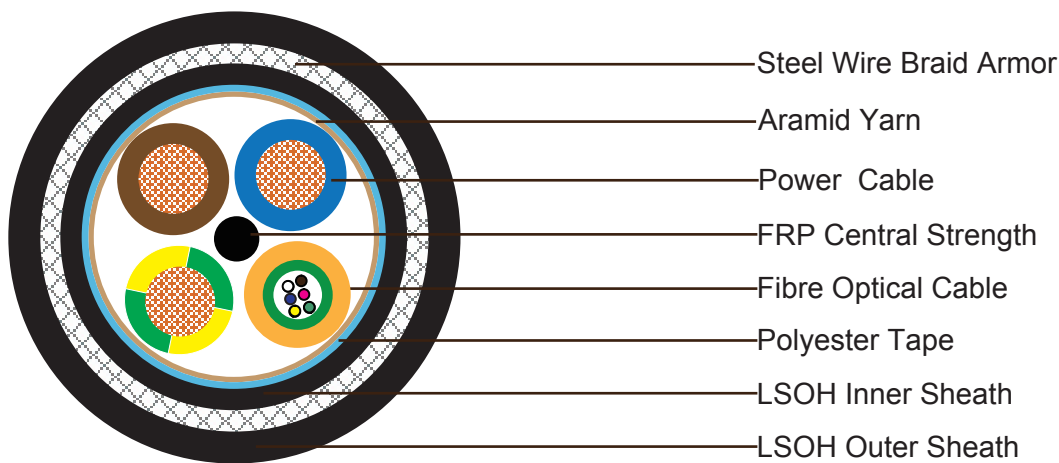




3x2.5 Power Cable + 6C Fiber Optic Cable SWB Armored Composite Cable

Construction:



3x2.5mm² Power Cables

Conductor	7/0.67mm Stranded bare copper wire
Insulation	XLPE compound. Nominal outer diameter 3.41mm
Insulation Color	Blue, Brown and Green/Yellow

6 Core Central Loose Tube Fiber Optic Cable

Optical Fiber	Single-mode cabled fibers meet or exceed the requirements of ITUT G.652.D specification
Loose Tube	PBT tubes 1.80±0.1mm outer diameter, contains 6 fibers, The tubes are filled with a thixotropic gel to prevent the ingress of water
Fiber Glass Yarn	Fiber Glass Yarn is laid over the tube core to serve as peripheral strength member.
Sheath	PE outer Sheath is extruded over the glass yarn, Nominal outer diameter is about 3.40mm
Sheath Color	Black

Element Assembly



Composite Cables

Central Strength Member	1.5mm FRP central strength member with PE/PVC coating if necessary
Strength member	Aramid yarn helically is applied over cable core.
Inner Jacket	Black PE, thickness 1.00mm
Armor	Steel wire braid, coverage 80%, 0.25mm steel tape armor is optional
Sheath	PE, thickness 1.80mm, nominal outer diameter 16.00±1.0mm
Sheath Color	Black

Optical Characteristics

Single-mode fibers meet or exceed the requirements of ITUT G.652.D, as listed in below:

Parameter		Standard Single Mode Fiber per ITU-T G.652D	Non-zero Dispersion Shifted fiber per ITU-T G.655	Non-zero Dispersion Shifted fiber per ITU-T G.656	Units
Fiber Code		9	8	7	
Attenuation, Loose Tube Cables	@1310nm	≤0.35	N/A	N/A	dB/km
	@1550nm	≤0.22	≤0.22	≤0.22	dB/km
	@1625nm	≤0.25	≤0.26	≤0.26	dB/km
Attenuation, Tight Buffer or Semi-Tight Cables	@1310nm	≤0.38	N/A		dB/km
	@1550nm	≤0.28	N/A		dB/km
Chromatic Dispersion	between 1260 and 1360nm (O Band)	≤3.5	N/A	N/A	ps/(nm*km)
	between 1460 and 1530nm (S Band)	N/A	N/A	2.0-7.0	ps/(nm*km)
	between 1530 and 1565nm (C Band)	≤18	1.0-10.0	7.0-10.0	ps/(nm*km)
	between 1565 and 1625nm (L Band)	≤22	7.0-12.0	10.0-14.0	ps/(nm*km)
Zero Dispersion Wavelength		1310±11	1530-1560	1460-1565	nm
Zero Dispersion Slope		0.093	0.093	0.093	ps/(nm ² . km)
Point Discontinuity at 1300nm & 1550nm		0.1	0.1	0.1	dB
Mode Field Diameter	@1300nm	9.3±0.5	N/A	N/A	um
	@1550nm	10.4±0.8	8.5±0.6	9.0±0.5	um



Cable Cut-off Wavelength	≤1260	≤1450	≤1450	nm
PMD (Individual fiber)	≤0.2	≤0.2	≤0.2	ps/km ^{1/2}
Cladding Diameter	125±1	125±1	125±1	um
Core/Cladding Concentricity Error	≤0.5	≤0.5	≤0.6	um
Cladding Non-Circularity	≤1.0	≤1.0	≤1.0	%
Coating Non-Circularity	≤6.0	≤6.0	≤6.0	%
Primary Coating Diameter	245±10	245±10	245±10	um
Proof-Test Level	100 (0.7)	100 (0.7)	100 (0.7)	Kpsi/GN/m ²
Fatigue Coefficient	≥20	≥20	≥20	
Temperature Dependence between 0°C ~ +70°C @ 1310 & 1550nm	0.1	0.1	0.1	Db/km

The fibers contain no splices.

Mechanical Properties:

Minimum Bending Radius:

Under Installation: 25×OD

During Operation: 12.5×OD

Temperature Range:

Operating Temperature Range: -40°C (-40 oF to +70°C (+158 oF))

Storage Temperature Range: -50°C (-58 oF to +70°C (+158 oF))

Maximum Crush Resistance:

Long Term: 300N

Short Term: 10000N

Minimum Tensile Resistance:

Under Installation: 1500N

During Operation: 600N.

Repeated Impact: 4.0 N.m (J)

Twist (Torsion): 180x10 times, 125xOD

Cyclic Flexing: 25 cycles for armoured cables;