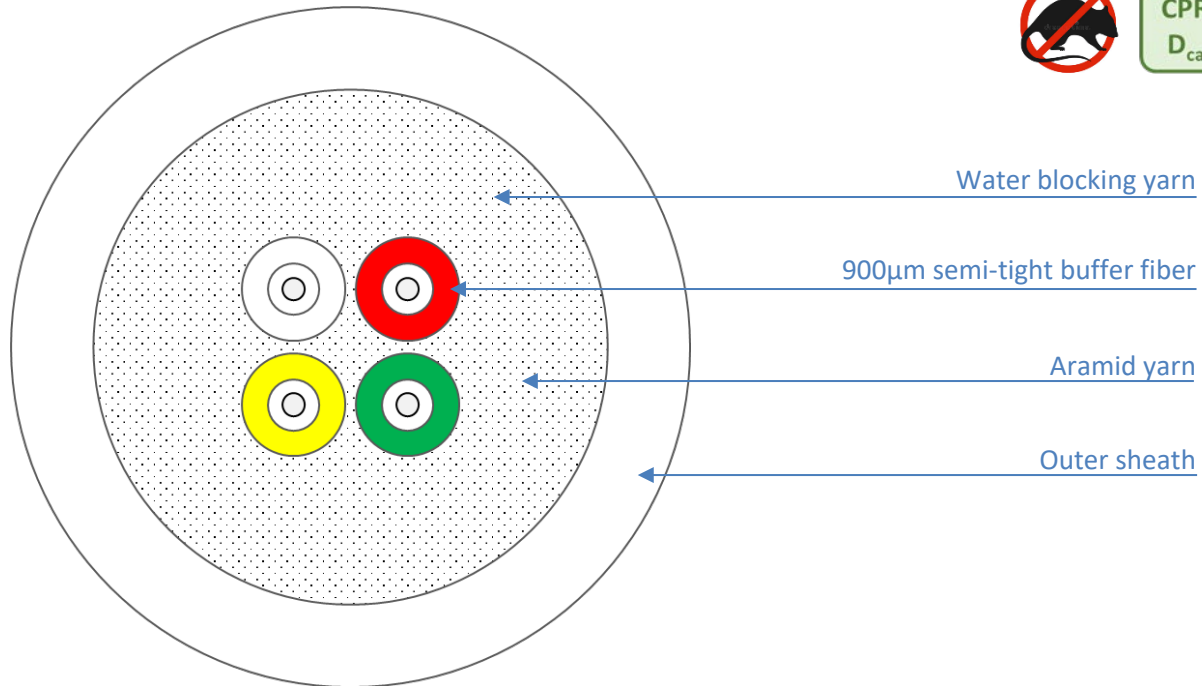


SUPRAFLEX SUBSCRIBER CABLE

WHITE, UNMARKED $\varnothing 4,5\text{mm}$, 500 mtr. Reel-in-a-box



1. APPLICATION/CONSTRUCTION

Identification	SUPRAFLEX SM 2/4 G.657.A2		
Application	Subscriber cable $\varnothing 4,5\text{mm}$, Reel-in-Box, no cable marking		
Configuration	- 900 μm semi-tight buffer fiber		
	- Dry cable core with water blocking yarn		
	- Aramid yarn as additional strength member		
	- Outer sheath: UV-stabilized, LSZH		
Temperature range	Storage and Transport -40 to +60°C	Installation -20 to +60°C	Operation -40 to +60°C
Standards	IEC 60793-1, IEC 60793-2, IEC 60794-2-20, EN 50173-1, ISO/IEC 11801		
CPR Class	Dca s2d2a1 (EN 50575:2014+A1:2016)		
DoP	231158-01/03		

2. MECHANICAL PROPERTIES

Number of fibers		2	4
Tight buffer diameter ($\pm 0,05$)	mm	0,85	
Outer cable diameter ($\pm 0,1$)	mm	4,5	
Cable jacket thickness ($\pm 0,1$)	mm	1,0	
Max tensile load, permanent	kN	0,5	

Crush resistance N/10 cm	N	750 (mandrel/plate)
Torsion	turn	5x ±1
Weight	kg/km	21
Bending radius (Dynamic)	/	20x cable ø
Bending radius (Static)	/	10x cable ø

