



Your Best Fiber Blowing Solution

Product Overview





Ever since 1996, Fremco A/S has specialized in the development and production of quality fiber blowing machines.

During the past two decades, we have accumulated a large unique knowledge of blowing techniques based on massive development within broadband in Scandinavia.

Today, we are ISO 9001 certified and offer a large range of products covering all dimensions of fiber/cables and ducts.

Your Best Solution

We want to be your best partner and offer you the most user-friendly solutions. To achieve this, we continue developing products in close collaboration with not only customers but also duct and cable manufactures worldwide.

Concurrently, we have developed a large range of specified accessories in close cooperation with leading suppliers meaning we can offer a total solution, which we call '*your best solution*'.



WITH FREMCO, YOU GET

RAPID BENEFITS

NO NEED FOR TOOLS



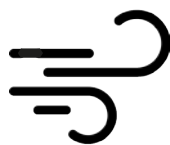
Configuration and installation with Fremco machines can be deployed without any usage of tools. This makes every fiber blowing job more effective as the machine can quickly be changed to blow different sizes of fiber/cable and ducts.

EASY CONFIGURATION



With attention to user-friendly design, Fremco machines have a minimum number of loose parts making it possible to configure the machine in only a few minutes. This way the user will have time to reach several fiber blowing jobs per day.

DURABLE



Fremco machines are designed, developed and optimized in collaboration with our customers. Together with our own experience, achieved by being part of the fiber blowing industry for over 25 years, each machine can withstand all weather and special fiber blowing conditions.

COMPETITIVE PRICING



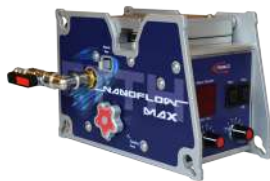
The development of Fremco machines is made with the customer in mind. The machines are of great quality, and with no unnecessary, expensive features. Our extended warranty and service agreement up to 60 months creates a great cost-benefit.

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PRODUCT OVERVIEW

Fiber Optic Cable Installation Machines



ACCU



110/230 V



110/230 V

Model	NanoFlow MAX	MicroFlow Touch	MicroFlow LOG
Typical Usage	Inside	Inside	Inside
Fiber/Cable OD	0.8-4.5 mm	0.8-6.5 mm	0.8-6.5 mm
Duct Size OD	3-12.7 mm	4-16 mm	4-16 mm
Item No. #	101-190911001	101-10051	101-171001001
Max Speed	125 m/min (410 ft)	90 m/min (295 ft)	90 m/min (295 ft)
Pushing Force	0-2 kg	-	-
Blowing distance	Up to 1,200 m	Up to 2,500 m	Up to 2,500 m
Rec. Airflow	200-400 l/min (7.1- 14.1 cfm)	200-500 l/min (7.1-17.7 cfm)	200-500 l/min (7.1-17.7 cfm)
Max. Pressure	10 bar (150 psi)	16 bar (230 psi)	16 bar (230 psi)
Length Width Height Weight	212 mm 104 mm 139 mm 2.8 kg (w/o battery)	Machine: 250 mm Control Box: 200 mm 150 mm 150 mm 220 mm 80 mm 10.5 kg 1.2 kg	Machine: 250 mm Control Box: 240 mm 150 mm 250 mm 220 mm 80 mm 10.5 kg 2.9 kg
Service requirement	Annually	Annually or every 350000 m	Annually or every 350000 m
Unique features	<ul style="list-style-type: none"> • Unique double fiber protection • Adjustable clamping force • Tool free installation • Lightweight but powerful 	<ul style="list-style-type: none"> • Anti-Buckle fiber detection • Adjustable torque • Preset automatic stop • Adjustable speed control 	<ul style="list-style-type: none"> • Access to OptiCloud • Possibility of job documentation & planned maintenance • Anti-buckle fiber detection

PRODUCT OVERVIEW

Fiber Optic Cable Installation Machines



HYDRAULIC



HYDRAULIC



HYDRAULIC







Model	MiniFlow RAPID	PowerFlow RAPID	MultiFlow RAPID
Typical Usage	Outside	Outside	Outside
Fiber/Cable OD	3-12 mm	5.5-25 mm	5.5-32 mm
Duct Size OD	7-20 mm	10-63 mm *	10-63 mm *
Part no. #	101-10031	101-40001	101-40002
Max Speed	100 m/min (325 ft)	80 m/min (260 ft)	80 m/min (260 ft)
Pushing Force	0-40 kg	0-125 kg	0-200 kg
Blowing distance	Up to 3,500 m	Up to 5,000 m	Up to 5,000 m
Floating distance	-	Up to 10,000 m	Up to 10,000 m
Rec. Airflow	1,000 l/min (35.3 cfm)	8,000-12,000 l/min (282.5-423.8 cfm)	8,000-12,000 l/min (282.5-423.8 cfm)
Max. air/water pressure	8-16 bar air (120-230 psi)	16 bar (230 psi)	16 bar (230 psi)
Max. hydraulic pressure	-	110 bar (1595 psi)	110 bar (1595 psi)
Length Width Height Weight	650 mm 225 mm 210 mm 24 kg	950 mm 400 mm 500 mm 45 kg	1050 mm 400 mm 500 mm 51 kg
Service requirement	Annually	Annually	Annually
Unique features	<ul style="list-style-type: none"> • Possible to reverse cable • Flexible adaptability • Adjustable torque, distance and speed measurement 	<ul style="list-style-type: none"> • Rugged, solid construction • Flexible • Tool free installation 	<ul style="list-style-type: none"> • Relining and single cable • Easy adjustable Flex block and inlet • Adjustable Torque Distance and Speed measurement

* Standard duct size OD for PowerFlow RAPID and MultiFlow RAPID: 14-60 mm

Custom made duct size OD for PowerFlow RAPID and MultiFlow RAPID: 10-13 mm & 61-63 mm

