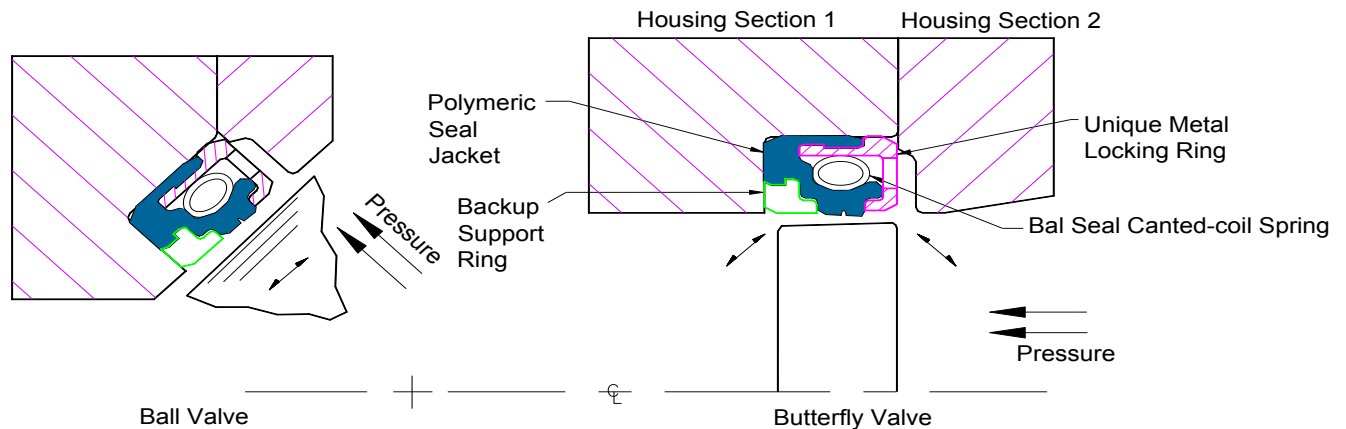


## ANTI-BLOWOUT BAL SEAL<sup>®</sup> SEALS

Self-retained, anti-blowout Bal Seal<sup>®</sup> seals are designed to retain fluid or gas products. The seal can be retained in a simple two-piece rectangular gland. Other technologies, such as conventional O-rings and anti-blowout seals, require an elaborately machined gland to retain the seal. The seal designs developed by Bal Seal have built-in support features to prevent the seal from deforming and experiencing a blowout, while maintaining residual pressure in the spring cavity. Blowout may occur when the shaft or piston has been removed. Typical applications are ball valves, butterfly valves, plug valves, pistons and quick disconnect coupling.

The anti-blowout seal is designed to press into the housing. A metal locking ring firmly retains the seal assembly into the housing and retains the inner lip of the seal to prevent a blowout. It also prevents shrinkage of the plastic ring during thermal cycling. A back-up ring further supports the inside diameter of the lip to prevent blowout whenever the seal is under pressure and unsupported.



### Operating Parameters

Pressure:	50 to 2,000 psi (3.5 to 141 kg/cm <sup>2</sup> )
Service:	Static, linear travel and rotation
Temperature:	70F to 300F (21C to 149C)
Media:	Liquids and gases

### Features:

- Metal locking ring has an integral ledge for anti-blowout capability.
- Excellent press-in metal locking ring retention system provides excellent support during thermal cycling.
- The metal ring compresses the outside diameter seal lip against the gland and seals the outside diameter.
- The seal is pressurized by multiple through-holes located on the metal ring face.
- Patented, canted-coil spring energizer provides near-constant force for long seal life.
- Bal Seal Engineering's proprietary filled PTFE seal materials provide excellent wear resistance, chemical compatibility and low friction.

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

Rev.B 8-30-07 (11-277) Bal Seal Engineering, Inc. is certified to ISO 9001 | [www.balseal.com](http://www.balseal.com)