



COMMUNICATOR

Make Cable Installation a 'Breeze'

FIS is pleased to announce that cable jetting (cable blowing) equipment is now available for purchase or rent through the FIS Services Department.

"Breeze," a micro fiber cable blowing machine from GMP, uses compressed air to make cable installation, well, a breeze. The equipment can stream micro cable though preinstalled micro duct over distances of up to 3,200 ft. (975 m).

The unit's light weight, compact size and portability make it well suited for both external and internal use.

(Cont. on page 2)

▼ Purchase or rent the "Breeze" from FIS!



NFOC 2015 COMMUNICATIONS CONFERENCE

Registration Now Open



Register Early and Save \$100

NFOC is the most comprehensive fiber optic, telecommunication, broadcast and broadband technologies conference of its kind, attracting world-class manufacturers, distributors and industry professionals from across the nation!

New for NFOC 2015 is "Broadband Blvd.," a dedicated area at the Conference designed to attract broadband providers, commercial and multi-unit property owners/developers, municipal and state officials, community broadband organizations and economic development professionals. Broadband-focused informational sessions and presentations will take place throughout the day.



Mark your calendar for NFOC 2015, taking place September 23-24 at the Turning Stone Resort and Casino in Verona, NY.

To register online visit www.nfoc.org. Email contact@nfoc.org or call Mark Cushman at (315) 737-2162 for more information.

Standard
U.S. Postage
PAID
Fiber Instrument
Sales, Inc.



(Cont. from page 1)

Magic Carpet Ride

With cable jetting, air rushes along between the cable and the duct wall, which greatly reduces the amount of drag imposed upon the cable. As the air streams down the length of the duct, the cable goes along for the ride.

The Breeze uses a DC motor and adjustable rollers that feed the cable as compressed air is applied. The torque applied to the cable by the rollers can be adjusted to help prevent cable buckling.

The Breeze may be placed on the ground or on a support stand to raise the cable to the desired height. The unit is provided with a reinforced transport case that can be used as a support stand when installing cable.

The Breeze installs micro fiber cable of 0.1 to 0.315 inch diameter at speeds up to 164 feet/minute. The device is compatible with micro duct O.D. from 0.197 to 0.629 inches.

When renting the Breeze, specify the diameter of your cable and microduct tubes so that a matching accessory pack can be provided. Your cable diameter is limited to 80% or less of the inside tube diameter to allow air passage. The equipment requires an air compressor rated at 220 psi/33 cfm for maximum distance of 3,200 ft.

Additional tools, connectors and enclosures are available from FIS. For more information, see page 74 of the NEW FIS Product Catalog (2015–2016 Edition), or contact your FIS Sales Associate.

Join the Jet Set

Cable jetting is an increasingly popular way to install cable. With conventional cable pulling methods, the pull line can impose a lot of stress on the cable as it is pulled through bends and undulations along the duct route.

Cable jetting typically requires the use of Microducts, which are small-diameter ducts that work well with cable jetting techniques. Although pull lines can be used, cable jetting is often the preferred way to install cable in this type of duct.

The advantages of cable jetting over pulling include:

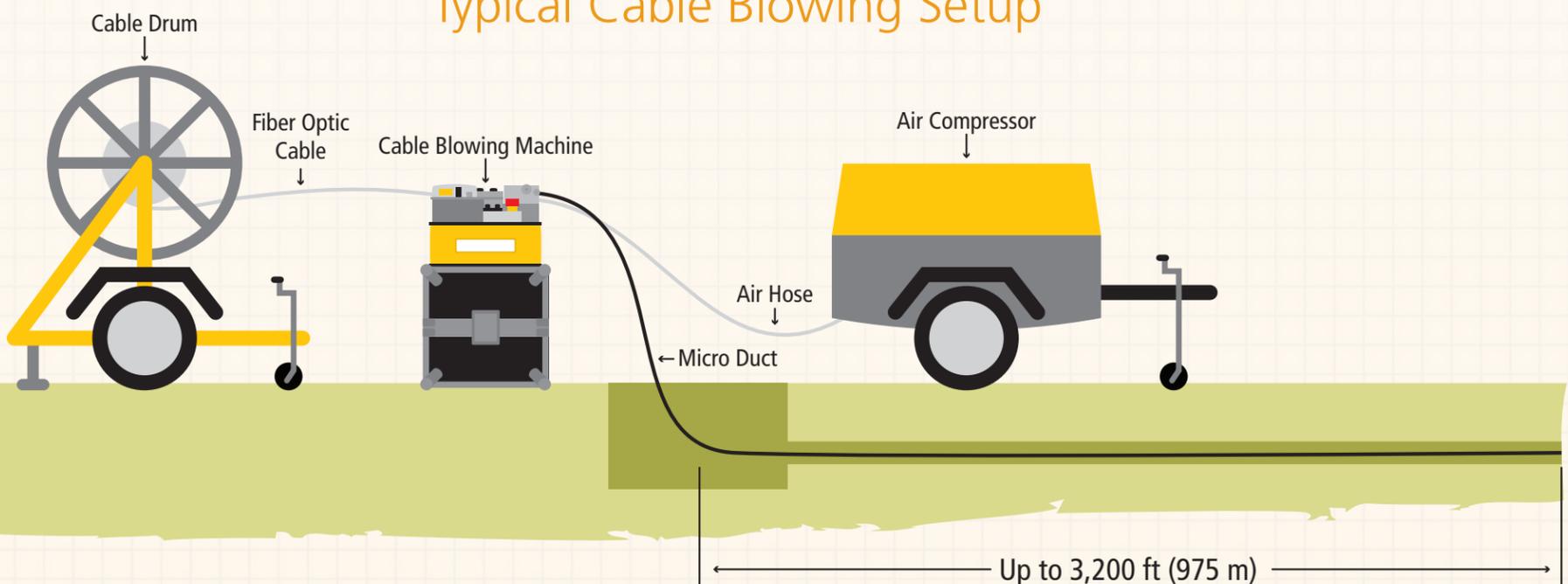
- Ability to install cable over long distances without splicing
- Less concern over bends and undulations in duct
- Equipment is required at only one end of the duct route
- Less force is exerted on cable
- Faster installation
- Smaller crew required

