

Armoured Direct Burial Cable (12 -144 Fibres)

The Optronics multi element multi loose tube cable construction consists of up to 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a fibre reinforced plastic (FRP) central strength member with waterswellable threads and waterswellable tape. Helically applied non-metallic strength members with ripcord. Corrugated steel tape (CST) armouring and black high density polyethylene (HDPE) jacket.

Features/Benefits

- > Step layer stranded construction (up to 144 fibres)
- > Corrugated steel tape as protection against rodents and mechanical damage
- > Thin and robust cable
- > Dry core construction
- > PE- Jacket
- > Wrapped in water blocking tape
- > Filled loose tube
- > Fibre relevant standards ITU-T G.652, G. 655, G. 656 or a combination
- > Cable relevant standards IEC 60793 and IEC 60794

Applications

- > Direct burial
- > Used in application with high mechanical loads

Technical Specifications

DESCRIPTION		A-DQ(ZM) (SR)2Y 12	A-DQ(ZM) (SR)2Y 24	A-DQ(ZM) (SR)2Y 36	A-DQ(ZM) (SR)2Y 48	A-DQ(ZM) (SR)2Y 60	A-DQ(ZM) (SR)2Y 72	A-DQ(ZM) (SR)2Y 96	A-DQ(ZM) (SR)2Y 120	A-DQ(ZM) (SR)2Y 144
Maximum Fibre Count	Cores	12	24	36	48	60	72	96	120	144
Cable Diameter	mm	12.3	12.3	12.3	12.3	12.3	12.3	13.8	15.4	17.1
Cable Weight	kg/km	91	91	91	91	91	91	125	155	190
Max Tensile Load during installation	N	2700	2700	2700	2700	2700	2700	2700	2700	2700
Fibres per loose tube		12	12	12	12	12	12	12	12	12
Number of loose buffer tube		1	2	3	4	5	6	8	10	12
Number of standing elements		6	6	6	6	6	6	8	10	12
Min. Bend Radius		20 x cable outer diameter (during laying and installation) 17.5 x cable outer diameter (installed)								
Installation Temperature Range	°C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C
Operation Temperature Range	°C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C
Transportation Temperature Range	°C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C

Ordering information available upon request.



Double Jacket Direct Burial Cable (12 -144 Fibres)

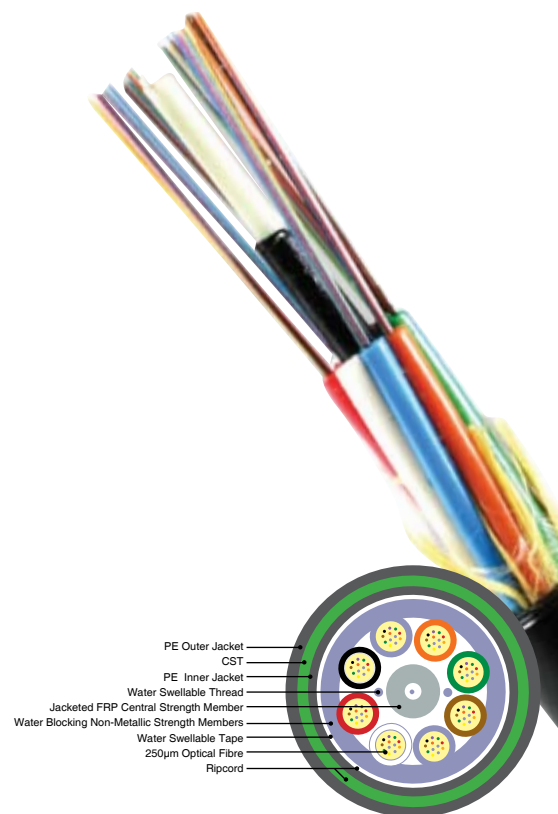
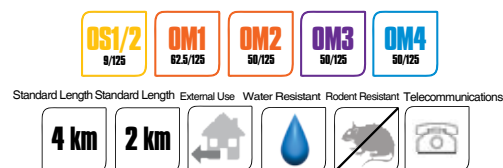
The Optronics multi element multi loose tube cable construction consists of up to 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a fibre reinforced plastic (FRP) central strength member with water swellable threads and waterswellable tape. Helically applied non metallic strength members with ripcord and PE inner Jacket, Corrugated steel tape (CST) armouring and black high density polyethylene (HDPE) final jacket with ripcord

