Туре:	AERO-AS06 T25 (01)	REV: 0		
Issued:	29/04/2020	AM		
Project:	43-20	DR		

All dielectric self-supporting cable with multitube structure and aramid yarn reinforcement AERO-AS06 (01)



*schematic drawing not to scale

APPLICATION:

For installation into existing duct Fully dielectric 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

Water swellable yarns and tape to prevent moisture ingress into the cable core

Loose tube (PBT Ø 2.5 [mm]) with filing compound

Optical fibres (G.652.D compatible)

Fillers (if applicable)

Aramid yarns as strain relief and rodent protection in two layers laid in opposite

directions

Black UV stabilized PE sheath

Minimum outer sheath thickness = 1,4 [mm]

CABLE DESIGNS:

	Quantity [pcs]				Ø nominal	Nominal	Max short	Max long	
Variant	Fibres Fibres per tube		Total	Active	(±5%)	weight (±10%)	term tensile load	term tensile load	
		elements	tubes	[mm]	[kg/km]	[N]	[N]		
8T x 12F	96	12	8	8	13,0	132	3000	1500	

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Crush performance: 3000 [N/10 cm] IEC 60794-1-21 E3, $\Delta\alpha \le 0.1$ dB, after test

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 F5B, no leakage

Temperature range IEC 60794-1-22 F1, ∆α≤0,1 dB/km

Installation: -10...+70 [°C] Transport & Storage: -30...+70 [°C]

SUGGESTED MAXIMUM SPAN VALUES

Suggested max span	60 [m]					
Installed Sag (2%)	1,2 [m]					
Loading conditions	Ice 12,5 [mm]; wind 190 [Pa]					



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OPTICAL FIBRES AND LOOSE TUBES COLOUR IDENTIFICATION

Tube 01-12	1	2	3	4	5	6	7	8	9	10	11	12
Code												
Colour	Red	Green	Yellow	Blue	Brown	White	Violet	Black	Grey	Orange	Aqua	Pink
Fibre 01-12	1	2	3	4	5	6	7	8	9	10	11	12
Code												
Colour	Red	Green	Yellow	Blue	Brown	White	Violet	Black	Grey	Orange	Aqua	Pink

FIBRES PARAMETERS

For selected post-production optical fibres parameters please see DSH OFP document.

MARKING

The following marking (hot foil, laser marking or other suitable method depending on availability) is applied at 1-meter intervals:

Example: MÁV Zrt. <YEAR OF MANUFACTURE> FIBRAIN <FIBRAIN PRODUCT CODE> Fve <TUBE COUNT> X <FIBER COUNT> L SM LWP <BATCH NUMBER> <LENGTH MARKING>

The accuracy of marking is ±1%. 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 battened disposable wooden or treated wooden drums. Both ends of the cable will be capped and accessible for testing. FIBRAIN logo, drum ID and rotation direction arrow will be marked on both flanges; cable identification information (standard FIBRAIN label) and test report will be attached to every drum. Minimum drum core diameter is 25 x D (where D stands for diameter of the cable).

DELIVERY LENGTH

2000 – 8000 meters ± 5% depending on cable design and technical limitations, 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.