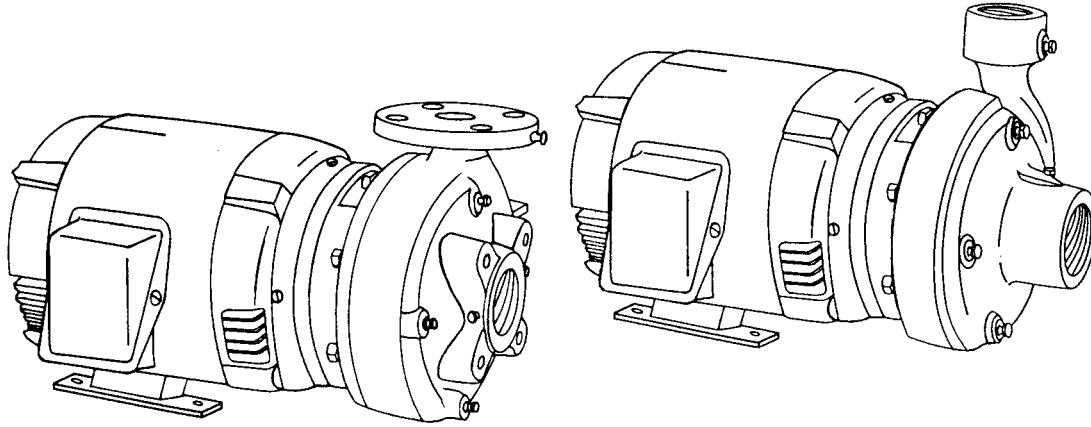


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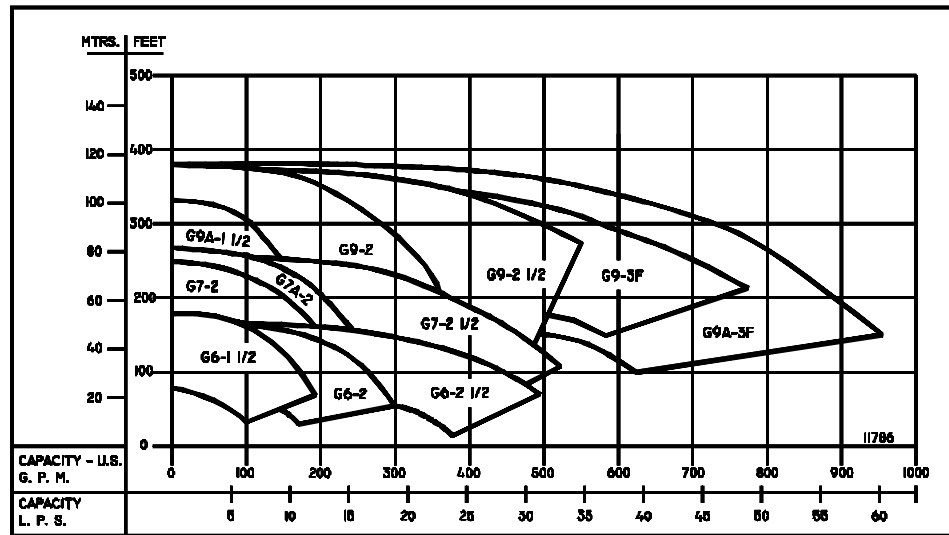
**SERIES: G6-1-1/2  
thru 4G9-4F**



