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**GREAT FLUIDIC
SOLUTIONS**

Measure inline liquid flow rates

Determine inline flow rates in any mode of liquid chromatography without interfering with the system. The Biotech Liquid Flow Meter is the perfect tool for high-precision, continuous measurement of flow rates ranging from 0.001 to 5 mL/min. Compatible with most solvents, a wide pH range, and pressures up to 3 MPa (435 psi).

[Learn More](#)





Perfect connection every time

MarvelXACT UHPLC connection system use a patented torque-limiting mechanism with “click” feedback to ensure a perfect leak-free connection with minimum dead volume. Built from sturdy, bioinert PEEK and stainless steel, this fitting can be reconnected more than 100 times even at the most demanding positions such as column inlet.

[Learn More](#)

Degasser for organic solvents

DEGASi® PLUS GPC is the right choice of degasser if you are working with 100% organic solvents in your fluidic line. Perfect for Gel Permeation Chromatography (GPC), Normal Phase Chromatography and other modes of HPLC. Many other degassers for other fluid compositions are also available.

[Learn More](#)



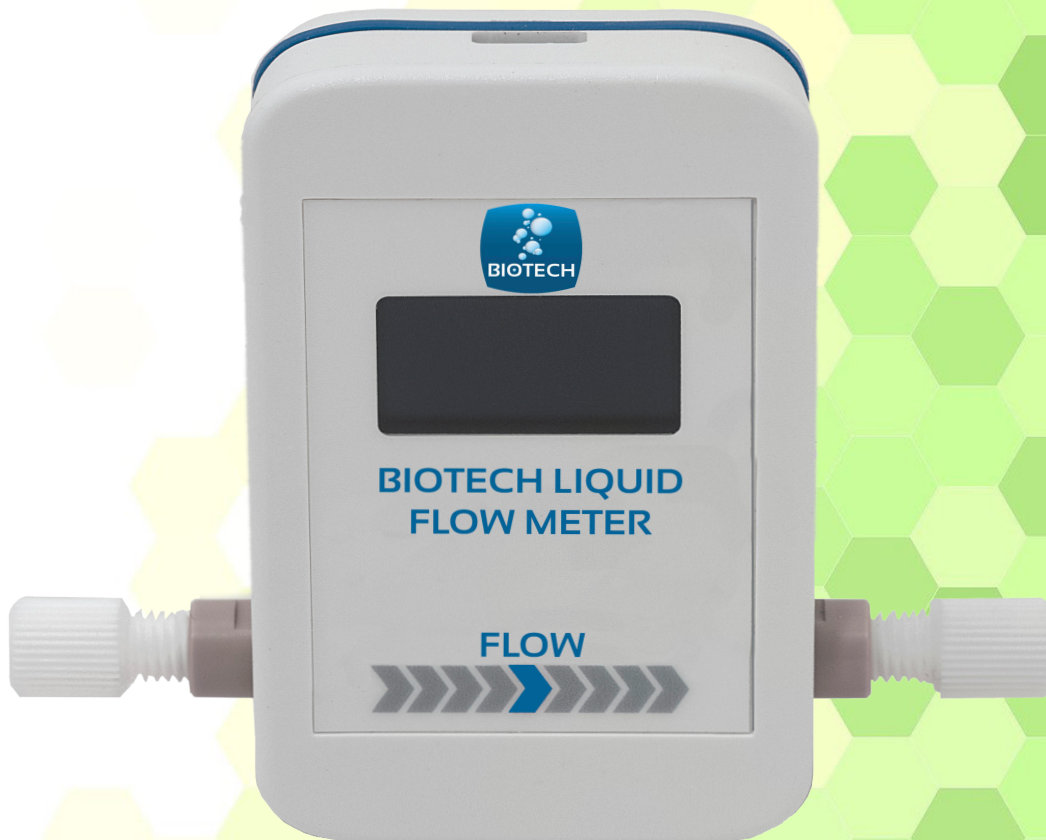
Let us help you

Biotech Fluidics has more than 20 years experience in providing innovative fluid transfer components to analytical, biotech and life science users all over the world. We and our distributors are on a mission to ensure great design of every fluidic system and we are most happy to guide you to the most suitable components for your setup.

