

Increasing the Cost-Effectiveness and Range of Deployment Options for Access Networks

Product Description

The AccuBreeze™ FX Cabled Fiber Unit (CFU) is a small, cost-effective acrylate fiber unit specifically designed for air-blown installation applications, using microduct systems in access networks. To construct the AccuBreeze FX CFU, up to 12 color-coded optical fibers are gathered to form a small fiber bundle. This fiber bundle is then placed in a soft acrylate inner layer that cushions the fibers. This inner layer is next encased in a protective hard acrylate outer layer in which glass spheres are embedded. This enhanced outer surface promotes low friction and increased aerodynamic drag for exceptional performance during air-blown installation.

Why the AccuBreeze™ FX Cabled Fiber Unit (CFU)?

The AccuBreeze FX CFU offers a highly effective, low-cost fiber optic solution for access networks. The fiber unit's small size, light weight and enhanced surface help save on time and money with fast, cost-effective air-blown installation.

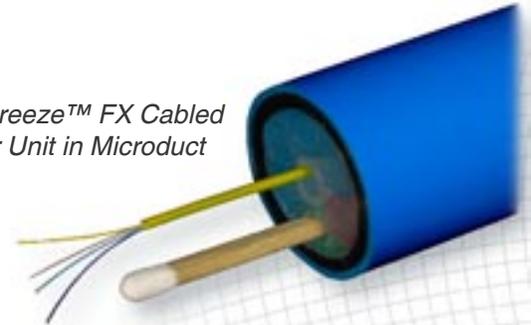
By using the air-blown installation method with inexpensive microduct networks, the AccuBreeze FX CFU further helps save on build costs by eliminating the need for expensive and disruptive excavation along with procuring costly rights-of-way.

The AccuBreeze FX CFU also helps service providers to defer and gain greater control over their initial network build investment by deploying fiber only as needed to meet demand. This capability helps providers in the future to consistently maintain the highest performance fibers in their networks and avoid the costs of procuring additional rights-of-way and constructing new ducts.

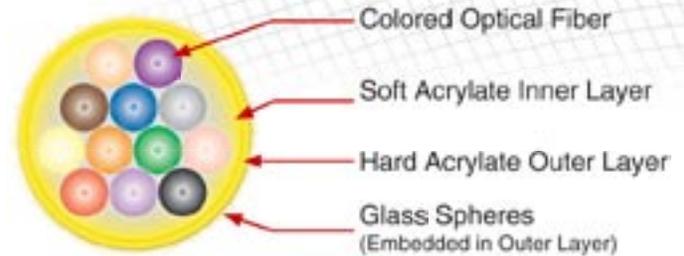
Technical Information:

Fiber Count:	2	4	8	12	
Outside Diameter:	1.0 mm (0.039 in.)	1.0 mm (0.039 in.)	1.4 mm (0.055 in.)	1.45 mm (0.057 in.)	
Unit Weight:	0.85 kg/km (0.57 lbf/kft)	0.85 kg/km (0.57 lbf/kft)	1.75 kg/km (1.18 lbf/kft)	2.08 kg/km (1.40 lbf/kft)	
Fiber Color Scheme (fibers 1 through 12):					
1 - Blue (BL)	3 - Green (GR)	5 - Slate (SL)	7 - Brown (BR)	9 - White (WH)	11 - Rose (RS)
2 - Orange (OR)	4 - Red (RD)	6 - Yellow (YL)	8 - Violet (VI)	10 - Black (BK)	12 - Aqua (AQ)
Temperature (all fiber counts):				Minimum Bend Radius	
Installation:	-30°C to 50°C (-22°F to 122°F)	Operation: -40°C to 60°C (-40°F to 140°F)	Storage: -40°C to 70°C (-40°F to 158°F)	36 mm (1.4 in)	

AccuBreeze™ FX Cabled Fiber Unit in Microduct



12 Fibers Shown



Features and Benefits:

- Small, lightweight, and flexible fiber unit helps save time and money with fast and reliable microduct installation
- Specially designed outer surface promotes low friction and increased aerodynamic drag for exceptional performance during air-blown installation
- Expanded deployment options maximize cost-effectiveness and help "future-proof" networks
- Deploy fiber only as needed for increased cost control
- Available with AllWave® Zero Water Peak (ZWP) Fiber, other OFS Single-Mode fiber designs, and multimode fiber
- Currently available with 2, 4, 8, and 12 fibers

