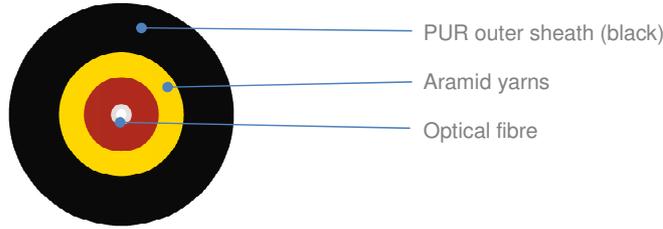


## FIBRAIN AERO-DR03 (PUR)



\*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	$\Delta\epsilon \leq 0,6\%$ , $\Delta\alpha 0,1$ [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: 1.1
Issued:	08/04/2019	AM
Modified:		

## 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.

## 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.