

# **KST LTD**

### **Technical Data Sheet**

Cable Description													
Type of Fibre			, 48F, 72F lode, G.6		GLE SHE	ATH ADSS	CABLE FC	DR OVER	HEAD API	PLICATIO	N		
		-	Introd		n								
All dielectric self supporting a compliant to the relevant IEC	aerial optic cable containing up C specifications.	o to 96 L	WP-SMI	F in full	complia	ance wit	h ITU-T (	G 652D	. The off	fered ca	ıbles ar	e fully	
			Cable	Desig	n								
<ul> <li>* Non-metallic and anti-buck</li> <li>* Loose buffer tubes fully fille</li> <li>* Loose buffer tubes S-Z Stra</li> </ul>	nded ith water swellable yarn & tapo rength member	Central S				D							
			Appli	catior	1								
<ul> <li>* Self supporting aerial instal</li> <li>* Maximum Tensile Strength</li> <li>* Suitable for span length from</li> </ul>	of 6000 N measured at <1.0%	Fiber St	rain										
		Sp	ecial I	Featu	res								
	n and corrosion resistance for a de easy fibre routing inside clos		plicatior	1									
	Cal	ble Ph	ysical	Chara	acteri	stics							
		1					r					1	1
Fibre Count		12	24	48	72	96							
Number of Fibres in Each Tul			-	12	1	1			1			1	
Number of Buffer Tubes in ea	ach cable	1	2	4	6	8							
					-								
		10.5	10.5	10.5	10.5	12.0							
Tolerance ± (mm)	,	0.5	0.5	0.5	0.5	0.5							
Tolerance ± (mm)	m)				0.5 95	0.5 120							
Tolerance ± (mm) Nominal Cable Weight (kg/kr	m)	0.5 95	0.5	0.5	0.5 95 2000 ±	0.5							
Tolerance ± (mm) Nominal Cable Weight (kg/kr		0.5 95 4000	0.5 95 ± 5%	0.5 95	0.5 95 2000 ± 10%	0.5 120 4000 ± 5%							
Tolerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters)	Cable Mecha	0.5 95 4000	0.5 95 ± 5%	0.5 95	0.5 95 2000 ± 10%	0.5 120 4000 ± 5%							
Tolerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters) <b>Test</b>	Cable Mechai Standard	0.5 95 4000	0.5 95 ± 5%	0.5 95	0.5 95 2000 ± 10%	0.5 120 4000 ± 5% Chara Prod	uct Pe	rform		Q. Cho	go: 20	°C to	20 °C
Tolerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters) <b>Test</b> Temperature Range (°C)	Cable Mechai Standard [IEC 60794-1-2-F1]	0.5 95 4000 nical 8	0.5 95 ± 5% <b>k Envi</b>	0.5 95	0.5 95 2000 ± 10% ental	0.5 120 4000 ± 5% Chara Prod	uct Pe	rform		& Stora	ge: -30	°C to +7	70 °C
Folerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters) <b>Test</b> Femperature Range (°C) Cable Bending Radius (mm)	Cable Mechai Standard [IEC 60794-1-2-F1] [IEC 60794-1-2-E11 A & B]	0.5 95 4000 nical 8 0pe 210	0.5 95 ± 5% & Envir eration: 210	0.5 95 ronm( -30 °C t 210	0.5 95 2000 ± 10% ental 0 +70 °( 210	0.5 120 4000 ± 5% Chara Produ C, Install 240	uct Pe	rform		& Stora	ge: -30	°C to +7	70 °C
Tolerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters) <b>Test</b> Temperature Range (°C) Cable Bending Radius (mm) Kink Resistance (mm)	Cable Mechan Standard [IEC 60794-1-2-F1] [IEC 60794-1-2-E11 A & B] [IEC 60794-1-2-E10]	0.5 95 4000 nical & 0pe 210 105	0.5 95 ± 5% & Envir eration: 210 105	0.5 95 ronme -30 °C t 210 105	0.5 95 2000 ± 10% ental 0 +70 °C 210 105	0.5 120 4000 ± 5% Chara Prod C, Install 240 120	ation: -3	<b>rform</b> 80 °C to	+70 °C				
Tolerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters) <b>Test</b> Temperature Range (°C) Cable Bending Radius (mm) Kink Resistance (mm) Every Day Tensile Force (N)	Cable Mechai Standard [IEC 60794-1-2-F1] [IEC 60794-1-2-E11 A & B] [IEC 60794-1-2-E10] [IEC 60794-1-2-E1]	0.5 95 4000 nical 8 0pe 210 105 4000	0.5 95 ± 5% <b>k Envil</b> eration: 210 105 4000	0.5 95 -30 °C t 210 105 4000	0.5 95 2000 ± 10% ental 0 +70 °( 210 105 4000	0.5 120 4000 ± 5% Chara Produ C, Install 240	ation: -3	<b>rform</b> 80 °C to					
Folerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters) Test Femperature Range (°C) Cable Bending Radius (mm) Kink Resistance (mm) Every Day Tensile Force (N) mpact Resistance (Nm)	Cable Mechan Standard [IEC 60794-1-2-F1] [IEC 60794-1-2-E11 A & B] [IEC 60794-1-2-E10]	0.5 95 4000 nical & 0pe 210 105	0.5 95 ± 5% <b>k Envi</b> eration: 210 105 4000 50	0.5 95	0.5 95 2000 ± 10% ental 0 +70 °C 210 105 4000 50	0.5 120 4000 ± 5% Chara Prod C, Install 240 120	ation: -3	<b>rform</b> 80 °C to	+70 °C				
Tolerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters) <b>Test</b> Temperature Range (°C) Cable Bending Radius (mm) Kink Resistance (mm) Every Day Tensile Force (N) Impact Resistance (Nm) Crush Resistance (N/10cm)	Cable Mechan Standard [IEC 60794-1-2-F1] [IEC 60794-1-2-E11 A & B] [IEC 60794-1-2-E10] [IEC 60794-1-2-E1] [IEC 60794-1-2-E4] [IEC 60794-1-2-E3]	0.5 95 4000 100 210 105 4000 50 2000	0.5 95 ± 5% <b>k Envi</b> 210 105 4000 50 2000	0.5 95	0.5 95 2000 ± 10% ental 0 +70 °( 210 105 4000 50 2000	0.5 120 4000 ± 5% Chara Produ 240 120 4000	ation: -3	<b>rform</b> 80 °C to	+70 °C				
Tolerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters) Test Temperature Range (°C) Cable Bending Radius (mm) Kink Resistance (mm) Every Day Tensile Force (N) Impact Resistance (Nm) Crush Resistance (N/10cm) Torsion Resistance	Cable Mechan Standard [IEC 60794-1-2-F1] [IEC 60794-1-2-E11 A & B] [IEC 60794-1-2-E10] [IEC 60794-1-2-E1] [IEC 60794-1-2-E1] [IEC 60794-1-2-E3] [IEC 60794-1-2-E7]	0.5 95 4000 105 4000 50 2000	0.5 95 ) ± 5% & Envir eration: 210 105 4000 50 2000 10 Cycle	0.5 95 -30 °C t 210 105 4000 50 2000 e, ± 360	0.5 95 2000 ± 10% ental 0 +70 °( 210 105 4000 50 2000 °, L=50N	0.5 120 4000 ± 5% Charac Produ 240 120 4000	ation: -3	rform 30 °C to 7 Day Te	+70 °C of a state of the state				
Tolerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters) <b>Test</b> Temperature Range (°C) Cable Bending Radius (mm) Kink Resistance (mm) Every Day Tensile Force (N) Impact Resistance (Nm) Crush Resistance (N/10cm) Torsion Resistance Water Penetration	Cable Mechan Standard [IEC 60794-1-2-F1] [IEC 60794-1-2-E11 A & B] [IEC 60794-1-2-E10] [IEC 60794-1-2-E1] [IEC 60794-1-2-E3] [IEC 60794-1-2-E3] [IEC 60794-1-2-E7] [IEC 60794-1-2-F5 B]	0.5 95 4000 100 210 105 4000 50 2000 1 Mete	0.5 95 e± 5% <b>k Envin</b> 210 105 4000 50 2000 10 Cycle	0.5 95	0.5 95 2000 ± 10% ental 0 +70 °C 210 105 4000 50 2000 °, L=50N 3 Meter	0.5 120 4000 ± 5% C, Install 240 120 4000	ation: -3 Every Sample,	rform 30 °C to 7 Day Te 168 Ho	+70 °C d				
Tolerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters) <b>Test</b> Temperature Range (°C) Cable Bending Radius (mm) Kink Resistance (mm) Every Day Tensile Force (N) Impact Resistance (Nm) Crush Resistance (N/10cm) Torsion Resistance Water Penetration	Cable Mechan Standard [IEC 60794-1-2-F1] [IEC 60794-1-2-E11 A & B] [IEC 60794-1-2-E10] [IEC 60794-1-2-E1] [IEC 60794-1-2-E1] [IEC 60794-1-2-E3] [IEC 60794-1-2-E7]	0.5 95 4000 100 210 105 4000 50 2000 1 Mete	0.5 95 e± 5% <b>k Envin</b> 210 105 4000 50 2000 10 Cycle	0.5 95	0.5 95 2000 ± 10% ental 0 +70 °C 210 105 4000 50 2000 °, L=50N 3 Meter	0.5 120 4000 ± 5% C, Install 240 120 4000	ation: -3 Every Sample,	rform 30 °C to 7 Day Te 168 Ho	+70 °C d				
Tolerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters) <b>Test</b> Temperature Range (°C) Cable Bending Radius (mm) Kink Resistance (mm) Every Day Tensile Force (N) Impact Resistance (Nm) Crush Resistance (N/10cm) Torsion Resistance Water Penetration	Cable Mechan           Standard           [IEC 60794-1-2-F1]           [IEC 60794-1-2-E11 A & B]           [IEC 60794-1-2-E10]           [IEC 60794-1-2-E1]           [IEC 60794-1-2-E1]           [IEC 60794-1-2-E3]           [IEC 60794-1-2-E3]           [IEC 60794-1-2-E7]           [IEC 60794-1-2-F5 B]           e in Attenuation shall be ≤ 0.05	0.5 95 4000 100 210 105 4000 50 2000 1 Mete	0.5 95 2 ± 5% <b>k Envin</b> 210 105 4000 50 2000 10 Cycle er Water <b>h. No Fib</b>	0.5 95	0.5 95 2000 ± 10% ental 0 +70 °( 210 105 4000 50 2000 °, L=50N 3 Meter	0.5 120 4000 ± 5% C, Install 240 120 4000 rs Cable mage or	Every Sample,	rform 30 °C to 7 Day Te 168 Ho	+70 °C d				
Temperature Range (°C) Cable Bending Radius (mm) Kink Resistance (mm) Every Day Tensile Force (N) Impact Resistance (Nm) Crush Resistance (N/10cm) Torsion Resistance Water Penetration Note: After the Test, Change	Cable Mechan           Standard           [IEC 60794-1-2-F1]           [IEC 60794-1-2-E11 A & B]           [IEC 60794-1-2-E10]           [IEC 60794-1-2-E1]           [IEC 60794-1-2-E3]           [IEC 60794-1-2-E3]           [IEC 60794-1-2-E7]           [IEC 60794-1-2-F5 B] <b>in Attenuation shall be ≤ 0.05</b>	0.5 95 4000 100 210 105 4000 50 2000 1 Mete 5 dB/Km	0.5 95 2 ± 5% <b>k Envin</b> 210 105 4000 50 2000 10 Cycle er Water <b>h. No Fib</b>	0.5 95	0.5 95 2000 ± 10% ental 0 +70 °( 210 105 4000 50 2000 °, L=50N 3 Meter k & Dan	0.5 120 4000 ± 5% Chara Produ 240 120 4000 s rs Cable mage or eristic	Every Sample,	rform 30 °C to 7 Day Te 168 Ho on the C	nsile is n				
Tolerance ± (mm) Nominal Cable Weight (kg/kr Standard Length (meters) Test Temperature Range (°C) Cable Bending Radius (mm) Kink Resistance (mm) Every Day Tensile Force (N) Impact Resistance (Nm) Crush Resistance (N/10cm) Torsion Resistance Water Penetration Note: After the Test, Change	Cable Mechan           Standard           [IEC 60794-1-2-F1]           [IEC 60794-1-2-E11 A & B]           [IEC 60794-1-2-E10]           [IEC 60794-1-2-E1]           [IEC 60794-1-2-E1]           [IEC 60794-1-2-E3]           [IEC 60794-1-2-E7]           [IEC 60794-1-2-F5 B]	0.5 95 4000 100 210 105 4000 50 2000 1 Mete 5 dB/Km	0.5 95 9±5% <b>k Envi</b> 210 105 4000 50 2000 10 Cycle er Water <b>b. No Fib</b>	0.5 95	0.5 95 2000 ± 10% ental 0 +70 °( 210 105 4000 50 2000 °, L=50N 3 Meter k & Dan	0.5 120 4000 ± 5% Chara Produ 240 120 4000 s rs Cable mage or eristic	Every Sample,	rform 30 °C to 7 Day Te 168 Ho on the C	+70 °C ( nsile is n ours Cable	neasured		j% fiber	



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### **Cable Constructional Details**

### Cable Cross Sectional Diagram of 48F Cable [Drawing not to scale]

	HDPE Outer Sheath, Black
	Glass Yarn (Peripheral Strength Member)
8	Water Swellable Tape
	Filler
	Water Swellable Yarn
	Central Strength Member, FRP
	Ripcord
	Fiber
	Gel-filled Loose Tube
Indent	ification Fibre & Buffer Tubes
ibre Colour	Blue Orange Green Brown Slate White Red Black Yellow Violet Rose Aqua
uffer Tube Colour	Blue Orange Green Brown Slate White Red Black
	Dide Orange Oren Diown State White Hed Didek
Pronosed Print	ing Details & Method at every meters
Proposed Print	ing Details & Method at every meters
	ing Details & Method at every meters CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres, Type of Fibre Type of Cable YYYY Manufacturer Name Sequential Meter Marking
	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres,
