



ALLFLO



APP SERIES

⊙ Reliability

⊙ Energy Saving

⊙ Environmental Protection

FLUIDS HANDLED

Pulp production
Recycled fibre preparation
Papermaking
Chemical industry
Food industry
Energy supply
Water supply
Waste water treatment

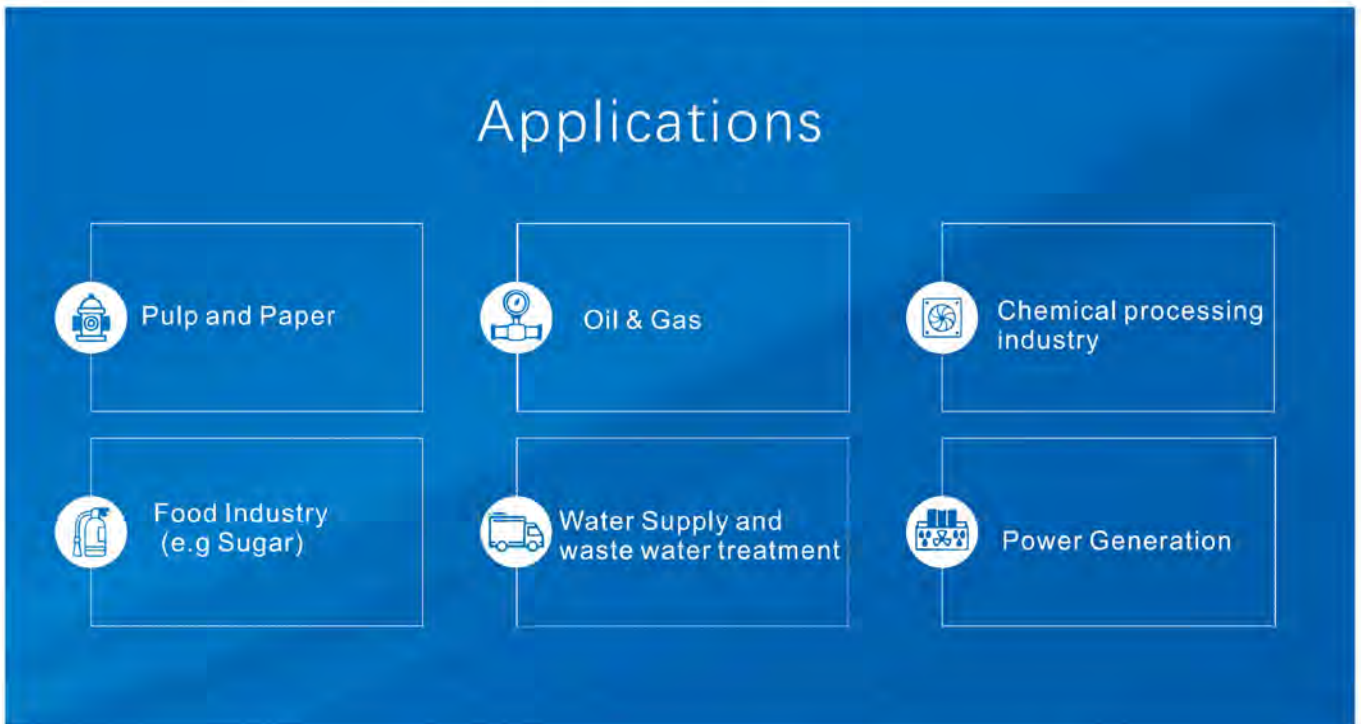


PROCESS PUMPS

Design & Features

APP design is accordance with international standards of ISO2858/5199. APP pumps with semi open impeller and front/back wear plate. And it can transfer a certain amount of gas medium, with a good meet for pulp and paper making process requirements, ensures a robust, long last, high performing product consumers have come to depend on from Allflo.

APP type pulp pump degests and absorbs the asvantages of foreign advanced produts. summarizes the research experience of our company engaged in paper industry for many years and cooperated with the institute technical research. it is a successfully developed upgarding products.