PRODUCT OVERVIEW

Fiber Optic Cable Dimensions

Cable Diameter (mm)	FTTH	ACCESS NET	BACKBONE
	  		 
0-1	<div>NanoFlow MAX</div> <div>Fiber OD: 0.8-4.5 mm</div> <div>Duct OD: 3-12.7 mm</div>		
1			
2			
3			
4			
5			
6	<div>MicroFlow TOUCH</div> <div>Fiber OD: 0.8-6.5 mm</div> <div>Duct OD: 4-16 mm</div>	<div>MiniFlow RAPID</div> <div>Fiber OD: 3-12 mm</div> <div>Duct OD: 7-20 mm</div>	
7			
8			
9			
10			
11			
12		<div>PowerFlow RAPID</div> <div>Fiber OD: 5.5-25 mm</div> <div>Duct OD: 10-63 mm</div>	<div>MultiFlow RAPID</div> <div>Fiber OD: 5.5-32 mm</div> <div>Duct OD: 10-63 mm</div>
13			
14			
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32			



Do not forget to sign a service agreement. Learn more on page 22-23.



NANOFLOW MAX

Fiber blowing machine for FTTH fibers (EPFU) and micro cables up to 4.5 mm

Adjustable clamping force

Secures grip around cable/fiber during installation.

Tool free installation

Easy to open and close by hand with quick load of fiber and duct. Adjustable speed and torque. Battery-powered (independent of 100V/240V).

LED display

Showing speed, distance, fiber protection and battery information.

Unique fiber protection technology

If the maximum recommended load on the fiber exceeds the preset torque, the machine stops the blowing process immediately without damaging the fiber.

Tested in accordance to IEC standards

INCLUDED

- 2 x 24V 2.0 Ah Lithium-ion battery with quick charger
- Filter and water separator
- 1 adaptor plate set.
- Steel drive wheel for fibers + 3 mm
- Drive wheel for fibers 0.8-3 mm
- Duct adaptors for 3, 5, 7, 8, 8.5, 10, 12 & 12.7 mm
- Quality transport box

POSSIBLE ACCESSORY ADD-ONS

Tripod with quick adaptor

Item No.: 103-161127005

Shoulder strap

Item No.: 103-160601074

Reel holder arm for pre-connected fiber

Item No.: 103-171020001

Steel drive wheel for up to 3 mm fiber

Item No.: 103-170515001

A wide selection of adaptor plates for any fiber/duct sizes on request

SPECIFICATIONS

Item No.:	101-190911001
Fiber diameter:	0.8-4.5 mm
Duct diameter:	3-12.7 mm
Blowing distance ¹ :	Up to 1,200 m
Blowing speed ² :	Up to 125 m/min
Pushing force:	0-2 kg
Recommended pressure and airflow ³ :	Max. 10 bar (200 l/pr. min.)
Weight:	3.5 kg
Length:	212 mm
Width:	104 mm
Height:	139 mm

¹) Depending on type of microduct and cable size. When blowing fibers above 3 mm, blowing distance is reduced.

²) Depending on type of microduct and cable.

³) Cooled and dried air.

ACCESSORIES FOR NANOFLOW MAX



Midi drum rack

Equipped with brakes that secures against fiber overflow that could disrupt the fiber blowing job. The drum rack has small wheels making it easy to transport. Furthermore, you can easily fold it together minimizing its size, so it can be transported in smaller cars.

Item No.: 103-211026001



Tripod

With a weight around 1.8 kg, the tripod is a great tool to improve your work environment. It can easily be setup and prepared with its quick adaptor. Afterwards you can fold it ensuring minimal capacity.

Item No.: 103-161127005



Sponges for duct cleaning

Save time and money by preparing the duct before initiating your fiber blowing job. Cleaning the duct prior to blowing the fiber create a smoother fiber blow.

- 5 mm for ID 2.5-4.0 mm (Item No.: 103-2005060)
- 8 mm for ID 4.0-6.0 mm (Item No.: 103-2008060)
- 12 mm for ID 6.0-9.0 mm (Item No.: 103-2012060)



FlowLUB 5000 & FlowLUB 5000 Wintergrade

FlowLUB 5000 is a special lubricant for mini fiber cable and micro cable. With FlowLUB 5000, you can lubricate the duct before and during fiber optic installation and it greatly reduces friction and static electricity.

FlowLUB 5000, Pack of 12 bottles (Item No.: 101-30531)
FlowLUB 5000, Pack of 12 bottles. Wintergrade (Item No.: 103-30533)

If you are in need of competent feedback on your fiber blowing project, do not hesitate to contact us.

Do not forget to sign a service agreement. Learn more on page 22-23.



MICROFLOW TOUCH

Fiber blowing machine for FTTH fibers (EPFU) and micro cables up to 6.5 mm

Equipped with a unique protection technology

The unique protection technology that stops the machine if the fiber cable meets resistance. Any obstacles are registered by a sensor and the motor stops. The machine will also stop automatically if the motor exceeds the preset maximum torque level. In both cases, the machine stops immediately so the fiber cable does not get damaged.

User-friendly touch display

The Microflow Touch's control unit has a user-friendly touch display, which can be used to make a number of different adjustments.

Present automatic stop

The control unit can be used to presetting distance counter to stop after a certain blowing distance, making it possible to work alone.

Adjustable torque and speed control

DON'T FORGET TO ORDER

Adaptor plate set

You can choose between adaptor plates for fiber sizes 0.8-6.5 mm.

Gasket sets

You can choose between gasket sets for adaptor plates 0.8-6.5 mm.

Sponges for duct cleaning

POSSIBLE ACCESSORY ADD-ONS

Valve for reverse airflow

Different variants between 5-12 mm duct.

Adaptor

Item No.: 103-30154

Blowing tips

Different variants between 2-6 mm.

FlowLUB 5000

Item No.: 103-30530

A wide selection of adaptor plates for any fiber/duct sizes on request

SPECIFICATIONS

Item No.:	101-10051
Cable diameter:	0.8-6.5 mm
Duct diameter:	4-16 mm
Blowing distance ¹ :	Up to 2,500 m
Blowing speed ² :	Up to 90 m/min
Recommended pressure and airflow ² :	8-16 bar (200-500 l/pr. min.)
Weight:	11.7 kg
Length ³ :	250 mm/200 mm
Width ³ :	150 mm/150 mm
Height ³ :	220 mm/80 mm

Powered by 24V DC electric motor. Electronic control unit and electronic meter speed/counter with presetting of blowing distance.

