



M/s. Optronics Trading LLC  
P.O Box. 181775  
Dubai, UAE

January 2, 2025  
Ref: HO/EPA/780508/25

## Subject: Passive Product Approval for Etisalat FTTH Network

Dear Mr. Suregh Sudhaman

Reference is made to your application for Product Approval. We are pleased to inform that the following items are approved for deployment in FTTH Network subject to prevailing Etisalat and TDRA Guidelines. This is issued based on the technical specifications stated by the manufacturer, inspection of sample and test certificates provided. Etisalat do not undertake any responsibility towards any damage or hazard caused due to the deployment of these products.

Sl. No	EPA No	Product Description	Supplier	Brand
1	780508-1	FO Cable Loose Tube Armored	Optronics	Optronics Plus
2	780508-2	FO Cable Loose Tube Armored w/steel wires	Optronics	Optronics Plus
3	780508-3	FO Drop Cable outdoor	Optronics	Optronics Plus

Kindly note that this approval is valid for a period of 12 months from today. Any misuse of this approval for promoting, supplying or installing counterfeit or inferior product will lead to forfeiture of this approval, legal action or both.

Stamped specification sheets are attached for your reference and further correspondence's.

Best Regards

**Jayan Thomas**  
Ag. Director – DO&C / DM



ETISALAT PRODUCT APPROVAL	
EPA No:	780508-1
Approval valid	01 Jan 2026
Authorized signatory	
Designation	D/DO&C
Date	02-01-2025

## Single Loose Tube Steel Tape Armoured Cable

Single loose tube steel tape armoured cable with water blocking e-glass strength members. The single gel filled loose tube consists of 2 to 24 250µm singlemode (OS1/OS2) 9/125 ITU-T G.652D, G.657A1, G.657A2 or multimode (OM1/OM2/OM3/OM4/OM5) fibres. The corrugated steel tape armoring makes it an ideal solution for application that require high crush resistance or anti-rodent protection. There is an option for Low Smoke Zero Halogen (LSZH) or High Density Polyethelene (HDPE) jacket.

## Features

- Flame retardant LSZH jacket for enhanced fire performance or HDPE jacket for environmental protection and water permeation resistance
- CST armoring for enhanced impact, crush and rodent resistance
- Choice of fibre types
- Color coded fibres
- Compact 250 µm loose tube construction

## Applications

- Internal/External FTTH applications Suitable for internal applications
- Suitable for external duct and direct burial applications
- Suitable for environments where impact protection is required
- Suitable for intra building links in campus environments

## Specifications

PAREMETER	UNIT	VALUE
Crush	N/100mm	2000
Strength Member		E-Glass
Storage Temperature	°C	-40 to +70
Installation Temperature	°C	-10 to +70
Operating Temperature	°C	-40 to +70
Nominal Weight 2f to 12 f	kg/km	LSZH 85 PE 63
Nominal Weight 14f to 24f	kg/km	LSZH 96 PE 73
Fibre count	N	2, 4, 6, 8, 12, 16 & 24
Nominal outer diameter 2f to 12f	mm	8.5 ± 0.3
Nominal outer diameter 14f to 24f	mm	9.2 ± 0.3
Maximum tensile load (Short Term)	N	1000
Maximum tensile load (Long Term)	N	500
Minimum bend radius	mm	Installed 10D
Minimum bend radius	mm	Loaded 20D
Drum length	km	2 or 4

