

**END SUCTION
CENTRIFUGAL
PAPER /
PULP & PROCESS
PUMP**

FECP SERIES - 50 Hz



Zirantec



www.zirantec.com



FABBRICA ITALIANA POMPE SOMMERGIBILI S.r.l

Zirantec



ZIRANTEC products are manufactured by well qualified and experienced Italian Pump Engineers in state of the art manufacturing facilities in Italy

CERTIFICATION



ZIRANTEC Pumps & Motors are from the house of **Fabbrica Italiana Pompe Sommergibili S.r.l.** a four decades old Italian company of high repute, offering complete waste water solutions around the world. Its current product portfolio includes world class Waste Water Pumps of various types, Multistage Centrifugal Pressure Booster Pumps, Borehole Submersible Pumps & Motors, End Suction Centrifugal Pumps, Industrial Pumps for various applications.

Founded as early as 1978 in Rozzano, South of Milan, Italy by Mr.Orfeo Agostini, the company has witnessed steady growth and market expansion continuously ever since. In these four decades of existence, the company has carved a niche for itself in the waste water and sewage pump market in Italy and other countries. Its products are employed in Municipal, Domestic and Industrial applications. The Company is well known for the unique and robust designs of its products and their workmanship. Due to its superior quality ZIRANTEC products are also exported to many European, African and Asian countries.

ZIRANTEC's products are conceived, designed and manufactured by well qualified and experienced Italian Pump Engineers in state of the art manufacturing facilities in Italy. These manufacturing plants are accredited with UNI EN ISO 9001:2008 Certification.

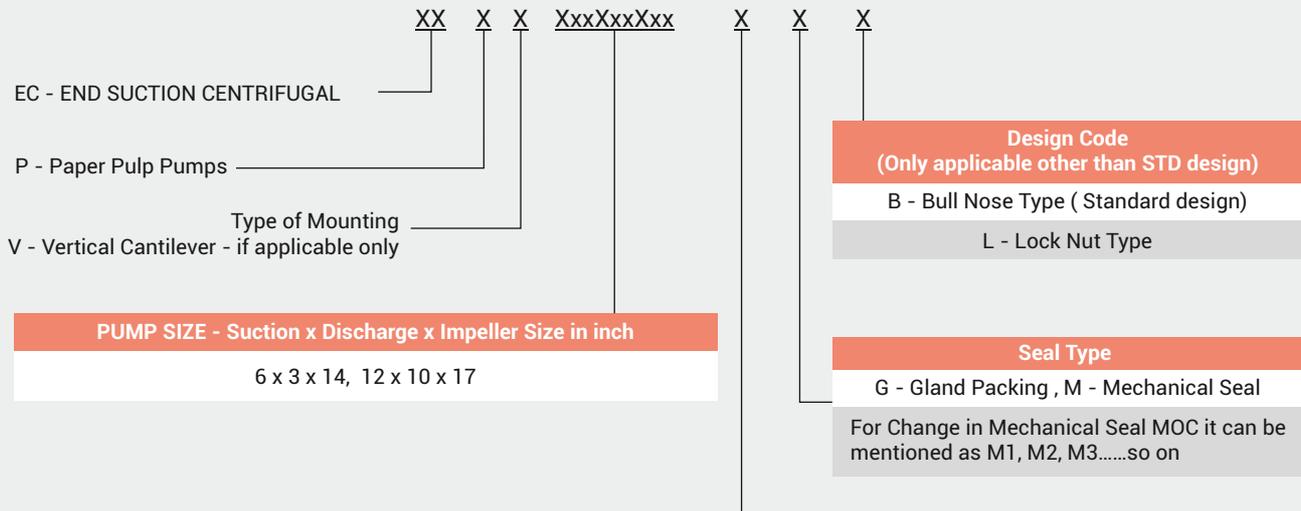
Over the years, the company has metamorphosed and ventured into manufacturing of high quality water pumps, for domestic, agricultural and industrial applications. In the due process, Fabbrica Italiana Pompe Sommergibili S.r.l. has shed its image of an exclusive sewage and waste water pumps manufacturer to a complete pump production company with an ability to manufacture diverse kinds of pumps for different applications.

C O N T E N T S

HORIZONTAL MULTI-STAGE CENTRIFUGAL PUMPS

FHMW SERIES	PageNo.
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MODEL IDENTIFICATION CODE



Description	Material of Construction					
Pump Casing	SS 316	SS 316	SS 304	CI	CI	SS 304
Impeller	SS 316	SS 316	SS 304	SS 316	SS 304	SS 304
Side Plate	SS 316	SS 316	SS 304	CI	CI	SS 304
Stuffing Box & Gland	SS 316	SS 316	SS 304	CI	CI	SS 304
Shaft	SS 316	EN 19	EN 19	EN 8	EN 8	SS 304
Shaft Sleeve	SS 316	SS 410	SS 410	SS 316	SS 316	SS 304
Bearing Housing with cover & Connecting Frame	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Type of material of construction	N	M	T	W	C	S

TECHNICAL SPECIFICATIONS

Power	: upto 270kW
Flow	: upto 2970m ³ /hr
Head	: upto 100m
Speed	: 720 / 960 / 1450 RPM
Consistency	: upto 7%
Max Solid Passage	: upto 95mm
Max Working Pressure	: 16 bar
Liquid Temperature	: -30°C to 180°C

GENERAL INSTRUCTIONS

- Performance curves are as per specific gravity and viscosity of water.
- Curve tolerance according to ISO 9906 : 2012 Table 8 - 2B.
- For Safety consider a margin of 0.5m higher of NPSH.
- All dimensions are in mm unless specified
- In view of continuous developments the information / performance / descriptions / specifications / Illustrations mentioned in this catalogues are subject to change without notice.

GENERAL INFORMATION FECP SERIES



PERFORMANCE BEYOND TECHNOLOGY

The FECP series pumps are specially designed to handle paper stock and pulp also it can be used as process pumps for various applications in industries. The FECP series are tailor made pump to ensure process reliability, high efficiency and low operating cost. At the same time, the spare parts inventory and costs are kept to minimum by means of standardization and interchangeability of spares among the ranges. These pumps are generally offered with semi open type impeller with 2 or 3 vanes, 4 vanes also can be offered on request. In case of high consistency applications the pump can be accommodated with use of optional inducers fitted to the impeller. The standard flange drillings are of ANSI 16.5 # 150 and other flanges also can be offered on request. These pumps are also offered with vertical execution type.



APPLICATIONS

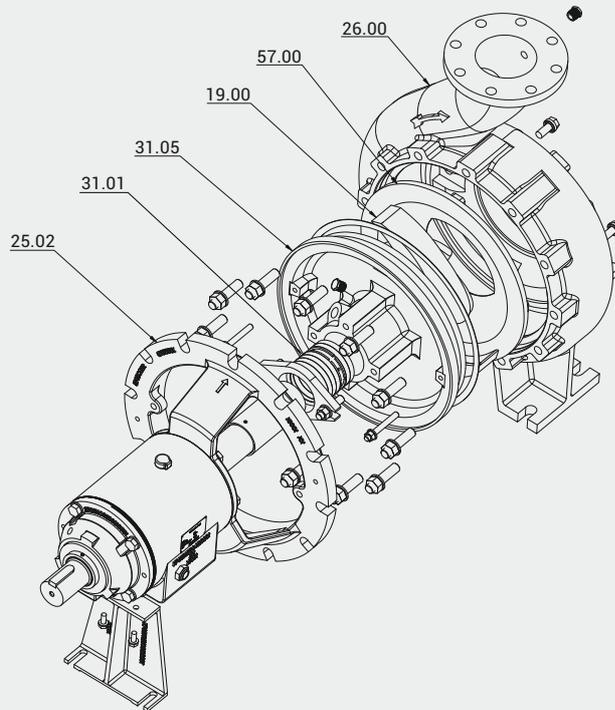
- Paper stock and pulp, sugar and other food industries to handle highly viscous liquids with consistencies upto 7%
- Liquor distilling and transfer
- Liquors with suspended solids upto 95mm
- Pumping of erosive, corrosive and non-corrosive effluents
- Chemical process
- De-inking process
- Edible oil refinery
- Dewatering in mines with low density slurries and sludge