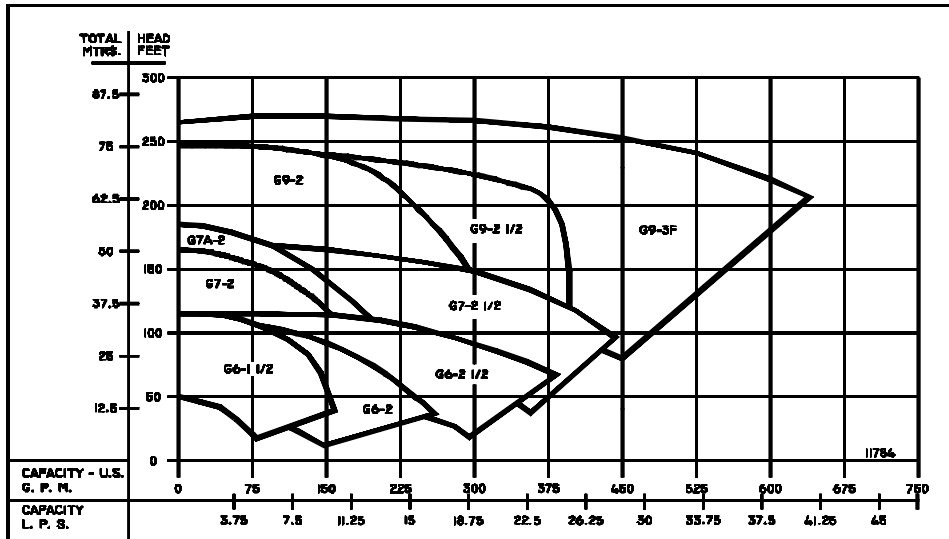
**CLOSED COUPLED CENTRIFUGAL PUMPS**



**3500RPM - 60Hz.**  
CAPACITIES TO 960GPM (60.6LPS)  
HEADS TO 380 FEET (116M)



**2900RPM - 50Hz.**  
CAPACITIES TO 630GPM (39.7LPS)  
HEADS TO 265 FEET (80.8M)



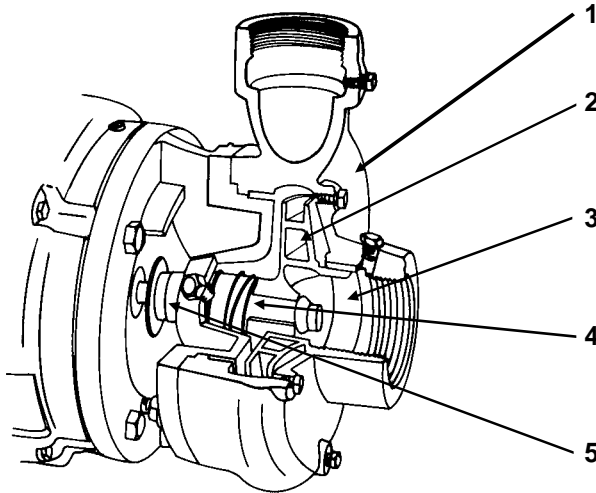
Individual performance curves should be checked for final selection.



PUMPS & SYSTEMS



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## PRODUCT FEATURES

### 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.

### 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.

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

SUCTION & DISCHARGE SIZES		
* SERIES	SUCTION	DISCHARGE
G6-1-1/2	2"	1-1/2"
G6-2 & 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

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 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



