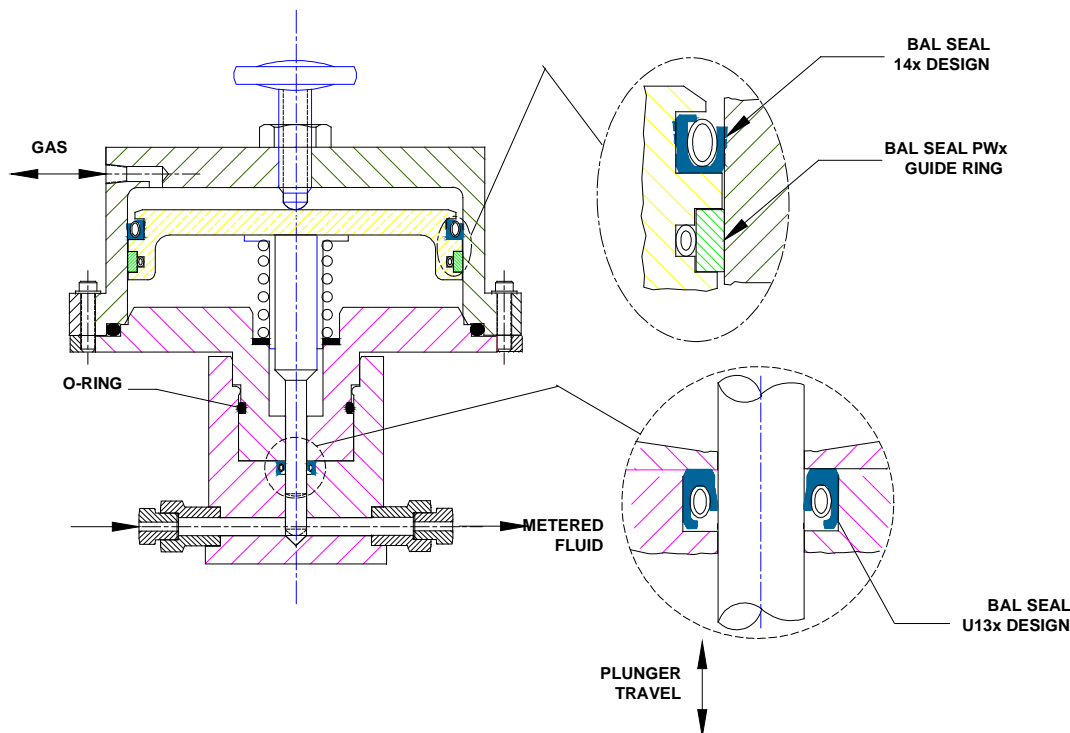


## BAL SEAL® SPRING-ENERGIZED SEALS IN CHEMICAL INJECTION PUMPS

Chemical injection pumps, a variation of plunger pumps, are designed to inject metered amounts of known liquids into pipelines that carry gases or liquids. The injected liquid provides an odor, color, or blending under precise conditions. The internal pipeline pressure activates the injector pump piston to develop high pressure on the liquid side to be forced into the pipeline. The stroke and displacement of the piston determine volume and rate.

These specialty pumps can be placed in remote areas where reliability of operation is important.



### Operating Parameters

Pressure:	60 to 6,000 psi (4.2 to 422 kg/cm <sup>2</sup> )
Media:	Sampling liquids
Temperature:	-65°F to 175°F (-54°C to 80°C)
Speed:	Slow reciprocating

**Seal Selection:** PWX (guide ring), 14X (low-pressure seal), U13X (high-pressure seal)

### Features:

- Bal Seal spring-energized seals series 14X and U13X selected for their easy press-in assembly.
- Bal Seal spring-energized seals series PWX spring-energized guide ring provides alignment.
- Excellent sealing performance; low, breakout frictional forces
- Patented, Bal Spring™ canted coil spring energizer provides near-constant force for long seal life.
- Excellent wear-resistant, filled PTFE seal material operates without lubrication.
- Chemically compatible with various fluids.

For more information and technical assistance, consult the Bal Seal Technical Sales Department.

PATENTS: The items described in this page include products that are the subject of issued United States and foreign patents or products where patents are pending, including the following: Patents 6,641,141 B2; 7,210,398 B2; 6,161,838; 5,992,856; 5,134,244

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Bal Seal Engineering, Inc. is certified to ISO 9001

[www.balseal.com](http://www.balseal.com)