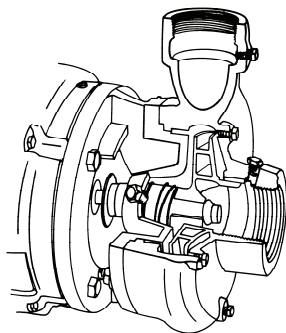


### Close Coupled End Suction



#### 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:

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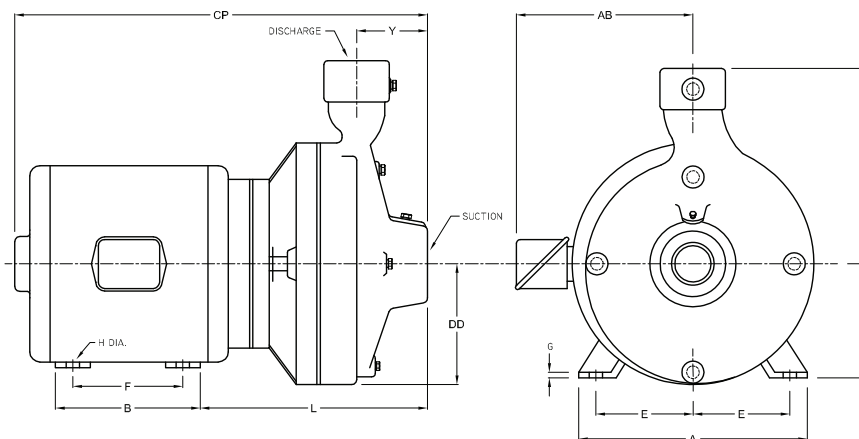
# Series: 4G9A-1½, 4G9-2, 4G9-2½