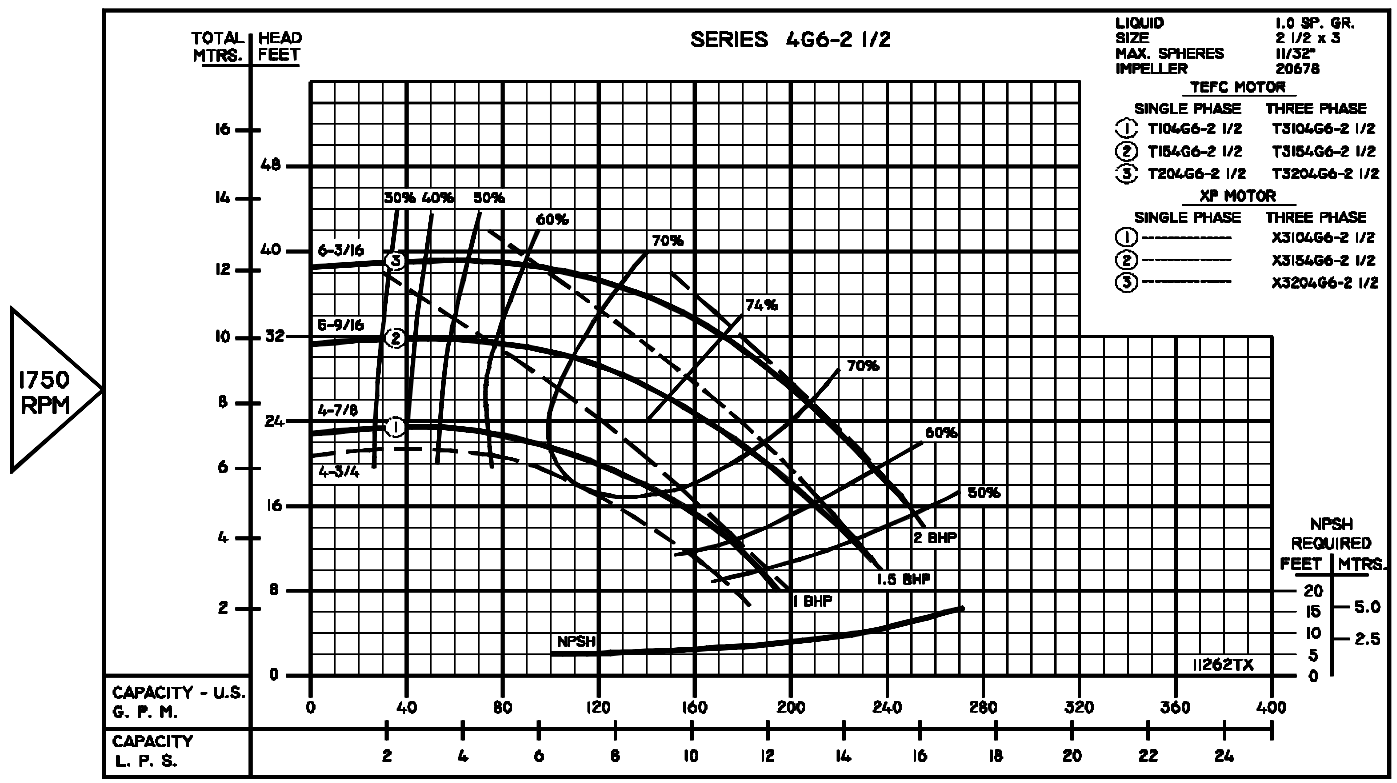
