

# INTRODUCING COMPLETE UHPLC BIOINERT SAMPLE FLOW PATH



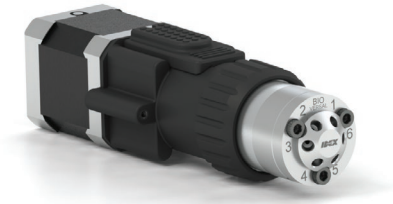
## BioVersal™



## We Understand the Challenges Associated with Modern UHPLC Separation

Today's samples are challenging and include bio-molecules, peptides, proteins, nucleic acids, and antibodies. The need to minimize or remove unwanted sample interaction with wetted surfaces has become critical. That is why we have developed the BioVersal™ set of products that create a complete, bioinert flow path for your most challenging samples.

When Used Together, Our Available Suite of Either Standard or Custom Designed Products Offers a Complete Solution for Bioinert UHPLC, from Injector to Detector



## INJECTION VALVES

### BioVersal™ Valve

- › Pressure rated to 1,300 bar (130 MPa, 18,855 psi)
- › Metal-free bioinert flow path
- › Utilizes flat-face sealing ports for zero dead-volume connections



## SAMPLE LOOPS

### BioVersal™ Sample Loops

- › Bioinert PEEK-lined stainless steel
- › Face sealing ensures zero dead volume
- › Finger-tight up to 1,310 bar (131 MPa, 19,000 psi)



## CONNECTIONS

### MarvelXACT™

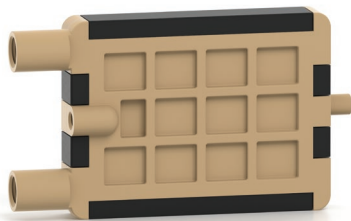
- › Bioinert PEEK-lined stainless steel
- › Torque limiting mechanism — cannot be overtightened
- › Face sealing ensures zero dead-volume
- › Minimizes carryover, peak broadening, and peak tailing



## COLUMNS

### Bioinert Systems

- › PEEK-lined SST column hardware for bioinert applications up to 1,034 bar (103 MPa, 15,000 psi)
- › Combines the strength of our stainless steel UHPLC column (IsoBar) with the chemical inertness of PEEK polymer
- › Eliminates unwanted surface interactions while allowing for a wide range of pH and solvent conditions
- › Packing pressure rating 1,379 bar (138 MPa, 20,000 psi)



## FILM DEGASSERS

### HPLC Degassing

- › Reinforced Teflon™ AF film, the degassing chamber has a metal-free flow path
- › Universal solvent compatibility, which includes HFIP and Hexane
- › Operates at highest possible pressure minimizing solvent loss to the laboratory atmosphere
- › Consistent degassing efficiency for flow rates from 0 – 10 mL/min
- › Ability to select any given efficiency of degassing for any HPLC system