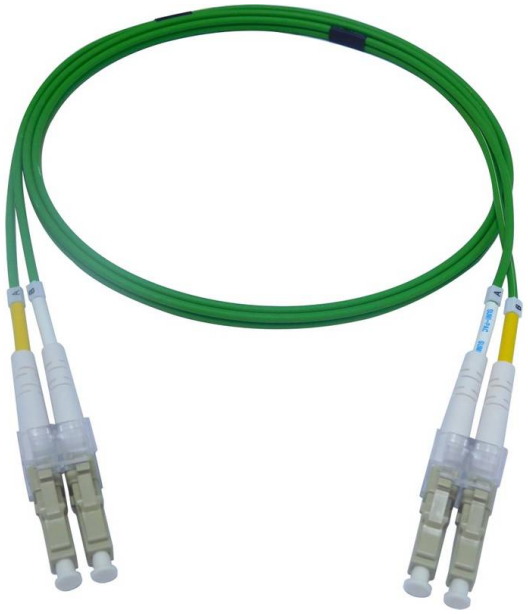
Excel Enbeam OM5 Fibre Optic Patch Lead LC-LC Multimode 50/125 Duplex LS0H Lime Green 5 m

Item Code: 204-604



- 100% Optically Tested
- Test Certificate Included
- Low Loss Connectors
- Zirconia Ceramic PC Ferrules
- Polarity Changeable (Duplex Connectors)
- 25 Year system warranty

Product Overview

Excel Enbeam OM5 50/125 micron duplex patch leads are manufactured from the highest quality 900 micron buffer/jacket optical fibre, terminated with ceramic ferrule connectors. Each cable has strain relief boots to prolong and maintain performance levels of the assembly, transmit and receive 'legs' of each duplex cable are identified by means of ring type cable marker fixed to each end the assembly.

A short distance from these identification rings heat shrink is applied to maintain an easy to manage bonded two fibre cable, finally a label containing a unique batch number is fixed to the centre of cable for quality and traceability purposes.

Product Specifications

Feature	Values
Fibre type	Multi mode 50/125
Category	OM5
Number of Cores	2
Outer diameter sheath single fibre	4.1 mm
Cable type	Duplex
Length	5 m
Type of connector connection 1	LC
Type of connector connection 2	LC
Outer sheath colour	Green
Strain relief boot	Push-on

Flame retardant according to IEC 60332-1-2	yes
Low smoke (acc. IEC 61034-2)	yes

Cable specifications

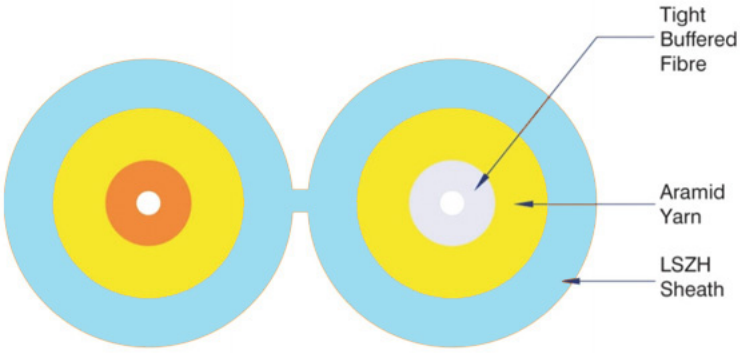
Features	Values	SC Assemblies	LC Assemblies
Cable Construction	Duplex zip-cord		
No. of Fibres	2		
Cable Dimensions		2.8 x 5.7mm	2.0 x 4.0mm
Colour	Lime Green		
Strength members	Aramid Yarn		
Temperature range	-20C to +70C		
Connector Material		Composite	Composite
Minimum bend radius (loaded)	10 x cable diameter		
Connector Ferrule		2.5mm Zirconium ceramic	1.25mm Zirconium ceramic
Ferrule End Face	PC Polish		
Connector Insertion Loss	Max. 0.3dB		

