MECO SEALS

EA Type-2

EMPLOYEE OWNED

WOODEX · MECO INDUSTRIES

What it is

The MECO EA Type-2 seal is a custom-designed, soft-face, double mechanical seal for rotating shafts. The seal can be manually adjusted without disassembly to compensate for periodic seal face wear. Unlike packing glands, the seal does not move against the shaft, so no abrasive damage occurs and shaft runout can be tolerated. The seal is available fully-split for ease of installation and maintenance.

How it works

The seal uses a wide driving elastomer to lock two bearing-grade plastic rotors to the shaft, forcing the elastomer and rotors to turn with the shaft. The rotors act like rotating thrust washers, sealing against polished stainless steel stators, and the elastomer ensures a tight seal against the shaft. An elastomer adjusting gasket, fitted into a groove in each of the stationary housings, creates a gas-tight purge cavity.

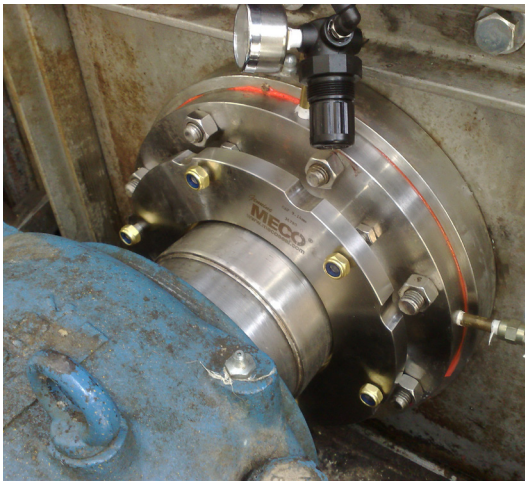
Air or inert gas is introduced through one purge port; a second purge port is fitted with a pressure gauge to monitor gas pressure retained within the cavity. Purge pressure between the two seal faces, positive relative to both atmosphere and process, ensures process material remains on the process side of the seal, and isolates process materials from atmospheric oxygen. The gas pressure also serves to energize the seal faces and provide a diagnostic tool for evaluating seal performance and predicting maintenance.

Applications

The EA Type-2 seal is used on solvent extractor mainshafts and shaker shafts, on screw and en masse conveyors in the oilseed, plastics and chemical industries, on polymer blenders and dryers, and on other machinery with restricted axial clearances where the ability to adjust seal face pressure without seal disassembly is desired. EA Type-2 seals have successfully sealed vacuum dryers but the EP Type-3 design is preferable when space is available.

EA Type-2 features:

- Fully split
- Elastomer driven
- Gas-purged
- Externally adjustable

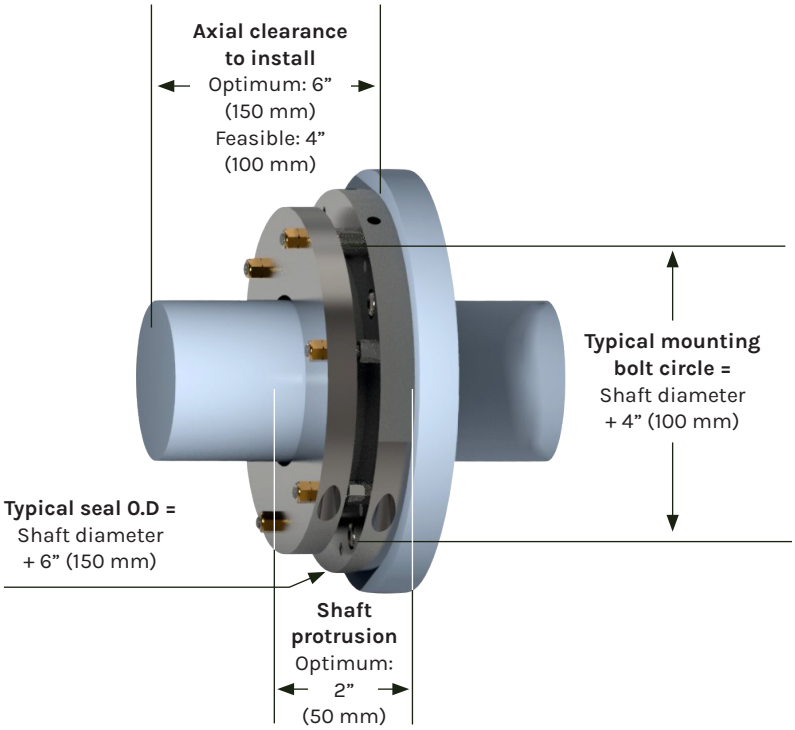


Sizing & material options

The EA Type-2 seal is custom-designed and manufactured to fit each application's needs. Shaft sizes typically range from 1" (25mm) up to 17.5"(445mm) but other sizes are possible. Seal housings are typically manufactured of 304L stainless steel or aluminum, with other alloys available. Stators are typically 304L stainless steel and drive elastomers and sacrificial rotors can be manufactured from a variety of polymer materials, according to each application's needs. Seals are typically built fully-split for ease of installation and maintenance.

Fully-split

FOR EXTERNAL MOUNTING



Maintenance

The EA Type 2's performance can be monitored by comparing the regulated purge gas pressure entering the seal with the gas pressure contained within the seal. As a differential between these two pressures begins to grow, the seal can be adjusted to compensate for seal face wear. As wear takes place, pressure between the seal faces is reduced and more purge gas can exit the seal, resulting in lower pressure in the seal cavity.

Adjustment consists of tightening each of the seal's adjusting studs one-sixth turn, reducing the distance between the two stationary seal faces and tightening the seal. Fully-split repair and overhaul kits are offered which permit rebuilding the seal in the plant.

MADE IN THE USA

To learn more and to find out if the **EA Type-2** is the right seal for you, please give us a call, or submit an online application today!

woodex-meco.com | +1 207.371.2210 | sales@woodex-meco.com
216 Bay Point Road, Georgetown, ME 04548 U.S. |