



Optical Industrial Cable Assemblies and Adapters

106059 LC Duplex

106059 SC Simplex

106059 MPO Multi-fiber

Easy optical connections are now possible in harsh industrial environments with Molex's optical industrial cable assemblies

Designed with rugged and compact housings, Molex's optical industrial assemblies incorporate the high-performance of a fiber optic connection with the versatility of a rugged industrial connector. The assemblies guarantee an environmentally sealed optical connection in one step, with the combined push-pull insertion and bayonet-style mechanical latch. The bulkhead adapter mounts directly in a panel cut-out, serving as a sealed feed-through. The removable connector provides sealing between both the adapter mating-surface, as well as the cable exiting the connector.

Molex's optical industrial assemblies are compatible with many fiber types and cable constructions and are ideal for both indoor and outdoor applications. This assembly is particularly well-suited for long distances or remote connections using either single mode or multimode fiber.

Available in a simplex SC, Duplex LC, and multi-fiber MPO version, these assemblies offer a sealed fiber optic connection to fit many applications from bi-directional single fiber up to 12 fiber ribbon connections. Assemblies are available in pigtails (single-ended), jumpers (dual-ended) and breakout assemblies, to any Molex standard fiber optic connector. The assemblies can be manufactured in lengths from 1.0 meter to well over 1.0 kilometer.

The industrial duplex LC assembly has been ratified as a 'Standard Interface' in the ODVA (Open DeviceNet Vendors Association) as a next generation industrial interconnect.



(Left to right) Industrial MPO, Industrial SC, Industrial LC Cable Assemblies

Features and Benefits

- Provides moisture and dust protection for use in harsh industrial environments
- Sealed panel feed-through design for easy installation into enclosures
- 100% optically tested to ensure quality performance assemblies
- Available in single mode and multimode styles to work with any common fiber type
- Housing is NEMA 6P and IP67 rated which ensures dust and moisture protection
- Push-pull insertion with bayonet-style mechanical latch provides easy installation and removal
- Broad temperature range (-40 to +85°C) is ideal for indoor or outdoor applications

APPLICATIONS

Markets and Applications

- Industrial
 - System controls
 - Monitoring
 - High Electro Magnetic Interference (EMI) and Radio Frequency Interference (RFI) areas
- Medical equipment
- Telecommunication/CATV
 - FTTx
 - Outdoor system connections
- Other markets
 - Rugged test equipment
 - Mobile broadcasting or audio visual equipment
 - Food processing



Ball Park — outdoor system connections

SPECIFICATIONS



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Indoor and Outdoor Industrial LC Assemblies with Industrial LC Adapters



Indoor industrial LC Assemblies with In-line Industrial LC Adapter



Outdoor Industrial SC Assembly with Industrial SC Adapter and SC Cable Assembly



Outdoor Industrial MPO Assembly with Industrial MPO Adapter and MPO Cable Assembly

Reference Information

Packaging: Cable Assemblies: Individual bag or spool
Adapters: Individual bag

Mates With: Standard LC, SC, or MPO assemblies (respectively)

Designed In: Inches

Optical

Insertion Loss:

Single mode <0.35dB max. (0.13dB typical)

Multimode <0.50dB max. (0.10dB typical)

Return Loss:

Single mode 45 to 55dB

Wavelength:

Single mode 1310 or 1550nm

Multimode 850 or 1300nm

Physical

Housing: Polymer

Ferrule: Zirconia Ceramic

Operating Temperature:

-40 to +85° C

Cable Type: Indoor or outdoor

Fiber Type: Single mode or multimode

ORDERING INFORMATION

Cable Assemblies

Order No.	Connector Type	Cable	Fiber Count	Fiber Type
106059-0100	Industrial LC	Indoor	2	Multimode
106059-0110				Single mode
106059-1100		Multimode		
106059-1110		Single mode		
106059-2020	Industrial SC	Outdoor	1	Multimode
106059-2025				Single mode
106059-6100	4		Multimode	
106059-6105	8			
106059-6110	12			
106059-6115	4		Single Mode	
106059-6120	8			
106059-6125	12			

