

Installation Manual

5693000H

GR22-Series Guide Rail Systems

Models

GR22-LE 2" Discharge

Fits LE70, LE100, LEH100, LEH150 and LEH200-Series Pumps

GR22NS-LE 2" Discharge, Non-Sparking for Hazardous Locations

Fits XLE50, XLE70, XLE100 and XLE150-Series Pumps

GR22-FL 2" Discharge

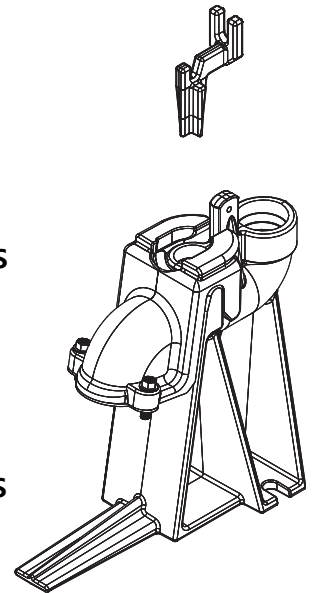
Fits FL50, FL60, FLH60, FL70, FL100, FL150 and FL200-Series Pumps

GR22NS-FL 2" Discharge, Non-Sparking for Hazardous Locations

Fits XFL50, XFL70, XFL100 and XFL150-Series Pumps

GR22-S 2" Discharge

Fits LE40, LE50 and PRG-Series Pumps



Features

- Heavy-duty cast iron construction
- Accommodates single 1-1/4" guide pipe and 2" discharge pipe
- Auto-alignment feature
- Upper rail support bracket
- Includes sealing grommet

IMPORTANT: All Liberty Pumps systems are supplied with their own separate Installation/Operation/Maintenance manuals. Ensure receipt of these manuals, and that they are read and understood prior to installation. For questions, call Liberty Pumps customer service at 1-800-543-2550.

NOTICE

Installer: Manual must remain with owner or system operator/maintainer.

Record information:

System: _____

Model(s): _____

Serial(s): _____

Date Code: _____

Install Date: _____

7000 Apple Tree Avenue
Bergen, NY 14416
ph: 1-800-543-2550
fax: 1-585-494-1839
www.LibertyPumps.com

Keep this manual handy for future reference.

For replacement manual, visit LibertyPumps.com, or contact Liberty Pumps.

Retain dated sales receipt for warranty.

GR22-Series Assembly

The GR22 quick disconnect assembly provides easy installation and removal of the pump. When installed correctly, it will seal and provide support for the pump. Ensure that installation is done per instructions.

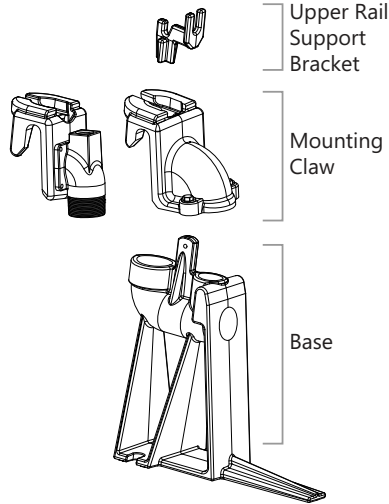
The rail system consists of three parts:

Upper rail support bracket:

A small casting is supplied and is used to support the top end of the 1-1/4" guide rail pipe (pipe not included). This casting needs to be mounted to a support structure, bar stock, angle iron, or other means that attaches to the side walls of the vault.

Mounting claw: The LE claw has a larger flange and fits LE-Series sewage pumps. The FL claw mates to FL-Series effluent pumps. Both GR22-LE and GR22-FL claws are threaded 2" FNPT for optional mounting applications. The GR22-S claw has a 2" NPT male thread for pumps with threaded discharges.

Base: Casting that is mounted to the floor of the pumping chamber or vault. One-half inch studs are recommended to secure, spaced at 5.5" apart.

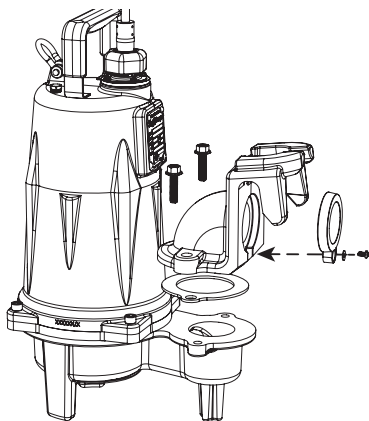


Preparation

The claw has a sealing grommet that provides the seal between the claw and base unit. The sealing grommet should be cleaned and greased before every new installation with a light amount of sealing grease (provided).