Model Designation(Examples): APP 125X100-315

APP

Series

125

Suction(mm)

100

Discharge(mm)

315

Impeller Norminal Diameter(mm)

Design



Design	Performance and dimension as per ISO 2858/5199
Structure	Horizontal, End suction, Single suction, Volute casing
DN(mm)	Suction size: 50~350, Discharge size: 32~300
Flange	DIN 2501, PN16

Material



Pump parts	Material
Casing / Impeller	Cast iron/Stainless steel
Shaft	Stainless steel
Shaft seal	Mechanical Seal
Bearing lubrication	Oil lubrication
Bearing Brand	Heavy duty NTN

Operating Data



Speed	Up to 3600rpm
Flow Rate(Q)	Up to 1900m ³ /h-1450rpm 2430m ³ /h-1750rpm
Head(H)	Up to 160m
Pressure	PN16 as standard
Liquid Temperature	Up to 120 °C

Impeller

Optimized Hydraulic design with semi-open impeller diameter up to 547mm, PPS pumps have wider performance coverage EN 25199/22858

Heavy Duty Tough Bearings

Cylindrical roller bearing at the impeller end, two angular contact ball bearing (back to back arrangement) at the drive end. Design bearing life up to 25000 hours. Long service life

Sturdy Shaft

Ensures minimum shaft deflection and low mechanical vibration

Wear Plate

Two wear plate according to impeller design To protect the pump casing

Shaft sealing

Single as standard, Double mechanical seal, Cartridge mechanical seal, Gland packing are available
Single mechanical seal for stock conveyance with sealing and rinsing water
Capital investment and operating cost savings

Application

The PPS pulp pump is suitable for handling water or similar liquids mainly used in the following.

- Chemical and Petrochemical Industry
- Oil refining plants
- Paper making industry
- Waste water treatment
- Pharmaceutical
- Food Industry

Axial Force Balance

The axial force are mostly balance by the front/rear wear plate and balancing holes in impeller design, The residual axial force are balanced by the back to back arranged contact ball bearings at the drive end.

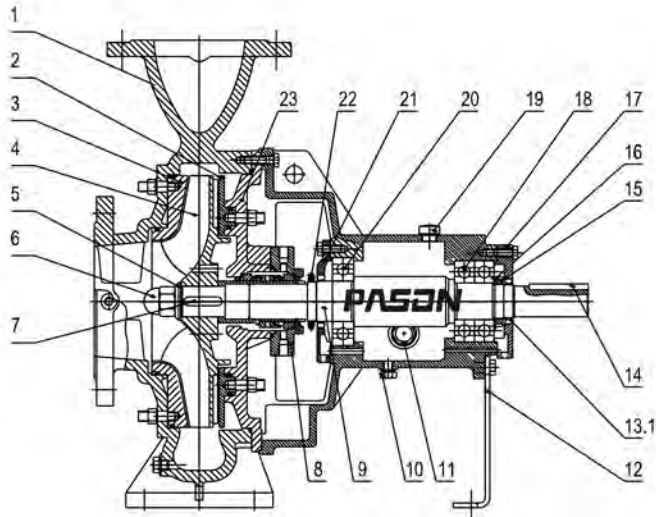
Flange

Flange dimensions comply to ISO 7005-1:1992 PN16 Mpa as standard, other flange (including ANSI flange) are also available by request

Operating Data --50Hz

Pump sizes		32mm to 350mm
Flow	up to	2000 m ³ /h
Head	up to	160 m
Temperature	up to	175°C
Speed	up to	3600 rpm
Pressure	up to	24 Bar

Section Drawing

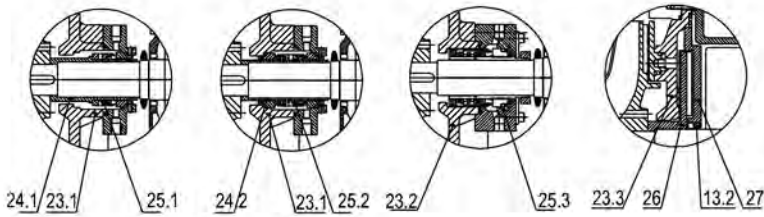


Single Seal

Double Seal

Cartridge Seal

Dynamic Seal

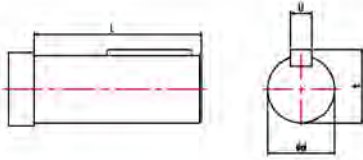


S/N	Part Name
1	Pump Casing
2	Cover wear plate
3	Casing wear plate
4	Impeller
5	Impeller Washer
6	Impeller nut
7	Impeller key
8	Seal Cover
9	Pump Shaft