¹) Depending on type of microduct and cable.

²) Cooled and dried air.



ACCESSORIES FOR MICROFLOW TOUCH



Midi drum rack

Equipped with brakes that secures against fiber overflow that could disrupt the fiber blowing job. The drum rack has small wheels making it easy to transport. Furthermore, you can easily fold it together minimizing its size, so it can be transported in smaller cars.

Item No.: 103-211026001



Blowing tips

The fiber blowing tips prevents air from getting into the cable that is being blown, avoiding air reaching the cable drum. It provides weight to small fibers, making it easier to fiber blow.

- 2 mm for tip OD 2.5 mm (Item No.: K02S)
- 2.5 mm for tip OD 3.0 mm (Item No.: K02.5S)
- 3 mm for tip OD 3.5 mm (Item No.: K03S)
- 4 mm for tip OD 4.5 mm (Item No.: K04S)
- 5 mm for tip OD 5.5 mm (Item No.: K05S)
- 6 mm for tip OD 6.5 mm (Item No.: K06S)



Sponges for duct cleaning

Save time and money by preparing the duct before initiating your fiber blowing job. Cleaning the duct prior to blowing the fiber create a smoother fiber blow.

- 5 mm for ID 2.5-4.0 mm (Item No.: 103-2005060)
- 8 mm for ID 4.0-6.0 mm (Item No.: 103-2008060)
- 12 mm for ID 6.0-9.0 mm (Item No.: 103-2012060)



FlowLUB 5000 & FlowLUB 5000 Wintergrade

FlowLUB 5000 is a special lubricant for mini fiber cable and micro cable. With FlowLUB 5000, you can lubricate the duct before and during fiber optic installation and it greatly reduces friction and static electricity.

- FlowLUB 5000, Pack of 12 bottles (Item No.: 101-30531)
- FlowLUB 5000, Pack of 12 bottles. Wintergrade (Item No.: 103-30533)

If you are in need of competent feedback on your fiber blowing project, do not hesitate to contact us.

Do not forget to sign a service agreement. Learn more on page 22-23.



MICROFLOW LOG

Fiber blowing machine for FTTH fibers (EPFU) and micro cables up to 6.5 mm

Compatible with OptiCloud

Access to OptiCloud data gives you: Job documentation, utilization data (how the machine is utilized and data to improve it), maintenance and service recommendation. The LOG template can be individually adapted to the specific job.

Equipped with protection technology

The unique well-known protection technology that stops the machine if the fiber cable meets resistance. Any stop is registered by a sensor and the motor stops.

Verification of blowing quality

Each job will end with a full report that ensures that the quality is 100% documented. This will minimize the risk of costly errors.

Adjustable torque and speed control

DON'T FORGET TO ORDER

Adaptor plate set

You can choose between adaptor plates for fiber sizes 0.8-6.5 mm.

Gasket sets

You can choose between gasket sets for adaptor plates 0.8-6.5 mm.

Sponges for duct cleaning

POSSIBLE ACCESSORY ADD-ONS

Valve for reverse airflow

Different variants between 5-12 mm duct.

Adaptor

Item No.: 103-30154

Blowing tips

Different variants between 2-6 mm.

FlowLUB 5000

Item No.: 103-30530

A wide selection of adaptor plates for any fiber/duct sizes on request

SPECIFICATIONS

Item No.:	101-10051
Cable diameter:	0.8-6.5 mm
Duct diameter:	4-16 mm
Blowing distance ¹ :	Up to 2,500 m
Blowing speed ² :	Up to 90 m/min
Recommended pressure and airflow ² :	8-16 bar (200-500 l/pr. min.)
Weight:	13.5 kg
Length:	250 mm/240 mm
Width:	150 mm/250 mm
Height:	220 mm/80 mm

Powered by 24V DC electric motor. Electronic control unit and electronic meter speed/counter with presetting of blowing distance.

¹⁾ Depending on type of microduct and cable.

²⁾ Cooled and dried air.



ACCESSORIES FOR MICROFLOW LOG



Midi drum rack

Equipped with brakes that secures against fiber overflow that could disrupt the fiber blowing job. The drum rack has small wheels making it easy to transport. Furthermore, you can easily fold it together minimizing its size, so it can be transported in smaller cars.

Item No.: 103-211026001



Vent valve

If you reach too high an air pressure in the duct, the vent valve lets you easily decompress the micro duct without opening the machine.

Item No.: 103-140324003



Sponges for duct cleaning

Save time and money by preparing the duct before initiating your fiber blowing job. Cleaning the duct prior to blowing the fiber create a smoother fiber blow.

- 5 mm for ID 2.5-4.0 mm (Item No.: 103-2005060)
- 8 mm for ID 4.0-6.0 mm (Item No.: 103-2008060)
- 12 mm for ID 6.0-9.0 mm (Item No.: 103-2012060)



FlowLUB 5000 & FlowLUB 5000 Wintergrade

FlowLUB 5000 is a special lubricant for mini fiber cable and micro cable. With FlowLUB 5000, you can lubricate the duct before and during fiber optic installation and it greatly reduces friction and static electricity.

FlowLUB 5000, Pack of 12 bottles (Item No.: 101-30531)
FlowLUB 5000, Pack of 12 bottles. Wintergrade (Item No.: 103-30533)

If you are in need of competent feedback on your fiber blowing project, do not hesitate to contact us.

