

### Close Coupled End Suction



#### 1. RADIAL SPLIT CASING DESIGN

Casing is close grain iron of 30,000 p.s.i. 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. Centerline discharge. Stud mounted casing assures positive alignment and allows rotation of discharge to eight different positions. Openings are provided for test gauges, for venting and for draining the pump.

#### 2. ENCLOSED BRONZE IMPELLER

Enclosed bronze impeller is of latest hydraulic design for maximum efficiency. It is balanced for vibration free operation. Precision fit to shaft and double-locked with key and cap screw.

#### 3. REPLACEABLE CASING WEAR RING

Prevents wear on casing and is easy to replace.

#### 4. MECHANICAL SHAFT SEAL

Mechanical Shaft Seal is self-adjusting for temperatures up to 225°F (107°C) and pressures to 150 psi (1034kpa). Has ceramic seat and carbon seal faces for long trouble-free service. Special seals are available for higher temperatures and fluids other than water. Tapped opening is provided in the seal chamber for flushing seal faces.

#### MAXIMUM OPERATING CONDITIONS

Maximum Pumping Temperature*	225°F (107°C)
Maximum inlet Pressure	100 PSI (690kpa)
Maximum Case Working Pressure	200 PSI (1379kpa)

\* FOR STANDARD BUNA-N SEAL

#### MATERIALS OF CONSTRUCTION

Part	Bronze Fitted	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 Stainless
Impeller	Bronze	Bronze	Cast Iron
Shaft Seal	Carbon-Ceramic SS - Buna-N	Carbon-Ceramic SS - Buna-N	Carbon-Ceramic SS - Buna-N

#### 5. BRONZE SHAFT SLEEVE

Gasketed and keyed hook-type sleeve protects shaft wear and corrosion in seal area.

#### 6. MOTORS

The standard Type JM motors supplied with these pumps offer the advantages of quiet operation, controlled shaft deflection for longer mechanical seal life and bearings sized to provide good service life. All motors are **supplied by** manufacturers providing field service facilities.

#### 7. INTERCHANGEABILITY

The complete liquid end of any size pump is interchangeable between motors on close-coupled pumps and the BURKS power frames of comparable size providing inventory flexibility, plus an option for handling emergency service.

#### 8. FACTORY TESTED

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

#### FOR TEMPERATURES TO 500°F (260°C).

All models, with the exception of the G7-2-1/2 and all G9 series 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: G6-1-1/2MJ. See Section on High Temperature Pumps for more information.

#### SUCTION & DISCHARGE SIZES

* SERIES	SUCTION (in)	DISCHARGE (in)
G6-1-1/2	2	1-1/2
G-2 & 2F	2-1/2	2
G6-2-1/2 & 2-1/2F	3	2-1/2
G7-2 & 2F	2-1/2	2
G7A-2 & 2F	2-1/2	2
G7-2-1/2 & 2-1/2F	3	2-1/2
G9-1-1/2	2	1-1/2
G9-2 & 2F	2-1/2	2
G9-2-1/2 & 2-1/2F	3	2-1/2
G9-3F & G9A-3F	4	3
G9-4F	5	4

