

Next Generation UHPLC Connection Technology





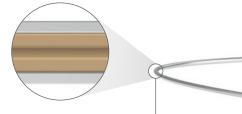
Advance Your Fluidic Systems with Finger-Tight MarvelX[™] UHPLC Connection Technology from IDEX Health & Science

MarvelX UHPLC Connection Systems have been expertly designed for easy routing throughout your instrument, while providing consistent performance and superior re-usability. Built with convenient, removable stainless steel fittings and changeable, precision-cut flexible tubing, MarvelX can be used for more than 100 connects and disconnects! The connection system is compatible with 10-32 coned receiving ports

and is absolutely finger-tight — no tool required. MarvelX utilizes our unique next-generation patented technology to auto-adjust to various port depths. This ensures zero dead volume and delivers better chromatography results with sleek, simple, and reliable functionality. In addition to our powerful Stainless Steel version, MarvelX offers a truly bioinert option in PEEK-Lined Stainless Steel.

MarvelX Features

Bioversal



TRUE BIOINERTNESS

System versions include Stainless Steel or bioinert PEEK-Lined Stainless Steel (pictured above) with an ID range of 25 μ m to 254 μ m, for 10-32 coned ports.

ZERO DEAD VOLUME

muna

Proprietary sealing technology eliminates extra internal volume.

FLEXIBLE TUBING

Special tubing blend prevents kinking and allows considerable flexibility to route throughout your instrument. Usable in any application, and can be replaced independent of fittings.

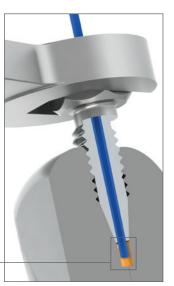


MarvelX UHPLC Fittings vs. Conventional Coned Fittings

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



MarvelX UHPLC 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. Furthermore, they are virtually impossible to over-tighten by hand, limiting wear and increasing product life. An enhanced proprietary tip design also ensures zero dead volume (ZDV) and better chromatography results.





SMALL & ACCESSIBLE

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



FOR ORDERING AND TECHNICAL SUPPORT, VISIT:

idex-hs.com/ MarvelX



REPLACEABLE TUBING

Innovative design makes it possible to replace tubing independent of fittings, which reduces waste and drives replacement costs down.

REMOVABLE FITTING

Facilitates easy routing of tubing in the instrument, which reduces time and effort during installation and instrument maintenance.

ROBUST TIP

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



FINGER-TIGHT TO UHPLC

MarvelX is truly a finger-tight connection system that only requires 2 in-lbs of installation torque, and seals up to 19,000 psi (~1,310 bar) for routine use. Our combination of optimum nut dimensions and proprietary sealing design makes it virtually impossible to over-tighten by hand.



| MarvelX [™] Technical Specifications | | | | | | | |
|---|--|--------------|--------------|--------------|--------------|--------------|--|
| Length: | 070 mm | 150 mm | 250 mm | 350 mm | 500 mm | 600 mm | |
| PEEK-Lined Stair | nless Steel Assemblie | s* | | | | | |
| 25 µm ID | UPFP-6025070 | UPFP-6025150 | UPFP-6025250 | UPFP-6025350 | UPFP-6025500 | UPFP-6025600 | |
| 50 µm ID | UPFP-6050070 | UPFP-6050150 | UPFP-6050250 | UPFP-6050350 | UPFP-6050500 | UPFP-6050600 | |
| 75 µm ID | UPFP-6075070 | UPFP-6075150 | UPFP-6075250 | UPFP-6075350 | UPFP-6075500 | UPFP-6075600 | |
| 100 µm ID | UPFP-6100070 | UPFP-6100150 | UPFP-6100250 | UPFP-6100350 | UPFP-6100500 | UPFP-6100600 | |
| Stainless Steel A | ssemblies* | | | | | | |
| 100 µm ID | UPFS-6100070 | UPFS-6100150 | UPFS-6100250 | UPFS-6100350 | UPFS-6100500 | UPFS-6100600 | |
| 125 µm ID | UPFS-6125070 | UPFS-6125150 | UPFS-6125250 | UPFS-6125350 | UPFS-6125500 | UPFS-6125600 | |
| 254 µm ID | UPFS-6254070 | UPFS-6254150 | UPFS-6254250 | UPFS-6254350 | UPFS-6254500 | UPFS-6254600 | |
| Replacement Pa | rts* | | | | | | |
| Replacement | To order Replacement Tubing, simply add the letter "T" to the end of any of the part numbers listed above. | | | | | | |

Tubing Example: UPFP-6025070T is the replacement tubing for UPFP-6025070.

 Replacement
 UPN-61032 – Includes 3 replacement fittings.

*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) for routine use; up to 23,000 psi max over pressure for PEEK-Lined versions; up to 29,000 psi max over pressure for Stainless Steel versions. | | | | |
| Installation Method | Finger-tight, 1/8 of a turn (45 degree angle) after initial resistance (~2 in-lbs) | | | | |
| Tubing Type | 1/32" OD flexible 316 Stainless Steel with 1/16" OD rigid tube ends | | | | |
| Fitting Type | 10-32 threaded, removable 316 Stainless Steel | | | | |
| 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 at up to 120 °C for the testing process. If different conditions are used, the expected pressure threshold will be different.

IMPORTANT NOTES

> MarvelX tubing includes a sleeve that assists in product identification, with ID, length and part number information:



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

REGULATORY COMPLIANCE

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

INSTRUCTIONS FOR TIGHTENING

- 1. Route tubing to the target port.
- 2. Slide fitting onto the tubing end via slot.
- **3.** Slowly finger-tighten to first resistance; continue tightening 1/8-turn (45 degree angle).
- 4. Learn more at www.idex-hs.com/MarvelX





For ordering, technical support, and contact information please visit www.idex-hs.com