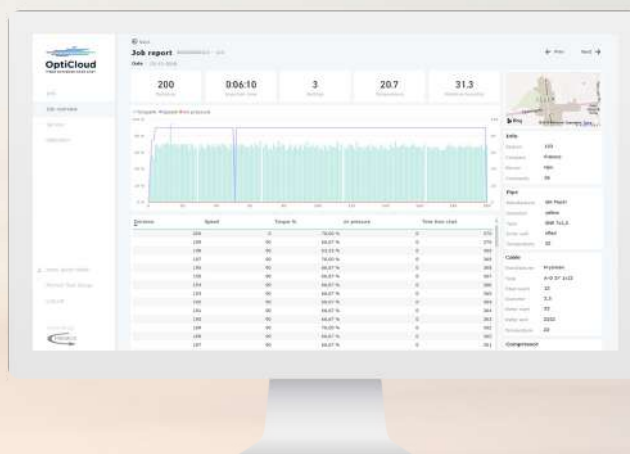


OptiCloud

FIBER DATABASE MADE EASY

User-friendly Data Management Tool

OptiCloud is a cloud based management tool included in the purchase of the Microflow LOG.



With OptiCloud, you get:

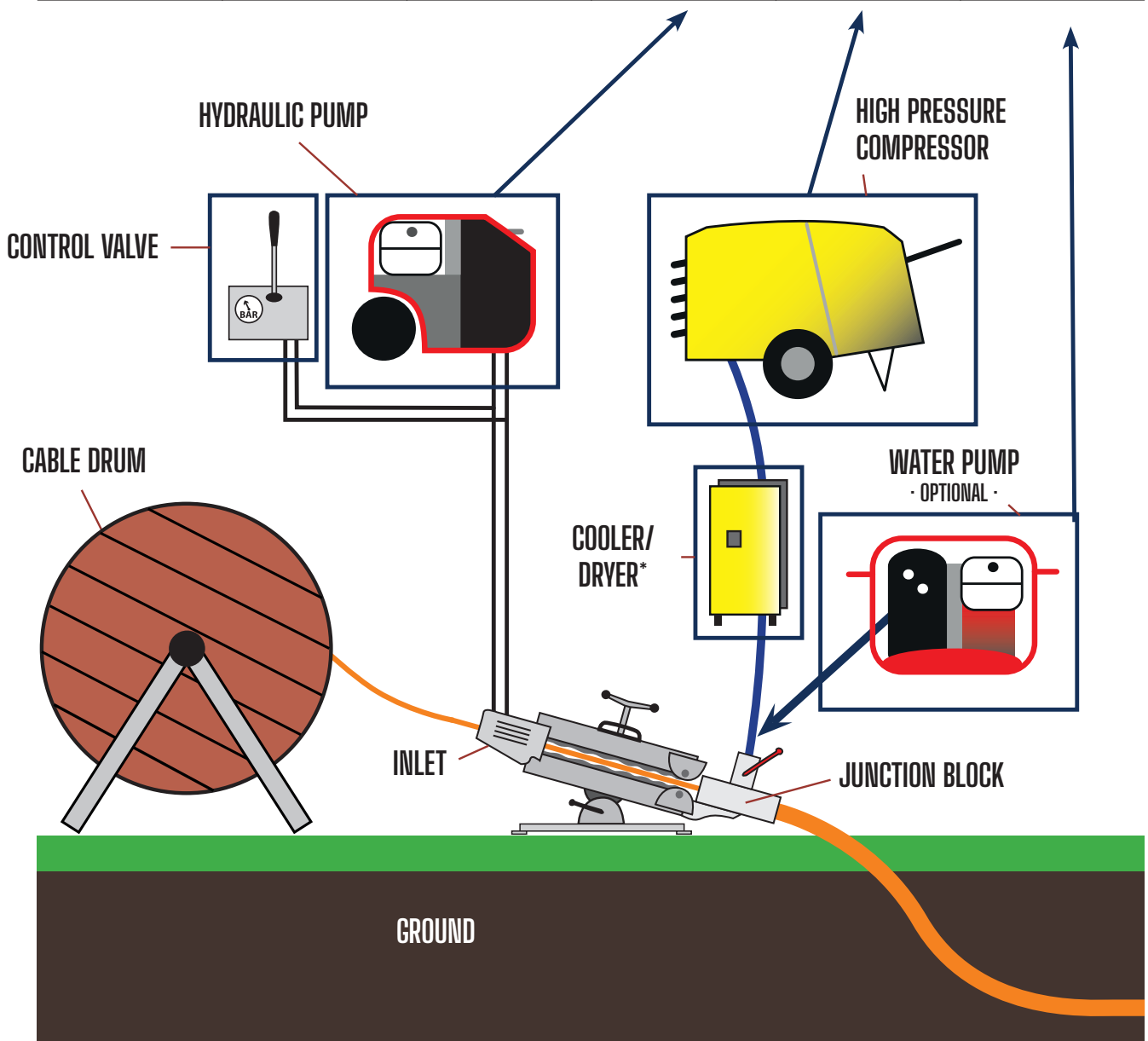
- A complete overview of your fiber blowing machines and the performed jobs.
- Possibility of planned service, minimizing the risk of having a machine that suddenly does not work.
- Easy access to a utilization overview of all machines, giving you the possibility to detect low performance.

Gain overview, create quality documentation in minutes and eliminate unnecessary high costs.

Learn more on www.opticloud.dk.

OVERVIEW OF POWER SOURCE

Model	24V Battery	110-220V AC Drive	Hydraulic drive	Compressed air	Water flush (Optional)
NanoFlow/ NanoFlow MAX	X			X → 200 l/min. Max. 10 bar	
MicroFlow Touch/LOG		X		X → 200-500 l/min. 8-16 bar	
MiniFlow RAPID			X	X → 1,000 l/min. 8-16 bar	X
PowerFlow RAPID			X	X → 12,000 l/min. 8-12 bar	X
MultiFlow RAPID			X	X → 12,000 l/min. 8-12 bar	X



*We always recommend using a cooler/dryer between the compressor and the blowing machine. High pressure air can achieve very high temperatures that can inflict cables and ducts melt damage. Cold and dry air will also improve the blowing length.

Do not forget to sign a service agreement. Learn more on page 22-23.



