



Quality | Commitment | Adaptability

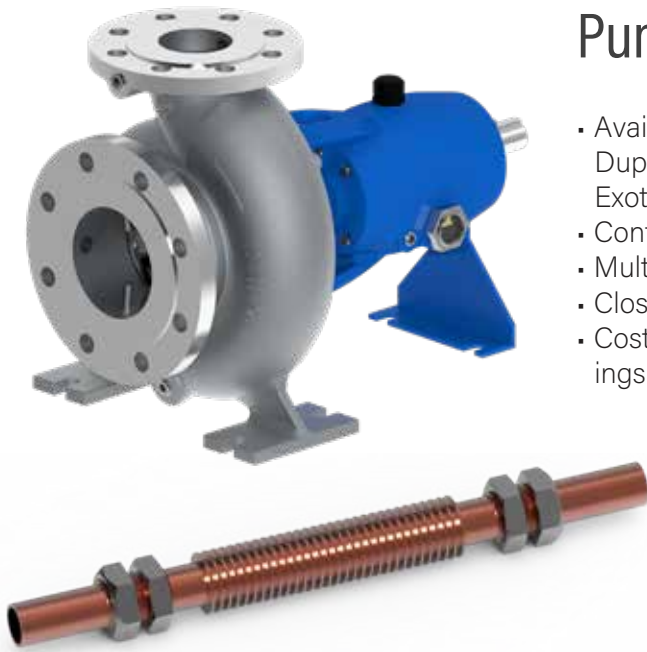
High on Pump  
Efficiency  
Great on  
Reliability



**RoChem** (ISO 2858/5199)  
Closed Impeller Chemical Process Pump

[www.rotechpumps.com](http://www.rotechpumps.com)

## Pump Design Features



- Available in various Material of Constructions i.e.CI, DI, Stainless Steel, Duplex, Super Duplex steel, Nickel based Alloys, Titanium and other Exotic Materials.
- Conforms to ISO 5199 and Dimensionally comply with ISO 2858
- Multiple Pump sizes cover the maximum Hydraulic Coverage Area
- Close impeller pump design offers higher efficiency of Pumps.
- Cost Effective solution with various options in Sealing Systems, Bearings and Shafts

### Finned Cooler

- Directly cools oil for lower bearing temperature.
- Requires minimum cooling water.
- Corrosion resistant construction.
- Recommended for temperature over 350°F (177°C)

### Bearings

SKF Make as a Standard, Other make options available

- Medium Duty  
Radial bearing: Cylindrical roller bearing  
Fixed bearing: Paired angular contact bearing/  
double-row angular contact ball bearing
- Economy bearing assembly  
Floating bearings: Deep groove ball bearings
- Lubrication  
Grease lubrication (Standard)  
Oil lubrication (Optional)



**Rochem Base Frame  
Sheet Metal**



**Rochem Drip Pan  
Base Frame**

### Base Frame Systems

- Base Frame mounting structures designed to meet the full variety of installation applications.
- Designed for optimum unit reliability, while meeting user preferences for economy, chemical resistance, and installation features.

### Flange Options

- Standard : ANSI B16.5 #150 Flat Flange
- Optional : ANSI B16.5 #150 Raise Flange,  
ANSI B16.5 #300 Raise Flange,  
PN 16 Raise Flange (EN 1092-1)



**Standard Bore**



**Large Bore**



**Taper Bore**

### Stuffing box covers

- Standard Bore:  
Designed for packing as well as mechanical seal.
- Large Bore:  
Enlarged chamber for increased seal life through improved cooling & lubrication.
- Taper Bore:  
Lower seal face temperature, self-venting & draining. Solid & vapors circulated away from seal face



