

**Dry Core Outdoor Cable** 

# **5-Element LAP Cable**

Issue February 2003

according OFS Generic Specification

### **Application**

Mainly used in Duct-Installation (HD-PE Tubes) and installed by Cable Blowing or Pulling

#### Design

- Optical Fibres
- Gel-filled Buffer Tubes (2.5 mm)
- Non-metallic Central Member
- Water Blocking Material
- Non-metallic Strength Elements
- <u>Laminated Aluminium Polyethylene (LAP)</u>
- Ripcord
- PE-Jacket

### **Features**

- LAP for additional moisture protection in metropolitan and long-haul networks
- Dry Core Design Cable core water blocked by means of dry "water swellable" technology - for quicker, cleaner cable prep for jointing
- Individual coloured tubes

Version illustrated is the 60 Fibre Cable

Fibre Tube 1 Count		Tube 2	Tube 3	Tube 4	Tube 5	AT-Code**
12	Blue 12F	Filler*	Filler*	Filler*	Filler*	AT-111T2TT-012
24	Blue 8F	Orange 8F	Green 8F	Filler*	Filler*	AT-111T2T8-024
	Blue 12F	Orange 12F	Filler*	Filler*	Filler*	AT-111T2TT-024
32	Blue 8F	Orange 8F	Green 8F	Brown 8F	Filler*	AT-111T2T8-032
36	Blue 12F	Orange 12F	Green 12F	Filler*	Filler*	AT-111T2TT-036
40	Blue 8F	Orange 8F	Green 8F	Brown 8F	Grey 8F	AT-111T2T8-040
48	Blue 12F	Orange 12F	Green 12F	Brown 12F	Filler*	AT-111T2TT-048
60	Blue 12F	Orange 12F	Green 12F	Brown 12F	Grey 12F	AT-111T2TT-060

<sup>\*</sup>Fillers are natural coloured \*\*Please refer to the OFS AT- Code. The blanks specify the fibre type.

Alternative tube colour code available on request

Cable Diameter (calc.): 11,80 mm Cable Weight (calc.): 110 kg/km



**Dry Core Outdoor Cable** 

## **5-Element LAP Cable**

Issue February 2003

according OFS Generic Specification

### Identification

#### **Fibre Colour Code:**

1	Blue	5	Grey	9	Yellow
2	Orange 6		White	10	Violet
3	Green	7	Red	11	Rose
4	Brown	8	Black	12	Aqua

#### **Sheath Marking:**

OFS OPTICAL CABLE
[ID] [MM/YY] [Handset-Sign]
XXXF [Meter Marking]

Alternative Sheath printing available on request

### **Mechanical Properties and Environmental Behaviour**

Tests according to EN 187105 and IEC 60794

	Parameter	Requirement	Value	
Tensile Performance: EN 187105-5.5.4	Long term load	<ul><li>No attenuation increase*</li><li>No fibre strain</li></ul>	Load: 1000 N	
IEC 60794-1-2-E1A and E1B	Short term load, during installation  - No changes in attenuation before versus after load - Max. fibre strain 0.33%		Load: 2700 N	
Crush Performance:	Long term load	- No attenuation increase*	Load (Plate / Plate): 500 N	
EN 187105-5.5.3 IEC 60794-1-2-E3	Short term load	<ul> <li>No changes in attenuation before versus after load</li> <li>No damage**</li> </ul>	Load (Plate / Plate): 2000 N	
Bending Performance:	Handling fixed installed	- No attenuation increase*	Bend radius: 10 x D	
EN 187105-5.5.1 IEC 60794-1-2-E11	During installation (under load)	<ul> <li>No changes in attenuation before versus after load</li> </ul>	Bend radius: 20 x D D is cable diameter	
Temperatures:	Operation	- No attenuation increase*	-40 to +70°C	
EN 187105-5.6.1 IEC 60794-1-2-F1	Installation Storage/Shipping		-15 to +60°C -40 to +70°C	

<sup>\*</sup>No changes in attenuation means that any changes in measurement value, either positive or negative within the uncertainty of measurement shall be ignored. The total uncertainty of measurement shall be less than of equal to 0.05 dB.

