



✗ 100% Optically Tested

✗ Test Certificate Included

✗ Low Loss Connectors

✗ Zirconia ceramic UPC ferrules

✗ Polarity Changeable (Duplex Connectors)

✗ Bend insensitive construction

✗ 25 Year system warranty

Product Overview

Excel OM2 50/125µm 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	OM2
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	ST

Outer sheath colour	Orange
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	ST Assemblies	SC Assemblies	LC Assemblies
Cable Construction	Duplex zip-cord			
No. of Fibres	2			
Cable Dimensions		2.8 x 5.7mm	2.8 x 5.7mm	2.0 x 4.0mm
Colour	Orange			
Strength members	Aramid Yarn			
Temperature range	-20C to +70C			
Connector Material		Nickel plated Brass	Composite	Composite
Minimum bend radius (loaded)	10 x cable diameter			
Connector Ferrule		2.5mm Zirconium ceramic	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	≤1.5µm
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%

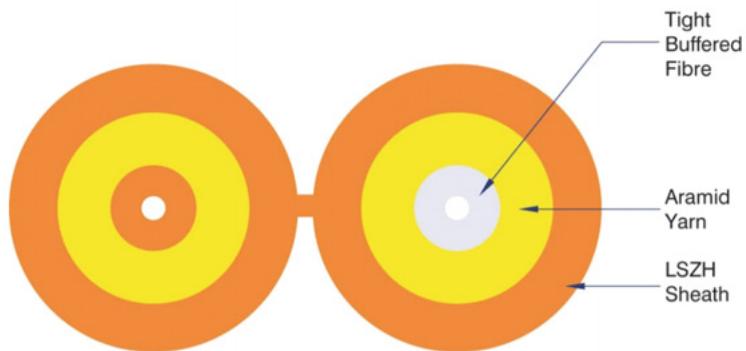
Excel Enbeam OM2 Fibre Optic Patch Lead LC-ST
Multimode 50/125 DX LS0H Orange 2 m

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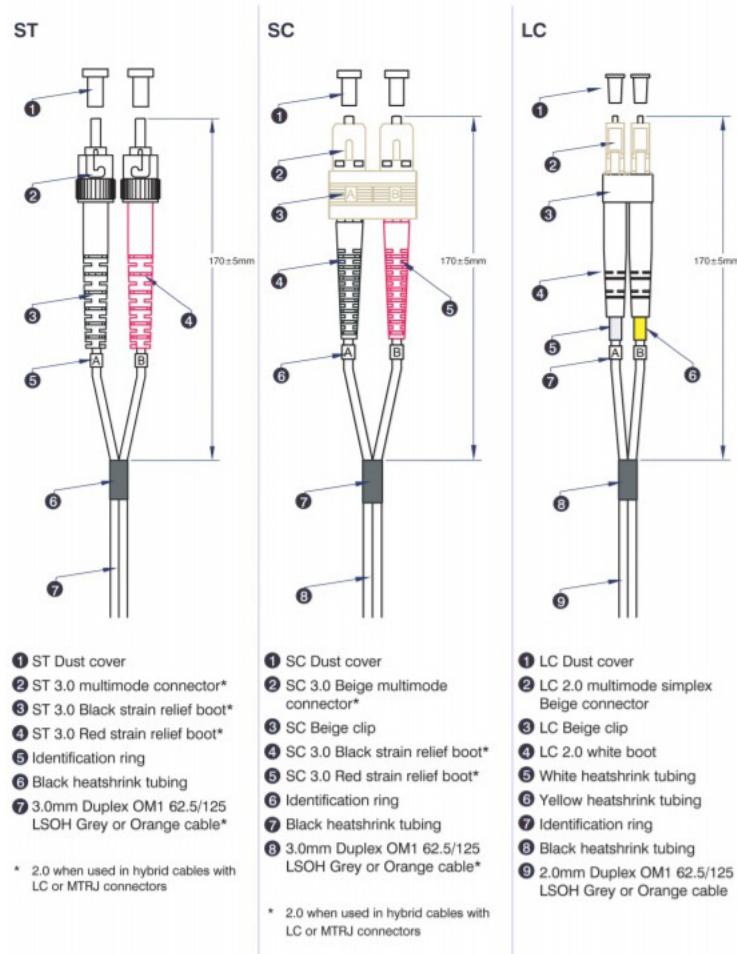
excel
without compromise.

Secondary coating diameter	900 μm nominal
Max. attenuation at 850nm	2.3dB/km
Max attenuation at 1300nm	0.6dB/km
Refractive Index at 850nm	1.482
Refractive Index at 1300nm	1.477
Bandwidth at 850nm	500 MHz.km
Bandwidth at 1300nm	500 MHz.km
Numerical Aperture	0.200 ± 0.015
Zero Dispersion Wavelength	1295-1340nm
Macrobending Loss - 2 turns, 15mm Radius, 850nm	$\le 0.10\text{dB}$
Macrobending Loss - 2 turns, 15mm Radius, 1300nm	$\le 0.30\text{dB}$
Macrobending Loss - 2 turns, 7.5mm Radius, 850nm	$\le 0.2\text{dB}$
Macrobending Loss - 2 turns, 7.5mm Radius, 1300nm	$\le 0.5\text{dB}$
Coating Strip Force (typical)	1.5N
Coating Strip Force (peak)	1.3 - 8.9N

