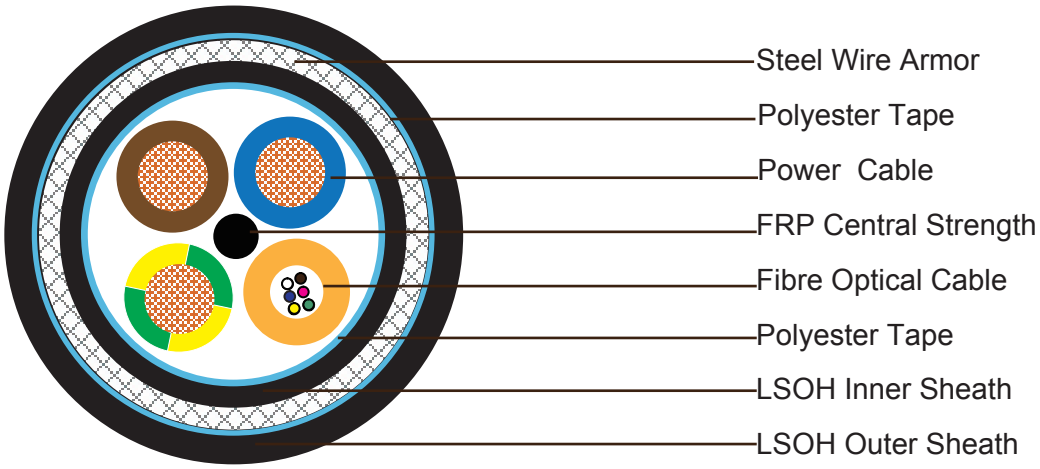
3x2.5 Power Cable + 6C Optical Fibre Cable SWB LSZH Sheathed Composite Cable

Construction:



3x2.5mm² Power Cable (around central member)

Conductor	50/0.25mm Stranded bare copper wire
Insulation	XLPE. Thickness is 0.86mm. Outer diameter 3.5mm
Insulation Color	Blue, Brown and Green/Yellow

6C Optic Fiber Cable

No of fibers in loose tube	6 fibers
Loose tube	Outer diameter: 3.5mm (PE or PVC Sheathwould be used over the loose tube if necessary)

Element Assembly

Wrapping Tape	Ployester tape
Inner Sheath	Grey LSZH, thickness 0.8mm
Armor	Galvanised steel wire armour, coverage 99%
Wrapping Tape	Ployester tape
Sheath	LSZH, thickness 1.6mm, norminal outer diameter 16.2mm
Sheath Color	Grey

Optical Characteristics

Table 1. SM

Property	Requirement
Optical properties	
Attenuation @ 1310 nm	0.35 dB/km
Attenuation @ 1550 nm	0.22 dB/km
Point Discontinuity	0.1 dB @ 1310 or 1550 nm
Chromatic Dispersion slope:	0.092 ps/km/nm2
Zero Chromatic Dispersion Wavelength:	1300 - 1324 nm
Mode Field Diameter @ 1300 nm	9.3 0.5m
Mode Field Diameter @ 1550 nm	10.5 1.0m
Fiber Cut-Off Wavelength	1260 70 nm
Cable Cut-Off Wavelength	1260 nm
Geometrical properties	
Cladding Diameter:	125 1.0 m
Core-Cladding Offset	0.8 m
Cladding Non-Circularity:	1.0 %
Colored Coating Diameter:	250 10m
Coating / Cladding Offset:	12m
Mechanical properties	
Proof Test:	0.7 GN/m2 for 1 second

Table 2. MM

Property	50/125 fibers	62.5/125 fibers
Attenuation @ 850 nm (dB/km)	≤ 3.0	≤ 3.2
Attenuation @ 1300 nm (dB/km)	≤ 1.0	≤ 1.2
Added Attenuation with Bending	≤ 0.5 dB (850 and 1300 nm for 100 turns around a 75 mm mandrel	
Numerical Aperture	0.20 ± 0.02	0.275 ± 0.015
Bandwidth @ 850 nm	400 MHz*km	160 MHz*km

Bandwidth @ 1300 nm	800 MHz*km	500 MHz*km
Core diameter	50 ± 3 μm	62.5 ± 3 μm
Cladding diameter	125 ± 2 μm	
Core-Claddingoffset	≤ 6%	
Cladding non-circularity	≤ 2%	
Core non-circularity	≤ 6%	
Coating diameter	245 ± 10 μm	
Coating / Cladding offset	12 μm	
Proof Test	≥ 0.69 GN/m2 (100 kpsi)	

Electrical and Physical Properties @20°C(Power Cable):

Max. Electrical Resistance: 7.98Ohm/km

Insulation Resistance: ≥5500 MOhmxkm

Dielectric Strength: 1500V/1'

Physical Characteristic:

Min Bending Radius: 240mm

Operating Temperature: -35°C/+80°C

Fire Characteristics:

Flame Propagation: IEC60332-1

Low Smoke Capacity: IEC61034-1/2

Halogen Free: IEC60754-1/2

* The data included in the present catalogue are merely indicative; Caledonian Cables Limited reserves to itself the right to change them as its own discretion in any time.