### Shipping Information

- 1-1- 5					
Cable Length	Drum Dimensions (approx.)		Shipping Weight (calc.)		
	Diameter(battened) Width		Without lagging	With lagging	
2000 m	1500 mm	890 mm	373 kg	423 kg	
4000 m	1800 mm	1090 mm	685 kg	757 kg	
6000 m	1800 mm	1090 mm	905 kg	977 kg	

The shipping information are given for one-way reels. Reusable reels are available on request.

The information is believed to be accurate at time of issue. OFS reserves the right to improve, enhance and modify the features and specifications of OFS products without prior notification. Please ensure you have the latest version of the data sheet.

This data sheet is property of OFS.

For additional information please contact your sales representative. You can also visit our website at http://www.ofsoptics.com.

Telephone: +49 (0) 228 7489 201 Email: cableinfo@ofsoptics.com

<sup>\*\*</sup> Mechanical damage – when examined visually without magnification, there shall be no evidence of damage to the sheath. The imprint of plates will not be considered as damage.



**Dry Core Outdoor Cable** 

# **6-Element LAP Cable**

Issue February 2003 according **OFS Generic Specification** 

### **Application**

Mainly used in Duct-Installation (HD-PE Tubes) and installed by Cable Blowing or Pulling

#### Design

- Optical Fibres
- Gel-filled Buffer Tubes (2.5 mm)
- Non-metallic Central Member
- Water Blocking Material
- Non-metallic Strength Elements
- <u>Laminated Aluminium Polyethylene (LAP)</u>
- Ripcord
- PE-Jacket

#### **Features**

- LAP for additional moisture protection in metropolitan and long-haul networks
- Dry Core Design Cable core water blocked by means of dry "water swellable" technology - for quicker, cleaner cable prep for jointing
- Individual coloured tubes

Version illustrated is the 72 Fibre Cable

Fibre Count	Tube 1	Tube 2	Tube 3	Tube 4	Tube 5	Tube 6	AT-Code**
48	Blue 8F	Orange 8F	Green 8F	Brown 8F	Grey 8F	White 8F	AT-111T2T8-048
72	Blue 12F	Orange 12F	Green 12F	Brown 12F	Grey 12F	White 12F	AT-111T2TT-072

<sup>\*</sup>Fillers are natural coloured \*\*Please refer to the OFS AT- Code. The blanks specify the fibre type.

Alternative tube colour code available on request

Cable Diameter (calc.): 12,60 mm Cable Weight (calc.): 126 kg/km



**Dry Core Outdoor Cable** 

## **6-Element LAP Cable**

Issue February 2003

according OFS Generic Specification

### Identification

#### **Fibre Colour Code:**

	1	Blue	5	Grey	9	Yellow
ĺ	2	Orange	6	White	10	Violet
ĺ	3	Green	7	Red	11	Rose
ĺ	4	Brown	8	Black	12	Aqua

### **Sheath Marking:**

OFS OPTICAL CABLE
[ID] [MM/YY] [Handset-Sign]
XXXF [Meter Marking]

Alternative Sheath printing available on request

### **Mechanical Properties and Environmental Behaviour**

Tests according to EN 187105 and IEC 60794

	Parameter	Requirement	Value
Tensile Performance: EN 187105-5.5.4	Long term load	<ul><li>No attenuation increase*</li><li>No fibre strain</li></ul>	Load: 1000 N
IEC 60794-1-2-E1A and E1B	Short term load, during installation	<ul><li>No changes in attenuation before versus after load</li><li>Max. fibre strain 0.33%</li></ul>	Load: 2700 N
Crush Performance:	Long term load	- No attenuation increase*	Load (Plate / Plate): 500 N
EN 187105-5.5.3 IEC 60794-1-2-E3	Short term load	<ul> <li>No changes in attenuation before versus after load</li> <li>No damage**</li> </ul>	Load (Plate / Plate): 2000 N
Bending Performance:	Handling fixed installed	- No attenuation increase*	Bend radius: 10 x D
EN 187105-5.5.1 IEC 60794-1-2-E11	During installation (under load)	<ul> <li>No changes in attenuation before versus after load</li> </ul>	Bend radius: 20 x D D is cable diameter
Temperatures:	Operation	- No attenuation increase*	-40 to +70°C
EN 187105-5.6.1 IEC 60794-1-2-F1	Installation Storage/Shipping		-15 to +60°C -40 to +70°C

<sup>\*</sup>No changes in attenuation means that any changes in measurement value, either positive or negative within the uncertainty of measurement shall be ignored. The total uncertainty of measurement shall be less than of equal to 0.05 dB.

