

CPC acc. to ISO2858

Chemical Process Pump



 **TORISHIMA**

End-Suction Volute Pump

TORISHIMA CPC is an end-suction volute pump in back pull-out design to ISO 2858-1975, specially applied for chemical and petrochemical industries, and widely used as process pumps in general chemical industries. The high efficient design provides high performance at a low running cost. There is a wide range of structural design to meet many different requirements for specification.

Features

- The highly efficient design enables very economical operation with a low running cost.
- High quality materials and structural designs are employed to meet specification requirements for a variety of applications, including chemical and petrochemical industries, oil refining, general industries, water desalination, and high temperature heating equipment applications.
- Covers a wide spectrum of specifications, such as high head, high capacity, high pressure, low temperature, and high temperature.
- Each component is designed with a special focus on compatibility, offering ease of maintenance.
- Stock management with an excellent quality control system enables short pump delivery times.
- The suction and discharge nozzles are arranged end-top to resist piping loads.
- Intake diameter is designed larger than discharge diameter to maximize the suction performance.
- A back pull-out structure allows disassembly of the pump when coupled with spacers, without dismantling the main piping and the motor.
- Center line support type volute casing is also available.
- Thrust is balanced using back vanes; the ball bearings only receive residual thrust.
- Roller bearings with oil bath are used with a constant level oiler and there is also a water cooling option.
- Combinations of heating jackets and cooling jackets are available, offering choices for the optimal configuration for various liquid types and liquid temperatures.
- Gland packing or Torishima mechanical seal is available for the shaft seal, both with proven performance with various liquid types.
- JIS-compliant standard flanges are employed, with other standards optionally supported.
- Configurations are also available in which the shaft is not directly in contact with pump liquid.

Materials

Casing	FC250, FCD400-15, SC450, CAC402, SCS13, SCS14, SCS16 etc.
Impeller	FC250, CAC402, SCS13, SCS14, SCS16
Shaft	S45C, SUS316, SUS316L
Gland Packing	Carbonized Fiber (~80°C) *
Casing Gasket	Valqua 6500 etc. (~100°C) *

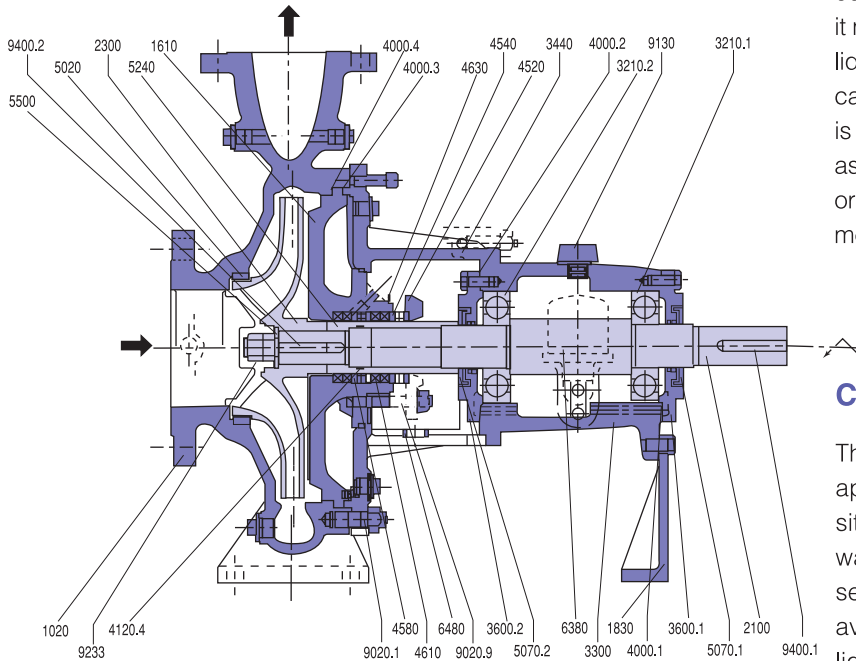
* Other materials are available for hot water or chemical liquid.



Sectional Drawing & List of Components

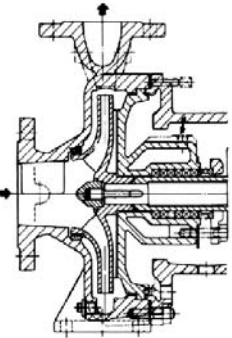
The wide variety of structure responds to every spec condition.