The Breeze, shown below, can jet cable up to 3,200 ft. in a single shot. All without a single splice!



▲ Aluminum "Breeze" is lightweight and portable.

Typical Cable Blowing Setup





Air Blown Cable

NEW

Reduce installation cost when installing cable within a building or ditch-witching for outdoor requirements by installing microduct and blowing fiber to your destination. Select your microduct and cable requirements from the options below. Your cable diameter is limited to 80% or less of the inside tube diameter to allow air passage. Blown cable installation requires a cable blowing machine, which can be purchased or rented from FIS. An air compressor is also required.

MICRODUCT 12/10

(Inner Tube size: 12 mm OD/10 ID mm)

Indoor Applications

A



15.4 mm OD

B



27.4 mm OD

C



39.4 mm max OD

Outdoor Applications

D



15.4 mm OD

E



32.8 mm OD

F



39.8 mm OD

SM* CABLE CHOICES

Works on all Microducts shown.

Micro Distribution 2mm Sub Units

PART #	COUNT	DIA(mm)	PRICE
S09MD12CZNPY20	12	2.0	\$1.40/mtr
S09MD24CZNR20Y	24	6.3	2.55/mtr
S09MD48CZNR20Y	48	6.6	3.70/mtr
S09MD72CZNR20Y	72	8.0	4.40/mtr

*MM equivalents and other cable available.

MICRODUCT

STYLE	PART #	PRICE
A	KIA12101	\$1.15/mtr
B	KIA12104	7.00/mtr
C	KIA12107	11.00/mtr
D	KDI12101	0.82/mtr
E	KDI12104	4.45/mtr
F	KDI12107	6.50/mtr

*Minimum order quantity of 100mtrs.

BREEZE CABLE BLOWING MACHINE



PART #	PRICE
MBM-010	\$11,950.00

*Additional accessories required to match cable and tube sizes

Straight & Level Installation

PSI	Cable	Distance
220	8 mm	3,200'
150	8 mm	2,000'
90	8 mm	700

EQUIPMENT RENTAL

2 weeks	\$750.00
3 weeks	900.00
1 month	1,000.00

Specify the diameter of the cable and microduct tubes so a matching accessory pack can be provided.

The cable blowing equipment pushes the cable while it is floated by the air supply reducing friction. The equipment requires an air compressor rated at 220 psi/33 cfm for maximum distance of 3,200 ft. The equipment weighs 50.6lbs.

Call your FIS Representative at 1-800-5000-FIS (347) for additional options and further details

At Your Service - FIS Customer Service Team

When you call FIS for information about a product or service, the first person you are likely to hear is the friendly voice of an FIS Customer Service Representative.

This individual will brighten your day and save you time by directing your call to exactly the person you need to speak with regarding product sales, rentals, repairs, calibration services and so forth.



Sales Support

The Customer Service Team also provides backup for FIS Sales staff. If your favorite Sales Associate happens to be on another call and you are pressed for time, a Customer Service person can take your order.

Order Processing/Follow Up

The Customer Service Team also follows your order from processing to shipping to ensure that things get done quickly. Products usually ship the same day from FIS' giant \$10 million in-house inventory. If a product happens to be on backorder from the manufacturer, Customer Service will create a "hot sheet" on your behalf so that you will be notified as soon as the product is available.

