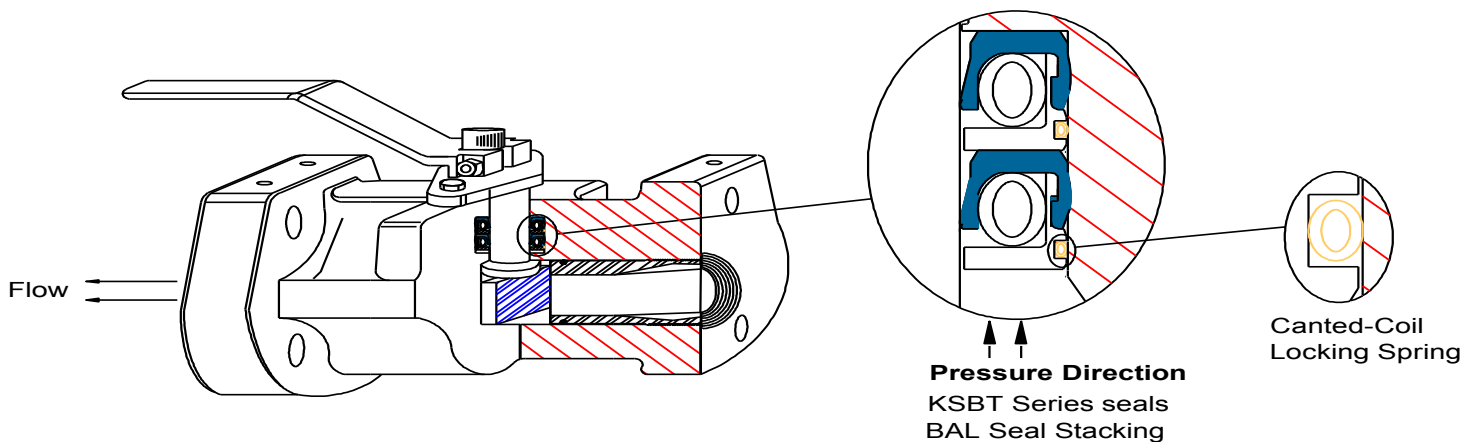


BAL SEAL® SEALS IN GATE VALVES

The petrochemical industry uses valves to control the flow of various gases and liquids. Elastomeric packings are typical sealing solutions for valve stems. However, the seal developed at Bal Seal is a direct replacement for the packing and provides reliable sealing.

Under environmental operating conditions, elastomeric packings compression set and age harden over time. Also, the conventional packing must be periodically adjusted to maintain good sealing performance. The patented, canted-coil spring energizer, however, creates a near-constant sealing contact force against the valve stem, so the Bal Seal seal does not need adjustment.

Compression set, media and environmental factors have no effect on the long-term sealing performance with Bal Seal seals, an important consideration when valves are loaded into remote areas. Bal Seal seals can be incorporated in a multitude of valve types including gate valves, ball valves and needle valves.



Operating Parameters

Pressure:	Vacuum to 3,000 psi (211 kg/cm ²)
Media:	Sour gas, water, petroleum, hydrocarbons and solvents
Temperature:	-20°F to 400°F (-29°C to 204°C)
Speed:	Slow rotation
Additional:	Low frictional forces, variable pressure and temperature endurance

Features:

- Bal Seal series seals with metal locking rings reduce diametrical seal shrinkage and support a radial loading holding spring or O-ring
- Easy seal removal.
- Patented, canted-coil spring mounted on the metal ring provides a reliable load to retain the seal within the gland.
- Bal Seal Engineering provides filled PTFE seal materials with excellent wear resistance and chemical compatibility.
- Unique seal geometry provides excellent sealing performance.
- Patented, canted-coil spring energizer provides near-constant force for long seal life.
- Canted-coil springs are available in many different materials and loads to accommodate good sealing and low-frictional drag.

For more information and technical assistance, consult the 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

U.S. Address 19650 Pauling Foothill Ranch, CA 92610-2610 • Phone: (949) 460-2100 • Fax: (949) 460-2300

BV Address: Jollemanhof 16, • 1019 GW Amsterdam • The Netherlands • Phone: 31 20 638 65 23 • Fax: 31 20 625 60 18