

## Applications

1. Heating and cooling water circulation.
2. Broad range of industrial applications.
3. Open loop and close loop water circuit systems.
4. Water supply and pressure boosting systems.
6. Process water for paper mill, brewery, refinery.
7. Boiler feed, washing and cleaning system.
8. General purpose water transfer and drainage.
9. Water supply for fire-fighting systems.

## Features

### 1. International standard

In accordance with ISO standard 2858, 5199 and European standard EN22858-interchangeable with others manufactured to the same international standard.

### 2. Heavy duty construction and Low power consumption

- Back-pull-out design for easy removal of bearing housing assembly and the rotor for repair without having to disturb the connected pipeline.
- Shaft sealing with mechanical seal as standard for protecting against environment damage due to leakage.
- Conical mounting with shaft and impeller increase the reliability when pump operated up to 3600rpm maximum and easily servicing for the impeller removed from the shaft.
- Oversized bearing module with quality bearing (deep groove ball bearing) to ensure the pump with safe operation even during operation with heavy duty at high speed.

### 3. Dynamically balanced impeller

Impeller hydraulically and dynamically balanced minimizes the vibration and noise level and ensures always smooth operation and long operational lifetime.

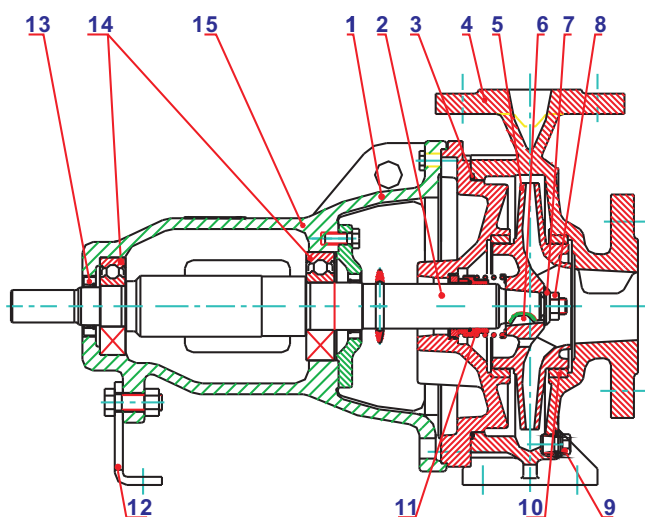
### 4. High interchangeability

All series of 29 types only need 4 overhangs, 4 shafts, 10 casing cover, enhanced components interchangeability, also lower accessories inventory.

### 5. Various materials available

To suit the demand for the variety of applications, ISO model provides Cast Iron GG25 as standard and various optional materials construction upon aggressive and abrasive medium.

## Sectional View



PART NAME	STANDARD MATERIAL	AVAILABLE MATERIAL
1. Frame	FC250	-----
2. Pump Shaft	SUS420	SUS316
3. O-ring	TEFLON	-----
4. Pump casing	FC250	SUS316
5. Impeller	FC250 or Bronze	SUS316
6. Key	SUS304	-----
7. Spring Washer	SUS304	SUS316
8. Impeller Nut	Bronze	SUS316
9. Plug	FC250	SUS316
10. Wear Ring	Bronze	-----
11. Mechanical Seal	SIC+Graphite	SIC/Tungsten
12. Support Foot	SS400	-----
13. Oil Seal	NBR	Teflon
14. Bearing	Steel alloy	-----
15. Bearing Housing	FC250	-----

- Ductile cast iron is available for pump material selection.

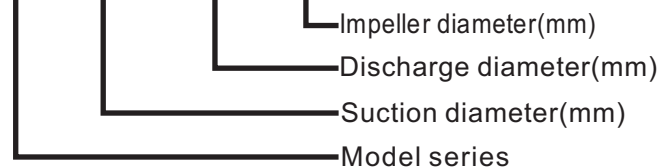
## Operating Conditions

1. Discharge flanges: 32mm to 200mm.
2. Suction flanges: 50mm to 250mm.
3. Water Capacity: Max. 900 m<sup>3</sup>/hr.
4. Head: Up to 160M.
5. Working pressure: 16bar~24bar.
6. Liquid temperature: 0~105°C.

