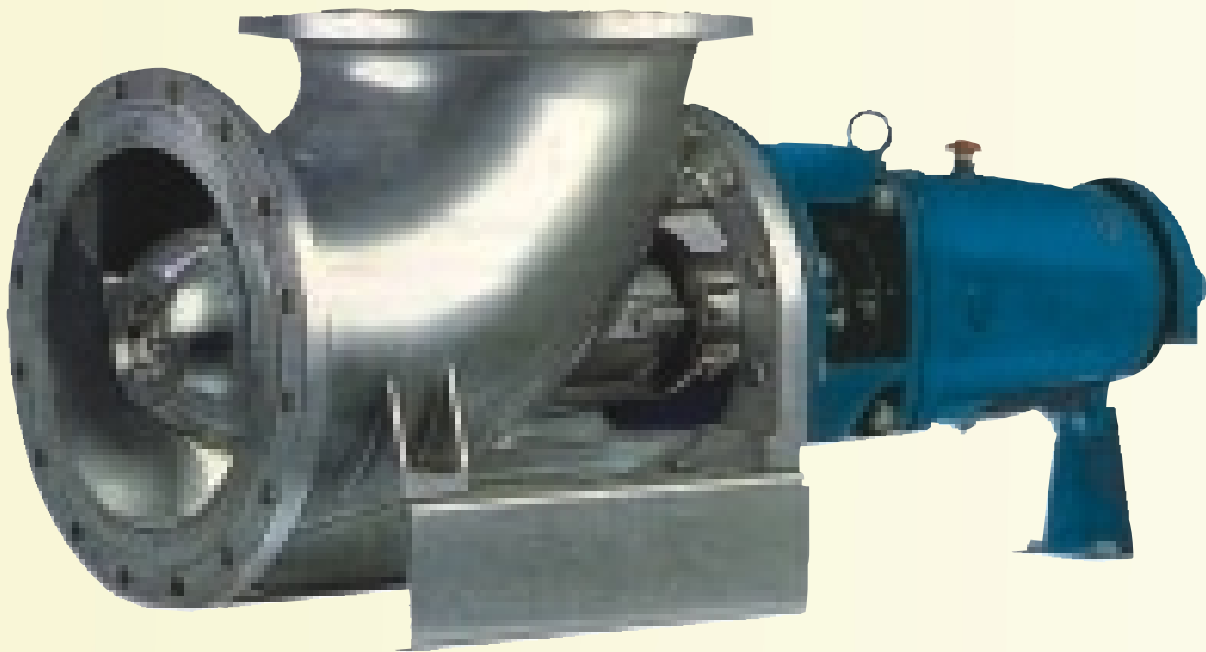


AF SERIES AXIAL FLOW PUMPS



Mfg. By :

JAY AMBE ENGINEERING CO.

AN ISO 9001 : 2000 CERTIFIED COMPANY

1 & 2, Jaylaxmi Ind. Estate, C.M.C. Compound, Opp. Anup Engg. Ltd., G.I.D.C., Odhav, Ahmedabad - 382 415 (INDIA)
Tele No. +91-79-22874508, 22894562 Tele Fax +91-79-22894562 Email : info@jecpumps.com Web : www.jecpumps.com

JEC line of Axial Flow pumps is unmatched in the industry for high volume/low head pumping requirements.... especially when corrosive and/or abrasive solutions are involved. Extended service life, mechanical reliability, custom engineering, and a wide range of materials allow the Model AF to stand out as the leader in the field.

JEC MODEL AF

The Industry Leader in Circulating Pump Technologies

For continuous circulation of corrosive/abrasive solutions and process wastes. Proven performance in a variety of services around the world.