## Ordering Information

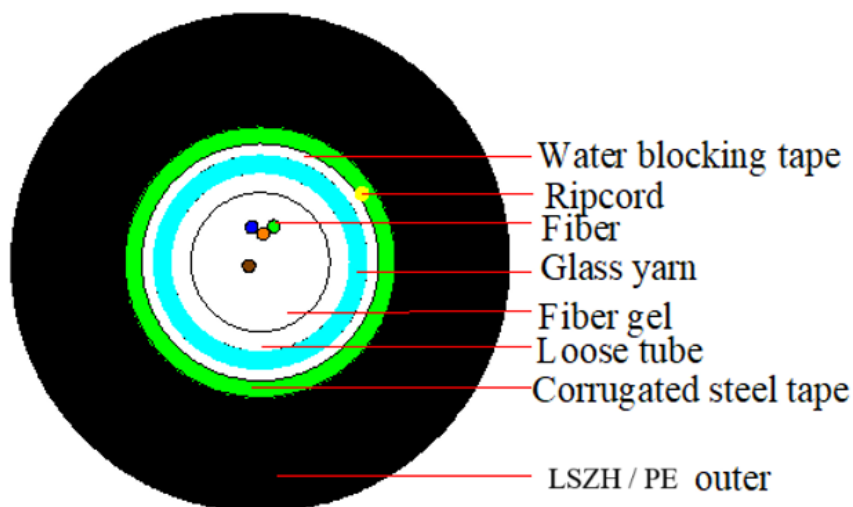
	Fibre Type		Jacket Type		Fibre Count	
OFC-LTS	9	G.652.D	1	LSZH	02	2
	A1	G.657A1	2	PE	...	...
	A2	G.657A2			24	24
	1	OM1				
	2	OM2				
	3	OM3				
	4	OM4				
	5	OM5				

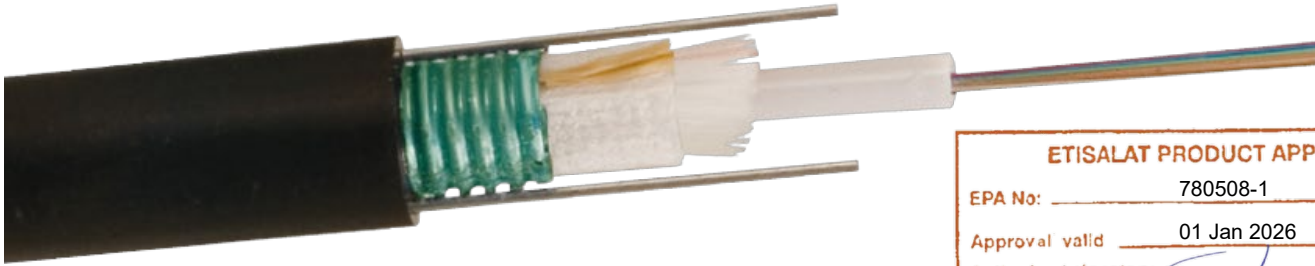
## Example order code

OFC-LTS - 9 1 - 24

Single Loose Tube Cable STA Singlemode LSZH 24 Fibres

## Technical Drawing





ETISALAT PRODUCT APPROVAL	
EPA No:	780508-1
Approval valid	01 Jan 2026
Authorized signatory	
Designation <i>for</i> D/DO&C	Date 02-01-2025

## Single Loose Tube Steel Tape Armoured Cable With Steel Wires

Single loose tube metallic armoured cable with steel wire strength members. The gel filled single loose tube consists of 2 to 24 250µm singlemode (G.652.D) or multimode (OM1/OM2/OM3/OM4/OM5) fibres and it is protected by a water swellable tape. There is an option for Low Smoke Zero Halogen (LSZH) or Polyethelene (PE) jacket.

