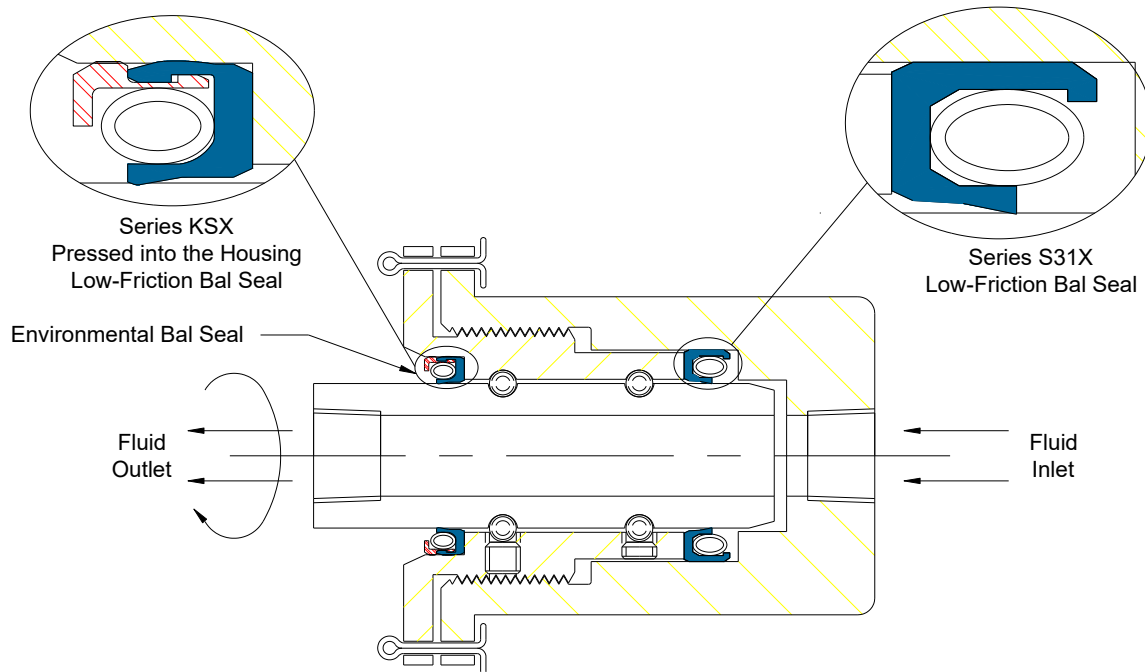


BAL SEAL® SEALS IN SWIVEL JOINTS

Swivel joints join sections of liquid-carrying lines that are moved and rotated from one position to another. A tanker truck pipeline is an example of a swivel joint application. These devices are available in basic styles for a 360° -rotation in one, two, or three planes of motion.

The swivel joint consists of a stationary housing and an internal rotary member. Between the housing and rotary member is an inner sleeve, which contains two circular grooves that house a series of balls that permit rotary, not axial, motion.



Operating Parameters

Pressure:	Vacuum to 15 psi (1.1 kg/cm ²)
Temperature:	-70 °F to 250 °F (-57 °C to 121 °C)
Velocity:	2 rpm
Media:	Corrosive fluids
Additional:	Chemical compatibility and low friction

Seal Selection: KSX and S31X

Features:

- Bal Seal® series KSX selected for its excellent metal locking ring retention system
- Bal Seal series S31X selected for complete gland retention
- Low-friction seal design keeps minimal frictional torque on the shaft
- Chemically compatible with various fluids
- Excellent wear-resistant, filled PTFE seal materials operate unlubricated
- Bal Spring® canted coil spring energizer provides near-constant force for long seal life

For more information and technical assistance, contact a technical sales representative.

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: VIDA Building, First Floor • Kabelweg 57 • 1014 BA Amsterdam • The Netherlands • Phone: 31 20 638 65 23 • Fax: 31 20 625 60 18

Bal Seal Engineering is certified to ISO 9001 | www.balseal.com