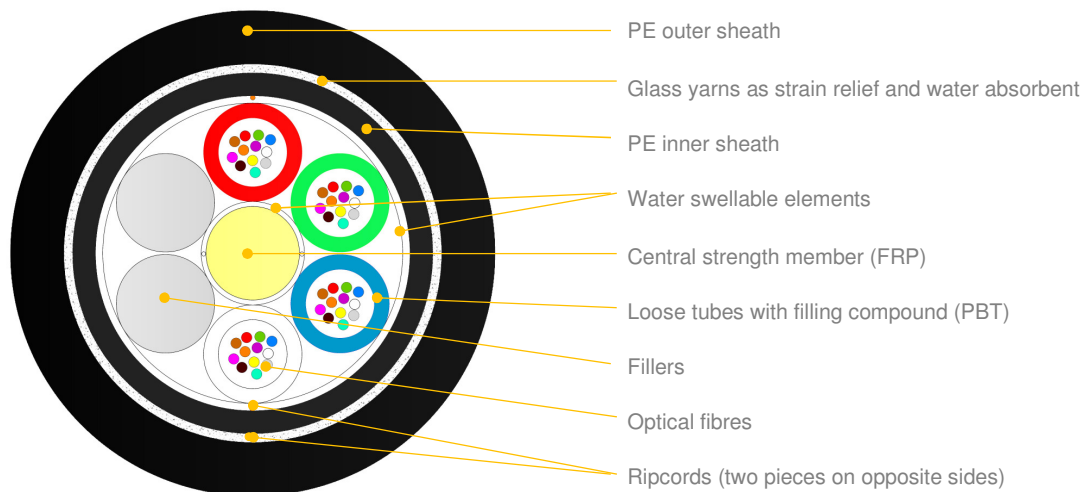


Type:	DDC-L027B XX	REV: 1.2
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Project:	005-21	

Double jacket duct cable with multitube structure and fibreglass reinforcement DDC L027B



*schematic drawing, not to scale

APPLICATION

For installation into existing duct or directly buried.
Fully dielectric
Rodent protection

DESIGN

FRP strength and anti-buckling element
Optical fibres
Loose tube with filling compound (PBT Ø 1.7mm)
Water swellable yarns to prevent moisture into the cable
Glass yarns as a reinforcement element and rodent protection
Double UV stabilized PE sheath
Outer sheath options: LSOH, PA etc.

CONFIGURATION

Variant	Quantity [pcs]				Ø nominal (±5%) [mm]	Nominal weight (±10%) [kg/km]	Max allowed tension [N]	Max static tension [N]
	Fibres	Fibres per tube	Total elements	Active tubes				
1-6T x 4F	4 - 24	4	6	1-6	9,1	65	2700	1300
1-6T x 6F	6 - 36	6	6	1-6	9,1	67	2700	1300
1-6T x 12F	12 - 72	12	6	1-6	9,1	72	2700	1300
8T x 12F	96	12	8	1-8	10,3	89	3000	1500
12T x 12F	144	12	12	12	12,3	130	3000	1300
18T x 12F (two layers)	192-216	12	18	16-18	12,3	130	3000	1300
24T x 12F (two layers)	288	12	24	24	14,1	170	3500	1500

Other fibre counts available on demand

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Test	Specification	Conditions	Requirements
Crush resistance	IEC60794-1-21 Method E3	Load: 3000 N / 10 cm Time: 1 min Number of pts: 3 (500mm apart)	Δα reversible No jacket cracking and fibre breakage
Impact resistance	IEC60794-1-21 Method E4	Impact energy: 10J Radius: 300 mm No. of impacts: 3 (500mm apart)	Δα ≤ 0.05dB No jacket cracking and fibre breakage
Repeated bending	IEC60794-1-21 Method E6	Radius: 10 x D Load: Without tension No. of cycles: 10	Δα ≤ 0.05dB No jacket cracking and fibre breakage
Torsion	IEC60794-1-21 Method E7	Cable length: 2m No. of cycles: 10 Twist angle: ± 180°	Δα ≤ 0.05dB No jacket cracking and fibre breakage

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Bending	IEC60794-1-21 Method E11	Radius: 10 x D Load: Without tension No. of turns: 5	$\Delta\alpha \leq 0.05\text{dB}$ No jacket cracking and fibre breakage
Water penetration	IEC 60794-1-22 Method F5B	Water head: 1m Sample length: 3m Time: 24 hrs	No water leakage
Temperature range	IEC60794-1-22 Method F1	Installation: -15... +55 [°C] Operation: -40... +70 [°C] Transport & Storage: -40... +70 [°C]	$\Delta\alpha \leq 0,05 \text{ dB/km}$

(*) values for single-mode fibres, all optical measurements performed at 1550nm

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 (laser / hot stamped or other suitable printing method) 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 DDC-L027B T17 12F SM G.657A1 1T12F "YEAR OF MANUFACTURE" "LASER SYMBOL" "LENGTH MARKING" "BATCH NUMBER"

The accuracy of marking is $\pm 0,5\%$. 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.

PACKING

Cables will be shipped on disposable wooden or treated wooden drums. Both ends of the cable will be capped and accessible for testing. Identification information will be placed on the drum.

DELIVERY LENGTH

4000 – 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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