

SUPERPROOF SEALS ENGINEERING PVT. LTD.

# **BEARING ISOLATOR**

For Pumps, Turbines, Gear Boxes, Motors & Blowers

www.superproofseals.com



# **ABOUT US**

Superproof Seals Engineering Pvt. Ltd, founded in January 2001, was established by director's having 21 Years experience in Sealing Industries. Our Manufacturing unit is at Goregaon (W), Mumbai & Khali (Siddhapur-Gujarat) with all Modern & Advanced Equipment Like CNC Machines, VMC Machines, Lathe Machines, Drilling Machines, Grinding & Lapping Machines, Etc. We Have Also quality control Department to Ensure the Quality of a product, Service or Process.

Superproof Seals is TUV Austria EN ISO-9001:2008, OHSAS 18001:2007, EN ISO 4001:2004 Certified Company.

**Superproof Seals** is the First Indigenous Company in the Design and Manufacture of Permanent Bearing Protection and Complete Shaft Seals for Rotating Equipment, since 2001. **Superproof Seals** has maintained, as, preferred choice over imported Bearing Isolator in the markets they serve.

**Superproof Seals** is dedicated to continuous development of magnetic bearing protectors that meet API & ANSI equipment standards for rotating equipments in a wide range of industries.

**Superproof Seals** Unique product Lines Increase MTBF (Mean Time Between Failure) in Multiple applications Operating in a Variety of Industries, with our custom Engineered Solution. Priority Shipment and Localized Sales Force will Provide You with the Right Technology, right when you need it.

**Superproof Seals** Have vast Clients all over India Including Overseas Countries Like, Malasiya, Indonesia, Kingdom of Saudia Arabia, UAE, South Africa, Germany, Canada, USA, etc.

#### <u>History</u>

Lip seals were first introduced 70 years ago, they were the only kind of sealing device available. Convenient \* inexpensive, when it came to sealing industrial rotating equipment. Equipment is doomed to premature failure by lip seals that will fail long before the equipment. Worst, when a lip seals quits sealing, very undersirable things are liable to happen without warning. Chances are the lip seals has soon grooved the shaft or burnt to a crisp at the point of contact. Lubricant is free to exit the bearing enclosure and as the equipment cycles, moisture in the environment is drawn into the enclosure where it condenses & contaminates the lubricant. Lip seals are not as cheap as they are perceived to be. A single pump failure after a lip seals burns out will cost as much as dozens of bearing isolators.

Rotating equipment is designed to operate for at least 5 years. Rolling element bearing have a design life of 150,000 hours (17 years) or more. With a finite life and 100% failure rate, it simply does not make sense to loose time & money trying to make a contacting seal work.

The bearing Isolator, a non contacting labyrinth type seal was invented, giving a choice of permanent bearing protection the eliminated the need for continual maintenance & repair, because they never wear out & can be used over & over for many years.

#### **TECHNICAL**

**SuperPro**<sup>™</sup> Bearing isolator is mechanical device replacing conventional lip seal that isolates a bearing from its environment, so that the bearing will be kept properly lubricated & uncontaminated throughout its life.

**SuperMag<sup>™</sup>** magnetic bearing isolator is a magnetic device used to maintain the relative position of a rotor to a stator. The Magnetic forces are adjusted in response to forces generated from machine operation. SuperMag<sup>™</sup> is unaffected by axial shaft movement.

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Innovative Sealing Solutions

# **TYPE: SPB01**



### **SPB 01 TECHNICAL DATA**

A two part compound bearing isolator consisting of Rotor and Stator, that excludes contamination and retains lubrication.

Standard Material: Bronze / Bronze

Movement: Axial ±0.2mm / Radial ±0.4mm

Temperature : - 40 to + 200 °C

Elastomer: Viton Standard

Pressure: 0 psi (Bar) Speed: 8000 rpm

Shaft Size: Ø 10mm to 200mm

## **TECHNICAL FEATURES**

SPB 01 Inter Face, O ring for Oil Lubrication

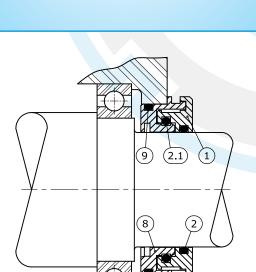
## **Application**

Pumps, Motor, Turbines, Gear Box, Blower

#### **Improved**

Equipment life, Process Uptime, Operational Profit

#### Reduced





Part No.	Description	
1	Rotor	
2	O-Ring	
2.1	O-Ring	
8	Stator	
9	O-Ring	



Innovative Sealing Solutions

# **TYPE: SPB02**



## **SPB02 TECHNICAL DATA**

A two part compound bearing isolator consisting of Rotor and Stator, that excludes contamination and retains lubrication.

Standard Material: Bronze / Bronze

Movement : Axial ±0.2mm / Radial ±0.4mm

Temperature : - 40 to + 200 °C

Elastomer: Viton Standard

Pressure: 0 psi (Bar) Speed: 8000 rpm

Shaft Size: Ø 10mm to 200mm

#### **TECHNICAL FEATURES**

SPB02 Without O Ring Face Lock.

