



STRUCTURE DESCRIPTION

1. Loose Tube: Thermoplastic material, containing optical fibers and filled with gel.
2. Filler Elements: Thermoplastic rods.
3. Central Strength Member(CSM):Glass fiber reinforced plastic rod (GFRP), Coated with polyethylene for the fiber of 144 cores or over.
4. Longitudinal Water Blocking Material: Water blocking tape.
5. Peripheral Strength Member: Aramid yarn.
6. Ripcord
7. Outer Sheath: Black polyethylene.
8. Tube Filling Compound

**ADSS-09G652XXX-SJ120Z-CN,
Optical Fibre Cable with GFRP central strength member for
Outdoor Application - 06 - 144 Fiber**

OPTICAL PROPERTIES

Fiber Type	ITU-T Rec. Low Water Peak (LWP) - G652D	
Fiber yarn count	06F/ 12F / 24F / 48F/ 96F/ 144F	
Attenuation coefficient	1310nm	< 0.36 dB/Km
	1550nm	< 0.23 dB/Km
	1625nm	< 0.22 dB/Km
Point discontinuity	≤ 0.05 dB	
Diameter of modal field	Wavelength: 1310nm, 1550nm, 1625nm	
	Nominal range: 9.2mm Tolerance: ± 0.4mm	
Cladding diameter (nominal)	125 mm ± 0,5 mm	
Primary coating diameter	245 ± 10 um	
Cut-off wavelength	Máx: 1260 nm	
PMD coefficient (Polarization Mode Dispersion)	Máx: 0,20 ps/√ km	



ADSS-09G652XXX-SJ120Z-CN

ADSS Optic Cable G652 9/125 –
Single Jacket/ 120 mt Span

TECHNICAL PROPERTIES		
External covering material	HDPE	
Outer jacket color	Black	
Jacket protection	UV resistant	
Internal cable structure - Loose tube	ADSS-09G652006-SJ120Z-CN	(1 buffer with 6 threads)
	ADSS-09G652012-SJ120Z-CN	(2 buffer with 6 threads)
	ADSS-09G652024-SJ120Z-CN	(4 buffer with 6 threads)
	ADSS-09G652048-SJ120Z-CN	(4 buffer with 12 threads)
	ADSS-09G652096-SJ120Z-CN	(8 buffer with 12 threads)
	ADSS-09G652144-SJ120Z-CN	(12 buffer with 12 threads)
Loose tube - Outer diameter (mm)	Loose tube - Diameter	
	ADSS-09G652006-SJ120Z-CN	1.9 ± 0.1 mm
	ADSS-09G652012-SJ120Z-CN	1.9 ± 0.1 mm
	ADSS-09G652024-SJ120Z-CN	1.9 ± 0.1 mm
	ADSS-09G652048-SJ120Z-CN	2.15 ± 0.1 mm
	ADSS-09G652096-SJ120Z-CN	2.15 ± 0.1 mm
	ADSS-09G652144-SJ120Z-CN	2.15 ± 0.1 mm
Central member structure (CSM)	Glass Fiber Reinforced Plasticrod (GFRP)	
	ADSS-09G652006-SJ120Z-CN	2 ± 0.10 mm
	ADSS-09G652012-SJ120Z-CN	2 ± 0.10 mm
	ADSS-09G652024-SJ120Z-CN	2 ± 0.10 mm
	ADSS-09G652048-SJ120Z-CN	2.3 ± 0.10 mm
	ADSS-09G652096-SJ120Z-CN	3.5 ± 0.10 mm
	ADSS-09G652144-SJ120Z-CN	6.4 ± 0.10 mm
Configuration of the internal cable structure	SZ Braided, Thermoplastic Cylinders	
Outer Sheath	Thickness (mm)	1.8 ± 0.1 mm
Estructura de los tubos	Material	Colors of tubes PTB
Cable Diameter (mm)cable OD)	ADSS-09G652006-SJ120Z-CN	9.6 ± .45 mm
	ADSS-09G652012-SJ120Z-CN	9.6 ± .45 mm
	ADSS-09G652024-SJ120Z-CN	9.6 ± .45 mm
	ADSS-09G652048-SJ120Z-CN	10.6 ± .45 mm
	ADSS-09G652096-SJ120Z-CN	11.7 ± .45 mm
	ADSS-09G652144-SJ120Z-CN	14.7 ± .45 mm
Ripcord	2 Nos. below armour	
Water Blocking Material	Core wrapping	Water blocking tape
	Water blocking media	Water Swellable Yarn Over CSM
Color code	TIA 598 D Standard: Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose (Pink), Aqua	
Cable breaking strength(RTS)≥	ADSS-09G652006-SJ120Z-CN	4828N
	ADSS-09G652012-SJ120Z-CN	4828N
	ADSS-09G652024-SJ120Z-CN	4828N
	ADSS-09G652048-SJ120Z-CN	6608N
	ADSS-09G652096-SJ120Z-CN	10943N
	ADSS-09G652144-SJ120Z-CN	11865N