MINIFLOW RAPID

Cable blowing machine for access network

Rugged stainless construction

The machine is designed based on functionality including:

- Safety chain guard
- Adjustable knobs
- Push force indicator

Fast cable blowing

The machine is capable of installing fiber cable at a speed up to 100 m/min. and up to a distance of 3.5 km making it a compact and efficient cable blowing machine.

Built-in electronic counter and tachometer

The counter is easy to read, robust and simple to operate.

Robust and compact

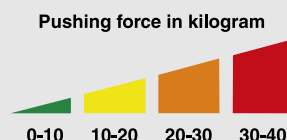
The machine is constructed in stainless steel and anodized aluminium, which makes it suited for use under rugged conditions at cable blowing locations.

Flexible

The machine can quickly be adapted to accommodate different cable and duct sizes making it flexible to fit every fiber blowing job.

Cable damage safety

MiniFlow RAPID has a unique monitoring system, which continuously monitors the pushing force applied on the fiber cable. This makes it easy to stop the process before any damage happens to the cable.



SPECIFICATIONS

Item No.:	101-10031
Cable diameter ¹ :	3-12 mm
Duct diameter:	7-20 mm
Blowing distance ² :	Up to 3,500 m
Blowing speed ² :	Up to 100 m/min
Pushing force:	0-40 kg
Recommended pressure and airflow ³ :	8-16 bar (1,000 l/pr. min.)
Weight:	24 kg
Length:	650 mm
Width:	225 mm
Height:	210 mm

¹) Two chains needed (3-8 mm/4-12 mm).

²) Depending on type of microduct and cable.

³) Cooled and dried air.

DON'T FORGET TO ORDER

- Hydraulic Power Pack/Control valve and high pressure compressor.

Item No.: 101-10102 & 101-10103

- Sponges for duct cleaning



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ACCESSORIES FOR MINIFLOW RAPID



Pack of sealings for MiniFlow RAPID

The MiniFlow RAPID have a large cable and duct diameter range. To make the blowing chamber as tight as possible, we have developed special seals. They are available in assortments that suit the total capacity of the machines. Single sizes supplement can be ordered in bulk.

The assortments are delivered in boxes where there is also room for e.g. adaptor plates and nylon inserts.

Item No.: 103-20611



Sponges for duct cleaning

Save time and money by preparing the duct before initiating your fiber blowing job. Cleaning the duct prior to blowing the fiber create a smoother fiber blow.

- 8 mm for ID 4.0-6.0 mm (Item No.: 103-2008060)
- 12 mm for ID 6.0-9.0 mm (Item No.: 103-2012060)
- 18 mm for ID 9.0 -14 mm (Item No.: 103-2018060)
- 28 mm for ID 14-21 mm (Item No.: 103-2028060)



FlowLUB 5000 & FlowLUB 5000 Wintergrade

FlowLUB 5000 is a special lubricant for mini fiber cable and micro cable. With FlowLUB 5000, you can lubricate the duct before and during fiber optic installation and it greatly reduces friction and static electricity.

FlowLUB 5000, Pack of 12 bottles (Item No.: 101-30531)

FlowLUB 5000, Pack of 12 bottles. Wintergrade (Item No.: 103-30533)



Quality hoses

Do not be afraid of compressed air - but treat it with respect! Our hoses are fitted with safety clamps and approved for any compressor. Available in several lengths.

Item No.: 103-30155

If you are in need of competent feedback on your fiber blowing project, do not hesitate to contact us.

Do not forget to sign a service agreement. Learn more on page 22-23.



POWERFLOW RAPID

Cable blowing machine for backbone with RAPID features

Time saving, user-friendly design

With its user-friendly design, the PowerFlow RAPID is easy to operate. The Flex block allows you to fasten the duct and cable to the machine easily without using tools. This saves you time when configuring the machine.

Tool free installation

When utilizing PowerFlow RAPID, the configuration and installation can be deployed without any usage of tools. This makes every fiber blowing job even more effective as the machine can quickly be adapted to blow different sizes of fiber/cable and ducts.

Adjustable Flex block

Each fiber deployment job is unique in regards to cable and duct dimensions, which is why the Flex block can easily be adjusted in its height and length. The adjustment is easily applied by hand ensuring an even better and faster job for the fiber blowing engineer.

Cable blowing using either air or water

It is possible to install fiber optic cables using either air or water. With water assisted cable floating, you can achieve optimal results, especially when installing large cables or blowing long distances.

SPECIFICATIONS

Item No.:	101-40001
Cable diameter ¹ :	5.5-25 mm
Duct diameter ² :	10-63 mm
Blowing distance ³ :	Up to 5,000 m
Floating distance ³ :	Up to 10,000 m
Pushing force:	0-125 kg
Blowing speed ⁴ :	Up to 80 m/min
Recommended pressure and airflow:	8-12 bar (8,000-12,000 l/pr. min.)
Max. air pressure:	16 bar
Max. hydraulic pressure:	110 bar
Weight:	45 kg
Length:	950 mm
Width:	400 mm
Height:	500 mm

¹⁾ Two chains needed (5.5-8 mm/8-16 mm/14-25 mm).

²⁾ Standard duct OD: 14 - 60 mm, Custom made duct OD: 10-13 mm & 61 -63 mm

³⁾ Depending on type of microduct and cable.

⁴⁾ Cooled and dried air.

DON'T FORGET TO ORDER

- Chains for cable
- Hydraulic Power Pack/Control valve and high pressure compressor.
Item No.: 101-10102 & 101-10103
- Sponges for duct cleaning



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ACCESSORIES FOR POWERFLOW RAPID

Blowing tips



The fiber blowing tips prevents air from getting into the cable that is being blown, avoiding air reaching the cable drum. It provides weight to small fibers, making it easier to fiber blow.