### Features

- 250 µm loose tube construction
- Steel tape armouring and steel wire strength members for enhanced crush resistance
- Rodent resistant
- Option for LSZH or PE jacket
- Available with various fibre types
- Choice of fibre types
- Colour coded fibres

### Applications

- Suitable for internal/external duct applications
- Suitable for environment that requires rodent resistance
- Works with 10Gb applications
- Applications that require impact protection
- Intra building links in campus environments

## Specifications

PAREMETER	UNIT	VALUE
Crush	N/100mm	1500
Strength Member		Steel Wire
Storage Temperature	°C	-40 to +70
Installation Temperature	°C	-10 to +70
Operating Temperature	°C	-40 to +70
Nominal Weight	kg/km	LSZH 150 PE 106
Fibre count	N	2, 4, 6, 8, 12 & 24
Nominal outer diameter	mm	10.0 ± 0.3
Maximum tensile load	N	1000
Minimum bend radius	mm	Installed 10D
Minimum bend radius	mm	Loaded 20D
Drum length	km	4
Plywood drum dimensions (Flange, Barrel, Width)	mm (approx.)	F1200, B560, W690
Drum weight with cable	kg (approx.)	LSZH 676 PE 451

### Ordering Information

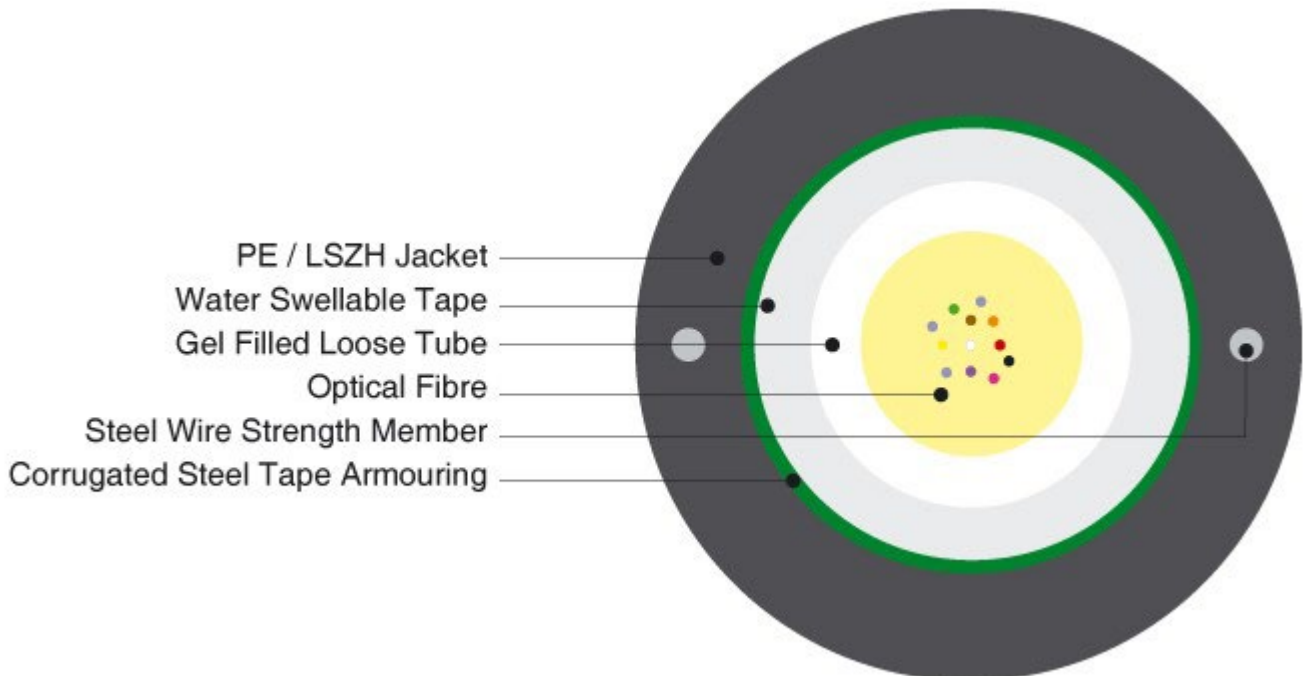
	Fibre Type		Jacket Type		Fibre Count	
	9	G.652.D	1	LSZH	02	2
OFC-LSTW	1	OM1	2	PE	...	...
	2	OM2			24	24
	3	OM3				
	4	OM4				