[Contact Us](#)



BIOTECH LIQUID FLOW METER



Measures continuous flow rates without
interference in your fluidic systems

Biotech Introduces a Unique Pocket-Sized High Resolution Liquid Flow Meter



The new Biotech Liquid Flow Meter can continuously and accurately determine in-line flow rates in any mode of liquid chromatography without system interference.

It is compatible with all HPLC and GPC solvents, conveniently sized and powers itself from a USB connection.

It is very easy to use, small enough to fit in your hand or lab coat pocket – weighing less than your cell phone!

The Biotech Liquid Flow Meter comes pre-calibrated and can be connected in-line in any orientation to continuously measure flow rates.



Improved Results

Supplied digitally calibrated, the AB-40010 delivers high-precision and accuracy across a wide measurement range.

Validate your system and get pump performance diagnostics at the same time!



Ease of Use

Specially designed app for easy interaction.

- Save the data to your system
- Set the integration time - from continuous reading up to 10 seconds
- Choose between 5 different pre-calibrated solvents, or add your own!



Reliable Trouble-free Operation

The ultra-reliable AB-40010 is suitable for virtually any flow application and compatible with all standard GPC/HPLC solvents.



Application Are

- Chromatography – validation & diagnostic purpose
- Peristaltic pump monitoring
- Flow chemistry
- Process flow applications

Technical Data

The Biotech Liquid Flow Meter is specifically designed for continuous measurement of flow rate without interference in liquid chromatography systems. Being compatible with most solvents, a wide pH range, and pressures up to 3 MPa (435 psi), it is the perfect tool for high-precision measurement of flow rates ranging from 0.001 to 5 mL/min.

Via its USB interface and modern PC application, data is recorded as time series, which is helpful when troubleshooting pumps, check valves or other malfunctioning components in liquid chromatography equipment.

The app allows the user to select the integration interval for average flow rate or pump performance. Current flow rate is displayed on the Flow Meter's integral high-resolution OLED display while recording and storing the measured flow rates. Extraordinary high resolution and wide dynamic range make the Biotech Liquid Flow Meter the perfect flow monitoring tool for the most demanding HPLC and GPC systems.

Measuring Range	0.001 ml/min to 5.000 ml/min
Maximum resolution	>0.0005 ml/min
Accuracy	>0.2 % FSD
Precision	>0.2 % FSD
Integration Time Factor	78, 312 (Default), 1172, 5781, 9844 (Milliseconds)
Maximum Pressure	3MPa (435 psi)
pH operating range	1 to 11
Measuring Cell Volume	94µl
Cell Diameter	1.8mm
Cell Length	37mm
Pressure Drop	0.12millibar at 5ml/min of water
Sensor Module	Robust, thermal- and chemical-resistant borosilicate glass capillary (Quartz) and PEEK
Display	High-resolution OLED Display with online flow rate, status & settings information
Control	Easy to use with USB-powered plug-and-play functionality
Calibration	<ul style="list-style-type: none">• Water Validated• MeOH, THF, EtOH/Water, ACN/Water Pre-set• Customer chosen alternative
Dimensions	40 x 20 x 70 mm (W x H x D)
Weight	0.2 kg

Portable robust Unit
with 1µl Resolution.

Easy Time Factor
Selection

Unit connects to
any Chromatograph

Perfect for IQ, OQ,
& PQ Validation

PACKING LIST

Qty	Content	P/N
1	Liquid Chromatography Flow Meter	
1	USB Cable, 1 m	
2	Plug, PFA, 1/4"-28 Flat-Bottom	P-316
2	Tubing, FEP, 1/16" OD x 0.75 mm ID x 0.4m Long	
3	Nut, One-piece Super Flangeless™, PEEK, Flat-Bottom, 1/4"-28, 1/16" ID	P-249
1	Coned Fitting, One-piece, PEEK, 10-32, 1/16" ID	F-120
2	Stickypads	
1	User Manual	
1	White Case with Blue Caps	



Ordering Information

AB-40010 Biotech Liquid Flow Meter





MARVELXACT™

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[Detectors](#)

