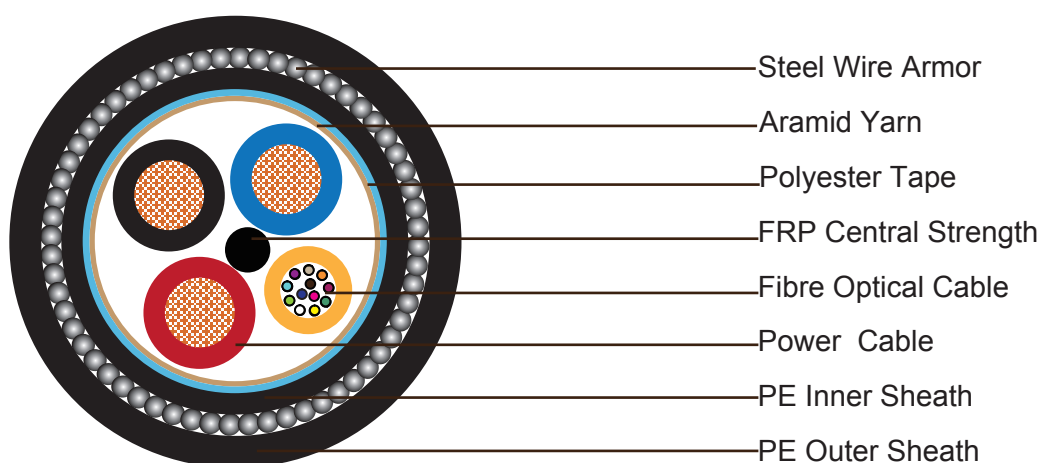




3x2.5 Power Cable + 12C Fiber Optic Cable SWA Composite Cable

Construction:



3x2.5mm² Power Cable

Conductor	7/0.67mm Stranded bare copper wire
Insulation	XLPE. Thickness is 0.7mm. Outer diameter 3.41mm

12C Fiber Cable

No of fibers in loose tube	12 fibers
Loose tube	outer diameter: 2.4mm (PE or PVC Sheath would be used over the loose tube if necessary)

Element Assembly

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.
Wrapping Tape	Polyester tape is applied over cable core
Inner Jacket	PE, LSOH is optional, thickness is 1.0mm
Armor	Steel wire armour, size: 0.9mm



Sheath	PE, LSOH is optional, thickness is 1.8mm, nominal outer diameter 17.0±1.0mm
Sheath Color	Black

Optical Characteristics

12C Optic Fiber Cable, G652D (around central member)

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



Composite Cables

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/m2
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:

Tensile load:

Operating: 2650N

Installation: 8000N

Bending radius:

Operating: 15×OD

Installation: 30×OD

Compressive load:

Short term: 6000N

Long term: 4000N

* 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.