DESIGN FEATURES

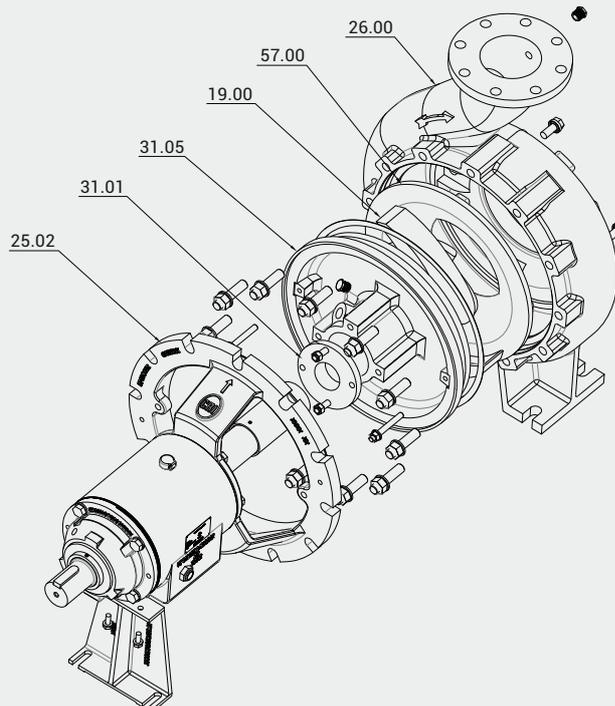
- Back pull out design for easy maintenance
- Replaceable wear plate to reduce operating cost
- Gland and mechanical seal options
- Common stuffing box for mechanical seal and gland
- Shims on DE side bearing to maintain axial clearance between impeller and wear plate to achieve desired hydraulic efficiency
- Various material options

EXPLODED VIEW

GLAND PACKING CONSTRUCTION



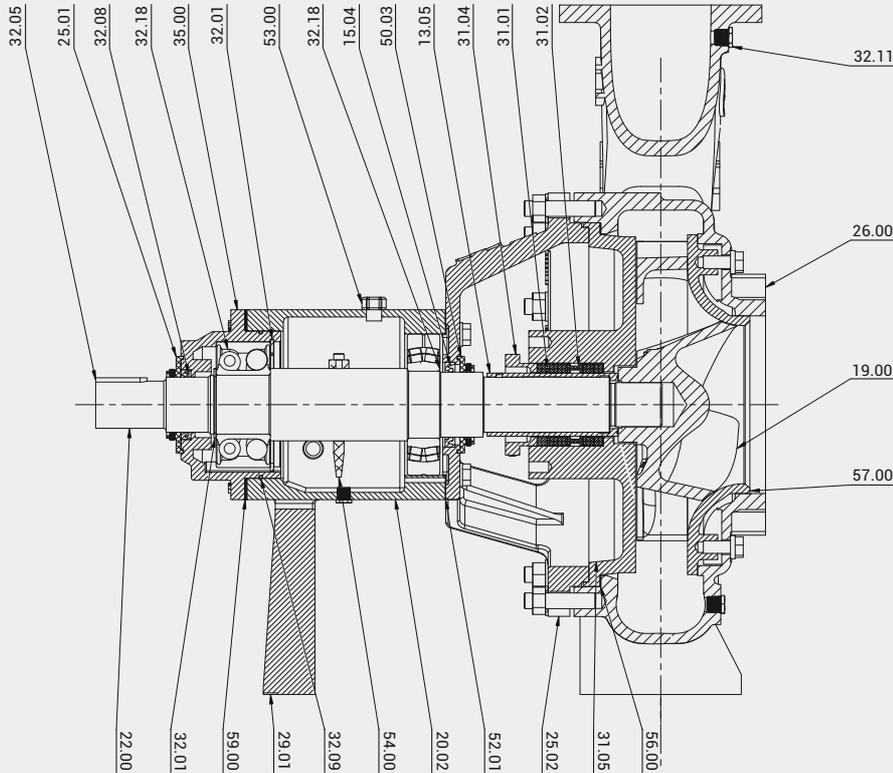
MECHANICAL SEAL CONSTRUCTION



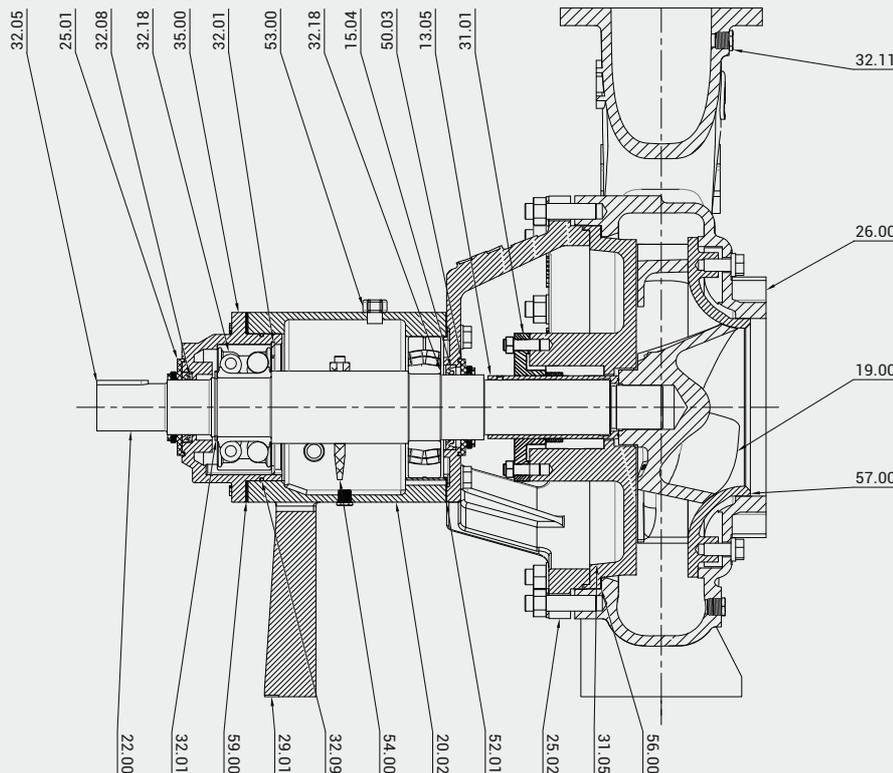
P. No.	Part Name
25.02	Connecting Frame
31.05	Stuffing Box
19.00	Impeller
57.00	Side Plate
26.00	Casing
46.00	Gland Packing
31.01	Packing / Mechanical Seal

CROSS SECTIONAL DRAWING

GLAND PACKING CONSTRUCTION



MECHANICAL SEAL CONSTRUCTION



P. No.	Part Name
26.00	Casing
22.00	Shaft
19.00	Impeller
13.05	Sleeve Shaft
31.05	Stuffing Box
32.05	Parallel Key
32.18	Double Row Angular Contact Ball Bearing
32.01	Circlip External
35.00	Housing Bearing
32.01	Circlip Internal
32.09	'O' Ring
20.02	Bearing Frame
32.18	Spherical Roller Bearing
52.01	Gasket Connecting Frame
25.02	Connecting Frame
53.00	Breather Nut
25.01	Deflector
32.08	Oil Seal
54.00	Thrower
31.01	Packing / Mechanical Seal
31.02	Ring Lantern
31.04	Gland
56.00	Gasket Casing
57.00	Side Plate
29.01	Frame Support
59.00	Shim
32.11	Hex. Plug

