



✗ 100% optically tested

✗ Test certificate included

✗ Low loss connectors

✗ Zirconia ceramic UPC ferrules

✗ Polarity changeable (duplex connectors)

✗ Bend insensitive construction

✗ CIBSE TM65 Embodied Carbon: 0.307 kg CO<sub>2</sub>e

## Product Overview

Excel OS2 9/125 µm duplex patch leads are manufactured from the highest quality 900 µm buffer/jacket optical fibre, terminated with ceramic ferrule connectors.

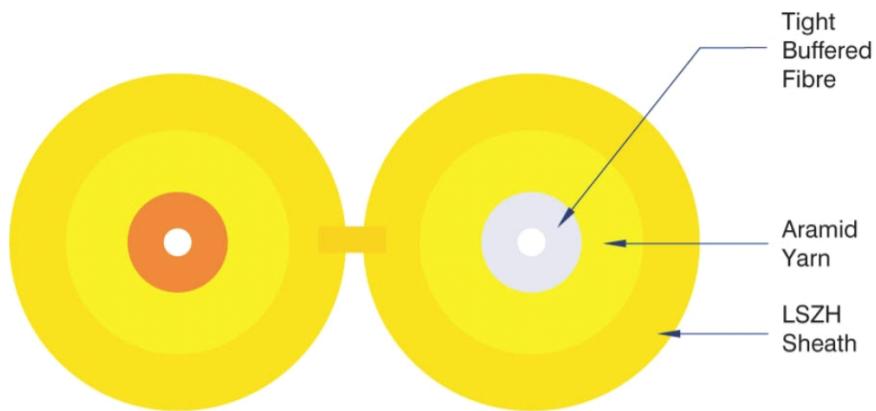
Each cable has strain relief boots to prolong and maintain performance levels of the assembly, transmit and receive 'legs' of each duplex cable are identified by means of ring type cable marker fixed to each end the assembly. A short distance from these identification rings heat shrink is applied to 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

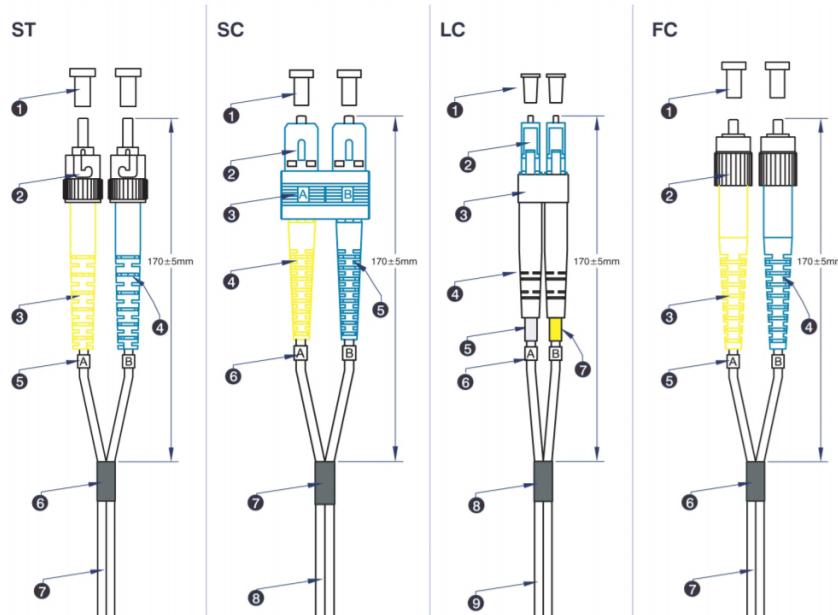
Feature	Values
Fibre type	Single mode
Category	OS2
Number of Cores	2
Outer diameter sheath single fibre	3 mm
Cable type	Duplex
Length	2 m
Type of connector connection 1	SC

Type of connector connection 2	SC
Outer sheath colour	Yellow
Strain relief boot	Push-on
Flame retardant according to IEC 60332-1-2	yes
Low smoke (acc. IEC 61034-2)	yes

### Cross-section diagram



### Product drawing



### Cable specifications

Features	Values	SC Assemblies	LC Assemblies
Cable Construction	Duplex zip-cord		
No. of Fibres	2		
Cable Dimensions		2.8 x 5.7 mm	2.0 x 4.0 mm
Colour	Yellow		
Strength members	Aramid Yarn		
Temperature range	-20 °C to +70 °C		
Connector Material		Composite	Composite
Minimum bend radius (loaded)	10 x cable diameter		
Connector Ferrule		2.5 mm Ceramic	1.25 mm Ceramic
Ferrule End Face	APC Polish		

