

Features

**Close Coupled End Suction**

**FOUR POSITION CASING**

Discharge can be located in any of four positions. Casing is close grain iron of 30,000 psi minimum tensile strength. Back pull-out design eliminates the need to disturb piping should the pump ever require service - the casing stays in the line.

**REPLACEABLE CASING WEAR RING**

Prevents wear on casing and is easy to replace.

**EASY TO SERVICE**

Taking out only 4 cap screws allows removal of pumping assembly without disturbing piping.

**ENCLOSED BRONZE IMPELLER**

Enclosed bronze impeller is of latest hydraulic design for maximum efficiency. It is balanced for vibration free operation and threaded onto stainless steel motor shaft.

**MECHANICAL SHAFT SEAL**

Standard self-adjusting shaft seal for temperatures to 225°F (107°C) and pressures to 150 psi (1034kpa). Ceramic seat and carbon seal face for long trouble-free service. Special seals are available for higher temperatures and fluids other than water.

**MOTORS**

Standard pump motors have open drip proof construction and are rated with jet pump service factors for continuous duty operation. Motors are 56 frame size with NEMA standard mounting flange, one piece threaded stainless steel shaft and ball/ball bearing construction.

**FACTORY TESTED**

After careful assembly and inspection, EVERY pump is factory tested and will meet Hydraulic Institute standards.

| MAXIMUM OPERATING CONDITIONS              |                   |
|---|-------------------|
| TEMPERATURE<br>(For Standard Buna-N Seal) | 225°F (107°C)     |
| INLET PRESSURE                            | 100 PSI (689kPa)  |
| CASING WORKING PRESSURE                   | 200 PSI (1379kPa) |

**MOTOR INFORMATION**

60 Hz - 3500 RPM - ODP  
 Single Phase: 1/3 thru 2 Hp. - 115/230 Volt  
 3 Hp. - 230 Volt only  
 Three Phase: 1/3 thru 3 Hp. - 208-230/460 Volt  
 50 Hz - 2900 RPM - ODP  
 Single Phase: 110/220 Volt  
 Three Phase: 380 Volt

Voltages may differ from some suppliers. Consult factory.

**OVERLOAD PROTECTION**

All single phase ODP and Totally Enclosed motors have built-in overload protection. All three phase motors and all explosion proof motors must be installed with a magnetic starter which provides full 3-leg protection. Failure to use correct starter and overloads will void motor warranty.

**JACKETED SEAL CAVITY FOR TEMPERATURES TO 500°F (260°C).**

Series G5-1-1/4 & G6-1-1/4 Pumps are available in a Jacketed Seal Cavity design for pumping hot oil, hot water and heat transfer fluids in common use in high temperature heating or cooling applications. This feature greatly extends seal life in high temperature applications. To order, add suffix "MJ" to pump catalog number for temperatures below 400°F (204°C) and add suffix "MJK" to pump catalog number for temperatures over 400°F (204°C). Example: G5-1-1/4MJ. See Section on High Temperature Pumps for more information

**MATERIALS OF CONSTRUCTION**

| PART             | ALL IRON                      | BRONZE FITTED                 | ALL BRONZE                    | * STAINLESS STEEL             |
|------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Adapter          | Cast Iron                     | Cast Iron                     | Bronze                        | #316 Stainless                |
| Casing           | Cast Iron                     | Cast Iron                     | Bronze                        | #316 Stainless                |
| Casing Wear Ring | Steel                         | Bronze                        | Bronze                        | #316 Stainless                |
| Impeller         | Cast Iron                     | Bronze                        | Bronze                        | #316 Stainless                |
| Shaft            | #303 Stainless                | #303 Stainless                | #303 Stainless                | #303 Stainless                |
| Shaft Seal       | Carbon-Ceramic<br>SS - Buna-N | Carbon-Ceramic<br>SS - Buna-N | Carbon-Ceramic<br>SS - Buna-N | Carbon-Ceramic<br>SS - Buna-N |

(\*) G5-1-1/4 ONLY



**WARNING:**  
 CANCER AND REPRODUCTIVE HARM -  
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**Close Coupled End Suction**