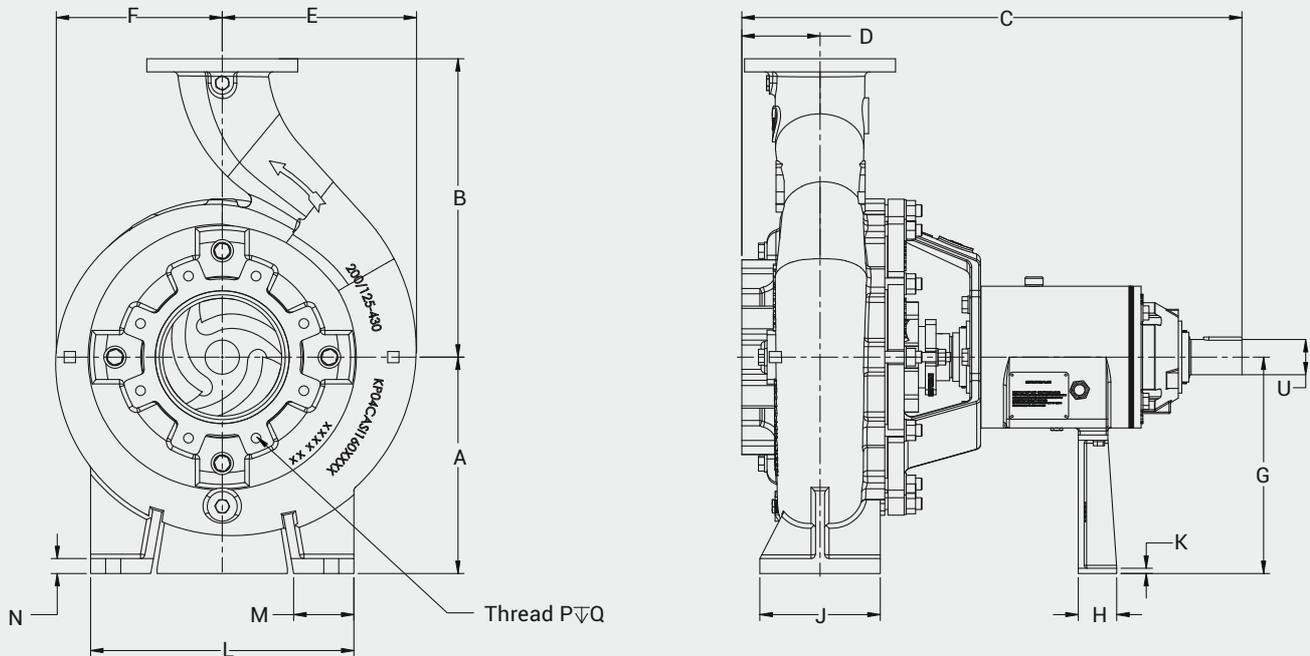
INTERCHANGEABILITY CHART

Part Name	6 x 3 x 14 (150 x 80 x 350)	6 x 4 x 14 (150 x 100 x 350)	8 x 4 x 17 (200 x 100 x 430)	8 x 5 x 17 (200 x 125 x 430)	8 x 6 x 21 (200 x 150 x 430)	10 x 8 x 21 (250 x 200 x 430)	12 x 10 x 17 (300 x 250 x 430)	8 x 6 x 21 (200 x 150 x 530)	10 x 8 x 21 (250 x 200 x 530)	14 x 12 x 21 (355 x 300 x 530)	16 x 14 x 21 (400 x 355 x 530)
Casing											
Casing Side Flate											
Impeller											
Stuffing Box											
Frame Assembly											

DETAILS OF STANDARD COMPONENTS

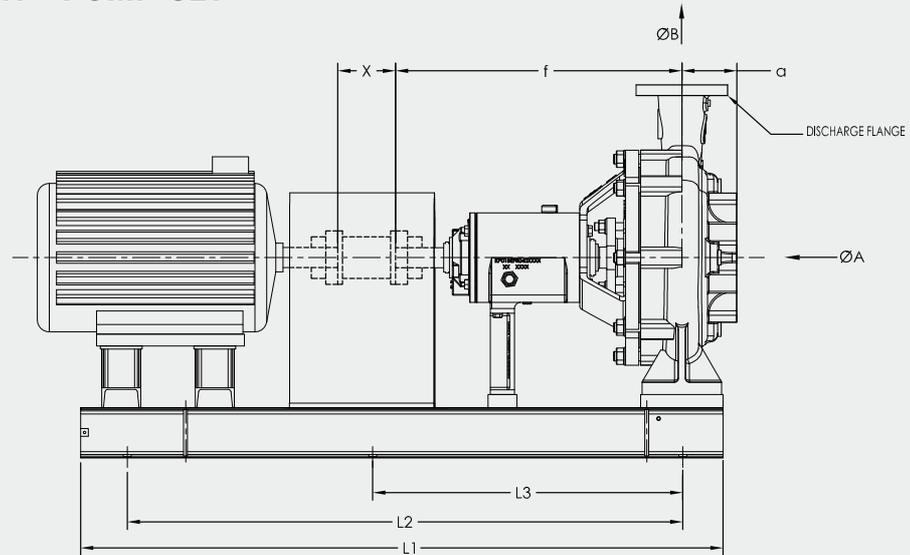
Shaft & Bearing data	Frame - I	Frame - II	Frame - III
Shaft Diameter (mm)			
At Coupling	Ø42	Ø60	Ø90
At 'NDE' Bearing	60	85	120
At 'DE' Bearing	50	75	110
Between bearings	63.5	92.1	122.2
Under Sleeve	45	69.82	114.27
Stuffing box dimensions (mm)			
Shaft sleeve Outer Diameter	55	80	135
Stuffing Box Bore diameter	80.5	105.5	173
Stuffing Box Bore diameter	88	93	134.5
Shaft Lengths (mm)			
Impeller end of shaft to 'NDE' Bearing	270.2	321.3	406.3
Between bearings	152.4	172.7	335.8
'DE' Bearing. To Coupling end	170.1	220.2	282.9
Bearings			
'NDE'	21312	21317	22224
'DE'	5310	5315	5222
Keyway at Coupling (mm)			
Width	12	18	25
Depth	5	7	9
Length	50	56	100
Shaft Thread at Impeller	M36x3 RH	M56x3 RH	M90x6 RH

MOUNTING DIMENSION - PUMP



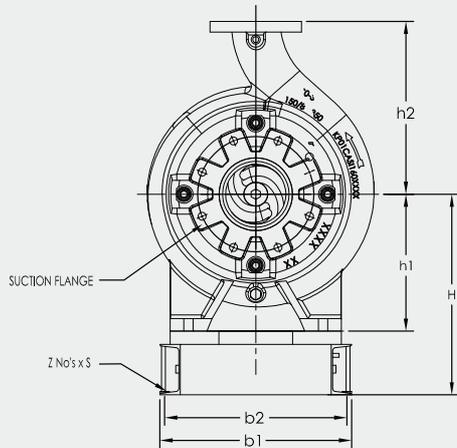
	Pump Size in inch (mm)										
	6 x 3 x 14 (150 x 80 x 350)	6 x 4 x 14 (150 x 100 x 350)	8 x 4 x 17 (200 x 100 x 430)	8 x 5 x 17 (200 x 125 x 430)	8 x 6 x 17 (200 x 150 x 430)	10 x 8 x 17 (250 x 200 x 430)	12 x 10 x 17 (300 x 250 x 430)	8 x 6 x 21 (200 x 150 x 530)	10 x 8 x 21 (250 x 200 x 530)	14 x 12 x 21 (355 x 300 x 530)	16 x 14 x 21 (400 x 355 x 530)
A	279.4	279.4	368.3	368.3	368.3	431.8	431.8	431.8	431.8	546.1	609.6
B	362	362	558.8	506.4	508	558.8	616.6	660.4	711.2	812.8	863.6
C	689.2	695.5	827.4	844.5	867.4	871.9	750.29	1169.5	1177.5	1222.9	1287.25
D	114.3	114.3	128.4	132.1	139.7	139.2	176.3	152.4	154.9	177.8	244.3
E	245.4	248.4	363.1	320	311.7	403.1	335.7	430.1	461	562.9	454.1
F	225	225	305	284.3	379.8	310.8	464.2	364.8	377.5	414.5	639.3
G	279.3	279.3	370.3	370.3	368.3	370.3	370.1	433.8	433.8	433.8	431.8
H	50	50	65	65	65	65	64	70	70	70	70
J	165.1	165.1	203.2	203.2	203.2	203.2	233.1	254	254	254	258.7
K	9.9	9.9	9.9	9.9	9.9	9.9	9.9	15	15	15	15
L	355.6	355.6	444.5	444.5	435.5	444.5	444.5	609.6	685.8	685.8	685.8
M	76.2	76.2	101.6	101.6	101.6	101.6	101.6	152.4	152.4	152.4	152.4
N	19.1	19.1	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
P	M20x2.5	M20x2.5	M20x2.5	M20x2.5	M20x2.5	M20x2.5	M20x2.5	M20x2.5	M20x2.5	M20x2.5	M20x2.5
Q	35	35	33	30	25	30	25	33	30	33	33
U	42	42	60	60	60	60	60	90	90	90	90

