

## 8G Series 1510 Centrifugal Pumps – Base Mounted

### TYPICAL SPECIFICATION FOR FLEXIBLE COUPLED END-SUCTION PUMPS

Furnish and install pumps with capacities as shown on plans. Pumps shall be base-mounted, single stage, end suction design.

Pump volute shall be made of ductile iron with integrally cast pedestal support. The impeller shall be cast bronze, enclosed type, statically and hydraulically balanced. Impeller shall be keyed to the shaft and secured by a hex head impeller nut and washer.

Pumps shall be provided with a single inside unbalanced mechanical shaft seal for leakless operation. A suitable arrangement shall be provided to furnish a portion of the pumped liquid to lubricate and cool the seal faces.

Pump shall be rated for a minimum of 175 psi working pressure. Casings shall be provided with tapped and plugged holes for priming, vent, and drain.

Pump bearing housing shall have heavy duty regreasable ball bearings.

Baseplate shall be channel steel, sufficiently rigid to support the pump and driving motor.

A flexible-type coupler, capable of absorbing torsional vibration, shall be employed between the pump and motor, and it shall be equipped with a suitable coupling guard as required. Contractor to level and grout each unit according to manufacturer's instructions.

The motor shall be NEMA specifications and shall be the size, voltage and enclosure called for on the plans. Pump and motor shall be factory aligned, and shall be realigned by contractor after installation.

Each pump shall be factory tested. It shall then be thoroughly cleaned and painted with at least one coat of high grade machinery enamel prior to shipment.

Each pump shall be checked by the contractor and regulated for proper differential pressure, voltage and amperage draw. This data shall be noted on a permanent tag or label and fastened to the pump for owner's reference. Pump series shall be "Series 1510" as manufactured by Bell & Gossett.

### CAST IRON CASING DESIGN DATA

125# Std. ANSI B16.1 Class 30 Iron	Max. Suction Press PSI	75 (5.2 bar)
	Max. Work Press PSI	175 (12 bar)
	Max Hydro Test Press PSI	262 (18 bar)
Flange Bolting (No.) & Size	Suction	(12) .88-9
	Discharge	(8) .75-10
	Stuff Box	(8) .62-11
Wall Thickness		.44 (11.18)
Distance To Casing Lip		7.25 (184.15)

### STUFFING BOX DATA

Bore	3.000 (76.20)
Depth	2.12 (53.85)
Seal Cage Width	.38 (9.65)
Shaft Sleeve O.D.	2.000 (50.80)
A-Tap for Seal Cage NPT	.38 (9.65)
B-Tap for Mech. Seal NPT	.38 (9.65)
Mech. Seal Size (Crane Type 21 or Equal)	2.000 (50.80)