Note: 1. Optical industrial assemblies are supplied in a cable assembly form only

2. Above part numbers are for reference drawings only, all assemblies will be assigned custom part numbers

Cable Assembly Accessory

Order Number	Description
106059-0020	Dust Cap/Pulling cap

Adapters

Order No.	Alignment Sleeve	Type	Mode
106059-0200	Phosphor Bronze	Industrial LC to Duplex LC	Multimode
106059-0210	Zirconia		Single mode
106059-3110	Phosphor Bronze	Industrial LC to Industrial LC (in-line)	Multimode
106059-3100	Zirconia		Single mode
106059-2030	Phosphor Bronze	Industrial SC to Simplex SC	Multimode
106059-2031	Zirconia		Single mode
106059-4100	Phosphor Bronze	Industrial SC to Industrial SC (in-line)	Multimode
106059-4110	Zirconia		Single mode
106059-6200	None	Industrial MPO to MPO/MTP	Single mode/Multimode



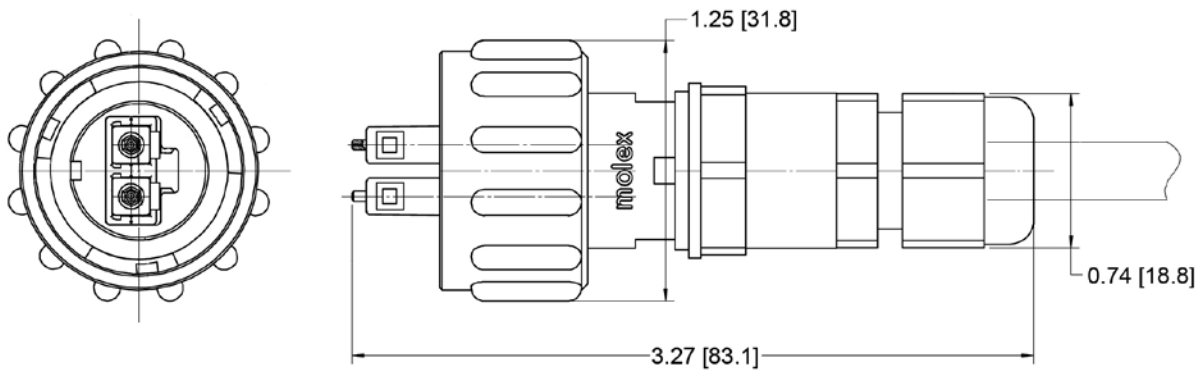
Optical Industrial Cable Assemblies and Adapters