## G9A-1½, G9-2, G9-2½

Dimensions with Screwed NPT Casing

**burks**  
www.cranepumps.com

### Close Coupled End Suction



DIMENSIONS IN INCHES																		
MODEL		HP	MOTOR FRAME SIZE	DISC NPT (in)	SUCT NPT (in)	A	AB	B	CP	D	DD	E	F	G	H	L	X	Y
1 Phase	3 Phase																	
1750 & 1450 RPM																		
154G9-1½	3154G9-1½	1½	145JM	1½	2	7	8 <sup>15</sup> <sub>16</sub>	6	17 <sup>13</sup> <sub>16</sub>	3½	5 <sup>13</sup> <sub>16</sub>	2¾	5	¾	1 <sup>11</sup> <sub>32</sub>	9¾	9	3 <sup>1</sup> <sub>16</sub>
204G9-1½	-----	2	182JM			8¾	9¾	5¾	18	4½	5 <sup>13</sup> <sub>16</sub>	3¾	4½	½	1 <sup>13</sup> <sub>32</sub>	10½	9	3 <sup>1</sup> <sub>16</sub>
-----	3204G9-1½	2	145JM			7	8 <sup>15</sup> <sub>16</sub>	6	17 <sup>13</sup> <sub>16</sub>	3½	5 <sup>13</sup> <sub>16</sub>	2¾	5	¾	1 <sup>11</sup> <sub>32</sub>	9¾	9	3 <sup>1</sup> <sub>16</sub>
304G9-1½	-----	3	184JM			8¾	9¾	6¾	19	4½	5 <sup>13</sup> <sub>16</sub>	3¾	5½	½	1 <sup>13</sup> <sub>32</sub>	10½	9	3 <sup>1</sup> <sub>16</sub>
-----	3304G9-1½	3	182JM			8¾	9¾	5¾	18	4½	5 <sup>13</sup> <sub>16</sub>	3¾	4½	½	1 <sup>13</sup> <sub>32</sub>	10½	9	3 <sup>1</sup> <sub>16</sub>
154G9-2	3154G9-2	1½	145JM	2	2½	7	8 <sup>15</sup> <sub>16</sub>	6	18 <sup>5</sup> <sub>16</sub>	3½	5 <sup>13</sup> <sub>16</sub>	2¾	5	¾	1 <sup>11</sup> <sub>32</sub>	10 <sup>7</sup> <sub>8</sub>	9 <sup>5</sup> <sub>8</sub>	4
204G9-2	-----	2	182JM			8¾	9¾	5¾	19¼	4½	5 <sup>13</sup> <sub>16</sub>	3¾	4½	½	1 <sup>13</sup> <sub>32</sub>	11 <sup>5</sup> <sub>8</sub>	9 <sup>5</sup> <sub>8</sub>	4
-----	3204G9-2	2	145JM			7	8 <sup>15</sup> <sub>16</sub>	6	18 <sup>5</sup> <sub>16</sub>	3½	5 <sup>13</sup> <sub>16</sub>	2¾	5	¾	1 <sup>11</sup> <sub>32</sub>	10 <sup>7</sup> <sub>8</sub>	9 <sup>5</sup> <sub>8</sub>	4
304G9-2	-----	3	184JM			8¾	9¾	6¾	20¼	4½	5 <sup>13</sup> <sub>16</sub>	3¾	5½	½	1 <sup>13</sup> <sub>32</sub>	11 <sup>5</sup> <sub>8</sub>	9 <sup>5</sup> <sub>8</sub>	4
-----	3304G9-2	3	182JM			8¾	9¾	5¾	19¼	4½	5 <sup>13</sup> <sub>16</sub>	3¾	4½	½	1 <sup>13</sup> <sub>32</sub>	11 <sup>5</sup> <sub>8</sub>	9 <sup>5</sup> <sub>8</sub>	4
504G9-2	3504G9-2	5	184JM			8¾	9¾	6¾	20¼	4½	5 <sup>13</sup> <sub>16</sub>	3¾	5½	½	1 <sup>13</sup> <sub>32</sub>	11 <sup>5</sup> <sub>8</sub>	9 <sup>5</sup> <sub>8</sub>	4
304G9-2½	-----	3	184JM			8¾	9¾	6¾	19¾	4½	6 <sup>1</sup> <sub>16</sub>	3¾	5½	½	1 <sup>13</sup> <sub>32</sub>	11¼	10½	3½
-----	3304G9-2½	3	182JM	8¾	9¾	5¾	18¾	4½	6 <sup>1</sup> <sub>16</sub>	3¾	4½	½	1 <sup>13</sup> <sub>32</sub>	11¼	10½	3½		
504G9-2½	3504G9-2½	5	184JM	2½	3	8¾	9¾	6¾	19¾	4½	6 <sup>1</sup> <sub>16</sub>	3¾	5½	½	1 <sup>13</sup> <sub>32</sub>	11¼	10½	3½
754G9-2½	-----	7½	215JM			10 <sup>3</sup> <sub>8</sub>	11 <sup>1</sup> <sub>16</sub>	8¾	22 <sup>11</sup> <sub>16</sub>	5¼	6 <sup>1</sup> <sub>16</sub>	4¼	7	¾	1 <sup>13</sup> <sub>32</sub>	12 <sup>3</sup> <sub>8</sub>	10½	3½
-----	3754G9-2½	7½	213JM			10 <sup>3</sup> <sub>8</sub>	11 <sup>1</sup> <sub>16</sub>	7¼	21 <sup>1</sup> <sub>16</sub>	5¼	6 <sup>1</sup> <sub>16</sub>	4¼	5½	¾	1 <sup>13</sup> <sub>32</sub>	12 <sup>3</sup> <sub>8</sub>	10½	3½
3500 & 2900 RPM																		
-----	350G9-1½	5	182JM	1½	2	8¾	9¾	5¾	18	4½	5 <sup>13</sup> <sub>16</sub>	3¾	4½	½	1 <sup>13</sup> <sub>32</sub>	10½	9	3 <sup>1</sup> <sub>16</sub>
-----	375G9-1½	7½	184JM			8¾	9¾	6¾	19	4½	5 <sup>13</sup> <sub>16</sub>	3¾	5½	½	1 <sup>13</sup> <sub>32</sub>	10½	9	3 <sup>1</sup> <sub>16</sub>
-----	3100G9-1½	10	213JM			10 <sup>3</sup> <sub>8</sub>	11 <sup>1</sup> <sub>16</sub>	7¼	20 <sup>7</sup> <sub>16</sub>	5¼	5 <sup>13</sup> <sub>16</sub>	4¼	5½	¾	1 <sup>13</sup> <sub>32</sub>	11 <sup>5</sup> <sub>8</sub>	9	3 <sup>1</sup> <sub>16</sub>
-----	3150G9-1½	15	215JM			10 <sup>3</sup> <sub>8</sub>	11 <sup>1</sup> <sub>16</sub>	8¾	21 <sup>15</sup> <sub>16</sub>	5¼	5 <sup>13</sup> <sub>16</sub>	4¼	7	¾	1 <sup>13</sup> <sub>32</sub>	11 <sup>5</sup> <sub>8</sub>	9	3 <sup>1</sup> <sub>16</sub>
-----	3200G9-1½	20	254JM			12	11 <sup>1</sup> <sub>16</sub>	10¼	25 <sup>13</sup> <sub>16</sub>	6¼	5 <sup>13</sup> <sub>16</sub>	5	8¼	7 <sup>7</sup> <sub>8</sub>	1 <sup>17</sup> <sub>32</sub>	13½	9	3 <sup>1</sup> <sub>16</sub>
-----	3150G9-2	15	215JM	2	2½	10 <sup>3</sup> <sub>8</sub>	11 <sup>1</sup> <sub>16</sub>	8¾	23 <sup>1</sup> <sub>16</sub>	5¼	5 <sup>13</sup> <sub>16</sub>	4¼	7	¾	1 <sup>13</sup> <sub>32</sub>	12¾	9 <sup>5</sup> <sub>8</sub>	4
-----	3200G9-2	20	254JM			12	11 <sup>1</sup> <sub>16</sub>	10¼	26 <sup>15</sup> <sub>16</sub>	6¼	5 <sup>13</sup> <sub>16</sub>	5	8¼	7 <sup>7</sup> <sub>8</sub>	1 <sup>17</sup> <sub>32</sub>	14 <sup>5</sup> <sub>8</sub>	9 <sup>5</sup> <sub>8</sub>	4
-----	3250G9-2	25	256JM			12	11 <sup>1</sup> <sub>16</sub>	12	28 <sup>11</sup> <sub>16</sub>	6¼	5 <sup>13</sup> <sub>16</sub>	5	10	7 <sup>7</sup> <sub>8</sub>	1 <sup>17</sup> <sub>32</sub>	14 <sup>5</sup> <sub>8</sub>	9 <sup>5</sup> <sub>8</sub>	4
-----	3300G9-2	30	284JM			13¾	13	11½	28 <sup>11</sup> <sub>16</sub>	7	5 <sup>13</sup> <sub>16</sub>	5½	9½	7 <sup>7</sup> <sub>8</sub>	1 <sup>17</sup> <sub>32</sub>	14 <sup>5</sup> <sub>8</sub>	9 <sup>5</sup> <sub>8</sub>	4
----	3400G9-2	40	286JM			13¾	13	13	30 <sup>3</sup> <sub>16</sub>	7	5 <sup>13</sup> <sub>16</sub>	5½	11	7 <sup>7</sup> <sub>8</sub>	1 <sup>17</sup> <sub>32</sub>	14 <sup>5</sup> <sub>8</sub>	9 <sup>5</sup> <sub>8</sub>	4
----	3250G9-2½	25	256JM	2½	3	12	11 <sup>1</sup> <sub>16</sub>	12	28 <sup>5</sup> <sub>16</sub>	6¼	6 <sup>1</sup> <sub>16</sub>	5	10	7 <sup>7</sup> <sub>8</sub>	1 <sup>17</sup> <sub>32</sub>	14¼	10½	3½
----	3300G9-2½	30	284JM			13¾	13	11½	28 <sup>5</sup> <sub>16</sub>	7	6 <sup>1</sup> <sub>16</sub>	5½	9½	7 <sup>7</sup> <sub>8</sub>	1 <sup>17</sup> <sub>32</sub>	14¼	10½	3½
-----	3400G9-2½	40	286JM			13¾	13	13	29 <sup>13</sup> <sub>16</sub>	7	6 <sup>1</sup> <sub>16</sub>	5½	11	7 <sup>7</sup> <sub>8</sub>	1 <sup>17</sup> <sub>32</sub>	14¼	10½	3½
-----	3500G9-2½	50	324JM			14½	16¼	12¼	30¼	8	6 <sup>1</sup> <sub>16</sub>	6¼	10½	7 <sup>7</sup> <sub>8</sub>	2 <sup>1</sup> <sub>32</sub>	14¾	10½	3½
----	3600G9-2½	60	326JM			14½	16¼	13¾	31¼	8	6 <sup>1</sup> <sub>16</sub>	6¼	12	7 <sup>7</sup> <sub>8</sub>	2 <sup>1</sup> <sub>32</sub>	14¾	10½	3½