Fibre specifications

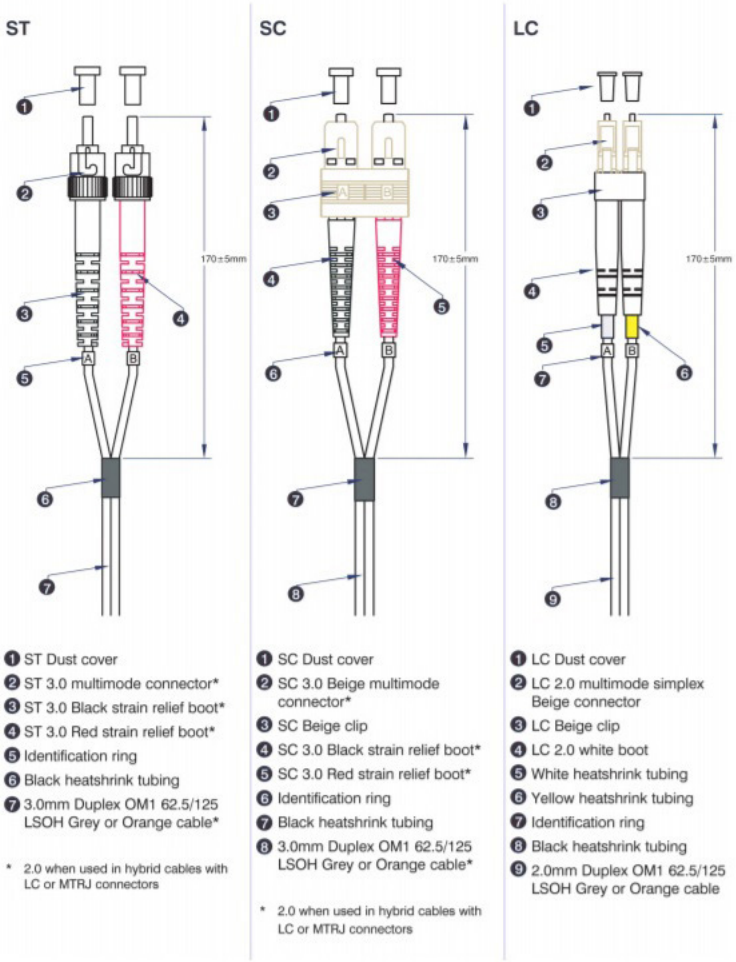
Features	Values
Core diameter	50 ± 2.5µm
Core Non-circularity	≤5%
Core-Cladding Concentricity Error	≤1.0µm
Cladding diameter	125 ± 0.8µm
Cladding Non-circularity	≤0.6%
Primary Coating diameter	245 ± 7µm
Coating-Cladding Concentricity Error	≤10.0µm
Coating Non-circularity	≤6.0%
Secondary coating diameter	900 µm nominal
Max. attenuation at 850nm	2.4dB/km
Max. attenuation at 953nm	1.7dB/km

Max attenuation at 1300nm	0.6dB/km
Refractive Index at 850nm	1.482
Refractive Index at 1300nm	1.477
Bandwidth at 850nm	≥3500 MHz.km
Bandwidth at 953nm	≥1850 MHz.km
Bandwidth at 1300nm	≥500 MHz.km
Effective Modal Bandwidth at 850nm	≥4700 MHz/km
Effective Modal Bandwidth at 953nm	≥2470 MHz/km
Numerical Aperture	0.200 ± 0.015
Zero Dispersion Wavelength	1295-1340nm
Macrobending Loss - 2 turns, 15mm Radius, 850nm	≤0.10dB
Macrobending Loss - 2 turns, 15mm Radius, 1300nm	≤0.30dB
Macrobending Loss - 2 turns, 7.5mm Radius, 850nm	≤0.2dB
Macrobending Loss - 2 turns, 7.5mm Radius, 1300nm	≤0.5dB
Coating Strip Force (typical)	1.5N
Coating Strip Force (peak)	1.3 - 8.9N

Cross-section diagram

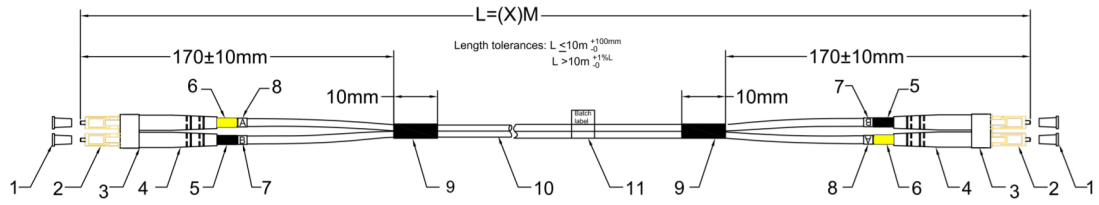


Product Schematics



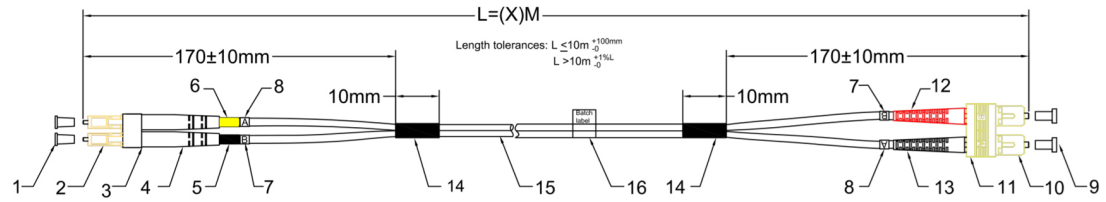
Product drawing

LC to LC



1. LC dust cover 2. LC/PC MM 2.0 connector, Beige 3. LC/PC 0.9mm Boot, White LC clip, clear
4. LC/PC 3.0 boot, White 5. LC shrink tube, white 6. LC shrink tube, yellow 7.B Ring 8. A Ring
9. Heat shrink tube, black 10. 02.0mm MM duplex OM5 50/125µ LSZH LIME GREEN cable 11. Batch label