- n Capacities to 2000 M3/HR
- n Heads from 2 TO 12 MTR.
- n Low NPSH requirements
- n Temperatures to 600°F
- n Available in Cast Iron, Austenitic Stainless Steels, Duplex alloys, Nickel, Nickel-Chrome Alloys, Nickel-Chrome-Moly Alloys, Titanium, and other Alloys as required for the service
- n Available in 6-66", 600-1400 mm sizes

Design Features

- Multiple Impeller selections for Optimum performance and efficiency
- Tapered Bore Stuffing Box for longest seal life
- Back pullout construction as standard on sizes through 20"
- Robust bearing frame and shaft for long life on critical, continuous duty services

Services

Chemical- Evaporator and Crystallizer Circulation

Mining and Minerals - Phosphate, Soda Ash, Potash, and Sodium Chloride Processing

Petrochemical- Polypropylene Reactors, Xylene

Pulp & Paper- Black Liquor Evaporator, Chlorine Dioxide Generators

Municipal - Sewage Digesters

General - Raw water pumping, Flood control, Marine Ballast transfer



Cast design 6-36"



Fabricated design 36-60" with optional spring mounted base

Performance Features for Extended Pump Life

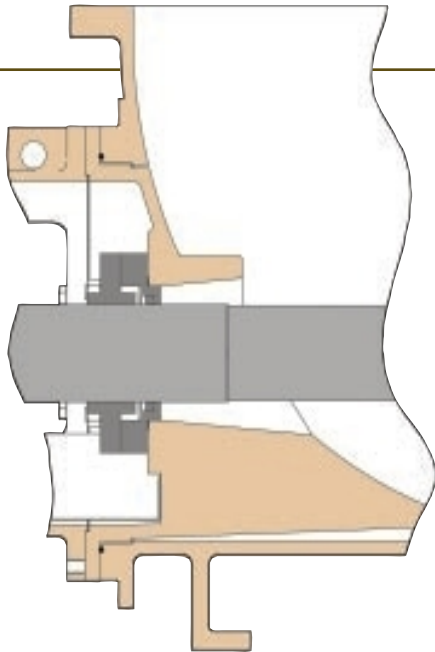


LABYRINTH SEALS

Carbon-filled Teflon for maximum chemical resistance prevent premature bearing failure caused by lubricant contamination or loss of oil. Non-contracting unitized design for ease of maintenance assembly.

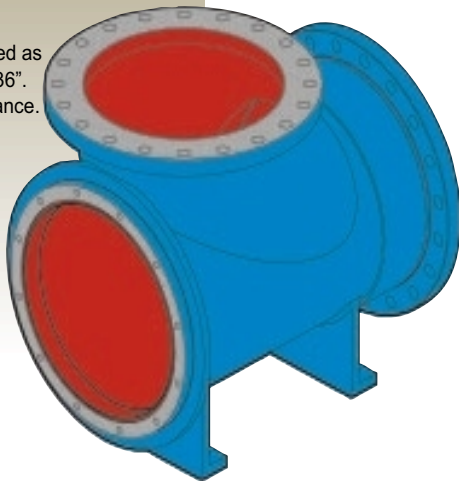
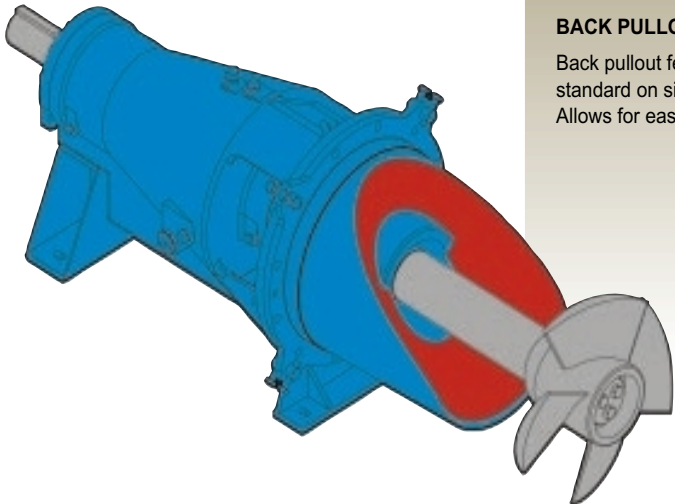
TAPERBORE SEAL CHAMBER

Enlarged, tapered bore for increased life of mechanical seals through improved lubrication and cooling. Accommodates current cartridge designs.



