

## End Suction Centrifugal Pumps Close-Coupled & Base-Mounted Models

### For General Industrial Applications

Burks offers a broad line of centrifugal pumps in close-coupled or base-mounted configurations. These pumps are designed for general purpose pumping, water circulation, liquid transfer or booster service.

Burks pumps are built for long life and all are factory tested for assured performance. Many pump models are available with our patented **MJ Jacketed Seal®** option designed to handle heat transfer fluids up to 500°F. This special cooling jacket surrounds the seal cavity, permitting cooling liquid to circulate and eliminates the need for exotic shaft seals.

**Capacities to 1100 GPM  
Heads to 380 Feet  
Sizes from 1/3 to 75HP  
High Temp. Models Available**



Materials of Construction			
Part Name	Bronze Fitted (Standard)	All Bronze	All Iron
Adapter	Cast Iron	Bronze	Cast Iron
Casing	Cast Iron	Bronze	Cast Iron
Casing Wear Ring	Bronze	Bronze	Steel
Shaft *	Steel	Steel	Steel
Shaft Sleeve *	Bronze	Bronze	316 S. Steel
Impeller **	Bronze	Bronze	Cast Iron
Shaft Seal	Carbon-Ceramic S. Steel, Buna-N	Carbon-Ceramic S. Steel, Buna-N	Carbon-Ceramic S. Steel, Buna-N

\* Pumps with 56J motors and all Series GNA base-mounted centrifugal pumps feature one-piece stainless steel shafts and no shaft sleeves.

\*\* Optional Noryl® impeller on selected models.

# G, GN, and GA Series

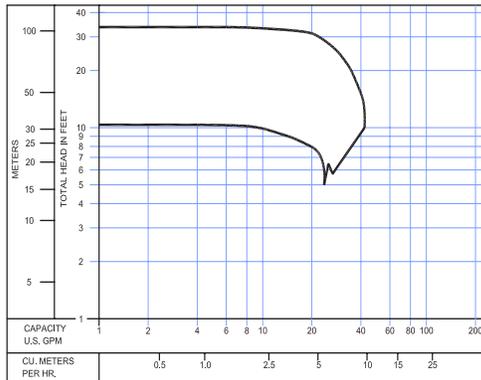
**Series G Close-Coupled Centrifugal Pumps** are available in 1750 RPM with capacities to 1100 GPM, heads to 95 feet, and in 3500 RPM with capacities to 950 GPM, heads to 380 feet. These rugged pumps allow maximum pumping temperatures to 225°F; pump models with the optional MJ Jacketed Seal® allow temperatures to 500°F. Burks Series G pumps accept inlet pressure to 100 psi, case working pressure to 200 psi, and suction from 1½" to 5", with discharge from 1¼" to 4". All Series G pump models feature standard construction bronze fitted cast iron, and are also available in all bronze or all iron. Flanged casing is available on 2" and 2½" pumps; 3" and 4" pumps are flanged only.



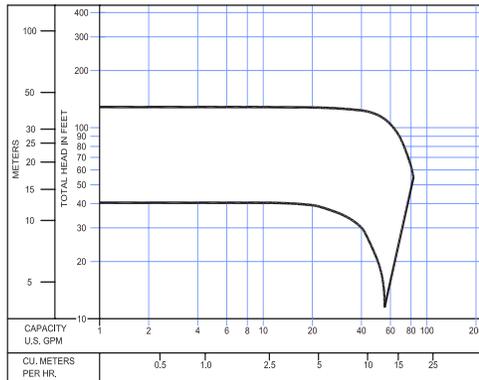
**Series GN Base-Mounted Centrifugal Pumps** are available in 1750 RPM, with capacities to 1100 GPM, heads to 95 feet; and in 3500 RPM with capacities to 950 GPM, heads to 380 feet. The base-mounted pump models are rated for use on inlet pressures to 100 psi, and case working pressures to 200 psi, with suction sizes from 1½" to 5", and discharge sizes from 1¼" to 4".