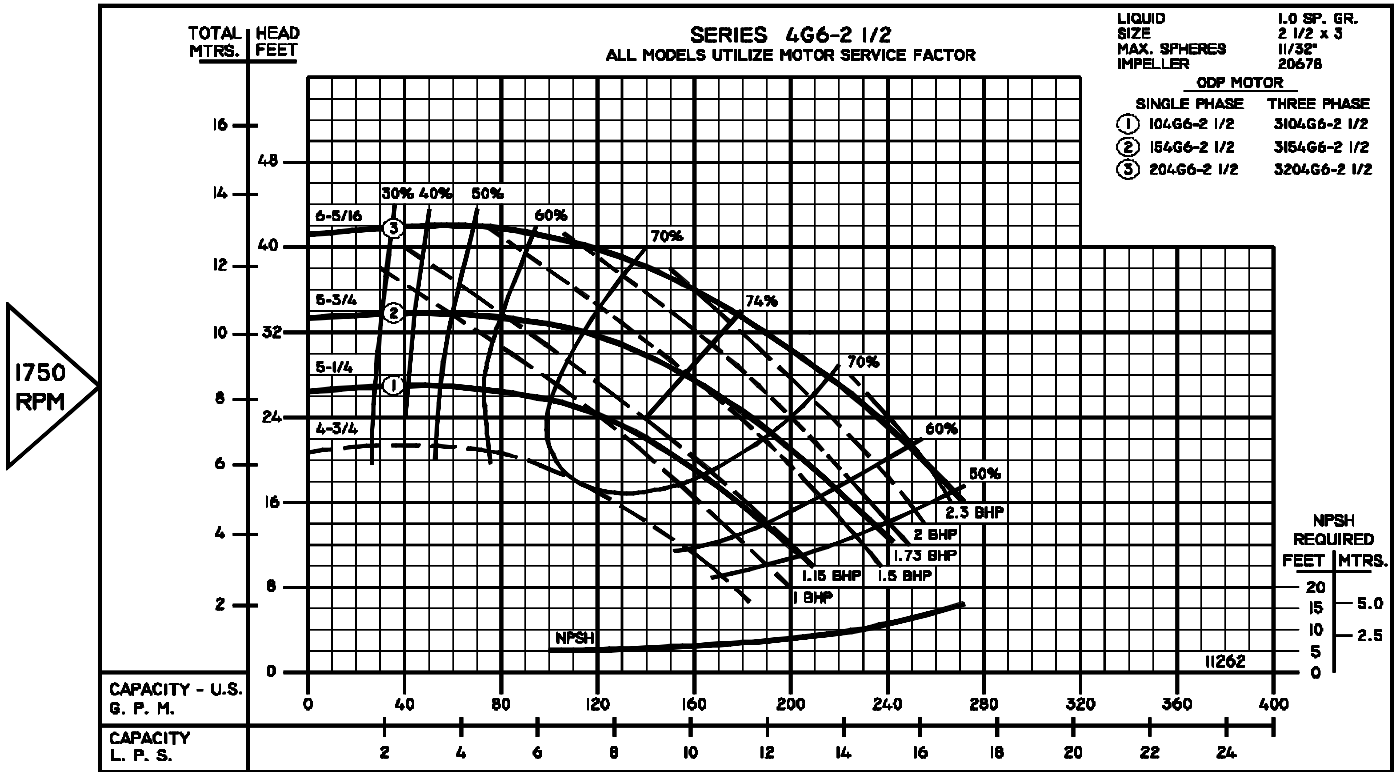


