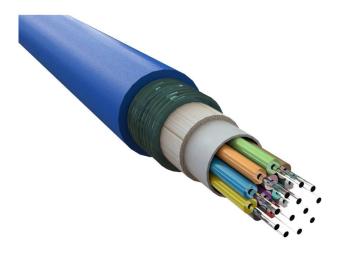


Item Code: 205-274









X Duct grade - rodent resistar

-X	Sequentially	/ matra	marker
	Dequer idali	y ilicule	Harket

50			
X	'UV	Res	istant

X Cut to length service

X 25 Year system warranty

X Euroclass Eca

Product Overview

Excel corrugated steel tape (CST) OM1 $62.5/125\mu m$ armoured loose tube optical fibre cables have been designed specifically for applications requiring a high degree of mechanical protection.

These cables are constructed from standard single loose tube cables which are then packed into a flexible but strong fibreglass water blocking strength member. These compact, lightweight cables are extremely rugged, provide rodent resistance and are quick and easy to install.

The print legend on the cable now includes information regarding the DOP number, Test and Classification of the cable for traceability.

The CST cable has also been designed for direct burial, to ensure the correct installation a sand back fill must be used at all times.

Product Specifications

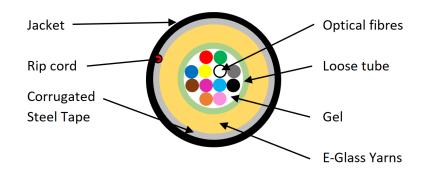
Feature	Values
Number of Cores	24
Type of tube	Loose tube
Number of fibres per tube	24
Fibre type	Multi mode 62.5/125
Category	OM1
Rodent resistant	yes
Outer sheath material	Copolymer, thermoplastic (LS0H)



Item Code: 205-274

Outer sheath colour	Blue
Flame retardant according to IEC 60332-1-2	yes
Reaction-to-fire class according to EN 13501-6	Eca
Outer diameter approx.	9.2 mm

Cross-section diagram



Colour coding (as per TIA-598-C)



For fibre core counts above 12 the colour sequence is repeated with the addition of a mark every 70mm for cores 13-24 and two marks for 25-36 and so on.

Cable specifications

Features		Values
Tensile Strength		2000 N
Crush Resistance		3000 N/m
Torsion		± 180 °
Temperature performance	Installation	-30°C to +70°C
	Operation	-30°C to +70°C



