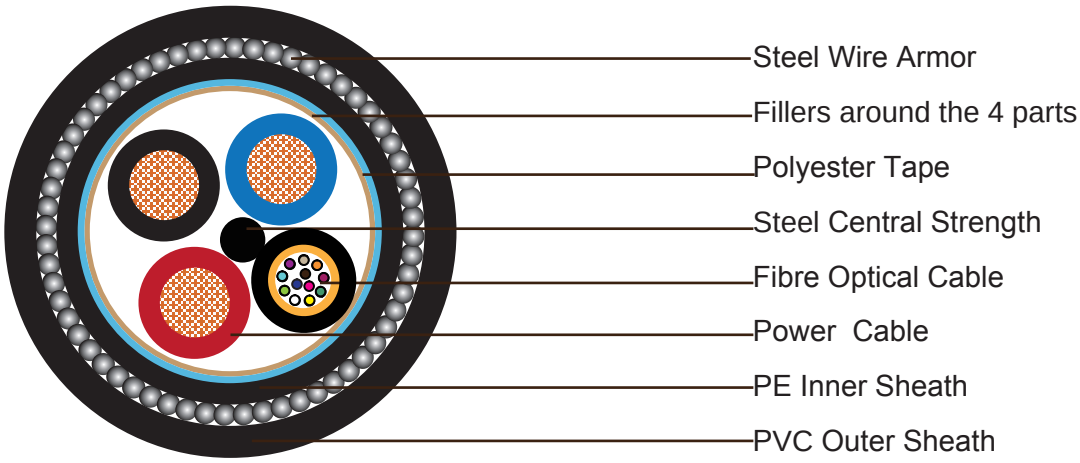
3x2.5 Power Cable + 12C Fiber Optic Cable SWA LSOH Sheathed Composite Cable

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: 2.2+/-0.2mm (Aramid yarn &PE Sheath would be used over the loose tube)

Element Assembly

Central Strength Member	Steel central strength member with PE/PVC coating if necessary
Fillers	PP fillers will be added around the 4 cable cores.
Wrapping Tape	Polyester tape is applied over cable core if necessary
Inner Jacket	PE, LSOH is optional, thickness is 1.0mm
Armor	Steel wire armour

Sheath	PE, LSOH is optional, thickness is 1.8mm, nominal outer diameter 16.2±2.0mm
Sheath Color	Black

Optical Characteristics

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-Cladding offset	≤ 6%	
Cladding non-circularity	≤ 2%	
Core non-circularity	≤ 6%	
Coating diameter	245 ± 10 µm	
Coating / Cladding offset	12 µm	
Proof Test	≥ 0.69 GN/m^2 (100 kpsi)	

The fibers contain no splices.

Mechanical Properties:

Tensile load:

Operating: 3000N Installation: 5000N

Bending radius:

Operating: 15×OD Installation: 28×OD

Compressive load:

Short term: 5500N Long term: 3500N