MOUNTING DIMENSION - PUMP SET



Pump Model	Motor rating (kW)			Motor Frame Size	Suction Flange details				Delivery Flange details				
	720 rpm	960 rpm	1450 rpm		Nominal Size (Ø A)	Pitch Circle Diameter	No. of Holes	Hole Diameter	Nominal Size (Ø B)	Pitch Circle Diameter	No. of Holes	Hole Diameter	
ECP	6x3x14	2.2	-	-	132S	150	241.3	8	M20X2.5	80	152.4	4	19.1
	6x3x14	1.5	-	-	112M	150	241.3	8	M20X2.5	80	152.4	4	19.1
	6x3x14	1.1	-	-	100L	150	241.3	8	M20X2.5	80	152.4	4	19.1
	6x3x14	-	7.5	-	160M	150	241.3	8	M20X2.5	80	152.4	4	19.1
	6x3x14	-	5.5	-	132M	150	241.3	8	M20X2.5	80	152.4	4	19.1
	6x3x14	-	3.7	-	132S	150	241.3	8	M20X2.5	80	152.4	4	19.1
	6x3x14	-	2.2	-	112M	150	241.3	8	M20X2.5	80	152.4	4	19.1
	6x3x14	-	-	22	180L	150	241.3	8	M20X2.5	80	152.4	4	19.1
	6x3x14	-	-	15	160L	150	241.3	8	M20X2.5	80	152.4	4	19.1
	6x3x14	-	-	9.3	160M	150	241.3	8	M20X2.5	80	152.4	4	19.1
ECP	6x4x14	-	-	7.5	132M	150	241.3	8	M20X2.5	80	152.4	4	19.1
	6x4x14	5.5	-	-	160M	150	241.3	8	M20X2.5	100	190.5	8	19.1
	6x4x14	3.7	-	-	132M	150	241.3	8	M20X2.5	100	190.5	8	19.1
	6x4x14	2.2	-	-	132S	150	241.3	8	M20X2.5	100	190.5	8	19.1
	6x4x14	1.5	-	-	112M	150	241.3	8	M20X2.5	100	190.5	8	19.1
	6x4x14	-	9.3	-	160L	150	241.3	8	M20X2.5	100	190.5	8	19.1
	6x4x14	-	7.5	-	160M	150	241.3	8	M20X2.5	100	190.5	8	19.1
	6x4x14	-	5.5	-	132M	150	241.3	8	M20X2.5	100	190.5	8	19.1
	6x4x14	-	3.7	-	132S	150	241.3	8	M20X2.5	100	190.5	8	19.1
	6x4x14	-	-	37	225SX	150	241.3	8	M20X2.5	100	190.5	8	19.1
ECP	6x4x14	-	-	30	200L	150	241.3	8	M20X2.5	100	190.5	8	19.1
	6x4x14	-	-	18.5	180M	150	241.3	8	M20X2.5	100	190.5	8	19.1
	6x4x14	-	-	15	160L	150	241.3	8	M20X2.5	100	190.5	8	19.1
	8x4x17	9.3	-	-	180M	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x4x17	7.5	-	-	160L	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x4x17	5.5	-	-	160M	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x4x17	3.7	-	-	132M	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x4x17	-	22	-	200L	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x4x17	-	18.5	-	200L	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x4x17	-	15	-	180L	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x4x17	-	11	-	160L	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x4x17	-	9.3	-	160L	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x4x17	-	7.5	-	160M	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x4x17	-	-	75	280SX	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x4x17	-	-	45	225MX	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x4x17	-	-	37	225SX	200	298.5	8	M20X2.5	100	190.5	8	19.1
ECP	8x5x17	-	-	30	200L	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x5x17	-	-	22	180L	200	298.5	8	M20X2.5	100	190.5	8	19.1
	8x5x17	15	-	-	200L	200	298.5	8	M20X2.5	125	215.9	8	22.2
	8x5x17	11	-	-	180L	200	298.5	8	M20X2.5	125	215.9	8	22.2
	8x5x17	9.3	-	-	180M	200	298.5	8	M20X2.5	125	215.9	8	22.2
	8x5x17	7.5	-	-	160L	200	298.5	8	M20X2.5	125	215.9	8	22.2

MOUNTING DIMENSION - PUMP SET



a	f	h1	h2	H	b1	L1	b2	L2	L3	Z No's	S	X
114.3	574.9	279.4	362	374	370	1150±5	348	990	495	6	16	140
114.3	574.9	279.4	362	374	370	1110±5	348	950	475	6	14	140
114.3	574.9	279.4	362	374	370	1130±5	348	970	485	6	14	140
114.3	574.9	279.4	362	374	370	1266±5	348	1066	533	6	14	140
114.3	574.9	279.4	362	374	370	1195±5	348	1035	517.5	6	14	140
114.3	574.9	279.4	362	374	370	1150±5	348	990	495	6	14	140
114.3	574.9	279.4	362	374	370	1110±5	348	950	475	6	14	140
114.3	574.9	279.4	362	374	390	1360±5	360	1200	600	6	14	140
114.3	574.9	279.4	362	374	370	1320±5	348	1160	580	6	14	140
114.3	574.9	279.4	362	374	370	1275±5	348	1115	557.5	6	14	140
114.3	574.9	279.4	362	374	370	1195±5	348	1035	517.5	6	14	140
114.3	581.2	279.4	362	374	370	1190±5	348	1030	515	6	14	140
114.3	581.2	279.4	362	374	370	1190±5	348	1030	515	4	14	140
114.3	581.2	279.4	362	374	370	1160±5	348	1000	500	6	14	140
114.3	581.2	279.4	362	374	370	1120±5	348	960	480	6	14	140
114.3	581.2	279.4	362	399	390	1325±5	360	1165	582.5	6	14	140
114.3	581.2	279.4	362	374	370	1270±5	348	1110	555	6	14	140
114.3	581.2	279.4	362	374	370	1190±5	348	1030	515	6	14	140
114.3	581.2	279.4	362	374	370	1160±5	348	1000	500	6	14	140
114.3	581.2	279.4	362	399	410	1420±5	380	1260	630	6	14	140
114.3	581.2	279.4	362	399	390	1405±5	360	1245	622.5	6	14	140
114.3	581.2	279.4	362	399	390	1325±5	360	1165	582.5	6	14	140
114.3	581.2	279.4	362	399	390	1325±5	360	1165	582.5	6	14	140
128.4	699	368.3	558.8	488	478	1550±5	448	1390	695	6	14	200
128.4	699	368.3	558.8	488	478	1545±5	448	1385	692.5	6	14	200
128.4	699	368.3	558.8	488	478	1505±5	448	1345	672.5	6	14	200
128.4	699	368.3	558.8	488	478	1425±5	448	1265	632.5	6	14	200
128.4	699	368.3	558.8	488	478	1625±5	448	1465	732.5	6	14	200
128.4	699	368.3	558.8	488	478	1625±5	448	1465	732.5	6	14	200
128.4	699	368.3	558.8	488	478	1585±5	448	1425	712.5	6	14	200
128.4	699	368.3	558.8	488	478	1550±5	448	1390	695	6	14	200
128.4	699	368.3	558.8	488	478	1550±5	448	1390	695	6	14	200
128.4	699	368.3	558.8	488	478	1505±5	448	1345	672.5	6	14	200
128.4	699	368.3	558.8	513	538	1785±5	508	1626	542	8	18	200
128.4	699	368.3	558.8	488	478	1680±5	448	1520	760	6	14	200
128.4	699	368.3	558.8	513	538	1665±5	508	1506	502	8	16	200
128.4	699	368.3	558.8	488	478	1625±5	448	1465	732.5	6	14	200
128.4	699	368.3	558.8	488	478	1585±5	448	1425	712.5	6	14	200
132	712.5	368.3	508	488	478	1635±5	448	1475	737.5	6	14	200
132	712.5	368.3	508	488	478	1575±5	448	1415	707.5	6	14	200
132	712.5	368.3	508	488	478	1540±5	448	1380	690	6	14	200
132	712.5	368.3	508	488	478	1540±5	448	1380	690	6	14	200
132	712.5	368.3	508	488	478	1495±5	448	1335	667.5	6	14	200
132	712.5	368.3	508	488	478	1745±5	448	1584	528	8	18	200

