

**BIOTECH**

**DEGASi<sup>®</sup>**

ELIMINATES TROUBLES  
WITH BUBBLES



# NO TROUBLES WITH BUBBLES ANYMORE



– prevent bubble formation in your fluidic system with BIOTECH DEGASi<sup>®</sup> line of degassers.

## CONTENT

3	NO TROUBLES WITH BUBBLES ANYMORE	
6	GET RID OF DISSOLVED GASSES	
7	THE DEGASSING CHAMBER	
7	THE HEART OF OUR DEGASi <sup>®</sup> -LINE	
8	INCREASE THE QUALITY USING	
8	SYSTEC <sup>®</sup> ZHCR AND SYSTEC AF <sup>™</sup>	
9	SYSTEC AF <sup>™</sup> MEMBRANE	
11	DEGASi <sup>®</sup> PLUS SERIES	
13	DEGASi <sup>®</sup> PLUS CLASSIC	New
15	DEGASi <sup>®</sup> PLUS GPC	New
17	DEGASi <sup>®</sup> PLUS MICRO	New
19	DEGASi <sup>®</sup> PLUS SEMI-PREP	New
21	DEGASi <sup>®</sup> PREP	
23	DEGASi <sup>®</sup> PREP+	New
25	DEGASi <sup>®</sup> COMPACT	New
27	DEGASi <sup>®</sup> HIGH FLOW 1000	New
28	DEGASSING SPARE PARTS & UPGRADES	
29	DEGASSER TUBING KITS	
30	SPECIAL TAILORED OEM DEGASSERS	
31	DEGASSING APPLICATIONS	

Dissolved gasses in a fluidic system can often cause troubles. When the pressure or the temperature changes, the dissolved gasses can form bubbles which affect the accuracy, precision and performance of your equipment. On-line degassing is a very efficient way of removing dissolved gasses from the liquid and preventing bubble formation.

### WHAT IS THE FUNDAMENTAL DIFFERENCE BETWEEN A DEGASSER AND A DEBUBBLER?

The Degasser removes gasses dissolved in the mobile phase/ flow systems. The Debubbler catches and removes bubbles visible to your eyes. For further information regarding debubblers - contact us!

### BIOTECH DEGASi<sup>®</sup> SERIES ARE DESIGNED TO REMOVE DISSOLVED GASSES FROM A SOLVENT

The degassers can be employed in all type of applications where gasses dissolved in the operating liquid may interfere with the use of the system. Degassing is an absolute requirement to get optimal performance out of your analytical instrumentation or chromatography system! The use of a BIOTECH DEGASi<sup>®</sup> system will save you time and money by avoiding interruptions in your production.

The BIOTECH DEGASi<sup>®</sup> line is easy to use and provides reliable continuous operation for many years. The extremely low internal volume of the Systec AF<sup>™</sup> tubing used in the degasser provides for quick equilibration and very short startup times, compared to the use of a degasser which uses PTFE<sup>®</sup> degassing channels with the same degassing efficiency. The product range includes eight different degassers where you select a model depending on the flow rate and what type of solvent used.

LET THE FLOW VOLUME  
GUIDE THE CHOICE OF DEGASi<sup>®</sup>

# A BIOTECH DEGASi®

# FOR EVERY APPLICATION



GENERAL PURPOSE

GPC ELUENT

LIMITED VOLUME

SEMI-PREP

PREP

ORGANIC SOLVENTS

COMPACT APPLICATION

HIGH FLOW 1000

System AF™ Internal Volume	480 µl	480 µl	100 µl
No of Channels	1-6	1-6	1-6
Biocompatible Flow Path	Yes	No, Stented	Yes
Approximate Max Flow Per Channel (ml/min)	3	3	0.5
Inner Dimension Flow Path (mm)	1.14	1.14	1.14

925 µl	5.3/13.8 ml	23 ml	285 µl	200 ml (silicone)
1-6	2	1, 2, 4	2, 4, 6	1
Yes	No/Yes	Yes	Yes	Yes
6	15/50	75-100	2	1000
1.14	1.91	N/A	0.89	N/A

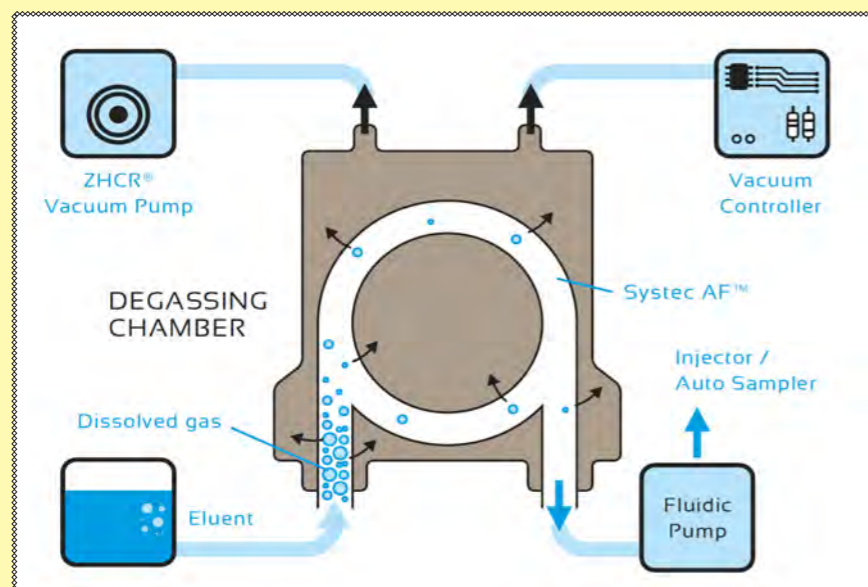
# GET RID OF DISSOLVED GASSES WITH OUR DEGASi®-LINE

The critical component of the vacuum degasser is a short length of Systec AF™ tubing through which the solvent flows. This tubing is located in a chamber where a partial vacuum is maintained by a vacuum pump that is constantly running at a low speed. Dissolved gasses migrate across the tubing wall under a concentration gradient produced by the vacuum as the solvent flows within the tubing in accordance with Henry's law. The gasses are expelled from the system and the chamber is maintained at a constant, preset vacuum level by varying the vacuum pump speed as needed. A special

port in the vacuum pump continually flushes the pump head with a small "bleed" of air to remove any solvent vapors which may enter the pump from the vacuum chamber. This air bleed eliminates the need for any solenoid valves within the system. This patented design results in zero vacuum "hysteresis".