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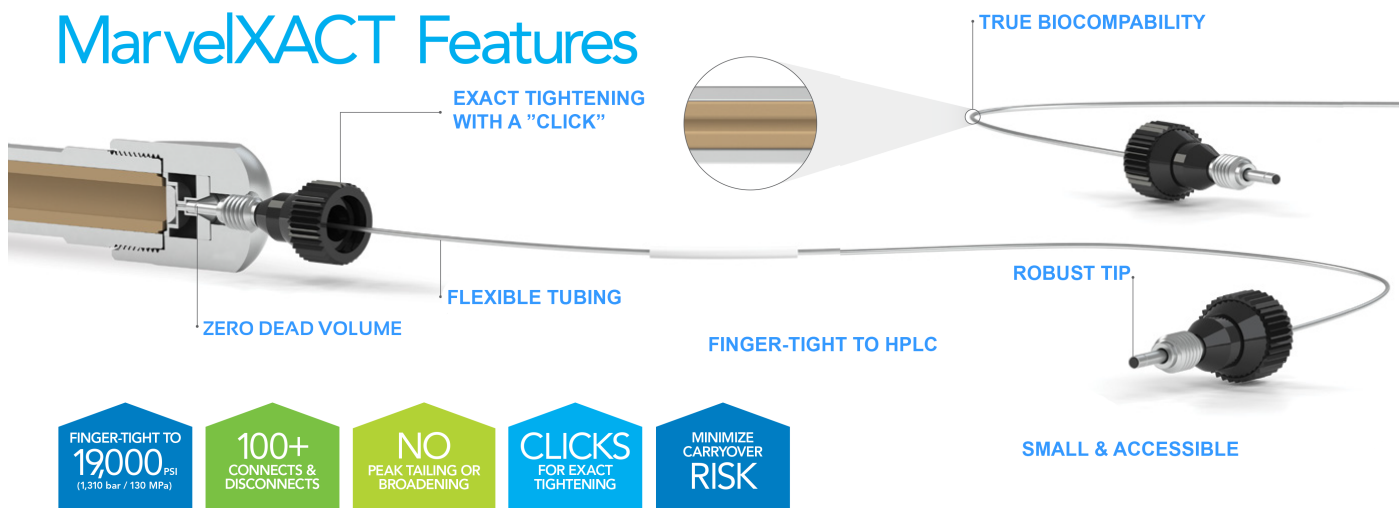
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MARVELXACT™ UHPLC CONNECTION SYSTEMS: FINGER-TIGHT WITH A "CLICK" FEEDBACK



ENSURE A PERFECT CONNECTION EVERY TIME WITH THE NEW MARVELXACT™
FITTING SYSTEM FOR TROUBLE-FREE LIQUID CHROMATOGRAPHY

MarvelXACT Features



Film MarvelXACT-8103473_1

from **Biotech Fluidics**

VIDEO Ask for Link

02:04



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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.

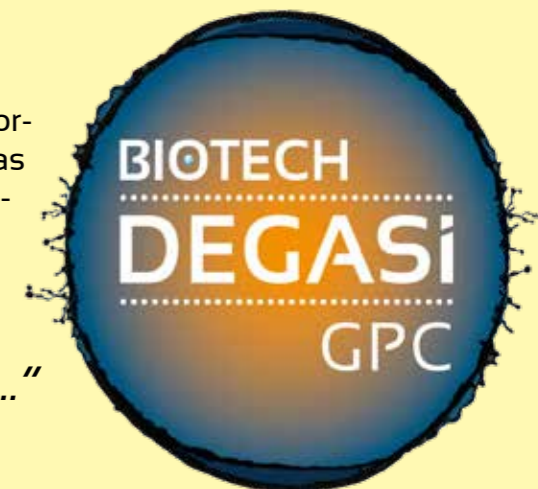
The stent is a short piece of a stainless steel tube placed inside the ends of the degassing membrane, in order to make the internal ferrule in the bulkhead to get a better grip. This solution makes an even more secure internal connection

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

PRODUCT FEATURES

- 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 – Stand Alone Degassers → DEGASi PLUS GPC

DEGASi® PLUS GPC

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[Column Hardware](#)

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[Degasi Finder](#)

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[DEGASi PLUS Degassers](#)

[DEGASi PLUS CLASSIC](#)

[DEGASi PLUS GPC](#)

[DEGASi PLUS MICRO](#)

[DEGASi PLUS SEMI-PREP](#)

[DEGASi COMPACT Degassers](#)

[DEGASi High Flow 1000](#)

[DEGASi PREP Degassers](#)

[DEGASi PREP+ Degassers](#)

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THE RIGHT CHOICE

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"WHEN YOU ARE USING 100 % ORGANIC SOLVENTS IN YOUR FLUIDIC LINE..."

