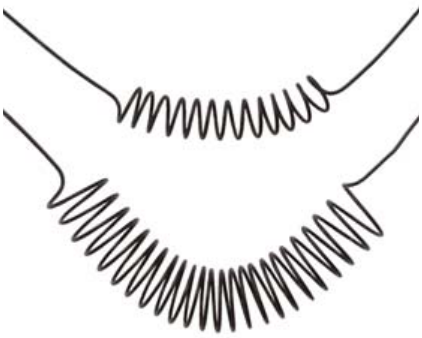
POF Retractile Cable

11/7/11



Benefits

- Expandable to various lengths
- Simplifies field installations
- Reduces inventory
- Minimizes cabling problems as layouts change
- Reduces installation times
- More attractive final installations

Applications

- Industrial networks and drives
- Photoelectric sensors
- Extendable boom/mast connections
- Cameras
- Computer cabinets
- Consumer electronics

Description

The POF Retractile Fiber Cable is a long-needed fiber optic equivalent of electrical retractile cables that have been used in hundreds of electrical applications for many years. Utilizing industry-standard 1.0 mm PMMA core fiber, Retractile Cables are suitable for all data transmission, security and sensor applications.

Industrial Fiber Optics offers the cables in three standard lengths, simplex and duplex and two different jacket materials. These specially formed POF cables expand to desired length, allow for movement and retract as needed. They ensure flexibility, neatness, organization and a clean design with the benefits of low cost and simple terminations of plastic optical fiber.

Designs for fiber working length, pigtail length, jacketing materials, fiber diameter and connectors are available on special order. Contact Industrial Fiber Optics to discuss your custom design and/or to receive a quote. Prototypes for custom designs can typically be fabricated in two to three working days.

Fiber Cable

The simplex version POF retractile cords are made using ESKA™ Premier GH4001 or GHV4001 jacketed fiber cable. Both fibers use ESKA™ Premier 1.0 mm optical fiber core material with an outer jacket diameter of 2.2 mm. The GH4001 fiber cable has a black polyethylene jacket and the GHV4001 has gray PVC UL rated jacket. Duplex modes utilize GH4002 and GHV4002 fiber. Cables are fabricated with a 1 µm polished fiber end or better. UL versions of the black polyethylene jacket, nylon jacket, dual jacket and multi-core fibers are also available.

Optical losses of each will be slightly greater than with a comparable straight length of fiber due to bending loss in the fiber.

View or download fiber specifications for both fiber cables at http://www.i-fiberoptics.com

Maximum Cable Ratings

Operating Temperature
GH4001 ..... -55° to 85°C
GHV4001 ..... -40° to 85°C

Storage Temperature
GH4001 ..... -55° to 85°C
GHV4001 ..... -40° to 85°C

Part No. GH4001	Part No. GHV4001	Working Distance (m)	Loss Typical[1] (dB)	Loss Maximum (dB)
IF 611-1-0	IF 621-1-0	.1 to .6	5	6
IF 611-2-0	IF 621-2-0	.3 to 1.25	6	7
IF 611-3-0	IF 621-3-0	1 to 2.7	4	5

For duplex versions, change 1 to a 2. IF 611-1-0 becomes IF 612-1-0.

To add connectors to any of the items above, change -0 to
-1 for SMA
-2 for ST
-3 for Versalink
-4 for SMI (duplex only)

[1] Measured with a 660 nm light source with a half power spectral bandwidth of 20 nm.

ESKA™ Premier is a registered trademark of Mitsubishi Rayon Corporation.

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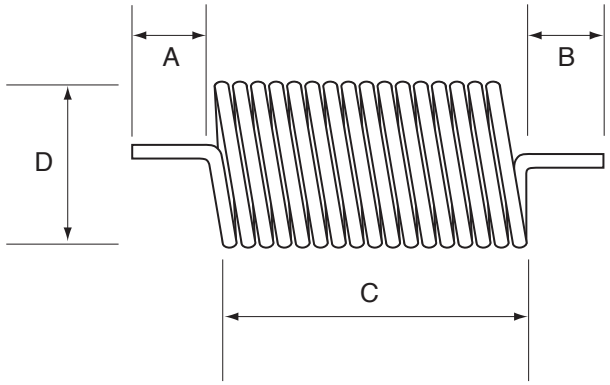

Model	Dim D (cm)	Turns (Nom.)	Dim A ± 1 (cm)	Dim B ± 1 (cm)	Dim C (cm)	Total fiber length (m)
IF 6X1-1-0	2.0	15	6	6	3.3	1.0
IF 6X1-2-0	2.0	31	6	6	7.0	1.94
IF 6X1-3-0	3.6	34	6	6	7.8	3.76
IF 6X2-1-0	2.0	15	6	6	6.6	1.0
IF 6X2-2-0	2.0	31	6	6	14.0	1.94
IF 6X2-3-0	3.6	34	6	6	15.6	3.76