It is not necessary to totally eliminate the dissolved gas, it only needs to be reduced to a concentration that is below the saturation point of the mixture. Typically, ~50% must be removed.

## DEGASSING EXPLAINED



## THE PRINCIPLE OF OUR DEGASi®-LINE

Dissolved gasses are actively removed from a flowing liquid stream by vacuum via the Systec AF™ membrane.

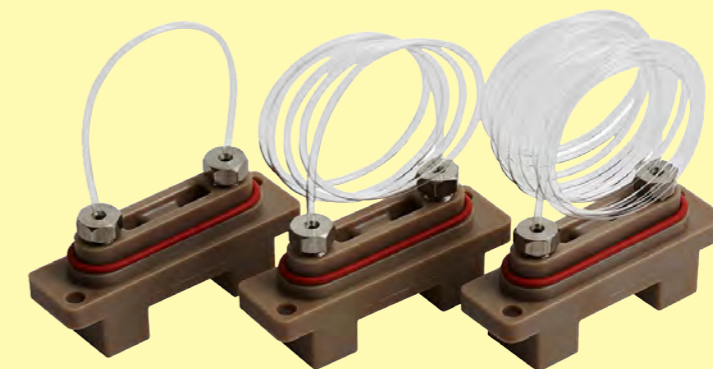
# THE DEGASSING CHAMBER THE HEART OF OUR DEGASi®-LINE

## THE SECRET REVEALED

The Systec AF™ membrane is an essential part of the degassing process. Systec AF™ consists of an amorphous perfluorinated copolymer. Through the highly permeable membrane the dissolved gasses are removed, by applying vacuum on the outside of the membrane, while the liquid stays on the inside.

The flow path is inert and most of our different degassing chambers have a biocompatible flow path. Every vacuum chamber is manufactured with the highest quality and tested individually to ensure top-of-the-line performance.

Depending on your needs regarding conditions such as type of solvents and flow rates, we can help you determine the size of the vacuum chamber that will be optimal for your application.



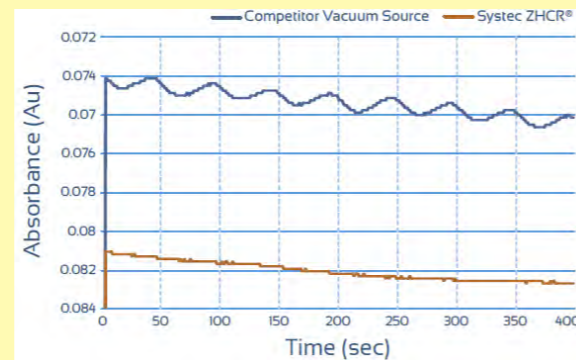
# INCREASE THE QUALITY USING SYSTEC® ZHCR AND SYSTEC AF™



## SYSTEC® ZHCR VACUUM PUMP

Introducing the ZHCR® (Zero Hysteresis Constant Run) stepper motor driven vacuum pump, designed and developed for membrane degassing of HPLC mobile phase and other fluids used in Analytical Instrumentation.

Employing a micro-stepping closed loop vacuum control strategy permits the pump to maintain a constant vacuum level set-point\* by varying the RPM of the stepper motor. The pump initially runs at a high speed which provides for a quick pull down and, as it approaches the vacuum control point, the RPM is gradually reduced until the desired vacuum level is reached. This patented control strategy allows the On-Line Degasser to maintain a virtually constant vacuum that is unaffected by varying degassing loads. As a consequence, fluctuations in baseline due to vacuum hysteresis are eliminated by not having the pump repeatedly stop and start as is done in many older and existing systems.



Typical Degassing Fluctuations from Vacuum Sources

Fluctuations in detector baseline of a single-speed pump compared to the patented technology of the Systec ZHCR® pump. \* UV detector baseline fluctuations are minimal when compared to traditional stop and start vacuum sources.

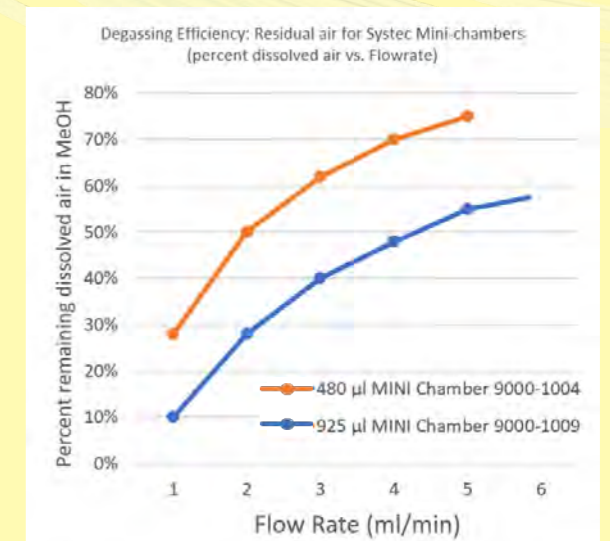
\*Vacuum chamber consists of 285 µl of Systec AF™ tubing; flow rate is 1 ml/min, eluent is methanol; wavelength is 215 nm.