THE DIFFERENCE BETWEEN THE NEW AND OLD DEGASi® GPC

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- [Tubing](#) •
- [HPLC Columns](#) •
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WHAT IS UNIQUE

FEATURES

[DEGASi® Classic](#)

[DEGASi® Classic](#)



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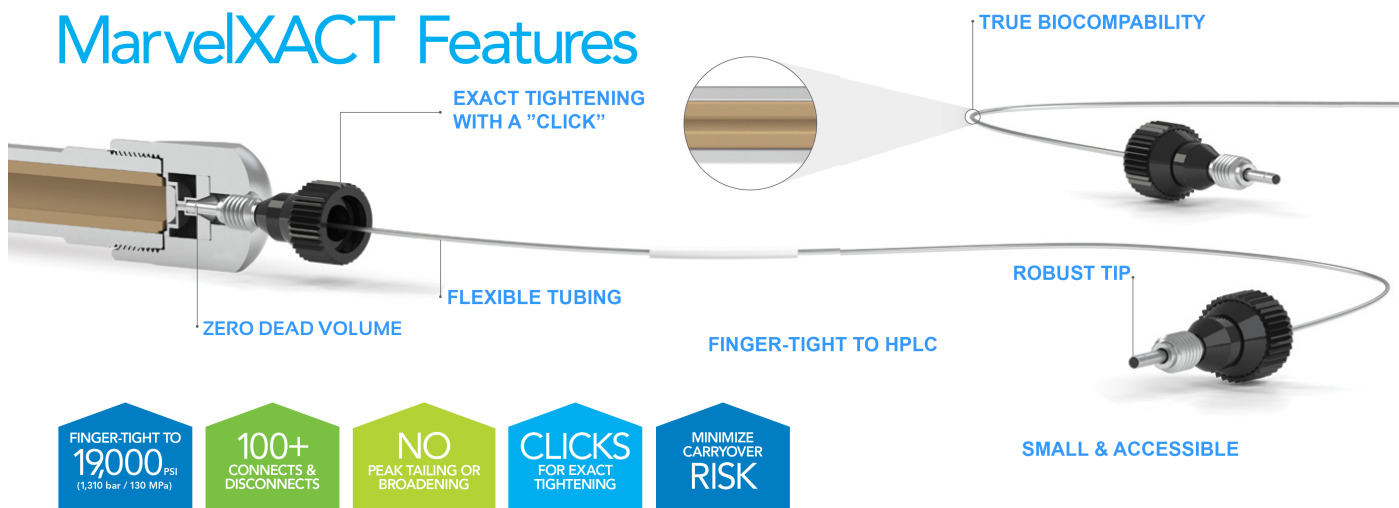
[Volumetric Precision Dispenser](#)

MARVELXACT™ UHPLC CONNECTION SYSTEMS: FINGER-TIGHT WITH A "CLICK" FEEDBACK



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Film MarvelXACT-8103473_1

from **Biotech Fluidics**

02:04





[Download Brochure](#)


MarvelXact Fittings

MARVELXACT™

A Complete Kit with Tubing and Fittings

- Fits Every 10 - 32 Coned Port
- 1300 bar Pressure Rating

Trouble-Free UHPLC
Connections for
Exact Performance
Every Time

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Ensure a Perfect Connection Every Time with Our New MarvelXACT™ Fitting System for Trouble-Free Liquid Chromatography

