

End Suction Centrifugal Pumps For Flows to 2,500 GPM





**Creating Value.** 

# **The GH Series**

The GH is Carver's horizontal, end suction pump series for handling water, oils, and chemicals in marine, process, and general industrial applications. Hydraulic performance extends to 2,500 GPM and is covered by twenty-eight sizes in cast iron, bronze fitted, 316 stainless steel fitted,

and all 316 SS construction.

Available as either a frame mounted (GHF) or close coupled (GHC) unit, the GH is based on the same product platform as our vertical pumps and shares many of the same parts with them.

For added simplicity, the entire series is covered by only three bearing frames and can be had in whole pump or modular kit form. The GHC is fully compatible with standard, off-the-shelf NEMA JP frame motors, and all models feature a back pull-out design, removable suction covers, and casings rotatable in 90° increments for different field piping orientations. Other common features for the GH include 316 SS shaft sleeves, keyed impellers to prevent accidental spin off, dynamic balancing to ISO G2.5 guidelines, and regreasable bearings secured with locking rings as standard. These features combine to produce shaft

> deflection values so low that they actually exceed the requirements of ANSI B73.1M-1991 and, overall, provide some of the most efficient hydraulics in the industry.

Common options for the GH include replaceable wear rings, cartridge seals, and API seal flush plans. Along with these, higher alloy material options such

as Ni-Al-Br and CD4MCu and a full range of motor and baseplate choices are also available.

Most importantly, as with all our other pumps, the GH offers the reliability, low total life cost, and lasting value that has made Carver one of the most trusted names in pumps.

#### **Hydraulics**

- Flows to 2,500 US GPM (570 m³/hr)
- Heads to 520 ft. (160 m)
- Efficiencies to 85%
- Solids to 1.250" diameter (32 mm)
- Power to 150 HP (110 KW)
- Speeds to 3,500 RPM



#### Applications

- Acids and solvents transfer
- Bilge transfer
- Black, green, and white liquor transfer
- Caustic solution transfer
- Commercial marine vessels
- Fluid filtering
- Light hydrocarbon transfer
- Irrigation systems
- Main and auxiliary engine cooling
- Potable and raw water supply
- Various OEM systems

#### **Positively Locked Bearings**

Oversized, grease lubricated ball bearings secured by lock nuts, rather than snap rings, eliminate axial movement at the faces and impeller-to-casing clearances

#### Back Pull Out Design

Allows removal of rotating elements and replacement of the shaft, impeller, or mechanical seal without disturbing system piping

#### Shafts

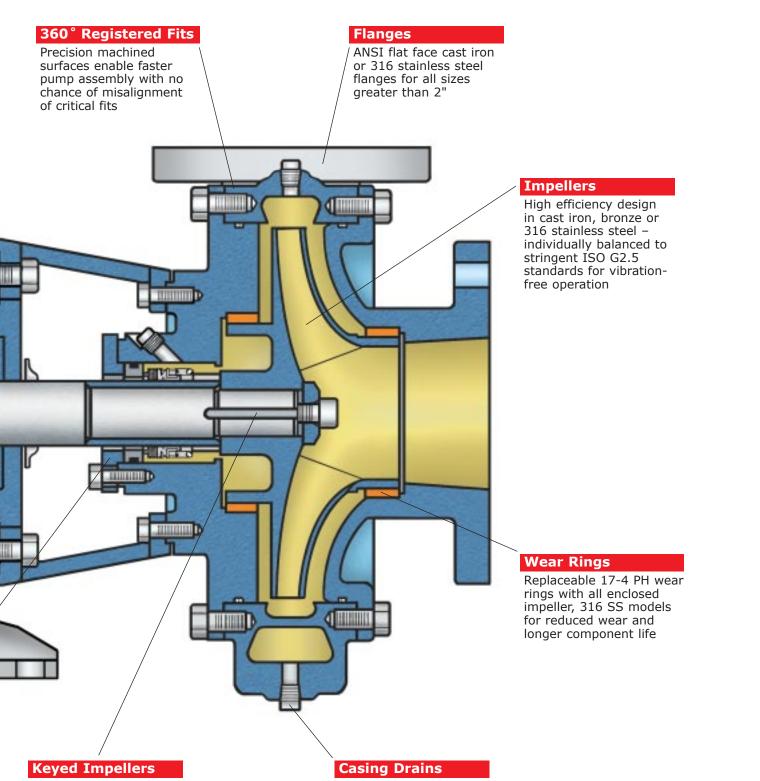
Large diameter shafts with replaceable 316 SS shaft sleeves meet or exceed ANSI B73.1-1991 guidelines for shaft deflection