**DIMENSIONS IN INCHES**

| MODEL    | MOTOR FRAME SIZE | DISC NPT (in) | SUCT. NPT (in) | A     | B | CP     | D     | DD    | E       | G   | H    | L     | O      | OP    | P      | X       | Y     | Z     |
|----------|------------------|---------------|----------------|-------|---|--------|-------|-------|---------|-----|------|-------|--------|-------|--------|---------|-------|-------|
| G5-1 1/4 | 56               | 1 1/4         | 1 1/2          | 7 3/4 | 8 | 15 3/4 | 4 3/4 | 3 1/4 | 1 15/16 | 3/4 | 9/16 | 6 7/8 | 8 9/16 | 9 3/8 | 4 5/16 | 4 7/16  | 2 3/8 | 3 3/8 |
| G6-1 1/4 | 56               | 1 1/4         | 1 1/2          | 8 1/2 | 8 | 15 7/8 | 5 1/4 | 3 3/4 | 1 15/16 | 3/4 | 9/16 | 7 1/4 | 9 1/16 | 10    | 4 5/16 | 4 11/16 | 2 1/2 | 3 3/4 |

**DIMENSIONS IN MILLIMETERS**

| MODEL    | MOTOR FRAME SIZE | DISC NPT (in) | SUCT. NPT (in) | A   | B   | CP  | D   | DD | E  | G  | H  | L   | O   | OP  | P   | X   | Y  | Z  |
|----------|------------------|---------------|----------------|-----|-----|-----|-----|----|----|----|----|-----|-----|-----|-----|-----|----|----|
| G5-1 1/4 | 56               | 1 1/4         | 1 1/2          | 197 | 203 | 400 | 121 | 83 | 49 | 19 | 14 | 175 | 217 | 238 | 109 | 113 | 60 | 86 |
| G6-1 1/4 | 56               | 1 1/4         | 1 1/2          | 216 | 203 | 403 | 133 | 95 | 49 | 19 | 14 | 184 | 230 | 254 | 109 | 119 | 64 | 95 |

DIMENSIONS SHOWN ABOVE ARE APPROXIMATE MAXIMUM DIMENSIONS FOR STANDARD PUMPS EQUIPPED WITH ODP MOTORS.

**Close Coupled End Suction**



**Centrifugals - Close Coupled**



| 1 - MOTORS (All 56J Frame)                |                | HP  |
|---|----------------|-----|
| RPM & PHASE                               | PART NUMBER    |     |
| <b>OPEN DRIP PROOF</b>                    |                |     |
| 3500 RPM<br>Single Phase<br>(ODP)         | 003-211-371-02 | 1/3 |
|   | 005-211-371-02 | 1/2 |
|   | 007-211-371-02 | 3/4 |
|   | 010-211-371-02 | 1   |
|   | 015-211-371-02 | 1½  |
|   | 020-211-371-02 | 2   |
| 030-215-371-02                            | 3              |     |
| 3500 RPM<br>Three Phase<br>(ODP)          | 003-230-361-02 | 1/3 |
|   | 005-230-361-02 | 1/2 |
|   | 007-230-361-02 | 3/4 |
|   | 010-230-361-02 | 1   |
|   | 015-230-361-02 | 1½  |
|   | 020-230-361-02 | 2   |
| 030-230-361-02                            | 3              |     |
| <b>TOTALLY ENCLOSED</b>                   |                |     |
| 3500 RPM<br>Single Phase<br>(TENV / TEFC) | 005-211-372-02 | 1/2 |
|   | 007-211-372-02 | 3/4 |
|   | 010-211-372-02 | 1   |
|   | 015-211-372-02 | 1½  |
|   | 020-211-372-02 | 2   |
|   | 030-230-362-02 | 3   |
| 3500 RPM<br>Three Phase<br>(TENV / TEFC)  | 005-230-362-02 | 1/2 |
|   | 007-230-362-02 | 3/4 |
|   | 010-230-362D02 | 1   |
|   | 015-230-362D02 | 1½  |
|   | 020-230-362D02 | 2   |
|   | 030-230-362D02 | 3   |
| <b>EXPLOSION PROOF</b>                    |                |     |
| 3500 RPM<br>Single Phase<br>(XP)          | 005-211-374-02 | 1/2 |
|   | 007-211-374-02 | 3/4 |
|   | 010-211-374-02 | 1   |
|   | 015-211-374-02 | 1½  |
|   | 020-211-374-02 | 2   |
|   | 030-230-364-02 | 3   |
| 3500 RPM<br>Three Phase<br>(XP)           | 005-230-364-02 | 1/2 |
|   | 007-230-364-02 | 3/4 |
|   | 010-230-364-02 | 1   |
|   | 015-230-364-02 | 1½  |
|   | 020-230-364-02 | 2   |
|   | 030-230-364-02 | 3   |

