

broadcast solutions



Camera Cables, Assemblies, Connectors & Panels



MOHAWK

Introduction

Why Should You Use Mohawk Broadcast Products?

You may have already been using Mohawk's broadcast products without even realizing it. Mohawk took its first steps into the broadcast sector over 30 years ago. We started working with RCA, becoming the first company to design and build TV81 cable and assemblies for the first live color TV broadcast. Since then, we have expanded our list of "firsts" in the industry, while becoming the preferred OEM cable and assembly supplier for the major camera manufacturers.

- First American SMPTE cable and assembly manufacturer.
- First SMPTE cable assemblies provided for the first live HD broadcast.
- First to design a plenum-rated SMPTE cable.
- First to design a 3-circuit Stadium cable.
- First to design a plenum-rated 3-circuit Stadium cable.
- First to design LEMO pigtail assemblies for on-site installations.

Who Is Mohawk?

Mohawk was established in 1952 as a manufacturer of wire and cable products which today include copper LAN, fiber optic cables and copper fiber composite designs. We were acquired by Intercole, Inc. in March 1986, which became Cable Design Technologies Corporation (CDT). CDT merged with Belden in July 2004. Mohawk is a division of Belden, one of the largest U.S.-based manufacturers of high-speed electronic cables. Belden employs 8,000 associates worldwide working in copper cable, fiber, wireless technology, connectors, switches and active components to bring voice, video and data to your mission-critical applications.

Mohawk has been a leading camera cable manufacturer for over 30 years, working to ensure that your equipment will never fail due to poor performance of a camera cable or assembly. Whether it is studio based or monitor platform, you can maintain that precise camera-cable performance throughout your broadcast application. We have a full line of quality professional broadcast digital signal processing cables and assemblies available including high definition SMPTE styles, fiber, multicore, and triax. We offer the only UL safety-listed plenum fiber optic cable for HDTV – so your picture can be transmitted flawlessly and safely from your studio to audiences around the world.

What Makes Mohawk Better Than Our Competitors?

At Mohawk we pride ourselves on our flexibility and work with our customers to design and provide custom-made assemblies. We deliver more types of camera cables, assemblies, and accessories than any other manufacturer, domestic or international. We excel at manufacturing custom lengths and custom configurations to meet any broadcast application.

With a wide variety of inventory stocked in our manufacturing facility we ensure a quick turnaround time to our customers. We keep the largest variety of assemblies in inventory to ensure mission critical turnaround times. To accommodate every customer need, we have taken critical steps within our manufacturing process to expand our production capacity and product offering.

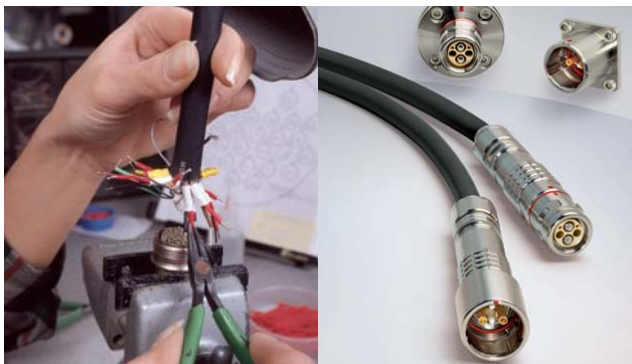
Mohawk has been on the cutting-edge of technical development for cable and connectivity, working with our OEMs and customers to develop products and

practices that have since become industry standards.

We have provided them with innovative solutions, such as our exclusive metal backshells for multipin connectors replacing the standard plastic shells that many of our competitors use. We also have developed and designed many versions of our SMPTE cable to meet customers' unique needs and situations; like our steadicam cable, plenum-rated SMPTE and 3-circuit Stadium cable.

Assembly Repair Services

This same quality and innovation continues in our repair services facility. If your existing cable assembly needs repair whether it was manufactured by Mohawk or even if it was provided by another vendor, let our technicians diagnose the problem and offer you a solution at a competitive cost. All of our assembly technicians have been certified in both the assembly of copper solder connections and the more delicate fiber polishing techniques for single-mode fiber. Each Mohawk assembly is identified with a serial number for complete traceability.



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Products comply with the EU-RoHs Directive 2002/95/EC (Restrictions on hazardous substances) regulations.

Multicore Connector

Quality Comparison

Mohawk's multicore assemblies provide superior quality. Our quality craftsmanship and continuous efforts for excellence set us apart from other assembly manufacturers. This comparison shows the differences between a

Mohawk assembly and a typical connector assembly. From this comparison it is easy to see why Mohawk is the approved OEM for camera cable assemblies for the industry's top five professional camera manufacturers.

Mohawk Connector Assembly

Mohawk isolates each conductor individually allowing for stronger protection over solder joints and isolation from other conductors to prevent electrical shorts.

Mohawk shields and shrink tubes each solder joint individually to protect the joint inside the connector from harsh field abuse.

Mohawk utilizes three set screws to prevent the connector from twisting and unscrewing when being connected to the camera. This also provides protection to the soldered pins preventing them from twisting, creating an open circuit which will result in electrical shorts.

Mohawk uses a longer heavy duty strain relief boot to provide more flexibility when managing the assembly.

Typical Connector Assembly

Typical connector assemblies do not isolate individual conductors up to the solder joints making them more prone to electrical malfunctions.

Typical connector assemblies wrap solder joints together with electrical tape as opposed to shrink tubing



them individually. This can lead to electrical shorts and malfunctions.

Typical connector assemblies use one set screw. As a result twisting can occur within the connector causing the conductors to become loose inside the connector leading to open pins and shorting.

Typical connector assemblies use a thinner shorter strain relief boot. This gives the assembly less flexibility when using the cable.



Quality Comparison

Mohawk's line of SMPTE assemblies has proven superior to typical fiber assemblies for many years. Built using only the highest quality material, Mohawk's assemblies stand out from the rest. This comparison shows the dif-

ferences in a Mohawk assembly and a typical fiber assembly. From this comparison, it is clear a Mohawk SMPTE assembly is the preferred choice in the industry.

Mohawk Connector Assembly

Mohawk uses a dust cap on the female end to protect the fiber from any contaminants.

Mohawk solders the copper conductors directly into the pins to prevent the conductor and pins from coming apart.

Mohawk uses epoxy per the connector standard and utilizes an internal process that allows epoxy to cure properly prior to completing assembly. This ensures a tight bond around the anchor.

