Bal Seal® Cover Seal for Syringe Pumps in Liquid Chromatography

Liquid chromatography is a separation technique that divides complex mixtures between a mobile and stationary phase. The Bal Seal® cover seal is used to ensure low dead volume for accurate control of flow rates during the dispensing cycle in syringe pumps. Energized by a Bal Spring® canted coil spring for improved sealing, the seal is made from low-friction materials that exhibit high chemical compatibility. A PW series, spring-loaded guide ring retains seal and piston concentricity with the bore, reducing side loading and leaks.

Operating Parameters

- Pressure: Vacuum to 500 psi (35 kg/cm²)
- Speed: .5 in/sec (1.2 cm/sec)
- Temperature: 70 °F (21 °C)
- Media: HPLC Solvents
- Additional: 304 SS, surface finish 2 to 4 Ra (0.05 to 0.10 µm)

Seal Selection:

OR-PS15X, S2X, and PW guide ring

Features:

- Bal Seal® OR-PS15X series seal is selected for low dead volume, high chemical compatibility, double acting, and snap on locking for ease of assembly
- Bal Seal S2 series face seal has radial contact points that create higher contact stress for improved sealing ability
- Bal Seal PW guide ring uses the patented canted-coil spring technology to energize the guide ring as it wears

Our products are custom-engineered to improve the performance and reliability of your designs. For more information about this and other sealing, connecting, conducting, and EMI/RFI shielding solutions, please contact us or visit us at www.balseal.com.