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

SECTION 2  
PAGE 62  
DATE 1/06

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PUMPS & SYSTEMS

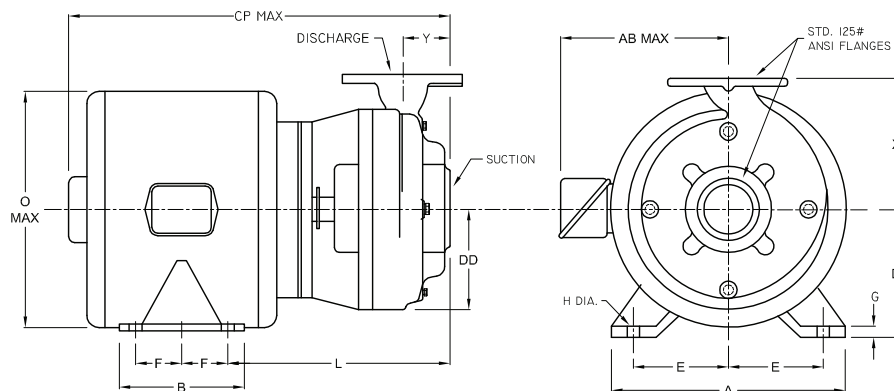
USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

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

Dimensions with Flanged Casing

**burks**<sup>®</sup>  
www.cranepumps.com

## 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	8½ <sup>15</sup> / <sub>16</sub>	5	15 <sup>7</sup> / <sub>8</sub>	3½	5½ <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>9</sup> / <sub>16</sub>
	145JM			7	8½ <sup>15</sup> / <sub>16</sub>	6	16 <sup>7</sup> / <sub>8</sub>	3½	5½ <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>9</sup> / <sub>16</sub>
	182JM			8¾	9 <sup>7</sup> / <sub>8</sub>	5¾	17 <sup>13</sup> / <sub>16</sub>	4½	5½ <sup>15</sup> / <sub>16</sub>	3¾	2¼	½	1 <sup>13</sup> / <sub>32</sub>	10 <sup>3</sup> / <sub>16</sub>	9 <sup>1</sup> / <sub>16</sub>	8½	2 <sup>9</sup> / <sub>16</sub>
	184JM			8¾	9 <sup>7</sup> / <sub>8</sub>	6¾	18 <sup>13</sup> / <sub>16</sub>	4½	5½ <sup>15</sup> / <sub>16</sub>	3¾	2¾	½	1 <sup>13</sup> / <sub>32</sub>	10 <sup>3</sup> / <sub>16</sub>	9 <sup>1</sup> / <sub>16</sub>	8½	2 <sup>9</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	5½ <sup>15</sup> / <sub>16</sub>	4¼	2¾	5 <sup>5</sup> / <sub>8</sub>	1 <sup>13</sup> / <sub>32</sub>	11 <sup>5</sup> / <sub>16</sub>	11	8½	2 <sup>9</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	5½ <sup>15</sup> / <sub>16</sub>	4¼	3½	5 <sup>5</sup> / <sub>8</sub>	1 <sup>13</sup> / <sub>32</sub>	11 <sup>5</sup> / <sub>16</sub>	11	8½	2 <sup>9</sup> / <sub>16</sub>
	254JM			12 <sup>3</sup> / <sub>16</sub>	11 <sup>9</sup> / <sub>16</sub>	10¼	25½	6¼	5½ <sup>15</sup> / <sub>16</sub>	5	4¼	7 <sup>1</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>9</sup> / <sub>16</sub>
	256JM			12 <sup>3</sup> / <sub>16</sub>	11 <sup>9</sup> / <sub>16</sub>	12¼	27¼	6¼	5½ <sup>15</sup> / <sub>16</sub>	5	5	7 <sup>1</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>9</sup> / <sub>16</sub>
	284JM			13¾	13	11½	27¼	7	5½ <sup>15</sup> / <sub>16</sub>	5½	4¾	7 <sup>1</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	14¾	8½	2 <sup>9</sup> / <sub>16</sub>
	286JM			13¾	13	13	28¾	7	5½ <sup>15</sup> / <sub>16</sub>	5½	5½	7 <sup>1</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	14¾	8½	2 <sup>9</sup> / <sub>16</sub>
	324JM			14½	16¼	12¼	29 <sup>9</sup> / <sub>16</sub>	8	5½ <sup>15</sup> / <sub>16</sub>	6¼	5¼	7 <sup>1</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>9</sup> / <sub>16</sub>
	326JM			14½	16¼	13¾	30 <sup>11</sup> / <sub>16</sub>	8	5½ <sup>15</sup> / <sub>16</sub>	6¼	6	7 <sup>1</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>9</sup> / <sub>16</sub>
G9-2½F	143JM	2½	3	7	8½ <sup>15</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>9</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>16</sub>	9¼	2 <sup>9</sup> / <sub>16</sub>
	145JM			7	8½ <sup>15</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>9</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>16</sub>	9¼	2 <sup>9</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>13</sup> / <sub>32</sub>	10 <sup>3</sup> / <sub>16</sub>	9 <sup>1</sup> / <sub>16</sub>	9¼	2 <sup>9</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	2¾	½	1 <sup>13</sup> / <sub>32</sub>	10 <sup>3</sup> / <sub>16</sub>	9 <sup>1</sup> / <sub>16</sub>	9¼	2 <sup>9</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>13</sup> / <sub>32</sub>	11½	11	9¼	2 <sup>9</sup> / <sub>16</sub>
	215JM			10 <sup>9</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>16</sub>	8¾	21 <sup>13</sup> / <sub>16</sub>	5¼	6 <sup>1</sup> / <sub>16</sub>	4¼	3½	5 <sup>5</sup> / <sub>8</sub>	1 <sup>13</sup> / <sub>32</sub>	11½	11	9¼	2 <sup>9</sup> / <sub>16</sub>
	254JM			12 <sup>3</sup> / <sub>16</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	4¼	7 <sup>1</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>9</sup> / <sub>16</sub>
	256JM			12 <sup>3</sup> / <sub>16</sub>	11 <sup>9</sup> / <sub>16</sub>	12¼	27 <sup>7</sup> / <sub>16</sub>	6¼	6 <sup>1</sup> / <sub>16</sub>	5	5	7 <sup>1</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>9</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>1</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	14¾	9¼	2 <sup>9</sup> / <sub>16</sub>
	286JM			13¾	13	13	28 <sup>15</sup> / <sub>16</sub>	7	6 <sup>1</sup> / <sub>16</sub>	5½	5½	7 <sup>1</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	14¾	9¼	2 <sup>9</sup> / <sub>16</sub>
	324JM			14½	16¼	12¼	29 <sup>9</sup> / <sub>16</sub>	8	6 <sup>1</sup> / <sub>16</sub>	6¼	5¼	7 <sup>1</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	17 <sup>1</sup> / <sub>8</sub>	9¼	2 <sup>9</sup> / <sub>16</sub>
	326JM			14½	16¼	13¾	30 <sup>5</sup> / <sub>8</sub>	8	6 <sup>1</sup> / <sub>16</sub>	6¼	6	7 <sup>1</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	17 <sup>1</sup> / <sub>8</sub>	9¼	2 <sup>9</sup> / <sub>16</sub>
G9-3F G9A-3F	182JM	3	4	8¾	9 <sup>7</sup> / <sub>8</sub>	5¾	18 <sup>7</sup> / <sub>16</sub>	4½	6 <sup>3</sup> / <sub>4</sub>	3¾	2¼	½	1 <sup>13</sup> / <sub>32</sub>	11	9 <sup>1</sup> / <sub>16</sub>	9	2 <sup>11</sup> / <sub>16</sub>
	184JM			8¾	9 <sup>7</sup> / <sub>8</sub>	6¾	19 <sup>7</sup> / <sub>16</sub>	4½	6 <sup>3</sup> / <sub>4</sub>	3¾	2¾	½	1 <sup>13</sup> / <sub>32</sub>	11	9 <sup>1</sup> / <sub>16</sub>	9	2 <sup>11</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>13</sup> / <sub>32</sub>	11 <sup>7</sup> / <sub>8</sub>	11	9	2 <sup>11</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>13</sup> / <sub>32</sub>	11 <sup>7</sup> / <sub>8</sub>	11	9	2 <sup>11</sup> / <sub>16</sub>
	284JM			13¾	13	11½	27 <sup>7</sup> / <sub>8</sub>	7	6 <sup>3</sup> / <sub>4</sub>	5½	4¾	7 <sup>1</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	14¾	9	2 <sup>11</sup> / <sub>16</sub>
	286JM			13¾	13	13	29 <sup>9</sup> / <sub>8</sub>	7	6 <sup>3</sup> / <sub>4</sub>	5½	5½	7 <sup>1</sup> / <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	14¾	9	2 <sup>11</sup> / <sub>16</sub>
	324JM			14½	16¼	12¼	29 <sup>13</sup> / <sub>16</sub>	8	6 <sup>3</sup> / <sub>4</sub>	6¼	5¼	7 <sup>1</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>32</sub>	14 <sup>1</sup> / <sub>16</sub>	17 <sup>1</sup> / <sub>8</sub>	9	2 <sup>11</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>1</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>11</sup> / <sub>16</sub>
4G9-4F	182JM	4	5	8¾	9 <sup>11</sup> / <sub>16</sub>	5¾	19½	4½	7 <sup>9</sup> / <sub>16</sub>	3¾	2¼	½	1 <sup>13</sup> / <sub>32</sub>	11¾	9 <sup>1</sup> / <sub>16</sub>	10 <sup>5</sup> / <sub>8</sub>	3¼
	184JM			8¾	9 <sup>11</sup> / <sub>16</sub>	6¾	21½	4½	7 <sup>9</sup> / <sub>16</sub>	3¾	2¾	½	1 <sup>13</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>15</sup> / <sub>16</sub>	5¼	7 <sup>9</sup> / <sub>16</sub>	4¼	2¾	5 <sup>5</sup> / <sub>8</sub>	1 <sup>13</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>1</sup> / <sub>16</sub>	5¼	7 <sup>9</sup> / <sub>16</sub>	4¼	3½	5 <sup>5</sup> / <sub>8</sub>	1 <sup>13</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

