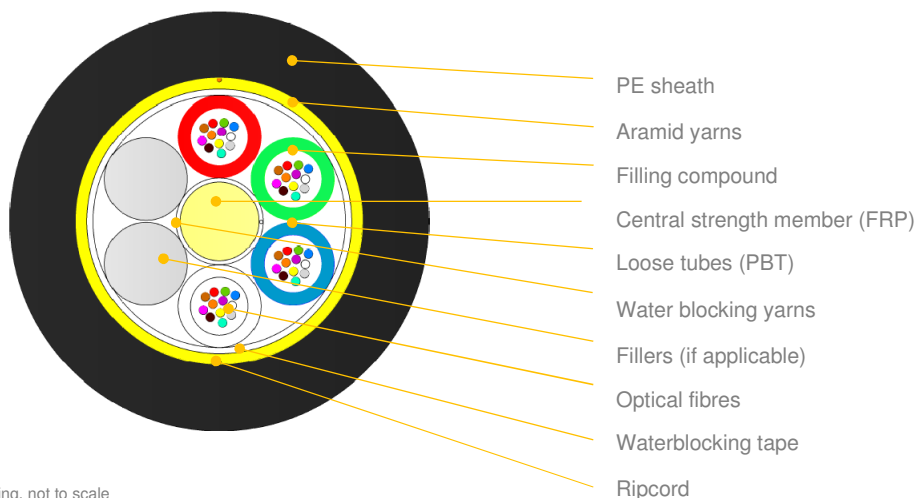


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Single Jacket Aerial Cable Multitube Structure AERO AS027



*schematic drawing, not to scale

APPLICATION:

For installation on poles or in ducts.
Fully dielectric cable
Self-supporting aerial cable with aramid reinforcement
For installation along power lines with an operation voltage below 150 kV and producing space potential below 4 kV.

DESIGN:

FRP strength and anti-buckling element
Dry yarns to prevent moisture into the cable
Loose tube (PBT Ø 2.0mm) with filling compound
6-12 elements SZ stranded cable core
Optical fibres
Fillers (if applicable)
Waterswellable tape
Aramid yarns as strain relief and water absorbent
UV stabilized PE sheath (black by default, other colours available)

CABLE DESIGNS:

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 6F	6 - 36	6	6	1-6	10,0	71	2700	1700
1-6T x 12F	12 - 72	12	6	1-6	10,0	74	2700	1300

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Crush performance:	2000 [N/10 cm]	IEC 60794-1-21-E3, $\Delta\alpha \leq 0,05$ dB, reversible
Bending radius:	Static: 15 x D Dynamic: 20 x D	IEC 60794-1-21-E6, $\Delta\alpha \leq 0,05$ dB, reversible
Water penetration:	3[m] sample, 1[m] head, 24[h]	IEC 60794-1-22-F5, 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]	

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]
NESC Heavy	100	2,5	3600	5,4	2,7	4,7

(*) $\epsilon f \leq 0,6\%$ according to IEC 60794-1-1

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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 printing (hot foil / laser printer) is applied at 1-meter intervals.

- Supplier: FIBRAIN
- Standard Code (Product Type, Fiber Type, Fiber Count):
- Year of manufacture: xxxx
- Length marking in meters
- Cable ID/ Drum No

Example: FIBRAIN AERO AS027 SJ T20 36F SM G657A1 6T6F "YEAR OF MANUFACTURE" "LASER SYMBOL" "LENGTH MARKING" "BATCH NUMBER"

The accuracy of marking is ±0,5%. Remarkings 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.

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