Test and Methods:

Cable Test	Test Method	Requirement	Parameters
Tensile Performance	IEC 60794-1-2-E1	Fiber strain $\leq 0.4\%$ during test, $\leq 0.05\%$ after test. Attenuation after test ≤ 0.05 dB/km.	89 N load, 10 minute duration
Crush Performance	IEC 60794-1-2-E3	Attenuation after test ≤ 0.05 dB/km. No significant damage to unit.	100 N load, 1 minute duration
Bending Performance	IEC 60794-1-2-E11A	Attenuation after test ≤ 0.05 dB/km. No significant damage to unit.	Bend diameter = 40 mm, 3 turns, 5 cycles
Cold Test	BS EN 60068-2-1	Single-mode attenuation at 1310 and 1550 nm ≤ 0.5 dB/km during test. Multimode attenuation ≤ 0.3 dB/km during test.	-20°C, 96 hour duration
Change of Temperature (Condensation)	BS EN 60068-2-38	Attenuation change at 1310 and 1550 nm during and after test ≤ 0.07 dB/km.	65°C, -10°C, 20°C, 93% RH, 10 cycles, 24 hr/cycle
Temperature Cycle	BS EN 60068-2-38	Attenuation change at 1310 and 1550 nm during and after test ≤ 0.07 dB/km.	-10°C, 60°C, 3 cycles
Water Immersion	CW 1500-4, section 3.2.4	Attenuation change at 1310 and 1550 nm during and after test ≤ 0.07 dB/km. Unit color and identification to remain readily distinguishable.	20°C, 2000 hour immersion

Ordering Information:

Position	Description	Options															
S1	Fiber Type & Test Wavelengths	3	Single-mode 1310/1550 nm	Ordering Code:	<table border="0"> <tr> <td></td> <td>Fiber Spec</td> <td>Fiber Count</td> <td>Color</td> </tr> <tr> <td></td> <td>S1 S2 S3 S4 S5 S6 S7</td> <td></td> <td></td> </tr> <tr> <td></td> <td>AB1 - - - - - - - -</td> <td></td> <td></td> </tr> </table>		Fiber Spec	Fiber Count	Color		S1 S2 S3 S4 S5 S6 S7				AB1 - - - - - - - -		
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			S1 S2 S3 S4 S5 S6 S7														
	AB1 - - - - - - - -																
6	TrueWave® 1550 nm																
R	Multimode 850/1300 nm																
S2	Fiber Attenuation Specification	<i>Single-Mode Options</i>		<i>Laser Optimized 50µm Multimode Options</i>													
		4	0.40/0.30 dB/km	K	2.5 dB/km, 500MHz*km @ 850 nm 0.7 dB/km, 500MHz*km @ 1300 nm												
		B	0.35/0.25 dB/km	J	2.4 dB/km, 550MHz*km @ 850 nm 0.7 dB/km, 600MHz*km @ 1300 nm												
		U	0.35/0.23 dB/km	G	2.4 dB/km, 500MHz*km @ 850 nm 0.7 dB/km, 900MHz*km @ 1300 nm												
		<i>TrueWave Options</i>		<i>Laser Optimized 62.5µm Multimode Options</i>													
		2	0.25 dB/km	U	3.4 dB/km, 200MHz*km @ 850 nm 1.0 dB/km, 500MHz*km @ 1300 nm												
				A	2.9 dB/km, 220MHz*km @ 850 nm 0.7 dB/km, 500MHz*km @ 1300 nm												
		C	2.9 dB/km, 350MHz*km @ 850 nm 0.7 dB/km, 900MHz*km @ 1300 nm														
S3	Fiber Type	E	AllWave® ZWP Single-Mode	2	50 µm Laser Optimized Multimode												
		6	TrueWave RS Single-Mode	9	62.5 µm Laser Optimized Multimode												
S4 & S5	Fiber Count	2, 4, 8, 12 fiber counts available															
S6 & S7	Cabled Unit Color	<i>Single-Mode Standard</i>		<i>Multimode Standards</i>													
		YL	Yellow (Standard for Single-Mode)	BL	Blue (Standard for Laser Optimized 50 µm)												
				RF	Rose (Standard for Laser Optimized 62.5 µm)												

For additional information please contact your sales representative. You can also visit our website at <http://www.ofsoptics.com> or call 1-888-fiberhelp.

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