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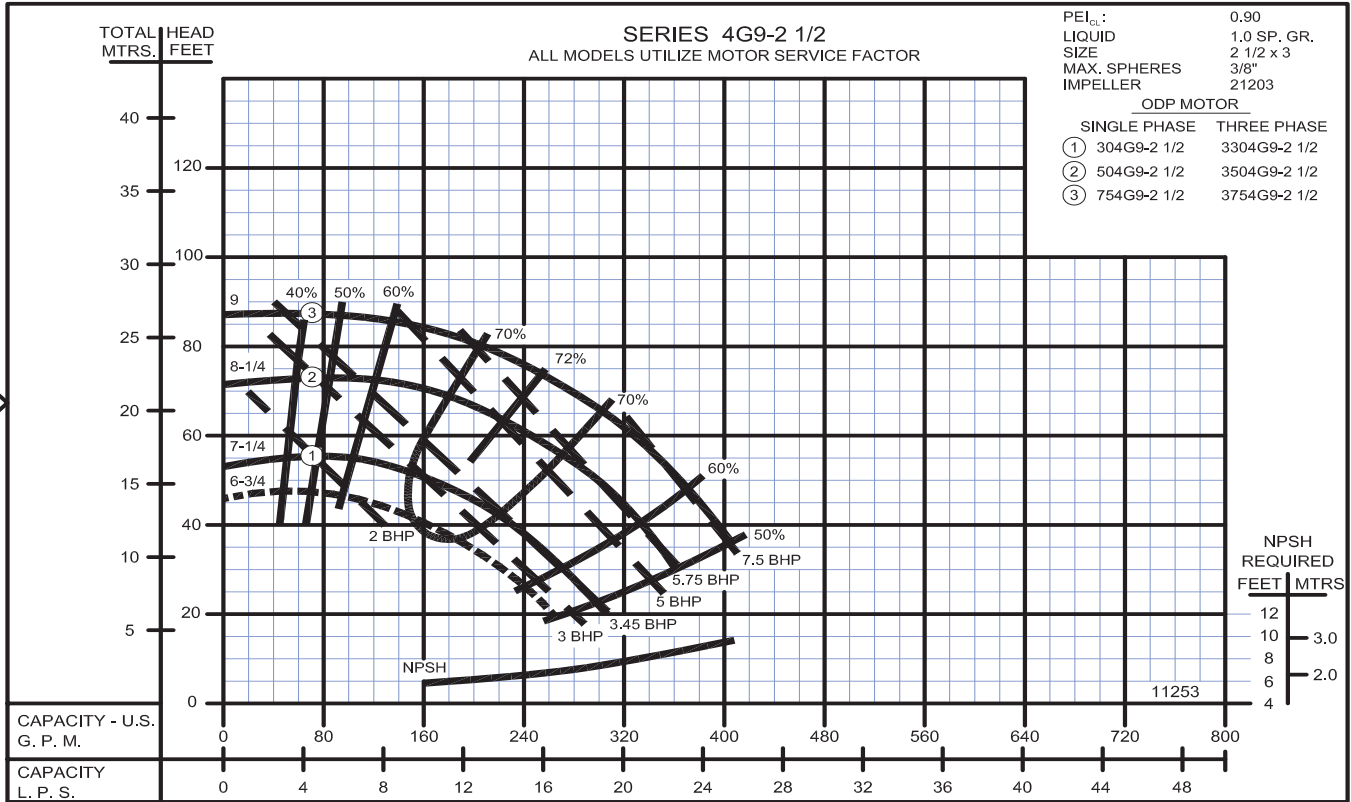
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PUMPS & SYSTEMS