Cross-section diagram



Product Schematics



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
200-093	Excel Enbeam OM2 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Orange 10 m
200-094	Excel Enbeam OM2 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Orange 15 m
200-095	Excel Enbeam OM2 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Orange 20 m
200-168	Excel Enbeam OM2 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Orange 1 m
200-169	Excel Enbeam OM2 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Orange 2 m
200-170	Excel Enbeam OM2 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Orange 3 m
200-171	Excel Enbeam OM2 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Orange 5 m
200-172	Excel Enbeam OM2 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Orange 1 m
200-173	Excel Enbeam OM2 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Orange 2 m
200-174	Excel Enbeam OM2 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Orange 3 m
200-175	Excel Enbeam OM2 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Orange 5 m
200-176	Excel Enbeam OM2 Fibre Optic Patch Lead LC-ST Multimode 50/125 DX LS0H Orange 1 m
200-177	Excel Enbeam OM2 Fibre Optic Patch Lead LC-ST Multimode 50/125 DX LS0H Orange 2 m
200-178	Excel Enbeam OM2 Fibre Optic Patch Lead LC-ST Multimode 50/125 DX LS0H Orange 3 m
200-179	Excel Enbeam OM2 Fibre Optic Patch Lead LC-ST Multimode 50/125 DX LS0H Orange 5 m

Excel Enbeam OM2 Fibre Optic Patch Lead LC-ST Multimode 50/125 DX LS0H Orange 2 m

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200-180	Excel Enbeam OM2 Fibre Optic Patch Lead LC-ST Multimode 50/125 DX LS0H Orange 10 m
200-200	Excel Enbeam OM2 Fibre Optic Patch Lead ST-ST Multimode 50/125 DX LS0H Orange 1 m
200-202	Excel Enbeam OM2 Fibre Optic Patch Lead ST-ST Multimode 50/125 DX LS0H Orange 2 m
200-204	Excel Enbeam OM2 Fibre Optic Patch Lead ST-ST Multimode 50/125 DX LS0H Orange 3 m
200-206	Excel Enbeam OM2 Fibre Optic Patch Lead ST-ST Multimode 50/125 DX LS0H Orange 5 m
200-209	Excel Enbeam OM2 Fibre Optic Patch Lead ST-ST Multimode 50/125 DX LS0H Orange 10 m
200-216	Excel Enbeam OM2 Fibre Optic Patch Lead ST-SC Multimode 50/125 DX LS0H Orange 1 m
200-218	Excel Enbeam OM2 Fibre Optic Patch Lead ST-SC Multimode 50/125 DX LS0H Orange 2 m
200-219	Excel Enbeam OM2 Fibre Optic Patch Lead ST-SC Multimode 50/125 DX LS0H Orange 15 m
200-220	Excel Enbeam OM2 Fibre Optic Patch Lead ST-SC Multimode 50/125 DX LS0H Orange 3 m
200-222	Excel Enbeam OM2 Fibre Optic Patch Lead ST-SC Multimode 50/125 DX LS0H Orange 5 m
200-224	Excel Enbeam OM2 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Orange 1 m
200-226	Excel Enbeam OM2 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Orange 2 m
200-227	Excel Enbeam OM2 Fibre Optic Patch Lead ST-SC Multimode 50/125 DX LS0H Orange 10 m
200-228	Excel Enbeam OM2 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Orange 3 m
200-229	Excel Enbeam OM2 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Orange 5 m
200-236	Excel Enbeam OM2 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Orange 10 m
200-237	Excel Enbeam OM2 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Orange 15 m
200-238	Excel Enbeam OM2 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Orange 20 m
200-265	Excel Enbeam OM2 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Orange 10 m

Excel Enbeam OM2 Fibre Optic Patch Lead LC-ST Multimode 50/125 DX LS0H Orange 2 m

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200-266	Excel Enbeam OM2 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Orange 15 m
200-267	Excel Enbeam OM2 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Orange 20 m
200-286	Excel Enbeam OM2 Fibre Optic Patch Lead ST-ST Multimode 50/125 DX LS0H Orange 15 m
200-287	Excel Enbeam OM2 Fibre Optic Patch Lead ST-ST Multimode 50/125 DX LS0H Orange 20 m
200-533	Excel Enbeam OM2 Fibre Optic Patch Lead LC-ST Multimode 50/125 DX LS0H Orange 20 m
202-171	Excel Enbeam OM2 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Orange 0.5 m
202-174	Excel Enbeam OM2 Fibre Optic Patch Lead LC-LC Multimode 50/125 DX LS0H Orange 30 m
202-178	Excel Enbeam OM2 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Orange 0.5 m
202-181	Excel Enbeam OM2 Fibre Optic Patch Lead LC-SC Multimode 50/125 DX LS0H Orange 30 m
202-184	Excel Enbeam OM2 Fibre Optic Patch Lead LC-ST Multimode 50/125 DX LS0H Orange 0.5 m
202-191	Excel Enbeam OM2 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Orange 0.5 m
202-194	Excel Enbeam OM2 Fibre Optic Patch Lead SC-SC Multimode 50/125 DX LS0H Orange 30 m
202-197	Excel Enbeam OM2 Fibre Optic Patch Lead ST-ST Multimode 50/125 DX LS0H Orange 0.5 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

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