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## 60Hz PERFORMANCE CURVE



### END SUCTION CENTRIFUGAL PUMPS



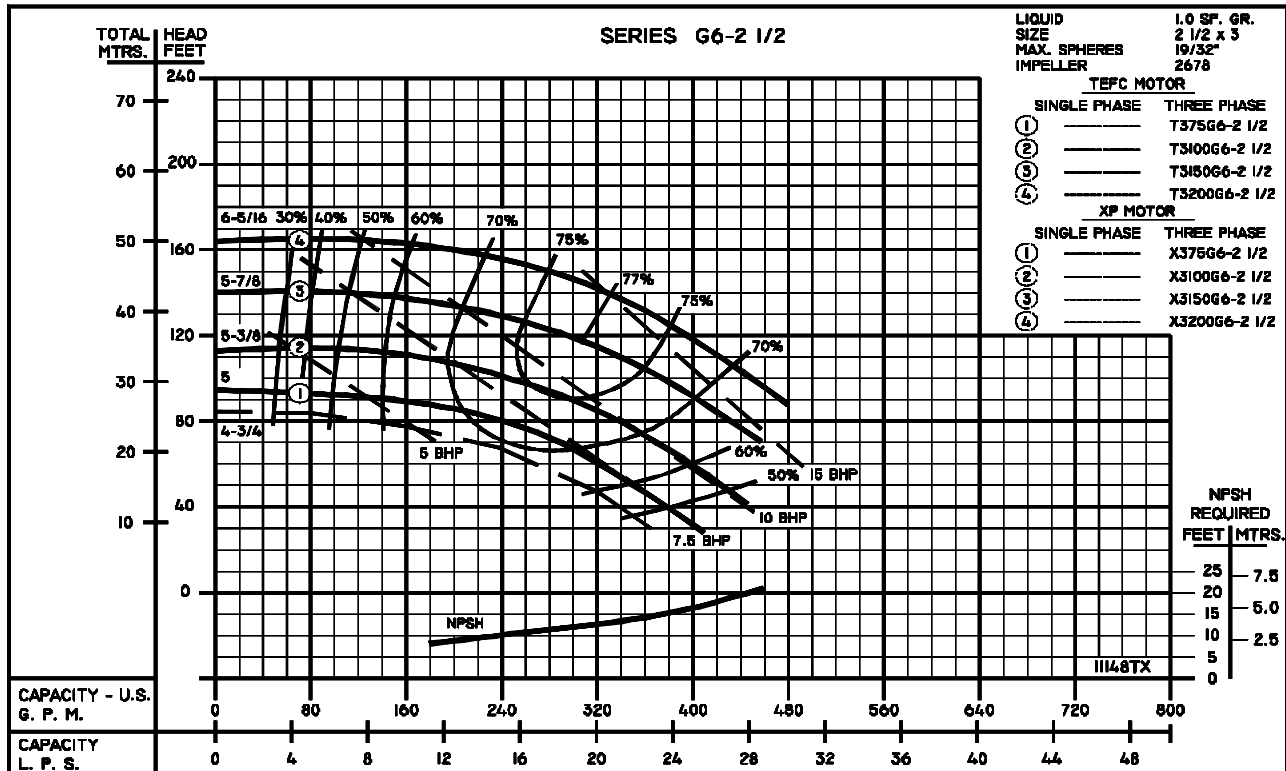
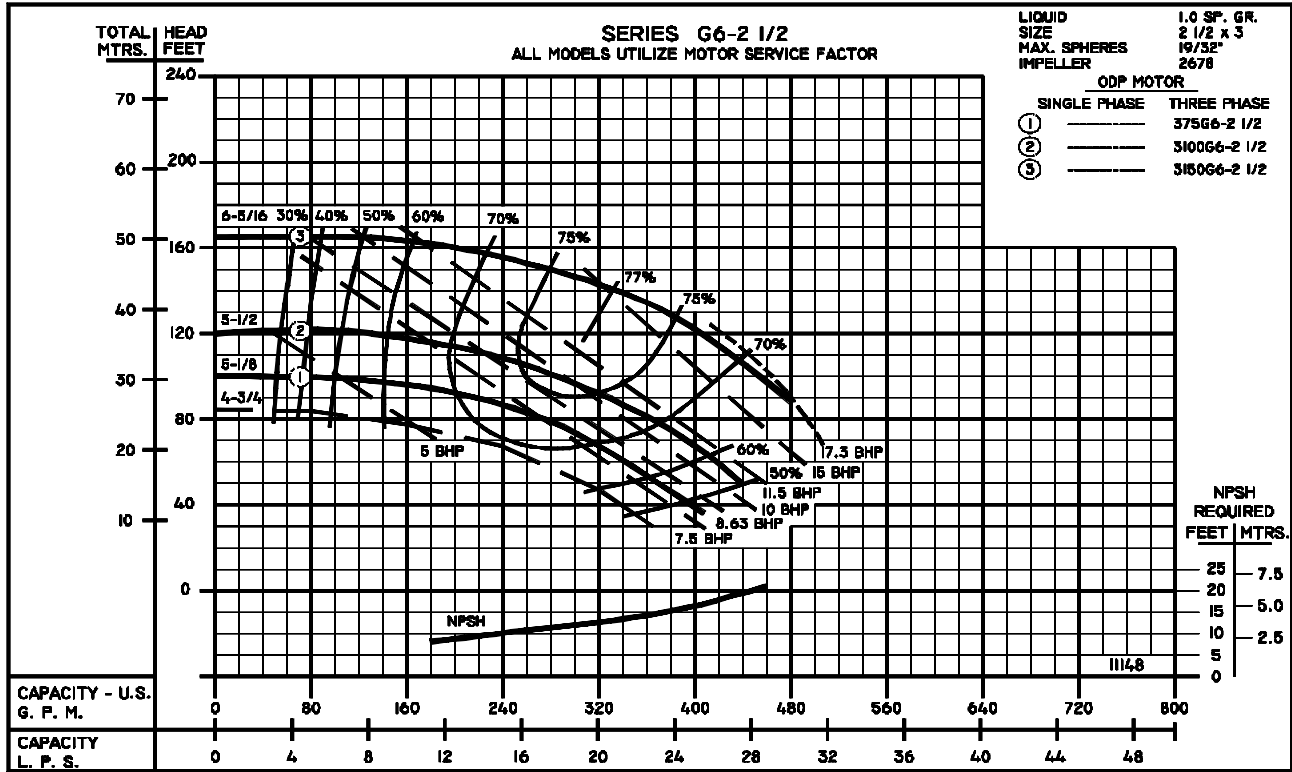
PUMPS & SYSTEMS