\*50 mmHG for most models and 80 mmHG for Prep

# SYSTEC AF™ MEMBRANE

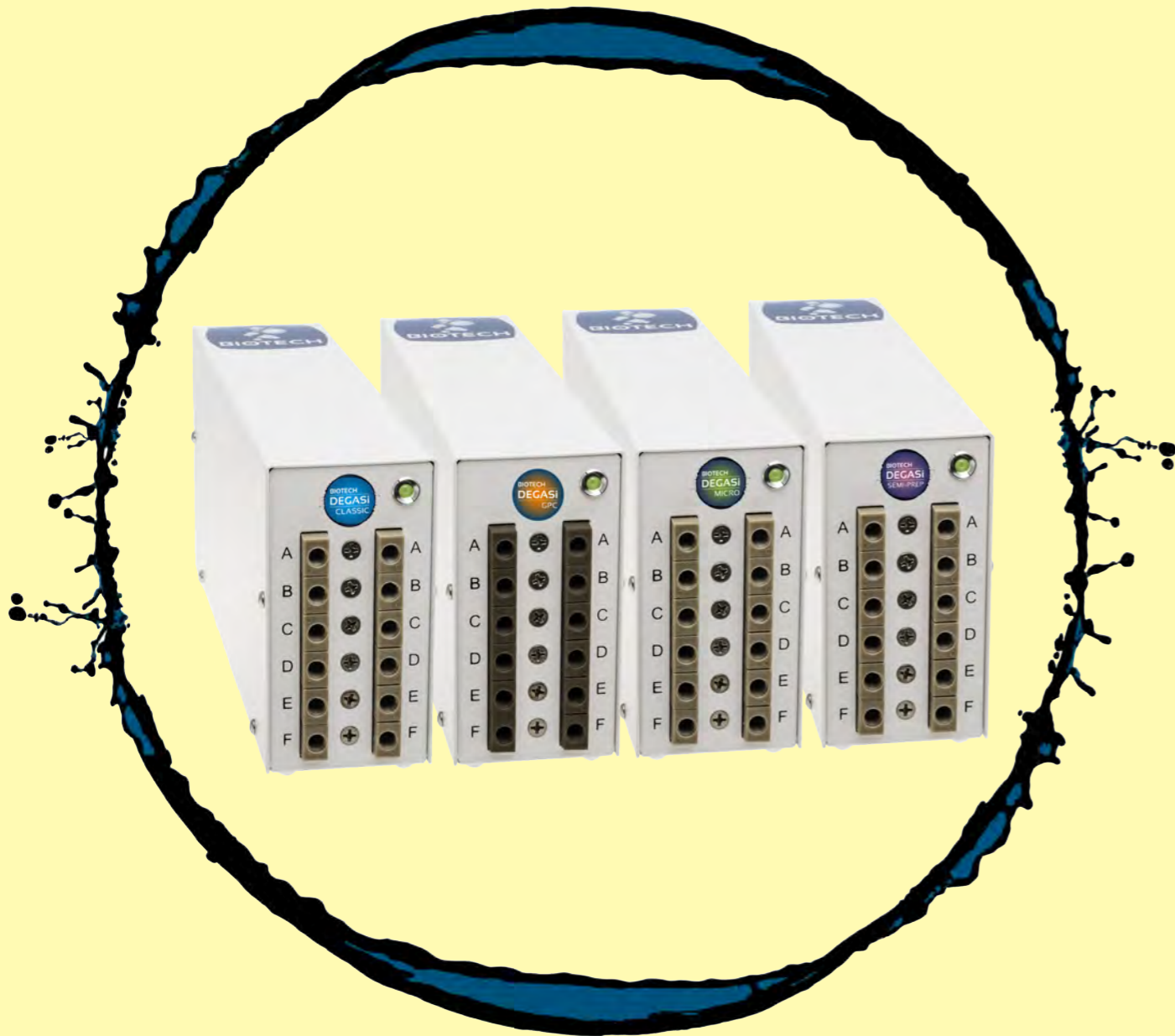
The new Systec AF™ membrane is 50x more permeable and outperforms the older Teflon® PTFE membranes used in many other degassing systems today. This translates into the ability to use shorter tubing for removal of dissolved gasses.

- Ultra-high degassing efficiency
- Low volume
- Considerably shorter equilibration times
- Very easy to prime
- Short vacuum pull-down times, typically 30 seconds
- Single lumen design for consistent degassing
- Inert flow path
- Excellent chemical compatibility flow path
- Long lifetime



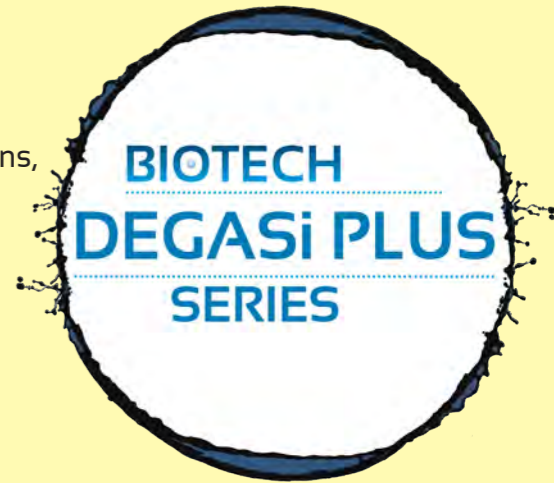
Plot shows remaining dissolved air in methanol using a selection of Systec Mini-Chambers\*. The range of chambers and specifications offered provide ample solutions for system designs.

\* Water and Methanol mixtures between 30 % and 70 % methanol will outgas when more than 38 % dissolved air remains in each of the solvents. Other water and organic mobile phases being mixed using a low pressure gradient system will undergo similar outgassing.



# DEGASi® PLUS SERIES

Our latest addition to the DEGASi® standalone series is the DEGASi® PLUS. It can be equipped for a wide range of applications, depending on what kind of performance you need.



*"It's small, smart & silent..."*

## THE FIRST CHOICE

DEGASi® PLUS is a further development of degassers such as:

- DEGASi® Classic
- DEGASi® Micro
- DEGASi® GPC
- DEGASi® Semi-Prep

## FEATURES

- Much smaller footprint, height and weight
- New vacuum pump using a smart board
- Almost silent
- Available with 1-6 channels
- Parallel connected vacuum chambers
- Easier accessibility and visibility
- Easier troubleshooting and replacement of parts
- Short lead time

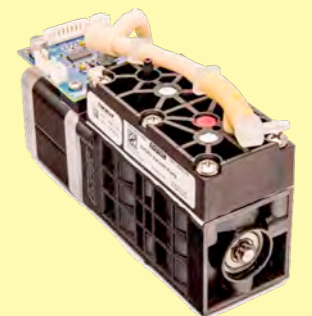
The old DEGASi® CLASSIC and GPC are replaced by the DEGASi® Plus series:



Old DEGASi® CLASSIC



Old DEGASi® GPC



All DEGASi® PLUS Units are delivered with a Systec ZHCR Vacuum Pump with Smart Board

Old Part Number	Number of Channels	New Part Number	Part number	Number of Channels	New Part Number
0001-6352-A	2	0003-6352-AI	0001-6622	2	0003-6622
0001-6353-A	3	0003-6353-AI	0001-6623	3	0003-6623
0001-6354-A	4	0003-6354-AI	0001-6624	4	0003-6624
0001-6355-A	5	0003-6355-AI	0001-6625	5	0003-6625



## DEGASI® PLUS CLASSIC

This is the first choice for most applications in analytical instrumentation and chromatography.