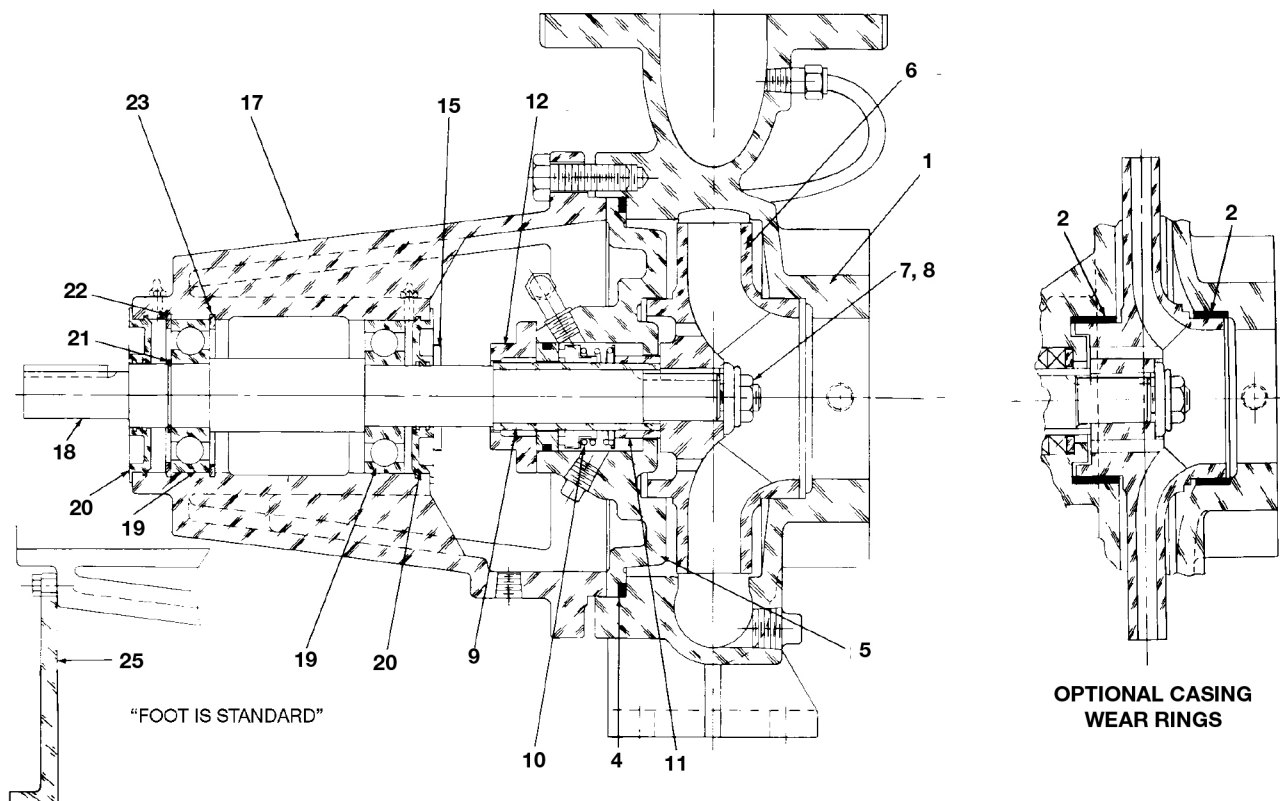
### IMPELLER DESIGN DATA

No. of Vanes	6
Inlet Area in <sup>2</sup> (cm <sup>2</sup> )	50.27 (324.3)
Inlet Velocity per 100 GPM (Ft./Sec) (M/Sec)	64 (19.5)
Maximum Diam.	13.03 (331)
Minimum Diam.	8.07 (205)
Maximum Sphere	1.00 (25.4)
Wear Ring Clearance-Dia. (Optional)	.010-.014 (.025-.036)

All dimensions in inches (mm).

### SHAFT AND BEARING DATA

Under Sleeve		1.750 (44.45)
At Coupling		1.625 (41.275)
Thru Impeller		1.625 (41.275)
Imp. Overhang Inb. Brg. $\varnothing$ to Imp. $\varnothing$		10.40 (264.16)
Shaft Span Bearing to Bearing $\varnothing$		10.40 (264.16)
Ball Bearings	Inboard	6309
	Outboard	6309



## 8G - SERIES 1510 PUMPS

ITEM NUMBER	PART NAME	STANDARD CAST IRON BRONZE FITTED	OPTIONAL ALL CAST IRON
9	Shaft Sleeve	Bronze (ASTM B584-932)	410 St. St (ASTM A296 CA-15)
15	Water Slinger	Synthetic Rubber	
11	Spacer Sleeve	Steel (ASTM A-519)	
25	Support Foot	Steel (AISI 1020)	
	Grease Fittings	Steel	
1	Volute	Ductile Iron	
5	Volute Coverplate	Ductile Iron	
4	Volute “O” Ring	Synthetic Rubber	
6	Impeller	Bronze (ASTM B584-875)	Cast Iron (ASTM A48 CL.25A)
7, 8	Impeller Nut & Washer	Plated Steel	
18	Shaft	Steel (AISI 1045)	
20	Bearing Cap	Synthetic Rubber	
20	Bearing Cap	Synthetic Rubber	
19	Ball Bearings (Inboard)	Steel	
19	Ball Bearings (Outboard)	Steel	
23	Snap Ring (Brg. Hsg. Inbd.)	Steel (SAE 1075)	
22	Snap Ring (Brg. Hsg. Outb.)	Steel (SAE 1075)	
17	Frame	Cast Iron (ASTM A48 CL.25A)	
21	Snap Ring. Shaft	Steel (SAE 1075)	
12	Gland (one piece)	Alum.-Copper-Zinc Alloy	
10	Mechanical Seal	Carbon, Ni-Resist, Stainless Steel	
NA	Bolts	Steel	
NA	Pipe Plugs	Steel	
OPTIONS			
2	Volute Wear Ring	Bronze (ASTM B584-932)	
2	Coverplate Wear Ring	Bronze (ASTM B584-932)	

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