



**CARVER PUMP™**

Built for purpose



**G2S**

Vertical Sump Pump



## G2S

Our process-duty vertical sump pump for water, hydrocarbons, and acid and alkaline solutions.

Modular in design, the G2S sump pump is made for flows to 2500 GPM and sump depths to 22 feet. The entire series is based on the same wet ends as our horizontal pumps, ensuring extensive hydraulic coverage, including options available for solids or abrasives handling. All models feature external impeller adjustment, bearings above the mounting plate, and full compatibility with standard NEMA 'C' motor faces.

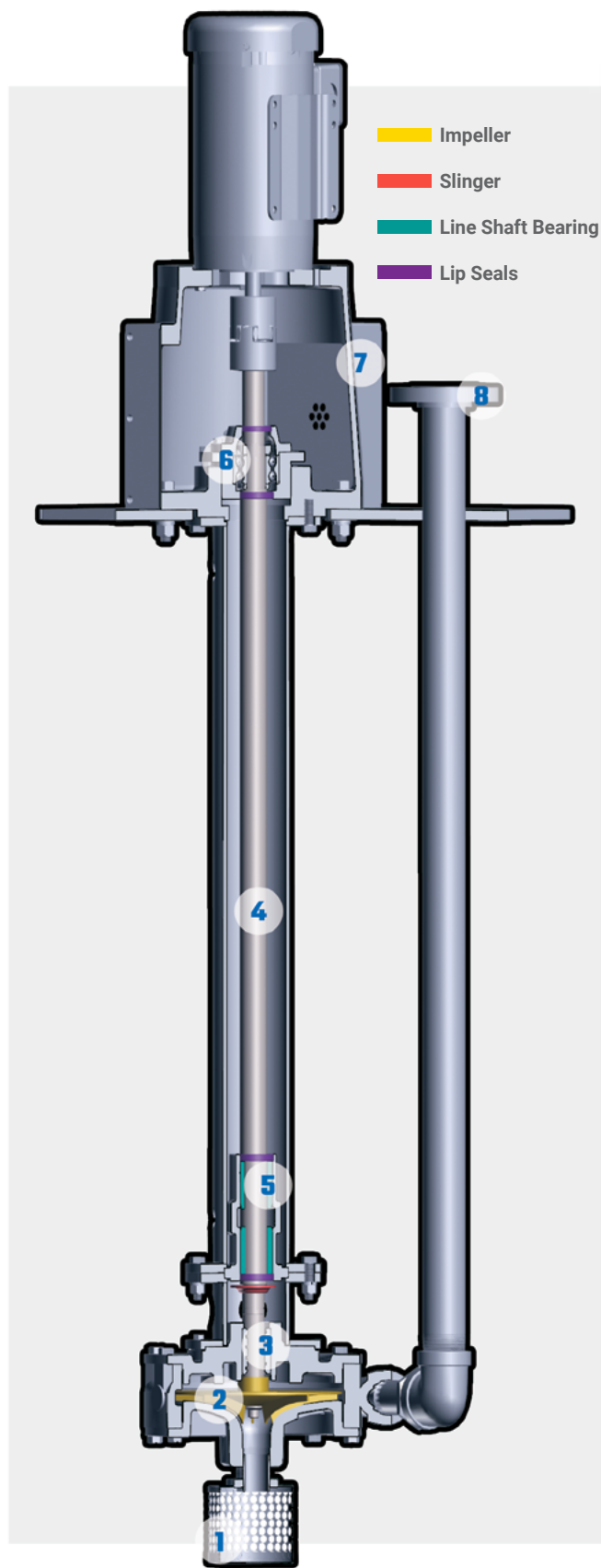
The G2S is offered with standard carbon line shaft bearings that comply with API 610 spacing guidelines, to ensure smooth operation away from resonant frequencies. Bearings can be product lubricated, external flushed or greased-for-life.

Common options include extra-large discharge piping, and stainless steel wetted parts and underliners. Automatic greasers, control panels with float switch actuators, and automatic stop/start sequencing are also available to satisfy system requirements.