- 8 mm for tip OD 8.5 mm (Item No.: K08S)
- 9 mm for tip OD 9.5 mm (Item No.: K09S)
- 10 mm for tip OD 10.5 mm (Item No.: K10S)
- 11 mm for tip OD 11.5 mm (Item No.: K11S)
- 12 mm for tip OD 12.5 mm (Item No.: K12S)
- 13 mm for tip OD 13.5 mm (Item No.: K13S)
- 14 mm for tip OD 14.5 mm (Item No.: K14S)



Pack of sealings for PowerFlow RAPID

The PowerFlow RAPID have a large cable and duct diameter range. To make the blowing chamber as tight as possible, we have developed special seals. They are available in assortments that suit the total capacity of the machines. Single sizes supplement can be ordered in bulk. The assortments are delivered in boxes where there is also room for e.g. adaptor plates and nylon inserts.

Item No.: 103-20611

Sponges for duct cleaning



Save time and money by preparing the duct before initiating your fiber blowing job. Cleaning the duct prior to blowing the fiber create a smoother fiber blow.

- 12 mm for ID 6.0-9.0 mm (Item No.: 103-2012060)
- 18 mm for ID 9.0-14 mm (Item No.: 103-2018060)
- 28 mm for ID 14-21 mm (Item No.: 103-2028060)
- 45 mm for ID 21-35 mm (Item No.: 103-2045060)
- 50 mm for ID 25-45 mm (Item No.: 103-2050060)
- 60 mm for ID 30-50 mm (Item No.: 103-2060060)



FlowLUB 2000

FlowLUB 2000 is a special lubricant for mini fiber cable and micro cable. With FlowLUB 2000, you can lubricate the duct before and during fiber optic installation and it greatly reduces friction and static electricity.

FlowLUB 2000, Pack of 12 bottles (Item No.: 101-30541)

If you are in need of competent feedback on your fiber blowing project, do not hesitate to contact us.

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MULTIFLOW RAPID

Flexible cable blowing machine for backbone.

Effective for both for single cable and relining

This machine is very flexible as it can both be configured for single cable and for relining. It can blow many different combinations of ducts and microducts.

Tool free installation

When utilizing MultiFlow RAPID, the configuration and installation can be deployed without any usage of tools. This makes every fiber blowing job even more effective as the machine can quickly be adapted to blow different sizes of fiber/cable and ducts saving you a lot of time.

Adjustable Flex block

Each fiber deployment job is unique in regards to cable and duct dimensions, which is why the Flex block can easily be adjusted in its height and length. The right placement in regards to the chains secures the fiber and duct. The adjustment is easily applied by hand and without any tools.

Cable blowing with either air or water

It is possible to install microducts and fiber optic cables using either air or water. With water assisted cable floating, you can achieve optimal results, especially when installing large cables or blowing long distances.

SPECIFICATIONS

Item No. (Single Cable):	101-40021
Item No. (Relining):	101-40002
Cable diameter ¹ :	5.5-32 mm
Duct diameter ² :	10-63 mm
Blowing distance ³ :	Up to 5,000 m
Floating distance ³ :	Up to 10,000 m
Pushing force:	0-200 kg
Blowing speed ⁴ :	Up to 80 m/min
Recommended pressure and airflow :	8-12 bar (8,000-12,000 l/pr. min.)
Max. air pressure	16 bar
Max. hydraulic pressure	110 bar
Weight:	51 kg
Length:	1050 mm
Width:	400 mm
Height:	500 mm

¹) Two chains needed (5.5-8 mm/8-16 mm/14-32 mm).

²) Standard duct OD: 14 - 60 mm, Custom made duct OD: 10-13 mm & 61 -63 mm

³) Depending on type of microduct and cable.

⁴) Cooled and dried air.

DON'T FORGET TO ORDER

- Chains for cable or microduct
- Hydraulic Power Pack/Control valve and high pressure compressor.
Item No.: 101-10102 & 101-10103
- Sponges for duct cleaning



FREMCO A/S DENMARK
EMAIL: SALES@FREMCO.DK | TELEPHONE: +45 72 30 12 13 | WWW.FREMCO.DK

ACCESSORIES FOR MULTIFLOW RAPID



Relining accessories

Relining of micro ducts in buried sub ducts is successfully used in many markets. Besides the MultiFlow RAPID (designed for this purpose), we have a comprehensive range of accessories for the whole process. The components that allow the microducts to be set under air pressure are illustrated in the picture. Valves for microducts are available in the following sizes: 7, 10, 12, 14 and 16 mm.



Pack of sealings for MultiFlow RAPID

The MultiFlow RAPID have a large cable and duct diameter range. To make the blowing chamber as tight as possible, we have developed special seals. They are available in assortments that suit the total capacity of the machines. Single sizes supplement can be ordered in bulk. The assortments are delivered in boxes where there is also room for e.g. adaptor plates and nylon inserts.

Item No.: 103-20611



Sponges for duct cleaning

Save time and money by preparing the duct before initiating your fiber blowing job. Cleaning the duct prior to blowing the fiber create a smoother fiber blow.

- | | | |
|--|--|--|
| • 12 mm for ID 6.0-9.0 mm
(Item No.: 103-2012060) | • 28 mm for ID 14-21 mm
(Item No.: 103-2028060) | • 50 mm for ID 25-45 mm
(Item No.: 103-2050060) |
| • 18 mm for ID 9.0-14 mm
(Item No.: 103-2018060) | • 45 mm for ID 21-35 mm
(Item No.: 103-2045060) | • 60 mm for ID 30-50 mm
(Item No.: 103-2060060) |



FlowLUB 2000

FlowLUB 2000 is a special lubricant for mini fiber cable and micro cable. With FlowLUB 2000, you can lubricate the duct before and during fiber optic installation and it greatly reduces friction and static electricity.

FlowLUB 2000, Pack of 12 bottles (Item No.: 101-30541)



Calibration probe

Our probe is intended for use with PowerFlow RAPID and MultiFlow RAPID to check/calibrate 32, 40 and 50 mm buried sub ducts.

The probe is sent (with air pressure) through a duct prior to the installation of a cable. The length and size of the probe reveals whether there are sharp curves, fractures or impurities in the duct (it is important to mount a catch at the opposite end of the duct).

If the probe gets stuck, it can be tracked at 33 KHz. The probe can also be mounted on a cable rod so that it can be retracted manually or with the machines.