Mohawk's SMPTE fiber cable is durable yet extremely flexible. We offer many UL listed and non-UL cables to suit any application. Indoors or out we have the right cable for your application.

Typical Connector Assembly

Typical cable assemblies have an exposed fiber which can lead to dirt and dust contamination causing the assembly to malfunction.

Typical cable assemblies crimp the copper conductors to the pins rather than soldering. Crimped conductors can become loose and wiggle inside the assembly or come free of the pin, resulting in an open circuit.

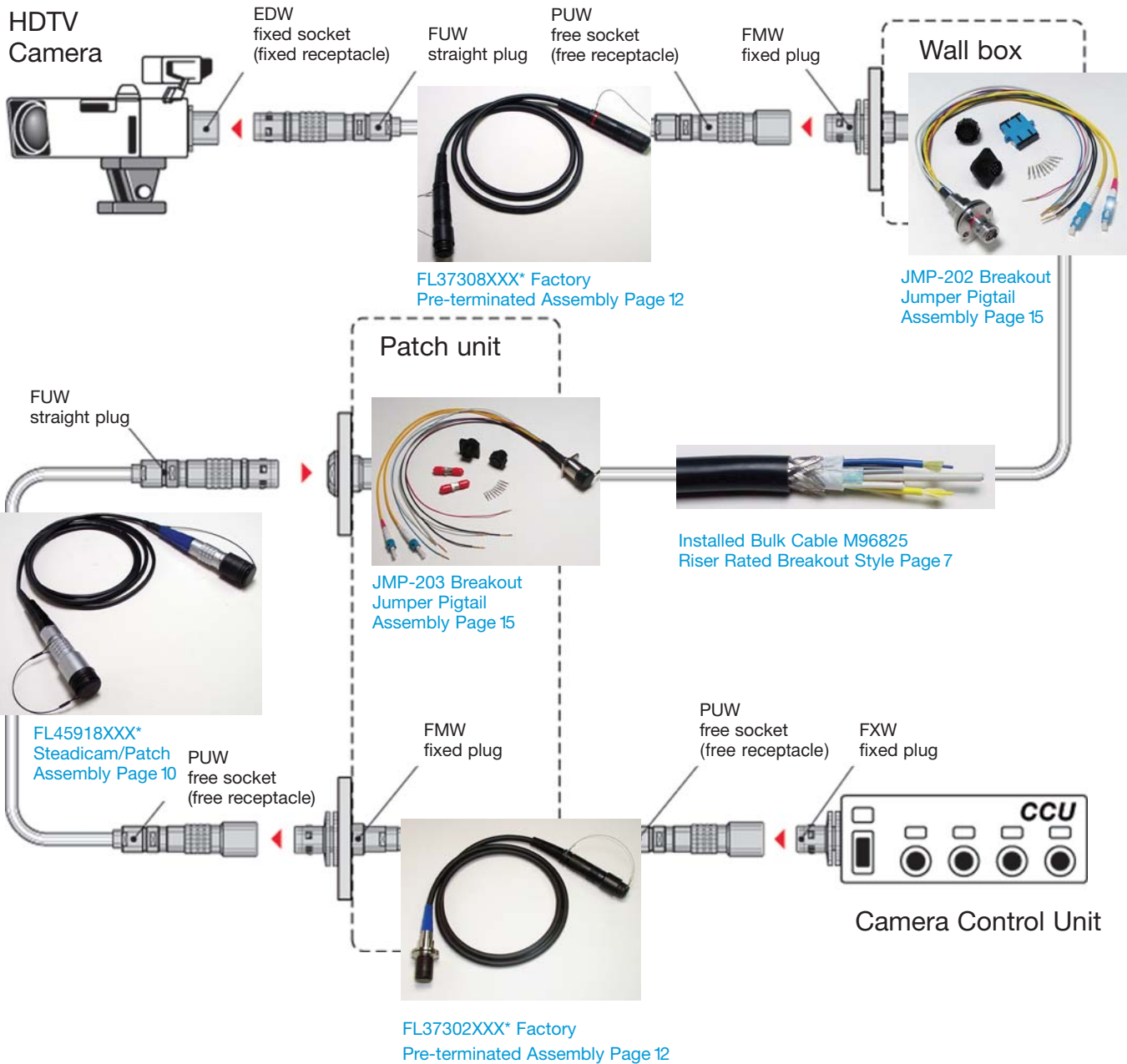
Typical cable assemblies use excessive epoxy to try and compensate for the curing process which can cause the connector to break and can also lead to malfunctions.

Many of the competitors' SMPTE fiber cables are stiff and difficult to work with. Many manufacturers only offer one or two versions of this product, limiting where the cables can be safely run.



Studio Configuration

Studio Configuration with On-site Installation



General Purpose Cables



M96040 Studio Light Duty



M97938 12mm Double Jacket

Product Description

Built to the SMPTE 311M spec, Mohawk offers the broadest range of cabling options for your HDTV infrastructure. These cables consist of two single-mode optical fibers, four 20 AWG and two 24 AWG tinned copper conductors cabled around a steel strength element, with an overall tinned copper braid.

The M96040 is the most popular version of SMPTE and is used in our standard assemblies. This general purpose cable is used for studios, patching and light to medium field use. A flexible PVC blend jacket allows for ease of use within the studio.

The M97938 cable is the same design as our M96040 cable except that it has a second jacket extruded over it. This cable is suitable for the same type of use as the M96040. The overall diameter is larger to eliminate the cable from getting caught under the camera skirt. The double jacket design also makes the cable more robust and durable.