Features/Benefits

- > Single layer stranded construction (up to 144 fibres)
- > Corrugated steel tape as protection against rodents and mechanical damage
- > Particularly robust cable, filled loose tube
- > Inner and outer jacket are made of PE- Jacket
- > Wrapped in water blocking tape
- > Core- stranded loose tube, SZ technique
- > Tensile strength elements - dielectric central strength member
- > Fibre relevant standards ITU-T G.652, G. 655, G. 656 or a combination
- > Cable relevant standards IEC 60793 and IEC 60794

Applications

- > Direct burial
- > Used in application with particularly high mechanical loads



Technical Specifications

DESCRIPTION		A-DQ(ZM) (SR)2Y 12	A-DQ(ZM) (SR)2Y 24	A-DQ(ZM) (SR)2Y 36	A-DQ(ZM) (SR)2Y 48	A-DQ(ZM) (SR)2Y 60	A-DQ(ZM) (SR)2Y 72	A-DQ(ZM) (SR)2Y 96	A-DQ(ZM) (SR)2Y 120	A-DQ(ZM) (SR)2Y 144
Maximum Fibre Count	Cores	12	24	36	48	60	72	96	120	144
Cable Diameter	mm	14.7	14.7	14.7	14.7	14.7	14.7	16.2	17.8	19.5
Cable Weight	kg/km	195	195	195	195	195	195	235	280	325
Max.Tensile Load during installation	N	2700	2700	2700	2700	2700	2700	2700	2700	2700
Fibres per loose tube		12	12	12	12	12	12	12	12	12
Number of loose buffer tube		1	2	3	4	5	6	8	10	12
Number of stranding elements		6	6	6	6	6	6	8	10	12
Min. Bend Radius		20 x cable outer diameter (during laying and installation) 17.5 x cable outer diameter (installed)								
Installation Temperature Range	°C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C
Operation Temperature Range	°C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C
Transportation Temperature Range	°C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C

Ordering information available upon request.

Multi Loose Tube Double Jacket Cable (24-144 Fibres)

The multi loose tube cable construction consists of up to 12 elements and a maximum of 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a fibre reinforced plastic (FRP) central strength member with waterswellable threads and waterswellable tape. Helically applied waterblocking e-glass non-metallic strength members with ripcord and PE inner jacket, corrugated steel tape (CST) armouring and black high density polyethylene (HDPE) final jacket with ripcord.

Features/Benefits

- > Choice of fibre type
- > Colour coded fibres
- > High water resistance

Applications

- > Suitable for external applications in ducts or for direct burial

Technical Specifications

DESCRIPTION		24 to 60-CORE	72-CORE	96-CORE	120-CORE	144-CORE
Outer Diameter	mm	14.0 ±0.5	14.6 ±0.5	16.1 ±0.5	17.6 ±0.5	19.1 ±0.5
Weight	kg/km	210	219	257	298	343
Max. Load (installation)	N	1500	1500	1500	1500	1500
Max. Load (installed)	N	600	600	600	600	600
Min. Bend Radius (installation)	mm	280	290	320	350	380
Min. Bend Radius (installed)	mm	140	145	160	175	190
Operating Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	4000	4000	4000	4000	4000

Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1	OM1LTDST***PBK-C/Z
OM2	OM2LTDST***PBK-C/Z
OM3	OM3LTDST***PBK-C/Z
OM4	OM4LTDST***PBK-C/Z
OS1/OS2	OS1LTDST***PBK-C/Z

Where ** is the fibre count between 24 & 144



Multi Loose Tube Double Jacket Cable (PKP)

A 5-12 element dry core OM1, OM2, OM3, OM4 multimode or OS1 (ITU-T G.652D) singlemode 250 multi loose tube PKP cables.

