types, SMT and through-hole versions and a bottom-entry option



CLIK-Mate 2.0 Standard Discrete Cable Assemblies

CLIK-Mate Cable Assembly carries 3.0A with a 2.00mm pitch

Offers even more signal lines in less space. Also, provides the highest current carrying capability of 3.0A and 250V.

CABLE ASSEMBLY FEATURES AND ADVANTAGES



Mini-Fit TPA2 Standard Discrete Wire Cable Assemblies

Mini-Fit TPA2 OTS Discrete Wire Cable Assembly capable of carrying 9.0A of power

Provides ideal current rating for many signal and power applications. Reduces terminal back-out. Compatible with standard Mini-Fit Jr. Headers



Mini-Fit Jr DR Cable Assemblies

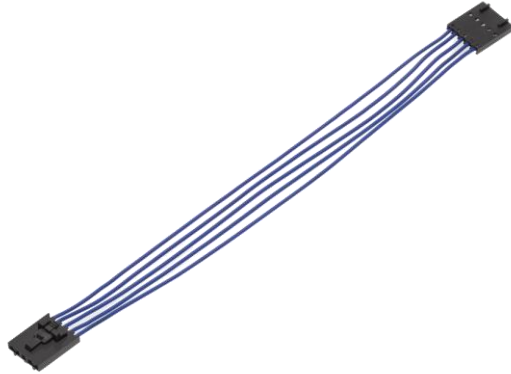
OTS Mini-Fit Jr. DR Discrete Wire Cable Assembly delivers an off-the-shelf solution with a variety of cable lengths and a 4.20mm-pitch connector with a 9.0A maximum current rating
Provides design flexibility and high quality. Designed to support development and production programs. Available with Gold or Tin plating.



OTS Mini-Fit Sigma DR Discrete Wire Cable Assemblies

OTS Mini-Fit Sigma DR Tin Discrete Wire Cable Assemblies deliver up to 11.5A of current and offer a variety of circuit sizes
Offers positive locking housings for to help prevent accidental unmating; facilitates both prototyping and global preproduction

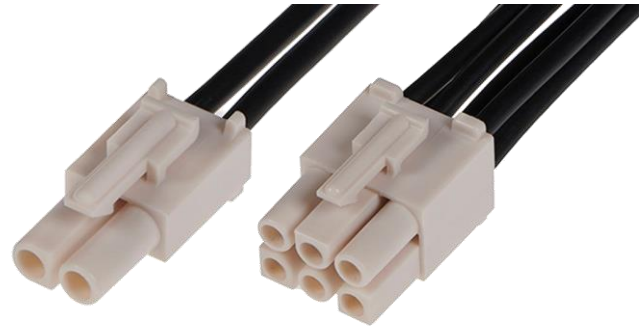
CABLE ASSEMBLY FEATURES AND ADVANTAGES



*SL (Positive Lock) 2.54mm-Pitch
Discrete Wire Cable Assemblies*

SL (Positive Lock) Discrete Wire Cable Assemblies carry up to 3.0A of power to support a range of wire-to-board applications

Helps ensure secure retention with connector position assurance positive lock feature



*Standard 0.93" 6.70mm-Pitch Discrete
Wire Cable Assemblies*

Standard .093" Pin-and-Socket Discrete Wire Cable Assemblies deliver up to 17.0A of power with a range of circuit counts and cable lengths available
Includes polarization, keying and positive lock features for reliable operation in a range of medium-power applications



*OTS Super Sabre Discrete Wire Cable
Assemblies*

Super Sabre Discrete Wire Cable Assemblies carry up to 34.0A of power per blade for use in high-current, high-voltage and high-temperature applications
Delivers design flexibility with low-profile design suitable for temperatures up to +125°C

CABLE ASSEMBLY FEATURES AND ADVANTAGES



Ultra-Fit Standard Discrete Wire Cable Assemblies

Ultra-Fit OTS Discrete Wire Cable Assembly carries up to 14.0A of power with 17% smaller footprint than similar power connectors

