

# Goulds 3355

Multistage Process Pump



# 3355

## Multistage Pumps Designed for a Wide Range of High Pressure Services

- Capacities to 1,500 GPM (340 m<sup>3</sup>/hr)
- Heads to 1,640 feet (500 m)
- Temperatures to 280° F (140° C)
- Pressures to 800 psig (55 bar)

## Performance Features for High Pressure Services

### Improved Reliability

- Heavy duty bearing design
- No external balance lines
- Internal seal flushing
- Metal to metal casing fits

### Ease of Maintenance

- Modular design
- Off-the-shelf components
- Fully interchangeable stages
- No balancing drum/disc
- Fewer parts than traditional designs
- Metal fits guarantee alignment
- No flush/bypass lines
- Easily retrofitted

### Safety

- ANSI B15.1 Coupling Guard
- Fully confined stage o-rings
- Internal flushing & balance
- Raised face flanges

## Applications

- Boiler Feed
- Condensate Return
- Deaerator
- Reverse Osmosis
- Shower/Spray Service
- Mine De-watering
- Cleaning Systems
- Seal Water Booster
- Product Transfer
- Reactor Feed
- Pressure Boosting

## Multiple nozzle orientations to fit your piping configurations.



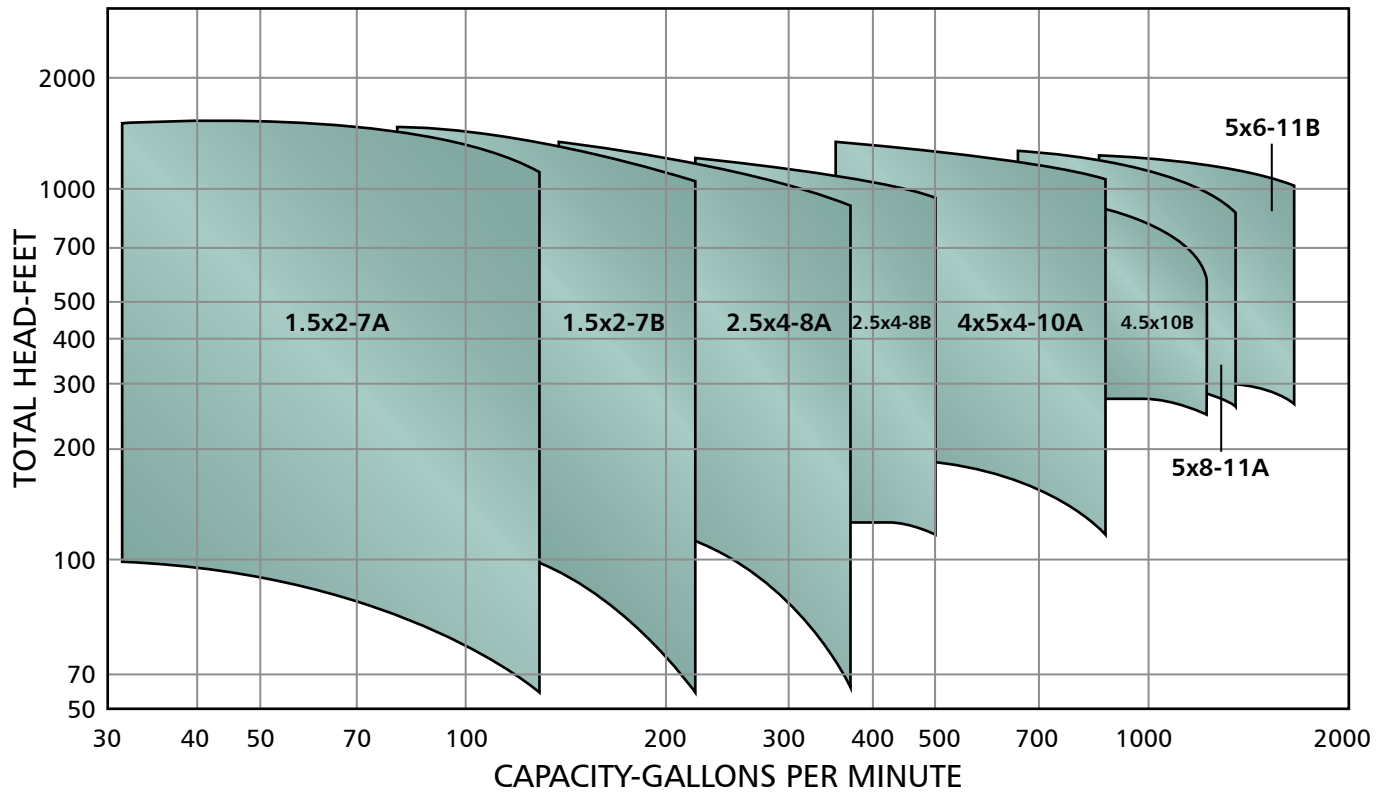
Radial Suction Configuration. Radial nozzles are rotatable at 90° increments.