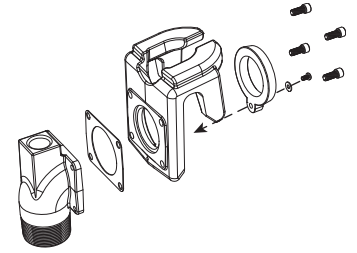
GR22-LE and GR22-FL: a gasket should be used between the claw and pump—the gasket and mounting hardware are provided with the pump. The stock flange that is shipped with the pump is removed and replaced with the claw.

1. Insert grommet into mounting claw. Tighten until washer does not spin freely, but do not over-tighten.
2. Apply a light amount of sealing grease to the face of the grommet.
3. Use supplied bolts to secure the claw to the pump discharge.



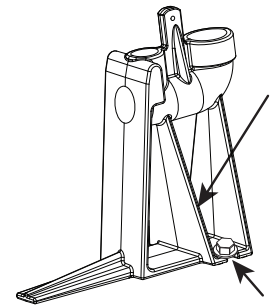
GR22-S features a split design for pumps without a flange.

1. Screw threaded split guide rail claw into pump discharge. Refer to **GR22-S Alignment**.
2. Use supplied bolts to secure the mounting claw assembly to the threaded base.
3. Insert grommet into mounting claw. Tighten until washer does not spin freely, but do not over-tighten.
4. Apply a light amount of sealing grease to the face of the grommet.



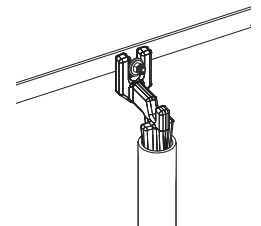
Installation

1. Mount the base to the floor of the tank, referring to the **Base Mounting Template** measurements. Secure the base to the basin floor at the base slots with 1/2" bolts (stainless steel recommended).



2. Insert upper rail support bracket into guide rail pipe and secure to tank.

Note: a heavy guide rail pipe of 1-1/4" galvanized or stainless steel is recommended.



Pump Connection

1. Using a lifting chain, slip the pump claw over the upper guide rail support bracket.
2. Lower the pump at an angle down the guide rail into the tank (basin).

As the pump nears its final position, the straightening rib squares the pump bracket with the guide bracket ears. When the pump bracket ears hook the guide bracket ears, the chain will slacken.

3. Grasp the lifting chain and shake the pump to ensure a good seat with the grommet. The pump is suspended by the bracket ears. The weight of the pump compresses the grommet against the mating flange of the guide bracket base.
4. The lifting chain may be removed from the hoist and hooked near the upper rail support bracket.

GR22-S Alignment

Proper GR22-S claw alignment is crucial for ensuring a secure pump seal with the mating base. The GR22-S claw face must be parallel to the pump handle when the threaded connection is secure and tight.

1. Screw the claw into the pump discharge by hand until it is snug.
2. Use a wrench for an additional 1/4 to 1/2 turn for tightening. Aim to have the claw mating face parallel to the pump handle when the connection is secure. Apply thread sealant to the male threads of the claw as needed.

Note: Avoid over-tightening that can damage the threads or deform claw.

Alineación del GR22-S

La correcta alineación de el gancho del GR22-S es crucial para asegurar un sellado seguro de la bomba con la base de acoplamiento. La cara de el gancho del GR22-S debe estar paralela a la manija de la bomba cuando la conexión roscada esté firme y apretada.

1. Enrosque el gancho en la descarga de la bomba con la mano hasta que quede ajustada.
2. Utilice una llave inglesa para dar entre 1/4 y 1/2 vuelta adicional para apretar. Procure que la cara de acoplamiento de el gancho quede paralela a la manija de la bomba cuando la conexión esté firme. Aplique sellador de roscas a las roscas macho de el gancho según sea necesario.