60HZ  
PERFORMANCE CURVE

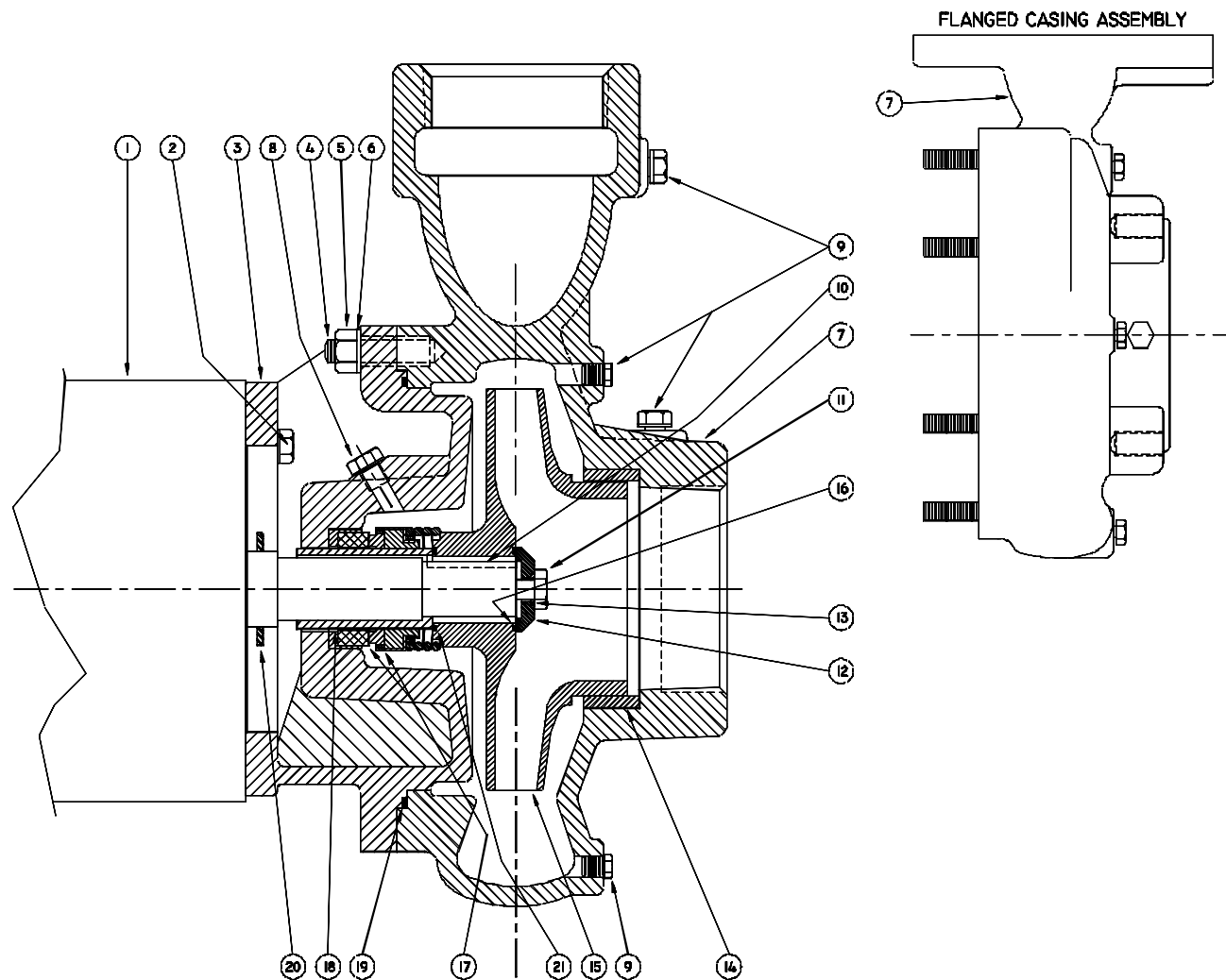
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END SUCTION CENTRIFUGAL PUMPS