#### **Bearing Frame**

Heavy duty, thickwalled cast iron frame supports bearings with rigid rear foot for less vibration, assuring the assembly stays in alignment

## **Stuffing Box**

Extra large stuffing box accommodates large diameter seals, cartridge seals, throttle bushing, flush and/or quench connections

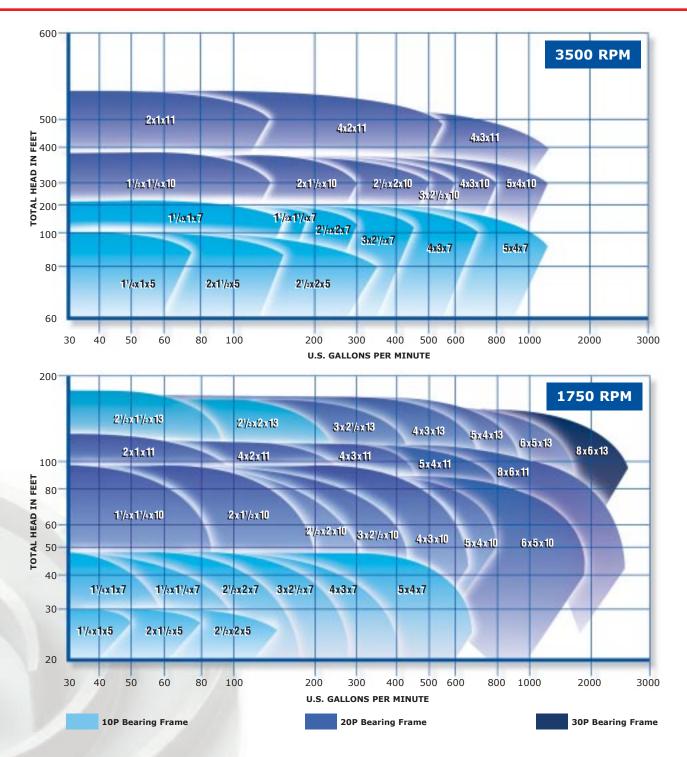


A more positive means for driving impellers also prevents them from spinning off the shaft in the event of accidental reverse rotation Heavy walled casing with vent and drains for easier maintenance at no added cost



Approval Certification Number 95-370

## **Hydraulic Coverage**



### **Standard Materials**

| Bearing Frame | Cast iron                   |
|---------------|-----------------------------|
| Casing        | Cast iron or 316 SS         |
| Impeller      | Cast iron, bronze or 316 SS |
| Shaft         | Carbon steel                |
| Shaft Sleeve  | 316 stainless steel         |

## **Mechanical Data**

| Rotation                            | CW as standard      |
|-------------------------------------|---------------------|
| Input Power                         | Up to 150 HP        |
| Connections                         | NPT or flange (>2") |
| Radial Bearing L <sub>10</sub> Life | 50,000 hours        |
| Thrust Bearing L <sub>10</sub> Life | 25,000 hours        |



Since we built our first pumps in 1938, the Carver name has become synonymous with value. Today we are recognized as one of the world's leading centrifugal pump companies, building pumps to the most demanding engineering specifications and military standards in the world.

Our company is located in Muscatine, Iowa, 25 miles southwest of the Quad Cities area. Our operations there include some of the most modern manufacturing equipment and pump development software available, and we are committed to the highest quality possible-in our products and our people. Along these lines, Carver was also one of the first American pump companies to attain ISO 9001 certification-the most recognized standard for quality in the world.

From an applications standpoint Carver has traditionally built pumps for water, oil, and chemicals for both the public and private sectors. Our product line includes both horizontal and vertical end suction, multi-stage, axial split case, self-priming, API, and solids-handling pumps that all carry the same Carver trademark: lasting value from solid, straightforward designs engineered to provide many years of service.

These pumps are also backed by unparalleled aftermarket support. Our network of stocking distributors, manufacturer's representatives and certified service centers throughout the world means that no matter where your pump may be installed, there are local sales and service people ready to support your aftermarket needs.





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