Part Number	Component Specification	Performance Specifications	Nominal OD		Weight		Min. Bend Radius		Max Load (Installation)		Jacket
			inch	mm	lbs/M'	kg/km	inch	cm	lbs	Newtons	
M96040	2 x Tight buffered single-mode fibers 4 x 20 AWG (19x32) tinned copper 2 x 24 AWG (7x32) tinned copper Upjacketed stranded steel member O/A tinned copper braid shield 80% min coverage	0.80 dB/km* Max < 36 Ω/km < 92 Ω/km	0.362	9.2	84	125	2.5	6.0	160	710	Thermo-Plastic Elastomer
M97938	2 x Tight buffered single-mode fibers 4 x 20 AWG (19x32) tinned copper 2 x 24 AWG (7x32) tinned copper Upjacketed stranded steel member O/A tinned copper braid shield 80% min coverage	0.80 dB/km* Max < 36 Ω/km < 92 Ω/km	0.472	12	110	163	3.25	8.3	160	710	Thermo-Plastic Elastomer

* At 1310 nm

Outdoor Harsh Environment Cables



M96818 Harsh Environment

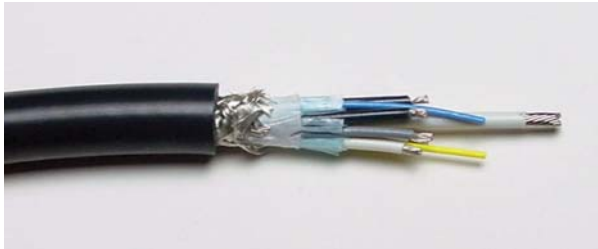
Product Description

The M96818 is built to the SMPTE 311M specification as well and is jacketed with a tough abrasion and UV-resistant polyurethane jacket. The polyurethane jacket is cut-through and water resistant, allowing it to stand up to the toughest elements. With a jacket temperature rating of -55°C to +85°C, this cable can withstand extreme temperatures and still operate flawlessly. We have incorporated Corning® bend insensitive fiber into our design which allows for extreme stress and tough use of this cable without affecting its performance. It is perfect for mobile trucks, outdoor venues and permanent outdoor installations.

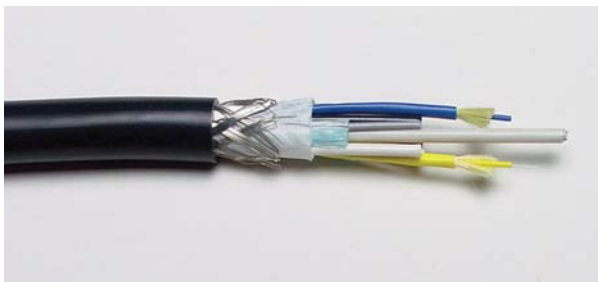
Part Number	Component Specification	Performance Specifications	Nominal OD		Weight		Min. Bend Radius		Max Load (Installation)		Jacket
			inch	mm	lbs/M'	kg/km	inch	cm	lbs	Newtons	
M96818	2 x Tight buffered single-mode fibers 4 x 20 AWG (19x32) tinned copper 2 x 24 AWG (7x32) tinned copper Upjacketed stranded steel member O/A tinned copper braid shield 80% min coverage	0.80 dB/km* Max < 36 Ω/km < 92 Ω/km	0.362	9.2	82	122	2.5	6.0	160	710	Polyurethane

* At 1310 nm

Permanent Installation Riser Cables



M96921 Riser Rated



M96825 Riser Rated Breakout Style

Product Description

Built to the SMPTE 311M spec, these cables are designed with a flame retardant PVC jacket for permanent installations in building riser. The jackets meet NEC Riser: CMR-OF. For permanent install applications in trays, conduit or shafts between floors.

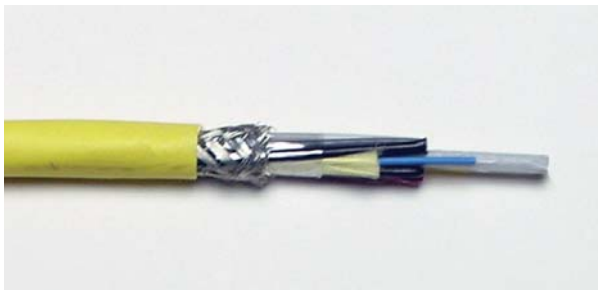
M96921 is the standard SMPTE design for use in factory pre-terminated assemblies. Choose the LEMO connectors needed for your cable run and Mohawk can build to length the assembly you need. Removing the connector shell on-site and utilizing the LEMO cable puller (page 16) can facilitate on-site installation of factory terminated assemblies.

M96825 is built with 2.0mm breakouts over the fibers to facilitate on-site termination using factory pre-terminated LEMO pigtail assemblies (page 15). Once the bulk cable is installed, the ends should be fanned out and terminated with the provided copper connector and field terminatable fiber connector of your choice. Utilizing this cable and the pigtail assemblies facilitates plug and play simplicity.

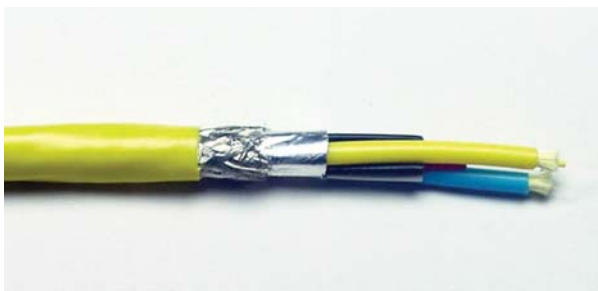
Part Number	Component Specification	Performance Specifications	Nominal OD		Weight		Min. Bend Radius		Max Load (Installation)		Jacket
			inch	mm	lbs/M'	kg/km	inch	cm	lbs	Newtons	
M96921	2 x Tight buffered single-mode fibers 4 x 20 AWG (19x32) tinned copper 2 x 24 AWG (7x32) tinned copper Upjacketed stranded steel member O/A tinned copper braid shield 80% min coverage	0.80 dB/km* Max < 36 Ω/km < 92 Ω/km	0.362	9.2	89	132	2.5	6.0	160	710	UV resistant PVC, UL type CMR-OF listing
M96825	2 x Tight buffered single-mode fibers pulled in with aramid strength elements under a 2mm jacket 4 x 20 AWG (19x32) tinned copper 2 x 24 AWG (7x32) tinned copper Upjacketed stranded steel member O/A tinned copper braid shield 80% min coverage	0.80 dB/km* Max < 36 Ω/km < 92 Ω/km	0.406	10.3	110	163	3.25	8.3	160	710	UV resistant PVC, UL type CMR-OF listing

* At 1310 nm

Permanent Installation Plenum Cables



M96924 Plenum Rated



M96920 Plenum Rated Breakout Style

Product Description

Built to the SMPTE 311M spec, these cables are designed with a flame retardant PVC jacket for permanent installations in building plenum and riser. The jackets meet NEC Plenum: CMP-OF. For permanent install applications in ceilings, under floors and ventilation shafts as well as all riser applications.