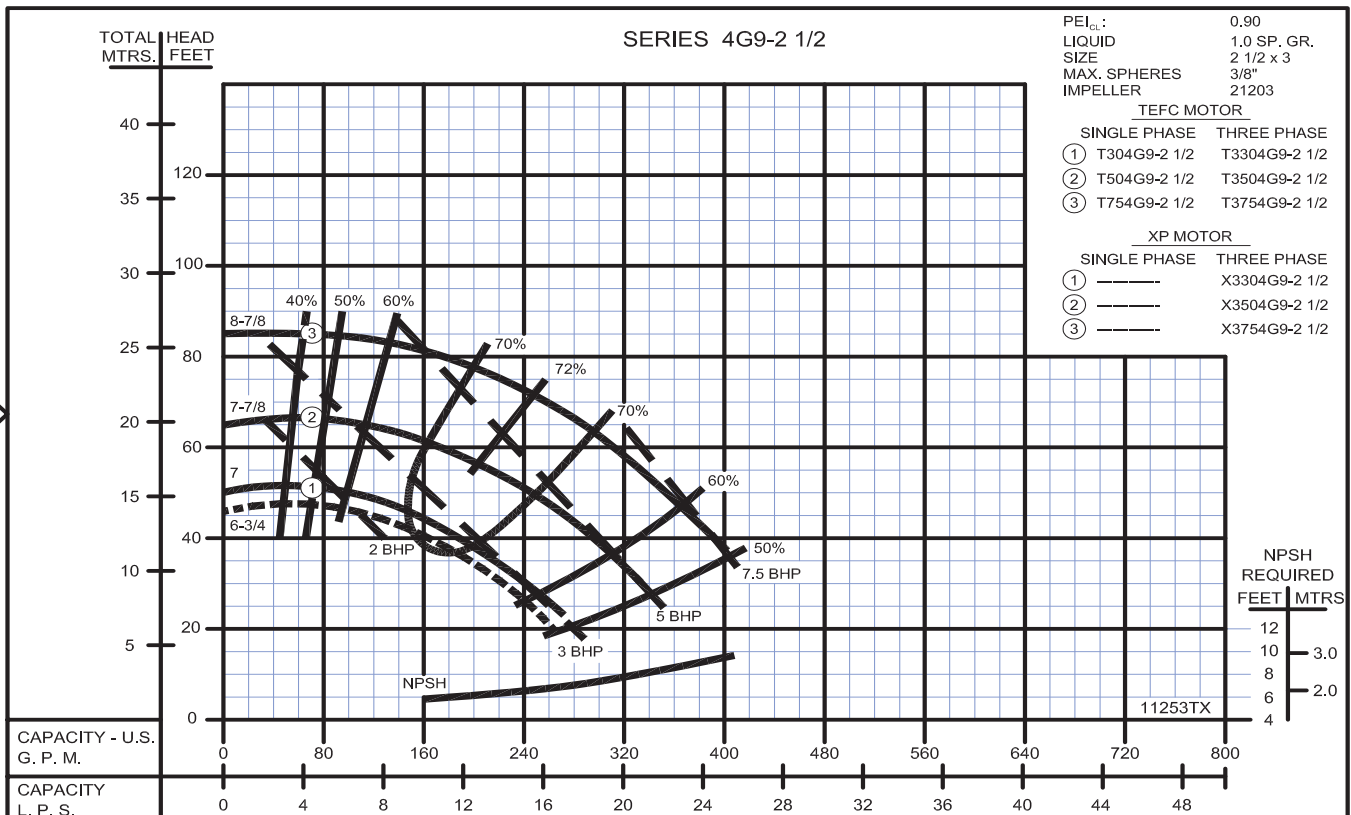
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**Close Coupled End Suction**