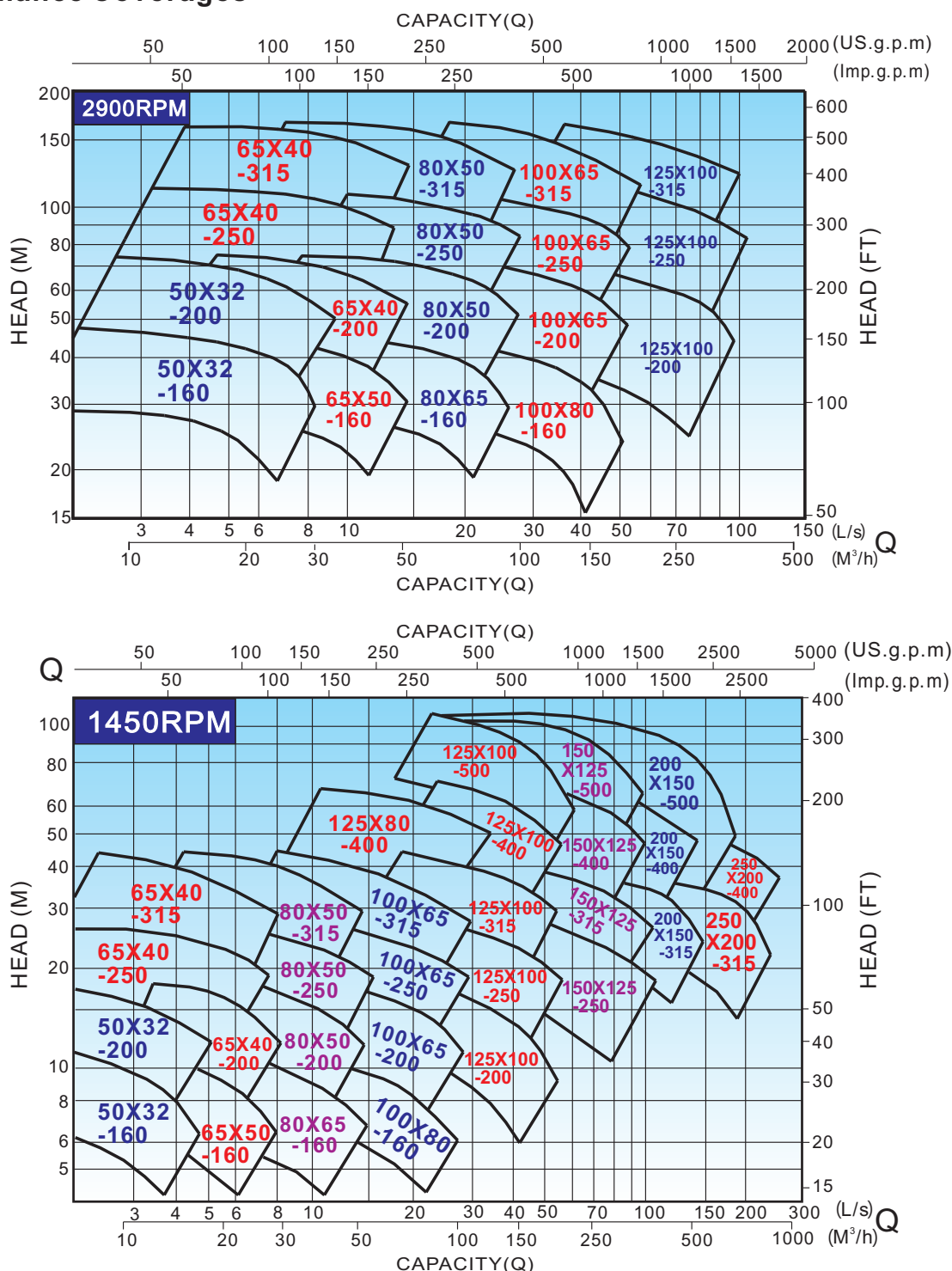
(Remarks: Technical data with 60Hz is available upon request.)