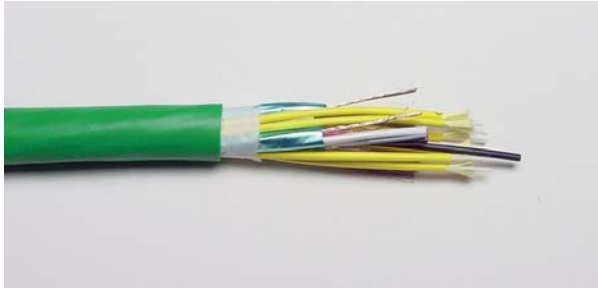
M96924 is the standard SMPTE design for use in factory pre-terminated assemblies. Choose the LEMO connectors needed for your cable run and Mohawk can build to length the assembly you need. Removing the connector shell on-site and utilizing the LEMO cable puller (page 16) can facilitate on-site installation of factory terminated assemblies.

M96920 is built with 3.0mm breakouts over the fibers to facilitate on-site termination using factory pre-terminated LEMO pigtail assemblies (page 15). Once the bulk cable is installed, the ends should be fanned out and terminated with the provided copper connector and field terminatable fiber connector of your choice. Utilizing this cable and the pigtail assemblies facilitates plug and play simplicity.

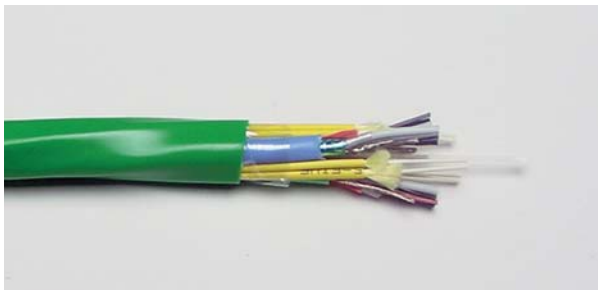
Part Number	Component Specification	Performance Specifications	Nominal OD		Weight		Min. Bend Radius		Max Load (Installation)		Jacket
			inch	mm	lbs/M'	kg/km	inch	cm	lbs	Newtons	
M96924	2 x Tight buffered single-mode fibers 4 x 20 AWG (19x32) tinned copper 2 x 24 AWG (7x32) tinned copper Upjacketed stranded steel member O/A tinned copper braid shield 80% min coverage	0.80 dB/km* Max < 36 Ω/km < 92 Ω/km	0.256	6.5	61	91	2.5	6.0	160	710	Plenum rated Thermo-Plastic UL type CMP-OF listing
M96920	2 x Tight buffered single-mode fibers pulled in with aramid strength elements under a 3mm jacket 4 x 20 AWG (19x32) tinned copper 2 x 24 AWG (7x32) tinned copper O/A tinned copper braid shield 80% min coverage	0.80 dB/km* Max < 36 Ω/km < 92 Ω/km	0.362	9.2	84	125	2.5	6.0	160	710	PVDF-Copolymer UL type CMP-OF listing

* At 1310 nm

Stadium Cables



M97673 Riser Rated



M97767 Plenum Rated

Product Description

Mohawk's Stadium cable is built with the components of three single SMPTE cables under one jacket. With this one cable, you have the ability to run 3 HDTV cameras. You will have lower installation costs with this high density design.

M97673 has a riser rated jacket for installation building risers. M97767 is designed with a plenum rated jacket for installation in building plenum and risers. Stadium cable is designed for on-site installation to be used in conjunction with factory terminated LEMO pigtail assemblies (page 15). Once bulk cable has been pulled, the ends should be fanned out and terminated with the provided copper connector and field terminatable fiber connector of your choice.

Part Number	Component Specification	Performance Specifications	Nominal OD		Weight		Min. Bend Radius		Max Load (Installation)		Jacket
			inch	mm	lbs/M'	kg/km	inch	cm	lbs	Newtons	
M97673	6 x Tight buffered single-mode fibers pulled in with aramid strength elements under 2mm jacket	0.80 dB/km* Max									UV-resistant PVC, UL type CMR-OF listing
	6 x 18 AWG (19x30) tinned copper	< 23 Ω/km	0.525	13.34	148	220	3.5	8.9	160	710	
	6 x 24 AWG (7x32) tinned copper Sub-units are cabled with a drain wire and O/A aluminum mylar tape	< 92 Ω/km									
M97767	6 x Tight buffered single-mode fibers pulled in with aramid strength elements under a 2mm jacket	0.80 dB/km* Max									Kynar, UL type CMP-OF listing
	6 x 18 AWG (19x30) tinned copper	< 23 Ω/km	0.553	14.05	209	311	3.5	8.9	120	534	
	6 x 24 AWG (7x32) tinned copper Sub-units are cabled with a drain wire and O/A aluminum mylar tape	< 92 Ω/km									

* At 1310 nm

Steadicam/Patch Cables



M97176 Steadicam/Patch

Product Description

This lightweight cable was designed specifically for steadicam operators who are using cameras with SMPTE 304M connectors. No external power is needed when this cable is used. This lightweight flexible cable is designed to have no effect on a steadicam operator's shot. Also used as an alternative for SMPTE patch cables, the small diameter of the cable allows for easy patching without the added bulk of a traditional SMPTE cable. M97176 has 2 single-mode fibers to transmit the video data and 5 copper conductors to power a short distance. Mohawk does not recommend lengths over 15 feet.

Part Number	Component Specification	Performance Specifications	Nominal OD		Weight		Min. Bend Radius		Max Load (Installation)		Jacket
			inch	mm	lbs/M'	kg/km	inch	cm	lbs	Newtons	
M97176	2 x Tight buffered single-mode fibers 5 x 26 AWG (7x34) tinned copper Cabled together with aramid yarn strength members	0.80 dB/km* Max < 145 Ω/km	0.166	4.2	18	27	1.0	6.0	160	710	UV-resistant PVC, UL type CMR-OF listing

