



Draka

All-Dielectric Rodent-Resistant Tactical Cable

tight buffer construction / 2 to 36 fibers / single-mode or multimode



Applications

All-Dielectric Rodent-Resistant Tactical fiber optic cables are designed for military communications, weapons control, remote control links and operation in severe environments. They have been extensively tested and used by armed forces worldwide.

All-dielectric rodent-resistant cables are used in areas of high rodent populations. All dielectric construction permits a lighter, more flexible cable that does not conduct electricity or attract lightning strikes. This cable handles like any other tactical cable, yet it offers extra protection against rodent attack. The cable has passed TNO laboratories' tests for rodent resistance.

Rugged tight buffered fibers are strengthened with aramid yarn and jacketed with water, sunlight, chemical and abrasion-resistant polyurethane. These cables are tough and very flexible for repeated deployment/retrieval applications such as field communications. Field deployable cables are compatible with most mil-style multi-channel connectors. Fibers are color coded for easy identification.

Features

- Extremely rugged for rapid/repeated deployment
- Very flexible
- Easily reeled and unreeled
- Lightweight
- Deploys like any other tactical cable
- All dielectric - no metal armor

Construction

1. CENTRAL STRENGTH MEMBER
Flexible aramid yarn overcoated with polyurethane.
2. FIBER
Multimode or singlemode fibers with a rugged 900 micron tight buffering colored per TIA/EIA 598.
3. STRENGTH MEMBER
Aramid yarn.
4. SUBUNIT JACKET
Flame-retardant colored olefinic thermoplastic elastomer.
5. STRENGTH MEMBER
Aramid yarn.
6. INNER SHEATH
Flame-retardant polyurethane.
7. RODENT BARRIER
Fiber glass rovings.
8. OUTER SHEATH
Flame-retardant polyurethane.



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Part Number	Number of Fibers	Installation (Short Term) Pull Strength Lbs (Newtons)	Installation (Short Term) Bend Radius in (cm)	Operating (Long Term) Tension Lbs (Newtons)	Operating (Long Term) Bend Radius in (cm)	Vertical Rise ft (meters)	Cable O.D. in (mm)	Approx. Cable Weight Lbs/Mft (Kg/Km)
S942T-02R-XXY	2	490 (2180)	6.5 (16.6)	120 (490)	3.3 (8.3)	1882 (574)	0.408 (10.4)	51 (76)
S942T-04-XXY	4	490 (2180)	6.8 (17.4)	120 (490)	3.4 (8.7)	1280 (390)	0.427 (10.9)	75 (112)
S942T-06-XXY	6	600 (2700)	7.8 (19.7)	132 (600)	3.9 (9.9)	1112 (339)	0.485 (12.3)	95 (141)
S942T-08-XXY	8	600 (2700)	8.5 (21.7)	132 (600)	4.3 (10.8)	926 (282)	0.533 (13.5)	114 (170)
S942T-12-XXY	12	600 (2700)	10.0 (25.4)	132 (600)	5.0 (12.7)	673 (205)	0.625 (15.9)	157 (234)
S942T-18-XXY	18	600 (2700)	10.5 (26.7)	132 (600)	5.3 (13.4)	640 (195)	0.658 (16.7)	165 (246)
S942T-24-XXY	24	600 (2700)	11.6 (29.4)	132 (600)	5.8 (14.7)	523 (159)	0.724 (18.4)	202 (301)
S942T-36-XXY	36	600 (2700)	13.0 (33.0)	132 (600)	6.5 (16.5)	433 (132)	0.811 (20.6)	244 (363)

Double-jacketing, distribution style cables, 500 micron fiber coatings and higher fiber counts are available.

Rad-hard fiber is qualified through DSCC under MIL-PRF-49291. See www.dscclia.mil for qualified suppliers.

Information is subject to change without notice. Consult factory for a variety of alternate constructions for specific applications.

Fiber Performance

Replace XXY in the part number above with your fiber requirements:

Multimode Designation	Min. Bandwidth 850nm/1300nm	Max. Attenuation 850nm/1300nm
50G (rad-hard)	500/500	3.50/1.50
50H	500/500	3.50/1.50
50GBE (10Gb)	1500/500	3.20/1.50
62X	200/500	3.50/1.00
62E1	300/600	3.50/1.00*
62G (rad-hard)	350/800	3.50/1.50

* Mode conditioning patch cords not required

Single Mode Designation	Max. Attenuation 1310nm/1550nm
010X	0.70/0.70
010N (rad-hard)	1.0/1.0

Environmental Specifications

Description	FOTP	Requirements
Operating Temp	EIA-455-3	-55°C to 85°C
Storage Temp	EIA-455-3	-65°C to 85°C

Mechanical Specifications

Description	FOTP	Requirements
Crush Resistance	EIA-455-41 MIL	440 N/cm
Impact Resistance	EIA-455-25 MIL	200 impacts
Cyclic Flexing Test	EIA-455-104 MIL	2000 Cycles

Draka Engineered Specialties

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