106059 LC Duplex

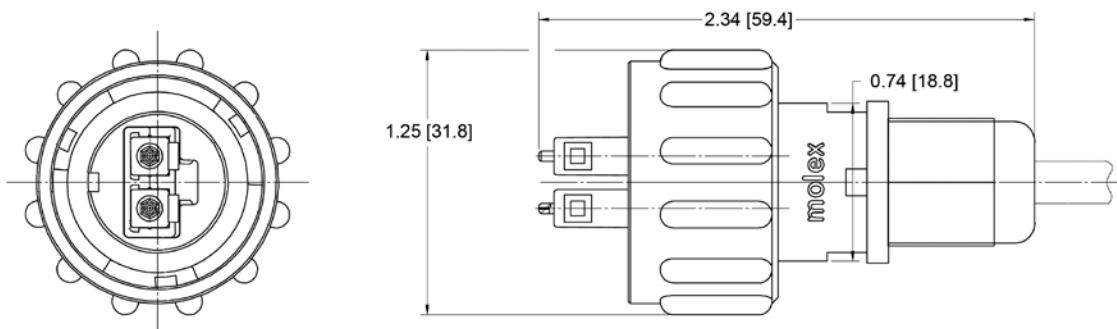
106059 SC Simplex

106059 MPO Multi-fiber

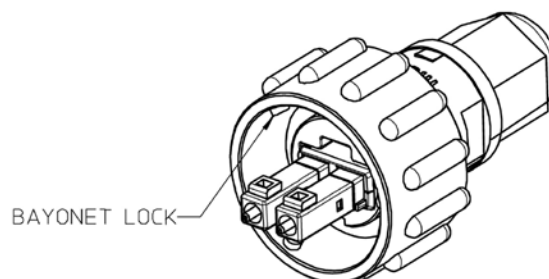
Industrial LC with Outside Plant Cable



Industrial LC with Indoor Cable



All dimensions are in INCHES
(MILLIMETERS)



ORDERING INFORMATION



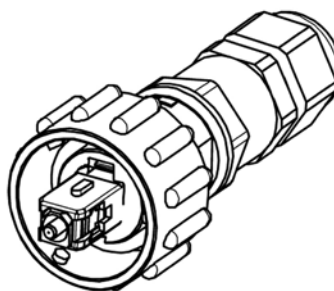
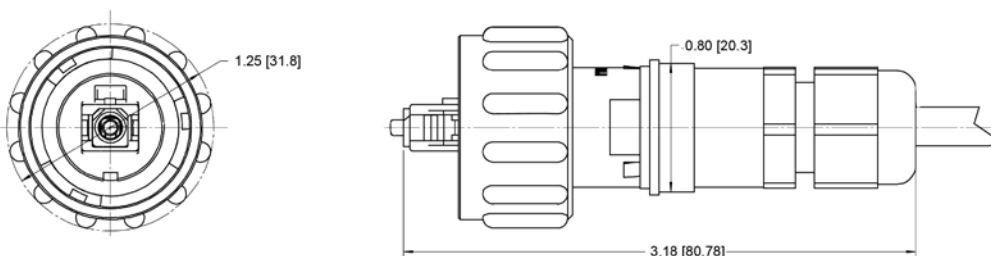
Optical Industrial Cable Assemblies and Adapters

106059 LC Duplex

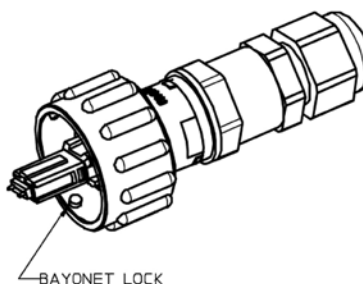
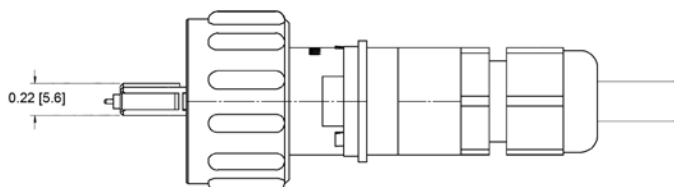
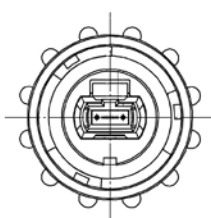
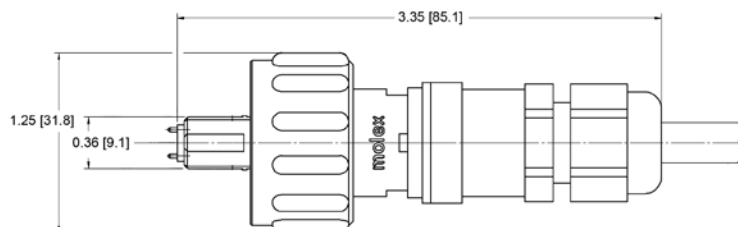
106059 SC Simplex

106059 MPO Multi-fiber

Industrial SC with Outdoor Plant Cable



Industrial MPO with Outdoor Cable



All dimensions are in INCHES
(MILLIMETERS)

