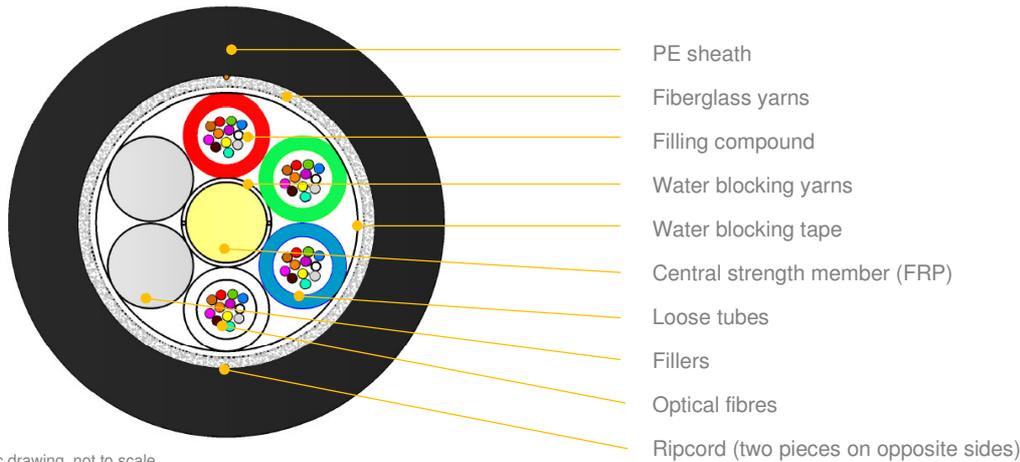


## Basic Duct Cable with multitube structure and glass fiber reinforcement BDC-CIE



\*schematic drawing, not to scale

### APPLICATION:

For installation into existing duct  
Good tensile performance  
Increased crush resistance  
Fully dielectric cable  
Basic rodent protection

### DESIGN:

FRP strength and anti-buckling element  
Optical fibres  
Loose tubes (Ø 2.0mm) with filling compound  
Dry yarns and tape to prevent moisture ingress  
Fiberglass yarns as tensile elements  
UV stabilized PE sheath (nominal 2,0mm / minimum 1,8mm);  
LSOH, PA etc. as option

### BASIC CABLE PARAMETERS:

Version	Quantity [pcs]				Ø nominal (±5%)	Nominal weight (±10%)	Max. tensile load short	Max. tensile load long
	Fibres	Fibres per tube	Total elements	Active tubes				
					[mm]	[kg/km]	[N]	[N]
1-6T x 4F	4-24	4	6	1-6	10,8	85	2700	1350
1-6T x 6F	6-36	6	6	1-6	10,8	86	2700	1350
1-6T x 8F	8-48	8	6	1-6	10,8	86	2700	1350
1-6T x 10F	10-60	10	6	1-6	10,8	87	2700	1350
1-6T x 12F	12-72	12	6	1-6	10,8	87	2700	1350
8T x 6F	48	6	8	8	12,1	115	2700	1350
8T x 12F	96	12	8	8	12,1	116	2700	1350
12T x 12F	144	12	12	12	14,6	163	2700	1350
16T x 12F (2 layers)	192	12	18	16	15,2	168	2700	1350
18T x 12F (2 layers)	216	12	18	18	15,2	170	2700	1350
24T x 12F (2 layers)	288	12	24	24	16,8	210	2700	1350
36T x 12F (3 layers)	432	12	36	36	19,0 (-2,5%/+5%)	270	2700	1350

Other fibre counts available on demand

### MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Crush performance:	2500 [N/10 cm]	IEC 60794-1-21-E3, $\Delta\alpha \leq 0,05$ dB
Bending radius:	Static: 15 x D Dynamic: 20 x D	IEC 60794-1-21-E6, $\Delta\alpha \leq 0,05$ dB
Water penetration:	3[m] sample, 1[m] head, 24[h]	IEC 60794-1-22-F5B, 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]	

Type:	BDC-CIE	REV: 1.7
Issued:	20/10/2017	PB
Modified:	16/02/2021	KP

## OPTICAL FIBRE AND LOOSE TUBES COLOUR IDENTIFICATION

For optical fibres and loose tube identification information please see DSH\_Colors\_CODE\_XXXX document.

## FIBRE PARAMETERS

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

## MARKING

The following print (white / hot foil) is applied at 1-meter intervals:

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

Example: FIBRAIN BDC-CIE T20 12F SM G652D 1T12F "YEAR OF MANUFACTURE" "LASER SYMBOL" "LENGTH MARKING" "BATCH NUMBER"

The accuracy of marking is  $\pm 1\%$ . 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.

## PACKING

Cables will be shipped on disposable wooden or treated wooden drums. Both ends of the cable will be capped and accessible for testing. Rotation direction arrow will be marked on the drum together with identification information.

## DELIVERY LENGTH

2000 – 8000 meters  $\pm 5\%$ , with possibility of supplying up to 5% of total contract quantity as short length cables which should be above 1000 meters long. Tolerance of 5 % of order quantity shall be allowed.

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