



7520 Model

Maintenance Free & Self-Adjusting Seal



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 [See How CinchSeal Works](#)

About the Seal

The key component of the 7500 rotary shaft seal design is the solid elastomer, which is made from FDA approved silicone and can handle temperatures up to 400F degrees. The 7520 is built for slurries or very abrasive applications. The elastomer is molded slightly smaller than the shaft size so that an interference fit is achieved. It is this tight fit that seals the shaft, which stops material from migrating past, and drives the two rotating faces called “rotor cups”. The rotating rotor cups compressed against the two stationary stator plates is what creates the primary seal that stops product leakage. These dynamic seals are also air purged at 5 to 7 PSI above any pressure in the vessel to assist in maintaining a positive seal.

- Designed for C.E.M.A. screw conveyor and bulk handling equipment
- Temperature ranges -50F to 400F
- Bolting pattern will accommodate flange mounted bearings
- The housing is machined out of Anodized Aluminum
- Designed to handle linear shaft growth, and 1/4” total radial shaft runout
- Purge with air, 5 to 8 psi above vessel pressure, or silicone grease
- Zero maintenance due to unique self adjusting design

Our Certifications



How the 7520 Works

Functionality

The key component of the 7500 rotary shaft seal design is the solid elastomer, which is made from FDA approved silicone and can handle temperatures up to 400F degrees. The elastomer is molded slightly smaller than the shaft size so that an interference fit is achieved. It is the interference fit of the elastomer and shaft that not only seals the shaft so the product can't migrate past and leak out, but it also causes the internal seal parts to turn with the shaft so that damage to the shaft is eliminated. As the elastomer turns with the shaft, it drives a pair of PTFE mineral-filled rotor cups against two stationary faces to form the primary seal. The fact that CinchSeal turns with the shaft is what makes it unique and superior to rope packing and lip seals that are stationary.

As the shaft turns, the elastomer drives two PTFE rotor cups that are being compressed with the optimum face pressure against a stationary face. It is the face pressure between the rotating faces and the stationary faces that stops material from leaking. The PTFE rotor cups are the softer and sacrificial part of the seal and are designed to wear and be replaced. In-expensive replaceable internal components (CinchSeal Repair Kit) consist of a new elastomer and two new PTFE rotor cups, which can be installed in minutes.

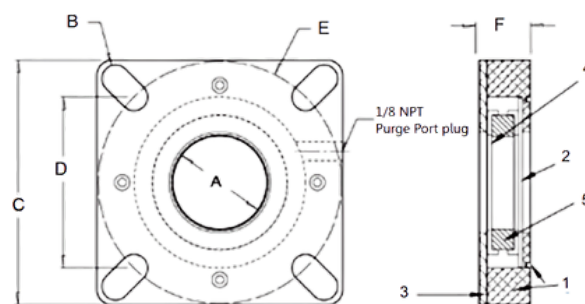
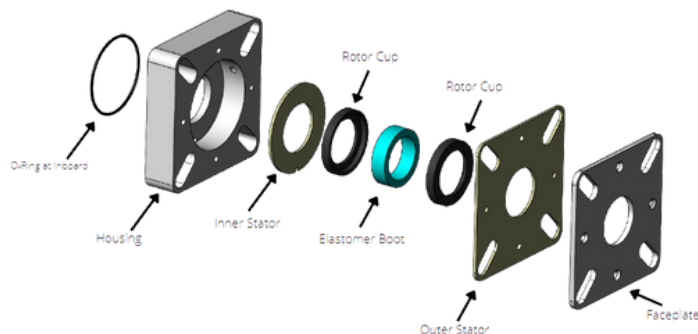
Air-Purge

CinchSeal is an air purged seal that performs best when purged with 5 to 8 PSI of air over vessel pressure. The air purge improves seal life by accomplishing 3 things: it creates a higher pressure inside the seal which creates a natural air barrier that helps keep material out of the seal. Keeps the rotating faces cooler, and it adds to the closing force on the seal faces so product can't leak by.

C.E.M.A.