MOUNTING DIMENSION - PUMP SET

Pump Model	Motor rating (kW)			Motor Frame Size	Suction Flange details				Delivery Flange details				
	720 rpm	960 rpm	1450 rpm		Nominal Size (Ø A)	Pitch Circle Diameter	No. of Holes	Hole Diameter	Nominal Size (Ø B)	Pitch Circle Diameter	No. of Holes	Hole Diameter	
ECP	8x5x17	-	30	-	225MX	200	298.5	8	M20X2.5	125	215.9	8	22.2
	8x5x17	-	22	-	200L	200	298.5	8	M20X2.5	125	215.9	8	22.2
	8x5x17	-	18.5	-	200L	200	298.5	8	M20X2.5	125	215.9	8	22.2
	8x5x17	-	15	-	180L	200	298.5	8	M20X2.5	125	215.9	8	22.2
	8x5x17	-	-	110	315SX	200	298.5	8	M20X2.5	125	215.9	8	22.2
	8x5x17	-	-	90	280MX	200	298.5	8	M20X2.5	125	215.9	8	22.2
	8x5x17	-	-	75	280SX	200	298.5	8	M20X2.5	125	215.9	8	22.2
	8x5x17	-	-	55	250MX	200	298.5	8	M20X2.5	125	215.9	8	22.2
	8x5x17	-	-	45	225MX	200	298.5	8	M20X2.5	125	215.9	8	22.2
	8x5x17	-	-	37	225SX	200	298.5	8	M20X2.5	125	215.9	8	22.2
ECP	8x6x17	22	-	-	225MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	18.5	-	-	225SX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	15	-	-	200L	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	11	-	-	180L	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	9.3	-	-	180M	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	7.5	-	-	160L	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	45	-	280SX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	37	-	250MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	30	-	225MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	22	-	200L	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	15	-	180L	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	11	-	160L	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	-	132	315MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	-	110	315SX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	-	90	280MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	-	75	280SX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	-	55	250MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	-	45	225MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x17	-	-	37	225SX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	ECP	10x8x17	18.5	-	-	225SX	250	362	12	M20X2.5	200	298.5	8
10x8x17		15	-	-	200L	250	362	12	M20X2.5	200	298.5	8	22.2
10x8x17		9.3	-	-	180M	250	362	12	M20X2.5	200	298.5	8	22.2
10x8x17		7.5	-	-	160L	250	362	12	M20X2.5	200	298.5	8	22.2
10x8x17		-	45	-	280SX	250	362	12	M20X2.5	200	298.5	8	22.2
10x8x17		-	37	-	250MX	250	362	12	M20X2.5	200	298.5	8	22.2
10x8x17		-	30	-	225MX	250	362	12	M20X2.5	200	298.5	8	22.2
10x8x17		-	22	-	200L	250	362	12	M20X2.5	200	298.5	8	22.2
10x8x17		-	18.5	-	200L	250	362	12	M20X2.5	200	298.5	8	22.2
10x8x17		-	-	160	315LX	250	362	12	M20X2.5	200	298.5	8	22.2
10x8x17		-	-	132	315MX	250	362	12	M20X2.5	200	298.5	8	22.2
10x8x17		-	-	90	280MX	250	362	12	M20X2.5	200	298.5	8	22.2
10x8x17		-	-	75	280SX	250	362	12	M20X2.5	200	298.5	8	22.2
10x8x17		-	-	55	250MX	250	362	12	M20X2.5	200	298.5	8	22.2
ECP	12x10x17	30	-	-	250MX	300	431.8	12	M20X2.5	250	362	12	25.4

MOUNTING DIMENSION - PUMP SET

a	f	h1	h2	H	b1	L1	b2	L2	L3	Z No's	S	X
132	712.5	368.3	508	488	478	1690±5	448	1530	510	8	18	200
132	712.5	368.3	508	488	478	1635±5	448	1475	737.5	6	14	200
132	712.5	368.3	508	488	478	1635±5	448	1475	737.5	6	14	200
132	712.5	368.3	508	488	478	1595±5	448	1435	717.5	6	14	200
132	712.5	368.3	508	513	573	1913±5	543	1752	584	8	18	200
132	712.5	368.3	508	513	523	1845±5	493	1686	562	8	18	200
132	712.5	368.3	508	513	523	1795±5	493	1635	545	8	18	200
132	712.5	368.3	508	488	478	1750±5	448	1590	530	8	18	200
132	712.5	368.3	508	488	478	1690±5	448	1530	510	8	18	200
132	712.5	368.3	508	488	478	1665±5	448	1506	502	8	18	200
139.5	727.9	368.3	508	488	478	1695±5	448	1536	512	8	18	200
139.5	727.9	368.3	508	488	478	1650±5	448	1491	497	8	18	200
139.5	727.9	368.3	508	488	478	1640±5	448	1480	740	6	14	200
139.5	727.9	368.3	508	488	478	1605±5	448	1445	722.5	6	14	200
139.5	727.9	368.3	508	488	478	1570±5	448	1410	705	6	14	200
139.5	727.9	368.3	508	488	478	1570±5	448	1410	705	6	14	200
139.5	727.9	368.3	508	513	508	1780±5	478	1620	540	8	18	200
139.5	727.9	368.3	508	488	478	1750±5	448	1590	530	8	18	200
139.5	727.9	368.3	508	488	478	1700±5	448	1539	513	8	18	200
139.5	727.9	368.3	508	488	478	1645±5	448	1486	743	6	14	200
139.5	727.9	368.3	508	488	478	1605±5	448	1445	722.5	6	14	200
139.5	727.9	368.3	508	488	478	1570±5	448	1410	705	6	14	200
139.5	727.9	368.3	508	513	548	1925±5	518	1764	588	8	18	200
139.5	727.9	368.3	508	513	548	1875±5	518	1716	572	8	18	200
139.5	727.9	368.3	508	513	508	1830±5	478	1671	557	8	18	200
139.5	727.9	368.3	508	513	508	1780±5	478	1620	540	8	18	200
139.5	727.9	368.3	508	488	478	1750±5	448	1590	530	8	18	200
139.5	727.9	368.3	508	488	478	1695±5	448	1536	512	8	18	200
139.5	727.9	368.3	508	488	478	1670±5	448	1509	503	8	18	200
139.5	732.4	431.8	558.8	552	478	1685±5	448	1524	508	8	18	200
139.5	732.4	431.8	558.8	552	478	1655±5	448	1494	498	8	18	200
139.5	732.4	431.8	558.8	552	478	1560±5	448	1400	700	6	14	200
139.5	732.4	431.8	558.8	552	478	1560±5	448	1400	700	6	14	200
139.5	732.4	431.8	558.8	577	528	1815±5	498	1656	552	8	18	200
139.5	732.4	431.8	558.8	577	508	1775±5	478	1614	538	8	18	200
139.5	732.4	431.8	558.8	552	478	1710±5	448	1551	517	8	18	200
139.5	732.4	431.8	558.8	552	478	1655±5	448	1494	498	8	18	200
139.5	732.4	431.8	558.8	552	478	1655±5	448	1494	498	8	18	200
139.5	732.4	431.8	558.8	577	573	2015±5	543	1854	618	8	18	200
139.5	732.4	431.8	558.8	577	573	1965±5	543	1806	602	8	18	200
139.5	732.4	431.8	558.8	577	528	1870±5	498	1710	570	8	18	200
139.5	732.4	431.8	558.8	577	528	1815±5	498	1656	552	8	18	200
139.5	732.4	431.8	558.8	577	508	1780±5	478	1620	540	8	18	200
176.3	751.7	431.8	616.6	577	506	1770±5	476	1611	537	8	18	200