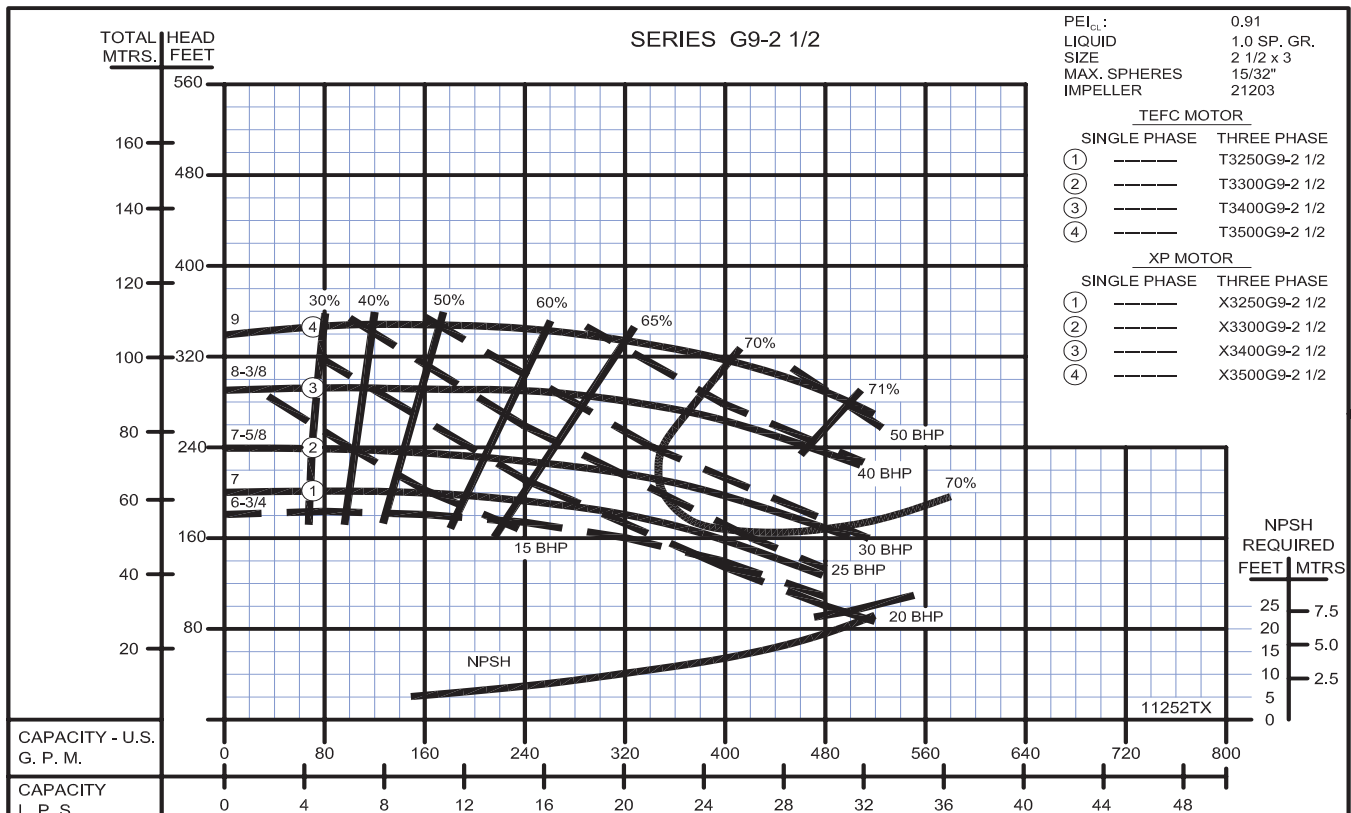
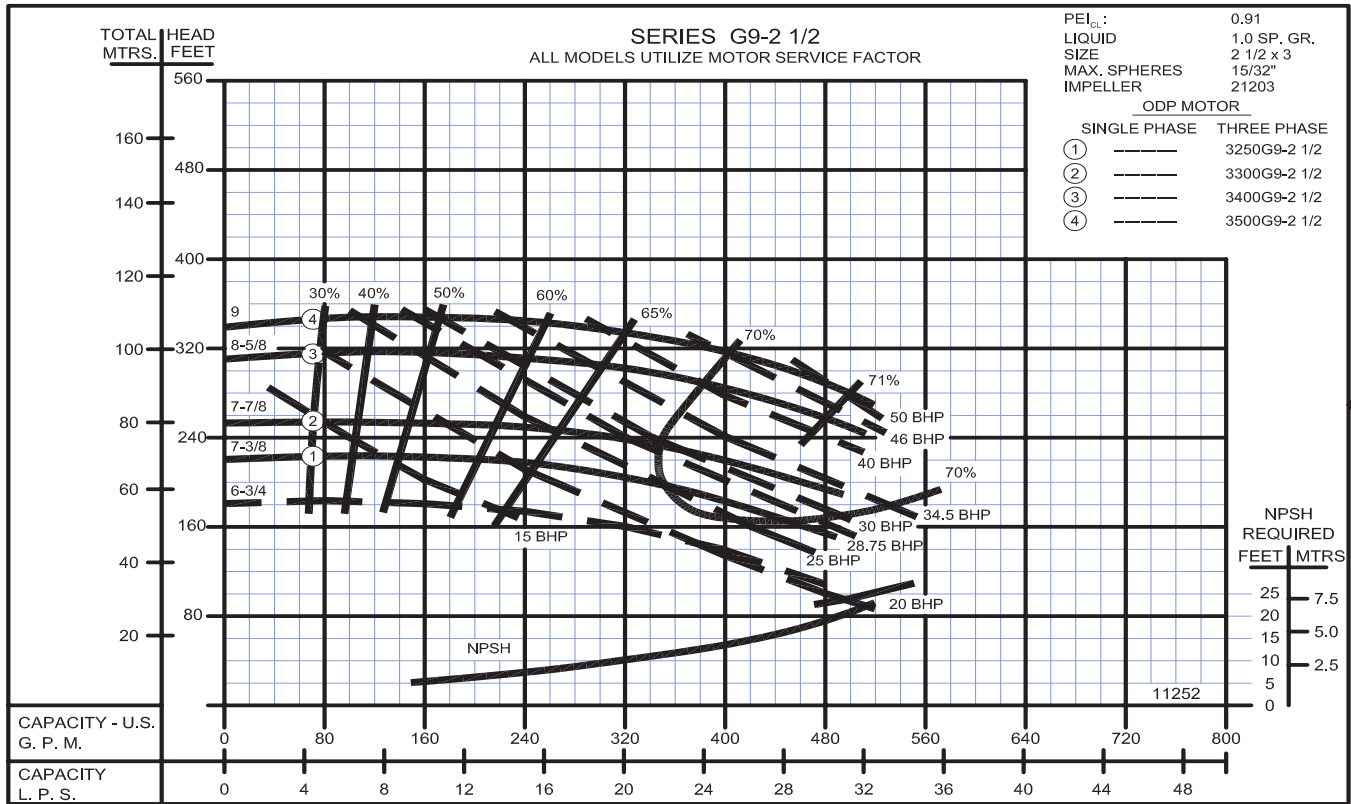
1750  
RPM