This state-of-the-art stand alone degasser will provide you with trouble free and efficient degassing day after day.



*“an all-round degasser for most applications in your lab...”*

### THE FIRST CHOICE

With the highly permeable Systec AF™ membrane, an internal degasser chamber volume of only 480 µl is sufficient to give you excellent degassing efficiency, up to flow rates of approximately 3 ml/min. The time the liquid spends inside the vacuum chamber is correlated to the degassing efficiency, so with higher flow rate the degassing efficiency will be lowered. In many cases the 480 µl vacuum chamber can be used at 5 ml/min with sufficient degassing.

Part Number	Number of Channels	Internal Volume
0003-6351-A	1	480 µl
0003-6352-A	2	480 µl
0003-6353-A	3	480 µl
0003-6354-A	4	480 µl
0003-6355-A	5	480 µl
0003-6356-A	6	480 µl

### PRODUCT FEATURES

- Very good chemical compability flow path
- Biocompatible flow path
- For aggressive organic solvents please contact Biotech
- Ultra-high degassing efficiency
- Fits every system
- Long life expectancy 5+ years continuous (24/7) running capacity
- Easy to prime
- Almost silent
- Closed loop vacuum control means constant vacuum (variable RPM)
- ZHCR® patented control eliminates baseline fluctuations
- Continuous vacuum system monitoring to ensure optimum operational conditions are maintained
- Advanced error and leak checking functions
- CE & RoHS compliant

### GENERAL SPECIFICATIONS

#### Degassing Channel Tubing:

Systec AF™ (0.045" ID)

#### Maximum Channel Pressure:

70 PSI

#### Wetted Materials:

Systec AF™, PEEK, Glass-filled PTFE

#### Liquid Connection:

1/4"-28 UNF threaded flat-bottom port

#### Size (L x H x W):

245 x 111 x 59 mm

### POWER REQUIREMENTS USING SUPPLIED AC ADAPTER

24 V Power supply included.  
Required input to power supply:  
110-240 V 50/60 HZ

Wall Sockets: 4 supplied with AC Adapter, Interchangeable: North America, Japan, U.K., Continental Europe, Australia



## DEGASi® PLUS GPC

is the right choice of degasser if you are working with 100 % organic solvents in your fluidic line. Example of application areas where this degasser is successfully used are GPC (Gel Permeation Chromatography) and Normal Phase Chromatography.

*“when you are using 100 % organic solvents in your fluidic line...”*

### WHAT IS UNIQUE

DEGASi® GPC uses the same 480 µl Systec AF™ degassing membrane as used in DEGASi® Classic. The main difference compared with the DEGASi® Classic is that we use a stented version of the vacuum chamber in the DEGASi® GPC.

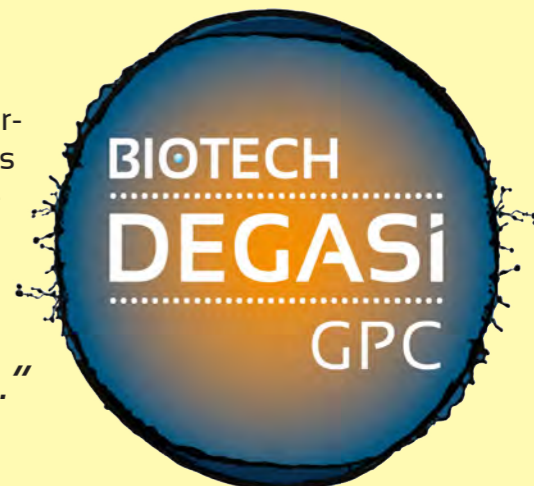
The stent is a short piece of a stainless steel tube placed inside the ends of the degassing membrane, in order to make the internal ferrule in the bulkhead to get a better grip. This solution makes an even more secure internal

connection when working with 100 % organic solvents in the fluidic line.

### PRODUCT FEATURES

- Outstanding chemical compatibility flow path
- Ultra-high degassing efficiency
- Fits every system
- Long life expectancy 5+ years continuous (24/7) running capacity
- Easy to prime
- Almost silent
- Closed loop vacuum control means constant vacuum (variable RPM)
- ZHCR® patented control eliminates baseline fluctuations
- Excellent chemical compatibility flow path
- Continuous vacuum system monitoring to ensure optimum operational conditions are maintained
- Advanced error and leak checking functions
- CE & RoHS compliant

Part Number	Number of Channels	Internal Volume
0003-6621	1	480 µl
0003-6622	2	480 µl
0003-6623	3	480 µl
0003-6624	4	480 µl
0003-6625	5	480 µl
0003-6626	6	480 µl



### GENERAL SPECIFICATIONS

**Degassing Channel Tubing:**

Systec AF™ (0.045" ID)

**Maximum Channel Pressure:**

70 PSI

**Wetted Materials:**

Systec AF™, PPS, Glass-filled PTFE  
Stainless Steel

**Liquid Connection:**

1/4"-28 UNF threaded flat-bottom port

**Size (L x H x W):**

245 x 111 x 59 mm

### POWER REQUIREMENTS USING SUPPLIED AC ADAPTER

24 V Power supply included.

Required input to power supply:  
110-240 V 50/60 HZ

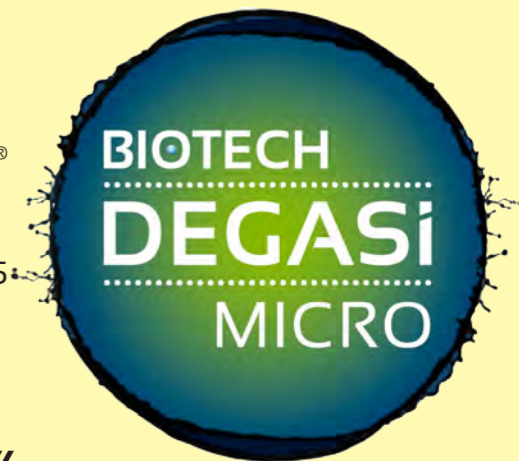
Wall Sockets: 4 supplied with AC Adapter, Interchangeable: North America, Japan, U.K., Continental Europe, Australia





## DEGASi® PLUS MICRO

Are you working with very low flow rates? Do you want to minimize the dead volumes inside your system? Then DEGASi® MICRO is your number one choice of degasser. With only 100 µl internal volume you minimize the internal volume while still keeping excellent degassing efficiency up to approximately 0.5 ml/min.