BACK PULLOUT

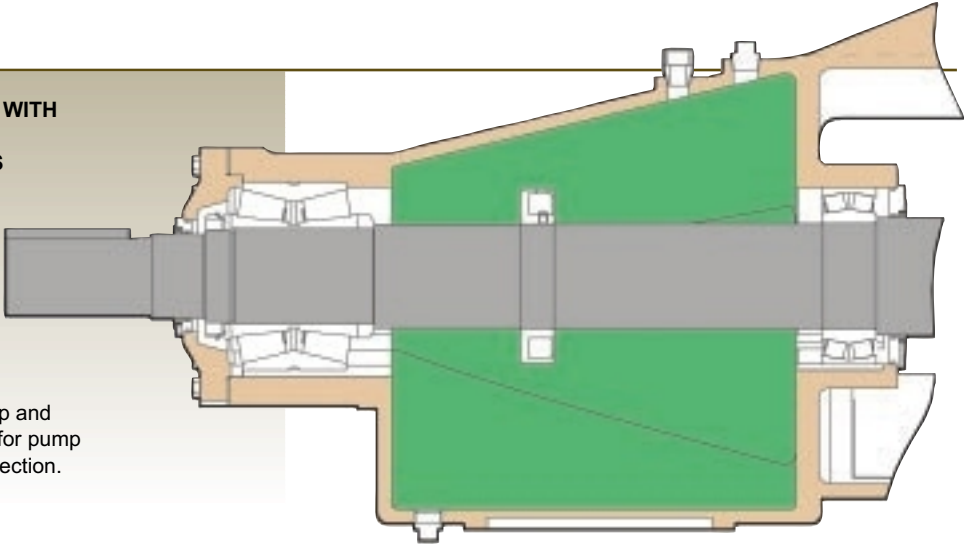
Back pullout feature provided as standard on sizes through 36". Allows for ease of maintenance.



Performance Features for Extended Pump Life

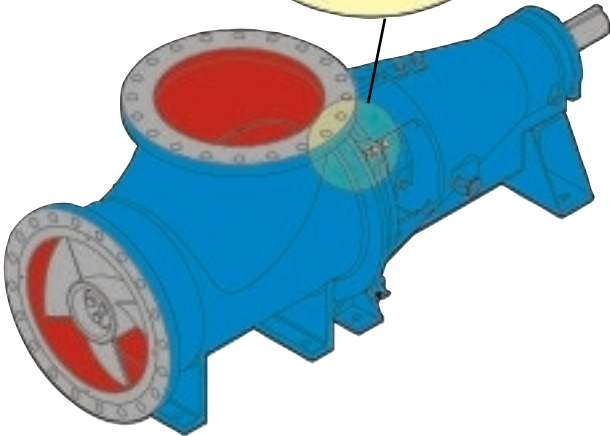
LARGER OIL SUMP WITH BI-DIRECTIONAL THRUST BEARINGS

The bearing frame is designed as a one piece unitized frame with extra large capacity oil sump to provide optimum cooling. Bearing arrangement is now identical for top and end suction allowing for pump operation in either direction.



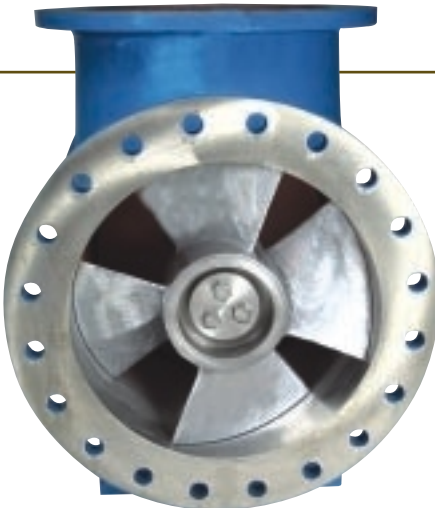
ADJUSTING LUGS FOR EASE OF ADJUSTMENT

Adjusting bolts allow for precise, easy alignment of both the impeller clearance and stuffing box runout. Precise alignments minimizes pump life cycle cost.

