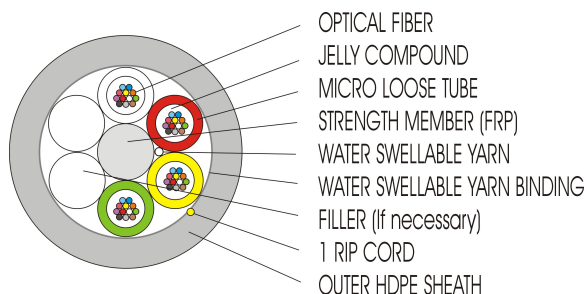
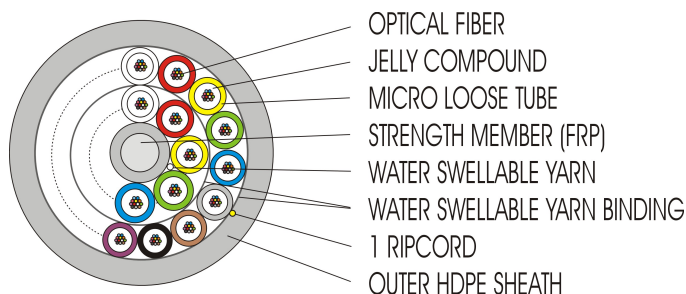


■ MICRO LOOSE TUBE DUCT INSTALLATION CABLE (4C~288C)



[4C ~ 144C]



[192C ~ 288C]

- SINGLE MODE OPTICAL FIBER (ITU-T G.652D, LWPF ; Low Water Peak Fiber)
- MICRO LOOSE TUBE (JELLY FILLED)
- CENTRAL STRENGTH MEMBER (FRP)
- DRY CORE DESIGN, SZ STRANDING
- MT-OPE* SHEATH FOR DUCT INSTALLATION (Halogen free PE)

Fiber Counts		4C, 6C	12~72C	96C	144C	192C	288C
Nom. cable diameter (mm)		5.8	5.8	6.8	8.8	9.1	10.4
Fibers per tube		4 or 6	12	12	12	12	12
Nom. loose tube diameter (mm)		1.6	1.6	1.6	1.6	1.6	1.6
Nom. outer sheath thickness (mm)		0.5	0.5	0.5	0.5	0.5	0.5
Min. bend radius (mm)	No load (15xD)	90	90	105	135	140	155
	Under load (20xD)	120	120	140	180	185	210
Max. pulling tension (N)	Installation	700	700	1000	1200	1000	1200
	Operation	400	400	600	700	600	700
Cable weight (kg/km)		25	27	42	66	66	87
Recommended temperature range		-40℃ ~ +70℃ (Transportation & Storage) -10℃ ~ +50℃ (Installation) -40℃ ~ +70℃ (Operation)					

- Note:**
1. MT-OPE : Micro Tube _ Outer HDPE Sheath
 2. Cable diameter may vary by -0/+0.2mm
 3. Cable weight may vary by -0/+1kg

● Mechanical and Environmental Properties

Item	Test Method	Test Condition	Acceptance Criteria
Tensile strength	IEC 794-1-E1	- Load: See table	Note 1), 2)
Crush	IEC 794-1-E3	- Load: 700 N/100mm	Note 1), 2)
Impact	IEC 794-1-E4	- Impact energy : 1J (1Nm) - Impact diameter: 10mm, 3impacts	Note 1), 2)
Repeated bending	IEC 794-1-E6	- Bending radius: 20×cable diameter - Bending cycles: 35	Note 1), 2)
Torsion	IEC 794-1-E7	- Test length: 2m - Twist angle: ±180 degrees - Twist cycles: 10	Note 1), 2)
Temperature cycling	IEC 794-1-F1	- Temperature change: -40℃→+70℃	Note 3)
Water penetration	IEC 794-1-F5	- Cable length: 3m, Water height: 1m - Duration time: 24 hrs	No water leak

Note 1) Attenuation : ≤ 0.1dB

2) No mechanical damage

3) Attenuation : ≤ 0.2dB/km (each procedure), ≤ 0.1dB/km (after test)

Annex 1. Color Code of Optical Fiber and Loose Tube

No.	1	2	3	4	5	6	7	8	9	10	11	12	13~15
Color	White	Red	Yellow	Green	Blue	Grey	Brown	Black	Violet	Turquoise	Orange	Pink	Natural

Annex 2. Optical Fiber Cable Unit Composition

Cable Core	Count of optical fiber per loose tube and unit composition														
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15
4C	4	F	F	F	F	F									
6C	6	F	F	F	F	F									
12C	12	F	F	F	F	F									
24C	12	12	F	F	F	F									
36C	12	12	12	F	F	F									
48C	12	12	12	12	F	F									
60C	12	12	12	12	12	F									
72C	12	12	12	12	12	12									
96C	12	12	12	12	12	12	12	12							
144C	12	12	12	12	12	12	12	12	12	12	12	12			
192C	1layer	12	12	12	12	12	12								
	2layer	12	12	12	12	12	12	12	12	12	F	F			
288C	1layer	12	12	12	12	12	12	12	12	12					
	2 layer	12	12	12	12	12	12	12	12	12	12	12	12	12	12

Note) F: Filler (Natural color)

Micro Loose Tube Cable (MT-OPE Sheath)

● ITU-T G.652D, LWPF, [4C, 6C, 12C, 24C, 36C, 48C, 60C, 72C, 96C, 144C, 192C, 288C]