

Multitube Double Armored Direct Buried Cable – Outdoor



- Steel Tape
- Water Blocking Yarn
- Filler
- Optical Fiber
- Central Strength Member
- Filling Jelly Compound
- Flooding Jelly Compound
- Aluminum Tape
- Inner Jacket
- Outer Jacket

Direct buried and/or duct type installation for highly reliable industrial applications. Designed for outside applications and specifically to protect the optical fiber from unexpected mechanical and environmental conditions. Qualification and acceptance tests are performed to assure the optical cable's performance and durability in several environments.

OPTICAL SYSTEMS

Features / Benefits

- Fiber counts up to 288
- Cable Type – OS2/OM1/OM2/OM3/OM4
- Multitube, steel armored w/double Sheath, PE
- High tensile strength design
- Fibers per loose tube 1-12
- Gel filled cable core for water resistance
- Dry core design is also possible for water resistance upon customer request
- Suitable for duct application
- Colored fiber quick identification
- UV resistance for the outer Sheath
- High fiber count to diameter ratio
- Ripcord for easy strip outer sheath

Applications

- Telecommunication applications
- Video applications
- Distribution
- Long Haul Communication and
- Metropolitan Communication Systems

Dimensions of cable constructions

| Fiber count | Structure | Fibers per tube | Loose tube diameter(mm) | CSM diameter /pad diameter(mm) | Thickness of Inner jacket (mm) | Thickness of outer jacket(mm) | Cable diameter(mm) | Cable weigh (kg/km) |
|-------------|-----------|-----------------|-------------------------|--------------------------------|--------------------------------|-------------------------------|--------------------|---------------------|
| 6 | 1+6 | 6 | 1.8±0.1 | 1.8 /1.8 | 1.0±0.1 | 1.7±0.1 | 12.6 ±0.5 | 160 |
| 12 | 1+6 | 6 | 1.8±0.1 | 1.8 /1.8 | 1.0±0.1 | 1.7±0.1 | 12.6±0.5 | 160 |
| 18 | 1+6 | 6 | 1.8±0.1 | 1.8 /1.8 | 1.0±0.1 | 1.7±0.1 | 12.6 ±0.5 | 161 |
| 24 | 1+6 | 6 | 1.8±0.1 | 1.8 /1.8 | 1.0±0.1 | 1.7±0.1 | 12.6 ±0.5 | 161 |
| 36 | 1+6 | 6 | 1.8±0.1 | 1.8 /1.8 | 1.0±0.1 | 1.7±0.1 | 12.6 ±0.5 | 162 |
| 48 | 1+6 | 12 | 2.0±0.1 | 2.0 /2.0 | 1.0±0.1 | 1.7±0.1 | 13.6±0.5 | 187 |
| 60 | 1+6 | 12 | 2.0±0.1 | 2.0/2.0 | 1.0±0.1 | 1.7±0.1 | 13.6±0.5 | 187 |
| 72 | 1+6 | 12 | 2.0±0.1 | 2.0 /2.0 | 1.0±0.1 | 1.7±0.1 | 13.7±0.5 | 189 |
| 84 | 1+7 | 12 | 2.0±0.1 | 2.2/2.7 | 1.0±0.1 | 1.7±0.1 | 14.4±0.5 | 211 |
| 96 | 1+8 | 12 | 2.0±0.1 | 2.2 /3.3 | 1.0±0.1 | 1.7±0.1 | 15.0±0.5 | 226 |
| 108 | 1+9 | 12 | 2.0±0.1 | 2.2/3.9 | 1.0±0.1 | 1.7±0.1 | 15.6 ±0.5 | 242 |
| 120 | 1+10 | 12 | 2.0±0.1 | 2.4/4.5 | 1.0±0.1 | 1.7±0.1 | 16.2 ±0.5 | 262 |
| 132 | 1+11 | 12 | 2.0±0.1 | 2.4 /5.2 | 1.0±0.1 | 1.7±0.1 | 16.9 ±0.5 | 281 |
| 144 | 1+12 | 12 | 2.0±0.1 | 2.4/5.8 | 1.0±0.1 | 1.7±0.1 | 17.5±0.5 | 299 |

Cable performance

| Item | | Parameters |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Loose tube | Material | PBT |
| | Color | Full color |
| Filler | Material | PE |
| | Color | Black |
| CSM | Material | Phosphating steel wire |
| Moisture barrier | Material | Plastic coated aluminum strip |
| Inner jacket | Material | PE |
| | Color | Black |
| Outer armoured | Material | Plastic coated steel tape |
| Outer jacket | Material | PE |
| | Color | Black |
| Min. bending radius | Static | 12.5 times cable diameter |
| | Dynamic | 25 times cable diameter |
| Repeating bending | Load: 150N; number of cycles:30 No obvious addition attention, no fiber break and no cable damage. | |
| Tensile performance | Short term | 3000N The addition attention≤0.1dB, fiber strain ≤0.3% |
| | Long term | 1000N No obvious addition attention, No obvious strain |
| Crush | Short term | 3000N/100mm The addition attention≤0.1dB |
| | Long term | 1000N/100mm No obvious addition attention |
| Torsion | Load: 150N; number of cycles:10; twist angle:±180 No obvious addition attention, no fiber break and no cable damage. | |
| Impact | Impact energy: 450g×1m; radius of hammer head:12.5mm; number of impact: 20 No obvious addition attention, no fiber break and no cable damage. | |
| Cable attenuation | ≤ 0.36dB/km at 1310nm, ≤ 0.22 dB/km at 1550nm | |

OPTICAL SYSTEMS

ORDERING INFORMATION

| NO OF FIBERS | 9/125 (OS2) | 62.5/125(OM1) | 50/125(OM2) | 50/125 (OM3) | 50/125 (OM4) |
|--------------|-------------|---------------|-------------|--------------|--------------|
| 4 | 507190043 | 507390043 | 507290043 | 507490043 | 507590043 |
| 6 | 507190063 | 507390063 | 507290063 | 507490063 | 507590063 |
| 8 | 507190083 | 507390083 | 507290083 | 507490083 | 507590083 |
| 12 | 507190123 | 507390123 | 507290123 | 507490123 | 507590123 |
| 24 | 507190243 | 507390243 | 507290243 | 507490243 | 507590243 |
| 36 | 507190363 | 507390363 | 507290363 | 507490363 | 507590363 |
| 48 | 507190483 | 507390483 | 507290483 | 507490483 | 507590483 |
| 72 | 507190723 | 507390723 | 507290723 | 507490723 | 507590723 |
| 96 | 507190963 | 507390963 | 507290963 | 507490963 | 507590963 |
| 144 | 507191443 | 507391443 | 507291443 | 507491443 | 507591443 |
| 172 | 507191723 | 507391723 | 507291723 | 507491723 | 507591723 |
| 216 | 507192163 | 507392163 | 507292163 | 507492163 | 507592163 |
| 244 | 507192443 | 507392443 | 507292443 | 507492443 | 507592443 |

Note:508xxxxx-Denotes LSOH Sheath