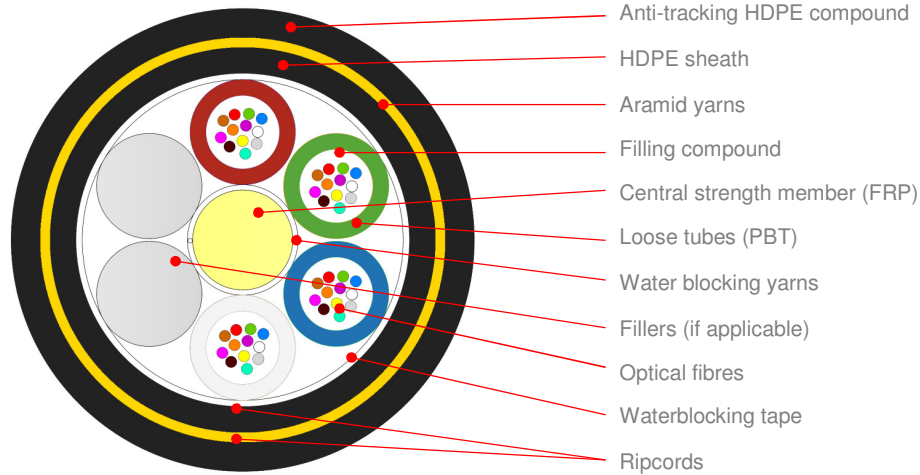


Type:	AERO-AD22AT T25	REV: 1
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Project:	124-18	DR

## Double jacket multitube self-supporting aerial cable AERO AD22AT



\*schematic drawing, not to scale

### APPLICATION:

For installation on poles or in ducts  
Fully dielectric  
Self-supporting aerial cable with aramid reinforcement  
For installation along power lines with an operation voltage of 150 kV or higher and producing space potential between 4kV and 20kV

### DESIGN:

FRP tensile strength and anti-buckling element  
Dry sealed cable core to prevent moisture ingress  
Loose tube (PBT Ø 2,5mm) with filling compound  
Optical fibres  
Fillers (if applicable)  
Water-swellable tape  
Aramid yarns as strain relief and water absorbent  
Double UV stabilized HDPE jackets  
Anti-tracking HDPE outer jacket

### CABLE DESIGNS:

Variant	Quantity [pcs]				Ø nominal (±5%) [mm]	Nominal weight (±10%) [kg/km]	Max working tension [N]	Rated working tension [N]
	Fibres	Fibres per tube	Total elements	Active tubes				

### MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Crush performance:	3000 [N/10 cm]	IEC 60794-1-21-E3, $\Delta\alpha \leq 0,1$ dB, after test
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 60794-1-21-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]	
Calculated rated tensile strength (RTS):	44,4 [kN]	
Calculated modulus:	19,0 [GPa]	

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## APPLICATION AND CABLE SPAN CHARACTERISTIC

Calculation for 6 tubes design / 6F per tube:

Loading Conditions	Span	Installed sag (2%)	Tension under given loading conditions	Total sag under given loading conditions	Horizontal sag under given loading conditions	Vertical sag under given loading conditions
	[m]	[m]	[N]	[m]	[m]	[m]
NSC Light	1000	20,0	22000	45,5	43,5	14,5
NSC Medium	800	16,0	22000	39,0	23,5	31,5
NSC Heavy	500	10,0	22000	27,0	13,0	23,6

## OPTICAL FIBRES AND LOOSE TUBES COLOUR IDENTIFICATION

For optical fibres and loose tubes identification information please see **DSH\_Colors\_CODE\_XXXX** document.

## FIBRES PARAMETERS

For selected cabled optical fibres parameters please see **DSH\_OFFP** document.

## MARKING

The following print (white / hot foil or similar) 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 AD22AT T25 24F SM G652D 4T6F "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.