S/N	Part Name
10	Drain plug
11	Oil Indicator
12	Support Foot
13	Oil Seal
14	Key (coupling)
15	Nut
16	Flat washer
17	Bearing Cover
18	Angular contact ball bearing

S/N	Part Name
19	Oil hole cover
20	Cylindrical roller bearing
21	Bearing Cover
22	Slinger
23.1/23.2/23.3	Casing Cover
24.1/24.2	Short Sleeve
25.1/25.2/25.3	Mechanical seal
26	Vice impeller
27	Seal plate

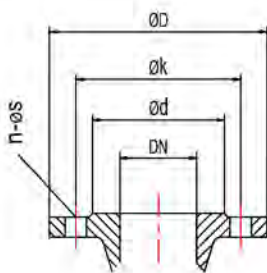
Intalling Dimensions-1



Drive Shaft Dimensions

Shaft No	ϕd	l	m	t
1	24	50	8	27
2	32	80	10	35
3	42	110	12	45
4	48	110	14	51.5
5	65	140	18	69
6	75	170	20	79.5

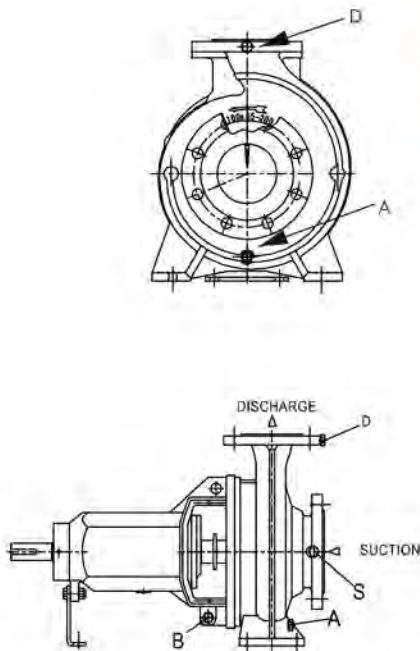
Flange Connecting Dimension(ISO 2084,PN16)



DN	ϕd	ϕk	ϕD	n	ϕS
32	76	100	140	4	18
40	84	110	150	4	18
50	99	125	165	4	18
65	118	145	185	4	18
80	132	160	200	8	18
100	156	180	220	8	18
125	184	210	250	8	18
150	211	240	285	8	22
200	266	295	340	12	22
250	319	355	405	12	26
300	370	410	460	12	26
350	429	470	520	16	26