* At 1310 nm

Steadicam Assemblies



FL45918XXX

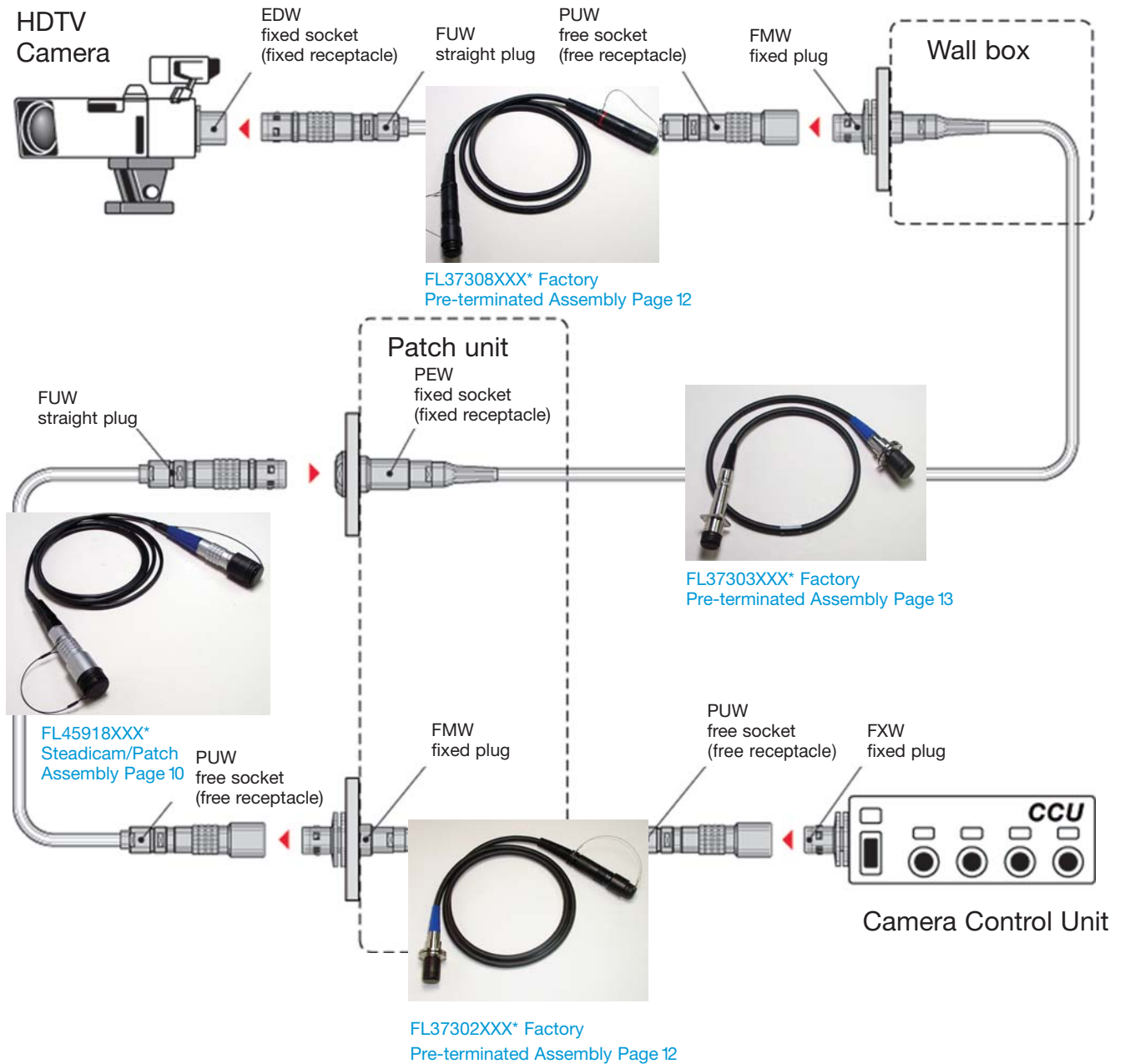
(XXX – length in feet)

Product Description

Mohawk can provide you with factory pre-terminated Steadicam assemblies for your high def applications. Utilizing our steadicam cable and LEMO connectors, we can provide a lightweight fiber alternative to traditional SMPTE cable. Available in custom lengths up to 15 feet.

Studio Configuration

Studio Configuration with Pre-terminated Assemblies



*XXX= Length in feet

Factory Pre-terminated LEMO Assemblies

Product Description

Mohawk has partnered with LEMO to offer a high end assembly option to its customer base. LEMO's rugged stainless steel connectors, coupled with the exceptional workmanship and outstanding quality that Mohawk brings to its SMPTE hybrid fiber assemblies, continues to make Mohawk the clear leader in the field. Machine polished for >45db RL or better and tested end to end optically and electrically, Mohawk provides test reports with every assembly. All Mohawk broadcast assemblies are backed by our unprecedented 1 year factory warranty due to any defect in material or workmanship. All in-line heavy duty stainless steel connectors come standard with a rugged full length rubber strain relief boot that ensures the connectors stay in like-new condition and prevent damage. All assemblies are custom made to order in any length with some standard lengths stocked. If you have a custom requirement that you do not see in our catalog, please contact your factory representative for a quote.



Assembly Part Number	Cable Part Number
FL37308XXX	M96040
FL37305XXX	M96818
FL37312XXX	M97938
FL44242XXX	M96921
FH43888XXX	M96924

(XXX – length in feet)

Standard In-Line PUW/FUW



Assembly Part Number	Cable Part Number
FL37302XXX	M96040
FL37327XXX	M96818
FL37328XXX	M97938
FL44244XXX	M96921
FH43891XXX	M96924

(XXX – length in feet)

Permanent Installation PUW/FMW

Factory Pre-terminated LEMO Assemblies



Permanent Installation PBW/FUW

Assembly Part Number	Cable Part Number
FL37304XXX	M96040
FL37326XXX	M96818
FL37329XXX	M97938
FL44246XXX	M96921
FH43893XXX	M96924

(XXX – length in feet)



Permanent Installation PEW/FUW

Assembly Part Number	Cable Part Number
FL37321XXX	M96040
FL37336XXX	M96818
FL37332XXX	M97938
FL44248XXX	M96921
FH43892XXX	M96924

(XXX – length in feet)



Permanent Installation PBW/FMW

Assembly Part Number	Cable Part Number
FL37303XXX	M96040
FL37333XXX	M96818
FL37334XXX	M97938
FL44243XXX	M96921
FH43889XXX	M96924

(XXX – length in feet)

Misc. Fiber Assemblies



Neutrik OpticalCon® Connector Assemblies

Available in a fiber only or a hybrid fiber and copper configuration, Mohawk can build assemblies with our tactical fiber cable or SMPTE hybrid designs.



CCBF Assemblies

Designed with 2 single-mode fibers and a nylon strength member. Utilized with permanently installed Sony robotic cameras, the fiber transports the video feed with local power to the camera. The strength member is tied off on to the back of the camera to support the connector ends.