## Model Code

**ISO125X100-250**



## Performance Coverages



## Performance Tables

Model	Capacity		Head (m)	Speed (r/min)	Efficiency (%)	Assembly Motor Efficiency				NPSHR (%)	Impeller (mm)	Weight (kg)
	(m³/h)	(L/s)				Power (kW)	r≤ 1.00	r≤ 1.35	r≤ 1.84			
50x32-160	23	6.39	40	2900	58	4.32	5.5	7.5	11	3	182	47
	11.5	3.19	10	1450	54	0.58	0.75	1.1	1.5	2		
50x32-160A	22	6.11	36	2900	57	3.79	5.5	7.5	11	3.2	173	
	11	3.05	9	1450	53	0.51	0.75	1.1	1.5	2		
50x32-160B	21	5.83	32.5	2900	57	3.26	4	5.5	7.5	3.3	164	
	10.5	2.92	8	1450	52	0.44	0.55	0.75	1.1	2		
50x32-160C	20	5.5	28.5	2900	55	2.82	4	5.5	7.5	3.4	155	
	10	2.77	7	1450	51	0.37	0.55	0.75	1.1	2.2		
50x32-160D	19	5.28	25.5	2900	54	2.44	3	4	5.5	3.4	146	
	9.5	2.64	6.2	1450	50	0.32	0.55	0.75	1.1	2.4		
50x32-200	23	6.39	65	2900	52	7.83	11	15	18.5	3	228	50
	11.5	3.19	16	1450	48	1.04	1.5	2.2	3	2		
50x32-200A	22	6.11	57.5	2900	51	6.76	11	15	18.5	3	217	
	11	3.05	14	1450	48	0.87	1.1	1.5	2.2	2		
50x32-200B	21	5.83	50	2900	50	5.72	7.5	11	15	3	205	
	10.5	2.92	12.5	1450	47	0.76	1.1	1.5	2.2	2		
50x32-200C	20	5.55	44	2900	49	4.89	7.5	11	15	3	194	
	10	2.77	10.7	1450	46	0.63	1.1	1.1	1.5	2.2		
50x32-200D	19	5.28	37.5	2900	48	4.04	5.5	7.5	11	3	182	
	9.5	2.64	9	1450	45	0.52	0.75	1.1	1.5	2.4		
65x50-160	36	10	40	2900	67	5.85	7.5	11	15	3	182	48
	18	5	9.5	1450	56	0.84	1.1	1.5	2.2	2		
65x50-160A	34	9.44	36.5	2900	66	5.12	7.5	11	15	3	173	
	17	4.72	8.8	1450	55	0.74	1.1	1.5	2.2	2		
65x50-160B	32	8.9	33	2900	65	4.43	5.5	7.5	11	3	164	
	16	4.44	8	1450	54	0.65	1.1	1.5	2.2	2		
65x50-160C	30	8.33	29	2900	64	3.7	5.5	7.5	11	3.2	155	
	15	4.16	7.2	1450	53	0.56	0.75	1.1	1.5	2		
65x50-160D	28	7.78	25	2900	62	3.08	4	5.5	7.5	3.2	146	
	14	3.89	6.4	1450	52	0.47	0.75	1.1	1.5	2		
65x40-200	36	10	66	2900	61	10.64	15	18.5	30	3	228	52
	18	5	16	1450	57	1.38	2.2	3	4	2		
65x40-200A	34	9.44	60	2900	61	9.11	15	18.5	22	3	217	
	17	4.72	14.6	1450	56	1.21	2.2	2.2	3	2		
65x40-200B	32	8.9	53	2900	61	7.58	11	15	18.5	3	205	
	16	4.44	13	1450	55	1.03	1.5	2.2	3	2		
65x40-200C	30	8.33	47	2900	60	6.4	11	15	18.5	3	194	
	15	4.16	11.6	1450	54	0.88	1.5	2.2	3	2		
65x40-200D	28	7.78	42	2900	59	5.43	7.5	11	15	3	182	
	14	3.89	10	1450	53	0.72	1.1	1.5	2.2	2		