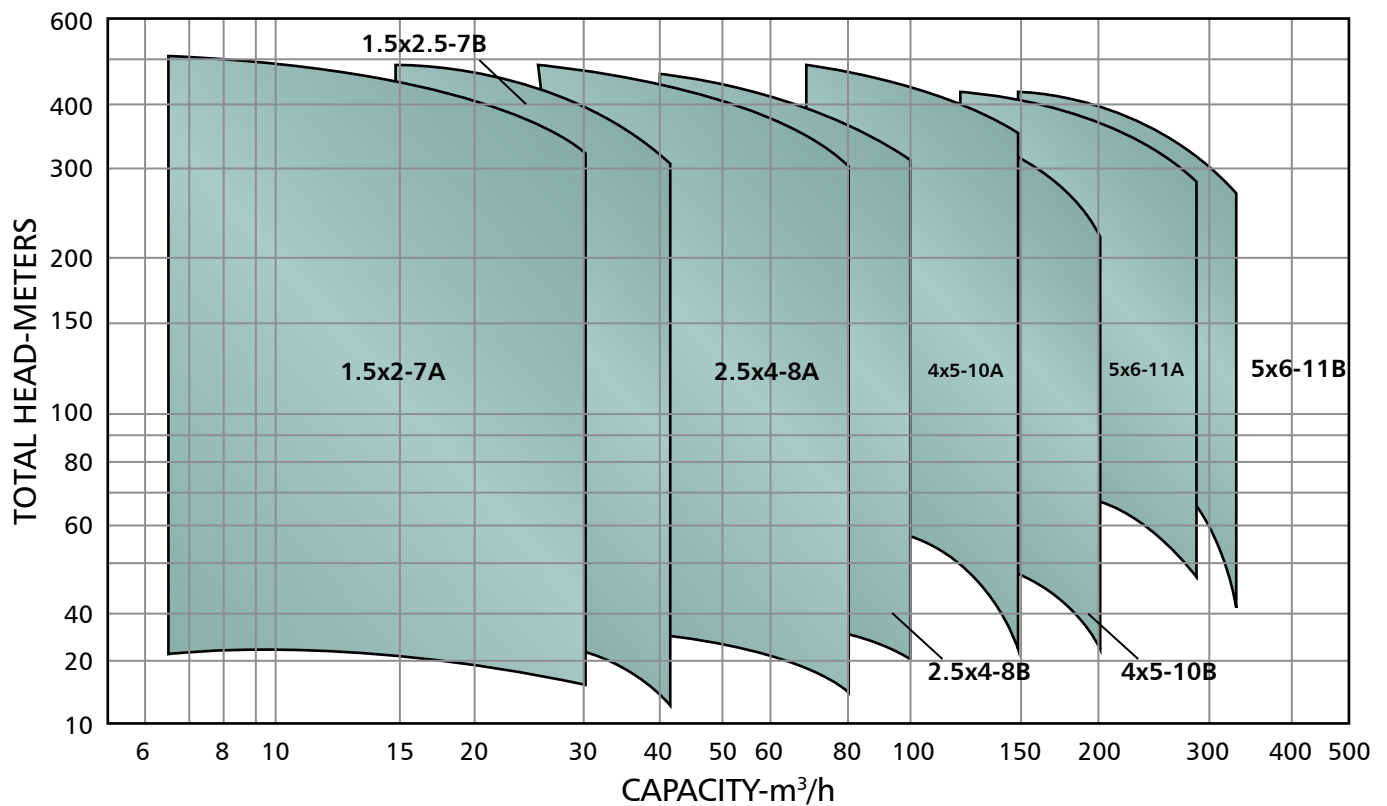
End Suction Configuration. Optional Inducer is available for low NPSH applications.

