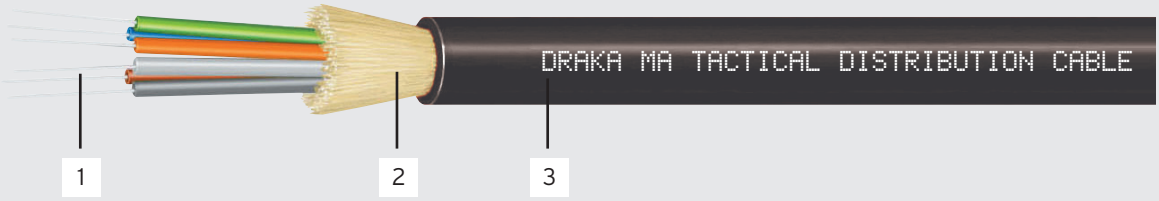
Field Deployable Tactical Distribution Cable

tight buffer construction / 2 to 12 fibers / singlemode or multimode



Applications

Field Deployable Tactical Distribution 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. They are designed to meet, and in many cases exceed, US Army TFOCA and TFOCA II® standards for field-deployable cable.

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

MADE IN THE USA

Extremely rugged for rapid/repeated deployment

Very flexible - capable of 4 inch diameter spooling

Easily reeled and unreeled

Lightweight

Compatible with multichannel connectors with 800 lbs retention

Terminated pull strength averages 800 lbs

Can be constructed with any combination of fibers

TFOCA and TFOCA II® versions are radiation hardened

Jacket-to-aramid yarn bond > 90 lbs (41 kg)

Construction

1. FIBER

Multimode or singlemode fibers with a rugged 900 micron tight buffering colored per TIA/EIA 598.

2. STRENGTH MEMBER

Aramid yarn.

3. JACKET

Flame-retardant polyurethane.

Ratings

Meets US Army standards for TFOCA and TFOCA II®

TFOCA-style Tactical Cable

tight buffer construction / radiation hardened / 2 fibers / 50/125 micron multimode

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)
S621T-02R-50G	2	400 (1780)	3.7 (9.3)	130 (580)	1.8 (4.7)	1668 (508)	0.230 (5.84)	19 (28)

TFOCA II®-style Tactical Cable

tight buffer construction / radiation hardened / 4 fibers / 62.5/125 micron multimode

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)
S621T-04-62G	4	400 (1780)	3.7 (9.3)	130 (580)	1.8 (4.7)	4952 (1510)	0.230 (5.84)	19 (28)

Field Deployable Multifiber Tactical Cable

tight buffer construction / 2 to 12 fibers / single-mode or multimode

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)
S621T-02R-50G	2	400 (1780)	3.7 (9.3)	130 (580)	1.8 (4.7)	1668 (508)	0.230 (5.84)	19 (28)
S693T-02R-XXY	2	400 (1780)	3.7 (9.3)	130 (580)	1.8 (4.7)	5474 (1668)	0.230 (5.84)	19 (28)
S693T-04-XXY	4	400 (1780)	3.7 (9.3)	130 (580)	1.8 (4.7)	4952 (1510)	0.230 (5.84)	19 (28)
S693T-06-XXY	6	400 (1780)	4.1 (10.4)	130 (580)	2.0 (5.2)	4160 (1268)	0.255 (6.48)	25 (37)
S693T-08-XXY	8	400 (1780)	4.2 (10.8)	130 (580)	2.1 (5.4)	3852 (1174)	0.265 (6.73)	27 (40)
S693T-12-XXY	12	470 (2100)	4.7 (12.0)	160 (712)	2.4 (6.0)	3879 (1182)	0.295 (7.49)	33 (49)

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

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