**Component seal**



**Single  
Cartridge Seal**



**Dual  
Cartridge Seal**

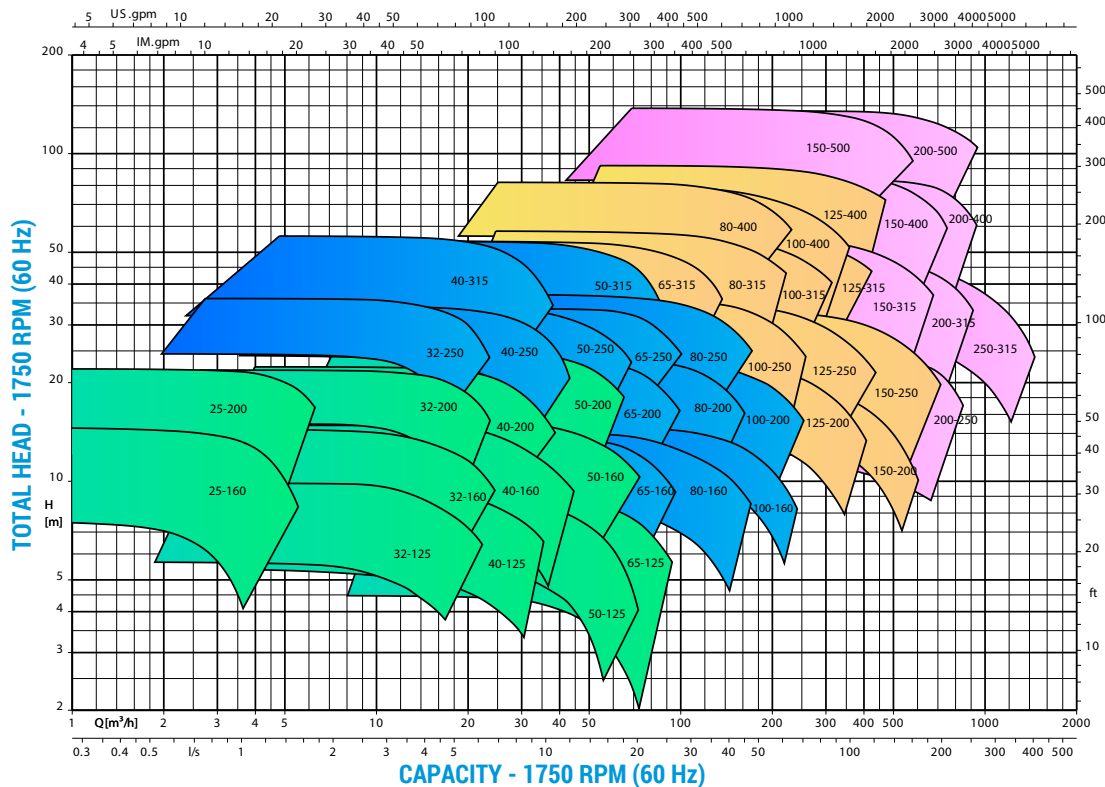
### Sealing Options

- For Pumping Liquid :  
Gland Packing, Component Mechanical Seal (Single or Double), Cartridge Mechanical Seal ( Single or Double)
- Bearing Lubrication / protection options :  
Single Lip Seal (Standard), Double Lip seal (Optional),  
Labyrinth Seal (Optional)