Our expertly designed MarvelXACT connection system takes the guesswork out of your process by eliminating the risk of under- and over-tightening, with our patented torque-limiting mechanism. This unique feature provides a haptic “click” feedback when it reaches the optimum torque, assuring a perfect connection every time. Built with sturdy, bioinert PEEK and stainless steel, MarvelXACT can be connected and disconnected more than 100 times. MarvelXACT also incorporates our advanced MarvelX™ Sealing

Technology to deliver precise face sealing (sealing at the port bottom), which eliminates additional internal volume, and minimizes carryover risk, peak tailing, and peak broadening. The MarvelXACT connection system incorporates flexible 1/32" OD tubing to easily route through your system, is compatible with 10-32 coned receiving ports, and is absolutely finger-tight — no tool required. Additionally, MarvelXACT utilizes our exclusive next-generation patented technology to auto-adjust to various port depths.

MarvelXACT Features



EXACT TIGHTENING WITH A “CLICK”

Achieve a perfect connection every time with built-in patented technology that delivers a haptic “click” when optimum torque is achieved through finger-tightening.

FLEXIBLE TUBING

Our special 1/32" OD tubing prevents kinking and allows considerable flexibility to route throughout your instrument. Tubing is usable in any Liquid Chromatography application.

ZERO DEAD VOLUME

Proprietary sealing technology eliminates extra internal volume.

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FINGER-TIGHT TO
19,000 PSI
(1,310 bar / 130 MPa)

100+
CONNECTS &
DISCONNECTS

NO
PEAK TAILING OR
BROADENING

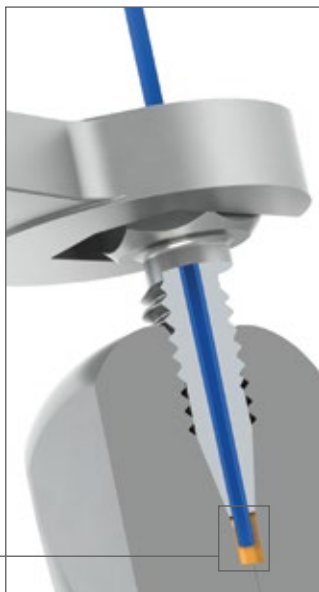
CLICKS
FOR EXACT
TIGHTENING

MINIMIZE
CARRYOVER
RISK

MarvelXACT vs. Conventional Coned Fittings

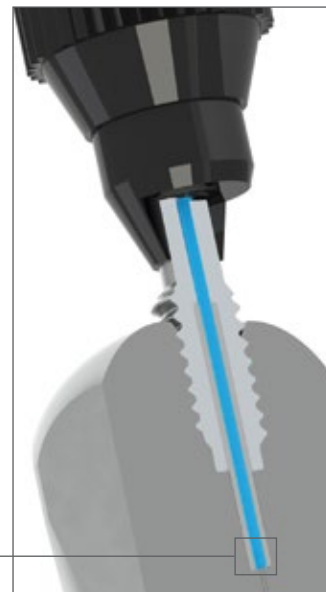
Conventional coned fittings

require a ferrule in conjunction with a fitting for proper sealing. They depend on complex techniques, including tools, to improve sealing performance, which significantly increases probability of extra internal volume and poor chromatography results. The excessive force needed for tightening increases wear of expensive components and the likelihood of replacement, adding to overall costs.



EXTRA INTERNAL VOLUME

MarvelXACT fittings do not depend on ferrules. They seal at the bottom of the port, without complex techniques, which significantly reduces required torque and enables many more connects and disconnects. MarvelXACT significantly reduces wear on your hardware, increasing product life. An enhanced proprietary tip design also ensures zero dead volume (ZDV) and better chromatography results.



ZERO DEAD VOLUME

TRUE BIOCOMPATIBILITY

PEEK-Lined Stainless Steel tubing technology, developed by IDEX Health & Science, delivers the benefit of a bioinert PEEK flow path with UHPLC pressures of 19,000 psi.

FOR ORDERING AND
TECHNICAL SUPPORT, VISIT:

idex-hs.com/MarvelXACT



ROBUST TIP

Enables robust structure, superior re-usability, and minimizes chances of tip damage from connecting and disconnecting.

SMALL & ACCESSIBLE

Fittings are small enough to fit in tight spaces, yet allow for finger-tightening at UHPLC pressures.