## Performance Tables

Model	Capacity		Head (m)	Speed (r/min)	Efficiency (%)	Assembly Motor Efficiency				NPSHR (%)	Impeller (mm)	Weight (kg)
	(m³/h)	(L/s)				Power (kW)	r≤ 1.00	r≤ 1.35	r≤ 1.84			
65x40-250	36	10	100	2900	50	19.62	30	37	45	3	278	86
	18	5	25	1450	47	2.6	4	5.5	7.5	2		
65x40-250A	34	9.44	92	2900	49	17.4	22	30	37	3	264	
	17	4.72	23	1450	47	2.27	3	4	5.5	2		
65x40-250B	32	8.9	82	2900	48	14.9	22	30	37	3	250	
	16	4.44	20.5	1450	46	1.94	3	4	5.5	2		
65x40-250C	30	8.33	73	2900	47	12.7	18.5	22	30	3	236	
	15	4.16	18	1450	45	1.64	2.2	3	4	2.2		
65x40-250D	28	7.78	63	2900	46	10.45	15	18.5	22	3	222	
	14	3.89	15.8	1450	44	1.37	2.2	3	4	2.4		
65x40-315	36	10	145	2900	44	32.33	45	75	90	3	342	96
	18	5	36	1450	40	4.42	5.5	7.5	11	2		
65x40-315A	34	9.44	132	2900	43	28.4	45	55	75	3	325	
	17	4.72	33	1450	40	3.82	5.5	7.5	11	2		
65x40-315B	32	8.9	118	2900	42	24.51	37	45	75	3	308	
	16	4.44	30	1450	39	3.35	4	5.5	7.5	2		
65x40-315C	30	8.33	106	2900	41	21.14	30	37	55	3	291	
	15	4.16	27	1450	38	2.9	4	5.5	7.5	2.2		
65x40-315D	28	7.78	94	2900	40	17.93	30	37	45	3	274	
	14	3.89	23	1450	37	2.37	3	4	5.5	2.4		
80x65-160	70	19.4	40	2900	77	9.91	15	22	30	3	182	54
	36	10	9.5	1450	74	1.26	2.2	2.2	3	2		
80x65-160A	67	18.6	36	2900	77	8.54	11	15	22	3	173	
	34	9.44	8.8	1450	73	1.12	1.5	2.2	3	2		
80x65-160B	63	17.5	32	2900	76	7.23	11	15	18.5	3	164	
	32	8.89	7.6	1450	72	0.92	1.5	2.2	2.2	2		
80x65-160C	60	16.7	28	2900	75	6.1	7.5	11	15	3	155	
	30	8.33	6.7	1450	71	0.77	1.1	1.5	2.2	2.2		
80x65-160D	56	15.6	24	2900	74	4.95	7.5	11	15	3	146	
	28	7.78	5.8	1450	70	0.63	1.1	1.1	1.5	2.4		
80x50-200	70	19.4	68	2900	73	17.77	22	30	-	3	228	54
	36	10	16	1450	70	2.24	3	4	5.5	2		
80x50-200A	67	18.6	62	2900	72	15.72	22	30	-	3	217	
	34	9.44	14.5	1450	69	1.95	3	4	5.5	2		
80x50-200B	63	17.5	55	2900	71	13.3	18.5	22	30	3	205	
	32	8.89	13	1450	68	1.67	2.2	3	4	2		
80x50-200C	60	16.7	48	2900	70	11.21	15	22	30	3	194	
	30	8.33	11.8	1450	66	1.46	2.2	3	4	2		
80x50-200D	56	15.6	41	2900	69	9.07	11	15	22	3	182	
	28	7.78	10	1450	65	1.17	1.5	2.2	3	2		