Item Code: 205-274

Loose tubes Number 1 Loose Tube ID/OD 4-16 Cores 2.0/2.8 ± 0.1 mm Loose Tube ID/OD 4-16 Cores 2.6/3.5 ± 0.1 mm Peripheral Strength Member Glass Yam + WS Yam Armoring Thickness 0.150 mm Armoring Material ECCS Tape Outer Sheath Thickness 1.8 mm (Nominal) Ripcord Number 1 Ripcord Number 1 Overall Cable Diameter 4-16 Cores 8.4 ± 0.5 mm Overall Cable Diameter 4-16 Cores 9.2 ± 0.5 mm Cable Weight 4-16 Cores 100.0 ± 10 kg/km Bending Radius Short term 20 x Diameter Long term 10 x Diameter			
$\begin{tabular}{ c c c c } \hline Material & PBT \\ Loose Tube ID/OD & 4-16 Cores & 2.0/2.8 \pm 0.1 mm \\ 24 Cores & 2.6/3.5 \pm 0.1 mm \\ 24 Cores & 2.6/3.5 \pm 0.1 mm \\ \hline Peripheral Strength Member & Glass Yam + WS Yam \\ \hline Armoring & Thickness & 0.150 mm \\ \hline Material & ECCS Tape \\ \hline Outer Sheath & Thickness & 1.8 mm (Nominal) \\ \hline Outer Sheath & Material & LSZH \\ \hline Ripcord & Number & 1 \\ \hline Material & Polyester \\ \hline Overall Cable Diameter & 4-16 Cores & 8.4 \pm 0.5 mm \\ \hline Cable Weight & 4-16 Cores & 9.2 \pm 0.5 mm \\ \hline Cable Weight & 4-16 Cores & 100.0 \pm 10 kg/km \\ \hline Bending Radius & Short term & 20 \times Diameter \\ \hline \end{tabular}$		Storage	-30°C to +70°C
Loose Tube ID/OD 4-16 Cores 2.0/2.8 ± 0.1 mm Peripheral Strength Member 24 Cores 2.6/3.5 ± 0.1 mm Armoring Thickness 0.150 mm Armoring Material ECCS Tape Outer Sheath Thickness 1.8 mm (Nominal) Material LSZH Ripcord Number 1 Material Polyester Overall Cable Diameter 4-16 Cores 8.4 ± 0.5 mm Cable Weight 4-16 Cores 9.2 ± 0.5 mm Cable Weight 4-16 Cores 100.0 ± 10 kg/km Bending Radius Short term 20 x Diameter	Loose tubes	Number	1
24 Cores 2.6/3.5 ± 0.1 mm Peripheral Strength Member Glass Yam + WS Yam Armoring Thickness 0.150 mm Material ECCS Tape Outer Sheath Thickness 1.8 mm (Nominal) LSZH Ripcord Ripcord Number 1 Material Polyester Overall Cable Diameter 4-16 Cores 8.4 ± 0.5 mm Cable Weight 4-16 Cores 9.2 ± 0.5 mm Cable Weight 4-16 Cores 100.0 ± 10 kg/km Bending Radius Short term 20 x Diameter		Material	PBT
Peripheral Strength MemberGlass Yam + WS YamArmoringThickness 0.150 mm MaterialECCS TapeOuter SheathThickness 1.8 mm (Nominal) MaterialLSZHRipcordNumber 1 MaterialPolyesterOverall Cable Diameter $4-16 \text{ Cores}$ $8.4 \pm 0.5 \text{ mm}$ Cable Weight $4-16 \text{ Cores}$ $9.2 \pm 0.5 \text{ mm}$ Cable Weight $4-16 \text{ Cores}$ $100.0 \pm 10 \text{ kg/km}$ Bending RadiusShort term $20 \times \text{ Diameter}$	Loose Tube ID/OD	4-16 Cores	$2.0/2.8 \pm 0.1 \text{mm}$
Armoring Thickness 0.150 mm Outer Sheath Thickness 1.8 mm (Nominal) Outer Sheath Material LSZH Ripcord Number 1 Material Polyester Overall Cable Diameter 4-16 Cores 8.4 ± 0.5 mm Cable Weight 4-16 Cores 9.2 ± 0.5 mm Cable Weight 4-16 Cores 100.0 ± 10 kg/km Bending Radius Short term 20 x Diameter		24 Cores	$2.6/3.5 \pm 0.1 \mathrm{mm}$
Outer SheathMaterialECCS TapeOuter SheathThickness 1.8 mm (Nominal) MaterialLSZHRipcordNumber 1 MaterialPolyesterOverall Cable Diameter $4-16 \text{ Cores}$ $8.4 \pm 0.5 \text{ mm}$ Cable Weight $4-16 \text{ Cores}$ $9.2 \pm 0.5 \text{ mm}$ Cable Weight $4-16 \text{ Cores}$ $100.0 \pm 10 \text{ kg/km}$ Bending RadiusShort term $20 \times \text{ Diameter}$	Peripheral Strength Member		Glass Yarn + WS Yarn
Outer SheathThickness 1.8 mm (Nominal)MaterialLSZHRipcordNumber 1 MaterialPolyesterOverall Cable Diameter $4-16 \text{ Cores}$ $8.4 \pm 0.5 \text{ mm}$ Cable Weight $4-16 \text{ Cores}$ $9.2 \pm 0.5 \text{ mm}$ Cable Weight $4-16 \text{ Cores}$ $100.0 \pm 10 \text{ kg/km}$ Bending RadiusShort term $20 \times \text{ Diameter}$	Armoring	Thickness	0.150 mm
RipcordMaterialLSZHRipcordNumber1MaterialPolyesterOverall Cable Diameter $4-16$ Cores 8.4 ± 0.5 mm24 Cores 9.2 ± 0.5 mmCable Weight $4-16$ Cores 100.0 ± 10 kg/km24 Cores 115 ± 10 kg/kmBending RadiusShort term $20 \times Diameter$		Material	ECCS Tape
RipcordNumber1MaterialPolyesterOverall Cable Diameter $4-16$ Cores 8.4 ± 0.5 mm24 Cores 9.2 ± 0.5 mmCable Weight $4-16$ Cores 100.0 ± 10 kg/km24 Cores 115 ± 10 kg/kmBending RadiusShort term $20 \times Diameter$	Outer Sheath	Thickness	1.8 mm (Nominal)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Material	LSZH
Overall Cable Diameter 4-16 Cores $8.4 \pm 0.5 \text{ mm}$ $24 \text{ Cores} 9.2 \pm 0.5 \text{ mm}$ Cable Weight $4\text{-}16 \text{ Cores} 100.0 \pm 10 \text{ kg/km}$ $24 \text{ Cores} 115 \pm 10 \text{ kg/km}$ Bending Radius Short term $20 \times \text{ Diameter}$	Ripcord	Number	1
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		Material	Polyester
Cable Weight 4-16 Cores $100.0 \pm 10 \text{ kg/km}$ 24 Cores $115 \pm 10 \text{ kg/km}$ Bending Radius Short term $20 \times \text{Diameter}$	Overall Cable Diameter	4-16 Cores	$8.4 \pm 0.5 \text{mm}$
$ 24 \ \text{Cores} \qquad \qquad 115 \pm 10 \ \text{kg/km} $ Bending Radius Short term $ 20 \ \text{x Diameter} $		24 Cores	9.2 ± 0.5 mm
Bending Radius Short term 20 x Diameter	Cable Weight	4-16 Cores	$100.0 \pm 10 \text{kg/km}$
		24 Cores	115 ± 10 kg/km
Long term 10 x Diameter	Bending Radius	Short term	20 x Diameter
		Long term	10 x Diameter