Product Description

Mohawk can manufacture a variety of fiber assemblies to meet your every need. Whether it is a simple fiber patch cord or permanently installed fiber fan-outs, Mohawk has the capabilities to build to your needs.



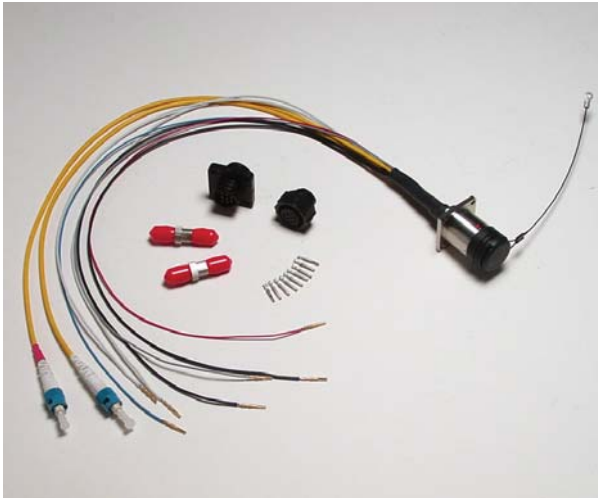
Permanent Install Fiber Fan-outs

Available in any fiber cable type or connector (SC, ST, LC or FC) of your choice. Mohawk offers a of variety plenum and riser rated cables including indoor/outdoor applications. Custom built to your requirements with fiber count, glass type, connector type and lengths all available to fit any need.

Breakout Jumper Pigtail Assemblies



Plug FXW



Socket EDW

Product Description

Mohawk factory terminated LEMO pigtail assemblies allow for on-site installation of SMPTE cable infrastructures with simple terminations. Because traditional LEMO connectors are not a field installable connector, Mohawk developed the pigtail assembly. A bulkhead LEMO connector is used with individual fiber and copper wires to mate with installed bulk cable. Installers can pull bulk SMPTE cable, such as our riser M96825 or our Stadium cable, M97673. The bulk cables are fanned out on the ends and terminated with a field installable fiber connector of your choice. Mohawk pigtail assemblies come as a package with the assembly, a fiber adapter, copper adapter and copper crimp pins and shell for your installed bulk cable. All pigtail assemblies can be made with the fiber connector of your choice; SC, ST, LC or FC. Custom configurations can be accommodated as well. All pigtails are made 18" as a standard, but other lengths can be made upon your request.

Pigtail assemblies to be used with single SMPTE runs (M96825 or M96920)

Mohawk Part Number	Connector Configuration
JMP-202	LEMO FXW - SC connectors
JMP-203	LEMO EDW - SC connectors
JMP-206	LEMO FXW - ST connectors
JMP-207	LEMO EDW - ST connectors
JMP-224	LEMO FXW - LC connectors
JMP-225	LEMO EDW - LC connectors

Pigtail assemblies to be used with Stadium cable

Mohawk Part Number	Connector Configuration
JMP-208	LEMO FXW - SC connectors
JMP 209	LEMO EDW - SC connectors
JMP-219	LEMO EDW - ST connectors
JMP-220	LEMO FXW - ST connectors

Cleaning & Installation Tools



FBR-A375 – Mohawk SMPTE Cleaning Kit

Everything you need to clean any basic fiber connector as well as LEMO SMPTE connectors. Kit includes LEMO contact extraction tool, a refillable bottle of 91% isopropyl alcohol, lint-free wipes, 100 lint-free swabs and cleaning instructions packaged in a convenient nylon carrying case.



FBR-A001 – LEMO Contact Extraction Tool

LEMO tool allows for removal of alignment sleeves on plug end for cleaning purposes.

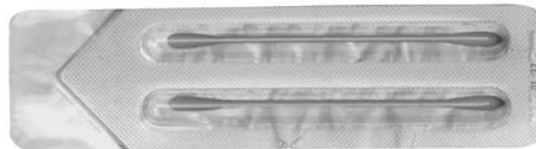
Product Description

Cleaning is an extremely important part of maintaining your Mohawk SMPTE assemblies as well as any type of fiber connector. More than 50% of the issues that arise with fiber optic assemblies are because the fiber contacts need cleaning.



FBR-A002 – LEMO Contact Extraction & Cleaning Tool

LEMO tool encompasses the extraction tool, alcohol reservoir and swab holder in one tool.



FBR-A003 – Cleaning Swabs

Single use burst packs with a dry swab and a pre-moistened swab for cleaning.



FBR-A007 – LEMO Cable Puller

Temporarily replaces the outer connector shell to allow the pulling of factory terminated assemblies on-site. Contact Mohawk for more information on this cabling option.

Panels/Enclosures/Reels

Product Description

Mohawk offers a variety of panels, enclosures for SMPTE infrastructures and reels for normal handling of cable assemblies.



6 Position Flat Panels

FBR-A312 – Accommodates 6 FMW or FXW connectors
FBR-A310 – Accommodates 6 EDW or PBW connectors



6 Position Lacing Bar

FBR-A311 – Accommodates 6 SC adapters and 6 copper adapters
FBR-A313 – Accommodates 6 ST adapters and 6 copper adapters



6 Position Angled Panels

FBR-A344 – Accommodates 6 bulkhead plug or bulkhead socket (Not PEW)



Pigtail Enclosures

3P-EDW-ENCL – Black enclosure houses 3 EDW pigtail assemblies with SC and copper connectors*
3P-FXW-ENCL – Black enclosure houses 3 FXW pigtail assemblies with SC and copper connectors*



High Density Angled Panels

FBR-A316 – Accommodates 10 FMW or FXW connectors
FBR-A317 – Accommodates 12 EDW or PBW connectors

Deployable Reels



Mohawk offers deployable reels for various size cables. Our standard reel has a sturdy metal frame with removable casters for ease of transport. Reels come in various sizes to accommodate different size and length cable assemblies. Please contact

your Mohawk representative to see which size reel will best fit your needs.

*For other connector options, please contact the factory for part numbers.

Tactical Fiber Products

Cables



M96569 10 Fiber Count

Product Description

Tactical fiber optic cables are designed for harsh outdoor environments where maximum performance and reliability is essential. The 900µm tight buffer optical fiber cables feature lightweight but exceptionally strong aramid yarn strength members which give the cable its superior strength to weight ratio benefits. The core is protected by a sunlight, abrasion and cut-through resistant polyurethane outer jacket. The jacket also provides for a broad range of environmental operating conditions down to -55°C. Used in outdoor sporting, news and broadcast events for ENG vehicles and other re-deployable A/V communications. See page 17 for field deployable reels.

