

FIBER-FLEX® Cable

Optical Fiber Festooning Cable / 90° C to -40° C / 62.5 µm
Multimode Fiber Fluoropolymer & Neoprene Jackets



APPLICATIONS:

FIBER-FLEX® Festooning Cable is designed primarily for installation on festoon systems for the transmission of optical data. In addition to festoon systems, FIBER-FLEX is also suitable for installation in cable track.

FIBER-FLEX is suitable for use indoor or outdoor at temperatures ranging from 90°C to -40°C on cranes, hoists, or any equipment which travels with a lateral traversing motion.

SPECIFICATIONS & RATINGS:

- Rated for continuous operation at 75° C to -40° C in wet or dry locations

CONSTRUCTION OPTIONS:

Consult factory for FIBER-FLEX® cables designed and manufactured in a variety of alternative constructions for specific applications.

Options Include:

- Single-mode fiber
- 50 micron multimode fiber
- Different fiber counts

DESIGN PARAMETERS:

Fiber:

Multimode (62.5/125 µm) optical fiber eliminates the need for expensive copper shielding.

Buffer Tube:

Color coded, gel filled, deformation resistant loose buffer tube (one fiber per tube) eases identification, provides mechanical protection and resists temperature extremes and the effects of high humidity.

Cabling:

Tubes are cabled with a short lay length around an epoxy glass core for optimum flexibility. A full braid of Kevlar® over the core adds strength and reinforcement to the assembly; any tensile forces that may be encountered during rapid acceleration and deceleration are carried by the braided Kevlar® strength member.

Jackets:

Deformation resistant fluoro-polymer inner jacket provides a stable base for application of the braided Kevlar strength member. Oil, chemical, and weather resistant neoprene outer jacket is suitable for use indoors and outdoors in abusive flexing applications where oil, chemicals and extreme temperatures are considerations.

Part Number	Fiber Number	Fiber Size	Nominal Cable O.D. in (mm)	Minimum Bend Radius in (mm)	Approximate Cable Weight Lbs/Mft (Kg/Km)
024701	4	62.5/125 µm	.670 (17)	8 (203)	185 (275)
024617	6	62.5/125 µm	.670 (17)	8 (203)	185 (275)
024667	12	62.5/125 µm	.670 (17)	8 (203)	204 (305)

The data herein is approximate and subject to normal manufacturing tolerances. These specifications are subject to change without notice.

Optical Fiber Performance

Type	Graded Index, Multimode
Core Diameter:	62.5 µm ± 2.5 µm
Cladding Diameter	125 µm ± 1.0 µm
Coating diameter	242 µm ± 5 µm
Attenuation	< 3.50 dB/km @ 850 nm · < 1.50 dB/km @ 1300 nm
Bandwidth	> 200 MHz-km @ 850 nm · > 500 MHz-km @ 1300 nm
Numerical Aperture	0.275 ± 0.015

FIBER-FLEX Color Codes

Conductor Number	Base Color	Conductor Number	Base Color
1	Blue	7	Red
2	Orange	8	Black
3	Green	9	Yellow
4	Brown	10	Violet
5	Slate	11	Pink
6	White	12	Aqua



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