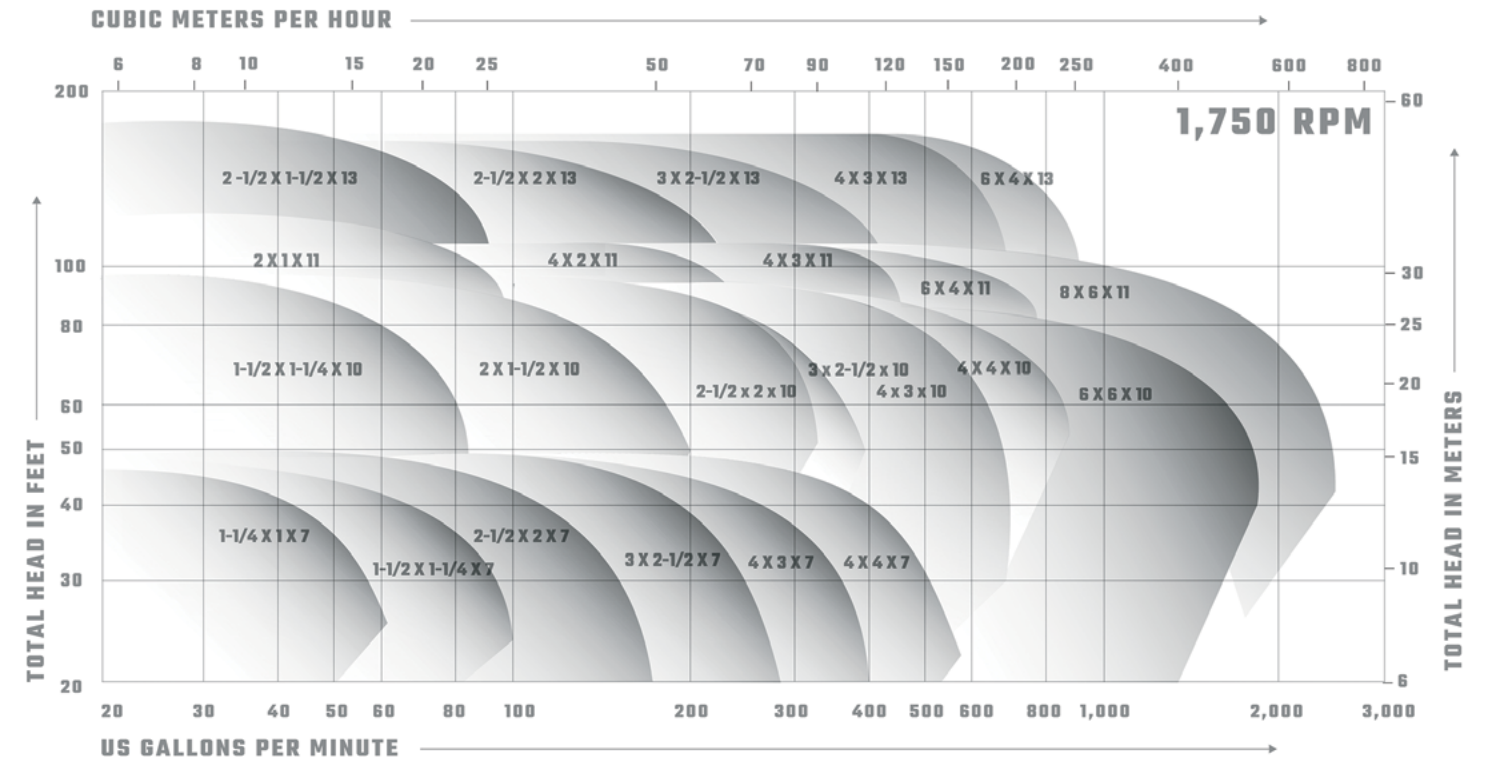
This pump comes standard with lip seals at the top plate. An optional stuffing box can be fitted with packing or a variety of mechanical seal types. For vapor-tight operation, the G2S is available with a machined and gasketed top plate, and welded seams around the discharge pipe.



G2S



- 1 STRAINER**  
Optional cast alloy strainer or standard fabricated strainer
- 2 IMPELLER**  
High-efficiency design in cast iron or 316 SS, semi-open and enclosed available
- 3 THROTTLE BUSHING**  
Teflon or hardened 17-4PH stainless steel with 416 SS shaft sleeves, for longer life when pumping dirty or abrasive fluids
- 4 SHAFTS**  
Carbon steel or 316 SS, with optimum diameter and bearing span for minimal deflection
- 5 LINESHAFT BEARINGS**  
Carbon bearings can be permanently sealed, product flushed, or externally lubricated, for total system compatibility
- 6 IMPELLER ADJUSTMENT**  
External adjusting wheel allows precise in-place adjustment of impeller-to-casing clearance, optimizing hydraulic performance over the life of the pump
- 7 BEARING FRAME**  
Heavy-duty, thick-walled cast iron bearing frame supports bearings above the tank or pit surface
- 8 CONNECTIONS**  
Class 150 ANSI RF discharge pipe flanges for all sizes



## FINDING THE RIGHT FIT

This North Carolina granite quarry called on us for an unusual application: a vertical pump for a dewatering application. The high-head, short-set vertical pump was mounted on a specially-designed floating platform to allow for positioning of the pump at specific locations within the pit to transfer water up and over a quarry wall.

