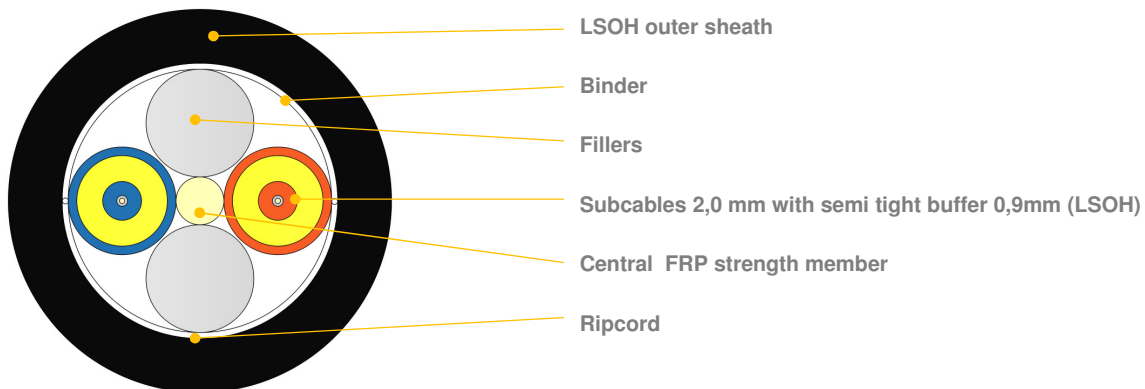


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| Type:     | LBR-20     | REV: 1.3 |
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## Indoor / Outdoor Breakout Cable with 2,0mm Subcables - LBR



\*schematic, not in scale

### APPLICATION:

Cable for indoor installation  
For distribution networks in multifamily buildings  
For use in fire exposed places  
FTTD Connections

### STRUCTURE AND COMPOSITION:

Tight buffers 0,9µm up to 4 pcs in cable  
Fully dielectric cable,  
Aramid yarns as tensile elements  
Black LSOH outer jacket (increased UV resistance)

### CONFIGURATION:

| Version | Subcables<br>[pcs] | Ø nominal<br>(±5%)<br>[mm] | Nominal weight<br>(±10%)<br>[kg/km] | Max. tensile load<br>(short term)<br>[N] | Max. tensile load<br>(long term)<br>[N] |
|---------|--------------------|----------------------------|-------------------------------------|--|---|
| 2F      | 2                  | 7,1                        | 45                                  | 500                                      | 200                                     |
| 4F      | 4                  | 7,1                        | 47                                  | 800                                      | 400                                     |

### TECHNICAL AND ENVIRONMENTAL CABLE CHARACTERISTICS

|                       |   |                            |
|-----------------------|---|----------------------------|
| Max allowed tension   | IEC 60794-1-21-E1, $\Delta\alpha\leq 0,1\text{dB}$ , reversible | as provided in table above |
| Max operating tension | IEC 60794-1-21-E1, $\Delta\alpha\leq 0,05\text{dB}$             |                            |
| Crush performance     | IEC 60794-1-21-E3, $\Delta\alpha$ reversible                    | 1000 N / 100mm             |
| Bending performance   | IEC 60794-1-21-E11, 15xD, 20N load                              | No damage                  |
| Temperature range     | Installation  | -5... +40 [°C]             |
|                       | Operation   | -5... +50 [°C]             |
|                       | Transport & Storage   | -25... +60 [°C]            |
|                       | IEC 60794-1-22-F1, $\Delta\alpha\leq 0,1\text{dB/km}$           |                            |

(\*) All values for single-mode optical fibres, all optical parameters for wave length @1550nm

### OPTICAL FIBRES AND LOOSE TUBES COLOUR IDENTIFICATION

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

### FIBRES PARAMETERS

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

### MARKING

The following print (inkjet) 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 LBR-20 2F SM G652D "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.

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#### 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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