

### TrueNet® Loose Tube, Internal/External, LSZH Duct Grade Cable

#### Features

- Outer sheath
  - Black, Low Smoke Zero Halogen (LSZH)
  - UV stabilised for outdoor applications
  - Gel water blocked (IEC 60794)
  - Sheath thickness 1.5mm
- Fire retardancy
  - 2 to 24 Cores IEC 60332-1
- Glass fibre armour
- Available with OM1, OM2, OM3, OM3e, and OS1 grade glass
- Hybrid multimode and singlemode options available
- Covered by the TrueNet System Warranty



#### Ordering Information

Description	Catalogue Number*
Fibre Optic Cable, Loose Tube, OM1 (62.5/125 µm) LSZH, Black	7023 3 220-xx
Fibre Optic Cable, Loose Tube, OM2 (50/125 µm) LSZH, Black	7023 3 222-xx
Fibre Optic Cable, Loose Tube, OM3 (50/125 µm) LSZH, Black	7023 3 227-xx
Fibre Optic Cable, Loose Tube, OM3e (50/125 µm) LSZH, Black	7023 3 246-xx
Fibre Optic Cable, Loose Tube, OS1 (9/125 µm) LSZH, Black	7023 3 224-xx

\*Replace xx with the number of cores

### TrueNet® Loose Tube, Internal/External, LSZH Duct Grade Hybrid Cable

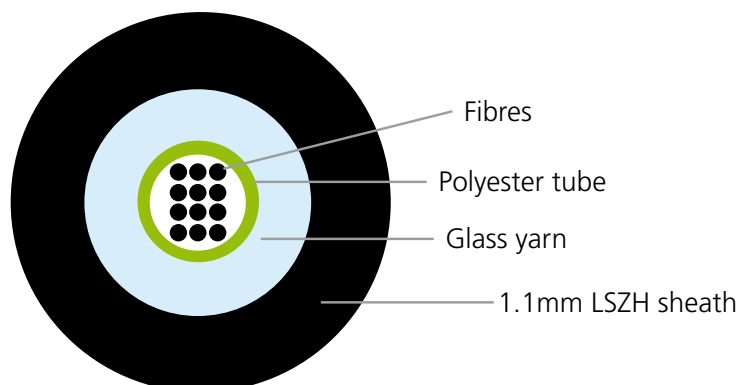
#### Ordering Information

Description	Catalogue Number
Fibre Optic Cable, Loose Tube, 8F OM2, 4F OS1, LSZH, Black	7023 4 542-12
Fibre Optic Cable, Loose Tube, 8F OM2, 6F OS1, LSZH, Black	7023 4 543-14
Fibre Optic Cable, Loose Tube, 6F OM2, 6F OS1, LSZH, Black	7023 4 533-12
Fibre Optic Cable, Loose Tube, 12F OM2, 6F OS1, LSZH, Black	7023 4 563-18
Fibre Optic Cable, Loose Tube, 8F OM3, 4F OS1, LSZH, Black	7023 4 642-12
Fibre Optic Cable, Loose Tube, 8F OM3, 6F OS1, LSZH, Black	7023 4 643-14
Fibre Optic Cable, Loose Tube, 6F OM3, 6F OS1, LSZH, Black	7023 4 633-12
Fibre Optic Cable, Loose Tube, 12F OM3, 6F OS1, LSZH, Black	7023 4 663-18

# Campus & Backbone

## Fibre Optic Cable

### TrueNet® Loose Tube, Internal/External, LSZH Duct Grade Cable



#### Compliances

- ISO11801 OM1, OM2, OM3 or OS1 channels
- IEC 332-1 2 to 24 cores
- DIN/VDE: A-D (ZN = B) H n, n
- RoHS compliant

#### Applications

- Between main cross-connects and telecommunications room
- Campus and Backbone cable runs from cross-connect to telecommunications room
- Areas requiring flame retardance and LSZH
- Cable runs from telecommunications rooms to consolidation points
- Outdoor ducts

