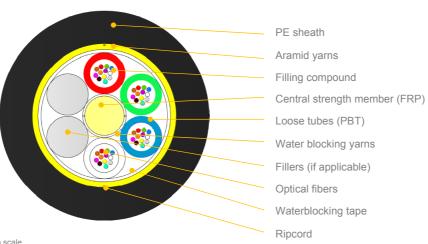


| Type: | AERO-AS04 | REV: 1.2 |
|-----------|------------|----------|
| Issued: | 01/01/2014 | SK |
| Modified: | 13/11/2015 | PB |

Single jacket multitube self-supporting aerial cable **AERO AS04**



*schematic drawing, not to scale

APPLICATION:

For installation on poles or in ducts. Fully dielectric cable Self-supporting aerial cable with aramid reinforcement

DESIGN:

FRP strength and anti-buckling element Dry yarns to prevent moisture into the cable Loose tube (PBT Ø 2.0mm) with filing compound 6-12 elements SZ stranded cable core Optical fibres Fillers (if applicable) Water-swellable tape Aramid yarns as strain relief and water absorbent UV stabilized PE sheath

CABLE DESIGNS:

| | Quantity [pcs] | | | | Ø nominal | Nominal | Max | Max |
|------------|----------------|--------------------|-------------------|--------------|-----------|------------------|--------------------|-------------------|
| Variant | Fibres | Fibres per tube | Total elements | Active tubes | (±5%) | weight (±10%) | allowed tension | static tension |
| | | | | | [mm] | [kg/km] | [N] | [N] |
| 1-6T x 6F | 6-36 | 6 | 6 | 1-6 | 10,1 | 76 | 4100 | 2400 |
| 1-6T x 12F | 12-72 | 12 | 6 | 1-6 | 10,1 | 82 | 4000 | 2000 |
| 8T x 6F | 48 | 6 | 8 | 8 | 11.3 | 98 | 4200 | 2500 |
| 8T x 12F | 96 | 12 | 8 | 8 | 11,4 | 103 | 4200 | 2100 |
| 12T x 12F | 144 | 12 | 12 | 12 | 13,9 | 149 | 4100 | 2000 |
| | | | Other fibr | | | | | |

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Crush performance: 2000 [N/10 cm] IEC 60794-1-2-E3, Δα≤0,05 dB, reversible

Bending radius: Static: 15 x D

Dynamic: 20 x D

IEC 60794-1-2-E6, ∆α≤0,05 dB, reversible

IEC 60794-1-2-F1, Δα≤0,05 dB/km

Water penetration: 3[m] sample, 1[m] head, 24[h] IEC 60794-1-2-F5, no leakage

Temperature range Installation: -15... +55 [°C]

-40... +70 [°C] Operation: Transport & Storage: -40... +70 [°C]

relating to this product are reserves the right to change this ded use. All questions of liability the intended use.



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APPLICATION AND CABLE SPAN CHARACTERISTIC

6 tubes design:

| Loading Conditions | Span | Installed Sag (2%) | Tension | Total sag | Horizontal sag | Vertical sag |
|--------------------|------|-----------------------|---------|-----------|----------------|--------------|
| | [m] | [m] | [N] | [m] | [m] | [m] |
| NSC Light | 250 | 5,0 | 4000 | 10,6 | 10,2 | 3,1 |
| NSC Medium | 170 | 3,4 | 4000 | 7,6 | 4,8 | 6,0 |
| NSC Heavy | 95 | 1,9 | 4000 | 4,5 | 2,3 | 3,9 |

8 tubes design:

| Loading Conditions | Span | Installed Sag (2%) | Tension | Total sag | Horizontal sag | Vertical sag |
|--------------------|------|-----------------------|---------|-----------|----------------|--------------|
| | [m] | [m] | [N] | [m] | [m] | [m] |
| NSC Light | 220 | 4,4 | 4100 | 8,9 | 8,6 | 2,6 |
| NSC Medium | 160 | 3,2 | 4100 | 6,9 | 4,3 | 5,5 |
| NSC Heavy | 90 | 1,8 | 4100 | 4,1 | 2,1 | 3,5 |

12 tubes design:

| Loading Conditions | Span | Installed Sag (2%) | Tension | Total sag | Horizontal sag | Vertical sag |
|--------------------|------|-----------------------|---------|-----------|----------------|--------------|
| | [m] | [m] | [N] | [m] | [m] | [m] |
| NSC Light | 175 | 3,5 | 4100 | 6,9 | 6,6 | 2,2 |
| NSC Medium | 135 | 2,7 | 4000 | 5,7 | 3,4 | 4,5 |
| NSC Heavy | 80 | 1,9 | 4000 | 3,6 | 1,8 | 3,1 |

OPTICAL FIBRES AND LOOSE TUBES COLOUR IDENTIFICATION

Fibres and tubes identification information see **DSH_Colors_CODE_XXXX** document.

FIBRES PARAMETERS

Optical fibres parameters 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 AERO AS04 SJ T20 12F SM G652D 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.

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:



*schematic drawing, not to scale