Standard



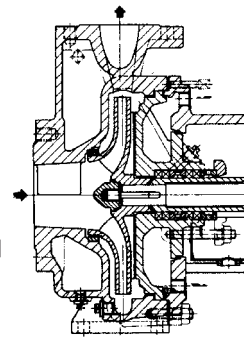
CPC-Y Stuffing box cooling jacket type

This type offers very powerful shaft seal cooling and moreover, it minimizes pump liquid heat loss in cases where warming is unnecessary, such as when transferring organic heating medium.



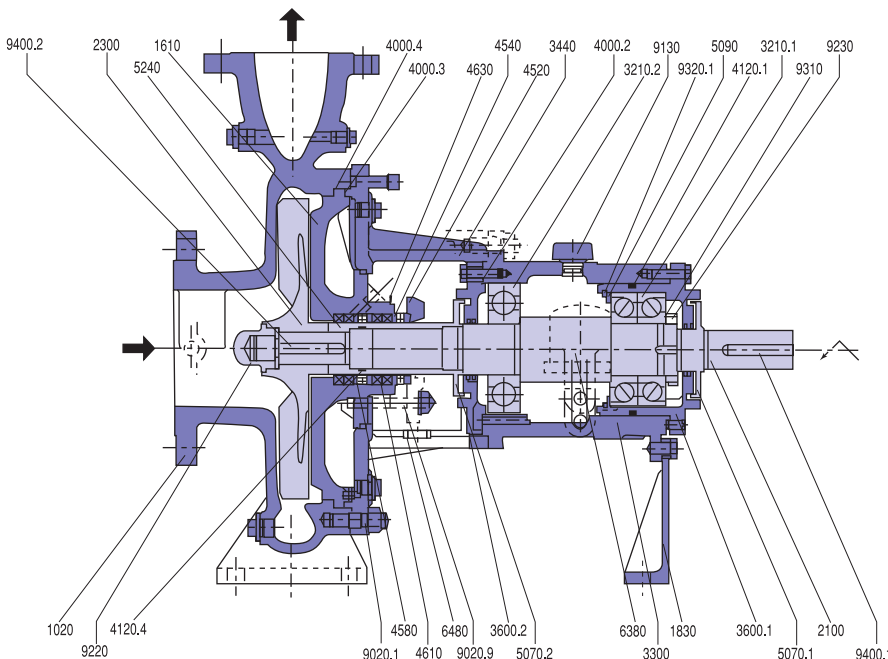
CPC-HS Casing heating jacket type

This type is applicable for situations in which warming of the shaft seal is required to avoid freezing of liquid due to cooling while pumping liquid at a temperature near its freezing point.



Semi-Open Impeller

This type is applicable for situations in which the pump liquid polymerizes, is easily solidified, or contains solids or gases.



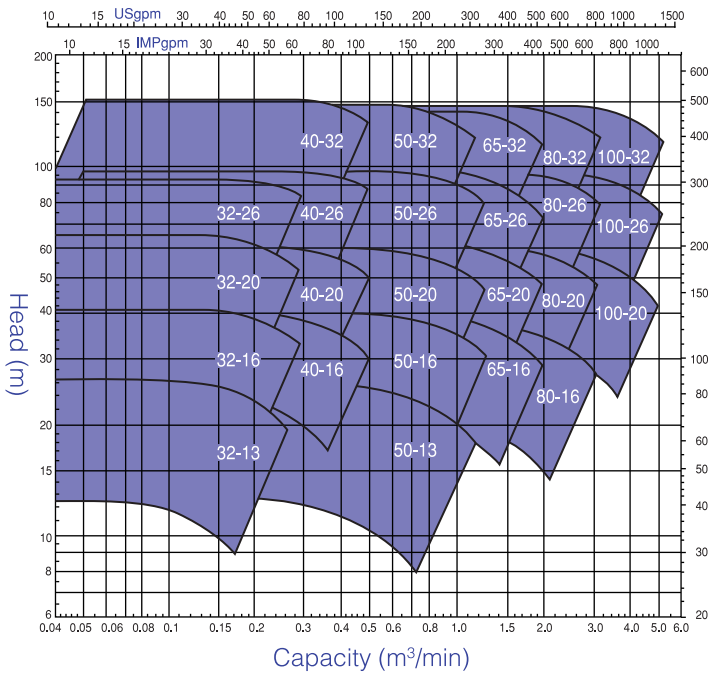
No.	Designation
1020	Volute casing
1610	Casing cover
1830	Support foot
2100	Shaft
2300	Impeller
3210.1/2	Deep groove ball bearing
3300	Bearing housing
3440	Bearing bracket lantern
3600.1/2	Bearing cover
4000.1/2/3/4	Flat gasket
4120.1/4	O-ring
4520	Shaft box gland
4540	Gland bushing
4580	Lantern ring
4610	Gland packing
4630	Apron
5020	Casing wear ring
5070.1/2	Deflector
5090	Adjust Ring
5240	Shaft protecting sleeve
5500	Washer
6380	Constant level oiler
6480	Drip plate
9020.1/9	Stud bolt
9130	Plug
9220	Impeller nut
9230	Bearing nut
9233	Lock nut
9310	Washer
9320.1/2	Snap ring
9400.1/2	Key