Fiber Box Fiber Connectivity Fiber Cassette Fiber Protection Fiber Patch Panel Optic Cables Cable Fitting



ADSS-09G652XXX-SJ120Z-CN

ADSS Optic Cable G652 9/125 –
Single Jacket/ 120 mt Span

Temperature range (IEC 60794-1-F1)	Operation	-20° to +65°C
	Installed	-20° to +65°C
	Storage and Shipping	-20° to +65°C
Tube filling compound	Water Blocking & Moisture Proof Thyrotrophic gel	
Filler	PP Diameter same as tube	
Water blocking tape	0.28mm thickness	
Working Tension (MAT)	ADSS-09G652006-SJ120Z-CN	1931N
	ADSS-09G652012-SJ120Z-CN	1931N
	ADSS-09G652024-SJ120Z-CN	1931N
	ADSS-09G652048-SJ120Z-CN	2643N
	ADSS-09G652096-SJ120Z-CN	4377N
	ADSS-09G652144-SJ120Z-CN	4746N
Dielectric Strength Members	Aramid Yarns 1670Dtex	
Drum length x Km	ADSS-09G652006-SJ120Z-CN	4 Km ± 5%
	ADSS-09G652012-SJ120Z-CN	4 Km ± 5%
	ADSS-09G652024-SJ120Z-CN	4 Km ± 5%
	ADSS-09G652048-SJ120Z-CN	4 Km ± 5%
	ADSS-09G652096-SJ120Z-CN	3 Km ± 5%
	ADSS-09G652144-SJ120Z-CN	2 Km ± 5%
Cable SPAN	120 Mt. SPAN	
GW/Reel	ADSS-09G652006-SJ120Z-CN	337 Kg
	ADSS-09G652012-SJ120Z-CN	337 Kg
	ADSS-09G652024-SJ120Z-CN	337 Kg
	ADSS-09G652048-SJ120Z-CN	376 Kg
	ADSS-09G652096-SJ120Z-CN	361 Kg
	ADSS-09G652144-SJ120Z-CN	322 Kg
Climate Condition	No Ice, 25m/s Max Wind Speed	
Repeated bending IEC 60794-1-2-E6	25 Cycle, r= 20 X D, 5 Kg , D = Cable Diameter	
Bending radius IEC 60794-1-E11	Load: 5000 N	Loss change 0.1 dB @ 1550 nm
	Length of cable under load: 50m	No fiber break and no sheath damage.
Crush Test IEC 60794-1-E3	Load: 3000 N/100mm	Loss change 0.1 dB @ 1550 nm
	Load time: ≥1min	No fiber break and no sheath damage.
Impact Test IEC 60794-1-E4	Points of impact: 5	Loss change 0.1 dB @ 1550 nm
	Times of per point: 5	
	Impact energy: 4.5Nm	No fiber break and no sheath damage.
	Radius of hammer head: 12.5mm	
	Impact rate: 2sec/cycle	
Repeated Bending IEC 60794-1-E6	Bending Dia.: 20 x OD	Loss change 0.1 dB @ 1550 nm
	Load: 250N	No fiber break and no sheath damage.
	Flexing rate: 3sec/cycle	
	No. of cycle: 30	

Cable Fitting
Optic Cables
Optic Tools
Fiber Patch Panel
Fiber Protection
Fiber Cassette
Fiber Connectivity
Fiber Box



ADSS-09G652XXX-SJ120Z-CN

ADSS Optic Cable G652 9/125 –
Single Jacket/ 120 mt Span

Torsion IEC 60794-1-E7	Length: 1m	No water shall have leaked from the opposite end of cable
	Load: 150N	
	Twist rate: 1min/cycle	
	Twist angle: $\pm 90^\circ$	
	No. of cycle: 10	
Compound Flow IEC 60794-1-E14	Sample length: 30 cm	No compound flow
	Temp: 70°C 2°C	
	Time: 24 hour	

Fiber Color And Binder Color Code: According To EIA/TIA 598D

No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Gray	White
No.	7	8	9	10	11	12
Color	Red	Black	Yellow	Violet	Pink	Aqua

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