*"an outstanding degasser*

*for very low flow rates..."*

### PRODUCT FEATURES

- Very good chemical compatibility
- Biocompatible flow path.
- For aggressive organic solvents please contact Biotech.
- Ultra-high degassing efficiency.
- Fits every system.
- Long life expectancy 5+ years continuous (24/7) running capacity.
- Easy to prime.
- Almost silent.
- Closed loop vacuum control means constant vacuum (variable RPM).
- ZHCR® patented control eliminates baseline fluctuations.
- Continuous vacuum system monitoring to ensure that optimal operational conditions are maintained.
- Advanced error and leak checking functions.
- CE & RoHS compliant.

Part Number	Number of Channels	Internal Volume
0003-6351-S	1	100 µl
0003-6352-S	2	100 µl
0003-6353-S	3	100 µl
0003-6354-S	4	100 µl
0003-6355-S	5	100 µl
0003-6356-S	6	100 µl

### GENERAL SPECIFICATION

**Degassing Channel Tubing:**  
Systec AF™ (0.045" ID)

**Maximum Channel Pressure:**  
70 PSI

**Wetted Materials:**  
Systec AF™, PEEK, Glass-filled PTFE

**Liquid Connection:**  
1/4"-28 UNF threaded flat-bottom port

**Size (L x H x W):**  
245 x 111 x 59 mm

### POWER REQUIREMENTS USING SUPPLIED AC ADAPTER

24 V Power supply included.  
Required input to power supply:  
110-240 V 50/60 HZ

Wall Sockets: 4 supplied with AC Adapter, Interchangeable: North America, Japan, U.K., Continental Europe, Australia



## DEGASi® PLUS SEMI-PREP

When working with higher flow rates, up to 6 ml/min, we strongly recommend DEGASi® SEMI-PREP equipped with 925 µl degassing chambers. These chambers can be used up to 10 ml/min but with a bit lower degassing efficiency.

*“manages higher flow rates  
up to 6–10 ml/min...”*

### PRODUCT FEATURES

- Very good chemical compability flow path.
- Biocompatible flow path.
- For aggressive organic solvents please contact Biotech.
- Ultra-high degassing efficiency.
- Fits every system.
- Long life expectancy: 5+ years continuous (24/7) running capacity.
- Almost silent.
- Closed loop vacuum control means constant vacuum (variable RPM).
- Easy to prime.
- ZHCR® patented control eliminates baseline fluctuations.
- Continuous vacuum system monitoring to ensure optimal operational conditions are maintained.
- Advanced error and leak checking functions.
- CE & RoHS compliant
- GPC-compatible version available

#### DEGASi® PLUS SEMI-PREP:

Part Number	Number of Channels	Internal Volume
0003-6351-L	1	925 µl
0003-6352-L	2	925 µl
0003-6353-L	3	925 µl
0003-6354-L	4	925 µl
0003-6355-L	5	925 µl
0003-6356-L	6	925 µl

#### **New:**

#### DEGASi® PLUS SEMI-PREP GPC:

Part Number	Number of Channels	Internal Volume
0003-6621-L	1	925 µl
0003-6622-L	2	925 µl
0003-6623-L	3	925 µl
0003-6624-L	4	925 µl
0003-6625-L	5	925 µl
0003-6626-L	6	925 µl



### GENERAL SPECIFICATIONS

#### Degassing Channel Tubing:

Systec AF™ (0.045" ID)

#### Maximum Channel Pressure:

70 PSI

#### Wetted Materials:

Systec AF™, PEEK, Glass-filled PTFE

#### Liquid Connection:

1/4"-28 UNF threaded flat-bottom port

#### Size (L x H x W):

245 x 111 x 59 mm

### POWER REQUIREMENTS USING SUPPLIED AC ADAPTER

24 V Power supply included.  
Required input to power supply:  
110-240 V 50/60 HZ

Wall Sockets: 4 supplied with AC Adapter, Interchangeable: North America, Japan, U.K., Continental Europe, Australia



## DEGASI® PREP

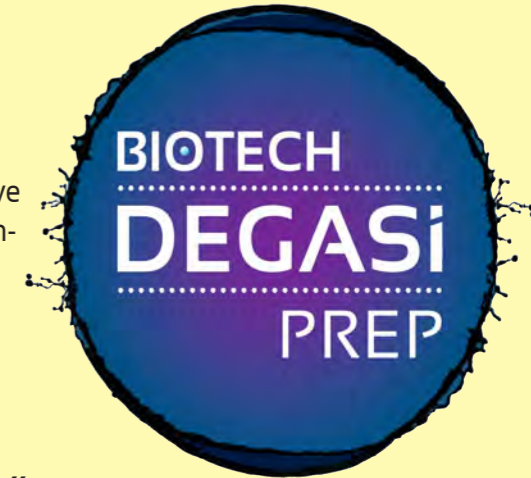
This is the vacuum degassing system for analytical instrumentation and UHPLC/HPLC. It removes dissolved gases at flow rates up to approximately 50 ml/min per channel. Built for the rigorous of modern preparative and semi-prep scale UHPLC/HPLC, its unique design assures reliable continuous operation and the highest level of continuous performance available. The low internal volume of each Systec AF™ channel offers quick equilibration and short startup times compared with PTFE degassers.

*“the best degassing efficiency  
for demanding applications”*

### PRODUCT FEATURES

- Outstanding chemical compatibility flow path.
- Ultra-high degassing efficiency.
- Low volume, easy to prime.
- Dual lumen design for low-flow resistance.
- ZHCR® patented control eliminates baseline fluctuations.
- Inert flow path.
- Long life expectancy 5+ years continuous (24/7) running capacity.
- Continuous vacuum system monitoring to ensure that optimal operational conditions are maintained.