Single-Mode

Part Number	Fiber Count	Nominal OD		Weight		Min. Bend Radius				Max. Load (Installation)	
		mm	in.	kg/km	lbs/M'	Short Term		Long Term		Newton	lbs.
M96566	2	5.3	.210	28	19	8.3	3.2	4.3	1.7	1468	330
M96639	4	5.7	.225	28	19	8.6	3.4	4.6	1.8	1468	330
M96567	6	6.1	.240	36	24	9.1	3.6	4.8	1.9	1468	330
M96568	8	6.3	.250	39	26	9.7	3.8	6.4	2.5	1468	330
M96569	10	6.7	.265	42	28	10.2	4.0	6.9	2.7	1468	330
M96570	12	6.5	.255	36	24	9.7	3.8	5.1	2.0	1468	330

Multimode (62.5/125)

Part Number	Fiber Count	Nominal OD		Weight		Min. Bend Radius				Max. Load (Installation)	
		mm	in.	kg/km	lbs/M'	Short Term		Long Term		Newton	lbs.
M96571	2	5.3	.210	28	19	8.3	3.2	4.3	1.7	1468	330
M96551	4	5.7	.225	28	19	8.6	3.4	4.6	1.8	1468	330
M96572	6	6.1	.240	36	24	9.1	3.6	4.8	1.9	1468	330
M96573	8	6.3	.250	39	26	9.7	3.8	6.4	2.5	1468	330
M9657	10	6.7	.265	42	28	10.2	4.0	6.9	2.7	1468	330
M96575	12	6.5	.255	36	24	9.7	3.8	5.1	2.0	1468	330

Multimode (50/125) optical fiber also available, contact factory.

Optical Characteristics

Glass Type	Wavelength nm	Attenuation dB/km		Bandwidth MHz-km
Single-Mode	1310	0.50 Typical	0.80 Max	-
	1550	0.40 Typical	0.50 Max	-
Multimode 62.5/125	850	2.70 Typical	3.50 Max	160 Min
	1300	0.75 Typical	1.25 Max	500 Min



Hermaphroditic Connectors

These meet the SMPTE 358M specification and are available in custom lengths. TAC-4 and TAC-12 are the most popular interface types, with other fiber counts and glass types available.



Expanded Beam Assemblies

This small and lightweight connector allows for easy cleaning and hermaphroditic design for ease of use. Available in 2 or 4 fiber only versions or hybrid design.

Product Description

All tactical fiber assemblies are made with the fiber count and glass type of your choice. Assemblies are custom built to order to any length your project requires. Choose your cable and connector type and we can build you what you need.



Tactical Fiber Fan-Outs

Available in custom lengths with your choice of SC, ST, LC or FC connectors.

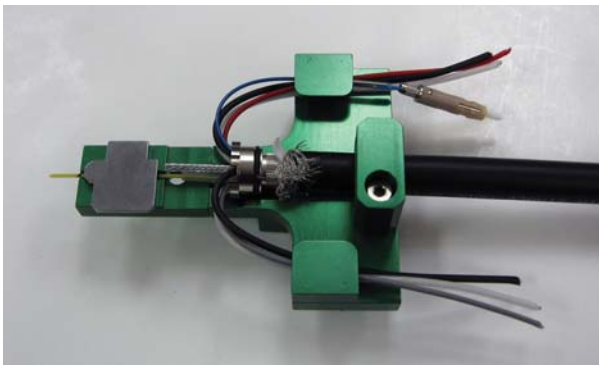
Field Service Repair & Terminations



Product Description

Mohawk has teamed with a network of LEMO certified field technicians to help facilitate on-site installation and repairs. When it is not feasible to ship cables back to our factory for repair or the only option is on-site termination of installed cable, Mohawk can now provide you with a technician to come to your location to facilitate this for you. Utilizing fusion splice technology, our field technicians can terminate or repair LEMO SMPTE connectors, giving you the same reliability and performance you would expect from a factory polished connector.

3SAE Technologies S177-HD Fusion Splicer



- Repair damaged SMPTE 311 hybrid cables
- Repair damaged SMPTE 311 hybrid cables on-site in a fraction of the time as conventional methods
- Terminate custom length cables on-site with factory results
- 100% compatible with the global standard LEMO SMPTE 304M connectors
- Splices standard 125um fibers with 250um and 900um coatings
- Easy fiber management without splice trays
- Total insertion loss of .30dB or less

Mohawk is an authorized re-seller for all LEMO connectors, parts and tools, which makes it a one-stop shop for all your repairs and new-build needs.



MCC - 26 Pin Multicore

Product Description

Mohawk builds various 26 pin multicore assemblies for use with JVC, Ikegami, Hitachi and Panasonic equipment. Built with male and female connectors, a 26 pin coupler is needed to join two cables together (see page 23). All assemblies are built to meet or exceed all camera manufacturer's specifications. Available in custom lengths and panelmount connectors for permanent installation. Please contact your Mohawk representative for the correct part numbers for your camera needs.



CP - 8 Pin

Product Description

This 8 pin male to male cable is used with multiple control systems and devices manufactured by Ikegami. These assemblies are built to meet or exceed the camera manufacturer's specifications. Available in custom lengths.

Copper Assemblies

Multicore



CCZAD - Digital 26 Pin

This digital 26 pin assembly allows for component digital SDI signal up to 150 meters with proper Sony equipment. Available in custom lengths as well as panelmount connectors for permanent installation. This assembly is built with male and female 26 pin connectors that require an adapter for joining two assemblies together (see page 23).



CCA7 - 10 Pin

This 10 pin male to female assembly is a remote control cable used with various Sony equipment. Built to meet or exceed the camera manufacturer's specifications. Available in custom lengths.



CCA5 - 8 Pin

This 8 pin male to male assembly is a camera control cable assembly that works with various Sony equipment. Built to meet or exceed camera manufacturer's specifications. Available in custom lengths.



CCQ-AM - 14 Pin

This 14 pin male to female assembly is used with various Sony equipment. Built to meet or exceed camera manufacturer's specifications. Available in custom lengths.

Multicore



KR - 28 Pin

This 28 pin assembly utilizes male to female connectors. Built to meet or exceed the camera manufacturer's specifications. Custom lengths and panelmount connectors are available.

