



## APPLICATION

Outdoor use  
 Direct buried  
 Core networks  
 Distribution networks  
 Outdoor Plant Duct Installation

## CABLE DESIGN

Highly resistant, UV stabilized HDPE outer jacket  
 Fibre-glass yarns as a strain relief and rodent protection  
 SZ stranded cable core  
 FRP central rod  
 Jelly filled, PBT loose tubes (2,0mm) with optical fibres  
 Fillers (if applicable)  
 Dry cable core - water-blocking tape and/or yarns  
 Ripcord – two pieces on opposite sides  
 Sheath options: LSOH, PA etc.  
 Nominal outer sheath thickness 1,6mm

## DUCT DESIGN

High mechanical resistance  
 Designed to protect optical cables from mechanical and environmental impact  
 Manufactured in black color in standard with parallel stripes on the outer surface

## CABLE VARIANTS

Variant	Quantity [pcs]				Ø nominal (±5%)	Nominal weight (±10%)	Max short term tensile load	Max long term tensile load
	Fibres	Fibres per tube	Total elements	Active tubes				
	[mm]	[kg/km]	[N]	[N]				
4T x 12F	48	12	6	4	10,0	74	2700	1200
Other designs available on demand								

\*Other fibre counts available on demand

## DUCT VARIANTS

Version	Outer Ø nominal (±0.3mm)	Nominal wall thickness (±0.5mm)	Circumferential stiffness SN	Compression resistance	Additional features
	[mm]	[mm]	[kN/m <sup>2</sup> ]	[N]	
RHDPE 32/2,6	32	2.6	32	450	
RHDPE 32/2,9	32	2.9	64	750	
RHDPE 32/2,6 UV	32	2.6	32	450	UV resistant
RHDPE 32/2,9 UV	32	2.9	64	750	UV resistant

## CABLE MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Crush performance:	2000 [N/10 cm]	IEC 60794-1-21-E3, $\Delta\alpha\leq 0,05$ dB, reversible
Bending radius:	Static: 15 x D Dynamic: 20 x D	IEC 60794-1-21-E6, $\Delta\alpha\leq 0,05$ dB, reversible
Water penetration:	3[m] sample, 1[m] head, 24[h]	IEC 60794-1-22-F5, no leakage
Temperature range		IEC 60794-1-22-F1, $\Delta\alpha\leq 0,05$ dB/km
Installation:	-15... +55 [°C]	
Operation:	-40... +70 [°C]	
Transport & Storage:	-40... +70 [°C]	
CPR Class:	Fca, DoP 0057	EN 50575:2014+A1:2016

(\*) The declared values apply only to cables with single-mode fibres and are given for 1550nm wavelength

## DUCT CHARACTERISTICS

Material	HDPE – High Density Polyethylene
Density	> 940 kg/m <sup>3</sup>
Operating temperature	-25... 90°C
Ovality	≤ 6%
Color	black
Applicable Standards:	PN-EN 61386-24

## OPTICAL FIBRE AND LOOSE TUBES COLOUR IDENTIFICATION

For optical fibres and modules identification information please see **DSH\_Colors\_CODE\_XXXX** document.

## FIBRE PARAMETERS

For selected post-production optical fibres parameters please see **DSH\_OFFP** document.

## CABLE MARKING

The following print (laser or other suitable printing method) is applied at 1-meter intervals.

- Standard code (Product type, fibre type, fibre count)
- Year of manufacture: xxxx
- Length marking in meters
- Cable ID / Drum No

Example: BDC-CI T20 12F SM G657A1 2T6F "YEAR OF MANUFACTURE" "LASER SYMBOL" "LENGTH MARKING" "BATCH NUMBER"

The accuracy of marking is ± 0.5%. Remarking is in accordance with Bellcore GR 20 and supersedes earlier markings. Occasional loss of marking is possible. Cables can be supplied with a range of single mode or multimode fibres and customized print.