

# Indoor/Outdoor Special Applications Tube Cables

FutureFLEX® Mass Transit Tube Cables are designed for use as an optical fiber cabling infrastructure in Air Blown Fiber applications which meet NFPA 130 (Standard for Fixed Guideway Transit and Passenger Rail Systems) and low smoke halogen free requirements. These requirements include FT4-ST-1/IEEE 1202 exposure requirements for char height, total smoke released, and peak smoke released rate of ANSI/UL 1685.

Mass Transit Unarmored/Armored Tube Cables may also be used in indoor applications where (1) Optical Fiber Nonconductive/Conductive Riser-rated (OFNR/OFCR or FT4-ST-1) apply, or (2) no fire ratings apply. Mass Transit Tube Cables are pulled or placed in indoor/outdoor routes for the purpose of individual tube interconnection to establish pathways for FutureFLEX® fiber bundle installation.



## SPECIFICATIONS

PROPERTY	SPECIFICATION
Transit and Passenger Rail Systems	NFPA 130, IEEE 1202, ANSUI/UL 1685, UL1666, OFNR, FT-4-ST1
Operation Temperature Range	-40° F to + 158°F (-40° C to +70° C)
Minimum Bend Radius (During/After Installation)	20 / 10 x Cable OD
Standard Reel Length	3,000 ft (+30 ft / -0 ft)
Maximum Reel Length	3,000 ft (+30 ft / -0 ft)
Metallic Elements (Armored Only)	Bonding/Grounding Required
Inner Tube ID / OD	6 mm / 8 mm



ORDERING INFORMATION

PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	MAX WEIGHT	STD LENGTH	MAX LENGTH
		IN	(LBS./KFT.)		
TC02MTIO	UL/CUL FT4 NFPA 130 Indoor/Outdoor Tube Cable; 2 tubes	0.84	128	3,000	3,000
TC04MTIO	UL/CUL FT4 NFPA 130 Indoor/Outdoor Tube Cable; 4 tubes (CSM)	0.97	235	3,000	3,000
TC07MTIO	UL/CUL FT4 NFPA 130 Indoor/Outdoor Tube Cable; 7 tubes	1.15	336	3,000	3,000
TC12MTIO	UL/CUL FT4 NFPA 130 Indoor/Outdoor Tube Cable; 12 tubes	1.43	437	3,000	3,000
TC19MTIO	UL/CUL FT4 NFPA 130 Indoor/Outdoor Tube Cable; 19 tubes	1.78	672	3,000	3,000
TC02MTIO-4	Interlocked Galvanized Steel Armor LSHF Jacketed; 2 tubes	1.20	531	3,000	3,000
TC04MTIO-4	Interlocked Galvanized Steel Armor LSHF Jacketed; 4 tubes	1.38	623	3,000	3,000
TC07MTIO-4	Interlocked Galvanized Steel Armor LSHF Jacketed; 7 tubes	1.50	1,001	3,000	3,000
TC12MTIO-4	Interlocked Galvanized Steel Armor LSHF Jacketed; 12 tubes	1.77	1,223	3,000	3,000
TC19MTIO-4	Interlocked Galvanized Steel Armor LSHF Jacketed; 19 tubes	2.17	1,850	3,000	3,000