Fiber Optic Cable

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Tactical Tight Buffered Cable

AFL Tactical Tight Buffered Cables are ideal for use in installations where extreme environmental conditions are present. Designed to be deployed and retrieved in the field, AFL's Tactical Tight Buffered Cables are highly resistant to damage caused by repeated impacts crushing forces, abrasion and extreme temperatures.

Features

- Cut resistant, fire retardant, LSZH polyurethane jacket
- Highly flexible construction allows for multiple deployments
- All aramid strength members
- Performance in wide temperature range
- UV, Fungus and water resistant
- High impact and crush resistance
- Durable in high traffic areas
- MIL-PRF-49291 qualified fiber available (-RH designation)

Cable Components

Applications

- Field deployment in abusive environments
- Temporary installation of critical communications lines where quick retrieval and re-use is necessary
- High Traffic areas
- Security and Sensing applications
- Broadcast deployments
- Installations in harsh environments



Specifications

CHARACTERISTIC	TEST PROCEDURE	PERFORMANCE
Tensile and elongation	EIA/TIA-455-33	
Operating tensile strength	EIA/TIA-455-33	
Low-temp flexibility	EIA/TIA-455-37	
Cyclic flexing	EIA/TIA-455-104	2000
Crush resistance	EIA/TIA-455-41	1800 N/cm or greater
Impact	EIA/TIA-455-25	200
Temperature cycling	EIA/TIA-455-3	-46°C to 85°C
Temperature/humidity cycling	EIA/TIA-455-5 Method B	
Life aging	EIA/TIA-455-4	
Freezing water immersion	EIA/TIA-455-98	



Specifications are subject to change without notice.