Part Number	Number of Channels	Channel Volume (ml)	Approximate max flow per channel (ml/min)	Pressure Drop (mmHg/ml/min)
0041-1053	1	1 x 5.3 ml	50% degassing at 15 ml/min	0.02
0041-2053	2	2 x 5.3 ml	50% degassing at 15 ml/min	0.02
0041-3053	3	3 x 5.3 ml	50% degassing at 15 ml/min	0.02
0041-4053	4	4 x 5.3 ml	50% degassing at 15 ml/min	0.02



### GENERAL SPECIFICATIONS

#### Degassing Channel Tubing:

Systec AF™ (0.075" ID)

#### Maximum Channel Pressure:

70 PSI

#### Wetted Materials:

Systec AF™, PEEK, Glass-filled PTFE, Stainless Steel (p/n 2053)

#### Liquid Connection:

1/4"-28 UNF threaded flat-bottom port

#### Size (L x H x W):

Mod 6484: 296x163x79 mm

Mod 2053: 195x100x175 mm

### POWER REQUIREMENTS USING SUPPLIED AC ADAPTER

24 V Power supply included.

Required input to power supply:  
110-240 V 50/60 HZ

Wall Sockets: 4 supplied with AC Adapter, Interchangeable: North America, Japan, U.K., Continental Europe, Australia



## DEGASi® PREP+

uses a revolutionary new technology that makes it possible to degass organic solutions with higher flows in a cost effective manner. That means you can get increased capacity at a lower price. DEGASi® PREP+ is a perfect choice for efficient degassing of many types of liquids at high flow rates, up to **75-100 ml / min per chamber**. Available in 1, 2 and 4 channels with an optional analytical flow chamber.

*“The world’s first high flow rate, in-line degasser, for organic solvents”*

Biotech in co-operation with IDEX H&S are proud to announce the world’s first WWin-line, membrane degasser ready to use with aggressive media and organic solvents, while maintaining flow-rates up to 300ml/min and above. Available configurations: Stand alone, OEM open frame and 1-4 channels. **The SH-version has an extra chamber.**

Part Number	No of Channels	Internal Volume
0001-0120	1	23 ml
0001-0120SH	1	23 ml + minichamber
0001-0220	2	2x23 ml
0001-0220SH	2	2x23 ml + minichamber
0001-0420	4	4x23 ml
0001-0420SH	4	4x23 ml + minichamber

### PRODUCT FEATURES

- Outstanding chemical compability flow path.
- Ultra-high degassing efficiency.
- New cost effective technology.

### APPLICATIONS

- Preparative HPLC.
- Flash chromatography.
- High-throughput applications.
- Dispensing applications.
- Ink degassing - all types of ink including organic solvent based ink and UV-ink.



### GENERAL SPECIFICATIONS

#### Recommend Flow Rate:

75-100 mL/min (per channel)

#### Maximum Flow Rate:

200 ml/min (per channel)

#### Maximum Channel Pressure:

50 PSI/3,5 bar

#### Wetted Materials:

Systec AF™, FEP, Tefzel, PTFE and Glass-filled PPS

#### Liquid Connection:

1/4"-28 Female Port

#### Pressure Drop:

0.0226.kPa/ml/min

#### Size (L x H x W):

295x110x80 mm (1-channel)

260x110x150 mm (2-channel)

260x110x290 mm (4-channel)

### POWER REQUIREMENTS USING SUPPLIED AC ADAPTER

24 V Power supply included.

Required input to power supply:

110-240 V 50/60 HZ

Wall Sockets: 4 supplied with AC Adapter, Interchangeable: North America, Japan, U.K., Continental Europe, Australia.



## DEGASi® COMPACT

is a new line of stand alone degassers which combine the cutting edge Systec AF™ technology with a very small footprint at an affordable cost.

*“stand alone on-line degasser with the smallest footprint available”*



DEGASi® COMPACT is available with 2, 4 and 6 degassing channels in a housing with only 167 x 59 mm footprint.

This is possible due to the development of a new single stage vacuum pump with a small built in control board and new 285 µl Systec AF™ vacuum chambers. Closed-loop control with a continuously running vacuum pump gives a very smooth baseline. The speed of the pump is varied to maintain an exact vacuum level inside the vacuum chambers.

The degasser is equipped with built in error detection functionalities. A bi-color diode on the front panel gives information about the performance.

The extremely low internal volume of 285 µl provides very fast priming and start up. Despite the small size of the unit, it has an expected life time of more than 6 years.

DEGASi® COMPACT has a very good chemical compability flow path. For aggressive organic solvents please contact Biotech

### GENERAL SPECIFICATIONS

**Degassing Channel Tubing:**

Systec AF™ (0.035" ID)

**Maximum Channel Pressure:**

70 PSI

**Wetted Materials:**

Systec AF™, PPS, PEEK, Glass-filled PTFE

**Liquid Connection:**

1/4"-28 UNF threaded flat-bottom port

**Size (L x H x W):**

167 x 111 x 59 mm

### POWER REQUIREMENTS USING SUPPLIED AC ADAPTER

24 V Power supply included.  
Required input to power supply:  
110-240 V 50/60 HZ

Wall Sockets: 4 supplied with AC Adapter, Interchangeable: North America, Japan, U.K., Continental Europe, Australia

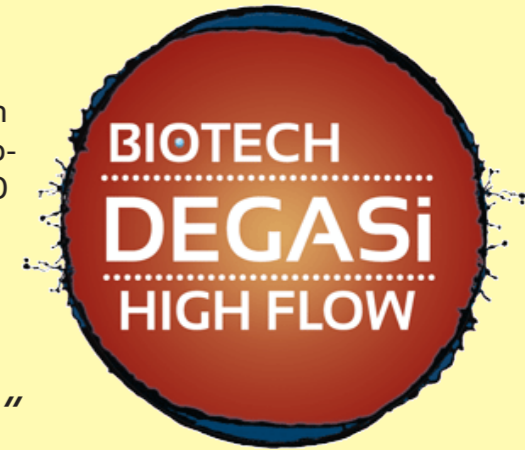
Part Number	Number of Channels	Internal Volume
0004-2285-W	2	285 µl
0004-4285-W	4	285 µl
0004-6285-W	6	285 µl



## DEGASi® HIGH FLOW 1000

It doesn't matter if you work with very high flow applications in fields like chemical analyses, biotechnology or sensitive processes on the manufacturing side, DEGASi® HIGH FLOW 1000 degasser will meet your expectations.