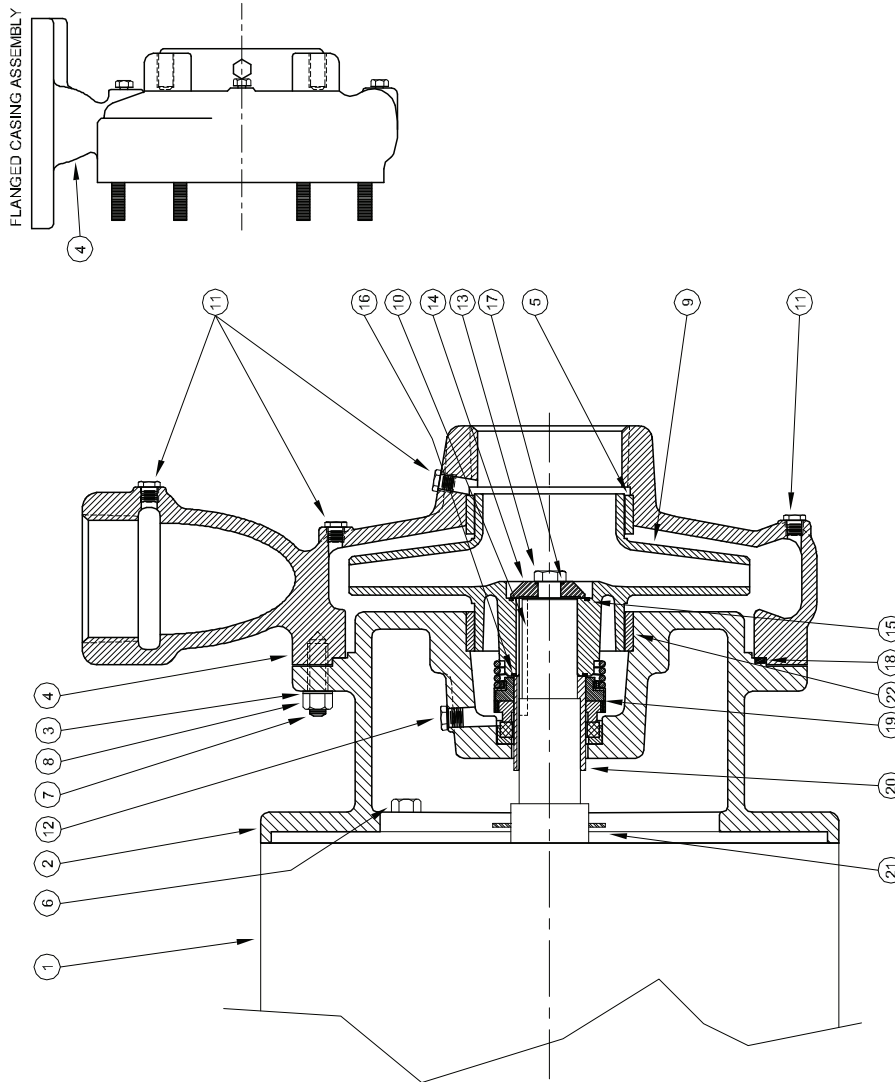
1750  
RPM



### Close Coupled End Suction



## Centrifugals - Close Coupled



1 - MOTORS				
RPM & PHASE	PART NUMBER	HP	FRAME SIZE	
OPEN DRIP PROOF				
1750 RPM Single Phase (ODP)	21396	3	184JM	
	21397	5	213JM	
	21398	7½	215JM	
1750 RPM Three Phase (ODP)	21422	3	182JM	
	21423	5	184JM	
	21424	7½	213JM	
3500 RPM Three Phase (ODP)	21170	25	256JM	
	21207	30	284JM	
	21208	40	286JM	
	21209	50	324JM	
	21210	60	326JM	
TOTALLY ENCLOSED				
1750 RPM Single Phase (TEFC)	21402	3	184JM	
	21403	5	213JM	
	21404	7½	215JM	
1750 RPM Three Phase (TEFC)	21429	3	182JM	
	21430	5	184JM	
	21431	7½	213JM	
3500 RPM Three Phase (TEFC)	21457	25	284JM	
	21215	30	286JM	
	21216	40	324JM	
	21217	50	326JM	
EXPLOSION PROOF				
1750 RPM Three Phase (XP)	21436	3	182JM	
	21437	5	184JM	
	21438	7½	213JM	
3500 RPM Three Phase (XP)	21458	25	284JM	
	21218	30	286JM	
	21219	40	324JM	
	21220	50	326JM	



## Centrifugals - Close Coupled

SYMBOL NUMBER	PART NUMBER	QTY	DESCRIPTION
+15	09933	1	PUMPS with 182-215JM Motors Flat Gasket +
	22083	1	O-Ring Gasket - Buna N (Std)
	22084	1	O-Ring Gasket - Viton
	22094	1	O-Ring Gasket - EPT**
	22085	1	O-Ring Gasket - Teflon
			PUMPS with 254-326JM Motors
+16	21090	1	Flat Gasket +
	22140	1	O-Ring Gasket - Buna N (Std)
	22141	1	O-Ring Gasket - Viton
	22143	1	O-Ring Gasket - EPT**
	22142	1	O-Ring Gasket - Teflon
			PUMPS with 182-215JM Motors
+17	09911	1	Flat Gasket +
	22083	1	O-Ring Gasket - Buna N (Std)
	22084	1	O-Ring Gasket - Viton
	22094	1	O-Ring Gasket - EPT**
	22085	1	O-Ring Gasket - Teflon
			PUMPS with 254-326JM Motors
+18	21092	1	Flat Gasket +
	22089	1	O-Ring Gasket - Buna N (Std)
	22090	1	O-Ring Gasket - Viton
	22096	1	O-Ring Gasket - EPT**
	22091	1	O-Ring Gasket - Teflon
			PUMPS with 182-215JM Motors
+19	22080	1	O-Ring Gasket - Buna N (Std)
	2-31005-012	1	O-Ring Gasket - Viton
	22093	1	O-Ring Gasket - EPT**
	22082	1	O-Ring Gasket - Teflon
			PUMPS with 254-326JM Motors
	22086	1	O-Ring Gasket - Buna N (Std)
+20	22087	1	O-Ring Gasket - Viton
	22095	1	O-Ring Gasket - EPT**
	22088	1	O-Ring Gasket - Teflon
	20425	1	Flat Gasket +
	23007	1	O-Ring Gasket - Buna N (Std)
	23008	1	O-Ring Gasket - Viton
+21	23009	1	O-Ring Gasket - EPT**
	23010	1	O-Ring Gasket - Teflon

"CONTINUED ON NEXT PAGE"

(\*) Casing Assy. Includes Symbols 5, 7 & 11.

(\*\*) For hot water or Caustic service.

(+) Series G9-2-1/2 & G9-3 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.

(\*) Adapter Assy. includes symbol 22.