### Shipping Information

emblem 3 monument							
	Cable Length	Drum Dimensions	s (approx.)	Shipping Weight (calc.)			
		Diameter(battened) Width		Without lagging	With lagging		
	2000 m	1500 mm	890 mm	405 kg	455 kg		
	4000 m	1800 mm	1090 mm	749 kg	821 kg		
	6000 m	1800 mm	1090 mm	1001 kg	1073 kg		

The shipping information are given for one-way reels. Reusable reels are available on request.

The information is believed to be accurate at time of issue. OFS reserves the right to improve, enhance and modify the features and specifications of OFS products without prior notification. Please ensure you have the latest version of the data sheet.

This data sheet is property of OFS.

For additional information please contact your sales representative. You can also visit our website at http://www.ofsoptics.com.

Telephone: +49 (0) 228 7489 201 Email: cableinfo@ofsoptics.com

<sup>\*\*</sup> Mechanical damage – when examined visually without magnification, there shall be no evidence of damage to the sheath. The imprint of plates will not be considered as damage.



**Dry Core Outdoor Cable** 

### 8-Element LAP Cable

Issue February 2003

according OFS Generic Specification

### **Application**

Mainly used in Duct-Installation (HD-PE Tubes) and installed by Cable Blowing or Pulling

#### Design

- Optical Fibres
- Gel-filled Buffer Tubes (2.5 mm)
- Non-metallic Central Member
- Water Blocking Material
- Non-metallic Strength Elements
- <u>Laminated Aluminium Polyethylene (LAP)</u>
- Ripcord
- PE-Jacket

#### **Features**

- LAP for additional moisture protection in metropolitan and long-haul networks
- Dry Core Design Cable core water blocked by means of dry "water swellable" technology
   for quicker, cleaner cable prep for jointing
- Individual coloured tubes

Version illustrated is the 96 Fibre Cable

Fibre Count	Tube 1	Tube 2	Tube 3	Tube 4	Tube 5	Tube 6	Tube 7	Tube 8	AT-Code**
56	BL 8F	OR 8F	GN 8F	BR 8F	SL 8F	WH 8F	RD 8F	Filler*	AT-111T5T8-056
64	BL 8F	OR 8F	GN 8F	BR 8F	SL 8F	WH 8F	RD 8F	BK 8F	AT-111T5T8-064
84	BL 12F	OR 12F	GN 12F	BR 12F	SL 12F	WH 12F	RD 12F	Filler*	AT-111T5TT-084
96	BL 12F	OR 12F	GN 12F	BR 12F	SL 12F	WH 12F	RD 12F	BK 12F	AT-111T5TT-096

<sup>\*</sup>Fillers are natural coloured

Alternative tube colour code available on request

Cable Diameter (calc.): 14,20 mm Cable Weight (calc.): 160 kg/km

Colour Abbreviations: BL=Blue / OR= Orange / GN=Green / BR=Brown / SL= Slate or Grey / WH= White / RD=Red / BK= Black

<sup>\*\*</sup>Please refer to the OFS AT- Code. The blanks specify the fibre type.