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1 - MOTORS			
RPM & PHASE	PART NUMBER	HP	FRAME SIZE
<b>OPEN DRIP PROOF</b>			
1750 RPM Single Phase (ODP)	21393	1	143JM
	21394	1-1/2	145JM
	21395	2	182JM
1750 RPM Three Phase (ODP)	21419	1	143JM
	21420 21421	1-1/2 2	145JM 145JM
3500 RPM Three Phase (ODP)	09907	7-1/5	184JM
	09999	10	213JM
	20002	15	215JM
	21169	20	254JM
<b>TOTALLY ENCLOSED</b>			
1750 RPM Single Phase (TEFC)	21399	1	143JM
	21400	1-1/2	145JM
	21401	2	182JM
	21402	3	184JM
1750 RPM Three Phase (TEFC)	21426	1	143JM
	21427	1-1/2	145JM
	21428	2	145JM
	21429	3	182JM
3500 RPM Three Phase (TEFC)	09951	7-1/2	231JM
	20000	10	215JM
	20003	15	254JM
	21195	20	256JM
<b>EXPLOSION PROOF</b>			
1750 RPM Three Phase (XP)	21433	1	143JM
	21434	1-1/2	145JM
	21435	2	145JM
	21436	3	182JM
3500 RPM Three Phase (XP)	09955	7-1/2	213JM
	20001	10	215JM
	20004	15	254JM
	21196	20	256JM



**SERIES: G6-2-1/2 CENTRIFUGAL PUMPS**

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SYMBOL NUMBER	PART NUMBER	QUANTITY	DESCRIPTION
2	01928	4	Cap Screw - for 9912 Adapter
	1-68-6	4	Cap Screw - for 9920 & 21345 Adapter
3	09912	1	Adapter - 143-184 JM Motors
	09920	1	Adapter - 213-215 JM Motors
	21345	1	Adapter - 254-256 JM Motors
4	03075	8	Stud
5	15-23-6	8	Nut
6	1609-A	8	Washer
* 7	22152	1	Casing Assy
	22270	1	Casing Assy (Flanged)
8	04236	1	Pipe Plug - 1/4", Bronze
9	01691-A	6	Pipe Plug, 1/8" - Bronze
10	23014	1	Key - 143-215 JM Motors
	22107	1	Key - 254-256 JM Motors
	1-529-1	1	Cap Screw, S.S. - 143-215 JM Motors
11	01638-A	1	Cap Screw, S.S. - 254-256 JM Motors
12	22105-C	1	Washer, Bronze - 143-215 JM Motors
	22106	1	Washer, Bronze - 254-256 JM Motors
13	<b>PUMPS With 143-215 JM Motors</b>		
	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
	<b>PUMPS With 254-256 JM Motors</b>		
	22086	1	O-Ring Gasket - Buna N (Std)
	22087	1	O-Ring Gasket - Viton
	22095	1	O-Ring Gasket - EPT**
	22088	1	O-Ring Gasket - Teflon
14	20680	1	Wear Ring - Bronze
15	<b>1750 RPM</b>		
	20678-5.25	1	Impeller - 104G6-2-1/2 & 3104G6-2-1/2
	20678-5.75	1	Impeller - 154G6-2-1/2 & 3154G6-2-1/2
	20678-6.31	1	Impeller - 204G6-2-1/2 & 3204G6-2-1/2
	<b>3500 RPM</b>		
	20678-5.13	1	Impeller - 375G6-2-1/2
	20678-5.50	1	Impeller - 3100G6-2-1/2
	20678-6.31	1	Impeller - 3150G6-2-1/2
	20678-1-6.31	1	Impeller - 3200G6-2-1/2