\*F Suffix Denotes ANSI 125# Flat Face Flanges



#### WARNING:

CANCER AND REPRODUCTIVE HARM -  
WWW.P65WARNINGS.CA.GOV

Series: **G9-2F, G9-2½F, G9-3F, G9A-3F, 4G9-4F**

Dimensions with Flanged Casing



**Close Coupled End Suction**



DIMENSIONS IN INCHES																	
MODEL	MOTOR FRAME SIZE	DISC NPT (in)	SUCT NPT (in)	A	AB	B	CP	D	DD	E	F	G	H	L	O	X	Y
G9-2F	143JM	2	2½	7	8 <sup>15</sup> / <sub>16</sub>	5	15 <sup>7</sup> / <sub>8</sub>	3½	5 <sup>15</sup> / <sub>16</sub>	2¾	2	¾	1 <sup>11</sup> / <sub>32</sub>	9 <sup>1</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>16</sub>	8½	2 <sup>1</sup> / <sub>16</sub>
	145JM			7	8 <sup>8</sup> / <sub>16</sub>	6	16 <sup>7</sup> / <sub>8</sub>	3½	5 <sup>15</sup> / <sub>16</sub>	2¾	2½	¾	1 <sup>11</sup> / <sub>32</sub>	9 <sup>1</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>16</sub>	8½	2 <sup>1</sup> / <sub>16</sub>
	182JM			8¾	9 <sup>7</sup> / <sub>8</sub>	5¾	17 <sup>13</sup> / <sub>16</sub>	4½	5 <sup>15</sup> / <sub>16</sub>	3¾	2¼	½	1 <sup>3</sup> / <sub>32</sub>	10 <sup>3</sup> / <sub>16</sub>	9 <sup>1</sup> / <sub>16</sub>	8½	2 <sup>1</sup> / <sub>16</sub>
	184JM			8¾	9 <sup>7</sup> / <sub>8</sub>	6¾	18 <sup>13</sup> / <sub>16</sub>	4½	5 <sup>15</sup> / <sub>16</sub>	3¾	2¼	½	1 <sup>3</sup> / <sub>32</sub>	10 <sup>3</sup> / <sub>16</sub>	9 <sup>1</sup> / <sub>16</sub>	8½	2 <sup>1</sup> / <sub>16</sub>
	213JM			10 <sup>9</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>16</sub>	7¼	20 <sup>7</sup> / <sub>16</sub>	5¼	5 <sup>15</sup> / <sub>16</sub>	4¼	2¾	5 <sup>5</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>32</sub>	11 <sup>1</sup> / <sub>16</sub>	11	8½	2 <sup>1</sup> / <sub>16</sub>
	215JM			10 <sup>9</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>16</sub>	8¾	21 <sup>5</sup> / <sub>16</sub>	5¼	5 <sup>15</sup> / <sub>16</sub>	4¼	3½	5 <sup>5</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>32</sub>	11 <sup>1</sup> / <sub>16</sub>	11	8½	2 <sup>1</sup> / <sub>16</sub>
	254JM			12 <sup>3</sup> / <sub>8</sub>	11 <sup>9</sup> / <sub>16</sub>	10¼	25 <sup>1</sup> / <sub>2</sub>	6¼	5 <sup>15</sup> / <sub>16</sub>	5	4½	7 <sup>5</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	13 <sup>3</sup> / <sub>16</sub>	8½	2 <sup>1</sup> / <sub>16</sub>
	256JM			12 <sup>3</sup> / <sub>8</sub>	11 <sup>9</sup> / <sub>16</sub>	12¼	27¼	6¼	5 <sup>15</sup> / <sub>16</sub>	5	5	7 <sup>5</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	13 <sup>3</sup> / <sub>16</sub>	8½	2 <sup>1</sup> / <sub>16</sub>
	284JM			13¾	13	11½	27¼	7	5 <sup>15</sup> / <sub>16</sub>	5½	4¾	7 <sup>5</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	14¾	8½	2 <sup>1</sup> / <sub>16</sub>
	286JM			13¾	13	13	28¾	7	5 <sup>15</sup> / <sub>16</sub>	5½	5½	7 <sup>5</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	14¾	8½	2 <sup>1</sup> / <sub>16</sub>
	324JM			14½	16¼	12¼	29 <sup>9</sup> / <sub>16</sub>	8	5 <sup>15</sup> / <sub>16</sub>	6¼	5¼	7 <sup>5</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>32</sub>	13 <sup>11</sup> / <sub>16</sub>	17 <sup>1</sup> / <sub>8</sub>	8½	2 <sup>1</sup> / <sub>16</sub>