No 'Voicemail Jail'

The FIS Customer Service Team includes four telephone operators. When you call FIS you'll always be greeted by a live person, not automated menu selections. Our Customer Service folks are always ready and eager to assist you!

◀ The FIS Customer Service Team works closely with the FIS Sales staff to ensure your satisfaction.

PRODUCT of the MONTH

AFFILIATE SPOTLIGHT

The Light Connection (TLC) has over 20 years of industry experience in manufacturing high quality fiber optic cable and tubing for a wide range of applications including data center and building premise cable installations.

TLC utilizes Corning fiber in its manufacturing processes, and in addition to its extensive on-hand inventory, will design and manufacture a cable to customer specification.



AIA (Aluminum Interlocking Armor), OFCR and OFCP

TLC Interlocking Armored Cables are standard cables inside a spirally wrapped aluminum tape for enhanced crush resistance and ruggedness.

Available in Riser and Plenum rated constructions, interlocking armor can be used for general inside plant or indoor / outdoor applications in place of a conduit.



Call your FIS Representative at 1-800-5000-FIS (347) or visit www.fiberinstrumentsales.com for more information.

Eye on the Industry

Here is our monthly report tracking the stock prices of some of the key names in our industry. Prices are as of the end of the first quarters of 2014 and 2015, and as of the close of business on April 20, 2015.

Company	End 1st QTR 2014	End 1st QTR 2015	April 20, 2015
3M	135.66	164.95	164.51
Belden Inc.	69.60	93.56	94.17
Cisco	22.41	27.52	28.48
Corning	20.82	22.68	22.68
EXFO	4.94	3.78	3.47
JDS Uniphase	14.00	13.12	13.31
Optical Cable Corp.	3.85	3.89	4.15
Preformed Line Products Co.	68.55	42.13	42.01

ASK BRUNO



John Bruno, V.P. of Technical Services

Hey everyone, I am changing the ask Bruno column a little bit this month. I want to talk about an unusual question that a customer of Fiber Instrument Sales presented to us last week during a visit to our company.

This customer was using a Singlemode SFP (Small Form Pluggable) 1 Gbps LC module in his switch. This SFP was rated for 10 Kilometers of maximum distance. The fiber to which the SFP was connected was 11.5 Kilometers long. His question was "Will the SFP work for the longer distance?"

Once the manufacturer of the SFP was determined I performed an Internet search for the specifications sheet and determined that the total link budget for the SFP was 10 dB.

After performing an OTDR scan on the fiber it was determined that his 11.5 Kilometer cable (with patch cords) had approximately 3.8 dB of attenuation, which was well within the loss budget of 10 dB. So, his equipment should run fine.



Upcoming Training Dates

Fiber Optics I and II – Two Days

May 20–21, Atlantic City, NJ

June 9–10, Detroit, MI

June 22–24, Raquette Lake (Brightside), NY

July 20–22, Raquette Lake (Brightside), NY

August 3–5, Raquette Lake (Brightside), NY

August 17–19, Raquette Lake (Brightside), NY

Fiber To The x – One Day

May 13, Atlanta, GA

May 27, Charlotte, NC

June 17, Memphis, TN

July 15 Chicago, IL

August 12, Denver, CO



To register or for more information, contact Grace Edel at 1-800-5000-FIS (347), ext. 2169 or gedel@fiberinstrumentsales.com.

Your business may qualify for a free company listing!



Submit your name and company information to advertising@wavelengthsmagazine.com or visit www.wavelengthsmagazine.com and click "connections".



Easy Ordering

To better serve our customers the FIS Success Team is made up of regions, see diagram below. Reps are available to answer questions or take your order Monday–Thursday 8am–7pm, Friday 8am–6pm and Saturday 10am–2pm (Eastern Time). Call 1-800-5000-FIS (347).



Help Us Help You

When you're in a hurry, every second counts. Help us help you by keeping these tips in mind:

- Know your billing zip code; it helps us find your account faster.
- When ordering cable or patchcords, determine in advance whether you need singlemode, multimode, simplex or duplex.
- When you need a product delivered overnight, place your order as soon as possible.

If you have a tight deadline, just call FIS. We'll assist you in every way we can.

FIS 38th Edition Catalog Available Soon!

Be on the lookout for the new 2015/16 FIS Product Catalog, coming soon in both print and online editions.

The catalog features many new products, pricing and solutions including a new FIS FIRECAT 2 series OTDR and our new bend insensitive Platinum Patch Cords.

Confirm your participation in the FIS catalog mailing list by contacting an FIS representative at 1-800-5000-FIS (347).

Come See Us

FIS will be exhibiting at the DAS & Small Cells Congress on June 8–10 in New Orleans, LA. Stop by Booth #100.