# MARVEL XACT.

Trouble-Free UHPLC Connections for Exact Performance Every Time







## Ensure a Perfect Connection Every Time with Our New MarvelXACT<sup>™</sup> 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<sup>™</sup> 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



Proprietary sealing technology eliminates extra internal volume.

## • 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.



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NO PEAK TAILING OR BROADENING





## 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.

### 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.



## SMALL & ACCESSIBLE

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



MarvelXACT <sup>™</sup> Technical Specifications					
Length:	150 mm	250 mm	350 mm	500 mm	600 mm
PEEK-Lined Sta	inless 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:

> APEX. XXX.[um] — YYY imm]

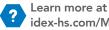
> Minimum recommended bend-radius with MarvelXACT tubing is 1/4" (~6.35 mm).

## 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.



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