# Hydraulic Coverage

60 Hz / 3600 rpm



50 Hz / 3000 rpm



# Rugged Design Features for Wide Range of Services

## DIFFUSERS

Eliminates radial loads to assure long bearing life.

## ANGULAR CONTACT, DOUBLE-ROW THRUST BEARINGS

Can carry a thrust load in either direction

## INTERNAL BALANCING

Eliminates the need for balance lines outside the pump.

## Wear Rings

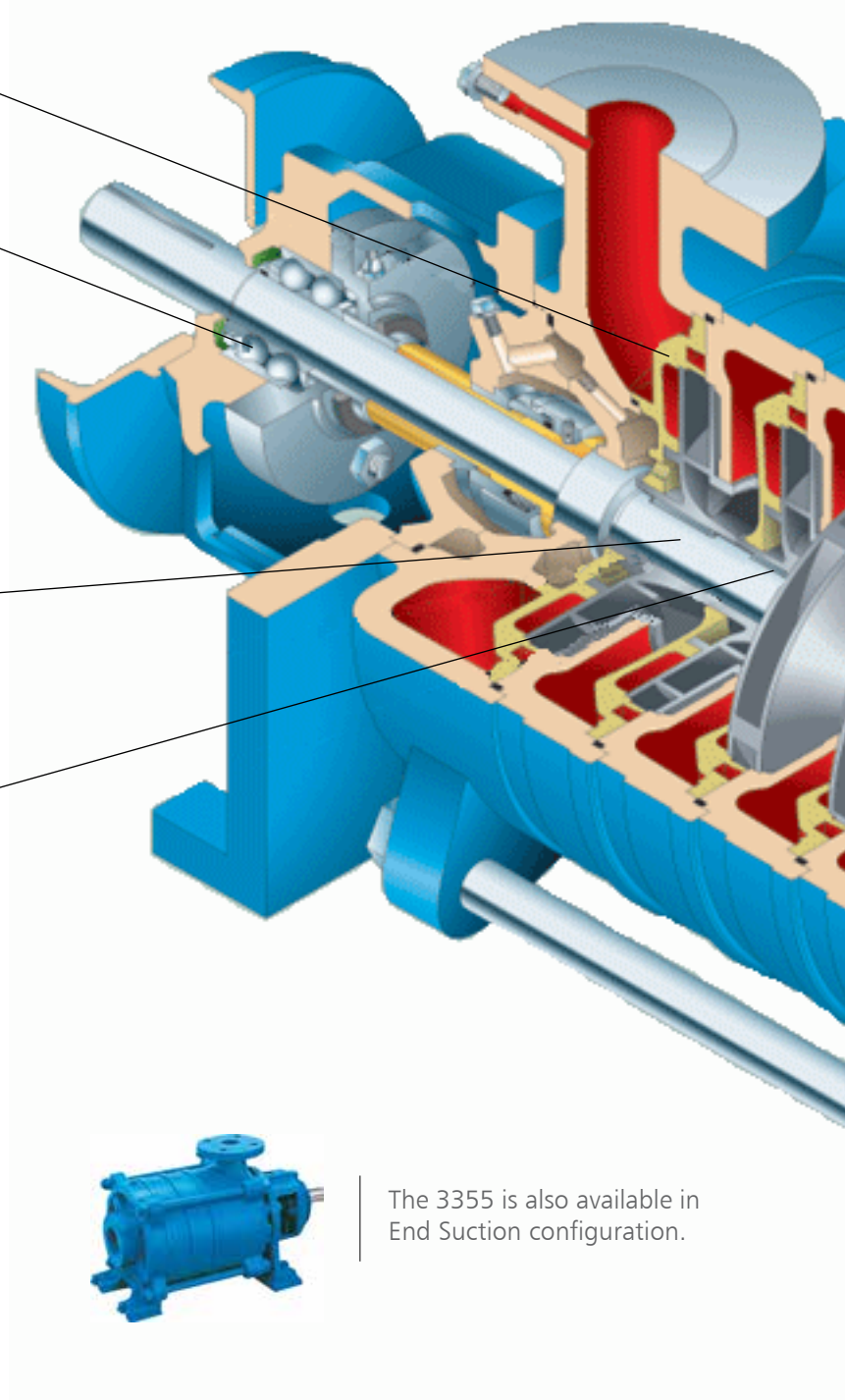
Optional case wear rings available

## SHAFT

Standard material is 12-13% chrome for improved shaft strengths and corrosion resistance.

## KEYED IMPELLERS

Offset keys ensure rotational shaft balance.



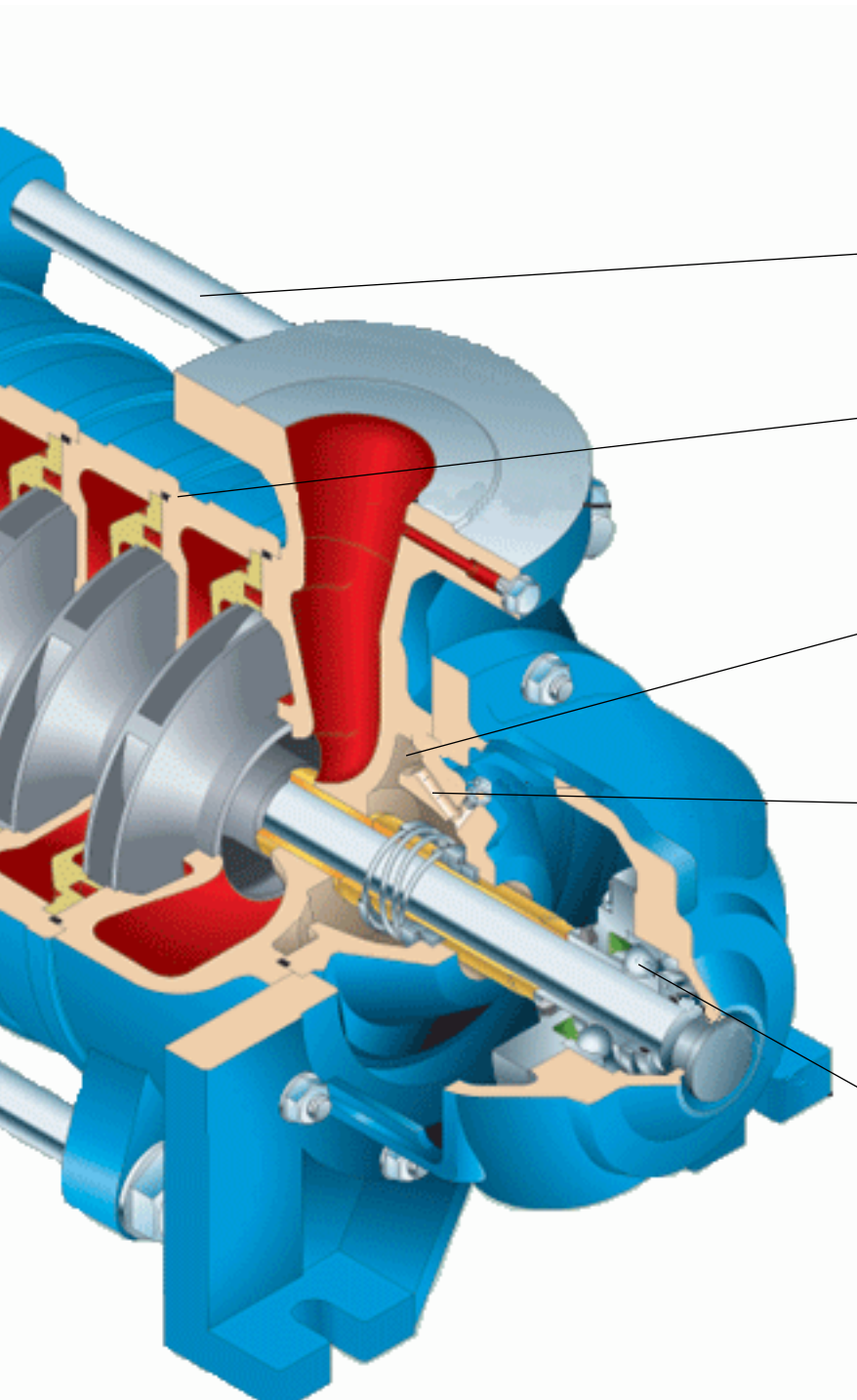
As optional inducer is available on the End Suction configuration for low NPSH applications.



