

# 30KC Viscous Fluids and Powders

*Cartridge design for sealing powders and viscous fluids*

Chesterton® 30KC polymer cartridge seals are designed for use in dynamic rotary seal applications. This cartridge design uses high performance, filled PTFE materials proven to withstand the high shear rates, frictional heat, and abrasives common when pumping high viscosity products and powders.

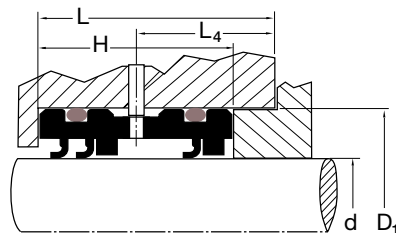
The 30KC high performance, filled PTFE compounds are coupled with the unique seal design to provide excellent fluid compatibility and outstanding performance. All engineered cartridges are custom manufactured to equipment dimensions eliminating the need for equipment modifications.

The 30KC is designed with an inboard sealing element, an outboard sealing element, and built-in flushing ports. The inboard lip seals process fluid, the outboard lips seal barrier fluid, while the flush port allows for flushing. The versatile cartridge design is extremely tough and able to withstand adhesion between the sealing surfaces and shaft due to reacted material and dry running capabilities.

## SPECIFICATIONS

| *Material (combination) (adapters/sealer rings) | Shaft Size mm (inch)          | Temperature °C (°F)         | Speed m/s (ft/min) | Pressure bar (psi) | Mating surface (Rockwell C) | Surface finish µm (µ inch)         | **Recommended use                                                                                                       |
|-------------------------------------------------|-------------------------------|-----------------------------|--------------------|--------------------|-----------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| AWC100 (PTFE)<br>Polyimide                      | 25 to 200<br>(1.000 to 7.875) | - 20 to 150<br>(-30 to 300) | Up to 5<br>(984)   | to 10<br>(150)     | 45                          | Dynamic                            | <b>Excellent dry</b><br>Excellent low viscosity (<2,000 cp)<br>Powders, oil, resins, glues, paints<br>No water or steam |
| AWC300 (PTFE)<br>Molybdenum & glass             |                               |                             |                    |                    | 55                          | 0.2 to 0.4<br>(8 to 16)            | <b>Excellent high viscosity</b><br>(>2,000 cp)<br>Good in dry, water or steam                                           |
| AWC400 (PTFE)<br>Carbon & graphite              |                               |                             |                    |                    | 55                          | Static<br>0.4 to 0.8<br>(16 to 32) | <b>Excellent in water or steam</b><br>Good dry and low viscosity<br>Powders, asphalt, clay, slurries                    |
| AWC510<br>Mineral (FDA listed)                  |                               |                             |                    |                    | 45                          |                                    | <b>Excellent dry</b><br>Good in water or steam<br>Chocolate and syrups<br>No petroleum liquids                          |

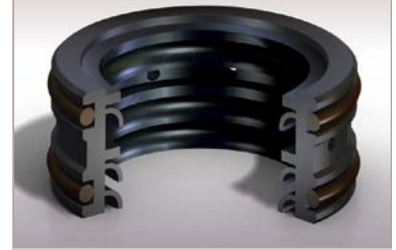
\* fluoroelastomer O-rings provided (FDA listed w/ AWC510) \*\* runout to 0,15mm (.005")



## PRODUCT PROFILES:



30KC



- *Outperform conventional packing, sealing high viscosity fluids and dry powders*
- *Decrease downtime, easy-to-install versatile cartridge design*
- *Improve performance of compression packing, distinct PTFE materials*
- *Custom designed cartridges made to equipment dimensions*

## To place an order:

Product profile: \_\_\_\_\_  
 Material: \_\_\_\_\_  
 Rod shaft diameter (d): \_\_\_\_\_  
 Stuffing bore diameter (D<sub>1</sub>): \_\_\_\_\_  
 Groove height (L): \_\_\_\_\_  
 Distance to flush port (L<sub>4</sub>): \_\_\_\_\_  
 Cartridge height (H): \_\_\_\_\_



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