#### Optical Performance

	Fibre Core Size	Maximum Attenuation (dB/km)	Typical Attenuation (dB/km)	Guaranteed Minimum Bandwidth (MHz.km)
<b>Channel</b>		<b>850nm/1300nm</b>	<b>850nm/1300nm</b>	<b>850nm/1300nm</b>
OM1	62.5/125	3.5/1.5	3.2/1.0	200 <sup>1</sup> /600 <sup>1</sup>
OM2	50/125	3.5/1.5	2.7/0.8	500 <sup>1</sup> /500 <sup>1</sup>
OM3 <sup>2</sup>	50/125	3.5/1.5	2.7/0.8	2000 <sup>3</sup> /500 <sup>1</sup>
OM3e <sup>2</sup>	50/125	3.5/1.5	2.7/0.8	4700 <sup>3</sup> /500 <sup>1</sup>
		<b>1310nm/1550nm</b>	<b>1310nm/1550nm</b>	<b>1310nm/1550nm</b>
<b>Singlemode<sup>4</sup></b>	9/125	1.0/1.0	0.4/0.3	NA

<sup>1</sup> Bandwidth specified by overfilled launch (OFL)

<sup>2</sup> DMD Compliance TIA/EIA-492AAAC

<sup>3</sup> Bandwidth specified by laser-based launch

<sup>4</sup> Compliant to G652D

#### Cable Core

The cable core consists of a central, jelly filled, green polyester tube containing the fibres. The tube is water blocked and meets the requirements of IEC 60794.

For 2 to 16 fibres the tube diameter is 2.8mm, and from 18 to 24 fibres the diameter is 3.5mm.

The cable core is protected by a specially treated glass fibre yarn, which offers both robustness and tensile strength.

# Campus & Backbone

## Fibre Optic Cable

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### Transmission Performance – Guaranteed Minimum Link Lengths

	Fibre Core Size	Fast Ethernet 100Mbps	Gigabit Ethernet 1GigE	10 Gigabit Ethernet 10GigE
<b>Channel</b>		<b>850nm/1300nm</b>	<b>850nm/1300nm</b>	<b>850nm/1300nm</b>
OM1	62.5/125	300m/2km	330m/550m	35m/300m <sup>1</sup>
OM2	50/125	300m/2km	550m/550m	86m/300m <sup>1</sup>
OM3	50/125	300m/2km	900m/550m	300m/300m <sup>1</sup>
OM3e	50/125	300m/2km	1040m/550m	550m/300m <sup>1</sup>
		<b>1310nm/1550nm</b>	<b>1310nm/1550nm</b>	<b>1310nm/1550nm</b>
<b>Singlemode</b>	9/125	2km/NA	5km/NA	10km/40km

<sup>1</sup>10 Gigabit Ethernet distance guarantees, at 1300nm, are achieved via four 3.125GigE channels multiplexed with Wide Wavelength Division Multiplexing (WWDM) technology (10GBASE-LX4)

### Cable Marking

The cable legend will be marked on the sheath as follows:

ADC TRUENET – XX – Y...Y/125 – mmmm – ZZZZ – ZZZZZZ

Where,

XX = Fibre optic core count

Y...Y = Glass type 62.5/125

50/125

OM3

OM3e

9/125

mmmm = Metre mark

ZZZZ – ZZZZZZ = Manufacturing batch data

TrueNet® Structured Cabling

10/06 • 102588BE

Campus & Backbone  
Fibre Cable

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### Mechanical Specifications

	Units	2	4	6	8	12	16	24
<b>Number of fibres</b>		2	4	6	8	12	16	24
<b>Nominal cable diameter</b>	mm	8	8	8	8	8	8	8.5
<b>Nominal cable weight</b>	Kg/km	65	65	65	65	65	75	75
<b>Minimum bend radius installed</b>	mm	60	60	60	60	60	60	60
<b>Minimum bend radius loaded during install</b>	mm	100	100	100	100	100	100	100
<b>Maximum tensile load (installed)</b>	N	700	700	700	700	700	700	700
<b>Maximum installation load</b>	N	1000	1000	1000	1000	1000	1000	1000
<b>Impact</b>	J (Nm)	20	20	20	20	20	20	20
<b>Compressive strength (crush)</b>	N/100mm	2000	2000	2000	2000	2000	2000	2000
<b>Torsion</b>	Cycles +/- 1 turn	5	5	5	5	5	5	5
<b>Temperature range (operating and installation)</b>	°C	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70
<b>Storage</b>	°C	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70