

# 30K Rotary Seal Bearing/Gear Box Protection

## Product Data

Chesterton® 30K Rotary Seal provides excellent service in bearing and gear box applications that utilize conventional oil lip seals. The 30K is available in 4 distinct PTFE materials developed specifically for sealing applications. The PTFE compounds coupled with the seal design provide excellent fluid compatibility and outstanding performance.

- Each seal is individually machined, then the dynamic sealing lip is mechanically formed to provide optimal sealing force.
- Static o-ring seal prevents rotation and allows for easy installation and removal.
- Outperforms conventional oil lip seals.
- Does not fret or damage hardened shafts.
- Custom fabricated to meet equipment dimensions.
- Material is easily selected based on system fluid.
- Three unique designs to meet your sealing requirements

**30K**

**30KW**

**30KSW**

**AWC 100**

**AWC 300**

**AWC 400**

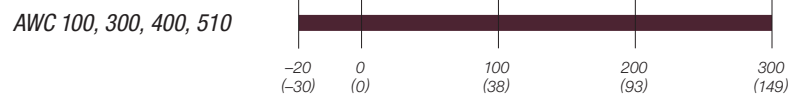
**AWC 510**

### Material Selection & Typical Applications\*

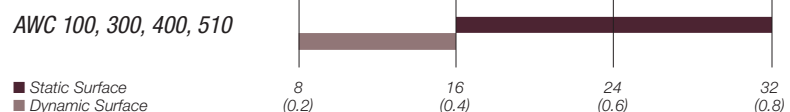
PTFE Compound	Dry	Water/Steam	Petroleum Based Liquids
AWC 100 - Polyimide Filled	Excellent	—	Excellent-Low Viscosity
AWC 300 - Moly & Glass Filled	Good	Good	Excellent-High Viscosity (>2,000 cp)
AWC 400 - Carbon & Graphite Filled	Good	Excellent	Good
AWC 510 - Mineral Filled (FDA Listed)	Excellent	Good	Not Recommended

\* Performance depends on concurrent conditions including shaft hardness, shaft surface roughness, material, lubrication, temperature and pressure.