The 7500 series meets all C.E.M.A. Dimensions and is easy to bolt up in place of waste packs, plate seals, and packing glands. Try CinchSeal today and stop all powder and dust leaks on all your rotating equipment.

7520 Assembly



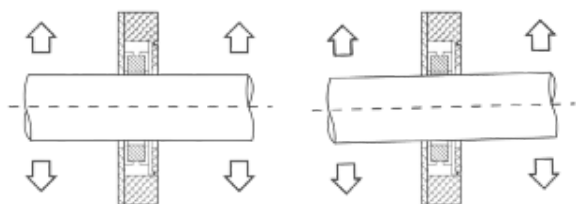
1. Housing - O'ring at Inboard
2. Inner Stator
3. Outboard Plate
4. Rotor Cup
5. Elastomer Boot - FDA Approved

DIMENSIONAL CHART

A	B	C	D min	D max	E min	E max	F
1.5	.625	5.375	3.30	4.375	4.667	6.187	1.75
2.0	.750	6.50	4.0	5.386	5.657	7.617	1.75
2.437	.750	7.375	4.5	6.26	6.364	8.853	1.75
3.0	.880	7.875	5.50	6.677	7.778	9.443	1.75
3.437	.880	9.25	6.76	8.052	9.560	11.387	1.75

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Self Adjusting Alignment



The CinchSeal module readily accommodates a reasonable amount of shaft vibration, misalignment or wobble. The rotor cup "floats" against the face of the stator plate so any lateral shaft movement produces nothing more than a slight orbital eccentricity.

Accessories Available

Seal Repair Kits (Replaceable Internal Components)

Air Pressure Regulators

Automatic Greaser



7520 Seal Installation

If you have any questions before you begin your installation please call 1-856-662-5162 Shaft should be totally clean of any wear, dirt, oils or grease before installing the seal. Carefully remove seal from shaft.

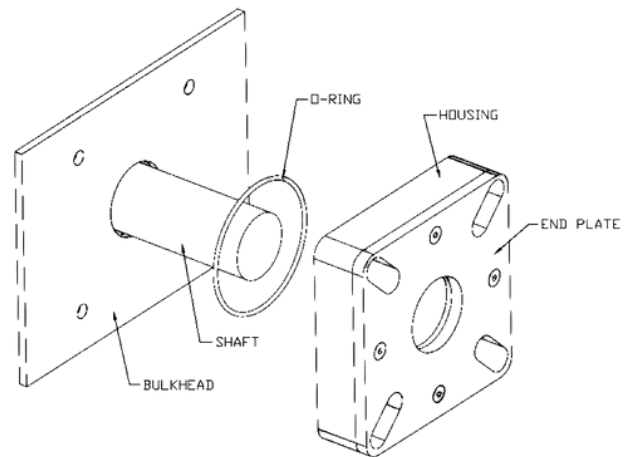
*Use mild soapy water for lubrication or P-80 Rubber Lubricant Emulsion.

[Contact Us](#)

[Watch Our Seal Installation Video](#)

Installing the 7520 Seal

1. Housing must be perpendicular - normal to the shaft
2. Alignment of housing to shaft cannot exceed 2°
3. Check and make sure the O-ring at the inboard is seated
4. Check for equal spacing around the shaft and the ID of the seal Tighten mounting hardware.
5. Manufacturers recommended torque settings 18ft. lb.
6. Purge seal before operating -Purge options: See Installation Guide. Each seal should have its own dedicated airline. Sharing a single airline between multiple seals is not permitted. Use separate air regulators for each seal.



Maximum operating temperature of the seal to be less than 400°F
Seal housing should be secured to the vessel wall using bolts/nuts and appropriate torques.

7520 Repair Kit Installation

Replacing Internal components for 7520 Seal

1. Remove cover plate and take out all internal parts
2. Clean housing and shaft
3. Align notch in new round PTFE stator to pin in housing
4. Place boot between 2 metal rotor cups and place in housing
5. Install square PTFE stator plate
6. Assemble endplate to housing using screws
7. Insert new o-ring in housing groove
8. Install rebuilt seal on to shaft