Notes: 1. Optional Flange: AS2129-1982, ANSI 16.1-1975, JISB 2210-1984

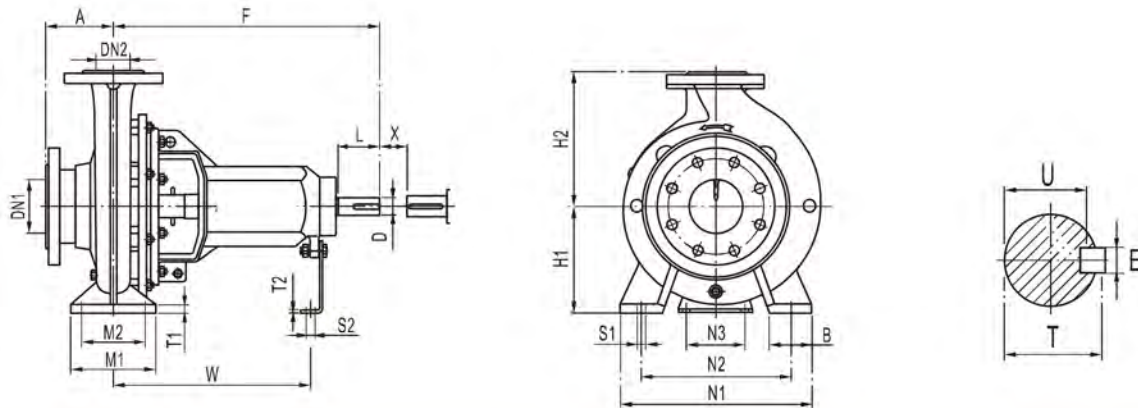
Service Connections



Pump Model	A	B	D	S
	Casing Drain	Housing Drain	Gauge Drain	Gauge Drain
50X32-160	1/4	3/8	1/4	1/4
50X32-200	1/4	3/8	1/4	1/4
65X40-200	1/4	3/8	1/4	1/4
65X40-250	1/4	3/8	1/4	1/4
65X40-315	1/4	3/8	1/4	1/4
65X50-160	1/4	3/8	1/4	1/4
80X50-200	1/4	3/8	1/4	1/4
80X50-250	1/4	3/8	1/4	1/4
80X50-315	1/4	3/8	1/4	1/4
80X65-160	1/4	3/8	1/4	1/4
100X65-200	1/4	3/8	1/4	1/4
100X65-250	1/4	3/8	1/4	1/4
100X65-315	1/4	3/8	1/4	1/4
100X80-160	1/4	3/8	1/4	1/4
125X80-400	1/4	3/8	1/4	1/4
125X100-200	1/4	3/8	1/4	1/4
125X100-250	1/4	3/8	1/4	1/4
125X100-315	1/4	3/8	1/4	1/4
125X100-400	1/4	3/8	1/4	1/4