MOUNTING DIMENSION - PUMP SET

Pump Model	Motor rating (kW)			Motor Frame Size	Suction Flange details				Delivery Flange details				
	720 rpm	960 rpm	1450 rpm		Nominal Size (Ø A)	Pitch Circle Diameter	No. of Holes	Hole Diameter	Nominal Size (Ø B)	Pitch Circle Diameter	No. of Holes	Hole Diameter	
ECP	12x10x17	22	-	-	225MX	300	431.8	12	M20X2.5	250	362	12	25.4
	12x10x17	18.5	-	-	225SX	300	431.8	12	M20X2.5	250	362	12	25.4
	12x10x17	15	-	-	200L	300	431.8	12	M20X2.5	250	362	12	25.4
	12x10x17	-	75	-	315SX	300	431.8	12	M20X2.5	250	362	12	25.4
	12x10x17	-	55	-	280MX	300	431.8	12	M20X2.5	250	362	12	25.4
	12x10x17	-	45	-	280SX	300	431.8	12	M20X2.5	250	362	12	25.4
	12x10x17	-	30	-	225MX	300	431.8	12	M20X2.5	250	362	12	25.4
	12x10x17	-	-	250	355MX	300	431.8	12	M20X2.5	250	362	12	25.4
	12x10x17	-	-	200	315LX	300	431.8	12	M20X2.5	250	362	12	25.4
	12x10x17	-	-	160	315LX	300	431.8	12	M20X2.5	250	362	12	25.4
	12x10x17	-	-	132	315MX	300	431.8	12	M20X2.5	250	362	12	25.4
	12x10x17	-	-	110	315SX	300	431.8	12	M20X2.5	250	362	12	25.4
ECP	8x6x21	37	-	-	280SX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	30	-	-	250MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	22	-	-	225MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	18.5	-	-	225SX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	-	90	-	315MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	-	75	-	315SX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	-	55	-	280MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	-	45	-	280SX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	-	37	-	250MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	-	-	275	355LX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	-	-	250	355MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	-	-	200	315LX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	-	-	160	315LX	200	298.5	8	M20X2.5	150	241.3	8	19.1
	8x6x21	-	-	132	315MX	200	298.5	8	M20X2.5	150	241.3	8	19.1
ECP	10x8x21	45	-	-	280MX	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	37	-	-	280SX	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	22	-	-	225MX	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	15	-	-	200L	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	11	-	-	180L	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	-	110	-	315LX	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	-	90	-	315MX	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	-	75	-	315SX	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	-	55	-	280MX	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	-	45	-	280SX	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	-	-	315	355LX	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	-	-	275	355LX	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	-	-	225	355SX	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	-	-	200	315LX	250	362	12	M20X2.5	200	298.5	8	22.2
	10x8x21	-	-	132	315MX	250	362	12	M20X2.5	200	298.5	8	22.2
	ECP	14x12x21	90	-	-	315LX	350	476.3	12	M24X3	300	431.8	12
14x12x21		75	-	-	315MX	350	476.3	12	M24X3	300	431.8	12	25.4
14x12x21		55	-	-	315SX	350	476.3	12	M24X3	300	431.8	12	25.4
14x12x21		45	-	-	280MX	350	476.3	12	M24X3	300	431.8	12	25.4
14x12x21		37	-	-	280SX	350	476.3	12	M24X3	300	431.8	12	25.4
14x12x21		-	200	-	355MX	350	476.3	12	M24X3	300	431.8	12	25.4
14x12x21		-	160	-	355SX	350	476.3	12	M24X3	300	431.8	12	25.4
14x12x21		-	110	-	315LX	350	476.3	12	M24X3	300	431.8	12	25.4
14x12x21		-	90	-	315MX	350	476.3	12	M24X3	300	431.8	12	25.4
14x12x21		-	75	-	315SX	350	476.3	12	M24X3	300	431.8	12	25.4
14x12x21		-	37	-	250MX	350	476.3	12	M24X3	300	431.8	12	25.4
16x14x21		110	-	-	315LX	400	539.8	16	M24X3	350	476.3	12	28.6
16x14x21		90	-	-	315LX	400	539.8	16	M24X3	350	476.3	12	28.6
16x14x21		75	-	-	315MX	400	539.8	16	M24X3	350	476.3	12	28.6
16x14x21		45	-	-	280MX	400	539.8	16	M24X3	350	476.3	12	28.6
16x14x21		-	250	-	355LX	400	539.8	16	M24X3	350	476.3	12	28.6
16x14x21		-	200	-	355MX	400	539.8	16	M24X3	350	476.3	12	28.6
16x14x21		-	160	-	355SX	400	539.8	16	M24X3	350	476.3	12	28.6
16x14x21		-	110	-	315LX	400	539.8	16	M24X3	350	476.3	12	28.6