# HYDRAULIC PERFORMANCE COVERAGE

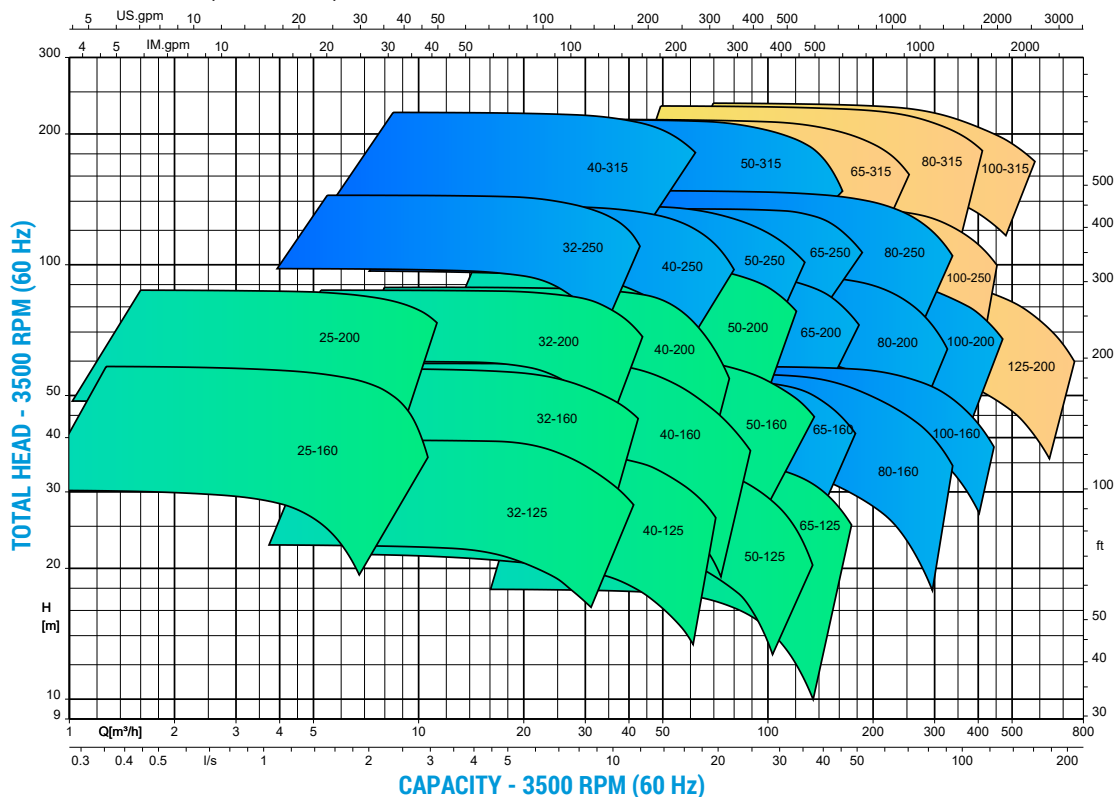
## With 4 Pole Motor

Capacity up to 6384 GPM (1450 m<sup>3</sup>/h) | Head up to 450 feet (137 m) | Temperature to 752° F (400° C)  
Pressure to 362 PSIG (2500 kPa)



## With 2 Pole Motor

Capacity up to 3300 GPM (750 m<sup>3</sup>/h) | Head up to 754 feet (230 m) | Temperature to 752° F (400° C)  
Pressure to 362 PSIG (2500 kPa)





# ROTECH ISO 2858/5199 PROCESS PUMP

## Design Features & Benefits

### Sealing Options & Stuffing box cover

- Different component & Lip seal configurations can accommodate.
- All API seal support system can be used.
- Assure leak protection with maximum heat dissipation, extended seal life and pump reliability.
- Gland packing can be accommodate with Standard Bore Stuffing box.

### Casing

- Additional featured with suction vortex breaker vanes
- Self-venting, centerline mounted discharge flange
- Precision serrated flange face finish for optimum gasket retention and sealing.
- Flange Options: Standard: ANSI B16.5 #150 Flat Flange  
Optional: ANSI B16.5 #150 Raise Flange, ANSI B16.5 #300 Raise Flange, PN 16 Raise Flange (EN 1092-1)
- Back Pull out design for easy maintenance

### Wear Ring

- Protects Impeller's wear
- Sustain and balance pump's radial load
- Optimized leakage gap causes higher pump efficiency

### Gasket

- PTFE, Glass filled Teflon for all pumps.
- Positive liquid sealing

### Impeller

- Closed Impeller design for increasing efficiency
- Moderate solid handling capacity with ease in pumping fibrous material.
- Back pump out curved vanes reduces pressure on shaft seal and throw out solid particles
- Balanced with grad G 6.3 of ISO 1940

