Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 10 m

Item Code: 201-216

- 100% Optically Tested
- Test Certificate Included
- Low Loss Connectors
- Zirconia ceramic UPC ferrules
- Bend insensitive construction
- CIBSE TM65 Embodied Carbon: 0.505 kg CO2e

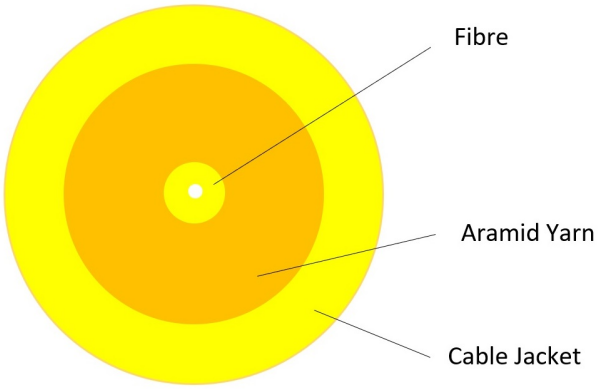
Product Overview

Excel OS2 9/125 µm simplex patch leads are manufactured from the highest quality 900 µm G657A2 buffer/jacket optical fibre, terminated with ceramic ferrule connectors. Each cable has strain relief boots to prolong and maintain performance levels of the assembly. A label containing a unique batch number is fixed to the centre of cable for quality and traceability purposes.

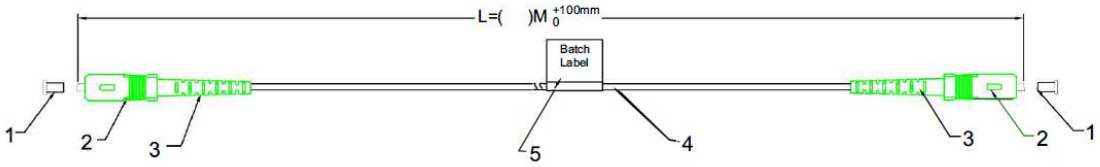
Product Specifications

Feature	Values
Fibre type	Single mode
Category	OS2
Number of Cores	1
Cable type	Simplex
Length	10 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
Cable Construction	Simplex
No. of Fibres	1
Cable Dimensions	3 mm
Colour	Yellow
Strength members	Aramid Yarn
Temperature range	-20 °C - +70 °C
Connector Material	Composite
Minimum bend radius (loaded)	10 x cable diameter
Connector Ferrule	2.5 mm Zirconium ceramic

Ferrule End Face	APC Polish
Connector Insertion Loss	Max. 0.3dB

Fibre specifications

Features	Values
Mode Field diameter at 1310nm	8.4 - 9.2µm
Mode Field diameter at 1550nm	9.3-10.3µm
Cladding diameter	125.0 ± 0.7µm
Cladding Non-circularity	≤ 0.7%
Primary Coating diameter	235 - 245µm
Coating-Cladding Concentricity Error	≤ 12µm
Coating Non-circularity	≤ 6.0%
Core-Cladding Concentricity Error	≤0.5µm
Max. attenuation at 1310nm	≤0.35 dB/km
Max. attenuation at 1383nm	≤0.35 dB/km
Max. attenuation at 1460nm	≤0.25 dB/km
Max. attenuation at 1490nm	≤0.23 dB/km
Max attenuation at 1550nm	≤0.21 dB/km
Max attenuation at 1625nm	≤0.23 dB/km
PMD (typical value)	0.04 ps/km
Cut-off wavelength	1260nm
Zero dispersion wavelength	1300-1324 nm
Zero dispersion slope	≤0.092 ps/nm2.km
Refractive Index at 1310nm	1.466
Refractive Index at 1550nm	1.467
Macro-Bend Loss - 10 turns, 15mm radius, 1625nm	≤0.03dB
Macro-Bend Loss - 10 turns, 15mm radius, 1550nm	≤0.1dB
Macro-Bend Loss - 1 turn, 10mm radius, 1550nm	≤0.1dB
Macro-Bend Loss - 1 turn, 10mm radius, 1625nm	≤0.2dB
Macro-Bend Loss - 1 turn, 7.5mm radius, 1550nm	≤0.5dB
Macro-Bend Loss - 1 turn, 7.5mm radius, 1625nm	≤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
201-211	Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 1 m
201-212	Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 2 m
201-213	Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 3 m
201-214	Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 5 m
201-216	Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 10 m