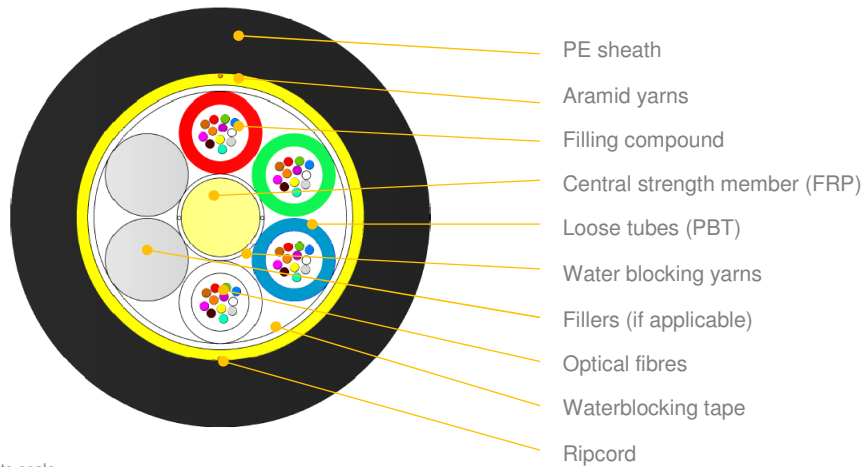


Type:	AERO-AS12	REV: 2.1
Issued:	30/06/2014	SK
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Single jacket multitube self-supporting aerial cable AERO AS12



*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 2.5mm) with filling compound
6-12 elements SZ stranded cable core
Optical fibres
Fillers (if applicable)
Water-swellaable tape
Aramid yarns as strain relief and water absorbent
UV stabilized PE sheath (black by default, other colours available)

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	11,7	105	12700	9000
1-6T x 6F	6-36	6	6	1-6	11,7	106	12700	9000
1-6T x 8F	8-48	8	6	1-6	11,7	106	12600	8500
1-6T x 12F	12-72	12	6	1-6	11,8	110	12500	8000
8T x 6F	48	8	8	8	13,3	142	12200	7800
8T x 12F	96	12	8	8	13,3	143	12200	7800
12T x 12F	144	12	12	12	16,3	208	12100	8000
Other fiber counts available on demand								

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Crush performance:	3000 [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]	

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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	700	14	12100	32.5	31.0	9.6
NSC Medium	530	10.6	12200	26.4	16.2	20.9
NSC Heavy	310	6.2	12200	16.6	8.3	14.5

8 tubes design

Loading Conditions	Span	Installed Sag (2%)	Tension	Total sag	Horizontal sag	Vertical sag
	[m]	[m]	[N]	[m]	[m]	[m]
NSC Light	620	12.4	12200	28.5	27.2	8.4
NSC Medium	490	9.8	12200	27	14.6	19.0
NSC Heavy	290	5.8	12200	15.3	7.5	13.4

12 tubes design

Loading Conditions	Span	Installed Sag (2%)	Tension	Total sag	Horizontal sag	Vertical sag
	[m]	[m]	[N]	[m]	[m]	[m]
NSC Light	480	9.6	12100	21.0	19.9	6.6
NSC Medium	400	8	12200	18.5	11.0	14.9
NSC Heavy	250	5	12200	12.6	6.1	11.1

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_OFPP 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 AS012 T25 12F SM G652D 2T6F "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. 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.