See point 6: Test Methods. Sizes and values without tolerances are nominal values

3. FIRE PROPERTIES

	Yes
Halogen free (IEC 60754-2)	Yes
Low smoke (IEC 61034-2)	Yes
Reaction to fire (EN 13501-6)	Dca
Smoke development class (EN 13501-6)	s2
Flaming droplets (EN 13501-6)	d2
Acidity (EN 13501-6)	a1

4. MARKING

	1	2	3	4
Fibre colors	White	Red	Yellow	Green

Cable sheath: White, no marking

5. OPTICAL FIBER PARAMETERS


Standard	ITU-T G.657.A2	
Optical	Fiber attenuation, cabled	1310 nm: ≤ 0.4 dB/km 1550 nm: ≤ 0.3 dB/km
	Mode field diameter (MFD)	1310 nm: 8.6 ± 0.4 μm
	Zero dispersion wavelength	1300 ~ 1324 nm
	Zero dispersion slope	≤ 0.092 ps/nm ² · km
	Polarization mode dispersion (PMD)	≤ 0.2 ps/√km
	Cut-off wavelength	≤ 1260 nm
	Macro bending loss, 100 turns ø50 mm	1550 nm 1625 nm
	-10 turns ø30mm	≤ 0.03 dB ≤ 0.1 dB
	-1 turn ø20mm	≤ 0.1 dB ≤ 0.2 dB
	-1 turn ø15mm	≤ 0.5 dB ≤ 1.0 dB
Geometric	Outer diameter (uncolored)	245 ± 5 μm
	Cladding diameter	125 ± 0.7 μm
	Core/clad concentricity error	≤ 0.5 μm
	Cladding non-circularity	≤ 0.8 %
Mechanical	Proof stress	≥ 0.69 Gpa

6. TEST METHODES

Test	Conditions	Acceptance criteria
Tensile strength IEC 60794-1-2-E1	Tensile load: See Point 3 Sample length: ≥ 50 m Test duration: 1 min	- Fiber strain $\leq 0.6\%$ - $\Delta\alpha \leq 0.4$ dB, reversible - No damage to outer jacket and inner elements
Crush resistance IEC 60794-1-2 E3	Crush: see Point 3 Test duration: 5 min Number of tests: 3	- Additional attenuation: ≤ 0.1 dB after test - $\Delta\alpha$ reversible - No damage to outer jacket or fibers
Impact IEC 60794-1-2 E4	Impact energy: 1 J R = 300 mm Impact points/number: 3/	- No obvious additional attenuation - No damage to outer jacket or fibers
Repeated bending IEC 60794-1-2-11A	Bending radius: 15x cable ϕ Turn number: 4 Cycles:3	- No obvious additional attenuation - No damage to outer jacket or fibers
Torsion IEC 60794-1-2 E7	Sample length: 2 m Angles: $\pm 180^\circ$ Cycles: 10	- No obvious additional attenuation - No damage to outer jacket or fibers
Temperature cycling IEC 60794-1-2 F1	Steps: $-30^\circ\text{C} \sim +60^\circ\text{C}$ Cycles: 2 Test duration: 12 hours	- $\Delta\alpha \leq 0.3$ dB/km - $\Delta\alpha$ reversible - No damage
Water penetration IEC 60794-1-2 F5	Sample length: 3 m Water column height: 1 m Test duration: 24 hours	- No water leakage

All optical measurements performed @ 1550 nm

7. LOGISTICS

Cable Type	/	500 mtr. Reel-in-a-box -1% / +3%	
G2/4	Dimension Weight	H40*L40*B30 24kg	

8. ORDERING INFORMATION

Enr.	Product code	Product	Fiber Qty.	Fiber type	Category (fiber)
1025447	K-FTTH-W-7A2-G2-5H	G2 SUPRAFLEX, Hvit, $\phi 4,5$ mm G.657.A2. 500 m reel-in-a-box	2	SM 9/125	OS2
1025448	K-FTTH-W-7A2-G4-5H	G4 SUPRAFLEX, Hvit, $\phi 4,5$ mm G.657.A2, 500 m reel-in-a-box	4	SM 9/125	OS2

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