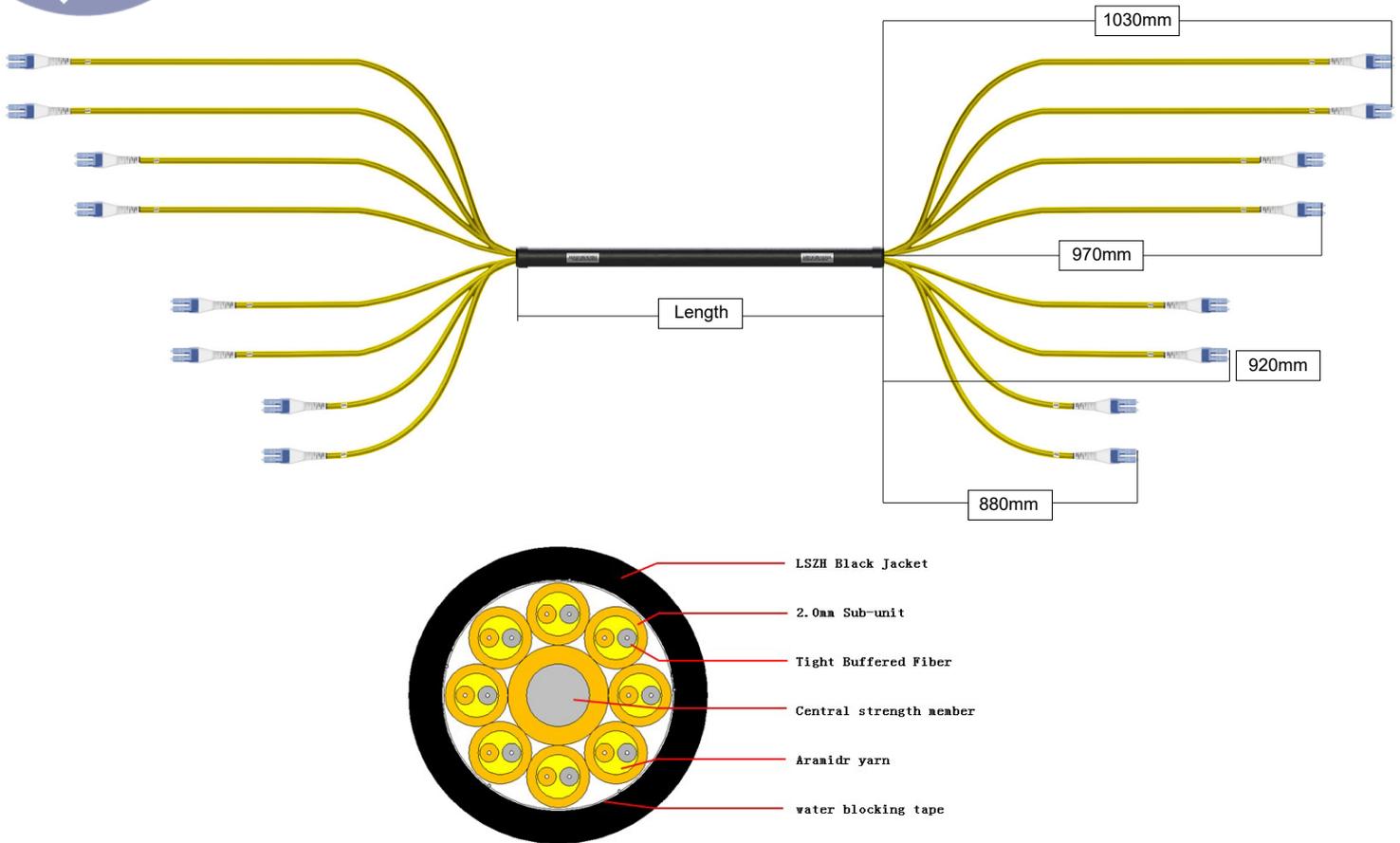




# Product specification

## SM 16C LC Uniboot – LC Uniboot Fibre Cable



### Description

Singlemode optical fiber cable with 8 pairs (16 cores) terminated with Duplex uniboot LC connectors

### Specification

Cable assembly	
Connectors	8 x pair LC (Uniboot)
Fibre type	16 core SM G657A2
Insertion loss	<0.2dB
Return loss	>50dB
Jacket material	LSZH; UV Resistant; External Grade; Black
Jacket min. avg. thickness	1.3mm ± 0.1mm
Cable OD	10.5 ± 0.2mm
Operating temperature	-40°C to +85°C
Storage temperature	-40°C to +85°C
Installation temperature	-40°C to +85°C
Breakout Length	880mm - 1030mm Staggered