### Delivery

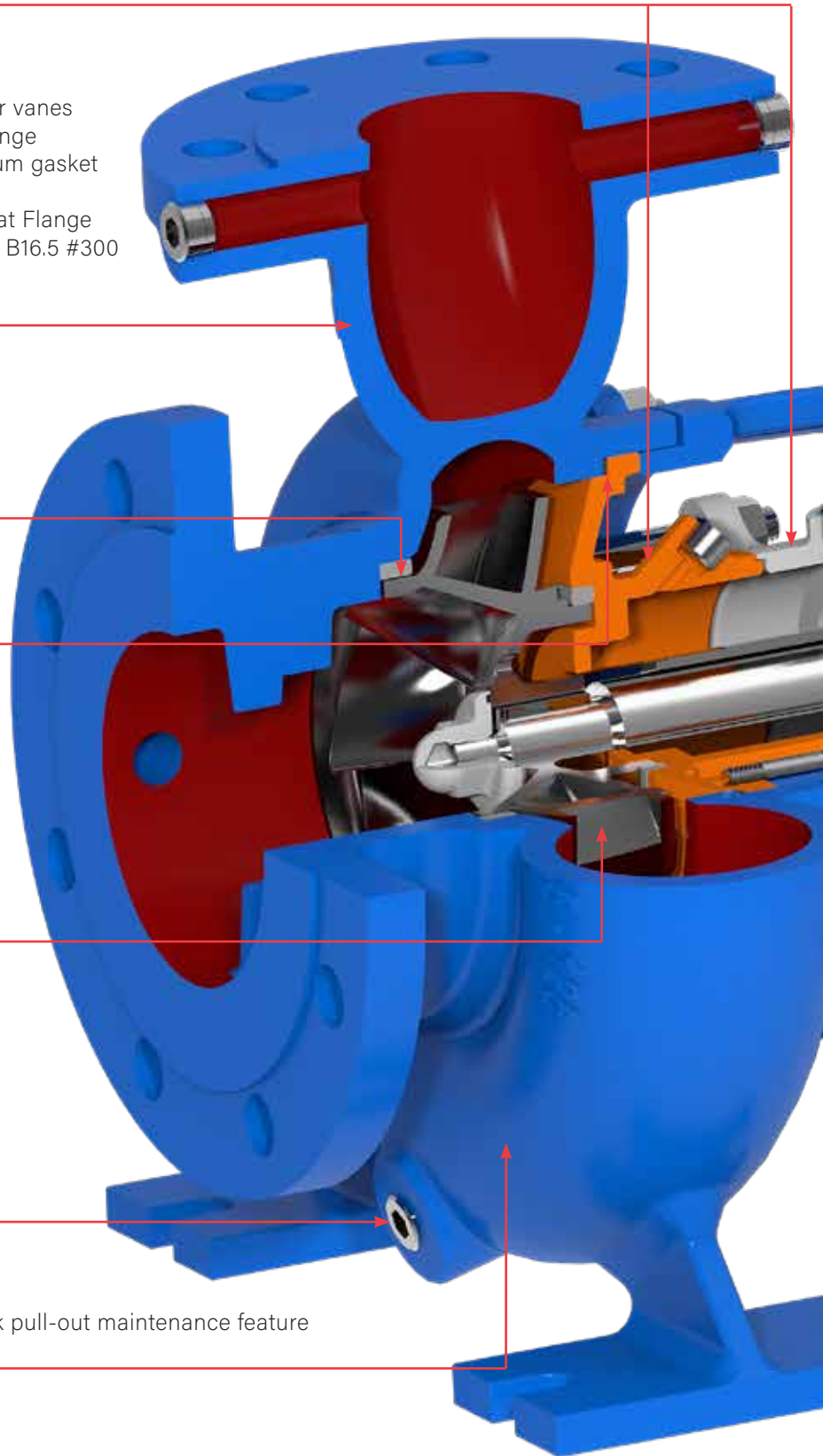
Pumps/parts are strategically inventoried at various locations in North America, Asia for rush delivery in various material options.

### Casing Drain

- Casing drain port as standard
- Drain piping as optional

### Foot Mounted Casing

- Maximum casing stability and support for back pull-out maintenance feature
- Reduced vibration





**Breather Plug**

- Large sized vent/fill cap for easy oil changes and elimination of contamination during oil change

**Slinger Disk**

- Directs oil to thrust bearings for efficient cooling and improved lubrication.

**Bearing**

- Pump end side: Cylindrical roller bearing
- Drive end side: Double row angular contact ball bearing  
Paired angular contact ball bearings

**Bearing Lock Cover**

- Inboard and Outboard lock cover are used for supporting outer race of both bearing
- It can accommodate single lip seal, double lip seal and isolator also.

**Bearing Frame**

- Optimize oil sump capacity for increased cooling
- Pressurise all lubrication system can be accommodate
- Lubrication Option: Oil and Grace both can be used
- Optional finned designed for maximum heat dissipation
- Contoured internal slope for positive collection of metal contaminants by magnetic drain plug
- Internal surface cleaned, rust preventative applied, and enamel coated assuring internal casting cleanliness

**Bearing Frame Leg**

- It reduces effects of pipe loads on pump or motor shaft alignment
- Bearings and seals last longer