The 5-12 element multi loose tube cable construction consists of up to 144 fibres, 250µm optical fibres in 12 fibre gel filled loose tubes and fillers where appropriate, SZ stranded around a Fibre Reinforced Plastic (FRP) central strength member with waterswellable threads and waterswellable tape. Polyethylene (PE) inner jacket with ripcord, helically applied aramid non metallic strength members. Polyethylene (PE) inner jacket with ripcord, helically applied aramid non metallic strength members with ripcord and black High Density Polyethylene (HDPE) final jacket.

Applications

- > Suitable for external duct applications where enhanced crush and impact is required
- > Suitable for applications where environmental resistance is required

Features

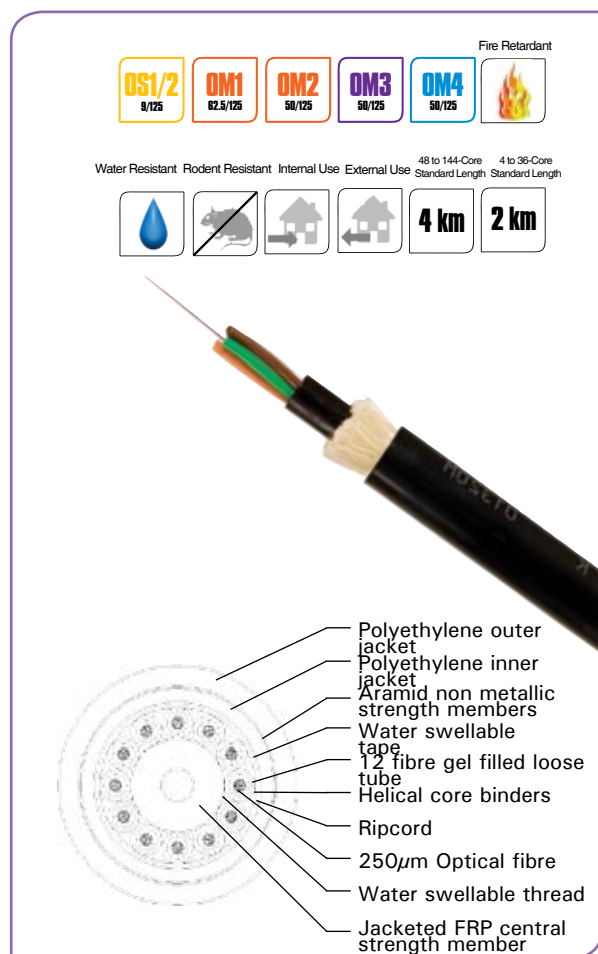
- > Choice of fibre types
- > Colour coded fibres
- > Compact 250 µm loose tube construction
- > Double PE jackets for environmental protection and water permeation resistance

Technical Specification

DESCRIPTION		4-CORE PE	8-CORE PE	12-CORE PE	16-CORE PE	24-CORE PE	48-CORE PE	72-CORE PE	96-CORE PE	144-CORE PE
Outer Diameter	mm	12.5 ±0.5	12.5 ±0.5	12.5 ±0.5	12.5 ±0.5	12.5 ±0.5	12.5 ±0.5	13.1 ±0.5	14.6 ±0.5	17.61 ±0.5
Weight	kg/km	110	110	110	110	110	110	122	150	216
Max. Load (Short Term)	N	2700	2700	2700	2700	2700	2700	2800	2900	3100
Max. Load (Long Term)	N	1300	1300	1300	1300	1300	1300	1500	1500	1600
Min. Bend Radius (Loaded)	mm	20D	20D	20D	20D	20D	20D	20D	20D	20D
Min. Bend Radius (Installed)	mm	10D	10D	10D	10D	10D	10D	10D	10D	10D
Storage Temp.	°C	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60
Installation Temp.	°C	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60
Operating Temp.	°C	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70
Max Crush Resistance	N/100mm	3000	3000	3000	3000	3000	3000	3000	3000	3000
Number of Elements	5	5	5	5	5	5	5	6	8	12