MOUNTING DIMENSION - PUMP SET

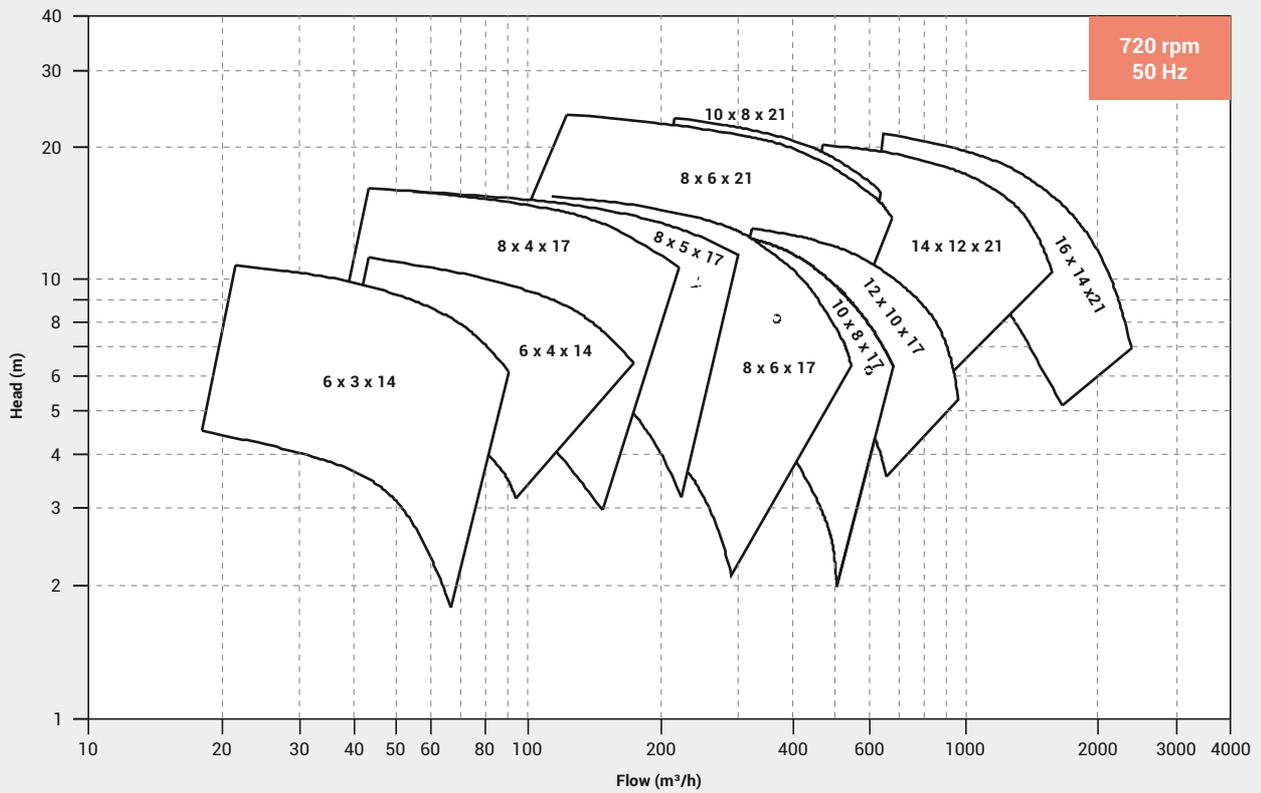
a	f	h1	h2	H	b1	L1	b2	L2	L3	Z No's	S	X
176.3	751.7	431.8	616.6	577	506	1710±5	476	1551	517	8	18	200
176.3	751.7	431.8	616.6	552	476	1675±5	446	1515	505	8	18	200
176.3	751.7	431.8	616.6	552	573	1650±5	543	1491	497	8	18	200
176.3	751.7	431.8	616.6	602	586	1940±5	546	1779	593	8	18	200
176.3	751.7	431.8	616.6	577	526	1880±5	496	1719	573	8	18	200
176.3	751.7	431.8	616.6	577	526	1830±5	496	1671	557	8	18	200
176.3	751.7	431.8	616.6	577	506	1730±5	476	1569	523	8	18	200
176.3	751.7	431.8	616.6	602	573	2170±5	543	2010	670	8	18	200
176.3	751.7	431.8	616.6	602	573	2040±5	543	1881	627	8	18	200
176.3	751.7	431.8	616.6	602	573	2040±5	543	1881	627	8	18	200
176.3	751.7	431.8	616.6	602	586	1990±5	556	1830	610	8	18	200
176.3	751.7	431.8	616.6	602	586	1940±5	556	1779	593	8	18	200
152.4	1017.1	431.8	660.4	577	648	2165±5	618	2004	668	8	18	250
152.4	1017.1	431.8	660.4	577	648	2120±5	618	1959	653	8	18	250
152.4	1017.1	431.8	660.4	577	648	2065±5	618	1905	635	8	18	250
152.4	1017.1	431.8	660.4	577	648	2040±5	638	1881	627	8	18	250
152.4	1017.1	431.8	660.4	602	573	2300±5	543	2169	723	8	18	250
152.4	1017.1	431.8	660.4	602	728	2330±5	698	2169	723	8	18	250
152.4	1017.1	431.8	660.4	577	648	2215±5	618	2055	685	8	18	250
152.4	1017.1	431.8	660.4	577	648	2165±5	618	2004	668	8	18	250
152.4	1017.1	431.8	660.4	577	648	2120±5	618	1959	653	8	18	250
152.4	1017.1	431.8	660.4	602	688	2580±5	658	2421	807	8	18	250
152.4	1017.1	431.8	660.4	602	728	2510±5	698	2349	783	8	18	250
152.4	1017.1	431.8	660.4	602	668	2380±5	638	2220	740	8	18	250
152.4	1017.1	431.8	660.4	602	668	2380±5	638	2220	740	8	18	250
152.4	1017.1	431.8	660.4	602	668	2330±5	638	2169	723	8	18	250
155	1022.5	431.8	711.2	577	724	2220±5	694	2061	687	8	18	250
155	1022.5	431.8	711.2	577	724	2170±5	694	2010	670	8	18	250
155	1022.5	431.8	711.2	577	724	2070±5	694	1911	637	8	18	250
155	1022.5	431.8	711.2	577	724	2020±5	694	1860	620	8	18	250
155	1022.5	431.8	711.2	577	724	1980±5	694	1821	607	8	18	250
155	1022.5	431.8	711.2	577	744	2380±5	714	2220	740	8	18	250
155	1022.5	431.8	711.2	602	573	2332±5	543	2172	724	8	18	250
155	1022.5	431.8	711.2	602	744	2280±5	714	2121	707	8	18	250
155	1022.5	431.8	711.2	577	724	2220±5	694	2061	687	8	18	250
155	1022.5	431.8	711.2	577	724	2170±5	694	2010	670	8	18	250
155	1022.5	431.8	711.2	602	744	2540±5	714	2379	793	8	18	250
155	1022.5	431.8	711.2	602	744	2540±5	714	2379	793	8	18	250
155	1022.5	431.8	711.2	602	744	2420±5	714	2259	753	8	18	250
155	1022.5	431.8	711.2	602	573	2385±5	543	2226	742	8	18	250
155	1022.5	431.8	711.2	577	744	2332±5	714	2172	724	8	18	250
177.8	1045.1	546.1	812.8	716	744	2400±5	714	2241	747	8	18	250
177.8	1045.1	546.1	812.8	716	744	2350±5	714	2190	730	8	18	250
177.8	1045.1	546.1	812.8	716	744	2300±5	714	2139	713	8	18	250
177.8	1045.1	546.1	812.8	716	744	2255±5	714	2094	698	8	18	250
177.8	1045.1	546.1	812.8	716	744	2205±5	714	2046	682	8	18	250
177.8	1045.1	546.1	812.8	716	744	2530±5	714	2370	790	8	18	250
177.8	1045.1	546.1	812.8	716	744	2480±5	714	2319	773	8	18	250
177.8	1045.1	546.1	812.8	716	744	2400±5	714	2241	747	8	18	250
177.8	1045.1	546.1	812.8	716	744	2350±5	714	2190	730	8	18	250
177.8	1045.1	546.1	812.8	716	744	2300±5	714	2139	713	8	18	250
177.8	1045.1	546.1	812.8	716	744	2186±5	714	2025	675	8	18	250
244.3	1042.9	609.6	863.6	780	744	2405±5	714	2244	748	8	18	250
244.3	1042.9	609.6	863.6	780	744	2405±5	714	2244	748	8	18	250
244.3	1042.9	609.6	863.6	780	744	2355±5	714	2196	732	8	18	250
244.3	1042.9	609.6	863.6	780	744	2260±5	714	2100	700	8	18	250
244.3	1042.9	609.6	863.6	780	744	2526±5	714	2367	789	8	18	250
244.3	1042.9	609.6	863.6	780	744	2455±5	714	2295	765	8	18	250
244.3	1042.9	609.6	863.6	780	744	2405±5	714	2244	748	8	18	250
244.3	1042.9	609.6	863.6	780	744	2405±5	714	2244	748	8	18	250