### Operating Temperature Range – °F (°C)



### Recommended Surface Finishes – μ inch (μ m)



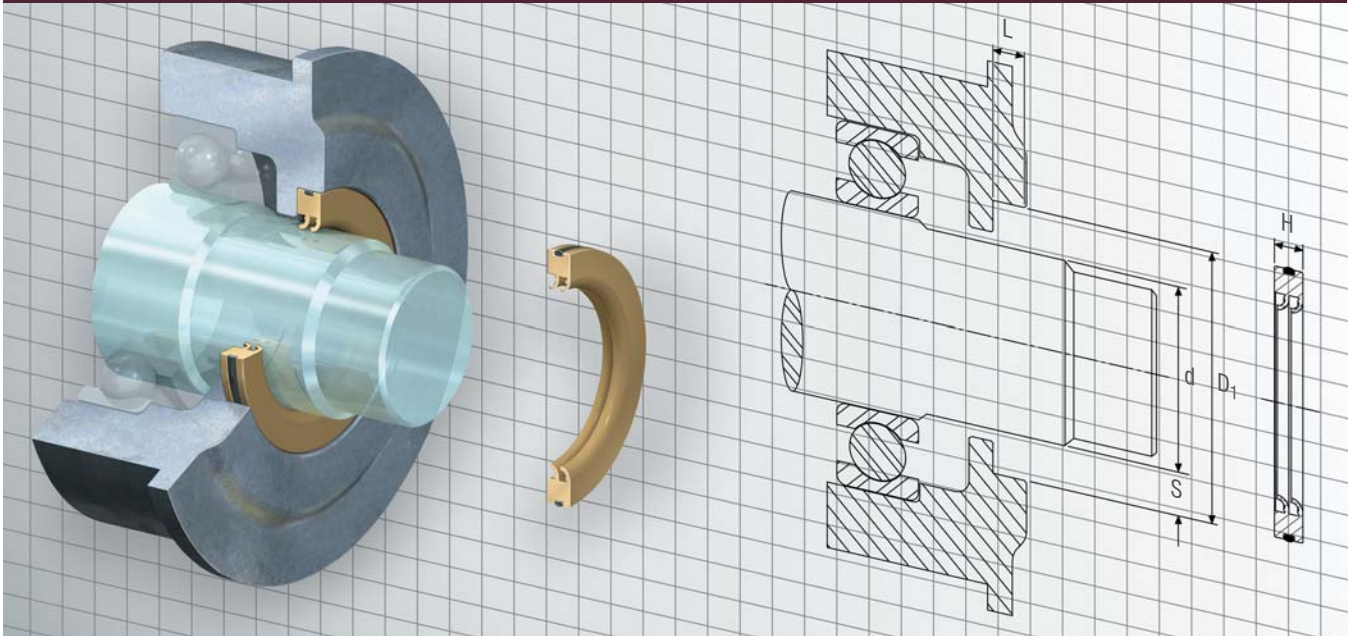
### Recommended Mating Surface Hardness

AWC 100 / 510	AWC 300	AWC 400
>45 Rockwell C	>55 Rockwell C	>55 Rockwell C

# 30K Rotary Seal

# Bearing/Gear Box Protection

## Cross Sectional Drawing of Equipment



### Technical Data

#### Designations:

Shaft diameter =  $d$   
 Equipment bore =  $D_1$   
 Seal height =  $H$   
 Groove height =  $L$   
 Cross section =  $S$

#### O-ring Material:

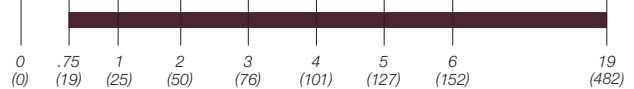
AWC 100, 300, 400 =  
 Fluoroelastomer

AWC 510 =  
 FDA Grade Fluoroelastomer

### Available Seal Sizes

#### Shaft Diameter Range

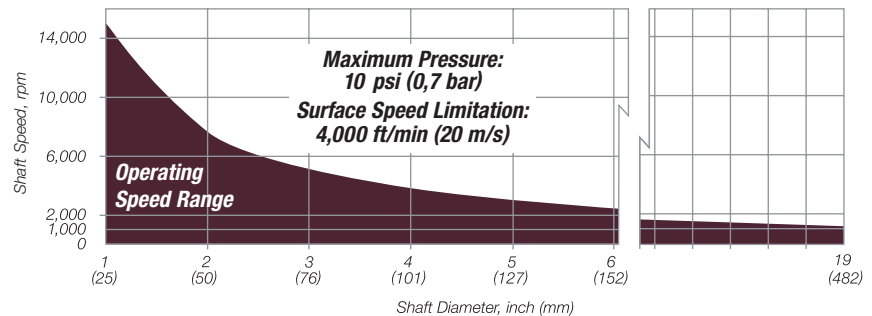
AWC 100, 300, 400, 510



Shaft Diameter ( $d$ )	*Equipment Cross Section ( $S$ )	*Seal Height ( $H$ )
0.750 – 19.0 inch (19 – 482 mm)	0.222 – 1.250 inch (5,5 – 31 mm)	0.230 – 1.500 inch (5,8 – 38 mm)

\* Maximum and minimum seal heights and cross sections will vary by shaft diameter.

### Operating Parameters



ISO certifications available at  
[www.chesterton.com/corporate/iso](http://www.chesterton.com/corporate/iso)

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A Supporting Member of FSA/ESA  
 860 Salem Street  
 Groveland, Massachusetts 01834 USA  
 Telephone: 978-469-6421 Fax: 978-469-6731  
[www.chesterton.com](http://www.chesterton.com)

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