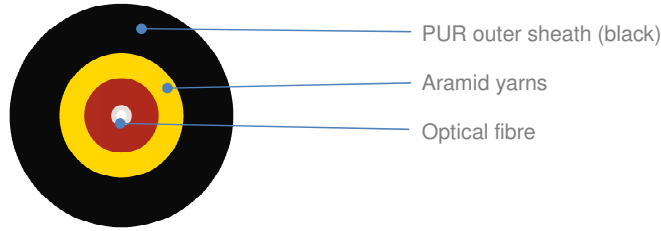


FIBRAIN AERO-DR03 (PUR)



*Schematic drawing, not to scale

APPLICATION:

For installation on poles
Fully dielectric
Aerial cable with aramid reinforcement

DESIGN:

1-2 optical fibres
Aramid yarns as strain relief and water absorbent
Black PUR outer sheath (flame retardant, halogen free)
UV resistant additive

CABLE DESIGNS:

Variant	Quantity [pcs]				Ø nominal (±5%) [mm]	Nominal weight (±10%) [kg/km]	Max allowed tension [N]
	Fibres	Active tubes or modules	Total elements	Active tubes or modules			
1F	1	1 (900µm)	1	1	3,0	8	300
2F	2	0 (2x250µm)	0	0	3,0	8	300

MAIN MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Test	Test Standard	Specified Value	Requirement*
Max allowed tension	IEC 60794-1-21-E1	Load: as provided in table above	$\Delta\epsilon_i \leq 0,6\%$, $\Delta\alpha 0,1$ [dB/km]
Crush	IEC 60794-1-21-E3	2000 N / 100 mm, max. 15 min	$\Delta\alpha$ reversible, no significant damage
Impact	IEC 60794-1-21-E4	10 Nm, 3 impacts, R= 300 mm	$\Delta\alpha \leq 0,05$ dB after the test
Torsion	IEC 60794-1-21-E7	50N, $\pm 180^\circ$, 10 cycles	$\Delta\alpha \leq 0,05$ dB, no damage
Repeated Bending	IEC 60794-1-21-E6	R=12x D, 50N, 20 cycles	no damage
Temp. range	Installation	IEC 60794-1-22-F1	-5... +55 [°C]
	Operation		-40... +70 [°C]
	Transport & Storage		-40... +70 [°C]
Water penetration	IEC 60794-1-22-F5B	Sample=3m, water column=1m, 24h	no water leakage

(*) values for single-mode fibres, all optical measurements performed at @1550nm

OPTICAL FIBRES AND LOOSE TUBES COLOUR IDENTIFICATION

For optical fibres and tubes identification information please see **DSH_Colors_CODE_XXXX** document.

FIBRES PARAMETERS

For selected post-production optical fibres parameters please see **DSH_OFP** document.

APPLICATION AND CABLE SPAN CHARACTERISTIC

Loading conditions	Span	Installed Sag (2%)	Tension	Total sag	Horizontal sag	Vertical sag
	[m]	[m]	[N]	[m]	[m]	[m]
Ice- 0 mm Wind- 94,4 km/h	55	1,1	300	2,1	1,8	1,0
Ice- 3,0 mm Wind- 62.8 km/h	40	0,8	300	1,6	1,34	0,87
Ice- 4,0 mm Wind- 70 km/h	30	0,6	300	1,23	1,09	0,57

Type:	AERO-DR03 (PUR)	REV: 1.2
Issued:	08/04/2019	AM
Modified:	25/10/2019	AM

MARKING

The following print (jet printed) 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-DR03 PUR 1F SM G657A1 "YEAR OF MANUFACTURE" "LASER SYMBOL" "LENGTH MARKING" "BATCH NUMBER"

The accuracy of marking is $\pm 0,5\%$. Remarketing 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.

STANDARD PACKING

Cables will be shipped on disposable plywood drums. Both ends of the cable will be capped and at least one accessible for testing. Identification information will be placed on a drum.

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.

EASYREEL PACKING OPTION

750m sections are wound in the EasyReel system and placed in a cardboard box. A reel is wound without an internal drum.



Product coding	Cable length	Packaging dimensions
ER-750-2-AERO-DDR03-XXX	750 m	350mm x 350mm x 270m

XXX - cable coding depending on the adopted parameters (number of fibers, type of fiber, coating color)
Tolerance for a cable wound in the EasyReel system: $\pm 2m$ from the nominal length