Enbeam OS2 Singlemode 9/125 12 Core Armoured CST Fibre Optic Cable Loose Tube Eca - Blue

Item Code: 205-307

- Duct grade - rodent resistant
- Sequentially metre marked
- UV Resistant
- Cut to length service
- 25 Year system warranty
- Euroclass Eca

Product Overview

Excel corrugated steel tape (CST) OS2 9/125µm armoured loose tube optical fibre cables have been designed specifically for applications requiring a high degree of mechanical protection.

The singlemode fibre is G.652.D compliant low water peak grade and offers OS2 performance and OS1 backwards compatibility. These compact, lightweight cables are extremely rugged, provide rodent resistance and are quick and easy to install.

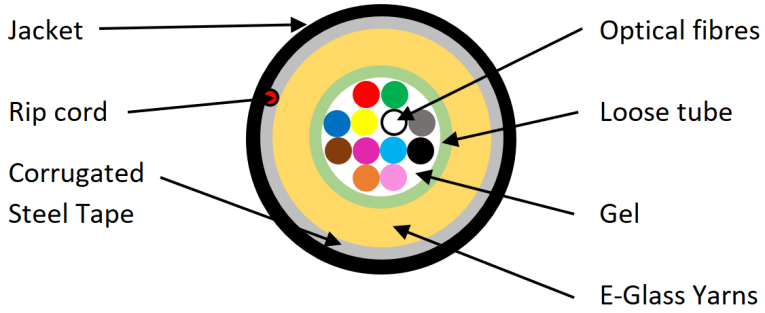
The print legend on the cable now includes information regarding the DOP number, Test and Classification of the cable for traceability.

Product Specifications

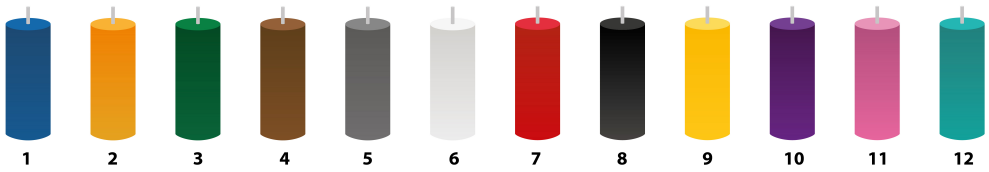
Feature	Values
Number of Cores	12
Type of tube	Loose tube
Number of fibres per tube	12
Fibre type	Single mode 9/125
Category	OS2
Armouring	Yes
Rodent resistant	Yes
Outer sheath material	Copolymer
Outer sheath colour	Blue

Reaction-to-fire class according to EN 13501-6	Eca
Halogen free (acc. EN 60754-1/2)	Yes
Flame retardant	In accordance with EN 50399
Outer diameter approx.	8.4 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 º
Temperature performance	Installation	-30ºC to +70ºC
	Operation	-30ºC to +70ºC

	Storage	-30°C to +70°C
Loose tubes	Number	1
	Material	PBT
Loose Tube ID/OD	4-16 Cores	2.0/2.8 ± 0.1 mm
	24 Cores	2.6/3.5 ± 0.1 mm
Peripheral Strength Member		Glass Yarn + WS Yarn
Armoring	Thickness	0.150 mm
	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
	24 Cores	9.2 ± 0.5 mm
Cable Weight	4-16 Cores	100.0 ± 10 kg/km
	24 Cores	115 ± 10 kg/km
Bending Radius	Short term	20 x Diameter
	Long term	10 x Diameter

Fibre specifications

Features		OS2
Attenuation	@1310 nm	≤ 0.36 dB/km
	@1550 nm	≤ 0.23 dB/km
Chromatic Dispersion	1285 - 1330 nm	≤ 3.5 ps/nm.km
	1550 nm	≤ 18 ps/nm.km
Zero Dispersion Wavelength		1300 - 1324 nm
Zero Dispersion Slope		≤ 0.092 ps/nm2.km
Polarisation Mode Dispersion		≤ 0.2 ps/√km
Cut-off Wavelength		≤ 1260 nm
Mode Field Diameter	@1310 nm	9.2 ± 0.4 µm
Core Cladding Concentricity Error		≤ 0.8 µm

Cladding Diameter	125 ± 1 µm
Cladding Non-circularity	≤ 1 %
Coating Diameter (Uncoloured)	245 ± 10 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 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 60793-1-1:2017	Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance
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
ITU G.652.D	Characteristics of a single-mode optical fibre and cable
EN 50173-1:2011	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 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	Restriction of Hazardous Substances - Compliant

Part Number Table

Part Number	Description
205-305	Enbeam OS2 Singlemode 9/125 4 Core Armoured CST Fibre Optic Cable Loose Tube Eca - Blue
205-306	Enbeam OS2 Singlemode 9/125 8 Core Armoured CST Fibre Optic Cable Loose Tube Eca - Blue
205-307	Enbeam OS2 Singlemode 9/125 12 Core Armoured CST Fibre Optic Cable Loose Tube Eca - Blue
205-308	Enbeam OS2 Singlemode 9/125 16 Core Armoured CST Fibre Optic Cable Loose Tube Eca - Blue
205-309	Enbeam OS2 Singlemode 9/125 24 Core Armoured CST Fibre Optic Cable Loose Tube Eca - Blue