**Dry Core Outdoor Cable** 

## 8-Element LAP Cable

Issue February 2003

according OFS Generic Specification

#### Identification

#### **Fibre Colour Code:**

1	Blue	5	Grey	9	Yellow
2	Orange	6	White	10	Violet
3	Green	7	Red	11	Rose
4	Brown	8	Black	12	Aqua

#### **Sheath Marking:**

OFS OPTICAL CABLE
[ID] [MM/YY] [Handset-Sign]
XXXF [Meter Marking]

Alternative sheath printing available on request

### **Mechanical Properties and Environmental Behaviour**

Tests according to EN 187105 and IEC 60794

	Parameter	Requirement	Value	
Tensile Performance: EN 187105-5.5.4	Long term load	<ul><li>No attenuation increase*</li><li>No fibre strain</li></ul>	Load: 1000 N	
IEC 60794-1-2-E1A and E1B	Short term load, during installation	<ul><li>No changes in attenuation before versus after load</li><li>Max. fibre strain 0.33%</li></ul>	n Load: 1.5 x W W is the weight of the cable in N	
Crush Performance:	Long term load	- No attenuation increase*	Load (Plate / Plate): 500 N	
EN 187105-5.5.3 IEC 60794-1-2-E3	Short term load	<ul> <li>No changes in attenuation before versus after load</li> <li>No damage**</li> </ul>	Load (Plate / Plate): 2000 N	
Bending Performance:	Handling fixed installed	- No attenuation increase*	Bend radius: 10 x D	
EN 187105-5.5.1 IEC 60794-1-2-E11	During installation (under load)	<ul> <li>No changes in attenuation before versus after load</li> </ul>	Bend radius: 20 x D D is the cable diameter	
Temperatures:	Operation	- No attenuation increase*	-40 to +70°C	
EN 187105-5.6.1 IEC 60794-1-2-F1	Installation Storage/Shipping		-15 to +60°C -40 to +70°C	

<sup>\*</sup>No changes in attenuation means that any changes in measurement value, either positive or negative within the uncertainty of measurement shall be ignored. The total uncertainty of measurement shall be less than of equal to 0.05 dB.

### Shipping Information

- 1-1- 5						
Cable Length	Drum Dimensions	Drum Dimensions (approx.)		eight (calc.)		
	Diameter(battened) Width		Without lagging	With lagging		
2000 m	1800 mm	1090 mm	473 kg	523 kg		
4000 m	1800 mm	1090 mm	885 kg	957 kg		
6000 m	1950 mm	1140 mm	1245 kg	1331 kg		

The shipping information are given for one-way reels. Reusable reels are available on request.

The information is believed to be accurate at time of issue. OFS reserves the right to improve, enhance and modify the features and specifications of OFS products without prior notification. Please ensure you have the latest version of the data sheet.

This data sheet is property of OFS.

For additional information please contact your sales representative. You can also visit our website at http://www.ofsoptics.com.

Telephone: +49 (0) 228 7489 201 Email: cableinfo@ofsoptics.com

<sup>\*\*</sup> Mechanical damage – when examined visually without magnification, there shall be no evidence of damage to the sheath. The imprint of plates will not be considered as damage.



**Dry Core Outdoor Cable** 

# 12-Element LAP Cable

Issue February 2003 according **OFS Generic Specification** 

### **Application**

Mainly used in Duct-Installation (HD-PE Tubes) and installed by Cable Blowing or Pulling

#### Design

- Optical Fibres
- Gel-filled Buffer Tubes (2.5 mm)
- Non-metallic Central Member
- Water Blocking Material
- Non-metallic Strength Elements
- <u>Laminated Aluminium Polyethylene (LAP)</u>
- Ripcord
- PE-Jacket

#### **Features**

- LAP for additional moisture protection in metropolitan and long-haul networks
- Dry Core Design Cable core water blocked by means of dry "water swellable" technology - for quicker, cleaner cable prep for jointing
- Individual coloured tubes

**Version illustrated is the 144 Fibre Cable** 

Fibre Count	Tube 1	Tube 2	Tube 3	Tube 4	Tube 5	Tube 6
108	Blue 12F	Orange 12F	Green 12F	Brown 12F	Grey 12F	White 12F
120	Blue 12F	Orange 12F	Green 12F	Brown 12F	Grey 12F	White 12F
132	Blue 12F	Orange 12F	Green 12F	Brown 12F	Grey 12F	White 12F
144	Blue 12F	Orange 12F	Green 12F	Brown 12F	Grey 12F	White 12F