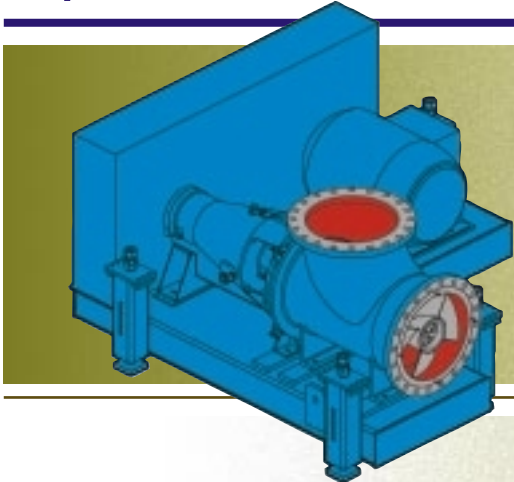


MULTIPLE IMPELLERS FOR OPTIMUM PERFORMANCE

Impellers are available in 0° and 5° vane pitch along with CW or CCW rotation.

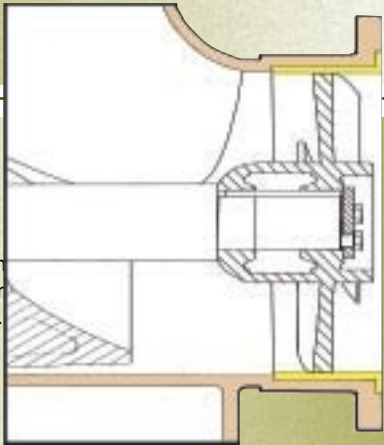
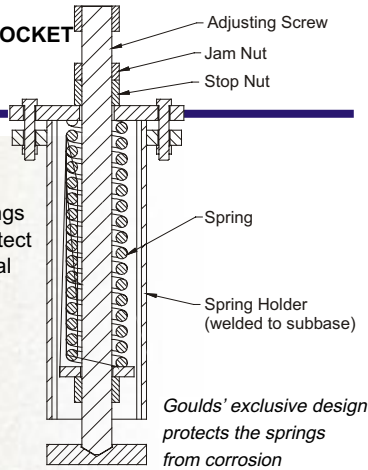


Optional Features



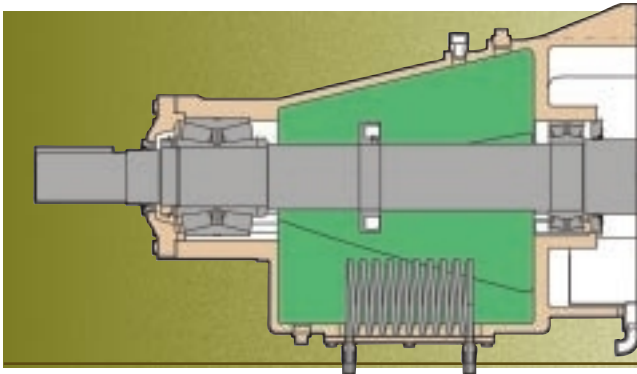
SPRING MOUNTED SUB-BASE

Goulds' exclusive enclosed design protects the springs from corrosion and spillage. Springs are used to protect the pump from large flange loads imposed by thermal expansion of the piping.



ELBOW LINER

Precision-made replaceable liners between impeller and casing are offered as an option to ensure continuous high efficiency.

