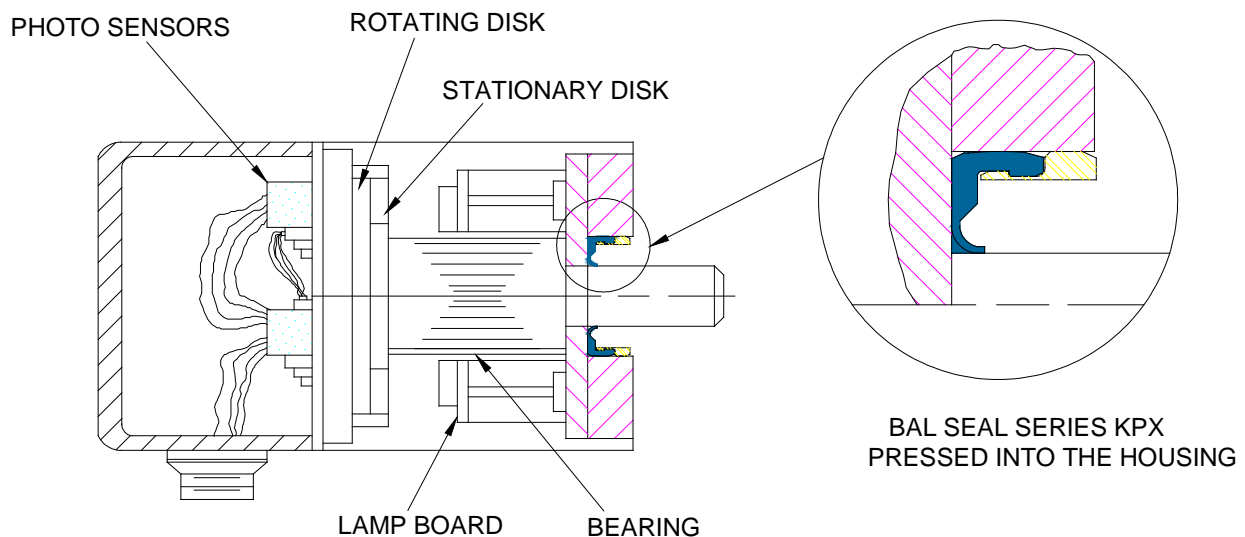


## BAL SEAL® SPRING-ENERGIZED SEALS IN ROTARY OPTICAL ENCODERS

Optical encoders control other mechanical devices by transforming electrical signals into mechanical action. Optical encoders are used in a variety of applications, such as robotic controls, NC lathes, disk drives, medical instruments, and welding equipment.

The optical encoder uses carefully aligned photoelectric sensors placed in front of a rotating disk that acts as a shutter. A light behind this disk provides the signal that is picked up by the sensors.

The KPX series Bal Seal® spring-energized seal closes off the rotating shaft and protects the precision encoder components from damage by outside environment elements such as water and dust.



### Operating Parameters:

Media:	Dust
Friction:	Very low
Speed:	3,600 rpm
Additional:	Low frictional torque and easy assembly

**Seal Selection:** KPX

### Features:

Bal Seal polymer-filled PTFE provides good wear resistance and low friction, and works well in non-lubricated environments.

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

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Bal Seal Engineering, Inc. is certified to ISO 9001

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