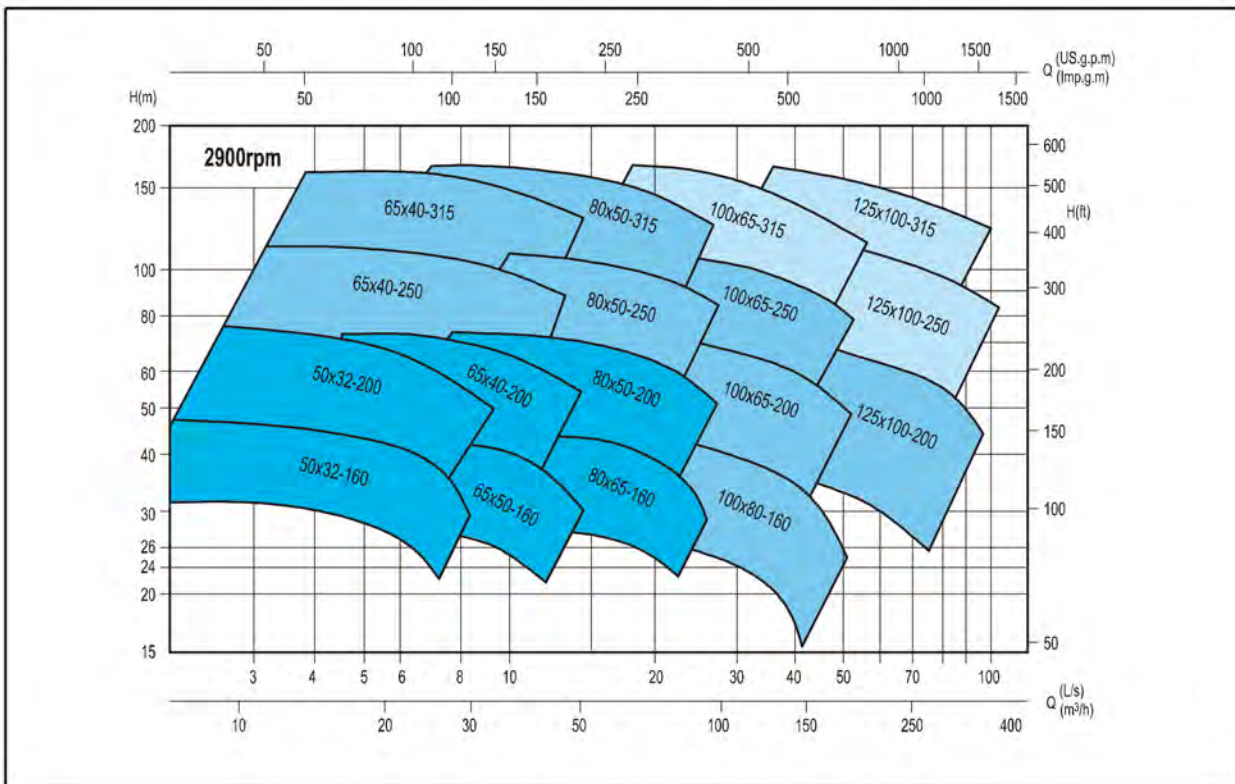
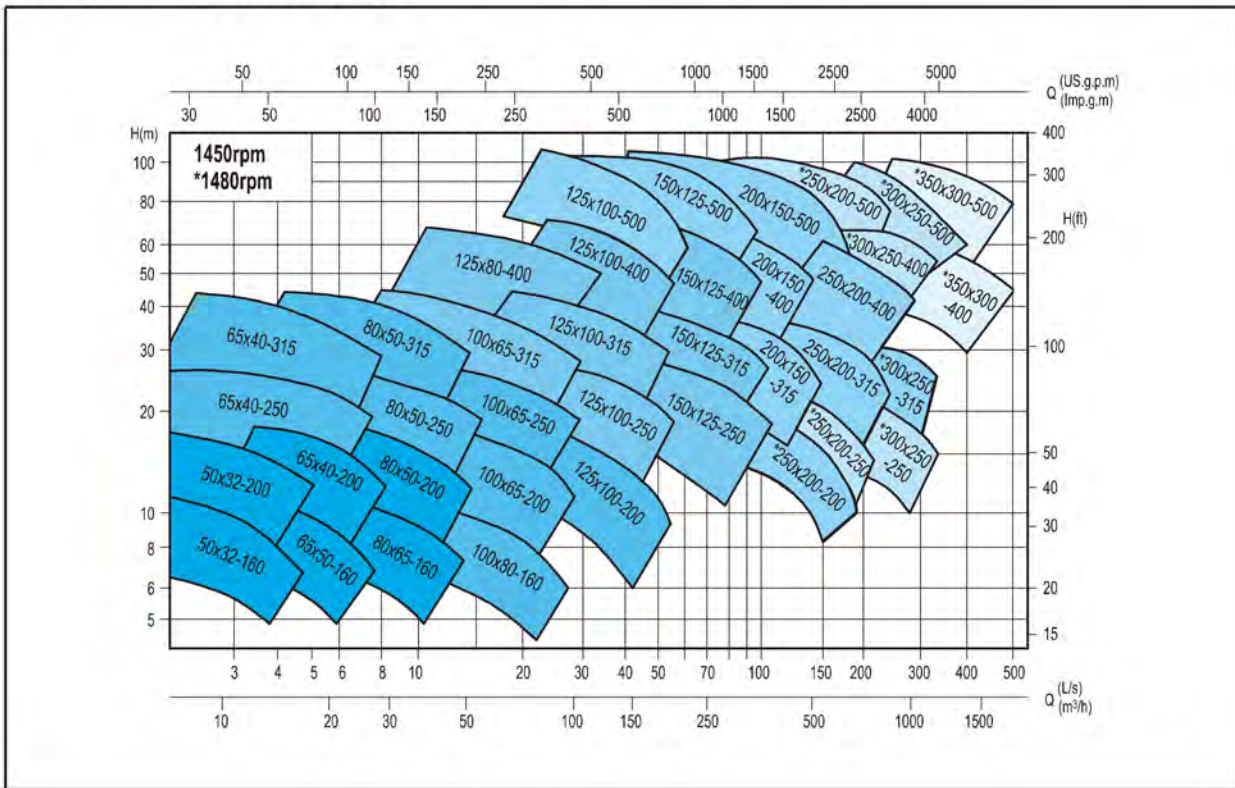
Pump Model	A	B	D	S
	Casing Drain	Housing Drain	Gauge Drain	Gauge Drain
125X100-500	3/8	3/8	3/8	3/8
150X125-250	1/4	3/8	1/4	1/4
150X125-315	1/4	3/8	1/4	1/4
150X125-400	1/4	3/8	1/4	1/4
150X125-500	3/8	3/8	3/8	3/8
200X150-315	3/8	3/8	3/8	3/8
200X150-400	3/8	3/8	3/8	3/8
200X150-500	3/8	3/8	3/8	1/4
250X200-200	3/8	3/8	3/8	3/8
250X200-250	1/2	3/8	1/2	1/2
250X200-315	3/8	3/8	3/8	3/8
250X200-400	3/8	3/8	3/8	3/8
250X200-500	1/2	3/8	1/2	1/2
300X250-250	1/2	3/8	1/2	1/2
300X250-315	3/8	3/8	3/8	3/8
300X250-400	1/2	3/8	1/2	1/2
300X250-500	1/2	3/8	1/2	1/2
350X300-400	1/2	3/8	1/2	1/2
350X300-500	1/2	3/8	1/2	1/2