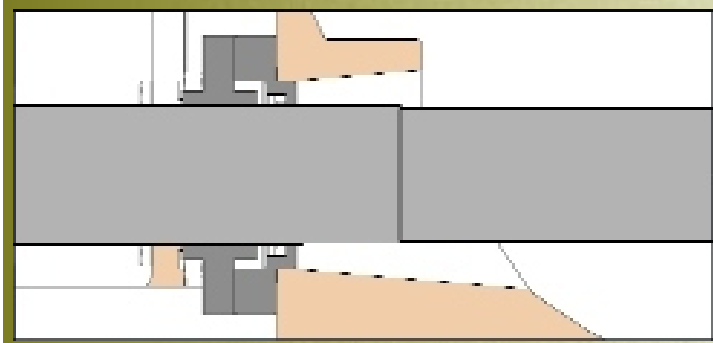
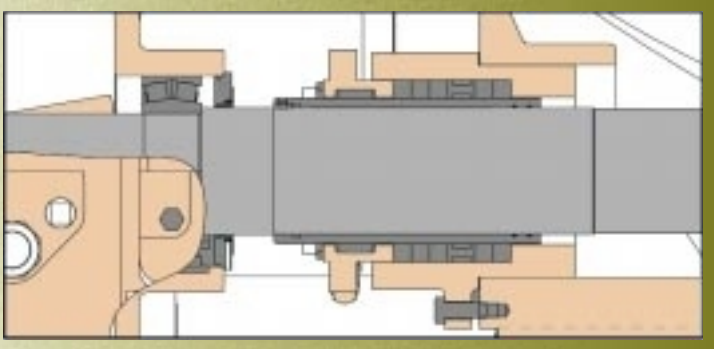


OIL COOLING

An oil cooling option is available on 12" and larger sizes. A coiled tube mounted inside the bearing housing circulates water to cool the oil bath. Used when process temperatures cause excessive heat build up in the bearing housing and or bearings.

PACKED BOX

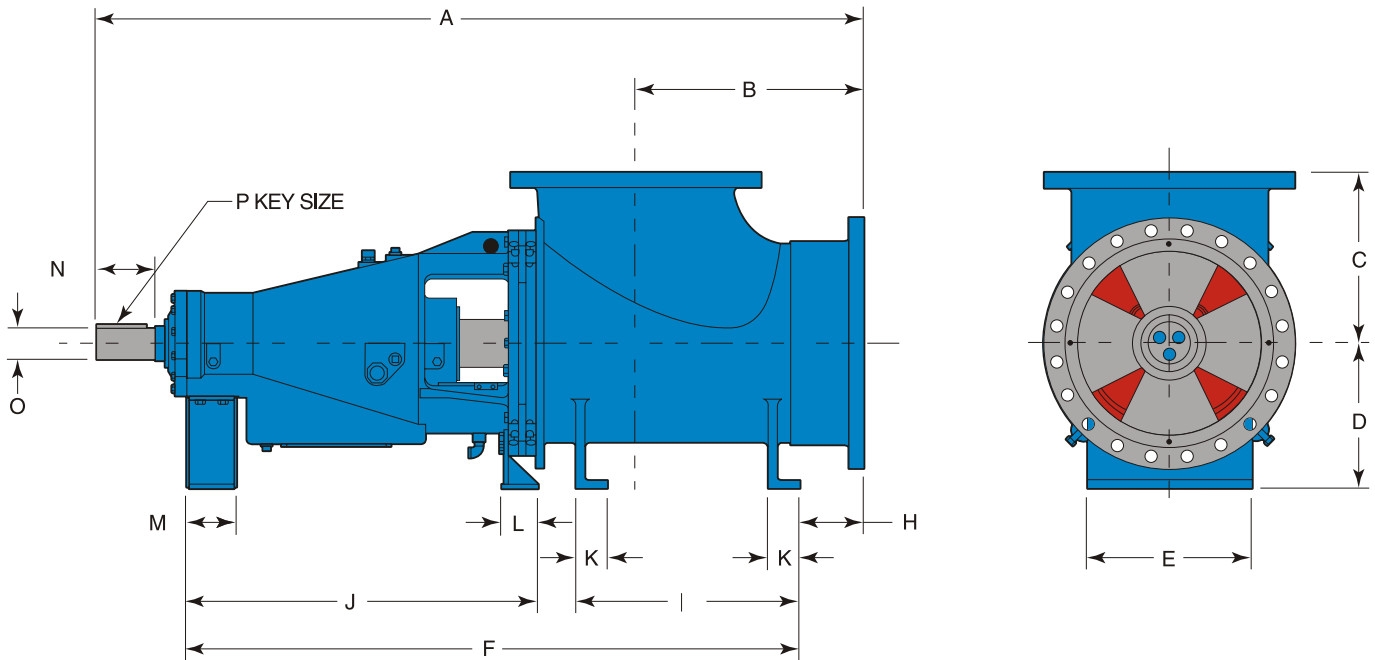
Optional packed stuffing box with replaceable wear sleeve is available as a low cost alternative to mechanical seals.