Fibre specifications

Features		OM1	OM2	ОМ3	OM4
Attenuation	@850 nm	≤ 3.0 dB/km	≤ 2.7 dB/km	≤ 2.7 dB/km	≤ 2.7 dB/km
	@1300 nm	≤ 1.0 dB/km	≤ 0.8 dB/km	≤ 0.8 dB/km	≤ 0.8 dB/km
Bandwidth	@850 nm	≥ 200 MHz.km	≥ 500 MHz.km	≥ 1500 MHz.km	≥ 3500 MHz.km
	@1300 nm	≥ 600 MHz.km	≥ 550 MHz.km	≥ 500 MHz.km	≥ 500 MHz.km
Core Diameter		$62.5 \pm 2.5 \mu m$	$50 \pm 2.5 \mu m$	$50 \pm 2.5 \mu m$	$50 \pm 2.5 \mu m$
Core Cladding Concentricity Error		≤1µm	≤1μm	≤1µm	≤ 1µm
Cladding Diameter		$125 \pm 1 \mu m$	125 ± 1 μm	125 ± 1 μm	125 ± 1 μm



Item Code: 205-274

Cladding Non- circularity	≤1%	≤1%	≤1%	≤1%
Coating Diameter (Coloured)	250 ± 15 μm			

Standards

Applicable Standard	Subject
IEC 60332-1-2:2004	Tests on electric and optical fibre cables under fire conditions. Test for vertical flame propagation for a single insulated wire or cable. Procedure for $1\ \text{kW}$ pre-mixed flame
IEC 60754-2:2011	Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity
IEC 61034-2:2005+A1:2013	Measurement of smoke density of cables burning under defined conditions – Part 2: Test procedure and requirements
IEC 60793-1-1:2022	Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance
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 60793-1-41:2010	Optical fibres - Part 1-41: Measurement methods and test procedures - Bandwidth
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 50575: 2014 + A1: 2016	Power, control and communication cables — Cables for general applications in construction works subject to reaction to fire requirements
EN 50399:2011+A1:2016	Common test methods for cables under fire conditions. Heat release and smoke production measurement on



Item Code: 205-274

	cables during flame spread test. Test apparatus, procedures, results
ISO/IEC 11801-1:2017	Information technology - Generic cabling for customer premises: Part 1 General Requirements
ANSI/TIA 568-3.D	Optical Fiber Cabling and Components Standard
ANSI/TIA/EIA 598-D	Optical Fibre Cable Colour Coding
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
204-273	Excel Enbeam OM1 Multimode Armoured CST Fibre Optic Cable Loose Tube 16 Core 62.5/125 Eca Blue
205-270	Excel Enbeam OM1 Multimode Armoured CST Fibre Optic Cable Loose Tube 4 Core 62.5/125 Eca Blue
205-271	Excel Enbeam OM1 Multimode Armoured CST Fibre Optic Cable Loose Tube 8 Core 62.5/125 Eca Blue
205-272	Excel Enbeam OM1 Multimode Armoured CST Fibre Optic Cable Loose Tube 12 Core 62.5/125 Eca Blue
205-274	Excel Enbeam OM1 Multimode Armoured CST Fibre Optic Cable Loose Tube 24 Core 62.5/125 Eca Blue

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.