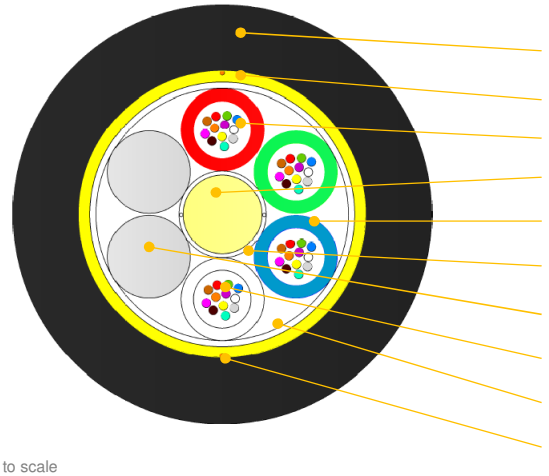
Type:	AERO-AS06	REV: 3.2
Issued:	03/10/2016	MM
Modified:	22/12/2020	KP

Single jacket multitube self-supporting aerial cable
AERO AS06



*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 filing compound
6-24 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 (black by default, other colours available)

CONFIGURATION:

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 4F	4-24	4	6	1-6	11,6	100	6100	4200
1-6T x 6F	6-36	6	6	1-6	11,6	101	6100	4200
1-6T x 8F	8-48	8	6	1-6	11,6	103	6200	4100
1-6T x 12F	12-72	12	6	1-6	11,6	104	6300	4100
8T x 6F	48	6	8	8	13,2	131	6100	4000
8T x 8F	64	8	8	8	13,2	132	6100	4000
8T x 12F	96	12	8	8	13,2	132	6100	4000
12T x 12F	144	12	12	12	16,2	198	6100	4000
16T x12F	192	12	18	16	16,8	201	6300	4100
18T x 12F	216	12	18	18	16,8	203	6300	4100
24T x 12F	288	12	24	24	19,4	270	6200	4400
Other fiber counts available on demand								

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Crush performance:	3000 [N/10 cm]	IEC 60794-1-21-E3, Δα≤0,05 dB, reversible
Bending radius:	Static: 15 x D Dynamic: 20 x D	IEC 60794-1-21-E6, Δα≤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, Δα≤0,05 dB/km
Installation:	-15... +55 [℃]	
Operation:	-40… +70 [℃]	
Transport & Storage:	-40… +70 [℃]	

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	370	7.4	6100	17.3	16.6	5.0
NSC Medium	270	5.4	6100	13.4	8.3	10.6
NSC Heavy	150	3.0	6000	7.9	4.0	6.9

8 tubes design:

Loading Conditions	Span	Installed Sag (2%)	Tension	Total sag	Horizontal sag	Vertical sag
	[m]	[m]	[N]	[m]	[m]	[m]
NSC Light	320	6.4	6100	14.7	14.0	4.5
NSC Medium	250	5.0	6100	12.3	7.5	9.8
NSC Heavy	150	3.0	6100	8.1	4.0	7.0

12 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	6100	10.9	10.4	3.6
NSC Medium	210	4.2	6100	9.8	5.8	7.9
NSC Heavy	130	2.6	6100	6.7	3.2	5.9

18 tubes design:

Loading Conditions	Span	Installed Sag (2%)	Tension	Total sag	Horizontal sag	Vertical sag
	[m]	[m]	[N]	[m]	[m]	[m]
NSC Light	240	4.8	6300	10.4	9.9	3.3
NSC Medium	200	4.0	6200	9.2	5.4	7.4
NSC Heavy	130	2.6	6300	6.6	3.2	5.8

24 tubes design:

Loading Conditions	Span	Installed Sag (2%)	Tension	Total sag	Horizontal sag	Vertical sag
	[m]	[m]	[N]	[m]	[m]	[m]
NSC Light	170	3,4	6200	6,2	5,5	2,6
NSC Medium	140	2,8	6200	5,5	2,9	4,6
NSC Heavy	100	2,0	6200	4,5	2,0	4,0

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 (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 AS06 T25 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.