The 3355 is also available in End Suction configuration.

### FEWER PARTS

The 3355 uses fewer parts than traditional multistage pumps with balancing devices, which means less inventory and increased maintenance ease.



### PRODUCT LUBRICATED BEARINGS (ES Configuration)

Frontal sleeve bearing is located behind first stage of the impeller for improved performance and reliability.

### HIGH STRENGTH TIE RODS

Bolting machined to SAE standards using high tensile strength steel, resulting in easy maintenance.

### INTERSTAGE CASING FITS

Metal fits ensure proper alignment of the stages at any temperature. No deflection due to o-ring-fits.

### SEAL CHAMBER

Taper Bore design eliminates the worry associated with venting. Improved flow to the seal helps extend seal life.

### INTERNAL SEAL FLUSHING

Special internal channels ensure the seal always has sufficient flushing fluid.

### MULTIPLE HYDRAULICS

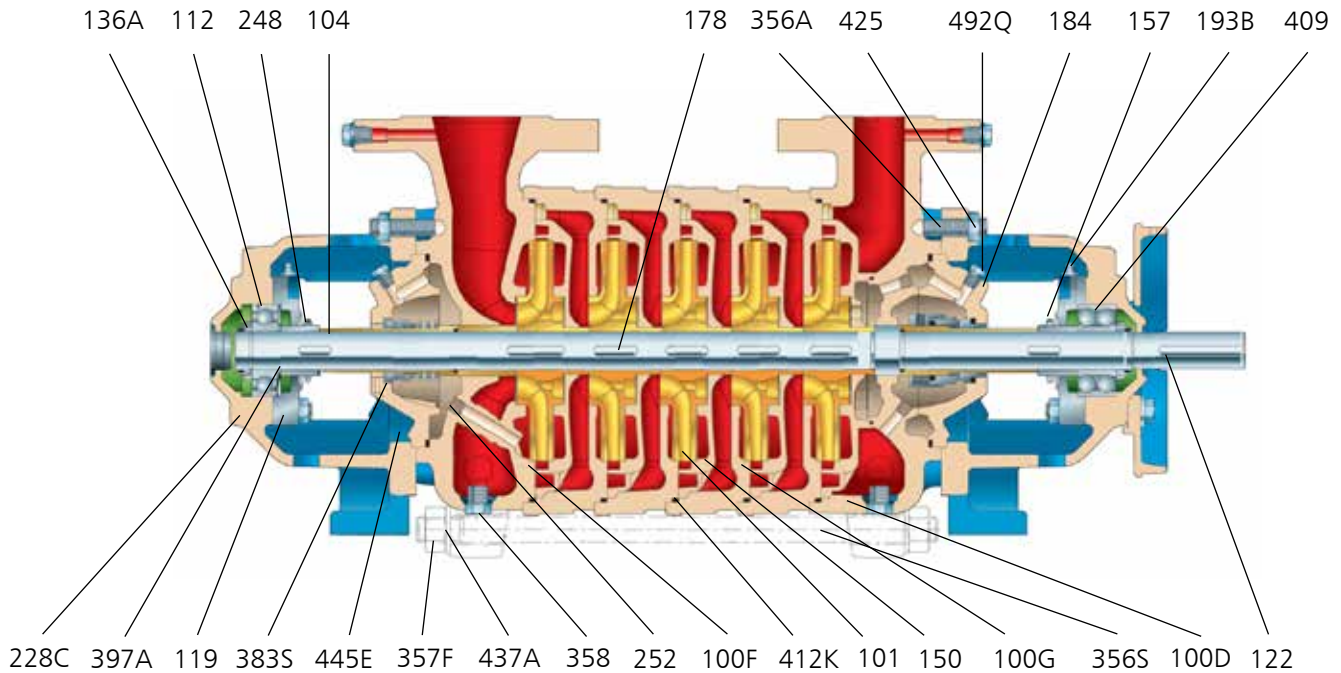
Two impeller/diffuser combinations per size maximizes efficiency at all conditions of service.

