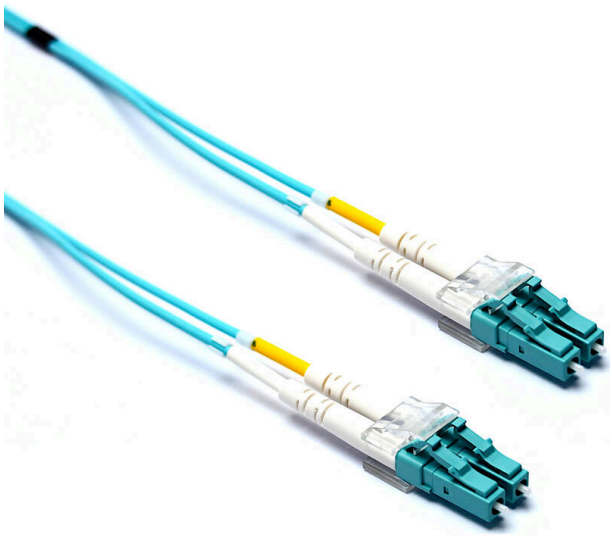
Excel Enbeam OM4 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Aqua 2 m

Item Code: 204-301



- 100% optically tested
- Test certificate included
- Low loss connectors
- Zirconia ceramic UPC ferrules
- Polarity changeable (duplex connectors)
- Bend insensitive construction

Product Overview

Excel OM4 50/125 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	Multi mode 50/125
Category	OM4
Number of Cores	2
Outer diameter sheath single fibre	2 mm
Cable type	Duplex
Length	2 m
Type of connector connection 1	LC
Type of connector connection 2	LC
Outer sheath colour	Aqua
Strain relief boot	Push-on

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

Cable specifications

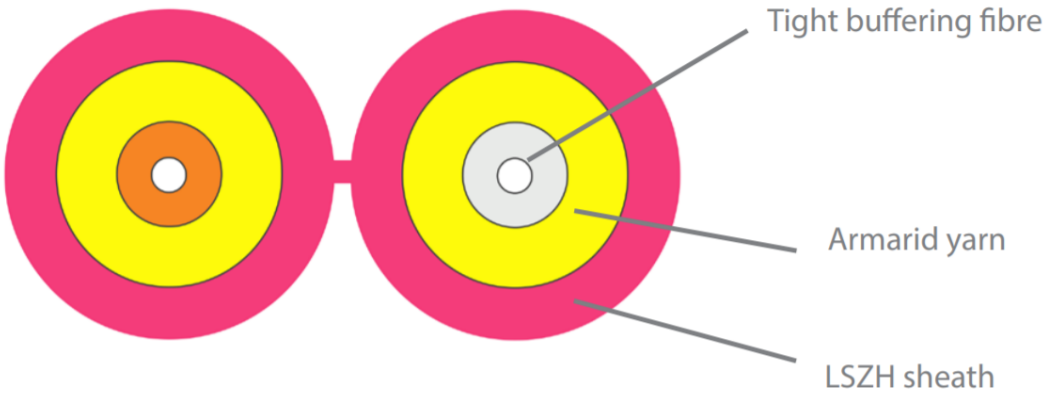
Features	Values	SC Assemblies	LC Assemblies
Cable Construction	Duplex zip-cord		
No. of Fibres	2		
Cable Dimensions		2.8 x 5.7mm	2.0 x 4.0mm
Colour	Heather Violet		
Strength members	Aramid Yarn		
Temperature range	-20C to +70C		
Connector Material		Composite	Composite
Minimum bend radius (loaded)	10 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

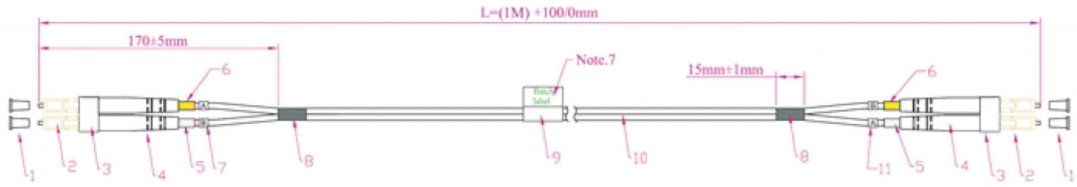
Features	Values
Core diameter	50 ± 2.5µm
Core Non-circularity	≤5%
Core-Cladding Concentricity Error	≤1.0µm
Cladding diameter	125 ± 1.0µm
Cladding Non-circularity	≤1.0%
Primary Coating diameter	245 ± 7µm
Coating-Cladding Concentricity Error	≤10.0µm
Coating Non-circularity	≤6.0%
Secondary coating diameter	900 µm nominal
Max. attenuation at 850nm	2.4dB/km
Max attenuation at 1300nm	0.6dB/km

Refractive Index at 850nm	1.482
Refractive Index at 1300nm	1.477
>=Bandwidth at 850nm	≥3500 MHz.km
Bandwidth at 1300nm	≥500 MHz.km
Effective Modal Bandwidth at 850nm	≥4700 MHz/km
Nμmerical Aperture	0.200 ±0.015
Zero Dispersion Wavelength	1295-1340nm
Macrobending Loss - 100 turns, 37.5mm Radius, 850nm	≤0.50dB
Macrobending Loss - 100 turns, 37.5mm Radius, 1300nm	≤0.50dB
Macrobending Loss - 2 turns, 15mm Radius, 850nm	≤1.0dB
Macrobending Loss - 2 turns, 15mm Radius, 1300nm	≤1.0dB
Coating Strip Force (typical)	1.5N
Coating Strip Force (peak)	1.3 - 8.9N

Cross-section diagram



Product drawing



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
204-300	Excel Enbeam OM4 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Aqua 1 m
204-301	Excel Enbeam OM4 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Aqua 2 m
204-302	Excel Enbeam OM4 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Aqua 3 m
204-303	Excel Enbeam OM4 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Aqua 5 m
204-304	Excel Enbeam OM4 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Aqua 1 m
204-305	Excel Enbeam OM4 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Aqua 2 m
204-306	Excel Enbeam OM4 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Aqua 3 m
204-307	Excel Enbeam OM4 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Aqua 5 m
204-308	Excel Enbeam OM4 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Aqua 1 m
204-309	Excel Enbeam OM4 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Aqua 2 m

204-310	Excel Enbeam OM4 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Aqua 3 m
204-323	Excel Enbeam OM4 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Aqua 10 m
204-330	Excel Enbeam OM4 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LSOH Violet 1 m
204-331	Excel Enbeam OM4 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Violet 2 m
204-332	Excel Enbeam OM4 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Violet 3 m
204-333	Excel Enbeam OM4 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Violet 5 m
204-334	Excel Enbeam OM4 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Violet 1 m
204-335	Excel Enbeam OM4 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Violet 2 m
204-336	Excel Enbeam OM4 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Violet 3 m
204-337	Excel Enbeam OM4 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LSOH Violet 5 m
204-338	Excel Enbeam OM4 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Violet 1 m
204-339	Excel Enbeam OM4 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Violet 2 m
204-340	Excel Enbeam OM4 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Violet 3 m
204-341	Excel Enbeam OM4 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Violet 5 m
204-352	Excel Enbeam OM4 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LSOH Violet 10 m