Ordering Information

DESCRIPTION	OM1 62.5/125µm MULTIMODE	OM2 50/125µm MULTIMODE	OM3 50/125µm MULTIMODE	OM4 50/125µm MULTIMODE	OS1/OS2 9/125µm SINGLEMODE
	Part NO.	Part NO.	Part NO.	Part NO.	Part NO.
4-Core	OM1MLT04PKPBK/Z	OM2MLT04PKPBK/Z	OM3MLT04PKPBK/Z	OM4MLT04PKPBK/Z	OS1MLT04PKPBK/Z
8-Core	OM1MLT08PKPBK/Z	OM2MLT08PKPBK/Z	OM3MLT08PKPBK/Z	OM4MLT08PKPBK/Z	OS1MLT08PKPBK/Z
12-Core	OM1MLT12PKPBK/Z	OM2MLT12PKPBK/Z	OM3MLT12PKPBK/Z	OM4MLT12PKPBK/Z	OS1MLT12PKPBK/Z
16-Core	OM1MLT16PKPBK/Z	OM2MLT16PKPBK/Z	OM3MLT16PKPBK/Z	OM4MLT16PKPBK/Z	OS1MLT16PKPBK/Z
24-Core	OM1MLT24PKPBK/Z	OM2MLT24PKPBK/Z	OM3MLT24PKPBK/Z	OM4MLT24PKPBK/Z	OS1MLT24PKPBK/Z
48-Core	OM1MLT48PKPBK/Z	OM2MLT48PKPBK/Z	OM3MLT48PKPBK/Z	OM4MLT48PKPBK/Z	OS1MLT48PKPBK/Z
72-Core	OM1MLT72PKPBK/Z	OM2MLT72PKPBK/Z	OM3MLT72PKPBK/Z	OM4MLT72PKPBK/Z	OS1MLT72PKPBK/Z
96-Core	OM1MLT96PKPBK/Z	OM2MLT96PKPBK/Z	OM3MLT96PKPBK/Z	OM4MLT96PKPBK/Z	OS1MLT96PKPBK/Z
144-Core	OM1MLT144PKPBK/Z	OM2MLT144PKPBK/Z	OM3MLT144PKPBK/Z	OM4MLT144PKPBK/Z	OS1MLT144PKPBK/Z



Multi Loose Tube CST Fibre Optic Cable (24-144 Fibres)

The multi loose tube cable construction consists of up to up to 12 elements and a maximum of 144, 250 µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a jacketed Fibre Reinforced Plastic (FRP) central strength member with waterswellable threads and waterswellable tape. Helically applied waterblocking e-glass non metallic strength members with ripcord. Corrugated Steel Tape (CST) armouring and black High Density Polyethylene (HDPE) or Low Smoke Zero Halogen (LSZH) jacket.

Features/Benefits

- > Choice of fibre type
- > Colour coded fibres
- > High water resistant
- > High crush resistant
- > PE / LSZH jacket

Applications

- > Suitable for external & aerial applications

Technical Specifications

DESCRIPTION		24 TO 60-CORE	72-CORE	96-CORE	120-CORE	144-CORE
Outer Diameter	mm	12.0 ±0.4	12.6 ±0.4	14.1 ±0.4	15.6±0.4	17.1 ±0.4
Weight	kg/km	166	173	207	243	284
Max. Load (installation)	N	1500	1500	1500	1500	1500
Max. Load (installed)	N	600	600	600	600	600
Min. Bend Radius (installation)	mm	240	252	280	320	340
Min. Bend Radius (installed)	mm	120	126	140	160	170
Operating Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	3000	3000	3000	3000	3000

