


 Draka Draka Comteq	CABLED FIBRE SPECIFICATION SINGLE MODE OPTICAL FIBRE ITU-T G.652 A-DQ(BN)(SR)2Y 1Xxx E9 800N CT	Optical Fibres 25/04/2006
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<u>TYPE AND CONSTITUTION</u>		
Singlemode, complying with ITU-T G 652 recommendation. The fibres are made of a high grade doped silica core surrounded by a silica cladding; they are coated with a dual layer, UV cured acrylate based coating.		
<u>GEOMETRICAL PROPERTIES</u> Mode field diameter @ 1310 nm Mode field diameter @ 1550 nm Cladding diameter Coating diameter Cladding non circularity Core / cladding concentricity error Cladding / coating concentricity error	(µm) (µm) (µm) (µm) (%) (µm) (µm)	9.2 ± 0.4 10.3 ± 0.5 125.0 ± 1.0 242 ± 7 ≤ 1.0 ≤ 0.6 ≤ 12
<u>OPTICAL PROPERTIES</u> Cabled cut-off wavelength Attenuation : Maximum value @ 1310 nm Maximum value @ 1550 nm Attenuation uniformity (local default:1310 & 1550 nm) Dispersion : Maximum value between 1285 and 1330 nm Maximum value at 1550 nm Zero dispersion wavelength Zero dispersion slope Polarization Mode Dispersion PMD link design value	(nm) (dB/km) (dB/km) (dB) (ps/nm.km) (ps/nm.km) (nm) (ps/nm ² .km) (ps/√km)	λ _{cc} ≤ 1260 (1) 0.36 0.23 ≤ 0.1 3 18 1302 ≤ λ ₀ ≤ 1322 ≤ 0.092 ≤ 0.1 (2)
<u>MECHANICAL PROPERTIES</u> Proof test (time : 1s) Macrobend test, additional loss at 1550 and 1620 nm - 100 turns on 60 mm diameter mandrel	(%) (dB)	≥ 1 ≤ 0.05

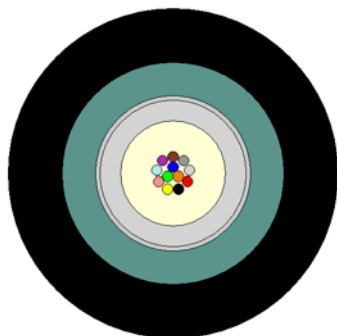
NOTE : All measurements in accordance with ITU-T G650 recommendations.

(1) : guaranteed value by the manufacturer of fibres according to the ITU-T (ATM G650) method.

(2) : guaranteed value by the manufacturer of fibres. Complies with IEC SC86A, WG1 method 1, 1997.

 <p>Draka Draka Comteq</p>	<p>CABLE DATASHEET</p> <p>Optical Fibre Cables</p>	<p>Cable Code : CDS-1385</p> <p>Date : 25/04/06</p>
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OPTICAL FIBRE CABLES FOR OUTDOOR METALLIC ANTIRODENT APPLICATIONS



- Figure : 8 fibres cable -

- ❑ Central loose tube containing optical fibres and filled with a suitable filling compound
- ❑ Water-swellaible synthetic core wrapping to ensure watertightness (dry core)
- ❑ Dielectric reinforcement: fibreglass yarns
- ❑ Bonded both sides copolymer coated corrugated steel tape armouring. One ripcord is laid below
- ❑ Black polyethylene outer sheath

CABLE DIMENSIONS AND MAIN CHARACTERISTICS


No. of fibres in cable		2 - 24
Loose tube outer diameter	mm	3.5
Steel tape thickness	mm	0.15
Outer sheath thickness	mm	1.2
Cable diameter	mm	8.5
Cable weight	kg/km	90

IDENTIFICATION

Optical fibres colour code :