## Centrifugals - Close Coupled

| SYMBOL NUMBER   | PART NUMBER  | QTY | DESCRIPTION                  |
|---|--------------|-----|------------------------------|
| <b>DIFFERING PARTS FOR ALL BRONZE CONSTRUCTION</b>  |              |     |                              |
| 2   | 03122-A      | 4   | Cap Screw                    |
| 3   | 09630-A      | 1   | Adapter - Bronze - G5-1-1/4  |
| 5   | 09657-A      | 1   | Adapter - Bronze - G6-1-1/4  |
| * 7   | 03288        | 4   | Cap Screw                    |
|   | 22148-A      | 1   | Casing Assy - G5-1-1/4AB     |
|   | 22149-A      | 1   | Casing Assy - G6-1-1/4AB     |
| 15  | 03289        | 2   | Cap Screw & 20056 Washer     |
| <b>DIFFERING PARTS FOR ALL IRON CONSTRUCTION</b>  |              |     |                              |
| 6   | 00158        | 5   | Pipe Plug 1/8"               |
| 7   | 22148-B      | 1   | Casing Assy - G5-1-1/4AI     |
|   | 22149-B      | 1   | Casing Assy - G6-1-1/4AI     |
| 8   | 09632-C      | 1   | Wear Ring                    |
|   | 09680-C-3.25 | 1   | Impeller - 3G5-1-1/4AI       |
|   | 09680-C-3.63 | 1   | Impeller - 5G5-1-1/4AI       |
|   | 09680-C-4.00 | 1   | Impeller - 7G5-1-1/4AI       |
|   | 09680-C-4.25 | 1   | Impeller - 10G5-1-1/4AI      |
|   | 09680-C-4.75 | 1   | Impeller - 15G5-1-1/4AI      |
|   | 09680-C-4.97 | 1   | Impeller - 20G5-1-1/4AI      |
| 10  | 09680-C-4.25 | 1   | Impeller - 10G6-1-1/4AI      |
|   | 09680-C-4.75 | 1   | Impeller - 15G6-1-1/4AI      |
|   | 09680-C-5.13 | 1   | Impeller - 20G6-1-1/4AI      |
|   | 09680-C-5.66 | 1   | Impeller - 30G6-1-1/4AI      |
| Stock pump Catalog Number shown are for 1 phase units.<br>Use same impellers for 3 phase units. |              |     |                              |
| 17  | 21181-A      | 1   | Washer - SS                  |
| <b>DIFFERING PARTS FOR G5-1/4SS CONSTRUCTION</b>  |              |     |                              |
| 3   | 09630-B      | 1   | Adapter                      |
| 5   | 04235-A      | 4   | Cap Screw SS                 |
| 6   | 01691-B      | 5   | Pipe Plug - 1/8" SS          |
| 7   | 09633-B      | 1   | Casing Assy                  |
|   | 09680-B-3.25 | 1   | Impeller - 3G5-1-1/4SS       |
|   | 09680-B-3.63 | 1   | Impeller - 5G5-1-1/4SS       |
|   | 09680-B-4.00 | 1   | Impeller - 7G5-1-1/4SS       |
|   | 09680-B-4.25 | 1   | Impeller - 10G5-1-1/4SS      |
|   | 09680-B-4.75 | 1   | Impeller - 15G5-1-1/4SS      |
|   | 09680-B-4.97 | 1   | Impeller - 20G5-1-1/4SS      |
| 11  | 23023        | 1   | O-Ring Gasket - Buna N (Std) |
|   | 21021        | 1   | O-Ring Gasket - Viton        |
|   | 23024        | 1   | O-Ring Gasket - EPT**        |
| 17  | 21181-A      | 1   | Washer - SS                  |