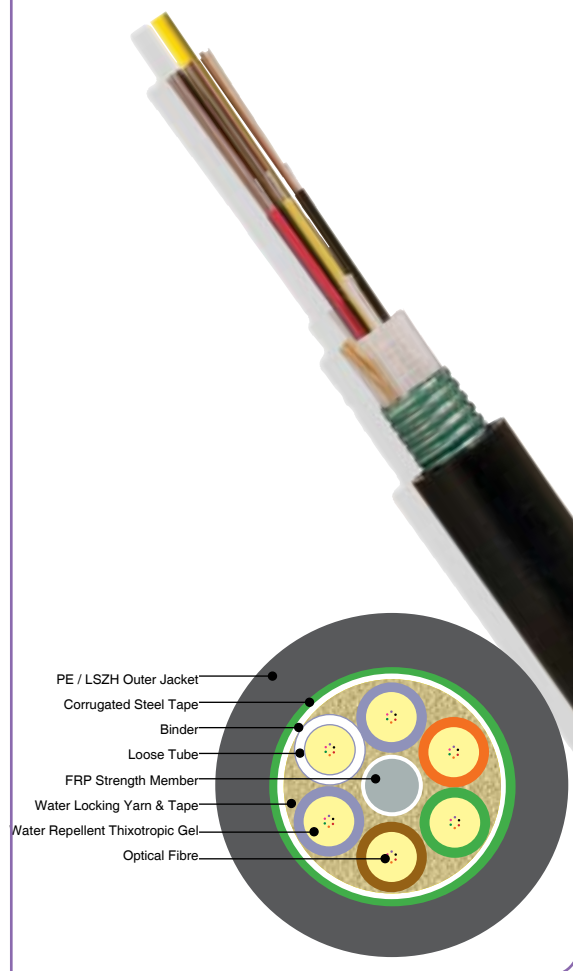
Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1 PE	OM1MLTSTA***PBK-C/Z
OM1 LSZH	OM1MLTSTA***UBK-C/Z
OM2 PE	OM2MLTSTA***PBK-C/Z
OM2 LSZH	OM2MLTSTA***UBK-C/Z
OM3 PE	OM3MLTSTA***PBK-C/Z
OM3 LSZH	OM3MLTSTA***UBK-C/Z
OM4 PE	OM4MLTSTA***PBK-C/Z
OM4 LSZH	OM4MLTSTA***UBK-C/Z
OS1/OS2 PE	OS1MLTSTA***PBK-C/Z
OS1/OS2 LSZH	OS1MLTSTA***UBK-C/Z

Where ** is the fibre count between 24 & 144



Water Resistant Rodent Resistant Internal Use External Use 48 to 144-Core Standard Length 4 to 36-Core Standard Length



Multi Loose Tube Fibre Optic Cable (24-144 Fibres)

Up to 144 fibre, 5 to 12 element dry core OM1, OM2, OM3, OM4 multimode or OS1/OS2 (ITU-T G.652D) singlemode 250µm multi loose tube rodent resistant external duct cables with e-glass strength members, and high density polyethylene (HDPE) or Low Smoke Zero Halogen (LSZH) jacket.

The multi loose tube cable construction consists of up to 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a fibre reinforced plastic (FRP) central strength member with waterswellable threads and waterswellable tape. Helically applied waterblocking e-glass non metallic strength members with ripcord and black high density polyethylene (HDPE) or Low Smoke Zero Halogen (LSZH) jacket.