## Performance Tables

Model	Capacity		Head (m)	Speed (r/min)	Efficiency (%)	Assembly Motor Efficiency				NPSHR (%)	Impeller (mm)	Weight (kg)
	(m³/h)	(L/s)				Power (kW)	r≤ 1.00	r≤ 1.35	r≤ 1.84			
80x50-250	70	19.4	100	2900	65	29.93	45	55	75	3	278	82
	36	10	24	1450	65	3.61	5.5	7.5	11	2		
80x50-250A	67	18.6	92	2900	65	25.84	37	45	75	3	264	
	34	9.44	22	1450	65	3.13	5.5	7.5	11	2		
80x50-250B	63	17.5	83	2900	64	22.26	30	45	55	3	250	
	32	8.89	20.5	1450	64	2.79	4	5.5	7.5	2		
80x50-250C	60	16.7	75	2900	63	19.46	30	37	45	3	236	
	30	8.33	18.5	1450	63	2.4	4	5.5	7.5	2		
80x50-250D	56	15.6	65	2900	62	16.0	22	30	37	3	222	
	28	7.78	16	1450	62	1.97	3	4	5.5	2		
80x50-315	70	19.4	150	2900	56	51.09	75	90	-	3	342	108
	36	10	37	1450	52	6.98	11	15	18.5	2		
80x50-315A	67	18.6	135	2900	55	44.81	55	75	-	3	325	
	34	9.44	33	1450	52	5.88	11	11	15	2		
80x50-315B	63	17.5	121	2900	54	38.47	55	75	90	3	308	
	32	8.89	29.5	1450	51	5.04	7.5	11	15	2		
80x50-315C	60	16.7	107	2900	53	33.01	45	55	75	3.2	291	
	30	8.33	26	1450	50	4.25	7.5	11	11	2.2		
80x50-315D	56	15.6	94	2900	51	28.13	37	45	75	3.4	274	
	28	7.78	23	1450	48	3.66	5.5	7.5	11	2.4		
100x80-160	140	39	35	2900	74	18.04	22	30	45	4	182	78
	70	19.5	8.5	1450	71	2.28	3	4	5.5	3		
100x80-160A	133	37	31	2900	74	15.18	18.5	30	37	4	173	
	67	18.6	7.8	1450	70	2.03	3	4	5.5	3		
100x80-160B	126	35	28	2900	73	13.17	18.5	30	37	4	164	
	63	17.5	6.8	1450	69	1.69	2.2	3	4	3		
100x80-160C	120	33.3	24	2900	72	10.9	15	22	30	4	155	
	60	16.6	6	1450	68	1.44	2.2	3	4	3		
100x80-160D	112	31	21	2900	70	9.16	15	18.5	22	4	146	
	56	15.5	5.2	1450	66	1.2	2.2	2.2	3	3		
100x65-200	140	39	62	2900	78	30.31	45	55	75	4	228	78
	70	19.5	15	1450	72	3.97	5.5	7.5	11	2.5		
100x65-200A	133	37	57	2900	77	26.81	37	45	75	4	217	
	67	18.6	13.5	1450	71	3.47	5.5	7.5	11	2.5		
100x65-200B	126	35	51	2900	76	23.02	30	37	55	4	205	
	63	17.5	12.5	1450	70	3.06	4	5.5	7.5	2.5		
100x65-200C	120	33.3	45	2900	74	19.87	30	37	45	4	194	
	60	16.6	11	1450	68	2.64	4	5.5	7.5	2.8		
100x65-200D	112	31	39	2900	73	16.31	22	30	37	4	182	
	56	15.5	9.5	1450	66	2.2	3	4	5.5	3		



## Performance Tables

Model	Capacity		Head (m)	Speed (r/min)	Efficiency (%)	Assembly Motor Efficiency				NPSHR (%)	Impeller (mm)	Weight (kg)
	(m³/h)	(L/s)				Power (kW)	r≤ 1.00	r≤ 1.35	r≤ 1.84			
100x65-250	140	39	96	2900	73	50.14	75	90	-	4	278	94
	70	19.5	24	1450	70	6.54	11	15	18.5	3		
100x65-250A	133	37	86	2900	72	43.26	55	75	-	4	264	
	67	18.6	21.5	1450	69	5.69	11	11	15	3		
100x65-250B	126	35	76	2900	71	36.73	55	75	90	4	250	
	63	17.5	19	1450	68	4.8	7.5	11	15	3		
100x65-250C	120	33.3	68	2900	70	31.75	45	55	75	4	236	
	60	16.6	16.5	1450	67	4.03	5.5	7.5	11	3		
100x65-250D	112	31	58	2900	68	26.02	37	45	75	4	222	
	56	15.5	14.5	1450	65	3.4	4	5.5	7.5	3		
100x65-315	140	39	146	2900	63	88.41	132	160	200	4	342	143
	70	19.5	36	1450	61	11.26	15	22	30	2.5		
100x65-315A	133	37	137	2900	63	78.81	110	132	200	4	325	
	67	18.6	32	1450	60	9.74	15	18.5	30	2.5		
100x65-315B	126	35	118	2900	62	65.35	90	110	160	4	308	
	63	17.5	28.5	1450	59	8.29	11	15	22	2.7		
100x65-315C	120	33.3	105	2900	61	56.29	75	110	132	4.2	291	
	60	16.6	25.5	1450	58	7.19	11	15	18.5	2.8		
100x65-315D	112	31	92	2900	59	47.59	75	90	110	4.2	274	
	56	15.5	22.5	1450	56	6.13	11	11	15	2.8		
125x80-400	90	25	60	1450	58	25.37	37	45	75	2.5	438	188
125x80-400A	86	24	53.5	1450	58	21.62	30	37	55	2.5	416	
125x80-400B	81	22.5	47	1450	57	18.2	30	37	45	2.5	394	
125x80-400C	77	21.4	41.5	1450	56	15.55	22	30	37	2.6	372	
125x80-400D	72	20	36.5	1450	55	13.02	18.5	22	30	2.8	350	
125x100-200	280	78	58	2900	82	53.97	75	90	-	4.5	228	93
	140	39	14.5	1450	78	7.09	11	15	18.5	3		
125x100-200A	266	74	52	2900	82	45.97	55	75	-	4.5	217	
	133	37	13	1450	78	6.04	7.5	11	15	3		
125x100-200B	252	70	45	2900	80	38.63	45	75	90	4.5	205	
	126	35	11.5	1450	77	5.13	5.5	7.5	11	3		
125x100-200C	238	66	39	2900	78	32.43	37	55	75	4.5	194	
	119	33	10	1450	76	4.27	5.5	7.5	11	3		
125x100-200D	224	62	33	2900	77	26.16	37	45	55	4.5	182	
	112	31	8.3	1450	75	3.38	4	5.5	7.5	3		
125x100-250	280	78	95	2900	80	90.61	110	160	200	4	278	146
	140	39	24	1450	78	11.74	15	22	30	2.5		
125x100-250A	266	74	85.5	2900	80	77.47	110	132	200	4	264	
	133	37	21	1450	78	9.76	15	18.5	22	2.5		
125x100-250B	252	70	76	2900	79	66.06	90	110	160	4	250	

