

Steel Wire Armoured Pre-Terminated Fibre

Overview

A steel wire armoured fibre optic cable, also known as SWA cable, is a type of optical fibre cable that is designed for rugged environments. These cables have a central tube containing individual fibre strands that is surrounded by layers of steel wire and a tough outer jacket.

The steel wire armoring provides additional protection against physical damage, such as rodent bites or crushing, while the outer jacket is resistant to moisture, UV radiation, and temperature changes. SWA cables are commonly used in applications such as power distribution, railway systems, and mining, where protection against harsh outdoor conditions is essential.



Applications

- Indoor & Outdoor
- Harsh environments
- Suitable for direct burial
- Inter-site connections

Features

- Excellent crush resistance
- Rodent resistant
- Available with 900µm, 2mm or 2.4mm tails
- Made to measure to your requirements
- Manufactured in the UK

STANDARD RUGGEDISED TAIL COLOURS

OS2 Yellow	OM1 Grey	OM3 Aqua	OM4 Aqua	OM5 Green
			Erika Violet	

*bespoke options available upon request

Steel Wire Armoured



Options

Fibre Type	Singlemode		OS2			
	Multimode		OM1*	OM3	OM4	OM5
Fibre Count	4	8	12	16	20	24
Connector Type Multimode/Singlemode	LC/UPC	SC/UPC	FC/UPC	ST/UPC	E2000/UPC	
	LC/APC	SC/APC	FC/APC	ST/APC	E2000/APC	
Tail Options	900 µm	2 mm	2.4 mm			

*OM1 fibre is not held in stock but is available upon request.
*APC available for singlemode only.

Tail Configuration



Cable Construction

Sheath	Black	LSZH		UV Stabilised		IEC 60332-1-2 IEC 60754-2 IEC 61034
	OS2	OM1	OM3	OM4	OM5	
Core/Cladding	9/125	62.5/125	50/125	50/125	50/125	

*The CPR rating of our cable is Eca as standard. Other ratings available upon request.



Our standard pre-terms are supplied with 1 metre tails

Pre-term length is measured gland-to-gland as standard

Our standard pre-terms are supplied with staggered tails



Customer specific configurations are available upon request.

Optical Fibre Specifications

Fibre Performance

		OS2	OM3	OM4	OM5
Max. Cable Attenuation (dB/KM)	@850nm	-	≤3.0	≤3.0	≤3.0
	@1300nm	-	≤1.0	≤1.0	≤1.0
	@1310nm	≤0.39	-	-	-
	@1550nm	≤0.22	-	-	-
Overfilled Modal Bandwidth	@850nm	-	≤1500	≤3500	≤3500
	@1300nm	-	≤500	≤500	≤500
Min. Bandwidth Laser Effective	@850nm	-	≤2000	≤4700	≤4700
Complies with Specification Standard		IEC - EN 60793-2-50	IEC - EN 60793-2-10	IEC - EN 60793-2-10	IEC - EN 60793-2-10

Connector Performance

	SC	LC	ST	FC	E2000
Typical Insertion Loss (dB)	≤ 0.20	≤ 0.20	≤ 0.20	≤ 0.20	≤ 0.20
Typical Return Loss (dB) MM/SM/APC	≥30 ≥55 ≥65	≥30 ≥55 ≥65	≥30 ≥55 ≥65	≥30 ≥55 ≥65	≥30 ≥55 ≥65