Fibre Count	Tube 7	Tube 8	Tube 9	Tube 10	Tube 11	Tube 12
108	Red 12F	Black 12F	Yellow 12F	Filler*	Filler*	Filler*
120	Red 12F	Black 12F	Yellow 12F	Violet 12F	Filler*	Filler*
132	Red 12F	Black 12F	Yellow 12F	Violet 12F	Rose 12F	Filler*
144	Red 12F	Black 12F	Yellow 12F	Violet 12F	Rose 12F	Aqua 12F

<sup>\*</sup>Fillers are natural coloured

Alternative tube colour code available on request

Fibre Count	AT-Code**
108	AT-111T5TT-108
120	AT-111T5TT-120
132	AT-111T5TT-132
144	AT-111T5TT-144

<sup>\*\*</sup>Please refer to the OFS AT- Code. The blanks specify the fibre type.

Cable Diameter (calc.): 17,40 mm Cable Weight (calc.): 235 kg/km



**Dry Core Outdoor Cable** 

# 12-Element LAP Cable

Issue February 2003

according OFS Generic Specification

### Identification

#### **Fibre Colour Code:**

1	Blue	5	Grey	9	Yellow
2	Orange	6	White	10	Violet
3	Green	7	Red	11	Rose
4	Brown	8	Black	12	Aqua

#### **Sheath Marking:**

OFS OPTICAL CABLE
[ID] [MM/YY] [Handset-Sign]
XXXF [Meter Marking]

Alternative sheath printing available on request

### **Mechanical Properties and Environmental Behaviour**

Tests according to EN 187105 and IEC 60794

Tensile Performance: EN 187105-5.5.4	Parameter Long term load	Requirement - No attenuation increase* - No fibre strain	<b>Value</b> Load: 1000 N
IEC 60794-1-2-E1A and E1B	Short term load, during installation	<ul><li>No changes in attenuation before versus after load</li><li>Max. fibre strain 0.33%</li></ul>	Load: 1.5 x W W is the weight of the cable in N
Crush Performance:	Long term load	- No attenuation increase*	Load (Plate / Plate): 500 N
EN 187105-5.5.3 IEC 60794-1-2-E3	Short term load	<ul> <li>No changes in attenuation before versus after load</li> <li>No damage**</li> </ul>	Load (Plate / Plate): 2000 N
Bending Performance:	Handling fixed installed	- No attenuation increase*	Bend radius: 10 x D
EN 187105-5.5.1 IEC 60794-1-2-E11	During installation (under load)	<ul> <li>No changes in attenuation before versus after load</li> </ul>	Bend radius: 20 x D D is the cable diameter
Temperatures:	Operation	- No attenuation increase*	-40 to +70°C
EN 187105-5.6.1 IEC 60794-1-2-F1	Installation Storage/Shipping		-15 to +60°C -40 to +70°C

<sup>\*</sup>No changes in attenuation means that any changes in measurement value, either positive or negative within the uncertainty of measurement shall be ignored. The total uncertainty of measurement shall be less than of equal to 0.05 dB.

### **Shipping Information**

Cable Length	Drum Dimensions	(approx.)	Shipping Weight (calc.)		
	Diameter(battened)	Width	Without lagging	With lagging	
2000 m	1800 mm	1090 mm	715 kg	787 kg	
4000 m	1950 mm	1140 mm	1225 kg	1311 kg	
6000 m	2550 mm	1490 mm	1860 kg	1995 kg	

The shipping information are given for one-way reels. Reusable reels are available on request.

The information is believed to be accurate at time of issue. OFS reserves the right to improve, enhance and modify the features and specifications of OFS products without prior notification. Please ensure you have the latest version of the data sheet.

This data sheet is property of OFS.

For additional information please contact your sales representative. You can also visit our website at http://www.ofsoptics.com.

Telephone: +49 (0) 228 7489 201 Email: cableinfo@ofsoptics.com

<sup>\*\*</sup> Mechanical damage – when examined visually without magnification, there shall be no evidence of damage to the sheath. The imprint of plates will not be considered as damage.



