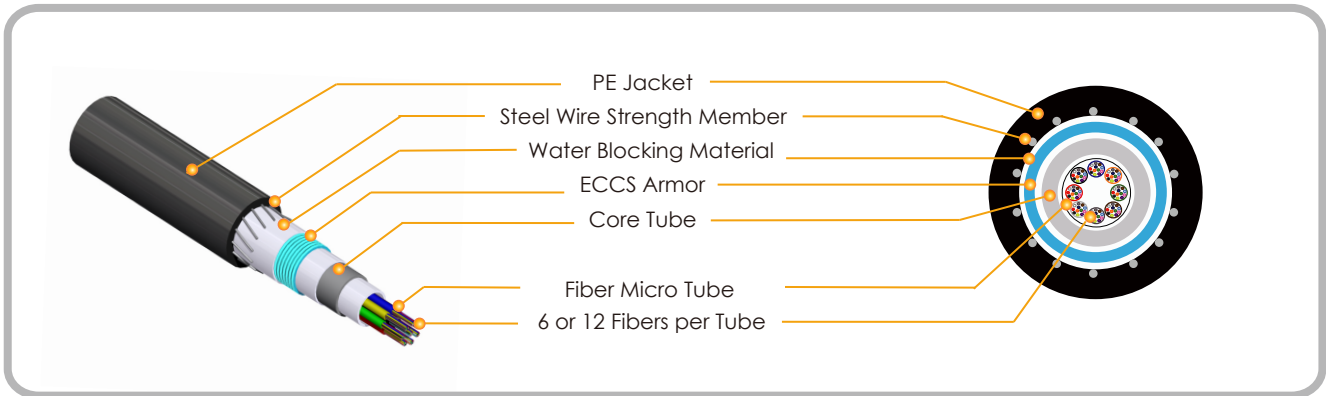


## Steel Wire Reinforced Type

### Constructions



### Description

The **Tubes/T™** MPAR cable is Tube-in-Tube cable structure, this cable contains 2 ~18 fiber micro tubes which are encased in a dry central tube, the inner tube is soft, flexible and can be peeled without any tool. This cable has an overlapping corrugated electrolytic chrome-coated steel (ECCS) tape armor and uses steel wires as strength members. Compared with traditional fiber bundle central core cable and loose tube cable, the **Tubes/T™** cable has advantages in saving time for cable preparation. Fiber counts from 6 to 216 fibers.

### Applications

- Local area networks
- Outside plant distribution system
- Long haul trunking and feeder
- Duct or direct buried installation
- CATV, CCTV, telecommunication

### Specifications

Fiber Count	6 ~ 48	60 ~ 96	144 ~ 216
Fibers Per Tube	6 or 12	12	
Strength Member (Steel Wire)	7	14	
Inside Micro Tube	Water Blocking Material		
Wrapping	Water Blocking Material		
Sheath	Black PE (LSZH for option)		
Cable Diameter: mm(approx)	11.6	13.5	16.5
Cable Weight: kg/km(approx)	115	149	200
Maximum Tensile Strength	2700 N		
Min. Bend Radius	Loaded:	20 times of cable diameter	
	Unloaded:	10 times of cable diameter	

\* LSZH: Low Smoke Zero Halogen.

### Features and Benefits

- Corrugated ECCS armor for durability and excellent in rodent resistance
- Central Tube cable design provides best fiber protection
- Inner fiber tube is gel-free water blocking
- Dry water blocking cable core design for less cable preparation time
- Small cable diameter and light weight for easy duct installation
- To integrate benefits of both traditional Central Tube and Loose Tube cable
- Due to flexible bending design, with 7-Wire Galvanized Steel Strand, it can be self-supporting type for aerial application

### Color Code

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua	Blue	Orange	Green	Brown	Slate	White

\* Color arrangement would be changed to meet customers' requests, for 216 cores color code will be same as code 1 ~ code 6 with extra marks.

# Tubes/T™ MPAR

## Product Information

### Fiber Specification

<b>Fiber Attenuation</b>	Singlemode	1310nm $\leq$ 0.4 dB/km	<b>PMD</b>	$< 0.2 \text{ ps/km}^{1/2}$
		1550nm $\leq$ 0.3 dB/km		
	Multimode	850nm $\leq$ 3.5 dB/km	<b>Mode-Field Diameter(SM)</b>	G.652D
		1300nm $\leq$ 1.0 dB/km		
<b>Bandwidth(MM)</b>	OM2-50/125	850nm $\geq$ 500 MHz-km	<b>Multimode Core</b>	50
		1300nm $\geq$ 500 MHz-km		
	OM3-50/125	850nm $\geq$ 1500 MHz-km	62.5	50 $\mu\text{m} \pm 3 \mu\text{m}$
		1300nm $\geq$ 500 MHz-km		
	62.5/125	850nm $\geq$ 200 MHz-km	<b>Cladding Diameter</b>	125 $\mu\text{m} \pm 1 \mu\text{m}$
		1300nm $\geq$ 500 MHz-km		
		<b>Coating Diameter</b>	250 $\mu\text{m} \pm 15 \mu\text{m}$ (colored)	

### Mechanical Specification (added attenuation: dB)

<b>Tensile Strength</b>	TIA/EIA-455-33	Singlemode $\leq$ 0.2 ; Multimode $\leq$ 0.3
<b>Crush Resistance</b>	TIA/EIA-455-41	Singlemode $\leq$ 0.2 ; Multimode $\leq$ 0.3
<b>Cyclic Flexing</b>	TIA/EIA-455-104	Singlemode $\leq$ 0.2 ; Multimode $\leq$ 0.3
<b>Impact Resistance</b>	TIA/EIA-455-25	Singlemode $\leq$ 0.2 ; Multimode $\leq$ 0.3
<b>Cable Twist</b>	TIA/EIA-455-85	Singlemode $\leq$ 0.2 ; Multimode $\leq$ 0.3

\* Compliant with Telcordia GR-20-Core and EIA/TIA standards.

### Environmental Conditions

<b>Temperature Range</b>	Storage	-40°C to +70°C
	Operating	-30°C to +70°C
	Installation	-30°C to +70°C

### Ordering Information

<b>Cable Type</b>	Tubes/T MPAR
<b>Fiber Count</b>	Max. 216
<b>Fiber Type</b>	Singlemode: G.652D, G.657A Multimode: OM1, OM2 or OM3
<b>Fiber Bundle</b>	6 or 12
<b>Jacket Type</b>	PE or LSZH(Low Smoke Zero Halogen) Jacket

Specifications are subject to change without notice.