Provides space savings with optimized current destiny



Mega-Fit Standard Discrete Wire Cable Assemblies

Mega-Fit OTS Discrete Wire Cable Assembly delivers 23.0A per circuit with a 5.70mm pitch

Offers more power per linear and square millimeter than most midrange power products



OTS DuraClik ISL SR Discrete Wire Cable Assemblies

OTS DuraClik ISL SR Discrete Wire Cable Assemblies deliver up to 3.0A of current and offer a variety of circuit sizes

Offers independent secondary lock (ISL) to detect incomplete terminal insertion; provides up to 50N of terminal retention force; helps position terminals while meeting stringent automotive requirements; Tin plating

CABLE ASSEMBLY FEATURES AND ADVANTAGES



iGrid Cable Assemblies

iGrid Cable Assemblies deliver off-the-shelf solutions with pin-to-pin mapping from receptacle to PCB header and meets current cable assembly industry standards

Provides ready-to-use, plug-and-play connections; ensures high quality and meets current automotive industry standards



OTS PowerWize 6.00mm Cable Assemblies

Mechanically keyed and color coded with uniquely positioned ribs on header housings and matching slots on receptacles (based on connector color)

Designed to ensure only like-colored connectors mate; helps prevent mis-mating when multiple wire-to-bard or wire-to-busbar interconnects are used in the same application



SW1 Cables

OTS SW1 Cables deliver solutions with a broad offering of Molex connectors and incorporate COEUR socket technology which enables a high-current-carrying capacity in three sizes: 6.00mm (120.0A), 8.00mm (185.0A) and 11.00mm (300.0A) with a unique positive-locking design for secure mating

Helps ensure minimal contact resistance at the interface between the wire and the crimp barrel; contributes to the system's minimal heat generation in higher-current-carrying capacity compared to other designs

CABLE ASSEMBLY FEATURES AND ADVANTAGES



MultiCat Standard Discrete Wire Cable Assemblies

MultiCat Cable Assembly delivers a 10 to 40.0A current rating with connector position assurance (CPA) in a small package

Provides high power and a locking mechanism without sacrificing compactness



KK Plus 250 Discrete Wire Cable Assemblies

KK Plus 250 Cable Assembly offers a 2.50mm pitch and is available in a variety of cable lengths

Facilitates efficient prototyping and global preproduction, while saving time and resources



Mini-Fit Max Cable Assemblies

Mini-Fit Max Cable Assembly offers a 4.20mm pitch and is available in a variety of cable lengths

Supports compact and high-power application demands, for adaptable performance and long-term reliability

SEALED CABLE ASSEMBLY FEATURES AND ADVANTAGES



OTS Mizu-P25 Discrete Wire Sealed Cable Assemblies

Mizu-P25 Sealed Discrete Wire Cable Assemblies deliver up to 4.0A of current with 2 to 4 circuits in a miniaturized form factor
Designed to meet automotive standards for reliability in harsh environments, Mizu-P25 cable assemblies are vibration-resistant and IP67-rated for superior dust and water protection



MX150 Discrete Wire Sealed Cable Assemblies

MX150 Sealed Discrete Wire Cable Assemblies deliver up to 22.0A of current for power and signal applications in harsh environments
Features a USCAR interface and space-saving design for use in applications subject to high vibration and extreme temperatures



OTS Squba 3.60mm-Pitch Discrete Wire Sealed Cable Assemblies

Squba 3.60mm-Pitch Sealed Discrete Wire Cable Assemblies deliver up to 14.0A of current and an IP68 rating for resistance to water or dust ingress
Delivers reliable high-power performance for space-constrained applications subject to wet conditions

SEALED CABLE ASSEMBLY FEATURES AND ADVANTAGES



*OTS Squba 1.80mm-Pitch Discrete Wire
Sealed Cable Assemblies*

Squba 1.80mm-Pitch Sealed Discrete Wire Cable Assemblies deliver up to 6.0A of current and an IP68 rating for resistance to water or dust ingress

Offers miniaturized flexibility for reliable operation in applications subject to water or moisture exposure

PRE-CRIMPED LEADS

Molex's range of pre-crimped leads offers a simple and cost-effective solution for any pre-production and prototype requirements.

