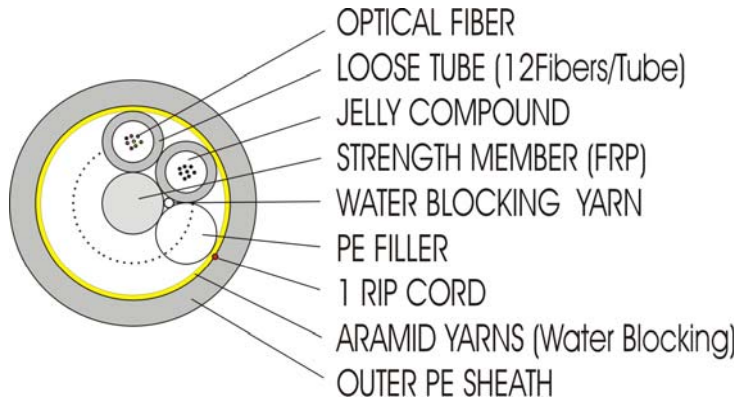


## ■ MICRO LOOSE TUBE DUCT INSTALLATION CABLE (12C~144C)



- SINGLE MODE OPTICAL FIBER (ITU-T G.652D, LWPB ; Low Water Peak Fiber)
- MICRO LOOSE TUBE (JELLY FILLED)
- CENTRAL STRENGTH MEMBER (FRP) + ADDITIONAL STRENGTH MEMBER (Kevlar yarns)
- DRY CORE DESIGN, SZ STRANDING
- MT-KPE\* SHEATH FOR DUCT INSTALLATION

Fiber Counts		12C ~ 72C	96C	144C
Max. cable diameter (mm)		6.0	7.2	9.8
Fibers per tube		12	12	12
Min. bend radius (mm)	No load (15xD)	90	110	145
	Under load (20xD)	120	145	195
Max. pulling tension (N)		700	1000	1200
Cable weight (kg/km)		31	48	81
Recommended temperature range		-40 °C ~ +70 °C (Transportation & Storage) -10 °C ~ +50 °C (Installation) -40 °C ~ +70 °C (Operation)		

**Note) MT-KPE\* : Micro Tube \_ Kevlar yarns + PE Sheath**

**● 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: 700N/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 : ≤ 0.1dB/km

**Annex 1. Color Code of Optical Fiber and Loose Tube**

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

**Annex 2. Optical Fiber Cable Unit Composition**

Cable Core	The count of optical fiber per loose tube and unit composition											
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12
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

Note) F: PE Filler (Natural color)