ORDERING INFORMATION



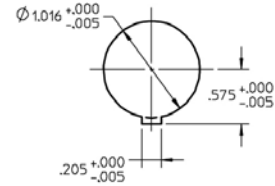
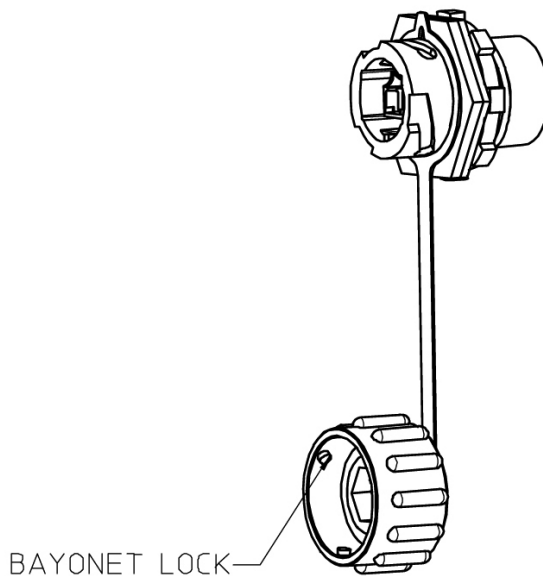
Optical Industrial Cable Assemblies and Adapters

106059 LC Duplex

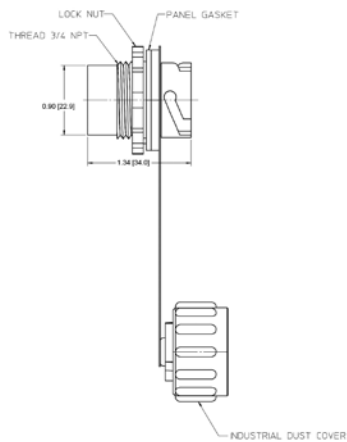
106059 SC Simplex

106059 MPO Multi-fiber

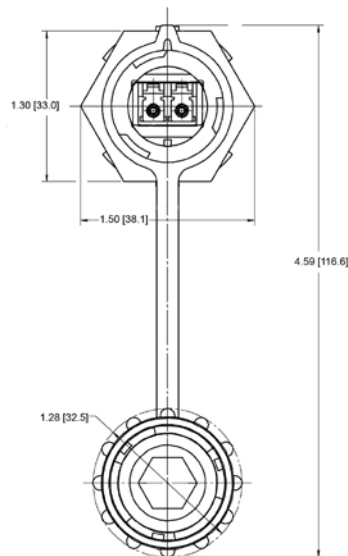
Industrial Adapter with Dust Cap



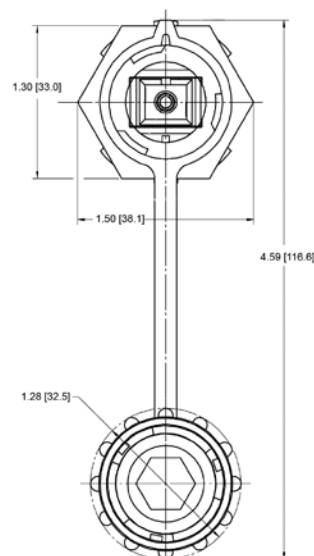
RECOMMENDED MOUNTING CUTOUT



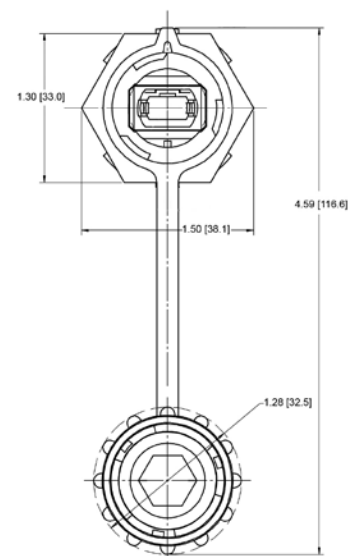
All Styles



LC
(Duplex)