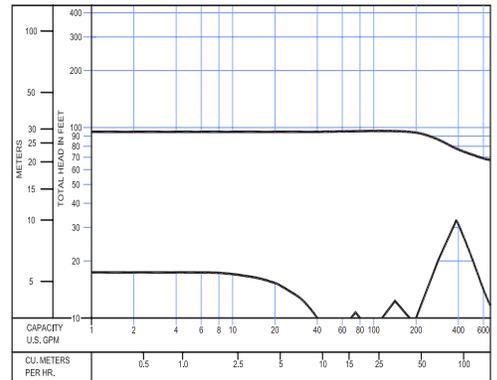
**Series GA Close-Coupled Centrifugal Pumps** offer motor sizes from 1/3 to 10 HP, and are available in 1750 and 3500 RPM with capacities to 360 GPM and heads to 230 feet. These reliable pumps operate to maximum pumping temperatures of 225°F. Series GA models are rated for use on the inlet pressures to 100 psi, and case working pressures to 200 psi, with suction from 1¼" to 2½" NPT, and discharge from 1" to 2" NPT. Pumps feature standard bronze fitted cast iron construction, and are also available in all bronze or all iron. Noryl® impellers are available on the GA5-1 and 1¼, and the GA6-1¼ models.



▲ Series 4GNA5-1¼ and 4GNA6-1¼ @ 1750 RPM



▲ Series GNA5-1¼ and GNA6-1¼  
Series G5-1¼ and G6-1¼ @ 3500 RPM



▲ Series 4G6-1½ thru 4G9-4F  
Series 4GNA6-1½ thru 4GNB9-4F @ 1750 RPM

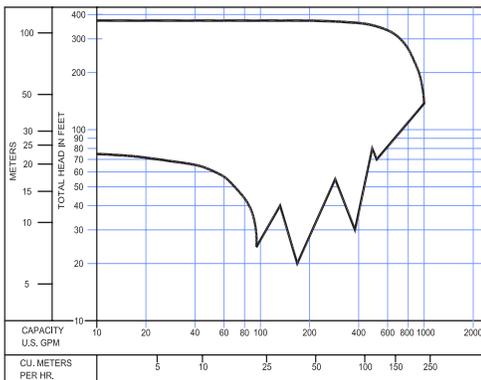


**Series GB In-Line Centrifugal Pumps** offer efficient design for long service life on heating and air conditioning systems, pressure boosting, liquid transfer, and general industrial applications. Available in motor sizes from  $\frac{1}{3}$  to 2 HP, with capacities to 80 GPM and heads to 110 feet, these versatile pumps install in any position - horizontal, vertical or at any angle. The easy-to-service back pullout design allows quick removal of pumping assembly without disturbing piping; this saves costly fittings, installation time, and floor space. Pump models are available in standard bronze fitted, all iron or all bronze construction.

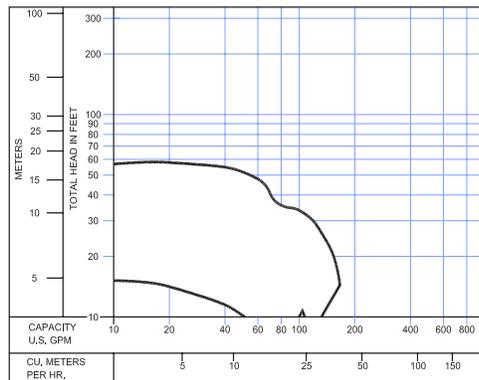
**Series GV Flange-Mounted Centrifugal Pumps** feature an efficient hydraulic design ideal for applications requiring a pump with a flanged inlet for mounting direct to tank or other vessel. The pump may be installed vertically or horizontally. The flanged and gasketed inlet adapts to any flat mounting surface. Seven standard models of Series GV pumps are available in motor sizes from  $\frac{1}{3}$  to 3 HP, with capacities to 80 GPM and heads to 130 feet. Back pullout design allows easy servicing without disturbing piping. Pump models are available in standard bronze fitted, or all iron construction.



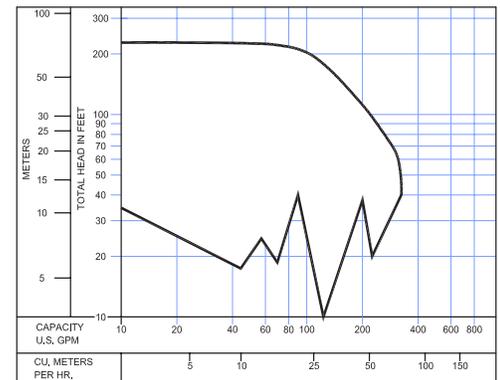
**Series GV Condensate Return Systems** provide efficient, reliable operation for the automatic return of hot water condensate from radiators and coils, low and high pressure boilers, and circulating applications. The vertically flange-mounted pumps are matched with rugged cast iron or fabricated steel receiver tanks in 9, 14, 20, and 36-gallon sizes for lifetime service even under the most severe conditions. Series GV systems offer motor sizes from  $\frac{1}{3}$  to 3 HP, with discharge pressures to 50 psig, and capacities to 50,000 sq. ft. Equivalent Direct Radiation (EDR). Back pullout design of the pump allows easy servicing without disturbing piping. Series GV systems are available in Simplex or Duplex models.