#### **Application**

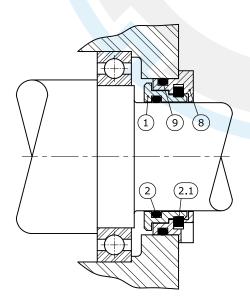
Pumps, Motor, Turbines, Gear Box, Blower

#### **Improved**

Equipment life, Process Uptime, Operational Profit

#### Reduced





Part No.	Description
1	Rotor
2	O-Ring
2.1	O-Ring
8	Stator
9	O-Ring



Innovative Sealing Solutions

**TYPE: SPB03** 



### **SPB03 TECHNICAL DATA**

A two part compound bearing isolator consisting of Rotor and Stator, that excludes contamination and retains lubrication.

Standard Material: Bronze / Bronze

Movement: Axial ±0.5mm / Radial ±0.4mm

Temperature : - 40 to + 200 °C

Elastomer: Viton Standard

Pressure: 0 psi (Bar) Speed: 8000 rpm

Shaft Size: Ø 10mm to 200mm

### **TECHNICAL FEATURES**

SPB 03 Without O Ring Face Lock.

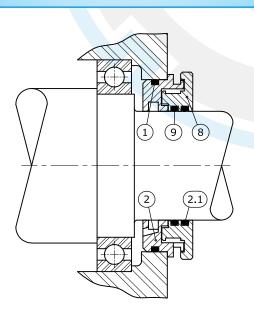
## **Application**

Pumps, Motor, Turbines, Gear Box, Blower

#### **Improved**

Equipment life, Process Uptime, Operational Profit

#### Reduced





Part No.	Description	
1	Rotor	
2	O-Ring	
2.1	O-Ring	
2.2	O-Ring	
8	Stator	
9	O-Ring	



Innovative Sealing Solutions

TYPE: SPB04



### **SPB 04 TECHNICAL DATA**

A two part compound bearing isolator consisting of Rotor and Stator, that excludes contamination and retains lubrication.

Standard Material: Bronze / SS316

Movement: Axial ±0.2mm / Radial ±0.4mm

Temperature : - 40 to + 200 °C

Elastomer: Viton Standard

Pressure: 0 psi (Bar) Speed: 8000 rpm

Shaft Size: Ø 10mm to 200mm

### **TECHNICAL FEATURES**

SPB 02 Face, O ring for Oil Lubrication

### **Application**

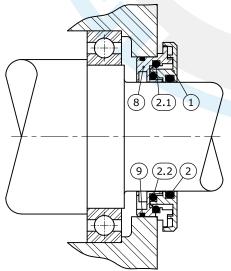
Pumps, Motor, Turbines, Gear Box, Blower

#### **Improved**

Equipment life, Process Uptime, Operational Profit

#### Reduced





Part No.	Description
1	Rotor
2	O-Ring
2.1	O-Ring
2.2	O-Ring
8	Stator
9	O-Ring

# **MAGNETIC BEARING ISOLATOR**



**Innovative Sealing Solutions** 

**TYPE: SPB05** 



### **SPB 05 TECHNICAL DATA**

A four part compound Magnetic Face Sealed bearing isolator consisting of Rotor and Stator, that excludes contamination and retains lubrication.

Standard Material: Bronze / Bronze / Magnet / Steel

Movement: Axial ±0.2mm / Radial ±0.4mm

Temperature: - 40 to + 200 °C

Elastomer: Viton Standard

Speed: 8000 rpm Pressure: 0 psi (Bar)

Shaft Size: Ø 10mm to 200mm

### **TECHNICAL FEATURES**

SPB05 Magneticaly Face Sealed Bearing Isolator

### **Application**

Pumps, Motor, Turbines, Gear Box, Blower

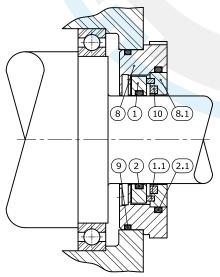
#### **Improved**

Equipment life, Process Uptime, Operational Profit

#### Reduced

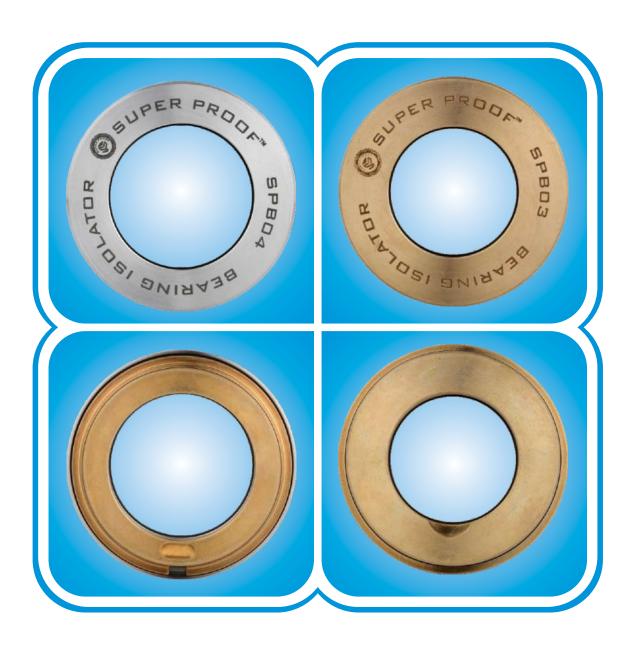
Bearing Failures, Maintenance Cost, Operational Losses, Easy to Install/Remove.





Part No.	Description	
1	Rotor	
1.1	Seal Ring	
2	O -rin g	
2.1	O-ring	
8	Stator	
8.1	Stator Ring	
9	O-ring	
1 0	Magnet Ring	





# We Adhere To Stringent Quality!

### SUPERPROOF SEALS ENGINEERING PVT. LTD.

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