| SYMBOL NUMBER   | PART NUMBER | QTY | DESCRIPTION                    |
|---|-------------|-----|--------------------------------|
| 2   | 03122       | 4   | Cap Screw                      |
| 3   | 09630       | 1   | Adapter - G5-1-1/4             |
|   | 09630-C     | 1   | Adapter w/Flush Tap - G5-1-1/4 |
|   | 09657       | 1   | Adapter - G6-1-1/4             |
|   | 09657-2     | 1   | Adapter w/Flush Tap - G6-1-1/4 |
| 5   | 04235       | 4   | Cap Screw, 3/8" x 1 1/4" Lg    |
| 6   | 01691-A     | 5   | Pipe Plug, 1/8" Brass          |
| * 7   | 22148       | 1   | Casing Assy - G5-1-1/4         |
|   | 22149       | 1   | Casing Assy - G6-1-1/4         |
| 8   | 09632-D     | 1   | Wear Ring                      |
|   | 09680-3.25  | 1   | Impeller - 3G5-1-1/4           |
|   | 09680-3.63  | 1   | Impeller - 5G5-1-1/4           |
|   | 09680-4.00  | 1   | Impeller - 7G5-1-1/4           |
|   | 09680-4.25  | 1   | Impeller - 10G5-1-1/4          |
|   | 09680-4.75  | 1   | Impeller - 15G5-1-1/4          |
|   | 09680-4.97  | 1   | Impeller - 20G5-1-1/4          |
| 10  | 09680-4.25  | 1   | Impeller - 10G6-1-1/4          |
|   | 09680-4.75  | 1   | Impeller - 15G6-1-1/4          |
|   | 09680-5.13  | 1   | Impeller - 20G6-1-1/4          |
|   | 09680-5.66  | 1   | Impeller - 30G6-1-1/4          |
| Stock pump Catalog Number shown are for 1 phase units.<br>Use same impellers for 3 phase units. |             |     |                                |
|   | 09634       | 1   | Flat Gasket - G5-1-1/4         |
|   | 08507       | 1   | Flat Gasket - G6-1-1/4         |
| <b>G5-1/4 Series</b>  |             |     |                                |
|   | 21333       | 1   | O-Ring Gasket - Buna N (Std)   |
|   | 21546       | 1   | O-Ring Gasket - Viton          |
|   | 22132       | 1   | O-Ring Gasket - EPT**          |
|   | 22058       | 1   | O-Ring Gasket - Teflon         |
| +11   |             |     |                                |
| <b>G6-1/4 Series</b>  |             |     |                                |
|   | 22021       | 1   | O-Ring Gasket - Buna N (Std)   |
|   | 22020       | 1   | O-Ring Gasket - Viton          |
|   | 22133       | 1   | O-Ring Gasket - EPT**          |
|   | 22102       | 1   | O-Ring Gasket - Teflon         |
| 12  | 08827       | 1   | Base                           |
| 13  | 08514       | 1   | Mechanical Seal - Buna N (Std) |
|   | 09762       | 1   | Mechanical Seal - Viton        |
|   | 20764-C     | 1   | Mechanical Seal - EPT**        |
| 14  | 08105       | 1   | Slinger Washer                 |
| 15  | 01928       | 2   | Cap Screw & 03503 Washer       |
| 16  | 21182       | 1   | Screw                          |
| 17  | 21181-C     | 1   | Washer - Bronze                |
| <b>WARNING:</b><br>CANCER AND REPRODUCTIVE HARM -<br>WWW.P65WARNINGS.CA.GOV                     |             |     |                                |

(\*) Includes Symbol 6 & 8  
(\*\*) For hot water or Caustic service.  
(+) G5-1/4 and G6-1/4 Series pumps have been manufactured with either a flat or O-ring type gasket. Determine which type is required before ordering. When in doubt, order flat gasket.