continued



Tactical Tight Buffered Cable

Mechanical Data

					MAXIMUM TENSILE LOAD		MINIMUM BEND RADIUS	
	NOMINAL DIA	AIVIETER		VEIGHT	LBS (N)		INCHES (CM)	
	INCHES	(MM)	LBS/1000FT	(KG/KM)	INSTALLATION	LONG TERM	INSTALLATION	LONG TERM
2	0.22	(5.5)	16.2	(25)	400 (1780)	130 (578)	2.2 (5.5)	1.1 (2.8)
4	0.22	(5.5)	16.2	(25)	400 (1780)	130 (578)	2.2 (5.5)	1.1 (2.8)
2	0.23	(5.8)	21.5	(32)	400 (1780)	130 (578)	3.4 (8.7)	2.3 (5.8)
4	0.23	(5.8)	21.5	(32)	400 (1780)	130 (578)	3.4 (8.7)	2.3 (5.8)
6	0.24	(6.1)	22.2	(33)	400 (1780)	130 (578)	3.6 (9.2)	2.4 (6.1)
8	0.25	(6.4)	28.8	(44)	470 (2090)	160 (712)	2.5 (6.4)	1.3 (3.2)
12	0.25	(6.4)	30.8	(47)	470 (2090)	160 (712)	2.5 (6.4)	1.3 (3.2)
	IBER - 2 4 2 4 6 8 12 12	NOMINAL DI/ 1NCHES 2 0.22 4 0.22 2 0.23 4 0.23 6 0.24 8 0.25 12 0.25	NOMINAL DIAMETER INCHES (MM) 2 0.22 (5.5) 4 0.22 (5.5) 2 0.23 (5.8) 4 0.23 (5.8) 4 0.23 (5.8) 6 0.24 (6.1) 8 0.25 (6.4)	NOMINAL DIAMETER NOMINAL VIAMETER INCHES (MM) LBS/1000FT 2 0.22 (5.5) 16.2 4 0.22 (5.5) 16.2 2 0.23 (5.8) 21.5 4 0.23 (5.8) 21.5 6 0.24 (6.1) 22.2 8 0.25 (6.4) 28.8 12 0.25 (6.4) 30.8	NOMINAL DI-METER NOMINAL WEIGHT INCHES (MM) LBS/1000FT (KG/KM) 2 0.22 (5.5) 16.2 (25) 4 0.22 (5.5) 16.2 (25) 2 0.23 (5.8) 21.5 (32) 4 0.23 (5.8) 21.5 (32) 6 0.24 (6.1) 22.2 (33) 8 0.25 (6.4) 28.8 (44) 12 0.25 (6.4) 30.8 (47)	IBER DUNT NOMINAL DIAMETER NOMINAL WEIGHT IMAXIMUM TEL IBS 2 0.22 (5.5) 16.2 (25) 400 (1780) 4 0.22 (5.5) 16.2 (25) 400 (1780) 2 0.23 (5.8) 21.5 (32) 400 (1780) 4 0.23 (5.8) 21.5 (32) 400 (1780) 6 0.24 (6.1) 22.2 (33) 400 (1780) 8 0.25 (6.4) 28.8 (44) 470 (2090) 12 0.25 (6.4) 30.8 (47) 470 (2090)	Nominal Diameter Nominal version Maximum resiste Load Incres (MM) LBS/1000FT (KG/KM) Installation LONG TERM 2 0.22 (5.5) 16.2 (25) 400 (1780) 130 (578) 4 0.22 (5.5) 16.2 (25) 400 (1780) 130 (578) 2 0.23 (5.8) 21.5 (32) 400 (1780) 130 (578) 4 0.23 (5.8) 21.5 (32) 400 (1780) 130 (578) 4 0.23 (5.8) 21.5 (32) 400 (1780) 130 (578) 4 0.23 (5.8) 21.5 (32) 400 (1780) 130 (578) 6 0.24 (6.1) 22.2 (33) 400 (1780) 130 (578) 8 0.25 (6.4) 28.8 (44) 470 (2090) 160 (712) 12 0.25 (6.4) 30.8 (47) 470 (2090) 160 (712)	NOMINAL DI-JAE NOMINAL PIER NOMINAL PIER MAXIMOM TENSILE LOAD MINIMOM BE INCHES (MM) LBS/1000FT (KG/KM) INSTALLATION LONG TERM INSTALLATION 2 0.22 (5.5) 16.2 (25) 400 (1780) 130 (578) 2.2 (5.5) 4 0.22 (5.5) 16.2 (25) 400 (1780) 130 (578) 2.2 (5.5) 2 0.23 (5.8) 21.5 (32) 400 (1780) 130 (578) 3.4 (8.7) 4 0.23 (5.8) 21.5 (32) 400 (1780) 130 (578) 3.4 (8.7) 6 0.24 (6.1) 22.2 (33) 400 (1780) 130 (578) 3.6 (9.2) 8 0.25 (6.4) 28.8 (44) 470 (2090) 160 (712) 2.5 (6.4) 12 0.25 (6.4) 30.8 (47) 470 (2090) 160 (712) 2.5 (6.4)

Note: Diameter and weight subject to change without notice

500 µm primary coated fiber available, replace H in AFL number with number corresponding below.

 $G = 500 \ \mu m$ Coated Optical Fiber

 $H = 250 \ \mu m$ Coated Optical Fiber

Replace asterisk (*) in AFL No. with corresponding fiber type below.

 $5 = 50/125 \ \mu m$ multimode GIGA-LinkTM 600

 $6=62.5/125~\mu m$ multimode GIGA-Link $^{\rm \scriptscriptstyle M}$ 300

9 = Bend Insensitive G.657A1 single-mode

 $L=50/125\;\mu m\;OM3$

 $C=50/125\;\mu m\;OM4$

Replace hashtag (#) in AFL No. with jacket color. See Tactical Cable Ordering Guide.

Customer specified print available.

See Tactical Cable Ordering Guide AFL No. designations.

Qualifications

GOVERNING BODY	STANDARD CODE	COMPONENT
EIA/TIA	EIA/TIA-455-33, EIA/TIA-455-37, EIA/TIA-455-104, EIA/TIA-455-41, EIA/TIA-455-25, EIA/TIA-455-3, EIA/TIA-455-5 Method B, EIA/TIA-455-4, EIA/TIA-455-98	Fiber Optic Cable
U.S. Department of Defense	MIL-PRF-49291 MIL-PRF-85045	Optical Fiber Fiber Optic Cable

Contact AFL for further details.

Temperature Specifications

TEMPERATURE RANGE			
INSTALLATION	-46°C to +85°C		
OPERATION	-46°C to +85°C		
STORAGE	-55°C to +85°C		