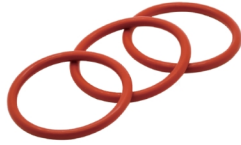


Seal ring - Catalog

Seal ring



P873



P874



P875

Product Name

O-Ring P Series

O-Ring G Series / V Series / AS Series

Oil Seal With Secondary Lip

Product Code

CURP

CURG/CURV/CURS

CVOS



P875



P876



P876



P877

Oil Seal Double Lip/Single Lip

Sealing Ring VA Type

Sealing Ring ED Type

Sealing Ring UN Type

CVBJ/CVAS

CVAW

CVBE

CVCU



P878



P879



P880



P880

Sealing Ring LBH Type

Sealing Ring Star shape

Seal Plug International Series

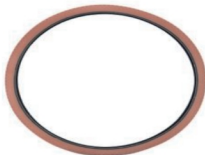
Seal Washer International Series

CVDL

CVEQ

CVFD

CVFB



P881



P882

Gland Packing for Holes

Sterling Seal for Shaft

CVGG

CVHD

Seal ring - Product Overview

❶ O-Ring Seal Product Introduction

The O-ring seal belongs to the category of molded packing seals. It relies on the elastic-plastic deformation of the packing material itself under the self-locking effect of mechanical compression force or medium pressure to block fluid leakage paths. An O-ring seal is a rubber seal with a circular cross-section. Due to its O-shaped cross-section, it is known as an O-ring seal or simply an O-ring.

❷ Features:

- ① Suitable for multiple sealing forms: static sealing and dynamic sealing.
- ② Compatible with a wide range of materials for various applications. Its dimensions and grooves are standardized, ensuring strong interchangeability.
- ③ Suited for various types of motion: rotary motion, axial reciprocating motion, or combined motions (e.g., rotary and reciprocating combined motion).
- ④ Capable of sealing multiple different media: oil, water, gas, chemical media, or other mixed media.
- ⑤ By selecting appropriate rubber materials and proper formulations, it can effectively seal oil, water, air, gas, and various chemical media. Wide temperature range of use (-60°C to +220°C). When used in a fixed manner, it can withstand pressures up to 1500Kg/cm² (when used with reinforcing rings).
- ⑥ Simple design, compact structure, and easy installation and removal: The cross-section structure of the O-ring is extremely simple, and it has self-sealing properties, ensuring reliable sealing performance. Being standardized, it is both easy to install and replace.

❸ Application Scope

O-ring seals are suitable for installation on various mechanical equipment, providing sealing functions in static or dynamic states within specified temperatures, pressures, and various liquid and gas media. They are widely used in machine tools, ships, automobiles, aerospace equipment, metallurgical machinery, chemical machinery, construction machinery, mining machinery, petroleum machinery, plastic machinery, agricultural machinery, as well as various types of instruments and meters, employing a diverse range of sealing elements. O-rings are primarily used for static sealing and reciprocating motion sealing. When used for rotary motion sealing, they are limited to low-speed rotary sealing devices. O-rings are typically installed within rectangular grooves on either the outer or inner circumference to perform the sealing function. O-rings exhibit excellent sealing and shock-absorbing capabilities even in oil, acid-alkali, abrasive, and chemically corrosive environments. Therefore, O-rings are the most widely used sealing components in hydraulic and pneumatic transmission systems.

❹ Introduction to Oil Seals

Also known as lubricating oil seals, oil seals are primarily used in bearings of various machinery, especially rolling bearings. Their main function is to isolate the oil chamber from the outside environment, sealing oil inside and preventing dust from entering.

❺ Precautions for Use

(1) Preparations and Precautions Before Startup

- ① Conduct a comprehensive inspection of the mechanical seal and its auxiliary piping to ensure completeness and compliance with technical requirements.
- ② Perform a hydrostatic test before starting the mechanical seal to check for any leakage. If significant leakage is observed, investigate the cause and take measures to eliminate it. If the issue persists, disassemble the seal for inspection and reinstall it. Typically, the hydrostatic test pressure ranges from 2 to 3 kg/cm².

③ Turn the pump by hand in the direction of rotation to check for smooth and even movement. If the pump is difficult to turn or does not move at all, inspect the assembly dimensions for errors and the installation for proper alignment.

(2) Installation, Operation, and Shutdown

- ① Ensure that the seal chamber is filled with liquid before startup. When conveying solidified media, use steam to heat the seal chamber to melt the media. Always rotate the pump by hand before starting to prevent sudden startup from causing the soft ring to shatter.
- ② For mechanical seals utilizing an external oil sealing system, start the oil sealing system first. Stop the oil sealing system after shutting down the pump.
- ③ Do not immediately stop the cooling water for the seal chamber and end face seal after stopping a hot oil pump. Wait until the oil temperature at the end face seal drops below 80°C before stopping the cooling water to prevent damage to the sealing parts.

(3) Operation

- ① If there is slight leakage after starting the pump, observe it for a period of time. If the leakage does not decrease after continuous operation for 4 hours, stop the pump for inspection.
- ② The operating pressure of the pump should be stable, with pressure fluctuations not exceeding 1 kg/cm².
- ③ During pump operation, avoid suction depletion to prevent dry friction and damage to the sealing surface.
- ④ Regularly check the sealing condition. During operation, if the leakage exceeds the standard (not more than 5 drops/minute for heavy oil and not more than 10 drops/minute for light oil), and if there is no improvement trend within 2-3 days, stop the pump and inspect the sealing device.