Gear Pump

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Introduction

Introductory page.

An **image map** is a list of coordinates defining areas over an image. These areas can link to different destinations (URLs).

For a sample image map of a **gear pump**, see the Gear Pump - Exploded View on page 3 topic. Transform the DITA map to an HTML output in order to see how clicking over the image works.

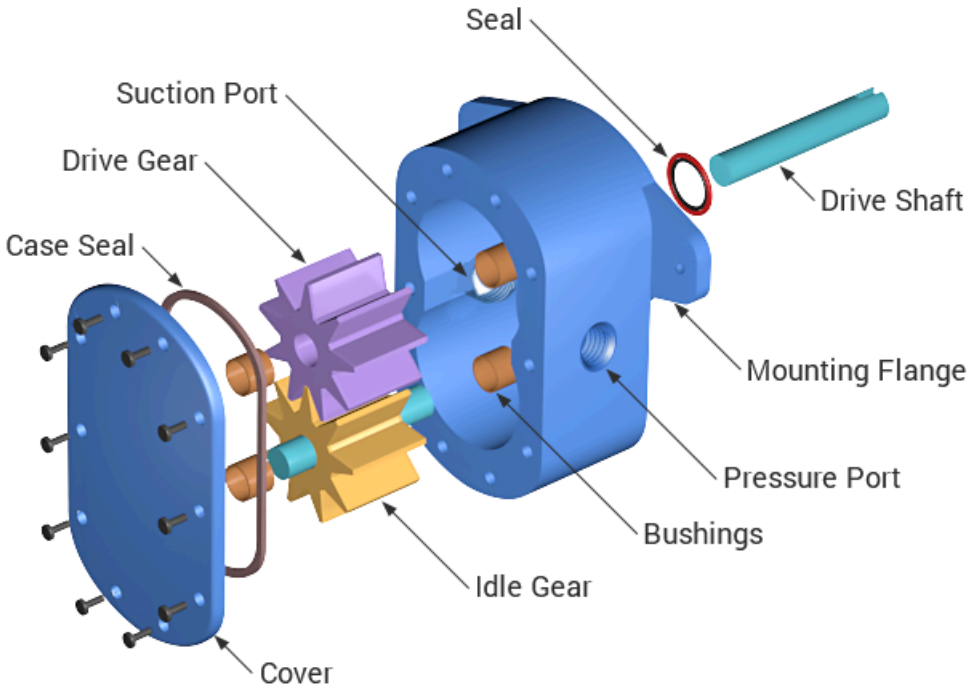
Gear Pump - Exploded View

Detailed description.

A **gear pump** uses the meshing of gears to pump fluid by displacement. They are one of the most common types of *pumps* for hydraulic fluid power applications. *Gear pumps* are also widely used in chemical installations to pump high viscosity fluids.

An exploded view diagram of a gear pump

Click on **Edit image map** to edit the map, or use **Image map details** to see the defined areas directly in the document.



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Bushings

Bushings

A *bushing*, also known as a *bush*, is an independent plain bearing that is inserted into a housing to provide a bearing surface for rotary applications. The bushings in the **gear pump** provide a bearing surface for the **drive gear** and **idler gear**.

Drive Shaft

Drive Shaft

A *drive shaft* is a mechanical component for transmitting torque and rotation, usually used to connect other components of a drive train that cannot be connected directly because of distance or the need to allow for relative movement between them..

Gears

The **gear pump** uses two identical gears rotating against each other. One gear is driven by a motor and it in turn drives the other gear. Each gear is supported by a shaft with *bushings* on both sides of the gear.

Drive Gear (Rotor)

The *drive gear* in the **gear pump** is the gear that is driven by the motor.

Idler Gear

The *idler gear* is the gear that is driven by the *drive gear*.

Mounting Flange

Mounting Flange

The mounting flange is used to fix the pump on a support apparatus.

Ports

Suction Port

The liquid enters in the pump through the *suction port*.

Pressure Port

The liquid leaves the pump through the *pressure port* (or discharge port).

Seals

Shaft Seal

This is a seal that is placed between the *drive shaft* and the main case of the **gear pump**.

Case Seal

The case seal is placed between the main case and the case cover.

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