Features/Benefits

- > Choice of fibre types
- > Colour coded fibres
- > Compact 250µm loose tube construction
- > PE jacket for environmental protection and water permeation resistance
- > Flame retardant LSZH jacket option for enhanced fire performance

Applications

- > Suitable for external duct applications
- > Suitable for applications where environmental resistance is required

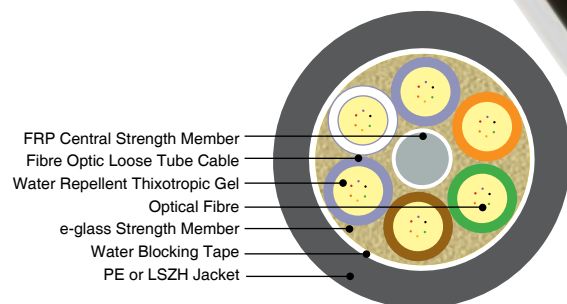
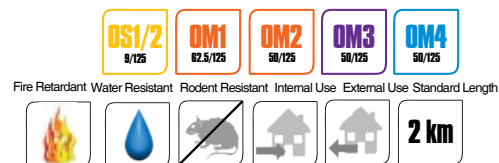
Technical Specifications

DESCRIPTION		24 TO 60-CORE	72-CORE	96-CORE	120-CORE	144-CORE
Outer Diameter	mm	10.5 ±0.4	11.1 ±0.4	12.6 ±0.4	14.1 ±0.4	15.6 ±0.4
Weight	kg/km	90	97	121	148	178
Max. Load (installation)	N	1500	1500	1500	1500	1500
Max. Load (installed)	N	600	600	600	600	600
Min. Bend Radius (installation)	mm	210	220	250	280	310
Min. Bend Radius (installed)	mm	105	110	125	140	155
Operating Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	2000	2000	2000	2000	2000

Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1 PE	OM1MLT**PBK-C/Z
OM1 LSZH	OM1MLT**UBK-C/Z
OM2 PE	OM2MLT**PBK-C/Z
OM2 LSZH	OM2MLT**UBK-C/Z
OM3 PE	OM3MLT**PBK-C/Z
OM3 LSZH	OM3MLT**UBK-C/Z
OM4 PE	OM4MLT**PBK-C/Z
OM4 LSZH	OM4MLT**UBK-C/Z
OS1/OS2 PE	OS1MLT**PBK-C/Z
OS1/OS2 LSZH	OS1MLT**UBK-C/Z

Where ** is the fibre count between 4 & 24



Single Loose Tube Fibre Optic Cable (2-24 Fibres)

2 to 24 fibre OM1, OM2, OM3, OM4 multimode or OS1/OS2 (ITU-T G.652D) singlemode 250µm single loose tube external duct cables with e-glass strength members and polyethylene (PE) or Low Smoke Zero Halogen (LSZH) jacket.

The single loose tube cables consist of 2 to 24, 250µm optical fibres in a single gel filled loose tube with e-glass non metallic strength members and black PE or LSZH jacket with ripcord.

Features/Benefits

- > Choice of fibre types
- > Colour coded fibres
- > E-glass strength members for rodent resistance
- > Flame retardant LSZH jacket option for enhanced fire performance
- > Compact 250µm loose tube construction

Applications

- > Suitable for internal / external duct applications
- > Suitable for environments where rodent resistance is required
- > Ideal for intra building links in campus environments

Technical Specifications

DESCRIPTION		2-12 CORE	14-24 CORE
Outer Diameter	mm	6.5 ±0.3	6.7 ±0.3
Weight	kg/km	40	47
Max. Load (installation)	N	1000	1000
Max. Load (installed)	N	500	500
Min. Bend Radius (installation)	Times diameter	20	20
Min. Bend Radius (installed)	Times diameter	10	10
Fire Performance		LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60
Storage Temp.	°C	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60
Crush Resistance	N/100mm	1000	1000

Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1 PE	OM1LT**PBK-C/Z
OM1 LSZH	OM1LT**UBK-C/Z
OM2 PE	OM2LT**PBK-C/Z
OM2 LSZH	OM2LT**UBK-C/Z
OM3 PE	OM3LT**PBK-C/Z
OM3 LSZH	OM3LT**UBK-C/Z
OM4 PE	OM4LT**PBK-C/Z
OM4 LSZH	OM4LT**UBK-C/Z
OS1/OS2 PE	OS1LT**PBK-C/Z
OS1/OS2 LSZH	OS1LT**UBK-C/Z

Where ** is the fibre count between 2 & 24