### DEEP-GROOVE BALL BEARINGS

Are unconstrained to accommodate thermal expansion.



# Other Features for Application Flexibility



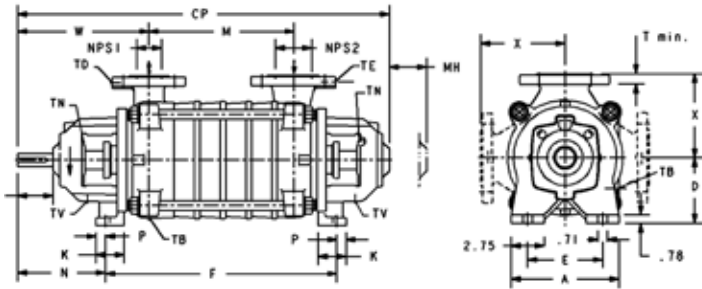
## Parts List and Materials of Construction

Item Number	Part Name	Material		
		Cast Iron	CI/SS Fitted	All Stainless Steel
100F	Casing (Suction)	Ductile Iron (1)	Ductile Iron (1)	Stainless Steel (3)
100D	Casing (Discharge)	Ductile Iron (2)	Ductile Iron (2)	Stainless Steel
101	Impeller	Cast Iron	Stainless Steel	Stainless Steel (4)
150/150L	Diffuser	Cast Iron	Cast Iron	Stainless Steel
103	Case Wear Ring (Optional)	Stainless Steel	Stainless Steel	Stainless Steel
228C	Bearing Bracket	Cast Iron	Cast Iron	Cast Iron
119	Bearing Cover	Cast Iron	Cast Iron	Cast Iron
184	Seal Cover	Cast Iron	Cast Iron	Stainless Steel
197A	Bearing - Bushing (5)	Bronze	Bronze	Bronze
122	Shaft	12% Chrome	12% Chrome	Duplex St. St.
104/126	Sleeve	12% Chrome	12% Chrome	Duplex St. St.
356S	Tie Rod	Carbon Steel	Carbon Steel	Carbon Steel
136A	Bearing Nut	Carbon Steel	Carbon Steel	Carbon Steel
100G	Stage Casing	Cast Iron	Cast Iron	Stainless Steel
157	Spacer Sleeve	Stainless Steel	Stainless Steel	Stainless Steel
248	Thrower	Rubber	Rubber	Rubber
358	Drain Plug	Carbon Steel	Carbon Steel	Stainless Steel
252	Throttling Element		316 Ti	
193B	Grease Nipple		Carbon Steel	
383/383S	Mech Seal		depends on seal configuration	
409	Radial Ball Bearing	Steel	Steel	Steel
112	Radial Ball Bearing	Steel	Steel	Steel
357F	Nut		Carbon Steel	
425	Nut		Carbon Steel	
412K	O-Ring - all	EPDM	EPDM	EPDM
178	Key - all		12% Chrome	Duplex Stainless Steel
356A	Stud		Carbon Steel	
445E	Pin		316 SS	
397A	Disc Spacer		Carbon Steel	
492Q	Plug		Carbon Steel	
437A	Washer - all		Carbon Steel	

