

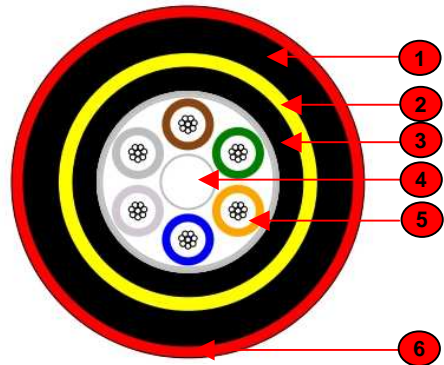
DATA SHEET FIBRE OPTIC CABLE

DATA SHEET : GCO-ENQ100586

GCO Peripheral Strength Member (Non-Metallic, Dry Core)

CABLE DESCRIPTION

1	High Density Polyethylene Sheath (1.5mm RT)
2	1 Layer of Glass Composite Oval peripheral strength member
3	Polyethylene Sheath (1.0mm RT)
4	Glass reinforced plastic centre strength member (GRP) (Over-sheathed in some cases)
5	Dry Water Block Core with PBT loose tubes (Thixotropic gel filled) and Optical Fibres
6	Poly-Amide Sheath (0.5 mm RT)



Drawing depicts a 48 fibre design

FIBRE COUNT	ELEMENTS PER LAYER											
	1	2	3	4	5	6	7	8	9	10	11	12
6	SM	FL	FL	FL	FL	FL	Up to 6 Fibres in a ØD 2.2mm tube					
8	SM	FL	FL	FL	FL	FL	Up to 8 Fibres in a ØD 2.2mm tube					
12	SM	SM	FL	FL	FL	FL	Up to 6 Fibres in a ØD 2.2mm tube					
24	SM	SM	SM	SM	FL	FL	Up to 6 Fibres in a ØD 2.2mm tube					
48	SM	SM	SM	SM	FL	FL	Up to 8 Fibres in a ØD 2.2mm tube					

FIBRE COLOURS : BLUE, ORANGE GREEN, BROWN, GREY, WHITE, RED AND BLACK
TUBE COLOURS: BLUE, ORANGE GREEN, BROWN, GREY, WHITE and YELLOW FILLERS

PRODUCT FEATURES

- * The CBI "GLASS COMPOSITE OVAL (Non-Metallic, Double Sheath, Dry Water-blocked)" optical fibre cable is specifically designed for underground installation.
- * A double sheath construction provides the necessary protection when the cable is subjected to abnormal crush and impact forces normally encountered during direct burial installation.
- * The G.C.O. provides a measure of rodent protection.
- * A totally non-metallic construction ensures lightning immunity and does not require grounding.
- * An outstanding feature is the sustained reliability over a wide temperature range. The optical fibres are "stress" free inside loose tubes while the cable contracts and expands with temperature.
- * The cable core is fully water-blocked by means of "dry" water-blocking materials. This also ensures user friendly handling that reduces installation time.

DATA SHEET

FIBRE OPTIC CABLE

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TYPICAL PROPERTIES		
Parameter	Property / Pass criteria	Test Method
	Fibre Count	
	24	
Number of elements	6	
Cable diameter (nominal)	15.0mm	
Cable weight (nominal)	182kg/km	
Maximum installation load (Short term)	3000 N	IEC 60794-1-E1
Minimum bend radius	240mm	IEC 60794-1-11
Crush resistance (via 100 mm plates)	3000 N	IEC 60794-1-E3
Impact resistance (25mm anvil / 10 blows)	4 Nm Blows	IEC 60794-1-E4
Temperature performance	-10 to +70°C	IEC 60794-1-F1
Water penetration (3m cable, 1m head of water)	No leakage	IEC 60794-1-5B
Drip test (300 mm sample of loose tube @ 80 °C)	No leakage	IEC 60794-1-14

OPTICAL PROPERTIES (Alternative fibre types/properties are available on request)

FIBRE TYPE	SINGLE MODE(SM) 9/125 µm	
	Specification	ITU-T G. 652D
Fibre core size	9.2 ± 0.4 µm (Mode field diameter @ 1310 nm) 10.3 ± 0.5 µm (Mode field diameter @ 1550 nm)	
Cladding diameter	125 µm	
Primary coating diameter	245 µm	
Operating wavelength	1310 nm	1550 nm
Max. Attenuation	0.36 dB/km	0.22 dB/km
Max. Dispersion	3 ps/nm.km	18 ps/nm.km
PMD _Q	0.2 ps√ km	

YOUR LINK TO THE WORLD OF COMMUNICATION

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All information given in this leaflet is correct to the best of our knowledge, but the company reserves the right to make alterations and amendments to the detailed specification at its discretion.