

# Sapphire Engineering™ Check Valve

## 20,000 & 30,000 PSI

### Ultra-High Performance Liquid Chromatography

Within a pressurized fluidic system, inlet and outlet check valves help create and sustain the required system pressures within the fluidic circuit. When connected to a UHPLC pump, a check valve reliably prevents solvents or fluids from flowing backwards into the valve or the system, causing contamination and unacceptable fluctuations in pressure and flow.

#### Variable Orientation

These two port, one-way ball & seat cartridge check valves are rated to 20,000 and 30,000 psi for use in UHPLC systems where reliable closure and sealing of the ball with the seat is critical to the performance of the instrument.

Designed with a universal cartridge for variable orientation, these flexible cartridge check valves can be used in both inlet and outlet flow paths, helping to simplify the instrument by reducing component count. The innovative design of the ball and seat configuration, the seals, and the cartridge housing contribute to the valve's rugged construction and rapid, reliable performance

#### Features

- ▶ Compact design: 1.3" in length x .63" in width
- ▶ Easy to implement—standard and custom sizes available
- ▶ Compatible—incorporates into all standard pump head port configurations
- ▶ Designed for ultra-high pressures, yet still stable in low-pressure systems
- ▶ Universal cartridge allows various body configurations

#### Technology Briefing

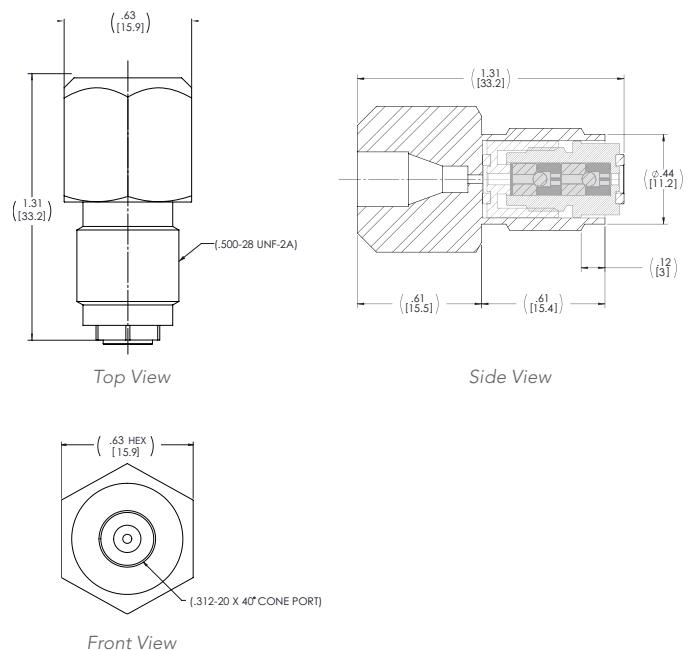
- ▶ 100% leak tested prior to assembly
- ▶ Seal design enables high pressure limits with uncompromised performance
- ▶ Ruby ball and matched ceramic seat
- ▶ Surface finishes to 0.25 µin. (0.006 µm RA)



UHPLC Check Valves

#### Overall Dimensions

Dimensions given in inches and [millimeters]



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