### Fibre specifications

Features	Values
Mode Field diameter at 1310nm	8.4 - 9.2 $\mu$ m
Mode Field diameter at 1550nm	9.3-10.3 $\mu$ m
Cladding diameter	125.0 $\pm$ 0.7 $\mu$ m
Cladding Non-circularity	$\leq$ 0.7%
Primary Coating diameter	235 - 245 $\mu$ m
Coating-Cladding Concentricity Error	$\leq$ 12 $\mu$ m
Coating Non-circularity	$\leq$ 6.0%
Core-Cladding Concentricity Error	$\leq$ 0.5 $\mu$ m
Max. attenuation at 1310nm	$\leq$ 0.35 dB/km
Max. attenuation at 1383nm	$\leq$ 0.35 dB/km
Max. attenuation at 1460nm	$\leq$ 0.25 dB/km
Max. attenuation at 1490nm	$\leq$ 0.23 dB/km
Max attenuation at 1550nm	$\leq$ 0.21 dB/km
Max attenuation at 1625nm	$\leq$ 0.23 dB/km
PMD (typical value)	0.04 ps/km
Cut-off wavelength	1260nm
Zero dispersion wavelength	1300-1324 nm
Zero dispersion slope	$\leq$ 0.092 ps/nm <sup>2</sup> .km
Refractive Index at 1310nm	1.466
Refractive Index at 1550nm	1.467
Macro-Bend Loss - 10 turns, 15mm radius, 1625nm	$\leq$ 0.03dB
Macro-Bend Loss - 10 turns, 15mm radius, 1550nm	$\leq$ 0.1dB
Macro-Bend Loss - 1 turn, 10mm radius, 1550nm	$\leq$ 0.1dB
Macro-Bend Loss - 1 turn, 10mm radius, 1625nm	$\leq$ 0.2dB
Macro-Bend Loss - 1 turn, 7.5mm radius, 1550nm	$\leq$ 0.5dB
Macro-Bend Loss - 1 turn, 7.5mm radius, 1625nm	$\leq$ 1.0dB
Coating Strip Force (typical)	1.5N
Coating Strip Force (peak)	1.3 - 8.9N

## 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-T G.652:2016	Characteristics of a single-mode optical fibre and cable
ITU-T G.657:2016	Characteristics of a bending-loss insensitive single-mode optical fibre and cable
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
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
ISO/IEC 11801-1:2017	Information technology - Generic cabling for customer premises: Part 1 General Requirements
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
201-001	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-SC/APC Singlemode 9/125 DX LS0H Yellow 1 m
201-002	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-SC/APC Singlemode 9/125 DX LS0H Yellow 2 m
201-003	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-SC/APC Singlemode 9/125 DX LS0H Yellow 3 m
201-005	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-SC/APC Singlemode 9/125 DX LS0H Yellow 5 m
201-010	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-SC/APC Singlemode 9/125 DX LS0H Yellow 10 m
201-015	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-SC/UPC Singlemode 9/125 DX LS0H Yellow 15 m
201-021	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-SC/UPC Singlemode 9/125 DX LS0H Yellow 1 m
201-022	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-SC/UPC Singlemode 9/125 DX LS0H Yellow 2 m
201-023	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-SC/UPC Singlemode 9/125 DX LS0H Yellow 3 m
201-025	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-SC/UPC Singlemode 9/125 DX LS0H Yellow 5 m
201-030	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-SC/UPC Singlemode 9/125 DX LS0H Yellow 10 m
201-041	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-LC/UPC Singlemode 9/125

# Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-SC/APC Singlemode 9/125 DX LS0H Yellow 2 m

Item Code: 201-002



DX LS0H Yellow 1 m	
201-042	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-LC/UPC Singlemode 9/125 DX LS0H Yellow 2 m
Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-LC/UPC Singlemode 9/125 DX LS0H Yellow 3 m	
201-045	Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-LC/UPC Singlemode 9/125 DX LS0H Yellow 5 m
Excel Enbeam OS2 Fibre Optic Patch Lead SC/APC-LC/UPC Singlemode 9/125 DX LS0H Yellow 10 m	
201-251	Excel Enbeam OS2 Fibre Optic Patch Lead LC/APC-LC/APC Singlemode 9/125 DX LS0H Yellow 1 m
Excel Enbeam OS2 Fibre Optic Patch Lead LC/APC-LC/APC Singlemode 9/125 DX LS0H Yellow 2 m	
201-253	Excel Enbeam OS2 Fibre Optic Patch Lead LC/APC-LC/APC Singlemode 9/125 DX LS0H Yellow 3 m
Excel Enbeam OS2 Fibre Optic Patch Lead LC/APC-LC/APC Singlemode 9/125 DX LS0H Yellow 5 m	
201-256	Excel Enbeam OS2 Fibre Optic Patch Lead LC/APC-LC/APC Singlemode 9/125 DX LS0H Yellow 10 m

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

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