# BELT

# **Carbon Floating Ring Seals - Shaft Seals**



#### **Product Description**

- 1. Designed to accommodate axial shaft movement
- 2. Capable of running dry
- 3. Radially cut multi-part seal rings
- 4. Shaft free of sealing components which minimizes the shaft vibrations
- 5. Seal rings are self adjusting
- 6. Shaft movement is accommodated by seal rings
- 7. Minimal power consumption as seal rings are non-contacting
- 8. Design of the seal housing is split
- 9. Low leakage due to extremely reduced gap during operation

#### **Technical Features**

- Ease of installation during assembly due to split design (dismantling of shaft is not necessary)
- 2. Operational durability
- 3. Easy to maintain
- 4. Trouble free replacement due to segmented seal ring design

#### Typical Industrial Applications

Bearing seals (gear box, motors) Chemical industry Food processing industry Fumes and exhaust, solids containing, flammable (ATEX), acid containing and toxic gases (Solids containing) steams / liquid mist Gases Medium-sized and large fans / blowers Metal production and processing Mixers, agitators, mills, dryer Oil mist / penetrating oil Petrochemical industry Power plant technology Steam turbines Waste incineration and removal industry Water

#### Standard

# FDA

**Materials** 

Seal ring: Carbon, PTFE compound Housing: 1.4021, 1.4571, Hastelloy®, Titanium, Inconel®, others Tension spring / detent: 1.4571, Hastelloy<sup>®</sup>, Titanium, Inconel<sup>®</sup>

### Performance Capabilities

Shaft diameter:

d = 40 ... 340 mm (1.57" ... 13.39") Operating pressure: p = vacuum ... 20 bar (290 PSI) abs. Operating temperature: t =  $-120 \degree C \dots + 800 \degree C$ ( $-184 \degree F \dots + 1,472 \degree F$ ) for carbon, max. 225 °C (437 °F) for PTFE compound Speed = max. 150 m/s (492 ft/s) for carbon, max. 40 m/s (131 ft/s) for PTFE compound Radial play:  $\pm 1.0 \dots 5.0$  mm ( $\pm 0.04^{"} \dots 0.2^{"}$ ) Axial movement: theoretically unlimited Recommended wear guard: > 300 HB (low pressure), > 58 HRC (high pressure)



Note: The item numbers as depicted above are based on our technical experience and knowledge and are placed in the chronological order of their assembly procedure.

ltem	Description
1	Flat seal
2	Housing, 2-piece
3	Seal ring
4	Tension spring
5	Detent



# Installation, Details, Options



ADKS 200 (split design)



Seal rings ADKS 200 ( 3-part, radial cut ) , Carbon / PTFE compound

# **Product Variants**







#### ADKF

With short design, reduced housing outside diameter and grease barrier port (for clean media, not for solids containing gases).

#### **ADKS 200**

For toxic and solids containing gases as well as ATEX applications type shaft seal with short design, reduced housing outside diameter and barrier gas port (for e.g. toxic and solids containing gases).

### ADS

With barrier gas and grease barrier port (for e.g. toxic and solids containing gases as well as ATEX applications, on special request).