**Oil Sump Magnetic Drain Plug\***

- Magnetic plug to maintain bearing frame cleanliness and increased protection

**Shaft and Sleeve**

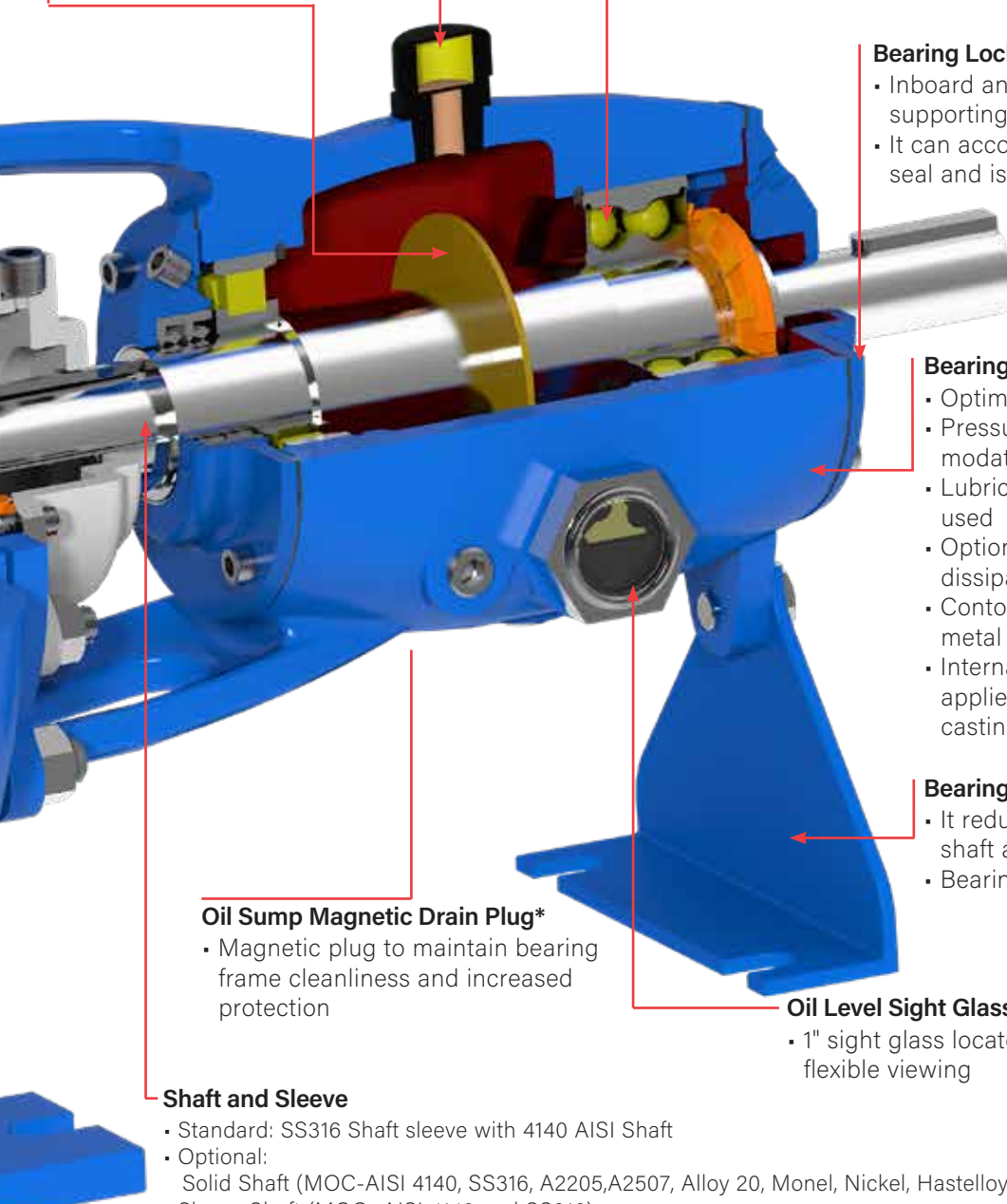
- Standard: SS316 Shaft sleeve with 4140 AISI Shaft
- Optional: Solid Shaft (MOC-AISI 4140, SS316, A2205,A2507, Alloy 20, Monel, Nickel, Hastelloy B,C & Titanium)
- Sleeve Shaft (MOC- AISI 4140 and SS316)
- Rigid heavy duty design for minimum shaft deflection at seal area and increased reliability
- Low deflection at seal faces for longer seal and bearing life

**Oil Level Sight Glass**

- 1" sight glass located on each side of bearing housing for flexible viewing







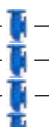

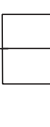

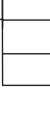




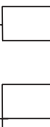
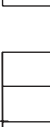








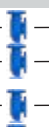
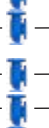
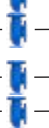

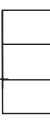
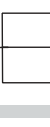
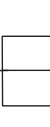







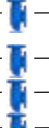
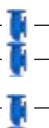


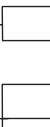
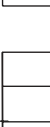





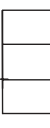
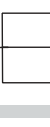
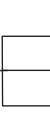







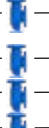
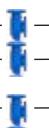




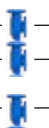




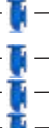
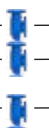



