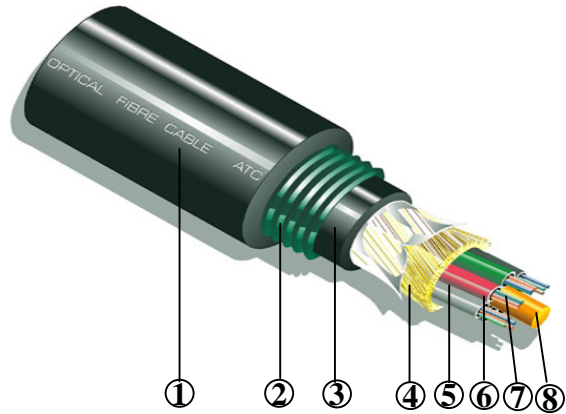


# DATA SHEET FIBRE OPTIC CABLE

## CORRUGATED STEEL TAPE ARMoured FIBRE OPTIC CABLE (Dry Core)

### CABLE DESCRIPTION

1	Polyethylene sheath
2	Corrugated steel tape armouring
3	Polyethylene bedding sheath
4	Aramid yarn peripheral strength member
5	Dry Water-blocked cable core
6	PBT loose tube (Thixotropic gel filled)
7	Optical fibres
8	Glass reinforced plastic centre strength member (GRP) (Over-sheathed in some cases)



### FIBRE COUNT

### ELEMENTS PER LAYER

	1	2	3	4	5	6	7	8	9	10	11	12
Up to 24	4 ELEMENTS											
36 & 48	6 ELEMENTS											
72	6 ELEMENTS											
96	8 ELEMENTS											
144	12 ELEMENTS											

Loose tubes contain up to 12 individually coloured fibres. Tubes are identified by means of marker/reference colour scheme (Red & Green tubes). In between tubes are natural in colour. Fillers are yellow.

\* Customized cables containing other fibre counts, fibre & element colours, are available on request.

### PRODUCT FEATURES

- \* The company's "CORRUGATED STEEL TAPE ARMoured" optical fibre cable is specifically designed for long haul direct burial applications.
- \* A double sheath construction that includes corrugated steel tape armouring provides the necessary protection when the cable is subjected to abnormal crush and impact forces normally encountered during direct burial installation.
- \* Corrugated steel tape is widely recognized for its ability to resist rodent attacks.
- \* The destructive crushing forces and discharge damage associated with lightning strikes are eliminated as the polymer coated steel tape provides an open circuit at the overlap eliminating the circumferential path for induced currents.
- \* 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.
- \* "Dry" water-blocking materials ensures user friendly handling which reduces installation time.

# DATA SHEET FIBRE OPTIC CABLE

DATA SHEET : CST-DC/01

## TYPICAL PROPERTIES

Parameter	Property / Pass criteria					Test Method
	Fibre Count					
	Up to 24	36 & 48	72	96	144	
Number of elements	4	6	6	8	12	
Cable diameter (nominal)	14.8 mm	16.6 mm	17.2 mm	17.2 mm	22.9 mm	
Cable weight (nominal)	192 kg/km	233 kg/km	260 Kg/km	260 Kg/km	430 Kg/km	
Maximum installation load	2700N	4000N	4000N	4000N	5000N	IEC 60794-1-E1
Minimum bend radius	220mm	250mm	260mm	260mm	345mm	IEC 60794-1-11
Crush resistance (via 100 mm plates)	5000 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		MULTI MODE 50/125 µm	
Specification	ITU-T G. 652		ITU-T G. 651	
Fibre core size	9.2 ± 0.4 µm (Mode field diameter @ 1310 nm) 10.3 ± 0.5 µm (Mode field diameter @ 1550 nm)		50 µm	
Cladding diameter	125 µm		125 µm	
Primary coating diameter	245 µm		245 µm	
Operating wavelength	1310 nm	1550 nm	850 nm	1300 nm
Max. Attenuation	0.37 dB/km	0.24 dB/km	2.8 dB/km	0.9 dB/km
Bandwidth	-	-	400 MHz.km	600 MHz.km
Max. Dispersion	3 ps/nm.km	18 ps/nm.km	-	-
PMD <sub>o</sub>	0.2 ps/km <sup>2</sup>		-	

# DATA SHEET FIBRE OPTIC CABLE

DATA SHEET : CST-DC/01

## ORDER DESCRIPTION, CODES & STANDARD LENGTHS

FIBRE COUNT & FIBRE TYPE	ORDER DESCRIPTION	STANDARD DRUM LENGTHS
4 Fibre Single Mode	4F-SM-CST-DC (OF00964)	2000 m / 4000 m
6 Fibre Single Mode	6F-SM- CST-DC (OF00967)	2000 m / 4000 m
8 Fibre Single Mode	8F-SM- CST-DC (OF00963)	2000 m / 4000 m
12 Fibre Single Mode	12F-SM- CST-DC (OF00942)	2000 m / 4000 m
16 Fibre Single Mode	16F-SM- CST-DC (DF3976)	2000 m / 4000 m
24 Fibre Single Mode	24F-SM- CST-DC (OF00943)	2000 m / 4000 m
36 Fibre Single Mode	36F-SM- CST-DC (OF01033)	2000 m / 4000 m
48 Fibre Single Mode	48F-SM- CST-DC (DF4393)	2000 m / 4000 m
72 Fibre Single Mode	72F-SM- CST-DC (DF4394)	2000 m / 4000 m
96 Fibre Single Mode	96F-SM- CST-DC (OF00993)	2000 m / 4000 m
144 Fibre Single Mode	144F-SM- CST-DC (DF4726)	2000 m / 4000 m
4 Fibre Multi Mode 50/125µm	4F-50/125- CST-DC (OF00934)	2000 m / 4000 m
6 Fibre Multi Mode 50/125µm	6F- 50/125- CST-DC (OF00936)	2000 m / 4000 m
8 Fibre Multi Mode 50/125µm	8F- 50/125- CST-DC (OF00935)	2000 m / 4000 m
12 Fibre Multi Mode 50/125µm	12F- 50/125- CST-DC (OF00937)	2000 m / 4000 m
16 Fibre Multi Mode 50/125µm	16F- 50/125- CST-DC(OF1055)	2000 m / 4000 m
18 Fibre Multi Mode 50/125µm	18F- 50/125- CST-DC (DF4474)	2000 m / 4000 m
24 Fibre Multi Mode 50/125µm	24F- 50/125- CST-DC (OF00938)	2000 m / 4000 m
36 Fibre Multi Mode 50/125µm	36F- 50/125- CST-DC (OF01105)	2000 m / 4000 m
48 Fibre Multi Mode 50/125µm	48F- 50/125- CST-DC (DF4722)	2000 m / 4000 m
72 Fibre Multi Mode 50/125µm	72F- 50/125- CST-DC (DF4723)	2000 m / 4000 m
96 Fibre Multi Mode 50/125µm	96F- 50/125- CST-DC (DF4725)	2000 m / 4000 m
144 Fibre Multi Mode 50/125µm	144F- 50/125- CST-DC (DF4727)	2000 m / 4000 m

**YOUR LINK TO THE WORLD OF COMMUNICATION**

**CBI Electric: Aberdare ATC Telecom Cables (Pty) Ltd**

PO Box 663, Brits, 0250, South Africa – Marthinus Ras Street, Industrial Sites, Brits  
Tel: +27 (0) 12 381 1400 – Fax: +27 (0) 12 250 3412 – sales@cbi-electric.com - www.cbi-electric.com

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