## Performance Tables

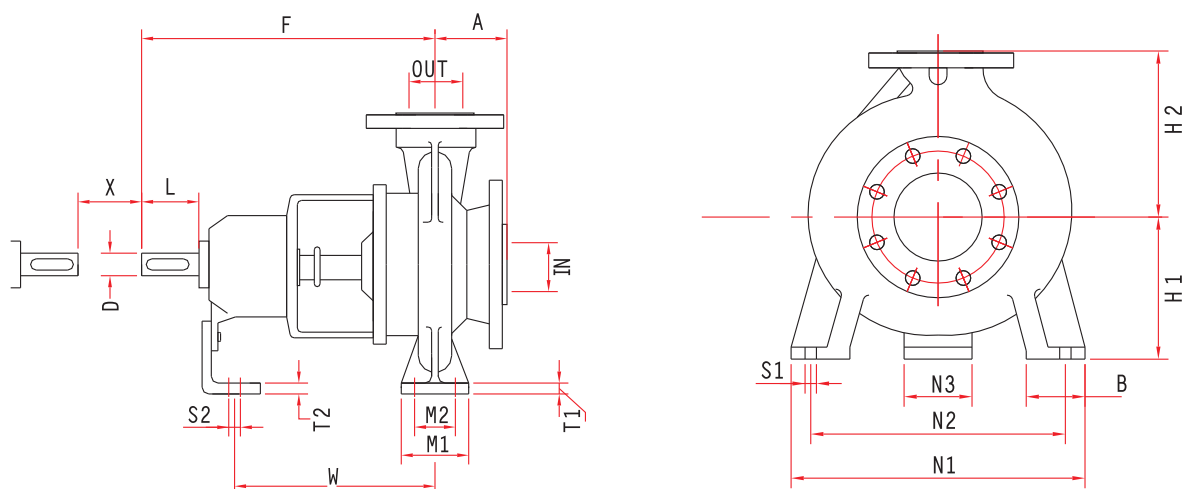
Model	Capacity		Head (m)	Speed (r/min)	Efficiency (%)	Assembly Motor Efficiency				NPSHR (%)	Impeller (mm)	Weight (kg)
	(m³/h)	(L/s)				Power (kW)	r≤ 1.00	r≤ 1.35	r≤ 1.84			
125x100-250B	126	35	18.5	1450	77	8.25	11	15	18.5	2.5	250	146
125x100-250C	238	66	66	2900	78	54.88	75	90	132	4	236	
	119	33	16.5	1450	75	7.13	11	15	18.5	2.5		
125x100-250D	224	62	57	2900	76	45.78	75	75	110	4.5	222	
	112	31	14	1450	73	5.85	7.5	11	15	2.8		
125x100-315	280	78	150	2900	78	146.6	200	-	-	4	342	152
	140	39	37	1450	76	18.57	30	37	45	2.5		
125x100-315A	266	74	135	2900	78	125.4	160	200	-	4	325	
	133	37	33.5	1450	75	16.2	22	30	45	2.5		
125x100-315B	252	70	119	2900	78	104.7	132	200	-	4.2	308	
	126	35	30	1450	74	13.92	18.5	30	37	2.6		
125x100-315C	238	66	105	2900	77	88.3	110	160	200	4.3	291	
	119	33	26	1450	73	11.55	15	22	30	2.7		
125x100-315D	224	62	91	2900	76	72.78	90	132	200	4.5	274	
	112	31	22	1450	72	9.33	15	18.5	22	2.8		
125x100-400	140	39	62	1450	65	36.39	55	75	90	2.5	438	199
125x100-400A	133	37	56	1450	65	31.22	45	55	75	2.5	416	
125x100-400B	126	35	48	1450	64	25.75	37	45	55	2.5	394	
125x100-400C	119	33	43	1450	63	22.13	30	45	55	2.5	372	
125x100-400D	112	31	37	1450	62	18.21	22	30	45	2.5	350	
125x100-500	140	39	93	1450	57	62.24	90	110	160	2.5	547	353
125x100-500A	133	37	85	1450	56	55.01	75	90	132	2.5	520	
125x100-500B	126	35	77	1450	55	48.07	75	90	110	2.5	492	
125x100-500C	119	33	70	1450	54	42.04	55	75	110	2.5	465	
125x100-500D	112	31	64	1450	53	36.85	45	75	90	2.5	437	
150x125-250	252	70	21	1450	80	18.03	30	37	45	2.5	278	158
150x125-250A	240	66.7	19	1450	80	15.53	22	30	37	2.5	264	
150x125-250B	227	63	16.5	1450	79	12.92	18.5	22	30	2.8	250	
150x125-250C	214	59.4	14	1450	78	10.47	15	18.5	30	3	236	
150x125-250D	202	56	11.8	1450	76	8.55	11	15	22	3.5	222	
150x125-315	252	70	36	1450	82	30.15	45	55	75	2.5	342	171
150x125-315A	240	66.7	32	1450	81	25.84	37	45	75	2.5	325	
150x125-315B	227	63	28.5	1450	80	22.04	30	37	55	2.6	308	
150x125-315C	214	59.4	25	1450	79	18.45	30	37	45	2.8	291	
150x125-315D	202	56	21.5	1450	78	15.17	22	30	37	3	274	
150x125-400	252	70	63	1450	77	56.18	75	110	132	3.5	438	213
150x125-400A	240	66.7	57	1450	77	48.41	75	90	132	3.5	416	
150x125-400B	227	63	51	1450	76	41.51	75	90	110	3.5	394	
150x125-400C	214	59.4	46	1450	76	35.30	55	75	90	3.5	372	
150x125-400D	202	56	41	1450	75	30.09	45	55	75	3.5	350	