SYMBOL NUMBER	PART NUMBER	QTY	DESCRIPTION
2	21346	1	Adapter - 182-184JM Motors
	20431	1	Adapter Assy - 213-215JM Motors
	21354-1	1	Adapter Assy - 254-256 JM Motors
	21174-1	1	Adapter Assy - G9-2-1/2 w/284-326JM Motors
	21349	1	Adapter Assy - G9-3F, G9A-3F w/284-326JM Motors
	21354	1	Adapter Assy - G9A-3 w/254-256 JM Motors
3	20059	12	Lockwasher - SS
*4	22157	1	Casing Assy - G9-2-1/2
	22274	1	Casing Assy - G9-2-1/2F (Flanged)
	22275	1	Casing Assy - G9-3F (Flanged)
	20680	1	Wear Ring, Casing, Bronze - G9-2-1/2
5	21315	1	Wear Ring, Casing, Bronze - G9-3F, G9A3-3F
6	01928	4	Cap Screw - Use with 21346 & 20431 Adapter
	1-68-6	4	Cap Screw - Use with 21354-1 Adapter
	Q15-4-E26	4	Cap Screw - Use with 21174-1 & 21349 Adapter
	20424	12	Stud
8	15-6-6	12	Nut
9	1750 RPM		
	21203-1-7.25	1	Impeller - 304G9-2-1/2 & 3304G9-2-1/2
	21203-1-8.25	1	Impeller - 504G9-2-1/2 & 3504G9-2-1/2
	21203-1-9.00	1	Impeller - 754G9-2-1/2 & 3754G9-2-1/2
	21557-1-7.75	1	Impeller - 504G9-3F & 3504G9-3F
	21557-1-8.50	1	Impeller - 754G9-3F & 3754G9-3F
	21557-1-9.25	1	Impeller - 31004G9-3F
	3500 RPM		
10	21203-7.38	1	Impeller - 3250G9-2-1/2
	21203-7.88	1	Impeller - 3300G9-2-1/2
	21203-8.63	1	Impeller - 3400G9-2-1/2
	21203-9.00	1	Impeller - 3500G9-2-1/2 & 3600G9-2-1/2
	21557-7.25	1	Impeller - 3300G9-3F
	21557-7.75	1	Impeller - 3400G9-3F
	21557-8.13	1	Impeller - 3500G9-3F
	23272-6.50	1	Impeller - 3200G9A-3F
	23272-6.94	1	Impeller - 3250G9A-3F
	23272-7.31	1	Impeller - 3300G9A-3F
	23272-7.81	1	Impeller - 3400G9A-3F
	23272-8.31	1	Impeller - 3500G9A-3F
11	23272-8.75	1	Impeller - 3600G9A-3F
	23014	1	Key - 143-215JM Motors
12	22107	1	Key - 254-326JM Motors
13	01691-A	6	Pipe Plug 1/8" - Bronze
	04236	1	Pipe Plug 1/4" - Bronze
14	1-529-1	1	Cap Screw SS - 182-215JM Motors
	1-68-1	1	Cap Screw SS - 254-326JM Motors
15	22105-C	1	Washer - Bronze - 182-215JM Motors
	22106	1	Washer - Bronze - 254-326JM Motors

WARNING:

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Centrifugals - Close Coupled

SYMBOL NUMBER	PART NUMBER	QTY	DESCRIPTION
DIFFERING PARTS FOR ALL IRON CONSTRUCTION			
2	20431-B	1	Adapter Assy ♦ - 213-215JM Motors
	21354-B-1		Adapter Assy ♦ - 254-256JM Motors
	21174-B-1		Adapter Assy ♦ - G9-2-1/2 w/284-326JM Motors
	21349-B		Adapter Assy ♦ - G9-3F, G9A-3F w/284-326JM Motors
*4	22157-B	1	Casing Assy - G9-2-1/2
	22274-B	1	Casing Assy - G9-2-1/2F (Flanged)
	22275-B	1	Casing Assy - G9-3F (Flanged)
5	20680-A	1	Wear Ring - Steel - G9-2-1/2
	21315-A	1	Wear Ring - Steel - G9-3F
1750 RPM			
9	21203-A-1	1	Impeller - Iron
	21557-A-1	1	Impeller - Iron
	Size suffixes same as standard bronze impellers		
	3500 RPM		
	23272-A	1	Impeller - Iron
	21203-A	1	Impeller - Iron
	21557-A	1	Impeller - Iron
	Size suffixes same as standard bronze impellers		
11	00158	6	Pipe Plug 1/8" Steel
12	04236-A	1	Pipe Plug 1/4" SS
14	22105-A	1	Washer - Steel - 182-215JM Motors
	22106-A	1	Washer - Steel - 254-326JM Motors
20	22063-A	1	Shaft Sleeve, SS - 182-215JM Motors
	22066-A	1	Shaft Sleeve, SS - 254-326JM Motors
22	09915-A	1	Wear Ring, Steel - for 20431-B Adapter Assy
	20680-A	1	Wear Ring, Steel - for 21354-B & 21174-B-1 Adapter
	21315-A	1	Wear Ring, Steel - for 21349-B Adapter

- (\*) Casing Assy. Includes Symbols 5, 7 & 11.  
 (\*\*) For hot water or Caustic service.  
 (+) Series G9-2-1/2 & G9-3 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.  
 (♦) Adapter Assy. includes symbol 22.

SYMBOL NUMBER	PART NUMBER	QTY	DESCRIPTION
19	PUMPS with 182-215JM Motors		
	09917	1	Mechanical Seal - Buna-N (Std)
	09926	1	Mechanical Seal - Viton
	21271	1	Mechanical Seal - EPT**
	PUMPS with 254-326JM Motors		
	21136	1	Mechanical Seal - Buna-N (Std)
	21189	1	Mechanical Seal - Viton
	21721	1	Mechanical Seal - EPT**
20	22063	1	Shaft Sleeve - Bronze - 182-215JM Motors
	22066	1	Shaft Sleeve - Bronze - 254-326JM Motors
21	09918	1	Slinger Washer - 182-215JM Motors
	21093	1	Slinger Washer - 254-326JM Motors
22	09915	1	Wear Ring, Bronze - for 20431 Adapter Assy
	20680	1	Wear Ring, Bronze - for 21354-1 & 21174-1 Adapter
	21315	1	Wear Ring, Bronze - for 21349 Adapter
DIFFERING PARTS FOR ALL BRONZE CONSTRUCTION			
2	21346-A	1	Adapter - 182-184JM Motors
	20431-A	1	Adapter Assy ♦ - 213-215JM Motors
	21354-A-1	1	Adapter Assy ♦ - 254-256JM Motors
	21174-A-1	1	Adapter Assy ♦ - G9-2-1/2 w/284-326JM Motors
	21349-A	1	Adapter Assy ♦ - G9-3F, G9A-3F w/284-326JM Motors
*4	22157-A	1	Casing Assy - G9-2-1/2
	22274-A	1	Casing Assy - G9-2-1/2F
	22275-A	1	Casing Assy - G9-3F, G9A-3F (Flanged)
8	03160-A	12	Nut
13	03289	1	Cap Screw Bronze - 182-215JM Motors
	01638-B	1	Cap Screw Bronze - 254-326JM Motors

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