▲ Series G6-1½ thru G9A-3F  
Series GNB6-1½ thru GNC9A-3F @ 3500 RPM



▲ Series 4GA6-1½, 4GA-2 and 4GA7-1½ @ 1750 RPM



▲ Series GA5-1 thru GA7-1½ @ 3500 RPM

# Burks End Suction Series

## Design Advantages of Series G and GA Pumps

### 1. Radial Split Casing Design

Casing is close-grain iron of 30,000 psi minimum tensile strength. The back pull-out design eliminates the need to disturb piping when servicing because the casing stays in the line. The stud-mounted casing assures positive alignment with eight-position center line discharge casing on G6-1½ models and larger.

### 2. Enclosed Bronze Impeller

Impeller is of latest hydraulic design for maximum efficiency. It is balanced for vibration-free operation. Optional cast iron impellers are available on all models. Optional Noryl® impellers are available for GA5-1 and 1¼ models and GA6-1¼ models.

### 3. Replaceable Casing Wear Ring

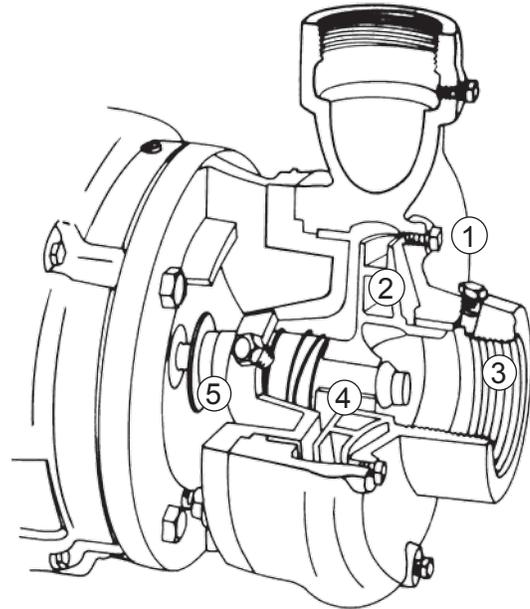
Easily replaceable casing wear ring prevents wear on casing. Available on Series G close-coupled and GN base-mounted units only.

### 4. Mechanical Shaft Seal

Self-adjusting shaft seal handles temperatures to 225°F and pressures to 200 psi. Ceramic seat and carbon seal faces provide long, trouble-free service. Special seals are available for higher temperatures and fluids other than water. Standard on G6-1½ through 4G9-4F close-coupled, and on GNA6-1½, GNB, and GNC base-mounted units is a tapped and plugged opening for optional seal face flushing.

### 5. Bronze Shaft Sleeve

Gasketed and keyed hook-type sleeve protects shaft from wear and corrosion in seal area on selected models. Bronze sleeves are standard on units with JM frame motors. All iron units have stainless steel shaft sleeves. Units with 56J frame motors have one-piece stainless steel shafts.



### 6. Motors

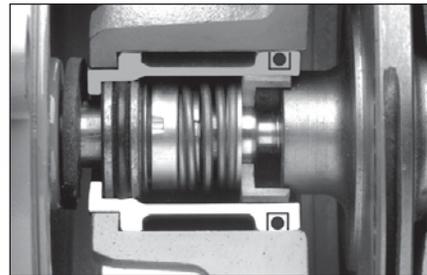
Standard 56J & JM frame motors on close-coupled units offer the advantages of quiet operation and controlled shaft deflection for longer mechanical seal life. Bearings are sized to provide optimal service life.

### 7. Interchangeability

The complete liquid end of most sizes of pumps are interchangeable between motors on close-coupled pumps and Burks power frames of comparably sized pumps. This provides greater inventory flexibility plus the option for handling emergency situations.

### Burks MJ Jacket Seal® for High Temperature Applications

The unique Burks MJ Jacketed Seal® option handles heat transfer fluids temperatures of 200°F to 500°F. It uses a Viton®-fitted rotary face-type shaft seal with carbon face and Ni-Resist stationary seat. This simple, field-proven design eliminates the need for complicated jacketing configurations and expensive shaft seals. The MJ Jacketed Seal® is available on most G, GA and GN models.



High temperature fluids cause seals to crack, distort, and ultimately fail. The MJ Jacket Seal® surrounds the seal cavity permitting cooling liquids to circulate. This process dissipates the heat transmitted through the jacket walls and extends seal life.

**CRANE**<sup>®</sup>

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