



CENTRAL LOOSE TUBE CABLE

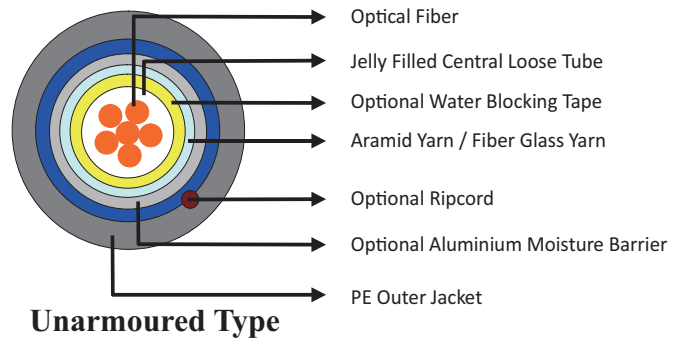
► Application

This cable is characterized by light weight and small diameter, suitable for both aerial and duct installation. The cable can also be used for direct burial for armoured option.

► Description

Central loose tube cable contains one tube with 2 - 24 fibers, which is filled with water blocking gel. Either aramid yarn or fiber glass is wound around the tube to provide physical protection and tensile strength. The cable can be jacketed with either PE or LSZH. PE is the preferred option in outdoor environment for water protection purpose. For direct burial, either steel wire armour or corrugated steel tape armour is applied with an optional inner jacket of either PVC, PE or LSZH. An Aluminium moisture tape can be incorporated under the jacket for water blocking and shielding purpose. A ripcord is located under the jacket to facilitate jacket removal.

► Construction

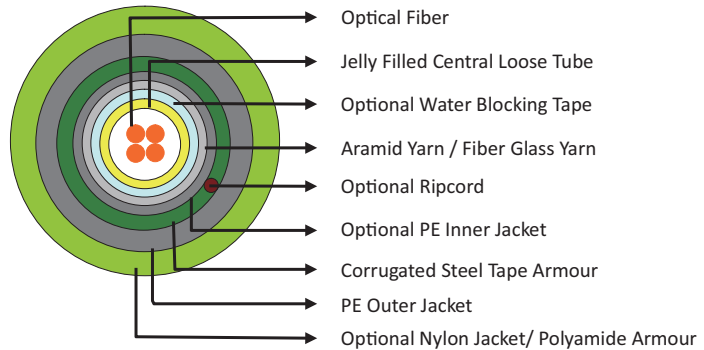


► Physical Properties

Fiber Count	Nominal Weight (kg/km)	Nominal Weight (lb/kft)	Nominal Outer Diameter (mm)	Nominal Outer Diameter (in)	Maximum Pulling/Tensile Load	
					Installation (N/lb)	In Service (N/lb)
2-12	60.0	40.27	7.5	0.296	1500/337	445/100
14-24	65.0	43.62	8.5	0.335	1500/337	445/100

▶ CENTRAL LOOSE TUBE CABLE

▶ Construction

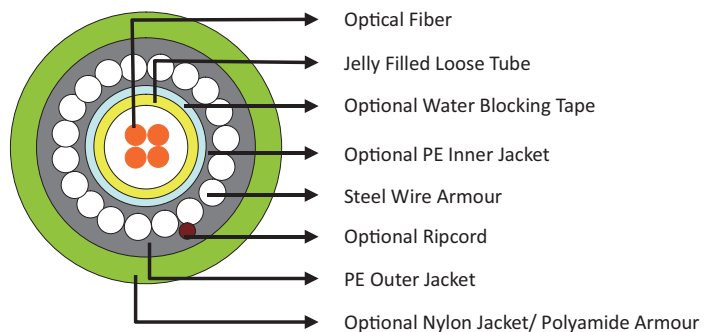


Corrugated Steel Tape Armoured Type

▶ Physical Properties

Fiber Count	Nominal Weight (kg/km)	Nominal Weight (lb/kft)	Nominal Outer Diameter (mm)	Nominal Outer Diameter (in)	Maximum Pulling/Tensile Load	
					Installation (N/lb)	In Service (N/lb)
2-12	125.0	83.89	10.5	0.414	2670/600	890/200
14-24	145.0	97.32	12.0	0.473	2670/600	890/200

▶ Construction



Steel Wire Armoured Type

▶ Physical Properties

Fiber Count	Nominal Weight (kg/km)	Nominal Weight (lb/kft)	Nominal Outer Diameter (mm)	Nominal Outer Diameter (in)	Maximum Pulling/Tensile Load	
					Installation (N/lb)	In Service (N/lb)
2-12	170.0	114.09	10.5	0.414	8000/1800	2650/595
14-24	245.0	164.43	12.0	0.473	8000/1800	2650/595





CENTRAL LOOSE TUBE CABLE

► Mechanical Properties

Minimum Bending Radius:	Maximum Compressive Load: 3000N
Under installation: 20×OD	Repeated Impact: 4.4 N.m (J)
During operation: 10×OD for unarmoured cables;	Twist (Torsion): 180×10 times, 125×OD
20×OD for armoured cables.	Cyclic Flexing: 25 cycles for armoured cables;
Temperature Range:	100 cycles for unarmoured cables.
Operating Temperature Range: -40°C(-40°F) to +70°C(+158°F)	Crush Resistance: 263N/cm (150lb/in)
Storage Temperature Range: -50°C(-58°F) to +70°C(+158°F)	

► Fiber Compliance

Temperature Cycling	IEC60794-1-2-F2
Tensile Strength	IEC60794-1-2-E1A
Crush	IEC60794-1-2-E3
Impact	IEC60794-1-2-E4
Repeated Bending	IEC60794-1-2-E6
Torsion	IEC60794-1-2-E7
Kink	IEC60794-1-2-E10
Cable Bend	IEC60794-1-2-E11
Cool Bend	IEC60794-1-2-E11

► Safety Compliance

General Purpose Grade	Flammability Test: OFN(UL1581)
Riser Grade	Flammability Test: OFNR/FT4 (UL1666)
Plenum Grade	Flammability Test: OFNP/FT6(UL 910)
FRPVC Grade	Flammability Test: IEC60332-1
LSZH Grade	Halogen Content Test: IEC 60754-1
	Acidity Test: IEC 60754; Smoke Emission Test: IEC61034-1/2
LSFROH Grade	Halogen Content Test: IEC 60754-1
	Acidity Test: IEC 60754; Smoke Emission Test: IEC61034-1/2
	Flammability Test: IEC60332-1 & IEC 60332-3C/A
FR Grade	Fire Resistance Test: IEC 60331 / BS 6387 CWZ

► Standard Compliance

Telcordia GR-20	RUS 7 CFR 1755.900 (REA PE-90)	ICEA S 87-640
-----------------	--------------------------------	---------------

► Features

- Loose Tube construction provides environmental protection
- Loose tube jelly filled for superior fiber protection
- Colored coded fibers and binders for quick and easy identification during installation.
- Very lightweight and flexible design allows for easy installation
- UV or moisture resistant for outdoor application
- Compact design with small cable diameter
- All Dielectric strength member
- Anti-termite and rodent protection as options
- Optional Aluminium moisture barrier for EMI protection