*"An excellent choice for high-throughput applications..."*



### DEGASi® HIGH FLOW 1000

degasser works with real high flow rates and ultrahigh degassing efficiency. With water-based solutions it removes dissolved gases at flow rates up to **1000 ml/min**.

The degasser is equipped with the new superior Systec® DST pump which is more reliable and almost entirely silent – a remarkable upgrade from older versions. This pump is also lighter and operates with less vibrations.

### APPLICATIONS

- Clinical chemistry analyzers.
- Dispensing applications.
- Dissolution testing.
- Process applications.
- High-throughput applications.
- Ink degassing (waterbased ink).
- Water based buffersolutions.

### PRODUCT FEATURES

- Water based buffer solution.
- For cleaning purposes upto 10% ethanol or methanol can be used up to 3 hours.

### GENERAL SPECIFICATIONS

#### Recommended Flow Rate:

0-1000 ml/min

#### Maximum Flow Path Pressure:

14 PSI/1 bar

#### Wetted Materials:

Silicone, PVC, Nitrile Rubber, Polyamide

#### Liquid Connection:

Barb for ID 10 mm tubing

#### Applicable Solvents:

Water and buffersolutions

#### Size (L x H x W) Weight:

365x135x150 mm, 5300g

### POWER REQUIREMENTS USING SUPPLIED AC ADAPTER

24 V Power supply included.

Required input to power supply:

110-240 V 50/60 HZ

Wall Sockets: 4 supplied with AC Adapter, Interchangeable: North America, Japan, U.K., Continental Europe, Australia.

Part Number	Number of Channels	Internal Volume
0003-HF.1000	1	200 ml

# DEGASSING SPARE PARTS & RETROFIT KITS



We keep an extensive stock in order to support our customers. Supplying spare parts and replacements to a wide range of instruments and brands in the shortest time possible. We always keep a wide variety of vacuum pumps, degassing chambers, control boards and other accessories on stock in order to simplify replacement and maintenance for our customers. As an alternative to a repair we can also offer a suitable Degasser from our comprehensive DEGASi line of Stand Alone Degassers.

More information is available on our website, or just give us a call.

## Degasser Spare Parts for DEGASi Series

Part Number	Description	Used within
9000-1471	Systec ZHCR Vacuum Pump	DEGASi Classic, GPC, Micro, Semi-Prep
9000-1585	Systec ZHCR Single Stage Vacuum Pump	DEGASi Compact
9000-1896	Systec ZHCR Vacuum Pump, Used Within - DEGASi Prep	DEGASi High Flow 1000
9000-1920	Systec ZHCR Vacuum Pump with Smart Board	DEGASi PLUS series
9000-1922	Systec ZHCR Vacuum Pump with Smart Board, Prep	DEGASi Prep+,
9000-1000	100 µl Systec AF Degassing Chamber	DEGASi Micro and PLUS Micro
9000-1004	480 µl Systec AF Degassing Chamber	DEGASi Classic and PLUS Classic
9000-1184	480 µl Systec AF GPC Degassing Chamber	DEGASi GPC and PLUS GPC
9000-1009	925 µl Systec AF Degassing Chamber	DEGASi Semi-Prep and PLUS Semi-Prep
9000-1810	285 µl Systec AF Degassing Chamber	DEGASi Compact
9000-1985	Systec Prep Degassing Chamber 100 ml/min	DEGASi Prep+
9000-1056	PC-board with LED's	DEGASi Classic, GPC, Micro, Semi-Prep

# DEGASSER TUBING KITS

Ready-to-send kits with the tubing in desired lengths and the fittings you need; attached, labeled and packed! We help you choose the best fittings and tubing for every application!

## WE HELP YOU EVERY STEP OF THE WAY:

- Wide selection of fittings and tubing
- Filters, tools, tubing markers and accessories
- Labeling with your logo and company details
- Packaging in boxes or plastic bags
- Long experience in this business
- We help you to find solutions for your needs

### Alternative fittings for the 1/8" OD tubing



Flangeless  
P-240  
P-387



Super flangeless  
P-331  
P-359



One piece  
Super Flangeless  
P-349

### Alternative fittings for the 1/16" OD tubing



Flangeless  
P-200  
P-230



Super Flangeless  
P-255  
P-259



One Piece  
Super Flangeless  
P-249

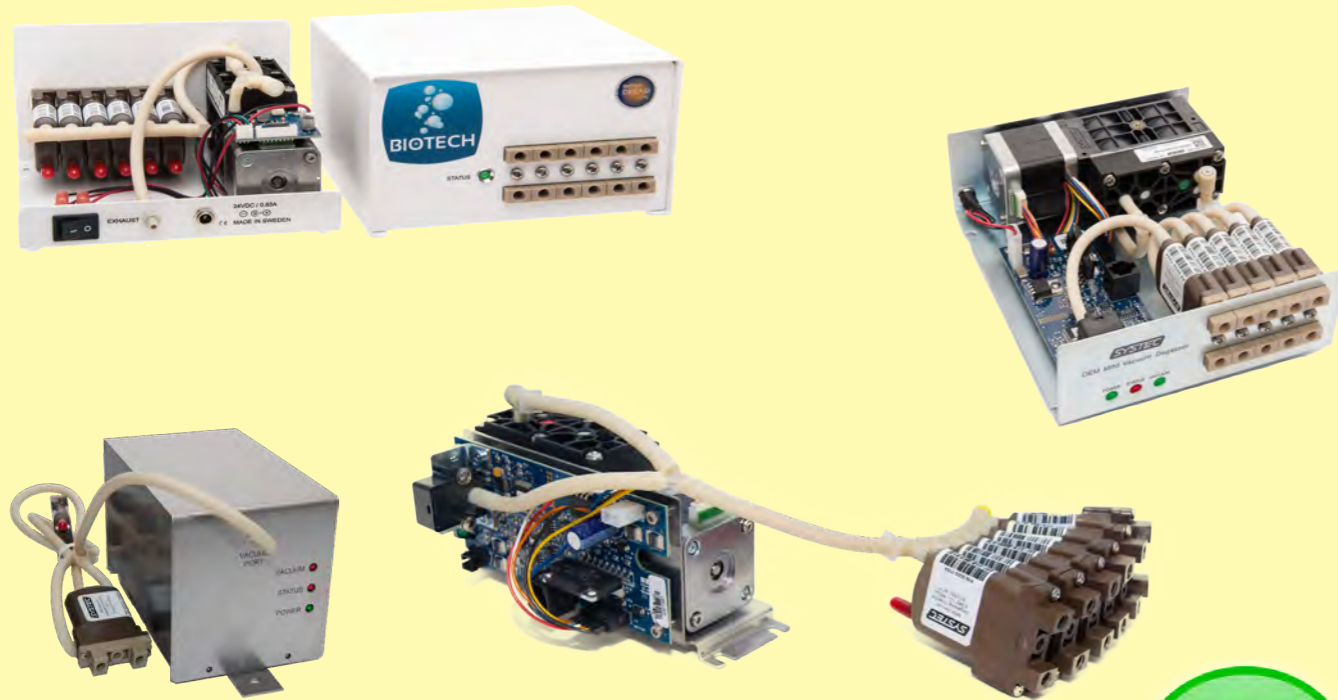
## Part Number Degasser Tubing Kits For 1/8" OD Tubing (1/4"-28 Threaded Nuts)