A Carver pump was an easy choice, for flexibility in design and adaptability to customer needs. Flows exceeding 1000 GPM and heads over 200 feet TDH are attainable with our G2S and G2C pumps.

## HYDRAULICS

- Flows to 2,500 US GPM (570 m<sup>3</sup>/hr)
- Solids to 1.250" diameter (32mm)
- Efficiencies to 80%
- Power to 75 HP (55 KW)
- Depths to 22 feet

## APPLICATIONS

- Commercial
- Desalination/Municipal
- Industrial
- Marine
- Oil & Gas
- Petrochemical
- Power Generation
- Bilge Transfer
- Caustic and Chemical Feed
- Coating, Surface Treatment and Spray Paint Systems
- District Flood Control
- Irrigation Systems
- Light Hydrocarbon Transfer
- Lube Oil Supply for Rotating Equipments
- Mine and Landfill Dewatering
- Phosphoric and Sulfuric Acids
- Refinery Offsite Loading and Transfer
- Sump Collection and Drain
- Various OEM Proprietary Systems
- Wastewater Evacuation and Treatment

## WHY A G2S?

- External axial adjustment allows for easy service and continued operating efficiency.
- Spiral grooves at the exit of the casing reduces spray and foaming.
- A variety of shaft sealing options at the plate range from a standard lip seal to component or cartridge mechanical seals. Dry-running seals or double mechanical seals with a plan 52 or 53 flush can be applied, for vapor-tight operation.

## MATERIALS OF CONSTRUCTION

Casing	Cast Iron or 316 SS
Impeller	Cast Iron or 316 SS
Lineshaft Bearing	Carbon
Piping	Carbon Steel or 316 SS
Throttle Bushing	Teflon, Steel, 316 SS or 17-4PH SS
Top Plate	Carbon Steel or 316 SS
Shaft	Carbon Steel or 316 SS

Other materials available upon request.

## MECHANICAL DATA

Rotation	Counter Clockwise
Impeller Adjustment	External
Discharge Pipe Connections	Class 150 ANSI RF
Line Shaft Bearings	Grease or Product Lubricated

# DISCOVER OUR PUMPS



**GH - HORIZONTAL  
END-SUCTION PUMP**



**RS - MULTISTAGE  
RING SECTION PUMP**



**API MAXUM OH2 -  
END-SUCTION PUMP**



**KWP - NON-CLOGGING  
PROCESS PUMP**



**850 - HORIZONTAL  
FILTRATE PUMP**



**MAXUM OH1- HEAVY-  
DUTY, HORIZONTAL  
END-SUCTION PUMP**



**855 - TANK-  
MOUNTED FILTRATE  
PUMP**



**RSV - VERTICAL  
IN-LINE MULTISTAGE  
PUMP**



**VLO - VERTICAL LUBE  
OIL PUMP**



**G2C - VERTICAL  
CANTILEVER PUMP**



**G2S - VERTICAL  
SUMP PUMP**



**OH3 - VERTICAL  
IN-LINE PUMP**



**KFP - SELF PRIME  
PUMP**



**M SERIES - ASTM  
F998 CLOSE-  
COUPLED PUMP**



**DELTA P - PACKAGED  
PUMP SYSTEM**



**DELTA P - UL508A  
LISTED CONTROL  
PANELS**



## 80 years of experience

Since we built our first pumps, Carver Pump has become recognized as one of the leading centrifugal pump companies, building to the most demanding engineering specifications and military standards in the world.

We were one of the first American pump companies to attain ISO 9001 certification – the most recognized standard for quality in the world. This certification is your assurance that our commitment

to quality includes not only our hardware, but also superior customer service, leading-edge R&D, and continuous improvement in everything we do.

So whether the job is refueling fighter jets on the deck of an aircraft carrier, supplying paint to an auto assembly line, or bringing water to the fountain in a city park, we put our reputation on the line everyday with every pump we build.

## Contact us

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