**Dry Core Outdoor Cable** 

# 19-Element LAP Cable

Issue February 2003 according OFS Generic Specification

### **Application**

Mainly used in Duct-Installation (HD-PE Tubes) and installed by Cable Blowing or Pulling

- Optical Fibres
- Gel-filled Buffer Tubes (2.5 mm)
- Non-metallic Central Member
- Water Blocking Material
- Non-metallic Strength Elements
- Laminated Aluminium Polyethylene (LAP)
- Ripcord
- PE-Jacket

#### **Features**

- LAP for additional moisture protection in metropolitan and long-haul networks
- Dry Core Design Cable core water blocked by means of dry "water swellable" technology - for quicker, cleaner cable prep for jointing

Alternative tube colour code available on request

- Two Layer Design for a smaller cable diameter and less cable weight
- Individual colored tubes

Version illustrated is the 228 Fibre Cable

Fibre Count	Tube 1	Tube 2	Tube 3	Tube 4	Tube 5	Tube 6					AT-C	ode**	
156	Blue	Orange	Green	Brown	Grey	White					AT-111T	2TT-156	
168	Blue	Orange	Green	Brown	Grey	White					AT-111T	2TT-168	
180	Blue	Orange	Green	Brown	Grey	White					AT-111T	2TT-180	
192	Blue	Orange	Green	Brown	Grey	White					AT-111T	2TT-192	
204	Blue	Orange	Green	Brown	Grey	White					AT-111T	2TT-204	
216	Blue	Orange	Green	Brown	Grey	White					AT-111T	2TT-216	
228	Blue	Orange	Green	Brown	Grey	White					AT-111T:	2TT-228	
Fibre Count	Tube 7	Tube 8	Tube 9	Tube 10	Tube 11	Tube 12	Tube 13	Tube 14	Tube 15	Tube 16	Tube 17	Tube 18	Tube 19
Count	7	8	9	10	11	12	13	14	15	16	17	18	19
Count 156	<b>7</b> Blue	8 Orange	<b>9</b> Green	10 Brown	11 Grey	12 White	13 Red	14 Filler*	<b>15</b> Filler*	16 Filler*	17 Filler*	18 Filler*	19 Filler*
156 168	7 Blue Blue	8 Orange Orange	9 Green Green	10 Brown Brown	Grey	12 White White	13 Red Red	14 Filler* Black	15 Filler* Filler*	16 Filler* Filler*	17 Filler* Filler*	18 Filler*	19 Filler*
156 168 180	7 Blue Blue	8 Orange Orange Orange	9 Green Green	Brown Brown Brown	Grey Grey Grey	White White White	Red Red Red	Filler* Black Black	15 Filler* Filler* Yellow	16 Filler* Filler*	Filler* Filler*	18 Filler* Filler*	Filler* Filler*
156 168 180 192	7 Blue Blue Blue Blue	8 Orange Orange Orange Orange	9 Green Green Green	Brown Brown Brown Brown	Grey Grey Grey Grey	White White White White	Red Red Red Red	Filler* Black Black Black	15 Filler* Filler* Yellow Yellow	16 Filler* Filler* Violet	Filler* Filler* Filler* Filler*	18 Filler* Filler* Filler*	Filler* Filler* Filler*

\*\*Please refer to the OFS AT- Code. The blanks specify the fibre type.

Cable Diameter (calc.): 18.10 mm Cable Weight (calc.): 245 kg/km

<sup>\*</sup>Fillers are natural coloured



**Dry Core Outdoor Cable** 

# 19-Element LAP Cable

Issue February 2003

according OFS Generic Specification

#### Identification

#### **Fibre Colour Code:**

1	Blue	5 Grey		9	Yellow
2	Orange	6	White	10	Violet
3	Green	7	Red	11	Rose
4	Brown	8	Black	12	Aqua

#### **Sheath Marking:**

OFS OPTICAL CABLE
[ID] [MM/YY] [Handset-Sign]
XXXF [Meter Marking]

