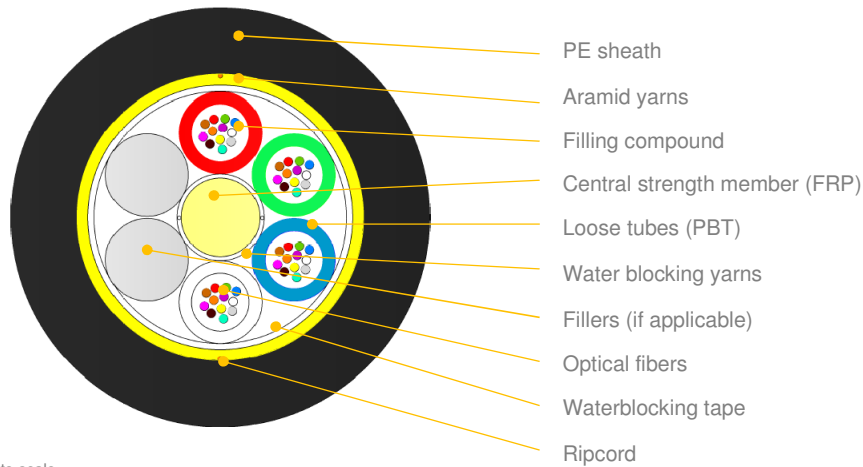


Single jacket multitube self-supporting aerial cable AERO AS02



*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 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:

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	10,0	72	2600	1700
1-6T x 4F	4 – 24	4	6	1 – 6	10,0	72	2400	1600
1-6T x 6F	6 – 36	6	6	1 – 6	10,0	73	2200	1200
1-6T x 12F	12 – 72	12	6	1 – 6	10,0	75	2100	1000
8T x 12F	96	12	8	8	11,3	98	2200	1100
12T x 12F	144	12	12	12	13,8	143	2100	1000
Other Fiber counts available on demand								

Other Fiber counts available on demand

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]
NSC Light	130	2.6	2100	5.4	5.2	1.6
NSC Medium	85	1.7	2000	3.7	2.3	2.9
NSC Heavy	45	0.9	2000	2.0	1.0	1.8

Type:	AERO-AS02	REV: 2.2
Issued:	01/01/2014	SK
Modified:	22/12/2020	KP

8 tubes design:

Loading Conditions	Span	Installed Sag (2%)	Tension	Total sag	Horizontal sag	Vertical sag
	[m]	[m]	[N]	[m]	[m]	[m]
NSC Light	110	2.2	2100	4.4	4.2	1.3
NSC Medium	80	1.6	2100	3.4	2.1	2.7
NSC Heavy	45	0.9	2100	2.0	1.0	1.8

12 tubes design:

Loading Conditions	Span	Installed Sag (2%)	Tension	Total sag	Horizontal sag	Vertical sag
	[m]	[m]	[N]	[m]	[m]	[m]
NSC Light	90	1.8	2100	3.6	3.4	1.1
NSC Medium	70	1.4	2100	2.9	1.8	2.3
NSC Heavy	40	0.8	2100	1.8	0.9	1.6

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 AS02 T20 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.

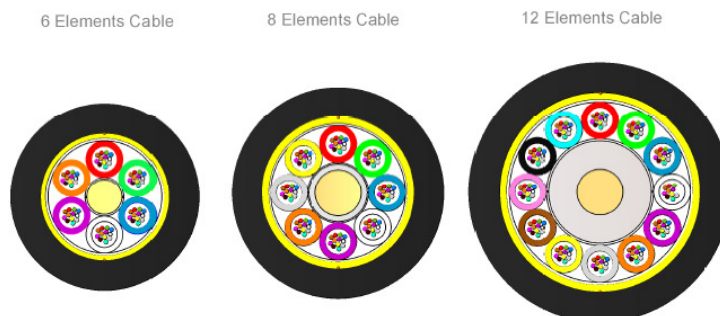
PACKING

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.

ANNEX – drawings:



*schematic drawing, not to scale

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