FINGER-TIGHT TO UHPLC

MarvelXACT is truly a finger-tight connection system that has a patented torque-limiting mechanism for exact tightening every time, and seals up to 19,000 psi (~1,310 bar) for routine use.

MarvelXACT™ Technical Specifications

Length:	150 mm	250 mm	350 mm	500 mm	600 mm
PEEK-Lined Stainless Steel Assemblies*					
25 µm ID	UPFP-7025150	UPFP-7025250	UPFP-7025350	UPFP-7025500	UPFP-7025600
50 µm ID	UPFP-7050150	UPFP-7050250	UPFP-7050350	UPFP-7050500	UPFP-7050600
75 µm ID	UPFP-7075150	UPFP-7075250	UPFP-7075350	UPFP-7075500	UPFP-7075600
100 µm ID	UPFP-7100150	UPFP-7100250	UPFP-7100350	UPFP-7100500	UPFP-7100600
Stainless Steel Assemblies*					
100 µm ID	UPFS-7100150	UPFS-7100250	UPFS-7100350	UPFS-7100500	UPFS-7100600
125 µm ID	UPFS-7125150	UPFS-7125250	UPFS-7125350	UPFS-7125500	UPFS-7125600
254 µm ID	UPFS-7254150	UPFS-7254250	UPFS-7254350	UPFS-7254500	UPFS-7254600

*Product availability and lead times may vary depending on the configuration.
Contact Customer Service at +1 800 426 0191 or email CustomerService.hs@idexcorp.com for details.

Product Specifications

Pressure Capability	19,000 psi (~1,310 bar, 131 MPa) for routine use.
Installation Method	Finger-tighten until the first "click" feedback is received.
Tubing Type	1/32" OD flexible 316 Stainless Steel with 1/16" OD rigid tube ends
Fitting Type	10-32 threaded, PEEK fittings with 316 Stainless Steel threads
Wetted Materials	PEEK-Lined versions: PEEK Stainless Steel versions: PEEK and 316 Stainless Steel
Maximum Use Temperature	120 °C

NOTE: The above performance specifications apply to use with appropriately-designed receiving ports under optimal conditions, using water for the testing process. If different conditions are used, the expected pressure threshold will be different.

IMPORTANT NOTES

- MarvelXACT tubing includes a sleeve to assist in product identification, containing details for ID, length, and part number:



- Minimum recommended bend-radius with MarvelXACT tubing is 1/4" (~6.35 mm).

REGULATORY COMPLIANCE

As of the date of publication, MarvelXACT is compliant with current RoHS and REACH regulations.

INSTALLATION INSTRUCTIONS

Finger-tighten until the first "click" feedback is received.

 Learn more at idex-hs.com/MarvelXACT

HEALTH & SCIENCE



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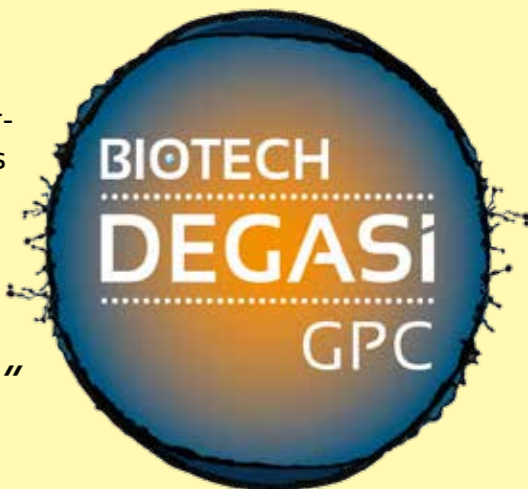
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- Fits every system
- Long life expectancy 5+ years continuous (24/7) running capacity
- Easy to prime
- Almost silent
- Closed loop vacuum control means constant vacuum (variable RPM)
- ZHCR® patented control eliminates baseline fluctuations
- Excellent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

Part Number	Number of Channels	Internal Volume
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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

Periodic Table of The Analytical Fittings

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Biotech Liquid Flow Meter



*Liquid Flow Meter
LC/HPLC
CT-AB400-10
Inert : 1/4-28
1uL to 5ml/min*