	326JM			14½	16¼	13¾	30 <sup>11</sup> / <sub>16</sub>	8	5 <sup>15</sup> / <sub>16</sub>	6¼	6	7 <sup>5</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>32</sub>	13 <sup>11</sup> / <sub>16</sub>	17 <sup>1</sup> / <sub>8</sub>	8½	2 <sup>1</sup> / <sub>16</sub>
G9-2½F	143JM	2½	3	7	8 <sup>8</sup> / <sub>16</sub>	5	16 <sup>1</sup> / <sub>16</sub>	3½	6 <sup>1</sup> / <sub>16</sub>	2¾	2	¾	1 <sup>11</sup> / <sub>32</sub>	9 <sup>5</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>16</sub>	9¼	2 <sup>1</sup> / <sub>16</sub>
	145JM			7	8 <sup>8</sup> / <sub>16</sub>	6	17 <sup>1</sup> / <sub>16</sub>	3½	6 <sup>1</sup> / <sub>16</sub>	2¾	2½	¾	1 <sup>11</sup> / <sub>32</sub>	9 <sup>5</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>16</sub>	9¼	2 <sup>1</sup> / <sub>16</sub>
	182JM			8¾	9 <sup>7</sup> / <sub>8</sub>	5¾	17 <sup>7</sup> / <sub>8</sub>	4½	6 <sup>1</sup> / <sub>16</sub>	3¾	2¼	½	1 <sup>3</sup> / <sub>32</sub>	10 <sup>3</sup> / <sub>16</sub>	9 <sup>1</sup> / <sub>16</sub>	9¼	2 <sup>1</sup> / <sub>16</sub>
	184JM			8¾	9 <sup>7</sup> / <sub>8</sub>	6¾	18 <sup>7</sup> / <sub>8</sub>	4½	6 <sup>1</sup> / <sub>16</sub>	3¾	2¼	½	1 <sup>3</sup> / <sub>32</sub>	10 <sup>3</sup> / <sub>16</sub>	9 <sup>1</sup> / <sub>16</sub>	9¼	2 <sup>1</sup> / <sub>16</sub>
	213JM			10 <sup>9</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>16</sub>	7¼	20 <sup>5</sup> / <sub>16</sub>	5¼	6 <sup>1</sup> / <sub>16</sub>	4¼	2¾	5 <sup>5</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>32</sub>	11½	11	9¼	2 <sup>1</sup> / <sub>16</sub>
	215JM			10 <sup>9</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>16</sub>	8¾	21 <sup>3</sup> / <sub>16</sub>	5¼	6 <sup>1</sup> / <sub>16</sub>	4¼	3½	5 <sup>5</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>32</sub>	11½	11	9¼	2 <sup>1</sup> / <sub>16</sub>
	254JM			12 <sup>3</sup> / <sub>8</sub>	11 <sup>9</sup> / <sub>16</sub>	10¼	25 <sup>11</sup> / <sub>16</sub>	6¼	6 <sup>1</sup> / <sub>16</sub>	5	4½	7 <sup>5</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	13 <sup>3</sup> / <sub>16</sub>	9¼	2 <sup>1</sup> / <sub>16</sub>
	256JM			12 <sup>3</sup> / <sub>8</sub>	11 <sup>9</sup> / <sub>16</sub>	12¼	27 <sup>1</sup> / <sub>16</sub>	6¼	6 <sup>1</sup> / <sub>16</sub>	5	5	7 <sup>5</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	13 <sup>3</sup> / <sub>16</sub>	9¼	2 <sup>1</sup> / <sub>16</sub>
	284JM			13¾	13	11½	27 <sup>1</sup> / <sub>16</sub>	7	6 <sup>1</sup> / <sub>16</sub>	5½	4¾	7 <sup>5</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	14¾	9¼	2 <sup>1</sup> / <sub>16</sub>
	286JM			13¾	13	13	28 <sup>5</sup> / <sub>16</sub>	7	6 <sup>1</sup> / <sub>16</sub>	5½	5½	7 <sup>5</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	14¾	9¼	2 <sup>1</sup> / <sub>16</sub>
	324JM			14½	16¼	12¼	29 <sup>3</sup> / <sub>8</sub>	8	6 <sup>1</sup> / <sub>16</sub>	6¼	5¼	7 <sup>5</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>32</sub>	13 <sup>7</sup> / <sub>16</sub>	17 <sup>1</sup> / <sub>8</sub>	9¼	2 <sup>1</sup> / <sub>16</sub>
	326JM			14½	16¼	13¾	30 <sup>3</sup> / <sub>8</sub>	8	6 <sup>1</sup> / <sub>16</sub>	6¼	6	7 <sup>5</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>32</sub>	13 <sup>7</sup> / <sub>16</sub>	17 <sup>1</sup> / <sub>8</sub>	9¼	2 <sup>1</sup> / <sub>16</sub>
