

# Single Loose Tube Steel Tape Armored Cable With Steel Wire 4-24 fibers





STANDARDS & FEATURES

#### **DESCRIPTION**

METACOM Fiber optic cables are constructed with a single loose tube filled with water blocking jelly, water blocking tape over the tube giving it excellent water and moisture resistance. A corrugated steel armouring and two steel wires strengthening within the outer PE/LSZH sheath give this cable excellent tensile strength, mechanical and environmental protection, fully water blocked cable for outdoor duct applications. Its compact design is suitable for limited conduit space and the cables are well suited for campus-type environments in and between buildings without building entry joints.

ANSI/TIA-568-C.3 / ISO/IEC 11801

IEC 60332-1-2, IEC 60332-3-24, IEC 60754-1,2 & IEC 61034-2

ITU.T G.652D / G.657A/B / G.651.1

IEC60793-2-10 type A1a.2 OM3/ IEC60793-2-10 type A1a.3 OM4

Fiber-count 4 -24 fibers

Corrugated steel armoring

Option for LSZH jacket or PE jacket

Color-coded fibers for easy identification

Ligthweight construction, Rodent resistant

#### **APPLICATIONS**

Outdoor duct applications (PE jacket)
Indoor/outdoor applications(LSZH jacket)
Voice, data, video and imaging applications



### FIBER PARAMETERS

ltem		Unit	Specification	
Fiber Type			G.652D	
	1310nm	mm	9.2±0.4	
Mode field diameter	1550nm	mm	10.4±0.8	
Cladding di	ameter	mm	125.0±1	
Cladding non-circularity		%	£1.0	
Core/cladding concentricity error		mm	£0.5	
Coating diameter		mm	245±5	
Coating non-Circularity		%	£6.0	
Coating/cladding concentricity error		mm	£12.0	
Cable cut-off wavelength		nm	£1260	
Attenuation Coefficient	1310nm	dB/km	£0.36	
	1550nm	dB/km	£0.22	
Proof stress level		kpsi	≥100	

## CABLE PERFORMANCE

Ite	Parameters				
Fiber Count		6/12/24			
	Dimension	250μm±15μm			
Colored coated fiber	Color	Blue、Orange、Green、Brown、Gray、White、Red、Black、Yellow、Purple、Pink、Aqua			
Loose tube	Dimension	2.2mm±0.1mm			
	Material	PBT			
	Color	nature			
Filler	Material	none			
	Color	none			
Strength Member	Dimension	0.7mm±0.05mm			
	Material	Phosphating steel wire			
Armoured	Material	Plastic coated steel strip			
Olden is about	Material	PE/LSZH			
Outer jacket	Color	Black			



## MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Item	Unit	Specifications		
Tension(Long Term)	N	600		
Tension(Short Term)	N	1500		
Crush(Long Term)	N/10cm	300		
Crush(Short Term)	N/10cm	1000		
Min. Bend Radius(Dynamic)	mm	20D		
Min.Bend Radius(Static)	mm	10D		
Installation Temperature	°C	-40 <b>~</b> +60		
Operating Temperature	°C	-40 <b>~</b> +70		
Storage Temperature	°C	-40 <b>~</b> +70		
	Load: 250N;number of cycles:30 No obvious addition			
Repeating bending	attenuation, no fiber b	enuation, no fiber break and no cable damage.		
	Load: 250N; number of cycles:10; twist angle:±90° No obvious			
Torsion	addition attenuation, no fiber break and no cable damage.			
	Impact energy: 450g×1m; radius of hammer head:12.5mm;			
Impact	number of impact: 5 No obvious addition attenuation, no fiber			
,	break and no cabl <mark>e damage.</mark>			

#### CABLE DIMENSIONS

Fiber count	Structure	Fibersper tube	Loose tube diameter (mm)	CSM diameter /paddiameter (mm)	Thickness of outer jacket (mm)	•	Cable weight (kg/km)
2	1	2	1.7±0.1	1.0/1.0	1.6	8.0±0.2	57
4	1	4	1.85±0.1	1.0/1.0	1.6	8.0±0.2	58
6	1	6	1.9±0.1	1.0/1.0	1.6	8.0±0.2	58
8	1	8	2.0±0.1	1.0/1.0	1.6	8.0±0.2	60
12	1	12	2.2±0.1	1.0/1.0	1.6	8.0±0.2	60
24	1	24	2.2±0.1	1.0/1.0	1.6	8.5±0.2	65

#### ORDERING INFORMATION

PART NUM DESCRIPTION

MCFC-XXX-STA-YY-LZ FIBER OPTIC CABLE STEEL TAPE ARMOURED, LSZH JACKET

MCFC-XXX-STA-YY-PE FIBER OPTIC CABLE STEEL TAPE ARMOURED, PE JACKET

xxx = OS1, OS2, OM1, OM2, OM3, OM4, yy = 04, 06, 08, 12, 24 fibers Standard reel length 2000m