OVERALL RANGE AND PERFORMANCE DETAILS

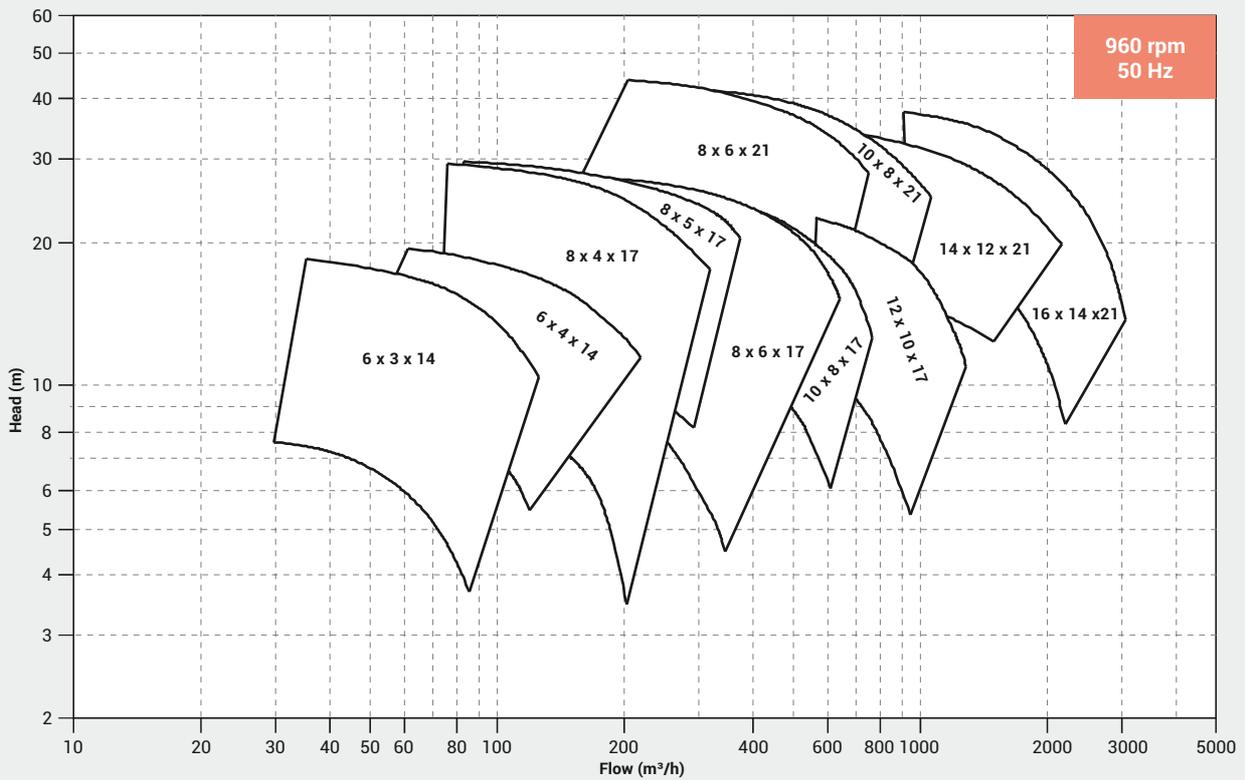
Sl. No.	Pump Size - Suction x Discharge / Impeller Sizes in inch (mm)	Suction Nozzle Dia. in mm	Discharge Nozzle Dia. in mm	Pump Weight in Kg	Speed in rpm	Max. Working Pressure in Bar	Max. Flow Rate in m ³ /hr	Max. Total Head in m	Max. Solid Size in mm
1	6 x 3 x 14 (150 x 80 x 350)	150	80	275	720 / 960 / 1450	10	172	49	38
2	6 x 4 x 14 (150 x 100 x 350)	150	100	275	720 / 960 / 1450	10	279	50	41
3	8 x 4 x 17 (200 x 100 x 430)	200	100	470	720 / 960 / 1450	10	421	68	38
4	8 x 5 x 17 (200 x 125 x 430)	200	125	480	720 / 960 / 1450	10	555	69	63
5	8 x 6 x 17 (200 x 150 x 430)	200	150	500	720 / 960 / 1450	10	884	67	76
6	10 x 8 x 17 (250 x 200 x 430)	250	200	550	720 / 960 / 1450	10	1100	64	63
7	12 x 10 x 17 (300 x 250 x 430)	300	250	650	720 / 960 / 1450	10	1850	54	38
8	8 x 6 x 21 (200 x 150 x 530)	200	150	850	720 / 960 / 1450	10	1110	102	76
9	10 x 8 x 21 (250 x 200 x 530)	250	200	900	720 / 960 / 1450	10	1520	101	76
10	14 x 12 x 21 (350 x 300 x 530)	350	300	1050	720 / 960	10	2150	39	95
11	16 x 14 x 21 (400 x 350 x 530)	400	350	1350	720 / 960	10	2960	42	50 (*)

(*) Using 4 vane impeller design – optional 3 vane allows for larger solids size.

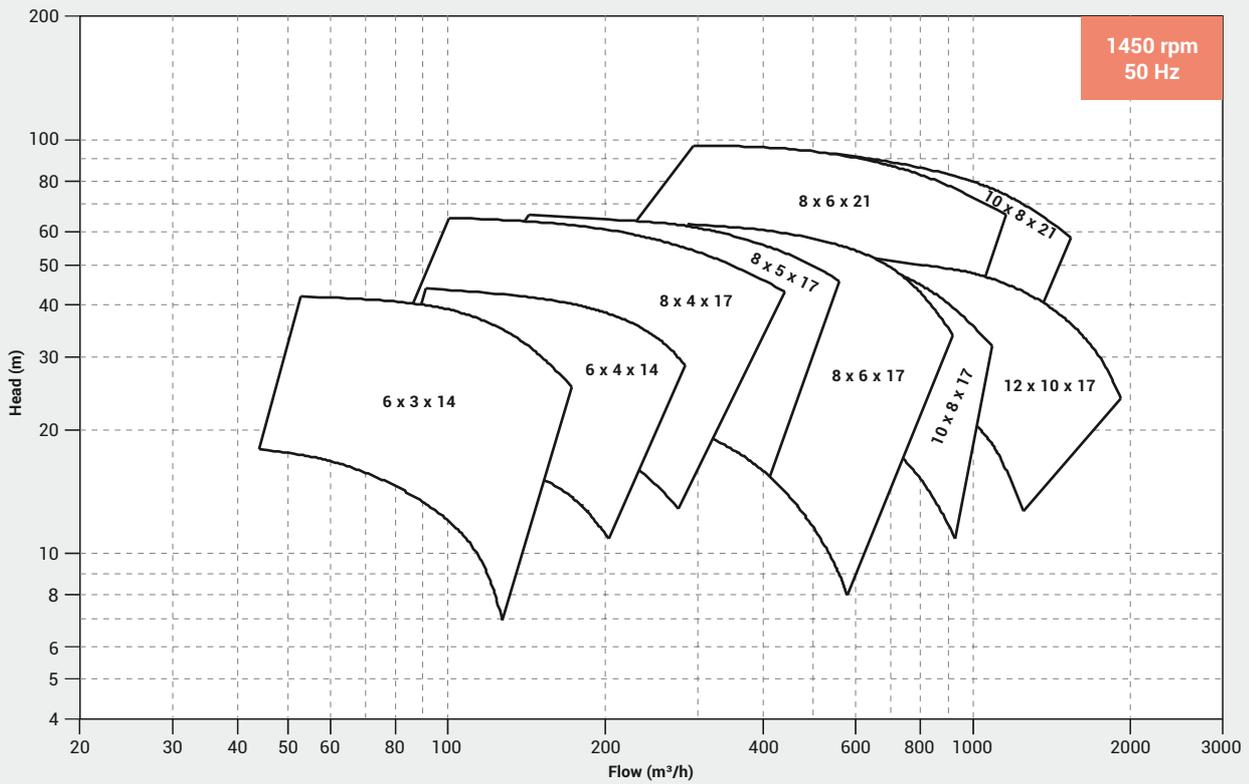
GROUP PERFORMANCE CURVE



GROUP PERFORMANCE CURVE



GROUP PERFORMANCE CURVE





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