

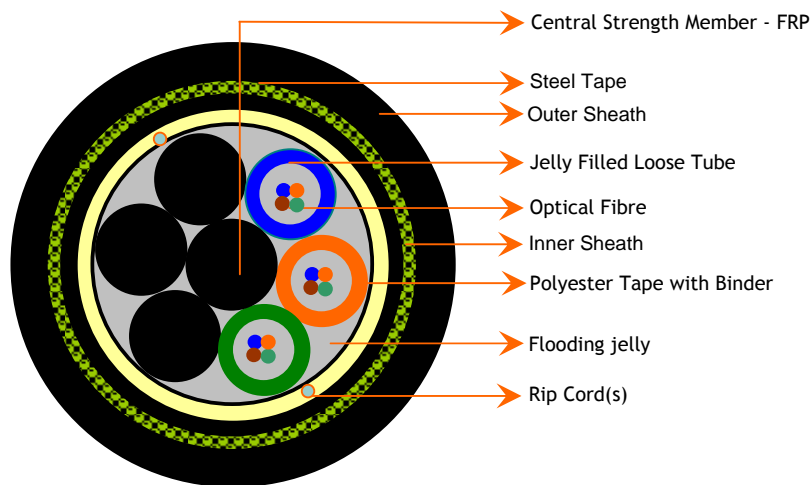
Technical Datasheet

Reference No. : GOFCLP/DSA/WET/HDPE Rev. 1 Dated 19/07/2014
Cable Description : Double Sheath Armoured (WET-WET) DSA HDPE OFC

A Technical Data:

i Temperature Range : -20° to +70° C
ii Bending Radius : $\geq 20 * D$ (D - Diameter of cable)
iii Repeated Bending : 20 * D, 30 Times with weight of 5 Kg
iv Max Pulling Force : 2000 N
v Torsion Resistance : 10 Cycle ($\pm 180^\circ$) with Load of 100 N
vi Crush/ Compression : 4000N (100 X 100 mm), 60 Second Resistance
vii Impact Resistance : 25 N-MTR, 3 Nos
viii Kink Resistance : $\geq 20 * D$ (D - Diameter of cable)

B Cable Construction:



C Cable Elements:

i Central Strength Member : Fiber Reinforced Plastic Rod
ii Loose Tube : PBT Loose Tube filled with Thixotropic jelly
iii Water Blocking Compound : Flooding Jelly
iv Core wrapping : Polyester Tape with Binder
v Rip Cord : 2 Nos. below Inner Sheath
vi Inner Sheath : HDPE Black
vii Armouring : Corrugated Steel Tape Armour
viii Outer Sheath : HDPE Black

D Dimensions:

No. of Fibres	4F	6F	8F	12F	24F	48F	72F	96F
FRP (OD ± 0.1) mm	1.8	1.8	1.8	1.8	1.8	2.0	2.2	2.3(3.5)
Loose Tube (OD ± 0.1) mm	1.7	1.7	1.7	1.7	1.7	2.0	2.1	2.1
No. of Loose Tube	2	3	2	3	6	6	6	8
No. of Fibres per Loose Tube	2	2	4	4	4	8	12	12
No. of Filler	4	3	4	3	0	0	0	0
Inner Sheath (Nominal) mm	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Outer Sheath (Nominal) mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Cable OD mm	11.9	11.9	11.9	11.9	11.9	12.7	13.1	14.4
Cable Weight Kg/Km	138	138	138	138	138	158	170	201

E	Colour Coding: *
i	Fiber in each Loose Tube: BL - Blue, OR - Orange, GR - Green, BR - Brown, SL - Slate, WH - White, RD - Red, BK - Black, YL - Yellow, VI - Violet, RS/PK - Rose/Pink, NAT - Natural
ii	Loose Tube: BL - Blue, OR - Orange, GR - Green, BR - Brown, SL - Slate, WH - White, RD - Red, BK - Black, YL - Yellow, VI - Violet, RS/PK - Rose/Pink, AQ - Aqua, Filler - Black Colour

* Loose Tube & Fiber colour will be serially selected as per cable construction requirement.

F Fibre Characteristics:

Single Mode Fibre

i	Attenuation at 1310nm	dB/Km	≤ 0.38
ii	Attenuation at 1550nm	dB/Km	≤ 0.25
iii	Maximum chromatic dispersion at 1285 - 1330nm	ps/nm.Km	≤ 3.5
iv	Maximum chromatic dispersion at 1270 - 1340nm	ps/nm.Km	≤ 5.3
v	Maximum chromatic dispersion at 1550nm	ps/nm.Km	≤ 18
vi	Zero dispersion wavelength	nm	1300 - 1324
vii	Zero dispersion slope	ps/nm ² .Km	≤ 0.092
viii	PMD	ps/√Km	≤ 0.2
ix	Fibre cut-off wavelength	nm	≤ 1320
x	Mode field diameter range at 1310nm	μm	9.2 ± 0.4
xi	Mode field diameter range at 1550nm	μm	10.5 ± 1

Geometrical Properties:

i	Cladding diameter	μm	125 ± 1
ii	Cladding non circularity	%	≤ 1
iii	Coating diameter	μm	245 ± 10
iv	Core/ clad concentricity error	μm	≤ 0.8

Multi Mode Fiber

i	Fiber Type		OM1	OM2	OM3
ii	Core Diameter	μm	62.5 ± 3	50 ± 3	50 ± 3
iii	Cladding diameter	μm	125 ± 2	125 ± 2	125 ± 2
iv	Cladding non circularity	%	≤ 3	≤ 3	≤ 3
v	Coating diameter	μm	245 ± 10	245 ± 10	245 ± 10
vi	Core/ clad concentricity error	μm	≤ 2	≤ 2	≤ 2
vii	Bandwidth at 850nm	MHz.Km	200	500	1500
viii	Bandwidth at 1300nm	MHz.Km	600	550	500
ix	Attenuation at 850nm	dB/Km	≤ 3.5	≤ 3.5	≤ 3.0
x	Attenuation at 1300nm	dbKm	≤ 1.5	≤ 1.5	≤ 1.2
Xi	Numerical Aperture		0.275 ± 0.015	0.200 ± 0.015	0.200 ± 0.015

G Delivery Information:

i	Standard Length	: 2, 4, 6 Km ± 10 %
ii	Short Length	: 5 % max (Minimum 2 Drums)
iii	PO qty Tolerance	: ± 5%
iv	Printing Details	: xxxxxm FINOLEX CABLES LIMITED GOA MONTH YEAR TELEPHONE & LASER SYMBOL LOOSE TUBE SM xxF A OFC CABLE ID

Note: - Printing sequence may change.
Customized printing will also be provided if required.
xx will be replaced by No. of fibres in cable.