No.	Colour	No.	Colour	No.	Colour	No.	Colour
1	Blue	7	Red	13	Orange (*)	19	Orange (**)
2	Orange	8	Black	14	Yellow (*)	20	Yellow (**)
3	Green	9	Yellow	15	Red (*)	21	Red (**)
4	Brown	10	Violet	16	White (*)	22	White (**)
5	Grey	11	Pink	17	Pink (*)	23	Pink (**)
6	White	12	Turquoise	18	Turquoise (*)	24	Turquoise (**)

(*) These fibres are marked with a black ring at each 50 mm length interval
(**) These fibres are marked with a double black ring at each 50 mm length

 Draka Draka Comteq	CABLE DATASHEET Optical Fibre Cables	Cable Code : CDS-1385 Date : 25/04/06
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Central tube colour : Natural

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Test	Standard	Specified value	Acceptance criteria
Tensile performance	IEC 60794-1-E1	800 N (installation) 250 N (operation)	$\Delta\epsilon_f \leq 0.33 \%$ $\Delta\alpha$ reversible $\Delta\alpha \leq 0.05$ dB/100m
Crush	IEC 60794-1-E3	2,000 N / 100 mm	$\Delta\alpha \leq 0.05$ dB
Impact	IEC 60794-1-E4	10 J, 3 impacts, 300 mm	$\Delta\alpha \leq 0.05$ dB
Bending radius	IEC 60794-1-E11	$15 \cdot \varnothing_{\text{cable}}$ (mm), 5 turns, 3 cycles	$\Delta\alpha \leq 0.05$ dB
Temperature cycling	IEC 60794-1-F1	-20 °C... +70 °C	$\Delta\alpha \leq 0.05$ dB/km
Water penetration	IEC 60794-1-F5	3 m cable, 1 m water, 24 h	No water leakage

SHEATH MARKING

Except where expressly requested by the customer the following information is printed on the outer sheath

DRAKA COMTEQ - YYYY - NN Type - LLLL

Where

YYYY : Year of manufacture

NN Type : Number and type of fibres in cable

LLLL : Length marking (m)



CABLED FIBRE SPECIFICATION

MULTIMODE OPTICAL FIBRE

A-DQ(BN)(SR)2Y 1Xxx G6 800N CT

Optical Fibres

25/04/2006

TYPE AND CONSTITUTION

Multimode 62.5/125

The fibres are made of a high grade doped silica core surrounded by a silica cladding; they are coated with a dual layer, UV cured acrylate based coating.

GEOMETRICAL PROPERTIES

Core diameter	(μm)	62.5 ± 2.5
Cladding diameter	(μm)	125.0 ± 1.0
Coating diameter	(μm)	242 ± 7
Core non circularity	(%)	≤ 5
Core / cladding concentricity error	(μm)	≤ 1.5
Cladding non circularity	(%)	≤ 1.0
Coating non circularity	(%)	≤ 5.0
Coating concentricity error	(μm)	≤ 10.0

OPTICAL PROPERTIES

Attenuation :

Maximum value @ 850 nm	(dB/km)	3.0
Maximum value @ 1300 nm	(dB/km)	0.8

Optical bandwidth :

Minimum value @ 850 nm	(MHz.km)	200
Minimum value @ 1300 nm	(MHz.km)	400


Numerical aperture

0.275 ± 0.015

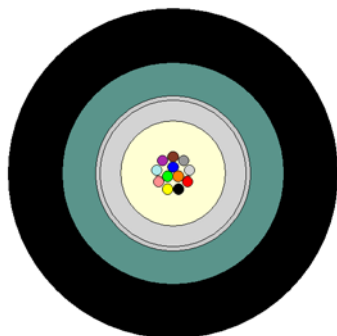
MECHANICAL PROPERTIES

Proof test (time : 1s)	(%)	≥ 1
Macrobend test, additional loss at 850 and 1300 nm - 100 turns on 75 mm diameter mandrel	(dB)	≤ 0.5

NOTE : All measurements in accordance with ITU-T G650 recommendations.

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