Intalling Dimensions-2

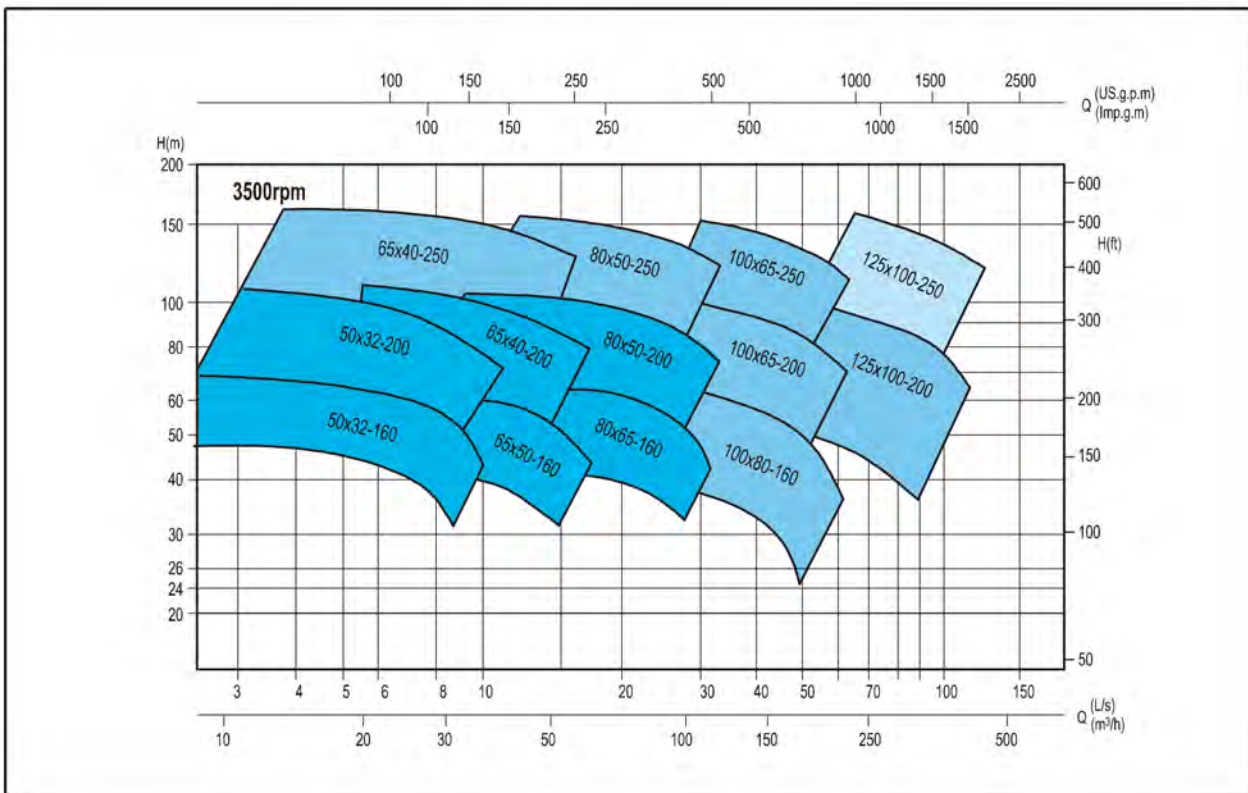
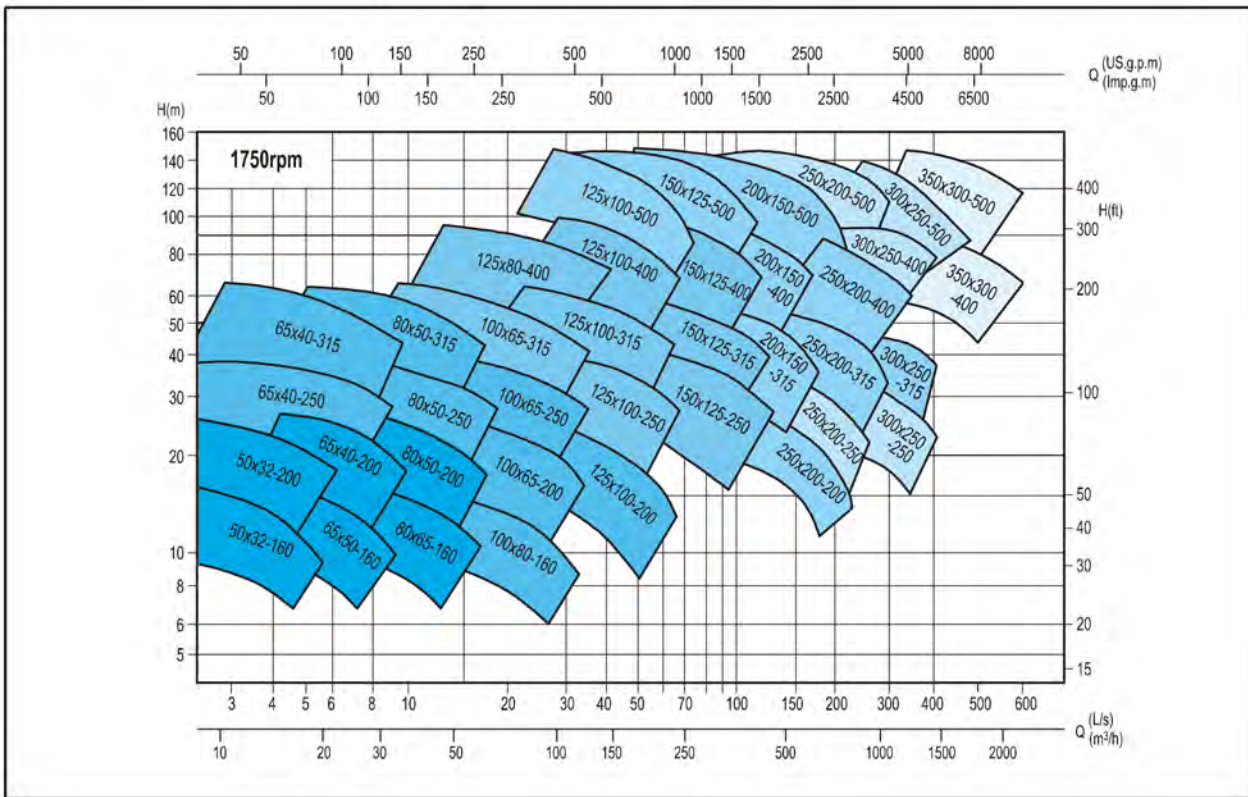