RESTRICTOR BUSHING ADAPTER

An optional adapter is used for single mechanical seals requiring a restrictor bushing. The restrictor bushing minimizes product dilution that may be detrimental to the process.

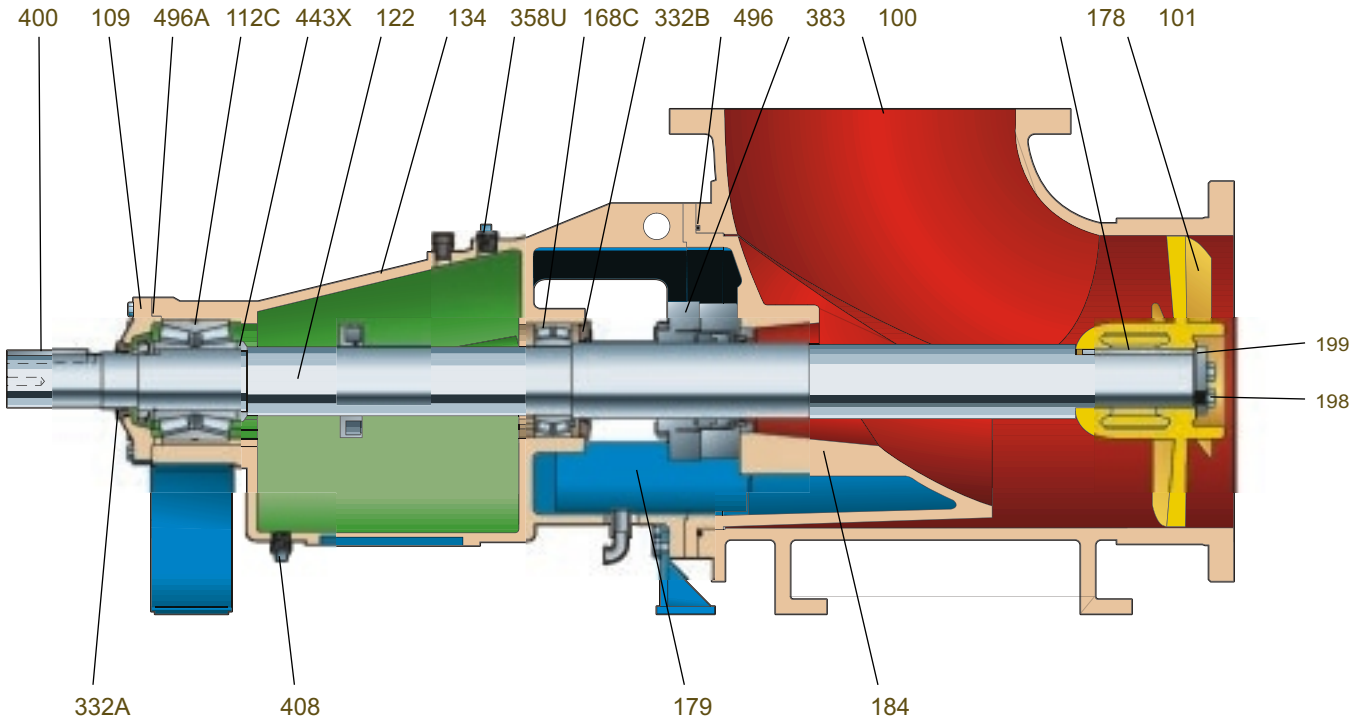
Dimensions Model AF



Dimensions

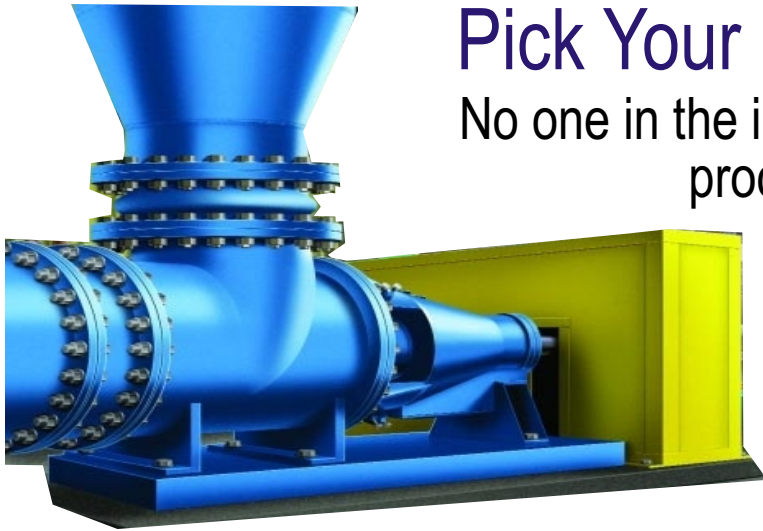
Pump Size	A	B	C	D	E	F	H	I	J	K	L	M	N	O	P
6	31.62	7.75	6.13	9.00	6.00	24.03	3.00	7.00	~	1.50	~	2.25	3.00	1.50	.375
8	34.56	10.00	7.50	9.00	8.00	26.10	4.00	8.00	~	2.00	~	2.25	3.00	1.50	.375
10	37.81	12.50	9.38	9.00	10.00	33.34	5.00	10.00	~	2.00	~	2.25	3.00	1.50	.375
12	51.38	15.00	11.25	11.00	12.00	39.27	6.00	12.00	24.14	2.75	2.75	2.75	4.00	2.25	.500
14	55.18	17.50	13.12	11.00	14.00	42.03	7.00	14.00	24.14	2.75	2.75	2.75	4.00	2.25	.500
16	62.47	20.00	15.00	13.00	16.00	47.14	8.00	16.00	26.58	3.00	3.00	3.00	5.00	2.62	.625
18	65.75	22.50	16.88	13.00	18.00	58.40	9.00	18.00	26.58	3.00	3.00	3.00	5.00	2.62	.625
20	84.37	25.00	18.75	16.00	18.00	74.19	7.00	24.50	38.50	3.50	4.00	5.00	6.50	3.50	.875
24	91.12	30.00	22.50	17.00	24.00	70.19	11.00	24.00	39.63	5.00	5.00	5.00	6.50	3.50	.875
700mm	107.12	36.81	25.50	20.00	24.00	76.00	17.56	28.00	43.50	4.00	5.00	5.00	9.75	4.38	1.000
30	109.31	36.50	25.00	22.00	30.00	81.00	15.00	30.00	43.50	5.00	5.00	5.00	9.75	4.38	1.000
36	114.47	39.94	28.00	26.00	33.00	102.59	18.44	33.00	45.77	5.00	5.00	5.75	8.50	5.12	1.250

Sectional View Model AF



Parts List and Materials of Construction

