

Uppgjord (även faktaansvarig om annan) - Prepared (also subject responsible if other)		Nr - No.	
HCI/T Tobias Borg		1301-TOL 404 1211	
Dokansv/Godk - Doc respons/Approved	Kontr - Checked	Datum - Date	Rev
HCI/T Thomas Ericsson		2019-04-23	A
		File	

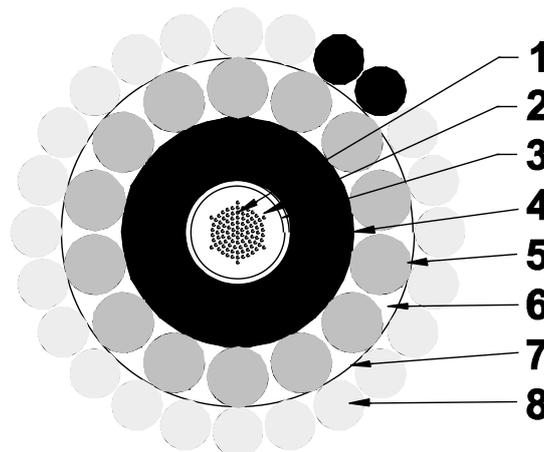
OPTICAL SUBMARINE CABLE, GJLTM 144/T144 G.652.D 10 ton SA

DESIGN

	Diameter [mm]
1 Optical fibres, coloured (bundled into groups with yarns)	0.25
2 Filling compound	
3 Stainless steel tube	5.3
4 Sheath: Polyethylene, black	11.5
5 Armouring: Galvanized steel wires, single layer Wire diameter = 3.0 mm	18
6 Filling compound: Bitumen	
7 Wrapping: Plastic tape	
8 Polypropylene yarns (Yellow with black stripe)	22

CROSS SECTION

144 FIBRES



COLOUR CODING

Alternative C:

Yarn color:

1-Blue, 2-Orange, 3-Green, 4-Brown, 5-Grey, 6-White

Fibre in each bundle (fibre 13-24 is ring marked, where fibre 20 is uncoloured):

1-Blue, 2-Orange, 3-Green, 4-Brown, 5-Grey, 6-White, 7-Red, 8-Black, 9-Yellow, 10-Violet, 11-Pink, 12-Turquoise, 13-Blue-ring, 14-Orange-ring, 15-Green-ring, 16-Brown-ring, 17-Grey-ring, 18-White-ring, 19-Red-ring, 20-Uncolored-ring, 21-Yellow-ring, 22-Violet-ring, 23-Pink-ring, 24-Turquoise-ring

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CABLE MARKERS

The submarine cable is marked with kilometre markers and factory joint markers.

CABLE PROPERTIES

Temperature range:

operation [°C]	-30 to +60
storage [°C]	-40 to +70
handling [°C]	-15 to +40

Tensile strength:

Cable break load CBL [kN]	≥ 130
Fibre break load FBL [kN]	≥ 130
Short term tension NTTS [kN]	≤ 100
Operating tension NOTS [kN]	≤ 70
Permanent tension NPTS [kN]	≤ 50

Impact ¹ [J]	≤ 200
Crush resistance ¹ [kN/100 mm]	≤ 10

Cable bend:

loaded cable, radius [m]	≥ 1.5
unloaded, radius [m]	≥ 0.5

Coil diameter [m]	≥ 3.0
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Water depth [m]	≤ 500
Hydrodynamic constant [deg x Knots]	83
Stowage factor [km/m ³]	2.1
Cable net weight in air [kg/m]	1.1
Cable net weight in water [kg/m]	0.8

Mechanical and environmental tests in accordance with IEC 60794-1-21 and IEC 60794-1-22

OPTICAL CHARACTERISTICS

Optical fibre specification 1301-TOF 401 1019 (G.652.D)

REFERENCES

[1] 1301-TOF4011019+ Fibre specification

¹ Attenuation increase ≤ 0.05 dB, No break on cable members