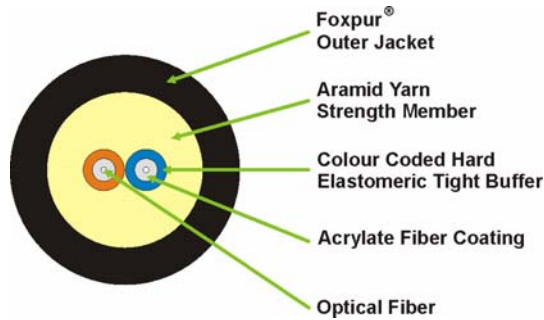
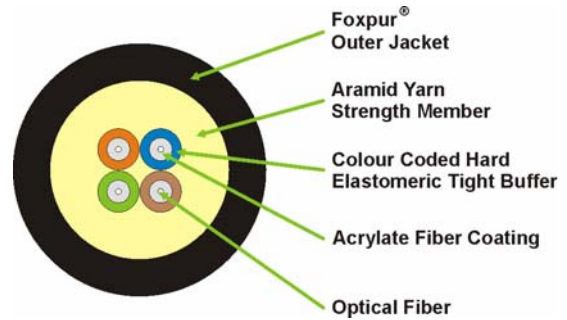


FIBERFOX Military Fiber Optic Cable for Extreme Environments

Series TD Distribution Cable



TD-02



TD-04

APPLICATION

- Extreme severe environments
- Field video audio network broadcast
- Fixed or mobile communication shelters connectivity
- Manufacturing, mining, oil rigs, wind energy, petrochemical environments
- For FIBERFOX EBC and BJ harsh environment connectors

DESIGN

Cable core

- Helically stranded cable core for flexibility, survival in difficult pulls and exceptional mechanical protection for the optical fibers
- 500 µm acrylate primary buffer coating over each optical fiber
- 900 µm hard elastomeric secondary tight buffer protection on each optical fiber coloured according to TIA-598-B

Outer jacket

- Halogen-free and flame retardant
- Colour: matt black
- Inkjet-marking white
- Press extruded Foxpur® Polyurethane for abrasion, cut, and chemical resistance



- Excellent impact and crush resistance with a thick layer of aramid strength members
- Compact, round cable design for easy transportation and deployment
- Tight-buffered gel-free construction
- Metal-free design

OPTICAL FIBER

Singlemode E9/125µm 0.35F3.2/0.25H18

Optical fiber

E9/125µm, matched cladding type (conform to CCITT Rec. G. 652 and IEC 60793-2-50 type B1.1)

Optical core

9 µm diameter

Optical cladding

125 µm diameter

Primary UV-cured acrylate fiber coating

500 µm diameter

Maximum Attenuation

1310nm:	0,35 db/km
1550nm:	0,25 db/km

Maximum Dispersion

1310nm:	3,2 ps/(nm x km)
1550nm:	18,0 ps/(nm x km)

Effective group of refraction

1310nm:	1,466
1550nm:	1,467

Multimode G50/125µm 3.0B600/1.0F600 OM2

Optical graded index fiber

G50/125µm (conform to CCITT Rec. G. 651 and IEC 60793-2-10 type A1a)

Optical core

50 µm diameter

Optical cladding

125 µm diameter

Primary UV-cured acrylate fiber coating

500 µm diameter

Maximum Attenuation

850nm:	3,0 db/km
1300nm:	1,0 db/km



Bandwidth
850nm: 600 MHz x km
1300nm: 600 MHz x km

Numeric aperture
0,200 +/- 0,015

Effective group of refraction
850nm: 1,483
1300nm: 1,479

Link lengths 1 Gbit/s
1000Base-SX (850nm) 600m
1000Base-FX (1300nm) 750m

Multimode G62,5/125µm 3.0B200/1.0F500 OM1

Optical graded index fiber
G62,5/125µm (conform to CCITT Rec. G. 651 and IEC 60793-2-10 type A1b)

Optical core
62,5 µm diameter

Optical cladding
125 µm diameter

Primary UV-cured acrylate fiber coating
500 µm diameter

Maximum Attenuation
850nm: 3,0 db/km
1300nm: 1,0 db/km

Bandwidth
850nm: 200 MHz x km
1300nm: 500 MHz x km

Numeric aperture
0,275 +/- 0,015

Effective group of refraction
850nm: 1,496
1300nm: 1,493

Link lengths 1 Gbit/s
1000Base-SX (850nm) 275m
1000Base-LX (1300nm) 550m

Standard Color Code (according TIA-598-B)
Blue Channel 1
Orange Channel 2
Green Channel 3
Brown Channel 4



GENERAL CHARACTERISTICS

Minimum Bend Radius		
Under Installation Tensile Load		16x Outside diameter
Under Long-Term Tensile Load		8x Outside diameter
Operating Temperature		
-55° C to + 85° C		
Storage Temperature		
-70° C to + 85° C		
Crush Resistance (TIA/EIA-455-41 military requirement)		
440 N/cm		
Impact Resistance (TIA/EIA-455-25 military requirement)		
200 impacts		
Flex Resistance (TIA/EIA-455-104 military requirement)		
2.000 cycles		
Tensile Load Rating		
Short-Term:	1800 N	
Long-Term:	600 N	

FIRE PERFORMANCE

Flame retardant
Halogen-free
No corrosive and toxic fumes
Flame test of MIL-PRF-85045 Sec. 4.7.6.12.1

ORDERING INFORMATION

Order Code	Item	Fiber	Type	OD ø	Weight
27101008	TD-02G50-3GB1GC-MIL	2	50/125µm	5,0 mm	23 kg/km
27101004	TD-02G62-3EB1UC-MIL	2	62,5/125µm	5,0 mm	23 kg/km
27101013	TD-04E09-YMCYMD-MIL	4	9/125µm	5,5 mm	28 kg/km
27101009	TD-04G50-3GB1GC-MIL	4	50/125µm	5,5 mm	28 kg/km
27101005	TD-04G62-3EB1UC-MIL	4	62,5/125µm	5,5 mm	28 kg/km