Item Number	Description	Material										
		Cast Iron	304	316	Alloy 20	Duplex SS	904L	Monel	Inconel	Nickel	Titanium	
100	Elbow	Cast Iron	CF8	CF8M	CN7M	CD4MCuN	904L	M-35-1	CW-6MC	CZ-100	Gr.C-3	
101	Impeller	Cast Iron	CF8	CF8M	CN7M	CD4MCuN	904L	M-35-1	CW-6MC	CZ-100	Gr.C-3	
109	Thrust Bearing Retainer	Cast Iron										
112C	Outboard bearing	Steel										
122	Shaft	Steel	304SS	316SS	C-20	2205	904L	Monel 400	Inconel 625	Nickel 200	Tit.Gr.2	
134	Bearing Housing	Cast Iron										
168C	Inboard Bearing	Steel										
178	Impeller Key	Steel	304	316	C-20	Hast C	904L	Monel 400	Inc.625	Nickel	Titanium	
179	Drip Pan	316 standard.Other options available.										
184	Stuffing Box Cover	Cast Iron	CF8	CF8M	CN7M	CD4MCuN	904L	M-35-1	CW-6MC	CZ-100	Gr.C-3	
198	Impeller Screw	Steel	304	316	C-20	Hast C	904L	Monel 400	Inc.625	Nickel	Titanium	
199	Impeller Lockplate	Steel	304	316	C-20	2205	904L	Monel 400	Inc.625	Nickel	Titanium	
215C	Oiler Plug	Brass										
332A	Laby Seal Outboard	Carbon Filled Teflon										
332B	Laby Seal Inboard	Carbon Filled Teflon										
356A	Adjusting Bolts	Steel										
383	Mechanical Seal	As Specified										
358U	Filler Plug	Brass										
400	Coupling Key	Steel										
408	Drain Plug	Brass										
408A	Sensor plugs	Brass										
443X	Spacer	Steel										
496A	Thrust Bearing Retainer O-ring	Brass-N										
496	Stuffing Box Cover O-ring	Buna-N	EPDM								Teflon	
787H	Adjusting Lug	Steel										