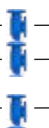




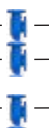




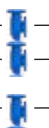

**Pump Selector Program**

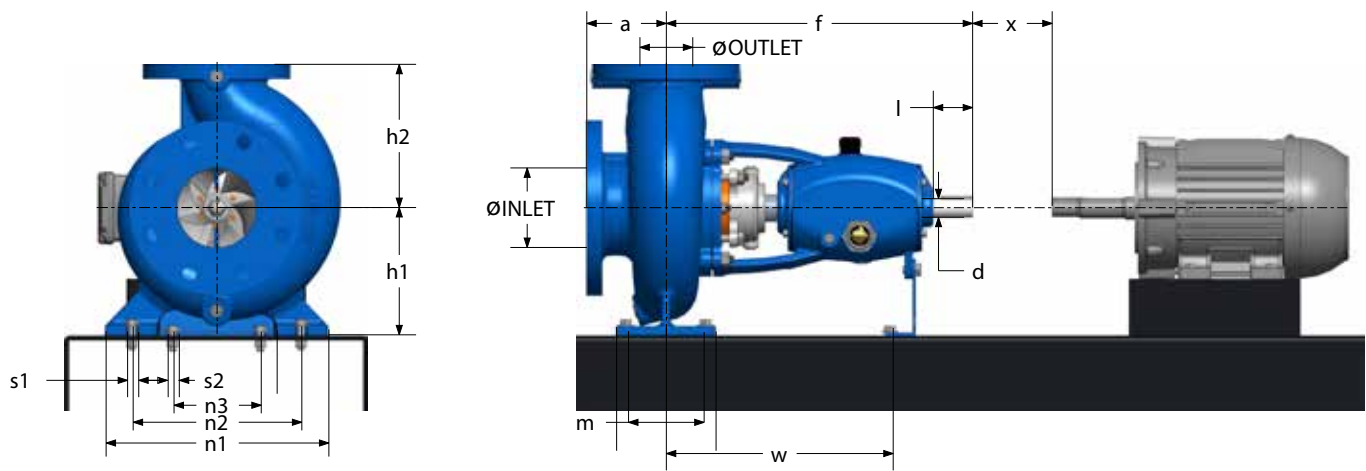
Access to end users and specifiers to select your pump application online at [www.rotechpumps.com](http://www.rotechpumps.com) or Contact us for more help



Note: (\*) Not Illustrated

# INTERCHANGEABILITY CHART

Power Frame	Back Plate	Stuffing Box Cover	Impeller	Casing	Size			
 <p><b>Group 1</b></p>	G1 6"	G1 5"	  	  	1.25x2-5			
		G1 6"			G1 6"	1.5x2.5-5		
		G1 8"			G1 8"	2x3-5		
	 <p><b>Group 2</b></p>	G2 8"	G2 6"	  	  	2.5x4-6		
			G2 10"			G2 10"	3x4-6	
			G2 13"			G2 13"	4x5-6	
		 <p><b>Group 3</b></p>	G3 10"	G2 8"	  	  	2.5x4-8	
				G2 10"			G2 10"	3x4-8
				G2 13"			G2 13"	4x5-8
 <p><b>Group 4</b></p>			G4 13"	G3 8"	  	  	1.25x2-10	
				G3 10"			G3 10"	1.5x2.5-10
				G3 13"			G3 13"	2x3-10
	 <p><b>Group 5</b></p>		G4 16"	G3 13"	  	  	2.5x4-10	
				G3 16"			G3 16"	3x4-10
				G4 13"			G4 13"	3x4-10
		 <p><b>Group 6</b></p>	G4 20"	G4 10"	  	  	1.5x2.5-13	
				G4 16"			G4 16"	2x3-13
				G4 20"			G4 20"	2x3-13
 <p><b>Group 7</b></p>			G4 16"	G3 8"	  	  	5x6-8	
				G3 10"			G3 10"	6x8-8
				G3 13"			G3 13"	4x5-10
	 <p><b>Group 8</b></p>		G4 20"	G3 16"	  	  	5x6-10	
				G4 13"			G4 13"	6x8-10
				G4 16"			G4 16"	4x5-13
		 <p><b>Group 9</b></p>	G4 20"	G4 10"	  	  	2.5x4-13	
				G4 13"			G4 13"	3x4-13
				G4 16"			G4 16"	4x5-13
 <p><b>Group 10</b></p>			G4 20"	G4 16"	 	 	5x6-13	
				G4 20"			G4 20"	3x4-16
				G4 24"			G4 24"	4x5-16
	 <p><b>Group 11</b></p>		G4 24"	G4 10"	 	 	3x4-16	
				G4 13"			G4 13"	4x5-16
				G4 16"			G4 16"	5x6-16
		 <p><b>Group 12</b></p>	G4 24"	G4 13"	 	 	8x8-10	
				G4 16"			G4 16"	6x8-13
				G4 20"			G4 20"	8x10-13
 <p><b>Group 13</b></p>			G4 24"	G4 16"	 	 	10x12-13	
				G4 20"			G4 20"	6x8-16
				G4 24"			G4 24"	8x10-16
	 <p><b>Group 14</b></p>		G4 24"	G4 20"	 	 	6x8-20	
				G4 24"			G4 24"	8x10-20
				G4 28"			G4 28"	8x10-20