Misc. Multicore Products

26 Pin Adapters



26 Pin Adapters

Product Description

26 pin assemblies are made with connectors that require an adapter to join two cables. Our cablemount or panelmount adapters will work with all 26 pin assemblies that Mohawk currently manufactures for all camera system providers.

Bulk Video Triaxial Cables

Product Description

Mohawk offers both industry standard RG59/U (3/8") and RG11/U (1/2") cable. The smaller 3/8" triax is more flexible and generally used for portable cameras or shorter runs. The 1/2" triax has lower attenuation values that will allow for longer cable runs. Both cables may be used with various OEM triax adapter systems for SD/HD transmission. The Mohawk Dura-Flex jacket was developed to enhance flexibility and provide excellent protection through a wide range of temperatures.



M52479 1/2" Triax

M80248 3/8" Triax

Mohawk Part Number	AWG (stranding) Nom DCR	Dielectric Type		Shield Type	Nominal OD		Nom Imp ohms	Nominal Capacitance		Nom Attenuation			Weight				
		Inch	mm		Inch	mm		pF/ft	pF/m	freq MHz	dB/ 100 ft	dB/ 100m	lbs/ M'	kg/ km			
M80248 UL AWM/10296 3/8" Triax RG-59/U Type	20 (Solid) 032 Bare Copper 10.1 Ω/M' 33.1Ω/km	Cellular Polyethylene 146	3.71	2 BC- Inner 2.5 Ω/M' 8.3 Ω/km Outer 1.6 Ω/M' 5.3 Ω/km 95% Shield Coverage	.355	9.02	75	16.2	53.2	1	.3	.98	85	126			
										10	.8	2.62					
										Polyethylene Insulation					71.5	2.2	7.22
										Between Braids					135	3.0	9.84
										Black Dura-Flex Jacket					270	4.2	13.78
										100% Sweep Tested 5-850 MHz					360	4.8	15.75
										Min. SRL 21 dB					540	5.9	19.36
															720	6.9	22.64
															1000	8.8	28.87
										M52479 UL AWM/10296 1/2" Triax RG-11/U Type	14 (19x27) .064 Bare Copper 3.1 Ω/M' 10.2 Ω/km	Cellular Polyethylene .312			7.92	2 BC-Inner 1.8 Ω/M' 5.9 Ω/k Outer 1.4 Ω/M' 4.6 Ω/km 95% Shield Coverage	.510
10	.50	1.64															
Polyethylene Insulation			71.5	1.20	3.94												
Between Braids			135	1.80	5.92												
Black Dura-Flex Jacket			270	2.60	8.53												
100% Sweep Tested 5-850 MHz			360	3.10	10.17												
Min. SRL 21 dB			540	3.90	12.80												
			720	4.70	15.42												
			1000	5.70	18.70												

Triax Assemblies



Product Description

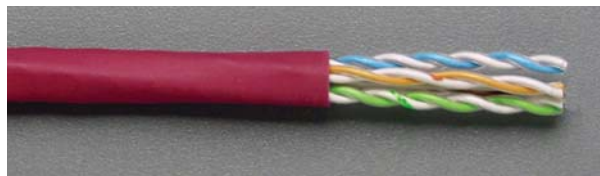
All triax assemblies are available in custom lengths and with various connector options. Kings Tri-Lock connectors are standard issue with all Mohawk assemblies. Also available are LEMO, Fischer and ADC triax connector options.

Low Skew Video Twisted Pair Cable

Product Description

With fast growing applications such as digital signage and in-studio video monitoring becoming mainstream, Mohawk has developed an unshielded twisted pair cable as an alternative to coax for RGB (Red,Green,Blue) or component style video broadcasts. The cable consists of a standard “Category” style design using four twisted pairs under one jacket. This allows the cables to be smaller than the standard style coax type cables that have been traditionally used for RGB applications.

The primary benefit is the cable’s built-in “low-skew.” Skew is defined as the difference in signal delay between any pairs in the same cable. This cable has a skew of **2.2ns/100m**. This means that all parts of the image being transmitted along the separate pairs of cable will arrive within 2.2 nanoseconds of each other, ensuring the clearest image on the receiving monitor. The lower the skew, the longer the lengths of cable that can carry the video transmission before experiencing some form of degradation of the image. The cable can transmit component type video on lengths of up to **2000 ft**.



Applications

- Retail Signage
- Supermarkets
- Education
- Government
- Hospitality
- Transportation

Mohawk Part Number	Cable Type	Dielectric Type	Jacket Type		Weight		Listings
			inch	Diameter mm	lbs/M'	kg/km	
M58813 Non-Plenum	4 PAIR 23 AWG UTP	Thermoplastic	Maroon PVC .190	4.8	20	30	C(ETL)US CMR
M58814 Plenum	4 PAIR 23 AWG UTP	Dual Insulation** FEP on all 4 pairs	Maroon ThermoPlen® .185	4.7	23	34	C(ETL)US CMP
M58841 LSZH	4 PAIR 23 AWG UTP	Thermoplastic	Maroon LSZH .196	4.98	26	39	N/A
M58854 Indoor/Outdoor	4 PAIR 23 AWG FLOODED	Thermoplastic	Black LSZH .250	6.35	41	61	C(UL)US CM-LS

*Plenum rated Thermoplastic. **US Patent No. 5,563,377.
Custom colors available; please consult the factory.

Other Mohawk Cables

Copper Category UTP Cables

- XGO Augmented Category 6A
- GigaLAN Category 6E
- AdvanceNet Category 6+
- 6 LAN Plus Category 6e
- 6 LAN Category 6
- MegaLAN Category 5E

Copper Category F/UTP Cables

- 5eLAN Category 5e
- High Pair Count
- Category 6
- MegaLAN Category 5E
- 5eLAN Category 5e
- High Pair Count

Fiber Optic Cables

- Tactical
- Distribution Riser
- Distribution Plenum
- VersaLite TBF Indoor/Outdoor Tight Buffer
- VersaLite Indoor/Outdoor Plenum
- RiserLite Indoor/Outdoor Loose Tube
- RiserLite Armored Loose Tube

- RiserLite Central Loose Tube
- Outdoor Central Tube
- Outdoor Loose Tube
- Armored Loose Tube
- ArmorLite
- Plug & Play Assemblies
- Field Breakout Kit

broadcast solutions



Camera Cables, Assemblies, Connectors & Panels



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