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## SM 16C LC Uniboot – LC Uniboot Fibre Cable

Max. Tension	Short term: 2700N; Long-term: 800N	
Max Crushing Resistance	Short-term: 1000N/100; Long term: 200N/100	
<b>Cable Technical Parameters</b>		
Optical fibre dimension	245±5µm	
Tight buffer dimension	570µm ± 50µmm	
Central Strength Member	2.0mm FRP	
Breakout Jacket	LSZH; Yellow; 2mm OD	
Min. Bend Radius (Dynamic)	206mm	
Min. Bend Radius (Static)	103mm	
<b>Duplex LC connectors (Uniboot)</b>		
Number of cores	2 cores per connector	
Dustcover	TPV, UL 94-V-0, white	
Ferrule Sub Assembly	Zirconia/Metal	
Compression Spring	Aluminium 5053	
Housing	PEI, blue	
Inner Tubing	PTFE, Clear, UL VW-1	
Rear Body	PEI, blue	
Heat Shrink Tubing	PE, Flame Retardant	
Limiting Bending Boot	PE, white	
<b>Fibre Transmission Characteristics: G657A2</b>		
<b>Geometrical characteristics</b>		
Cladding diameter	125.0±0.7µm	
Cladding non-circularity	≤0.7%	
Coating diameter	245±5 µm	
Coating/cladding concentricity error	≤12.0 µm	
Coating in roundness	≤6.0 %	
Core/envelope concentricity error	≤0.5 µm	
<b>Optical characteristics</b>		
Attenuation	1310nm	≤0.35 dB/km
	1383nm	≤0.35 dB/km
	1490nm	≤0.23 dB/km
	1550nm	≤0.21 dB/km
	1625nm	≤0.23 dB/km
Attenuation vs. Wavelength max. A difference	1285~1330nm	≤0.03 MHz*km
	1525~1575nm	≤0.02 MHz*km
Dispersion coefficient	1550nm	≤18 ps/(nm*km)
	1285~1330nm	≤3.5 ps/(nm*km)
Zero dispersion wavelength	1300~1324nm	
Zero dispersion slope	≤0.092 ps/(nm <sup>2</sup> *km)	
PMD maximum individual fibre	≤0.1 ps/km <sup>1/2</sup>	
PMD design link value	≤0.06 ps/km <sup>1/2</sup>	
Cable cut off wavelength	≤1260nm	
Mode field diameter	1310nm	8.4~9.2µm
	1550nm	9.3~10.3 µm
Group index of refraction	1310nm	1.466
	1550nm	1.467
<b>Environmental characteristics</b>		
Temperature cycling	-60°C to +85°C	≤0.05dB/km

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# Product specification

## SM 16C LC Uniboot – LC Uniboot Fibre Cable

<b>Temperature-humidity cycling</b>	-10°C to +85°C; 4% to 98% RH	≤0.05dB/km
<b>Water immersion</b>	23°C, 30days	≤0.05dB/km
<b>Dry heat</b>	85°C, 30days	≤0.05dB/km
<b>Damp heat</b>	85°C, 85%RH, 30days	≤0.05dB/km
<b>Mechanical specification</b>		
<b>Proof test</b>	≥100 kpsi	
<b>Macro bending induced loss</b>		
<b>10 Turns @15mm Radius</b>	1550nm	≤0.03 dB
<b>10 Turns @15mm Radius</b>	1625nm	≤0.1 dB
<b>1 Turn @10mm Radius</b>	1550nm	≤0.1 dB
<b>1 Turn @10mm Radius</b>	1625nm	≤0.2 dB
<b>1 Turn @7.5mm Radius</b>	1550nm	≤0.2 dB
<b>1 Turn @7.5mm Radius</b>	1625nm	≤0.5 dB
<b>Stripping force</b>	1.7N representative average; ≥1.3, ≤8.9N peak value	
<b>General</b>		
<b>Cable Length</b>	1m, 2m... any length optional	
<b>Length Tolerance</b>	10cm	
<b>Pair Identification</b>	Numeric 1-8	
<b>Label info</b>	HUGHES Part Number Product description Batch	
<b>Fibre deployment application</b>	Suitable for Outdoor, Indoor, External Ducting	
<b>Recommended Hanger</b>	Hughes 27-CL4S101/0DS1 – ONECLAMP DS1	



The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general information purposes only. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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