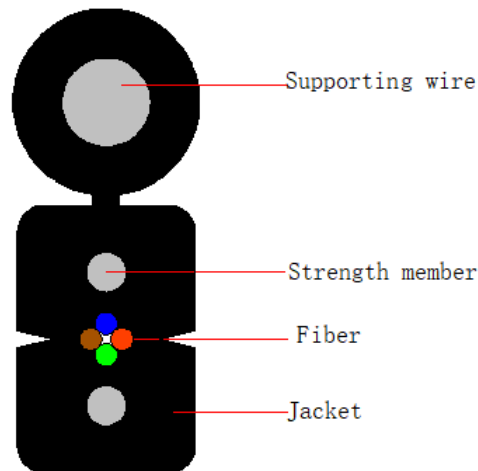
### Example order code

OFC-LSTW - 9 1 - 24

Single Loose Tube Cable STA with Steel Wires Singlemode LSZH 24 Fibres

### Technical Drawing





## FTTH Self-Supporting Drop Cable

All dielectric non-metallic self-supporting drop cable for FTTH (or FTTx in general) applications. It comes with 1 to 4, 250 $\mu$ m individually coloured bend insensitive singlemode fibres and it contains FRP strength members. The bow-type cable portion and outer Low Smoke Zero Halogen (LSZH) jacket comes with a nominal dimension 2x3mm and 2x5mm, respectively.

## Features

- Single mode optical fibre meeting ITU-T G.657A1/A2
- Choice of fibre types
- Black LSZH jacket for external use
- Individually coloured optical fibres

## Applications

- Outdoor FTTH/FTTx applications
- Horizontal and riser applications



## Specifications

### Fibre Attenuation

	PAREMETER	UNIT	VALUE
G.657A1/A2	Attenuation@1310nm	dB/km	0.4
	Attenuation@1550nm	dB/km	0.3

### Cable Dimension and Construction

PAREMETER		UNIT	VALUE
Fibre Count			1 to 4 fibres
Strength Member	Material		FRP
	Diameter	mm	0.45
Phosphating Steel Wire	Diameter	mm	1.20
Sheath	Colour		Black
	Material		LSZH
Primary buffer diameter		μm	250
Mode Field Diameter @1310nm		μm	8.6±0.4
Mode Field Diameter @1550nm		μm	9.8±0.5
Cladding diameter		μm	125±0.7
Colored coating diameter		μm	250±10
Bow-type cable size		mm	(3.0±0.2) * (2.0±0.1)
Cable Size		mm	(5.3±0.2) * (2.0±0.1)
Fibre Colour Code			1-Blue, 2-Orange, 3-Green, 4-Brown

## Mechanical & Environmental Characteristics

PAREMETER		UNIT	VALUE
Tensile Strength	Long Term	N	300
	Short Term	N	600
Crush Resistance	Long Term	N	1000
	Short Term	N	2200
Impact			1 N.m, jacket no damage, additional attenuation $\leq$ 0.4dB
Repeating bending			R=30H,20N,300cycles, jacket no damage, additional attenuation $\leq$ 0.4dB
Torsion			20 N,20cycles, $\pm$ 180°, jacket no damage, additional attenuation $\leq$ 0.4dB
Bending radius	load	mm	40
	unload	mm	20
Flame resistance			IEC60332-1
Additional att. (-40°C~60°C)		dB/km	$\leq$ 0.4
Temperature	Storage	°C	-40 to +70
	Installation	°C	-5 to +60
	Operating	°C	-40 to +70

## Ordering Information

	Fibre Type		Jacket Type		Fibre Count	
	OFC-ODRS	A1	G.657A1	2B	LSZH (external)	01
	A2	G.657A2			02	2
					04	4

## Example order code

OFC-ODRS	-	A1	2B	-	02
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FTTH non-metallic self-supporting Outdoor Drop Cable G.657A1 LSZH Black 2 Fibres