Alternative sheath printing available on request

### **Mechanical Properties and Environmental Behaviour**

Tests according to EN 187105 and IEC 60794

	Parameter	Requirement	Value
Tensile Performance: EN 187105-5.5.4	Long term load	<ul><li>No attenuation increase*</li><li>No fibre strain</li></ul>	Load: 1000 N
IEC 60794-1-2-E1A and E1B	Short term load, during installation	<ul><li>No changes in attenuation before versus after load</li><li>Max. fiber strain 0.33%</li></ul>	Load: 2700 N
Crush Performance:	Long term load	- No attenuation increase*	Load (Plate / Plate): 500 N
EN 187105-5.5.3 IEC 60794-1-2-E3	Short term load	<ul> <li>No changes in attenuation before versus after load</li> <li>No damage**</li> </ul>	Load (Plate / Plate): 2000 N
Bending Performance:	Handling fixed installed	- No attenuation increase*	Bend radius: 10 x D
EN 187105-5.5.1 IEC 60794-1-2-E11	During installation (under load)	<ul> <li>No changes in attenuation before versus after load</li> </ul>	Bend radius: 20 x D D is the cable diameter
Temperatures:	Operation	- No attenuation increase*	-30 to +70°C
EN 187105-5.6.1 IEC 60794-1-2-F1	Installation Storage/Shipping		-15 to +60°C -40 to +70°C

<sup>\*</sup>No changes in attenuation means that any changes in measurement value, either positive or negative within the uncertainty of measurement shall be ignored. The total uncertainty of measurement shall be less than of equal to 0.05 dB.

### **Shipping Information**

Cable Length	Drum Dimensions	s (approx.)	Shipping We	eight (calc.)
	Diameter(battened)	Width	Without lagging	With lagging
2000 m	1800 mm	1090 mm	735 kg	807 kg
4000 m	1950 mm	1140 mm	1265 kg	1351 kg

The shipping information are given for one-way reels. Reusable reels are available on request.

The information is believed to be accurate at time of issue. OFS reserves the right to improve, enhance and modify the features and specifications of OFS products without prior notification. Please ensure you have the latest version of the data sheet.

This data sheet is property of OFS.

For additional information please contact your sales representative. You can also visit our website at http://www.ofsoptics.com.

Telephone: +49 (0) 228 7489 201 Email: cableinfo@ofsoptics.com

<sup>\*\*</sup> Mechanical damage - when examined visually without magnification, there shall be no evidence of damage to the sheath. The imprint of plates will not be considered as damage.



**Dry Core Outdoor Cable** 

# 25-Element LAP Cable

Issue February 2003 according **OFS Generic Specification** 

### **Application**

Mainly used in Duct-Installation (HD-PE Tubes) and installed by Cable Blowing or Pulling

#### Desian

- Optical Fibres
- Gel-filled Buffer Tubes (2.5 mm)
- Non-metallic Central Member
- Water Blocking Material
- Non-metallic Strength Elements
- <u>Laminated Aluminium Polyethylene (LAP)</u>
- Ripcord
- PE-Jacket

#### **Features**

- LAP for additional moisture protection in metropolitan and long-haul networks
- Dry Core Design Cable core water blocked by means of dry "water swellable" technology
  - for quicker, cleaner cable prep for jointing
- Individual coloured tubes

Version illustrated is the 300 Fibre Cable

### Inner Layer (9 Tubes)

Fibre Count	Tube 1	Tube 2	Tube 3	Tube 4	Tube 5	Tube 6	Tube 7	Tube 8	Tube 9
240	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow
264	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow
288	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow
300	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow
Outer L	.ayer (16 1	Tubes)							
Fibre	Tube	Tube	Tube	Tube	Tube	Tube	Tube	Tube	
Count	10	11	12	13	14	15	16	17	
240	Blue	Orange	Green	Brown	Grey	White	Red	Black	
264	Blue	Orange	Green	Brown	Grey	White	Red	Black	
288	Blue	Orange	Green	Brown	Grey	White	Red	Black	
300	Blue	Orange	Green	Brown	Grey	White	Red	Black	
				Today	Toda	T. d. a	Today	Toda	
Fibre Count	Tube 18	Tube 19	Tube 20	Tube 21	Tube 22	Tube 23	Tube 24	Tube 25	
240	Yellow	Violet	Rose	Filler*	Filler*	Filler*	Filler*	Filler*	
264	Yellow	Violet	Rose	Aqua	Blue	Filler*	Filler*	Filler*	
288	Yellow	Violet	Rose	Aqua	Blue	Orange	Green	Filler*	
300	Yellow	Violet	Rose	Aqua	Blue	Orange	Green	Brown	