SYMBOL NUMBER	PART NUMBER	QUANTITY	DESCRIPTION
+ 16	<b>PUMPS With 143-215 JM Motors</b>		
	9933	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
	<b>PUMPS With 254-256 JM Motors</b>		
	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	
17	<b>PUMPS With 143-215 JM Motors</b>		
	09917	1	Mechanical Seal - Buna N (Std)
	09926	1	Mechanical Seal - Viton
	21271	1	Mechanical Seal - EPT **
	<b>PUMPS With 254-256 JM Motors</b>		
	21136	1	Mechanical Seal - Buna N (Std)
21189	1	Mechanical Seal - Viton	
21721	1	Mechanical Seal - EPT **	
18	22063-C	1	Shaft Sleeve - Bronze - 143-215 JM Motors
	22066	1	Shaft Sleeve - Bronze - 254-256 JM Motors
+ 19	09916	1	Flat Gasket +
	22099	1	O-Ring Gasket - Buna N (Std)
	23000	1	O-Ring Gasket - Viton
	23001	1	O-Ring Gasket - EPT**
	23002	1	O-Ring Gasket - Teflon
20	09918	1	Slinger Washer - 143-215 JM Motors
	21093	1	Slinger Washer - 254-256 JM Motors
+ 21	<b>PUMPS With 143-215 JM Motors</b>		
	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
	<b>PUMPS With 254-256 JM Motors</b>		
	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	

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SERIES: G6-2-1/2

\*Casing Assy. includes Symbols 4, 9 & 14.

\*\* For hot water or caustic service

+ Series G6-2-1/2 pumps have been manufactured with either flat or O ring type gaskets. Determine which type is required before ording. When in doubt, order flat gaskets.

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SYMBOL NUMBER	PART NUMBER	QUANTITY	DESCRIPTION
<b>DIFFERING PARTS FOR ALL BRONZE CONSTRUCTION</b>			
3	09912-B	1	Adapter-143-184JM Motors
	09920-B	1	Adapter-213-215JM Motors
	21345-A	1	Adapter-254-256JM Motors
* 7	22152-A	1	Casing Assy
	22270-A	1	Casing Assy (Flanged)
11	03289	1	Cap Screw, Bronze - 143-215 JM Motors
	01638-B	1	Cap Screw, Bronze - 254-256 JM Motors
<b>DIFFERING PARTS FOR ALL IRON CONSTRUCTION</b>			
2	03289	4	Cap Screw - for 9912-B Adapter
	01638-B	4	Cap Screw - for 9920-B & 21345-A Adapter
5	05536	8	Nut
6	01609-B	8	Washer
* 7	22152-B	1	Casing Assy.
	22270-B	1	Casing Assy. (Flanged)
8	04236-A	1	Pipe Plug - 1/4", S.S.
9	00158	6	Pipe Plug - 1/8", Steel
12	22105-A	1	Washer - Steel - 143-215 JM Motors
	22106-A	1	Washer - Steel - 254-256 JM Motors
14	20680-A	1	Wear Ring, G6-1-1/2
15	20678-A	1	Impeller - 143-215 JM Motors
	20678-A-1		Impeller - 254-256 JM Motors
	Impeller Size Suffixes Same as Standard Bronze Impellers.		
18	22063-A	1	Shaft Sleeve - S.S. - 143-215 JM Motors
	22066-A	1	Shaft Sleeve - S.S. - 254-256 JM Motors

SERIES: G6-2-1/2

\*Casing Assy. includes Symbols 4, 9 &amp; 14.

\*\* For hot water or caustic service

+ Series G6-2-1/2 pumps have been manufactured with either flat or O ring type gaskets. Determine which type is required before ordering. When in doubt, order flat gaskets.



For technical advice or service please take your pump into your local pump service center.  
To order pump or parts or for pricing please go to the following links :

[Burks Pumps Home >>](#)

[Burks Pumps stock list >>](#)