LC to SC



1. LC dust cover 2. LC/PC MM 2.0 connector, Beige 3. LC clip, clear 4. LC/PC 3.0 boot, White
5. LC shrink tube, white 6. LC shrink tube, yellow 7.B Ring 8. A Ring 9. SC Dust cover
10. SC MM 2.0 connector, Beige 11. SC clip, beige 12. SC 2.0 boot,red 13. SC 2.0 boot, black
14. Heat shrink tube, black 15. 02.0mm MM duplex OM5 50/125µ LSZH LIME GREEN cable 16. Batch label

Standards

Applicable standard	Detail
BS EN 60332-1-2:2004+A11:2016	Tests on electric and optical fibre cables under fire conditions - Test for vertical flame propagation for a single insulated wire or cable. Procedure for 1 kW pre-mixed flame
IEC 60793-1-1:2022	Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance
IEC 60793-2:2015	Optical fibres - Part 2: Product specifications - General
IEC 60793-2-10:2017	Sectional specification for A1 multimode fibres
IEC 60793-1-20:2014	Optical fibres - Part 1-20: Measurement methods and test procedures - Fibre geometry
IEC 60793-1-21:2001	Optical fibres - Part 1-21: Measurement methods and test procedures - Coating geometry
IEC 60793-1-22:2001	Optical fibres - Part 1-22: Measurement methods and test

	procedures - Length measurement
IEC 60793-1-30:2010	Optical fibres - Part 1-30: Measurement methods and test procedures - Fibre proof test
IEC 60793-1-31:2010	Optical fibres - Part 1-31: Measurement methods and test procedures - Tensile Strength
ITU G.651.1	Characteristics of a 50/125 µm multimode graded index optical fibre cable for the optical access network
EN 50173-1:2018	Information technology. Generic cabling systems - General requirements
EN 50173-2:2007 + A1:2010	Information technology. Generic cabling systems - Office premises
IEC 61754-1:2013	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 1: General and guidance
IEC 61754-2:1996	Fibre optic connector interfaces - Part 2: Type BFOC/2,5 connector family
IEC 61754-4:2013	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 4: Type SC connector family
IEC 61754-4-100:2015	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 4-100: Type SC connector family - Simplified receptacle SC-PC connector interfaces
RoHS-II/-III (2011/65/EU & 2015/863): 2023	Our products, demonstrate full adherence to the regulatory stipulations of the EU Directive 2011/65/EU (RoHS-II) and its corresponding delegated directive 2015/863 (RoHS-III).
WFD: 2023	Compliant to Waste Framework Directive
SCIP: 2023	Compliant - Does Not Contain Substances of Concern In articles as such or in complex objects (Products)
POPs (EU) No 2019/1021	EU Regulation for the restriction of Persistent Organic Pollutants.

Part Number Table

Part Number	Description
204-600	Excel Enbeam OM5 Fibre Optic Patch Lead LC-LC Multimode 50/125 Duplex LS0H Lime Green 0.5 m
204-601	Excel Enbeam OM5 Fibre Optic Patch Lead LC-LC Multimode 50/125 Duplex LS0H Lime Green 1 m
204-602	Excel Enbeam OM5 Fibre Optic Patch Lead LC-LC Multimode 50/125 Duplex

	LS0H Lime Green 2 m
204-603	Excel Enbeam OM5 Fibre Optic Patch Lead LC-LC Multimode 50/125 Duplex LS0H Lime Green 3 m
204-604	Excel Enbeam OM5 Fibre Optic Patch Lead LC-LC Multimode 50/125 Duplex LS0H Lime Green 5 m
204-605	Excel Enbeam OM5 Fibre Optic Patch Lead LC-SC Multimode 50/125 Duplex LS0H Lime Green 0.5 m
204-606	Excel Enbeam OM5 Fibre Optic Patch Lead LC-SC Multimode 50/125 Duplex LS0H Lime Green 1 m
204-607	Excel Enbeam OM5 Fibre Optic Patch Lead LC-SC Multimode 50/125 Duplex LS0H Lime Green 2 m
204-608	Excel Enbeam OM5 Fibre Optic Patch Lead LC-SC Multimode 50/125 Duplex LS0H Lime Green 3 m
204-609	Excel Enbeam OM5 Fibre Optic Patch Lead LC-SC Multimode 50/125 Duplex LS0H Lime Green 5 m

Excel is a world class premium performing end to end infrastructure solution designed, Manufactured, supported and delivered without compromise.

Contact us at sales@excel-networking.com

E&OE. Excel is a registered trade name of Mayflex Holdings Ltd.