## PUMP DIMENSIONS

Size	Bearing Frame	Suction Flange	Discharge Flange	Pump				Support				w	Clearance holes for bolts		Shaft End		
		ANSI B16.5		a	f	h1	h2	m	n1	n2	n3		s1	s2	d	l	X
1x1.5-6	G1	1.5	1	3.15	15.16	5.20	6.30	3.94	9.45	7.48	4.33	11.22	0.55	0.55	0.87	1.97	3.75
1x1.5-8	G1	1.5	1	3.15	15.16	6.30	7.09	3.94	9.45	7.48	4.33	11.22	0.55	0.55	0.87	1.97	3.75
1.25x2-5	G1	2	1.25	3.15	15.16	4.41	5.51	3.94	7.48	5.51	4.33	11.22	0.55	0.55	0.87	1.97	3.75
1.25x2-6	G1	2	1.25	3.15	15.16	5.20	6.30	3.94	9.45	7.48	4.33	11.22	0.55	0.55	0.87	1.97	3.75
1.25x2-8	G1	2	1.25	3.15	15.16	6.30	7.09	3.94	9.45	7.48	4.33	11.22	0.55	0.55	0.87	1.97	3.75
1.25x2-10	G2	2	1.25	3.94	19.69	7.09	8.86	4.92	12.60	9.84	4.33	14.57	0.55	0.55	1.12	3.15	3.75
1.5x2.5-5	G1	2.5	1.5	3.15	15.16	4.41	5.51	3.94	8.27	6.30	4.33	11.22	0.55	0.55	0.87	1.97	3.75
1.5x2.5-6	G1	2.5	1.5	3.15	15.16	5.20	6.30	3.94	9.45	7.48	4.33	11.22	0.55	0.55	0.87	1.97	3.75
1.5x2.5-8	G1	2.5	1.5	3.94	15.16	6.30	7.09	3.94	10.43	8.35	4.33	11.22	0.55	0.55	0.87	1.97	3.75
1.5x2.5-10	G2	2.5	1.5	3.94	19.69	7.09	8.86	4.92	12.60	9.84	4.33	14.57	0.55	0.55	1.12	3.15	3.75
1.5x2.5-13	G2	2.5	1.5	4.92	19.69	7.87	9.84	4.92	13.58	11.02	4.33	14.57	0.55	0.55	1.12	3.15	3.75
2x3-5	G1	3	2	3.94	15.16	5.20	6.30	3.94	9.45	7.48	4.33	11.22	0.55	0.55	0.87	1.97	3.75
2x3-6	G1	3	2	3.94	15.16	6.30	7.09	3.94	10.43	8.35	4.33	11.22	0.55	0.55	0.87	1.97	3.75
2x3-8	G1	3	2	3.94	15.16	6.30	7.87	3.94	10.43	8.35	4.33	11.22	0.55	0.55	0.87	1.97	3.75
2x3-10	G2	3	2	4.92	19.69	7.09	8.86	4.92	12.60	9.84	4.33	14.57	0.55	0.55	1.12	3.15	3.75
2x3-13	G2	3	2	4.92	19.69	8.86	11.02	4.92	13.58	11.02	4.33	14.57	0.55	0.55	1.12	3.15	3.75
2.5x4-5	G1	4	2.5	3.94	15.16	6.30	7.09	4.92	11.02	8.35	4.33	11.22	0.55	0.55	0.87	1.97	3.75
2.5x4-6	G2	4	2.5	3.94	19.69	6.30	7.87	4.92	11.02	8.35	4.33	14.57	0.55	0.55	1.12	3.15	3.75
2.5x4-8	G2	4	2.5	3.94	19.69	7.09	8.86	4.92	12.60	9.84	4.33	14.57	0.55	0.55	1.12	3.15	3.75
2.5x4-10	G2	4	2.5	4.92	19.69	7.87	9.84	6.30	14.17	11.02	4.33	14.57	0.71	0.55	1.12	3.15	3.75
2.5x4-13	G3	4	2.5	4.92	20.87	8.86	11.02	6.30	15.75	12.40	4.33	14.57	0.71	0.55	1.65	4.33	3.75
3x4-6	G2	4	3	4.92	19.69	7.09	8.86	4.92	12.60	9.84	4.33	14.57	0.55	0.55	1.12	3.15	3.75
3x4-8	G2	4	3	4.92	19.69	7.09	9.84	4.92	13.58	11.02	4.33	14.57	0.55	0.55	1.12	3.15	3.75