SC
(Simplex)



MPO
(8 or 12 fiber)

All dimensions are in INCHES
(MILLIMETERS)

ORDERING INFORMATION



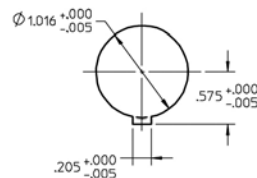
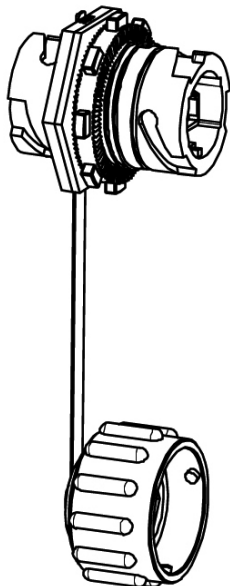
Optical Industrial Cable Assemblies and Adapters

106059 LC Duplex

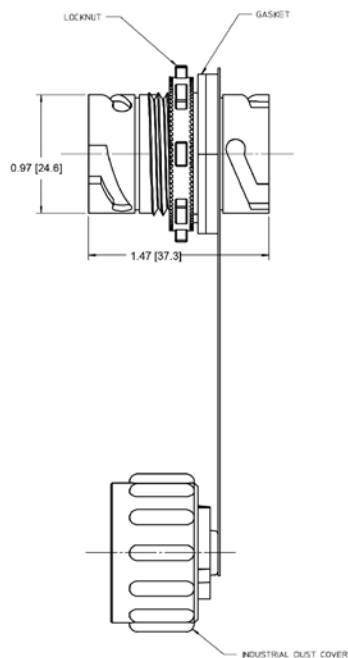
106059 SC Simplex

106059 MPO Multi-fiber

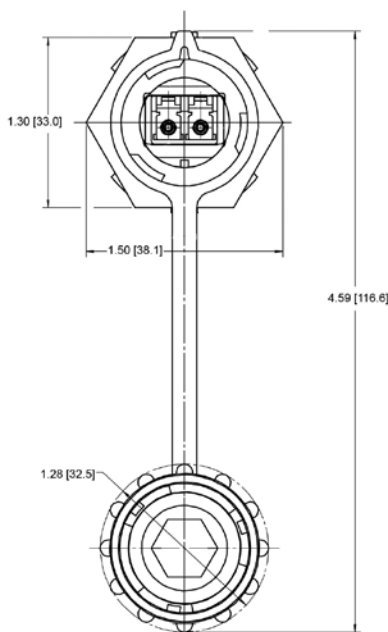
**Industrial In-Line
Adapter
with Dust Cap**



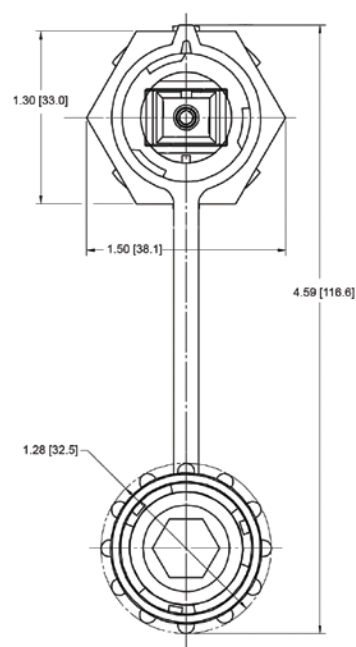
RECOMMENDED MOUNTING CUTOUT



All Styles



LC
(Duplex)



SC
(Simplex)

All dimensions are in INCHES
(MILLIMETERS)

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Visit our website at www.molex.com/product/fiber/industrialcables.html

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
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- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
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- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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