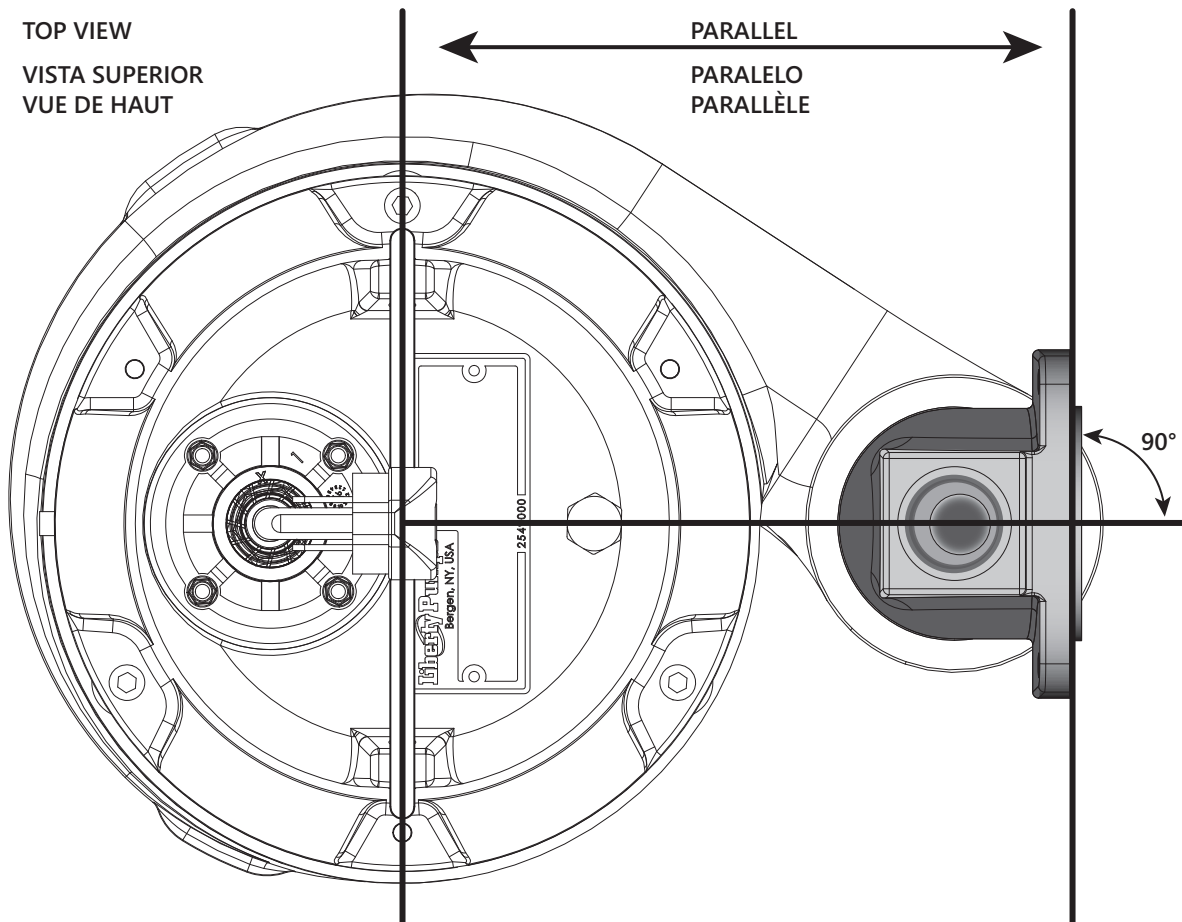
Nota: Evite apretar demasiado, ya que puede dañar las roscas o deformar el gancho.

Alignement du GR22-S

Un alignement correct de la griffe du GR22-S est essentiel pour assurer une bonne étanchéité de la pompe avec la base correspondante. La face de la griffe du GR22-S doit être parallèle à la poignée de la pompe lorsque le raccord fileté est solidement fixé.

1. Vissez la griffe à la main dans le refoulement de la pompe jusqu'à ce qu'elle soit bien serrée.
2. Utilisez une clé pour faire un quart à un demi-tour supplémentaire. Assurez-vous que la face de contact de la griffe soit parallèle à la poignée de la pompe lorsque le raccord est solidement fixé. Appliquez du scellant à filetage sur les filets mâles de la griffe si nécessaire.

Remarque : Évitez tout serrage excessif qui pourrait endommager les filetages ou déformer la griffe.



Base Mounting Template

Plantilla de montaje de la base

Gabarit de montage de base

