



Magnetic Seal

Aerospace | Defence



Description

- **Magnetic Seal** is an elegant design, that operates at low load & seal face flatness resulting in reduced friction during high speed
- It is capable of withstanding extreme acceleration & deceleration in aerospace or similar high precision applications
- It increases seal life and renders a magnetic seal as an ideal solution for high speed applications
- Uniform load applies across the entire seal face



Technical Features

Precision Machined Seal Faces	2 Helium Light Band
Elastomer Mounted Components	Dampens system vibration & eliminates occasion for chatter at seal interface
Designed for High Shaft Speed Applications	Operates up to 30000 rpm
Face Load	50-75% less than spring seal
Short Axial Length	

Performance & Operating Conditions

- Pressure (P1) - 45 kg/cm²
- Pressure (P2) - Atmospheric pressure
- Temperature range - (-30°C to 135 °C)
- O-ring material: Viton rubber
- Shaft speed: 0-30000 RPM
- Min life: 50 Hours

Material

- **Magnet** Alnico 5
- **Seal Case** SS410 housing & assembled with carbon graphite sealing ring
- **O-ring** Viton rubber with Shore-A hardness of 70±5 will meet AS871

Parts

- **Magnet** (Stator)
- **Seal Case** (Rotor)
- **O-rings**

Customization

- Magnetic seal (UHM-A18SCV2)
- Magnetic seal is manufactured for high-speed shafts & it is customized based on the application requirement of the customer

Features & Benefits

- Uniform loading of the seal ring produces no anomalies to the seal interface
- Proven to enhance life over conventional method of face sealing
- Fits in compressed space in comparison to conventional seals and can be applied for upgrading standard lip seals
- Accepts low and high face pressure and has designs for reverse pressure
- Temperature limited by secondary seal
- Accepts high vibration environmental conditions
- Low life-cycle cost

Advantages

- More controlled with high-speed applications
- Uniform load at the seal face
- Fast improving performance in high shaft speed
- Used for high vibration applications

UMAC HIREL MANUFACTURING PVT LTD

#2561, 16th 'D' Main, HAL 2nd Stage,
Indiranagar, Bengaluru - 560008, India
Ph: 080 2525 1318 / 2527 2969
E: info@umachirel.com W: www.umachirel.com