Item No.: 103-10490

If you are in need of competent feedback on your fiber blowing project, do not hesitate to contact us.

THE MOST EXPENSIVE MACHINE IS THE ONE *NOT* IN USE...

This is why it pays of signing a service agreement, securing quality service of your machine from day one.

Our service agreements ensure your machine gets serviced when its necessary - not before or after.

A preventative service and maintenance reduces the risk of downtime and prolongs the machine lifespan.

Your benefits

Financial safety with a service agreement You save money compared to the actual price on service.	No unexpected expenses Repair in case of machine malfunction is included within the warranty. Standard parts for an annual service are also included* (*no wear and tear parts included).
Fixed monthly, annual or onetime payment available creating total overview of expenses.	Quality machine service ... performed at an authorized service center.
Minimal downtime Access to a loan unit in case of unplanned breakdown or planned service.	

How secure the best performance of your machine?



You receive your new machine.



Go to fremco.dk/products/service-agreement/



Enter your details. You will be invoiced monthly, annually or by a onetime fee.



Congratulations! You are now covered.

EXTENDED WARRANTY AND SERVICE AGREEMENT OPTIONS IN DETAILS

Extended warranty options	36-month warranty period	36-month service agreement with warranty	60-month service agreement with warranty
Available where?	EU countries	EU countries	EU countries
Payment options	One time fee: €900 (for 36 months)	Monthly fee: €65 Annual fee: €725 Onetime fee: €2.000 (for 36 months)	Monthly fee: €65 Annual fee: €725 Onetime fee: €3.450 (for 60 months)
Benefits	<ul style="list-style-type: none"> • Free repair of machine malfunction within the Agreement² • Return freight covered by the Service Center 	<ul style="list-style-type: none"> • One free annual service (labour cost included)¹ • One free annual service kit/spare part kit (value up to 430 EUR) • Extended warranty up to 60 months¹ • Access to a lending machine sent from Fremco within 48 hours¹ • Free repair of machine malfunction within the Agreement² • Return freight covered by the Service Center 	

¹ Special conditions apply. Learn more about these conditions in the general Terms and Conditions for service agreement. for the excluding wear and tear parts. Spare parts kits/service kit are included.

² Claims caused by incorrect usage of the Machine, not in accordance with the operating manual, maintenance guide, Fremco e-learning, or current regulations, is not covered by the Agreement.

You can buy a service agreement or extended warranty within a month of your machine purchase.

Learn more about the service agreement and warranty offers on www.fremco.dk.

Terms and conditions

For more insight into the terms and conditions of the agreement, we refer to the General Terms and Conditions of Service agreement. This is forwarded to you by your Fremco service center.

HYDRAULIC MULTIPOWER PACK

The optimal power source for Fremco hydraulic machines



- Equipped with a unique cooling system
- Engine Honda GX200QX7 6.5 HP (gross power)
- 4-stroke petrol with oil alert system
- Reliable and compact

SPECIFICATIONS

Item No.:	101-10102 & 101-10103
Hydraulic oil tank capacity:	min. 5l/max. 7l
Working pressure nominal:	100 bar
Pressure relief valve set at:	110 bar
Guaranteed sound power level LWA:	100 dB
Oil temperature:	Max. 70° C
Weight (w/o hydraulic oil):	54 kg
Length:	630 mm
Width:	530 mm
Height:	510 mm

WHY A HYDRAULIC MACHINE?

Fremco's access network and backbone machines are hydraulic driven. Hydraulic driven fiber blowing machines are more effective and have a significantly lower total cost of ownership compared to an air driven machine.

Main advantages when using Fremco's hydraulic driven fiber blowing machines are:

- Rugged & dependable
- No performance loss
- Significantly lower maintenance costs and lower Total Cost of Ownership than air driven machines
- Can operate in forward & reverse
- Proven performance in extreme harsh environments and weather conditions (cold, hot, wet or dry)
- Installs fiber optic cable over long distances and produces maximum pushing force to the cable

Flexible Control Unit

- Stepless speed control and oil flow control
- Instant forward and backward movement via the joystick
- Gauge for monitoring oil pressure
- Used with Fremco's hydraulic machines

SPECIFICATIONS

Item No.:	103-10041
Hydraulic connection:	125 bar/17l min
Gauge:	160 bar air
Hose to fiber blowing machine:	1,500 mm
Hose to hydraulic pump:	1,500 mm
Weight:	5 kg
Length:	250 mm
Width:	250 mm
Height:	310 mm



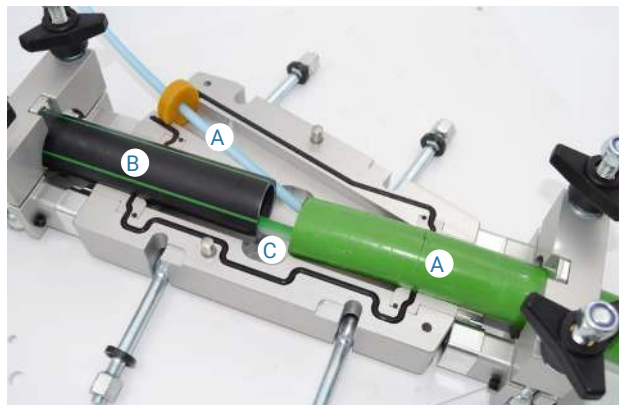
FREMCO BLOCKS

Y-Block



The Y-block, used for overblow, can assist you in adding one cable to an existing duct where another cable is installed. Its surface is treated aluminium and it can withstand air/water pressure up to 25 bar.

With Fremco's customized duct holder and adaptors, the Y-Block is more flexible than ever as it can be fitted into different sizes of ducts between 14 mm and 65 mm. This means you can modify both ends of the Y-block to fit each specific overblow.