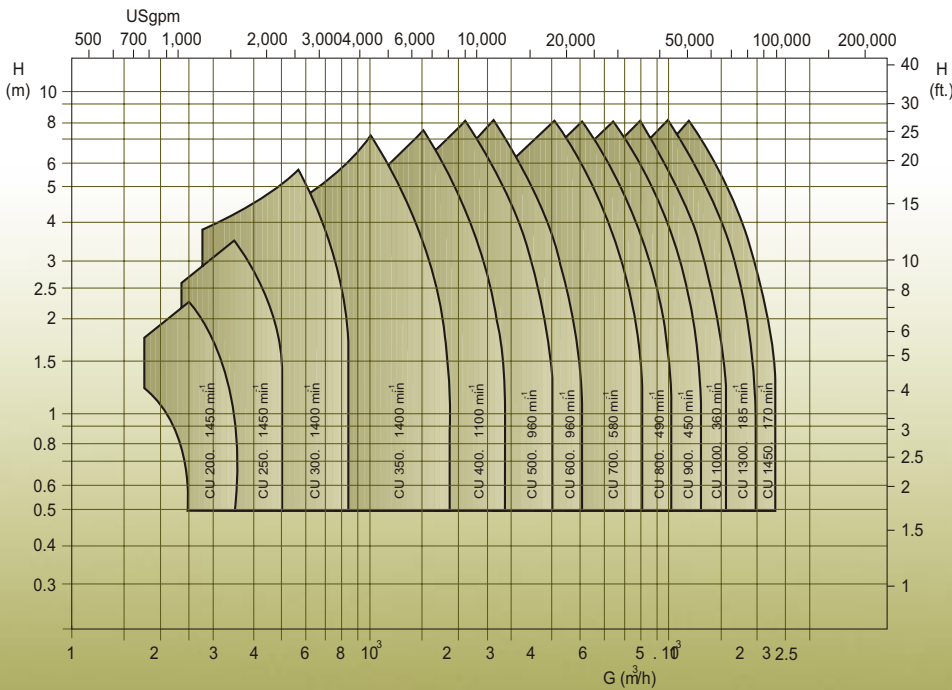


Pick Your Perfect Process Pump

No one in the industry offers the broad range of process pumps that JEC does...

Whether it's for pumping severe corrosives, abrasive slurries, fibrous/stringy solids, high temperature liquids, hazardous fluids, low flow or high capacity services—JEC has a perfect, reliable solution. The JEC selection of pump solutions includes horizontal and vertical configurations in a range of alloy and non-metallic constructions, sealed and sealless.

Axial Flow Pumps Performance Range



PERFORMANCE RANGE

Capacity up to 20,000 m^3/h
(88,000 USgpm)
Head up to 9 m (30 feet)
Speed up to 1500 min⁻¹ (1500 r.p.m.)

RANGES

DN 200 up to DN 1500 (8" up to 60")
Suction and discharge branch
same dimension

TEMPERATURE

max. 180°C (350°F)

CASING PRESSURE

max. 6/10 bar (87/145 psig)

Visit our website at www.jecpumps.com