Available for the most popular Molex connector families, the leads are offered in female-to-female and male-to-male configurations and lengths of 75.00 to 600.00mm.



Speed

Pre-crimped and full test cable decreases time to market

Variety

Pre-crimped leads are available in multiple lengths, making them ideal for all prototype and pre-production requirements

Versatility

Leads crimped on both ends for use with wire-to-wire and wire-to-board applications

Quality

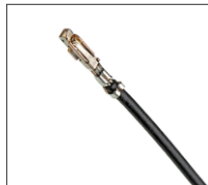
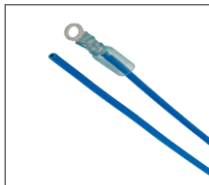
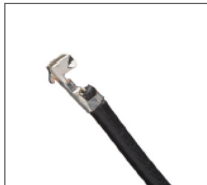
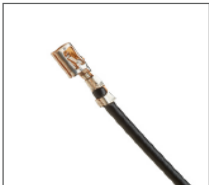
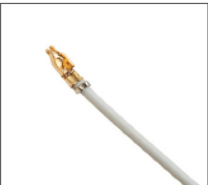
UL-listed cable assures high-quality approved materials

Choice

Pre-crimped leads are available for most popular Molex product families, helping customers choose the right connector before investing in tooling.

[OTS Pre-Crimped Leads
Web Overview](#)

PRE-CRIMPED LEAD OPTIONS

									
	PowerWize 6.00mm	C-Grid III	CLIK-Mate	DuraClik	KK	KK Plus	Mega-Fit	MicroClasp	Micro-Fit 3.0
									
Zero-Hachi	Micro-Lock Plus 2.0	Squba 1.80mm	Squba 3.60mm Tin	Micro-Lock	Milli-Grid	Mini-Fit	Mini-Lock	MLX	MultiCat
									
Micro-Fit Plus	Mini-SPOX 2.5	iGrid Gold and Tin	Solderless Ring	Nano-Fit	PicoBlade	Pico-Clasp	Pico-EZmate	Pico-Lock	Pico-SPOX
									
Stac64	Micro-One ISL	Mini-Fit SR Gold	Mini-Fit Sigma	Sabre	Sherlock	SL	Standard .062"	Standard .093"	Ultra-Fit

MARKETS AND APPLICATIONS



Consumer

- Home entertainment systems
- Home appliances
- Home security systems
- Portable devices
- Gaming consoles
- Mobile devices



Commercial Vehicle

- Aviation
- Drones
- Commercial aircraft cabins



Industrial Automation

- Process controls
- Industrial motors



MedTech

- Patient monitors
- Diagnostic equipment

FURTHER INFORMATION

Datasheets

Off-the-Shelf Discrete Wire Cable Assemblies

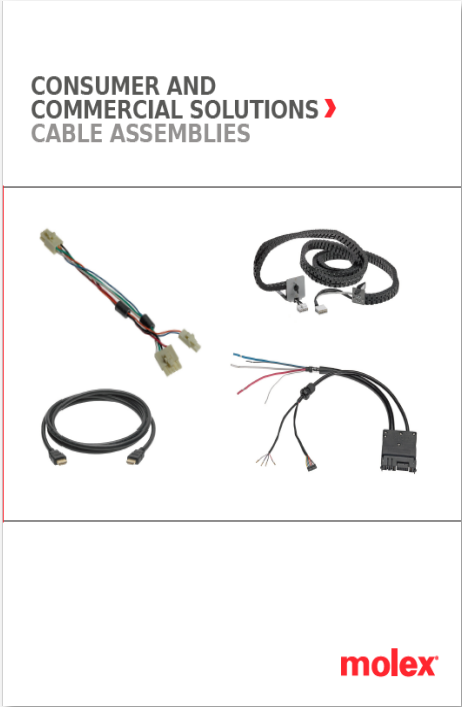
Off-the-Shelf Pre-Crimped Leads

Web Overview

Off-the-Shelf Cable Assemblies

Off-the-Shelf Pre-Crimped Leads

Brochure





THANK YOU

creating connections for life

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