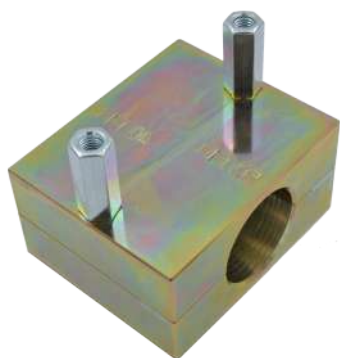
A) Existing cable or duct, B) Supply duct, C) New cable

Direct Air Connection

When utilizing the Y-block, especially with smaller Fremco machines, the Y-block is featured with a direct air connection in the lid. The direct connection of air makes it possible to do overblow with fewer steps, saving time for the fiber blowing engineer

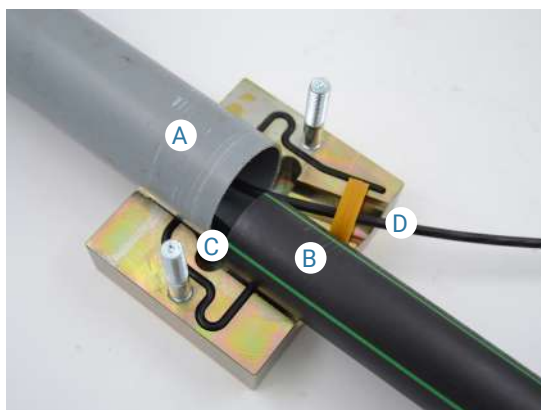
Item No.: 103-201112003

Mini Y-Block



The Mini Y-block is made with either 40-40 mm and/or 50-40 mm fixed connection. This means it can be freely reversed and connected to similar existing ducts in the ground.

Uses the same cable sealings as the rest of the Fremco blocks



A) 50 mm existing duct, B) 40 mm supply duct
C) New cable, D) Existing cable

Fits in the handhole

The Mini Y-block fits in most of the smaller handholes. It can withstand air/water pressure up to 25 bar.

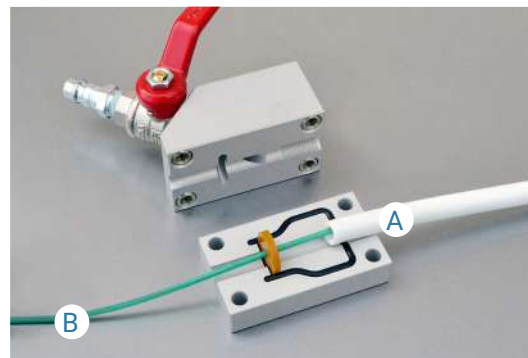
Upon request other custom made sizes can be produced.

Item No (40-40 mm): KA60500-40

Item No (50-40 mm): KA60500-50

FREMCO BLOCKS

Mini Blowing Junction Block Kit



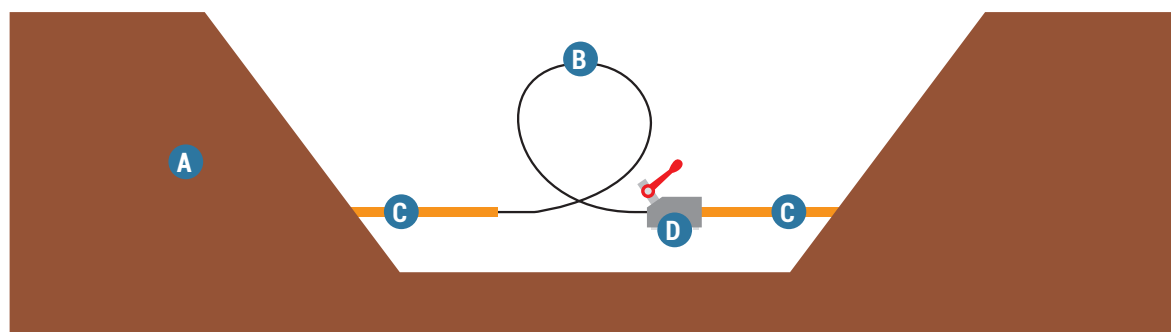
A) Microduct, B) Cable

The mini blowing junction block is used for straightening a cable when blowing in two directions, and when there is a loop left because the regular blowing machine does not fit into the excavation (see illustration below). It is the perfect accessory for a MiniFlow RAPID.

The mini blowing junction block can also be used to blow a cable (by hand in short distances) from a narrow spot

where there is no room for a regular blowing machine. It's made from surface treated aluminium and can withstand the same air pressure as the MiniFlow Rapid. The mini blowing junction block uses the same type of cable seals as the MiniFlow RAPID.

Item No.: 103-180314001



- A) Ground
- B) Cable with loop after blown in both directions
- C) Microduct
- D) Mini blowing junction block

Interested in knowing more?
Visit our webpage today at
www.fremco.dk



BENEFITS OF BEING A FREMCO RESELLER

We treasure local knowledge and availability, which is why we sell our machines through selected resellers.

Your benefits

- **Part of a global Fremco Family**

Being a part of the Fremco Family gives you a community across borders in which you can network with other companies from the same industry. You can always get support directly from Fremco, where the end goal is to create lucrative business for all parties involved.

- **Access to Fremco Academy**

Fremco Academy is our unique training and education platform into Fremco machines and fiber blowing knowledge. All our resellers are certified and we give you continued training from the first day you become an official reseller.

- **Part of Fremco quality and get a great return of investment**

We are an approved manufacturer of fiber blowing machines since 1996 – and our first machines are still functioning and working in the field. When becoming a Fremco reseller, you become a part of the Fremco brand. This means we can offer quality products that are competitively priced giving you a possibility to optimize your business as well as your customers' businesses.

- **3-day delivery time**

You can always expect that we will pack and dispatch your order in 3 working days from final order confirmation. This is the fastest delivery time in the business.

- **Your best partner**

We strive towards being your best partner, meaning that our fiber blowing solutions and the investment in a Fremco fiber blowing machine makes a substantial contribution to our customers' business, whether you are a reseller, contractor or installer.

We are also the first manufacturer to offer service agreement up to 60 months including warranty on all our fiber blowing machines.



How to become a Fremco reseller and gain the above benefits?
Contact us today and hear more

Want to know more?
Visit us at www.fremco.dk



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Youtube.com/FremcoTV

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