0704	<b>Most popular</b>	Tubing, 5 m FEP Tubing 1/8" OD x 1/16" ID
1208		Flangeless Fittings, 10 pcs PPS Nuts + 12 pcs ETFE ferrules 1/8" ID
1408		Superflangeless Fittings, 10 pcs PEEK Nuts + 10 pcs ETFE ferrules 1/8" ID
1608	<b>Most popular</b>	One-piece Superflangeless Fittings, 10 pcs PEEK nuts with integrated PEEK ferrule 1/8" ID

## Part Number Degasser Tubing Kits For 1/16" OD Tubing (1/4"-28 Threaded Nuts)

0716		Tubing, 5 m FEP Tubing 1/16" OD x 0.75mm ID
1216		Flangeless Fittings, 10 pcs PEEK Nuts + 12 pcs ETFE ferrules 1/16" ID
1416		Superflangeless Fittings, 10 pcs PEEK Nuts + 10 pcs ETFE ferrules 1/16" ID
1616		One-piece Superflangeless Fittings, 10 pcs PEEK nuts with integrated PEEK ferrule 1/16" ID

# SPECIAL TAILORED OEM DEGASSERS



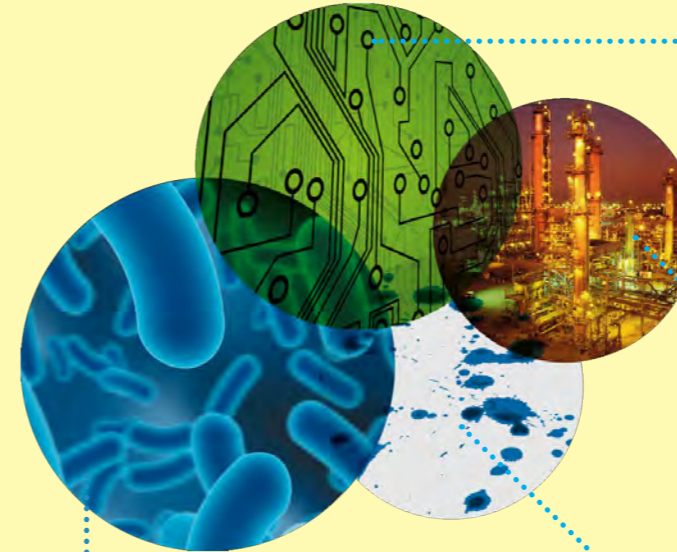
We ship most OEM-Degassers within 2-3 days

Except for our unique range of DEGASi® Standalone degassers, Biotech offers custom made degassing modules to fit your need. Biotech supplies degassing modules to some of the world's largest instrument manufacturers.

We design according to your requests and needs, continuously developing new models for different applications, always assisting our customers with ideas and solutions along the way.

We have degassers for a wide range of applications such as high flow, low flow and nasty organic solvents.

# DEGASSING APPLICATIONS



## BIOTECHNOLOGY INSTRUMENTATION

Biosensor instrumentation, as well as other scientific and medical instrumentation, often gives the user extremely high sensitivity and performance in the analysis work. It is easy to understand that the results can be completely ruined by a small air bubble.

## PROCESS INDUSTRY

In critical processes and manufacturing, the correct flow rate is of high importance. Air bubbles could be detrimental. With proper degassing, optimal results can be secured in the process. We customize degassers for flow rates from microlitres per minute up to cubic metres per hour.

## INK PRINTERS

Get a perfect print without blind spots. Improve the printing quality with our long life degassing solutions.

## ANALYTICAL INSTRUMENTATION

Get the best performance out of your instrumentation. Wide range of application areas

- Chromatography -HPLC/UHPLC
- GPC
- Preparative
- Flash





*A view of our Swedish headquarters located on the beautiful peninsula Onsala, just south of Gothenburg.*

Local Distributor:

**Biotech is the Global Premium Distributor for IDEX.**



Europe:  
Biotech AB  
Råövägen 300  
SE-439 92 Onsala  
Sweden  
[www.biotechfluidics.com](http://www.biotechfluidics.com)  
Phone: +46 300 56 91 80  
[info@biotechfluidics.com](mailto:info@biotechfluidics.com)

United States:  
Biotech USA LLC  
PO Box 18796  
Minneapolis, MN 55418  
USA  
[www.biotechfluidics.com](http://www.biotechfluidics.com)  
Phone: 612-703-5718  
[sales@biotechfluidics.com](mailto:sales@biotechfluidics.com)

Japan:  
BioNik Inc  
3397-19 Obuchi  
Fuji, Shizuoka, 417-0801  
Japan  
[www.bionikinc.com](http://www.bionikinc.com)  
Phone: +81 545 38 9125  
[info@bionikinc.com.jp](mailto:info@bionikinc.com.jp)