## Performance Tables

Model	Capacity		Head (m)	Speed (r/min)	Efficiency (%)	Assembly Motor Efficiency				NPSHR (%)	Impeller (mm)	Weight (kg)
	(m <sup>3</sup> /h)	(L/s)				Power (kW)	r ≤ 1.00	r ≤ 1.35	r ≤ 1.84			
150x125-500	252	70	92	1450	65	97.19	132	200	-	3	547	370
150x125-500A	240	66.7	83	1450	65	83.51	110	160	200	3	520	
150x125-500B	227	63	74	1450	64	71.52	90	132	160	3	492	
150x125-500C	214	59.4	66	1450	64	60.14	75	110	160	3	465	
150x125-500D	202	56	58	1450	63	50.68	75	90	110	3	437	
200x150-315	400	111	36	1450	80	49.05	75	90	132	3.5	342	287
200x150-315A	380	106	31.5	1450	79	41.29	55	75	110	3.7	325	
200x150-315B	360	100	27	1450	78	33.96	45	75	90	3.8	308	
200x150-315C	340	94.5	23.5	1450	77	28.28	37	55	75	3.8	291	
200x150-315D	320	90	20	1450	75	23.25	30	37	55	4	274	
200x150-400	400	111	58	1450	78	81.05	110	160	200	3.5	438	369
200x150-400A	380	106	51	1450	77	68.59	90	132	160	3.7	416	
200x150-400B	360	100	44	1450	76	56.79	75	110	132	3.7	394	
200x150-400C	340	94.5	38.5	1450	75	47.56	75	90	110	3.8	372	
200x150-400D	320	90	32	1450	73	38.22	45	75	90	4	350	
200x150-500	400	111	90	1450	73	134.38	200	-	-	3	547	403
200x150-500A	380	106	80	1450	72	115.06	160	200	-	3	520	
200x150-500B	360	100	70	1450	71	96.72	132	160	200	3	492	
200x150-500C	340	94.5	62	1450	70	82.06	110	132	200	3	465	
200x150-500D	320	90	54	1450	69	68.24	90	110	160	3	437	
250x200-315	630	175	31	1450	82	64.9	90	110	160	4	342	330
250x200-315A	600	167	26.5	1450	81	53.49	75	90	110	4.1	325	
250x200-315B	567	158	22.5	1450	80	43.46	55	75	90	4.2	308	
250x200-315C	536	149	19	1450	78	35.58	45	55	75	4.3	291	
250x200-315D	505	140	16	1450	76	28.97	37	45	75	4.5	274	
250x200-400	630	175	58	1450	82	121.43	160	200	-	3	438	407
250x200-400A	600	167	51	1450	81	102.94	132	200	-	3	416	
250x200-400B	567	158	44	1450	80	84.98	110	132	200	3	394	
250x200-400C	536	149	39	1450	79	72.11	90	132	160	3	372	
250x200-400D	505	140	35	1450	77	62.55	75	110	160	3.2	350	