Pump Model	Shaft No.	Flange Size		Pump Dimensions				Foot Dimensions								Bolt Holes		Shaft End					Spacer X ≥	Net Weight	
		DN1	DN2	A	F	H1	H2	B	M1	M2	N1	N2	N3	W	T1	T2	S1	S2	D	L	T	E			U
50X32-160	1	50	32	80	385	132	160	50	100	70	240	190	110	285	12	6	M12	M12	24	50	27	8	20	100	38
50X32-200	1	50	32	80	385	160	180	50	100	70	240	190	110	285	12	6	M12	M12	24	50	27	8	20	100	46
65X40-200	1	65	40	100	385	160	180	50	100	70	265	212	110	285	13	6	M12	M12	24	50	27	8	20	100	48
65X40-250	2	65	40	100	500	180	225	65	125	95	320	250	110	370	14	6	M12	M12	32	80	35	10	27	100	70
65X40-315	2	65	40	125	500	200	250	65	125	95	345	280	110	370	16	6	M12	M12	32	80	35	10	27	100	80
65X50-160	1	65	50	80	385	132	160	50	100	70	240	190	110	285	11	6	M12	M12	24	50	27	8	20	100	40
80X50-200	1	80	50	100	385	160	200	50	100	70	265	212	110	285	13	6	M12	M12	24	50	27	8	20	100	52
80X50-250	2	80	50	125	500	180	225	65	125	95	320	250	110	370	15	6	M12	M12	32	80	35	10	27	100	72
80X50-315	2	80	50	125	500	225	280	65	125	95	345	280	110	370	18	6	M12	M12	32	80	35	10	27	100	87
80X65-160	1	80	65	100	385	160	180	50	100	70	265	212	110	285	11	6	M12	M12	24	50	27	8	20	100	46
100X65-200	2	100	65	100	500	180	225	65	125	95	320	250	110	370	14	6	M12	M12	32	80	35	10	27	140	70
100X65-250	2	100	65	125	500	200	250	80	160	120	360	280	110	370	16	6	M16	M12	32	80	35	10	27	140	80
100X65-315	3	100	65	125	530	225	280	80	160	120	400	315	110	370	18	6	M16	M12	42	110	45	12	37	140	142
100X80-160	2	100	80	100	500	160	200	65	125	95	280	212	110	370	14	6	M12	M12	32	80	35	10	27	100	68
125X80-400	3	125	80	125	530	280	355	80	160	120	435	355	110	370	20	6	M16	M12	42	110	45	12	37	140	165
125X100-200	2	125	100	125	500	200	280	80	160	120	360	280	110	370	17	6	M16	M12	32	80	35	10	27	140	85
125X100-250	3	125	100	140	530	225	280	80	160	120	400	315	110	370	18	6	M16	M12	42	110	45	12	37	140	126
125X100-315	3	125	100	140	530	250	315	80	160	120	400	315	110	370	19	6	M16	M12	42	110	45	12	37	140	135
125X100-400	3	125	100	140	530	280	355	100	200	150	500	400	110	370	20	6	M20	M12	42	110	45	12	37	140	175
125X100-500	4	125	100	160	670	355	450	100	200	150	550	450	110	500	25	10	M20	M16	48	110	51.5	14	42.5	180	338
150X125-250	3	150	125	140	530	250	355	80	160	120	400	315	110	370	19	6	M16	M12	42	110	45	12	37	140	140
150X125-315	3	150	125	140	530	280	355	100	200	150	500	400	110	370	20	6	M20	M12	42	110	45	12	37	140	150
150X125-400	3	150	125	140	530	315	400	100	200	150	500	400	110	370	21	6	M20	M12	42	110	45	12	37	140	186
150X125-500	4	150	125	160	670	355	450	100	200	150	550	450	140	500	25	10	M20	M16	48	110	51.5	14	42.5	180	350
200X150-315	4	200	150	160	670	315	400	100	200	150	550	450	140	500	25	10	M20	M16	48	110	51.5	14	42.5	180	222
200X150-400	4	200	150	160	670	315	450	100	200	150	550	450	140	500	25	10	M20	M16	48	110	51.5	14	42.5	180	300
200X150-500	4	200	150	160	670	400	500	100	200	150	550	450	140	500	25	10	M20	M16	48	110	51.5	14	42.5	180	382
250X200-200	4	250	200	180	670	315	450	100	200	150	550	450	140	500	22	10	M20	M16	48	110	51.5	14	42.5	180	345
250X200-250	5	250	200	180	885	315	450	100	200	150	550	450	180	670	25	12	M24	M16	65	140	69	18	58	250	490
250X200-315	4	250	200	180	670	315	450	100	200	150	550	450	140	500	25	10	M20	M16	48	110	51.5	14	42.5	180	277
250X200-400	4	250	200	180	670	355	500	100	200	150	550	450	140	500	25	10	M20	M16	48	110	51.5	14	42.5	180	340
250X200-500	5	250	200	225	885	400	580	150	315	250	760	630	180	670	28	12	M24	M16	65	140	69	18	58	250	600
300X250-250	5	300	250	225	885	355	560	125	250	190	630	500	180	670	24	12	M24	M16	65	140	69	18	58	250	450
300X250-315	4	300	250	225	670	355	500	125	250	190	690	560	180	500	24	12	M20	M16	48	110	51.5	14	42.5	180	350
300X250-400	5	300	250	225	885	450	560	150	250	190	690	560	180	670	28	12	M24	M16	65	140	69	18	58	250	480
300X250-500	5	300	250	225	885	450	630	150	315	250	760	630	180	670	28	12	M24	M16	65	140	69	18	58	250	690
350X300-400	6	350	300	250	975	450	600	180	315	250	760	630	180	730	24	12	M24	M16	75	170	79.5	20	67.5	250	780
350X300-500	6	350	300	250	975	500	650	225	360	270	900	750	180	730	32	12	M30	M16	75	170	79.5	20	67.5	250	910

Performance Chart (50Hz)



Performance Chart (60Hz)





Phone:
+(66) 2320 1994



Email :
info@waterfieldasia.com



website:
www.waterfieldasia.com



Address :
623 Soi On-nut 70/1 Sub 2 , Pravet Sub-District,
Pravet District , Bangkok 10250, Thailand.

WFA
WATER FIELD ASIA