\*Fillers are natural coloured

Fibre Count	AT-Code**
240	AT-111TFTT-240
264	AT-111TFTT-264

						-	
*Please	refer	to t	he C	DFS.	AT-	Code.	

Fibre Count	AT-Code**		
288	AT-111TFTT-288		
300	AT-111TFTT-300		

The blanks specify the fibre type.

Cable Diameter (calc.): 20,60 mm Cable Weight (calc.): 320 kg/km



**Dry Core Outdoor Cable** 

# 25-Element LAP Cable

Issue February 2003

according OFS Generic Specification

#### Identification

#### **Fiber Colour Code:**

1	Blue	5	Grey	9	Yellow
2	Orange	6	White	10	Violet
3	Green	7	Red	11	Rose
4	Brown	8	Black	12	Aqua

#### **Sheath Marking:**

OFS OPTICAL CABLE
[ID] [MM/YY] [Handset-Sign]
XXXF [Meter Marking]

Alternative sheath printing available on request

### **Mechanical Properties and Environmental Behaviour**

Tests according to EN 187105 and IEC 60794

	Parameter	Requirement	Value	
Tensile Performance:	Long term load	- No attenuation increase*	Load: 1000 N	
EN 187105-5.5.4		- No fibre strain		
IEC 60794-1-2-E1A and E1B	Short term load, during installation	<ul> <li>No changes in attenuation before versus after load</li> <li>Max. fibre strain 0.33%</li> </ul>	Load: 1.0 x W W is the weight of the cable in N	
Crush Performance:	Long term load	<ul> <li>No attenuation increase*</li> </ul>	Load (Plate / Plate): 500 N	
EN 187105-5.5.3 IEC 60794-1-2-E3	Short term load	<ul> <li>No changes in attenuation before versus after load</li> <li>No damage**</li> </ul>	Load (Plate / Plate): 2000 N	
Bending Performance:	Handling fixed installed	- No attenuation increase*	Bend radius: 10 x D	
EN 187105-5.5.1 IEC 60794-1-2-E11	During installation (under load)	- No changes in attenuation before versus after load	Bend radius: 20 x D D is the cable diameter	
Temperatures:	Operation	- No attenuation increase*	-30 to +70°C	
EN 187105-5.6.1 IEC 60794-1-2-F1	Installation Storage/Shipping		-15 to +60°C -40 to +70°C	

<sup>\*</sup>No changes in attenuation means that any changes in measurement value, either positive or negative within the uncertainty of measurement shall be ignored. The total uncertainty of measurement shall be less than of equal to 0.05 dB.

### Shipping Information

<u> </u>					
Cable Length	Drum Dimensions	s (approx.)	Shipping Weight (calc.)		
	Diameter(battened)	Width	Without lagging	With lagging	
2000 m	1800 mm	1090 mm	885 kg	957 kg	
4000 m	2550 mm	1490 mm	1730 kg	1865 kg	

The shipping information are given for one-way reels. Reusable reels are available on request.

The information is believed to be accurate at time of issue. OFS reserves the right to improve, enhance and modify the features and specifications of OFS products without prior notification. Please ensure you have the latest version of the data sheet.

This data sheet is property of OFS.

For additional information please contact your sales representative. You can also visit our website at http://www.ofsoptics.com.

Telephone: +49 (0) 228 7489 201 Email: cableinfo@ofsoptics.com

<sup>\*\*</sup> Mechanical damage – when examined visually without magnification, there shall be no evidence of damage to the sheath. The imprint of plates will not be considered as damage.