G9-3F G9A-3F	182JM	3	4	8¾	9 <sup>7</sup> / <sub>8</sub>	5¾	18 <sup>1</sup> / <sub>16</sub>	4½	6 <sup>3</sup> / <sub>4</sub>	3¾	2¼	½	1 <sup>3</sup> / <sub>32</sub>	11	9 <sup>1</sup> / <sub>16</sub>	9	2 <sup>1</sup> / <sub>16</sub>
	184JM			8¾	9 <sup>7</sup> / <sub>8</sub>	6¾	19 <sup>1</sup> / <sub>16</sub>	4½	6 <sup>3</sup> / <sub>4</sub>	3¾	2¾	½	1 <sup>3</sup> / <sub>32</sub>	11	9 <sup>1</sup> / <sub>16</sub>	9	2 <sup>1</sup> / <sub>16</sub>
	213JM			10 <sup>9</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>16</sub>	7¼	20 <sup>3</sup> / <sub>4</sub>	5¼	6 <sup>3</sup> / <sub>4</sub>	4¼	2¾	5 <sup>5</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>32</sub>	11 <sup>7</sup> / <sub>8</sub>	11	9	2 <sup>1</sup> / <sub>16</sub>
	215JM			10 <sup>9</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>16</sub>	8¾	22¼	5¼	6 <sup>3</sup> / <sub>4</sub>	4¼	3½	5 <sup>5</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>32</sub>	11 <sup>7</sup> / <sub>8</sub>	11	9	2 <sup>1</sup> / <sub>16</sub>
	284JM			13¾	13	11½	27 <sup>3</sup> / <sub>8</sub>	7	6 <sup>3</sup> / <sub>4</sub>	5½	4¾	7 <sup>5</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	14¾	9	2 <sup>1</sup> / <sub>16</sub>
	286JM			13¾	13	13	29 <sup>3</sup> / <sub>8</sub>	7	6 <sup>3</sup> / <sub>4</sub>	5½	5½	7 <sup>5</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	14¾	9	2 <sup>1</sup> / <sub>16</sub>
	324JM			14½	16¼	12¼	29 <sup>9</sup> / <sub>16</sub>	8	6 <sup>3</sup> / <sub>4</sub>	6¼	5¼	7 <sup>5</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>32</sub>	14 <sup>5</sup> / <sub>16</sub>	17 <sup>1</sup> / <sub>8</sub>	9	2 <sup>1</sup> / <sub>16</sub>
	326JM			14½	16¼	13¾	31 <sup>5</sup> / <sub>16</sub>	8	6 <sup>3</sup> / <sub>4</sub>	6¼	6	7 <sup>5</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>32</sub>	14 <sup>5</sup> / <sub>16</sub>	17 <sup>1</sup> / <sub>8</sub>	9	2 <sup>1</sup> / <sub>16</sub>
4G9-4F	182JM	4	5	8¾	9 <sup>1</sup> / <sub>16</sub>	5¾	19½	4½	7 <sup>7</sup> / <sub>16</sub>	3¾	2¼	½	1 <sup>3</sup> / <sub>32</sub>	11¾	9 <sup>1</sup> / <sub>16</sub>	10 <sup>5</sup> / <sub>8</sub>	3¼
	184JM			8¾	9 <sup>1</sup> / <sub>16</sub>	6¾	21½	4½	7 <sup>7</sup> / <sub>16</sub>	3¾	2¾	½	1 <sup>3</sup> / <sub>32</sub>	11¾	9 <sup>1</sup> / <sub>16</sub>	10 <sup>5</sup> / <sub>8</sub>	3¼
	213JM			10 <sup>9</sup> / <sub>16</sub>	10 <sup>7</sup> / <sub>8</sub>	7¾	21 <sup>5</sup> / <sub>16</sub>	5¼	7 <sup>7</sup> / <sub>16</sub>	4¼	2¾	5 <sup>5</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>32</sub>	12 <sup>3</sup> / <sub>8</sub>	11	10 <sup>5</sup> / <sub>8</sub>	3¼
	215JM			10 <sup>9</sup> / <sub>16</sub>	10 <sup>7</sup> / <sub>8</sub>	8¾	23 <sup>3</sup> / <sub>16</sub>	5¼	7 <sup>7</sup> / <sub>16</sub>	4¼	3½	5 <sup>5</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>32</sub>	12 <sup>3</sup> / <sub>8</sub>	11	10 <sup>5</sup> / <sub>8</sub>	3¼

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

SECTION 2  
PAGE 66  
DATE 1/06



PUMPS & SYSTEMS

A Crane Co. Company

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Close Coupled End Suction

