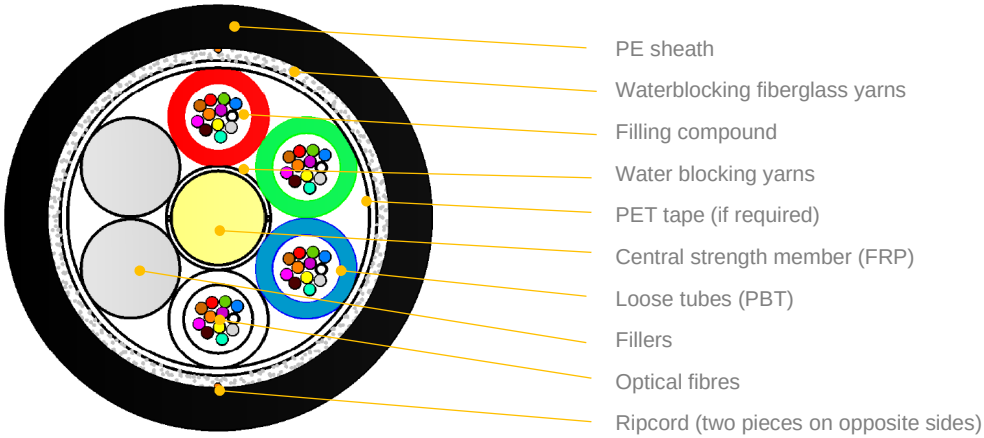
Basic Duct Cable with Multitube Structure
BDC MSA



*schematic drawing, not to scale

APPLICATION:

For installation into existing duct
Good resistance to traction and compression
Fully dielectric cable

STRUCTURE AND COMPOSITION:

PE outer sheath UV stabilized (black by default, other colours available)
Optical fibres
Tubes with filling compound
Loose tube (PBT Ø1.8mm)
PET tape (if required)
Glass yarns to prevent moisture into the cable

CABLE DESIGNS:

Variant	Quantity [pcs]				Ø nominal (±5%)	Nominal weight (±10%)	Max allowed tension	Max static tension
	Fibres	Fibres per tube	Total elements	Active tubes	[mm]	[kg/km]	[N]	[N]
1-6T x 2F	2-12	2	6	1-6	8.2	51	1500	900
1-6T x 4F	4-24	4	6	1-6	8.2	52	1500	800
1-6T x 6F	6-36	6	6	1-6	8.2	53	1500	700
1-6T x 8F	8-48	8	6	1-6	8.2	54	1500	600
1-6T x 12F	12-72	12	6	1-6	8.2	55	1500	550
8T x 6F	48	6	8	8	9.3	68	2000	1000
8T x 12F	96	12	8	8	9.3	71	1600	650
12T x 12F	144	12	12	12	11,5	104	1800	850
14T x 12F	168	12	14	14	12,6	126	2100	850
Other fibre counts available on demand								

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Crush performance:	1500 [N/10 cm]		IEC 60794-1-21-E3, Δα≤0,05 dB under test, no damage
Bending radius:	Static: 15 x D Dynamic: 20 x D		IEC 60794-1-21-E11, Δα≤0,05 dB, reversible
Water penetration:	3m sample, 1m head, 24h		IEC 60794-1-22-F5, no leakage
Temperature range:	Installation: Operation: Transport & Storage:	-5... +55 [°C] -20… +70 [°C] -40… +70 [°C]	IEC 60794-1-22-F1, Δα≤0,05 dB/km, reversible

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 (hot stamped / laser printing or other suitable 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 BDC-MSA T18 48F SM G652D 4T12F "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.

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

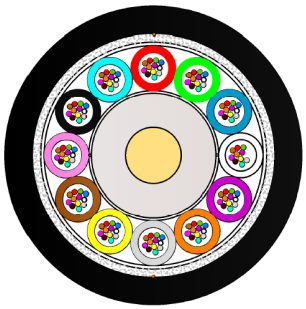
2000 – 8000 meters ± 5%, with possibility of supplying up to 5% of total contract quantity as short length cables which should be above 1000 meters long. Tolerance of 5 % of order quantity shall be allowed.

ANNEX – DRAWINGS:

6 Elements Cable

8 Elements Cable

12 Elements Cable



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