3x4-10	G2	4	3	4.92	19.69	8.86	11.02	6.30	15.75	12.40	4.33	14.57	0.71	0.55	1.12	3.15	3.75
3x4-13	G2	4	3	4.92	19.69	7.87	11.02	6.30	14.17	12.40	4.33	14.57	0.71	0.55	1.65	4.33	3.75
3x4-16	G2	4	3	4.92	19.69	7.87	11.02	6.30	14.17	13.98	4.33	14.57	0.71	0.55	1.65	4.33	3.75
4x5-6	G3	5	4	4.92	20.87	9.84	12.40	6.30	15.75	11.02	4.33	14.57	0.75	0.55	1.12	3.15	3.75
4x5-8	G3	5	4	4.92	20.87	11.02	13.98	6.30	17.13	11.02	4.33	14.57	0.71	0.55	1.12	3.15	3.75
4x5-10	G3	5	4	5.51	20.87	8.86	11.02	6.30	15.75	12.40	4.33	14.57	0.71	0.55	1.65	4.33	3.75
4x5-13	G3	5	4	5.51	20.87	9.84	12.40	6.30	15.75	12.40	4.33	14.57	0.71	0.55	1.65	4.33	3.75
4x5-16	G3	5	4	5.51	20.87	11.02	13.98	7.87	19.69	15.75	4.33	14.57	0.91	0.55	1.65	4.33	3.75
5x6-8	G3	6	5	5.51	20.87	9.84	12.40	6.30	15.75	12.40	4.33	14.57	0.75	0.55	1.65	4.33	3.75
5x6-10	G3	6	5	5.51	20.87	9.84	13.98	6.30	15.75	12.40	4.33	14.57	0.71	0.55	1.65	4.33	3.75
5x6-13	G3	6	5	5.51	20.87	11.02	13.98	7.87	19.69	15.75	4.33	14.57	0.91	0.55	1.65	4.33	3.75
5x6-16	G3	6	5	5.51	20.87	12.40	15.75	7.87	19.69	15.75	4.33	14.57	0.91	0.55	1.65	4.33	3.75
6x8-8	G3	8	6	7.09	20.87	11.02	15.75	7.87	21.65	17.72	4.33	14.57	0.94	0.55	1.65	4.33	3.75
6x8-10	G3	8	6	6.30	20.87	11.02	14.76	7.87	19.69	15.75	4.33	14.57	0.91	0.55	1.65	4.33	3.75
6x8-13	G4	8	6	6.30	26.38	12.40	15.75	7.87	21.65	17.72	5.51	19.69	0.91	0.71	1.87	4.33	5.25
6x8-16	G4	8	6	6.30	26.38	12.40	17.72	7.87	21.65	17.72	5.51	19.69	0.91	0.71	1.87	4.33	5.25
6x8-20	G4	8	6	7.09	26.38	14.76	19.69	7.87	21.65	17.72	5.51	19.69	0.91	0.71	1.87	4.33	5.25
8x8-10	G4	8	8	7.09	26.38	13.98	16.73	7.87	21.65	17.72	5.51	19.69	0.91	0.71	1.87	4.33	5.25
8x10-13	G4	10	8	7.87	26.38	13.98	17.72	7.87	21.65	17.72	5.51	19.69	0.91	0.71	1.87	4.33	5.25
8x10-16	G4	10	8	7.09	26.38	13.98	19.69	7.87	21.65	17.72	5.51	19.69	0.91	0.71	1.87	4.33	5.25
8x10-20	G4	10	8	7.87	26.38	16.73	22.05	7.87	25.98	22.05	5.51	19.69	0.91	0.71	1.87	4.33	5.25
10x12-13	G4	12	10	9.84	26.38	15.75	22.05	10.24	27.17	22.05	5.51	19.69	1.10	0.71	1.87	4.33	5.25

Note: Dimensions are approximate and not to be used for construction unless Certified by the Manufacturer.



 Corporate Office  
1180 Britannia Road East,  
Mississauga, ON L4W 1C8, Canada

 (905) 461-9617     Toll Free 1-866-217 7867

 [rotechpumps.com](http://rotechpumps.com)     [sales@rotechpumps.com](mailto:sales@rotechpumps.com)