Printing Method & Colour Hotfoil & White	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres,
rinting Method & Colour Hotfoil & White	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres, Type of Fibre Type of Cable YYYY Manufacturer Name Sequential Meter Marking Deposed Stencling on Drum
Printing Method & Colour Hotfoil & White	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres, Type of Fibre Type of Cable YYYY Manufacturer Name Sequential Meter Marking
Printing Method & Colour Hotfoil & White Pro	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres, Type of Fibre Type of Cable YYYY Manufacturer Name Sequential Meter Marking <b>Oposed Stencling on Drum</b> * Arrow showing the direction, the drum can be rolled. * Country of origin. * The manufacturer's name
Printing Method & Colour Hotfoil & White Pro Pro	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres, Type of Fibre Type of Cable YYYY Manufacturer Name Sequential Meter Marking <b>oposed Stencling on Drum</b> * Arrow showing the direction, the drum can be rolled. * Country of origin. * The manufacturer's name * Number of fibers.
Printing Method & Colour Hotfoil & White Pro Pro Every length will be delivered on non-returnable wooden drums. Generally the cable drum flange will be marked	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres, Type of Fibre Type of Cable YYYY Manufacturer Name Sequential Meter Marking <b>oposed Stencling on Drum</b> * Arrow showing the direction, the drum can be rolled. * Country of origin. * The manufacturer's name * Number of fibers. * Nominal cable length in meters
Printing Method & Colour Hotfoil & White Pro Pro Every length will be delivered on non-returnable wooden drums. Generally the cable drum flange will be marked	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres, Type of Fibre Type of Cable YYYY Manufacturer Name Sequential Meter Marking <b>oposed Stencling on Drum</b> * Arrow showing the direction, the drum can be rolled. * Country of origin. * The manufacturer's name * Number of fibers.
Printing Method & Colour Hotfoil & White Pro Pro Every length will be delivered on non-returnable wooden drums. Generally the cable drum flange will be marked	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres, Type of Fibre Type of Cable YYYY Manufacturer Name Sequential Meter Marking <b>Doposed Stencling on Drum</b> * Arrow showing the direction, the drum can be rolled. * Country of origin. * The manufacturer's name * Number of fibers. * Nominal cable length in meters * Net and gross weight.
Printing Method & Colour Hotfoil & White Pro Every length will be delivered on non-returnable wooden drums. Generally the cable drum flange will be marked with following: (These details can also be customised.)	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres, Type of Fibre Type of Cable YYYY Manufacturer Name Sequential Meter Marking <b>Doposed Stencling on Drum</b> * Arrow showing the direction, the drum can be rolled. * Country of origin. * The manufacturer's name * Number of fibers. * Nominal cable length in meters * Net and gross weight. * Drum number * Customer's/Project name and destination
Printing Method & Colour Hotfoil & White	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres, Type of Fibre Type of Cable YYYY Manufacturer Name Sequential Meter Marking <b>Doposed Stencling on Drum</b> * Arrow showing the direction, the drum can be rolled. * Country of origin. * The manufacturer's name * Number of fibers. * Nominal cable length in meters * Net and gross weight. * Drum number