Optical FTTx Drop Cable All Dielectric Design

MiDia[®] Monotube



Issue June 2019 according to OFS Generic Specification

Application

Customer drop cable for air-blown installation into Micro ducts (5/8 mm)

Design

- Optical Fibres (2 24) (AllWave[®] FLEX Fibre G.657.A1 AllWave[®] FLEX + Fibre G.657.A2)
- Gel-filled Central Loose Tube
- Tensile Strength Elements
- PE-Jacket or PA-Jacket

Features

- All Dielectric Cable
- Easy Fibre Access
- Light Weight
- Version illustrated is the 24 Fibre Cable

Fibre Count	Outer Diameter [mm]	Cable Weight [kg/km]	Standard Length [m]	AT-Code*
2	3.4	10	2000 / 4000 / 6000	AT-[][][]yXD2-002
6	3.4	10	2000 / 4000 / 6000	AT-[][][]yXD6-006
12	3.4	10	2000 / 4000 / 6000	AT-[][][]yXDT-012
24	3.4	10	2000 / 4000 / 6000	AT-[][][]yXDF-024

This table shows nominal diameter and weight values which may differ in shipments.

* Please refer to the OFS AT- Code and Cable Ordering Information. The blanks specify the fibre type.

y: 7 = PE Monotube

y: 8 = PA Monotube

Sheath Marking

OFS OPTICAL CABLE MIDIA MONOTUBE [PE or PA] [ID] [MM/YYYY] XXXF [Meter Marking]

Alternative sheath printing available on request.

In case of order the exact sheath printing text will be clarified with the customer.

Identification

Fibre	Colo	our C	Code):

1	Blue	2	Orange	3	Green	4	Brown	5	Grey	6	White
7	Red	8	Black	9	Yellow	10	Violet	11	Rose	12	Aqua
13	Blue*	14	Orange*	15	Green*	16	Brown*	17	Grey*	18	White*
19	Red*	20	Natural	21	Yellow*	22	Violet*	23	Rose*	24	Aqua*

* Fibre with black marking

The tube is natural coloured. Alternative fibre colour code available on request.



All Dielectric Design

MiDia[®] Monotube



Issue June 2019 according to **OFS Generic Specification**

Mechanical Properties and Environmental Behaviour

Tests according to IEC 60794

	Parameter	Requirement	Value	
Tensile Performance: IEC 60794-1-21-E1A and E1B	Long term load	 No attenuation increase* No fibre strain 	Load: 2 – 10 Fibre: 50 N 12 – 20 Fibre: 50 N 24 Fibre: 50 N	
	Short term load, during installation	 No changes in attenuation before versus after load* Max. fibre strain 0.6% 	Load: 2 – 10 Fibre: 140 N 12 – 20 Fibre: 250 N 24 Fibre: 400 N	
Crush Performance: IEC 60794-1-21-E3A	Short term load	 No changes in attenuation before versus after load* No damage** 	Load: 500 N	
Cable Bending:	Handling fixed installed	- No attenuation increase*	Bend radius: 20 mm	
IEC 60794-1-21-E11	During installation (under load)	 No changes in attenuation before versus after load* 	Bend radius: 30 mm	
Temperatures: IEC 60794-1-22-F1 IEC 60794-5-10	Operation Installation Storage/Shipping	- No attenuation increase***	-20 to +70°C -5 to +40°C -30 to +70°C	

*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.

** 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.

*** No changes in attenuation either positive or negative higher than 0.15 dB/km in the 1550 nm range according to the Microcable Standard IEC 60794-5-10:2014

Shipping Information Plastic Reel **Cable Length** Drum Dimensions (approx.) Shipping Weight (calc.) Width Diameter Without lagging 2000 m 800 mm 540 mm 40 kg 4000 m 800 mm 540 mm 60 kg Max 6000 m 800 mm 540 mm 80 kg

Shipping Information Light Weight Wooden Reel

Cable Length	Drum Dimensio	ns (approx.)	Shipping Weight (calc.)		
	Diameter	Width	Without lagging		
2000 m	800 mm	540 mm	35 kg		
4000 m	800 mm	540 mm	60 kg		
Max 6000 m	800 mm	540 mm	80 kg		

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

Optical FTTx Drop Cable

All Dielectric Design

MiDia[®] Monotube



Issue June 2019 according to **OFS Generic Specification**

Cable Ordering Inf	ormatio	n						
Example: AT-5EE7XDF-024 ¹								
				Fibre ²	Sheath Core Fibre C	Count		
			Part N	lumber: AT- <u>S1 S2 SF</u>	<u>S3 S4 S5 S6- NNN</u>			
Fibre Type	Fibre	Fibre	Fibre	Fibre		Average	Maximum	
Single-Mode Fibre	(S1)	(S2)	(SF)	Standards	Wavelenghts (nm)	Attenuation (dB/km)	Attenuation (dB/km)	
AllWave [®] FLEX ZWP	5	E	E	G.652.D/G.657.A1	1310/1385/1550/1625		0.36/0.31/0.25/0.27	
AllWave [®] FLEX + ZWP	7	E	E	G.652.D/G.657.A2	1310/1385/1550/1625		0.36/0.31/0.25/0.27	
S3= Sheath Construction			S5= Core Type		NNN = Fibre Count			
7= PE Monotube				D= Dielectric Drop Cable				
8= PA Monotube				S6= Fibres per Tube				
S4= Tensile Load				F= 24 Fibres				
X= Specific				T= 12 Fibres				
				N= 10 Fibres				
				8= 8 Fibres				

¹ Part Number shown is for MiDia Monotube PE with 250 µm Single Mode AllWave® FLEX ZWP Fibres. All-Dielectric drop cable with 24 fibres.

Contact OFS sales representative for information on other cable variations, including additional fibre types, composite cables and attenuation.

X= Specific

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

MiDia® is a registered trademark of Fitel USA Corp.