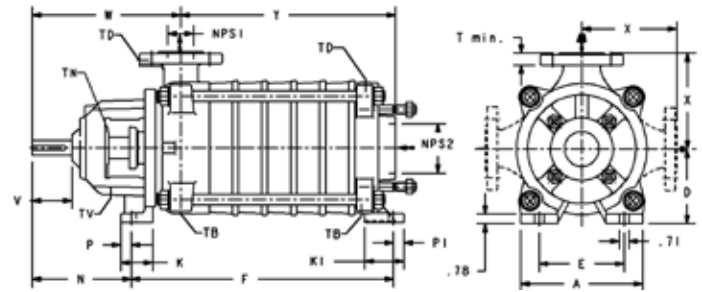
(1) Standard flange rating is 150#RF for radial suction and 150#RF for end suction. End suction casing is cast iron material.  
 (2) Standard flange rating is 300#RF. Casing material is stainless steel with optional 600#RF flange.  
 (3) Standard flange rating is 300#RF for radial suction and 150#RF for end suction.  
 (4) Standard flange rating is 600#RF.  
 (5) Only on end suction configuration.

# Dimensions

## Radial Suction



## End Suction



## Dimensions

DIMENSIONS						
Pump Size	NPS1	NPS2	A	W	D	X
1.5x2.5-7	1.5	2.5	9.06	11.02	5.51	7.09
2.5x4-8	2.5	4	9.84	12.40	6.30	8.27
4x5-10	4	5	13.38	14.58	8.27	9.84
5x6-11	5	6	15.75	17.72	9.84	11.81

## Number of Stages

Pump Size		NUMBER OF STAGES														
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.5x2.5-7	M	5.7*	7.87	10.04	12.20	14.37	16.54	18.70	20.87	23.03	25.20	27.36	29.53	31.69	33.66	36.02
	CP	24.72	26.88	29.05	31.21	33.38	35.55	37.71	39.88	42.04	44.21	46.37	48.54	50.70	52.87	55.03
	Y	9.44	11.81	13.78	15.94	18.11	20.28	22.44	24.60	26.77	28.94	31.10	33.27	35.43	37.60	39.77
2.5x4-8	M	7.09	9.84	12.60	15.35	18.11	20.87	23.62	26.38	29.13	31.88	34.65	37.40			
	CP	25.64	31.29	34.05	36.80	39.56	42.32	45.07	47.53	50.58	53.33	55.10	58.56			
	Y	11.02	13.78	16.54	19.29	22.05	24.80	27.56	30.31	33.07	35.83	38.58	41.33			
4x5-10	M	10.03	13.39	16.73	20.06	23.43	26.77	30.12	33.47							
	CP	35.26	36.62	41.96	45.31	48.56	52.00	56.35	58.70							
	Y	15.75	19.09	22.44	25.79	29.13	32.48	36.83	39.18							
5x6-11	M	12.40	16.54	20.67	24.80	26.94	33.07									
	CP	43.31	47.45	51.58	55.71	59.65	63.96									
	Y	15.90	23.03	27.17	31.30	35.43	39.57									

\*Note: Add 0.79" to "Y" dim for size 2.5x4-8 with inducer design.

# Locations



For more information Please Visit:  
[www.gouldspumps.com](http://www.gouldspumps.com) | [www.ittproservices.com](http://www.ittproservices.com)



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