## Dimensions



Pump end dimensions			Shaft No.	Pump dimensions				Installation dimensions									Screw		Shaft end		Interval	Weight
IN	OUT	IMP		A	F	H1	H2	B	M1	M2	N1	N2	N3	T1	T2	W	S1	S2	D	L	X ≥	KG
50	32	160	1	80	385	132	160	50	100	70	240	190	110	12	6	285	M12	M12	24	50	100	38
50	32	200	1	80	385	160	180	50	100	70	240	190	110	12	6	285	M12	M12	24	50	100	46
65	50	160	1	80	385	132	160	50	100	70	240	190	110	12	6	285	M12	M12	24	50	100	40
65	40	200	1	100	385	160	180	50	100	70	265	212	110	13	6	285	M12	M12	24	50	100	48
65	40	250	2	100	500	180	225	65	125	95	320	250	110	14	6	370	M12	M12	32	80	100	70
65	40	315	2	125	500	200	250	65	125	95	345	280	110	16	6	370	M12	M12	32	80	100	80
80	65	160	1	100	385	160	180	50	100	70	265	212	110	13	6	285	M12	M12	24	50	100	46
80	50	200	1	100	385	160	200	50	100	70	265	212	110	13	6	285	M12	M12	24	50	100	52
80	50	250	2	125	500	180	225	65	125	95	320	250	110	15	6	370	M12	M12	32	80	100	72
80	50	315	2	125	500	225	280	65	125	95	345	280	110	18	6	370	M12	M12	32	80	100	87
100	80	160	2	100	500	160	220	65	125	95	280	212	110	14	6	370	M12	M12	32	80	100	68
100	65	200	2	100	500	180	225	65	125	95	320	250	110	14	6	370	M12	M12	32	80	140	70
100	65	250	2	125	500	200	250	80	160	120	360	280	110	16	6	370	M16	M12	32	80	140	80
100	65	315	3	125	530	225	280	80	160	120	400	315	110	18	6	370	M16	M12	42	110	140	118
125	80	400	3	125	530	280	355	80	160	120	435	355	110	20	6	370	M16	M12	42	110	140	165
125	100	200	2	125	500	200	280	80	160	120	360	280	110	17	6	370	M16	M12	32	80	140	85
125	100	250	3	140	530	225	280	80	160	120	400	315	110	18	6	370	M16	M12	42	110	140	126
125	100	315	3	140	530	250	315	80	160	120	400	315	110	19	6	370	M16	M12	42	110	140	135
125	100	400	3	140	530	280	355	100	200	150	500	400	110	20	6	370	M20	M12	42	110	140	175
125	100	500	4	160	670	355	450	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	313
150	125	250	3	140	530	250	355	80	160	120	400	315	110	19	6	370	M16	M12	42	110	140	140
150	125	315	3	140	530	280	355	100	200	150	500	400	110	20	6	370	M20	M12	42	110	140	150
150	125	400	3	140	530	315	400	100	200	150	500	400	110	21	6	370	M20	M12	42	110	140	186
150	125	500	4	160	670	355	450	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	336
200	150	315	4	160	670	315	400	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	222
200	150	400	4	160	670	315	450	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	300
200	150	500	4	160	670	400	500	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	382
250	200	315	4	180	670	315	450	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	277
250	200	400	4	180	670	355	500	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	340