Performance Range

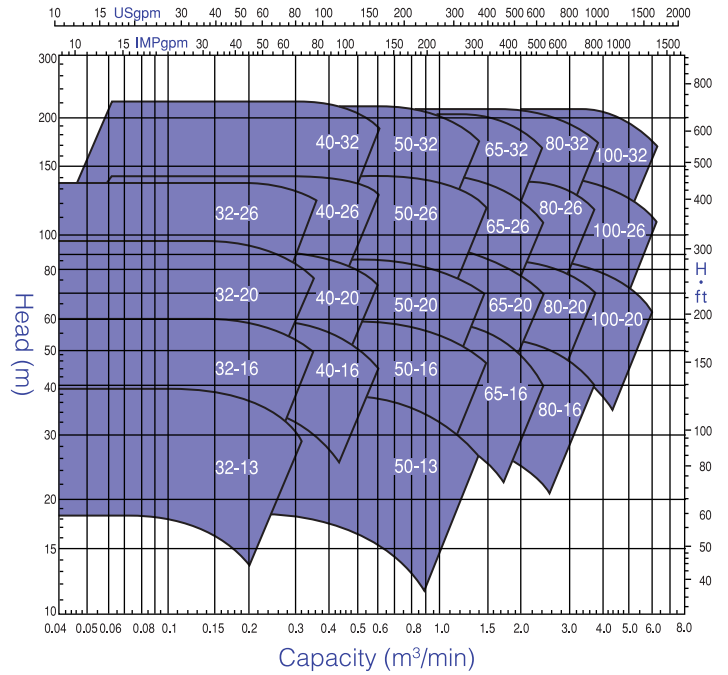
Standard, CPC-Y, CPC-HS

Capacity	~1,500m ³ /hr(~25m ³ /min)
Total Head	~220m
Temperature	-100°C~+350°C
Pressure	~2.45MPa
Size	32~250mm

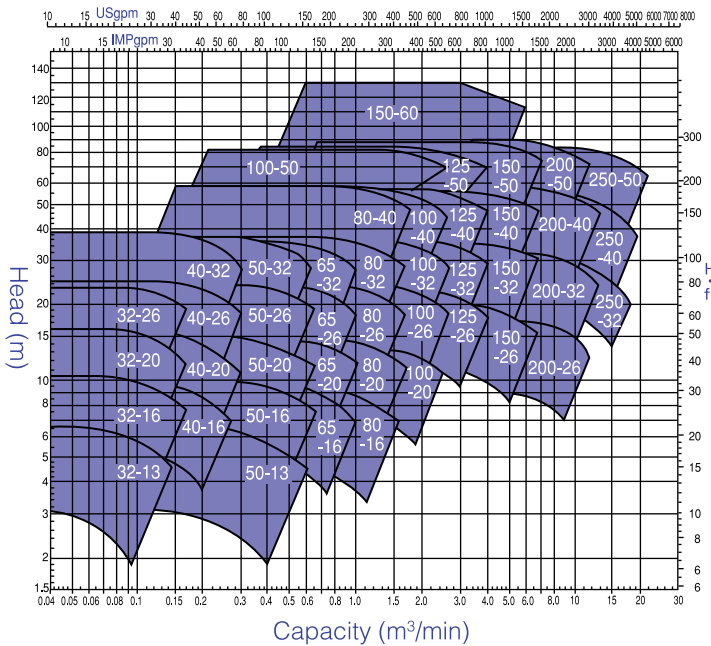
50Hz-2P



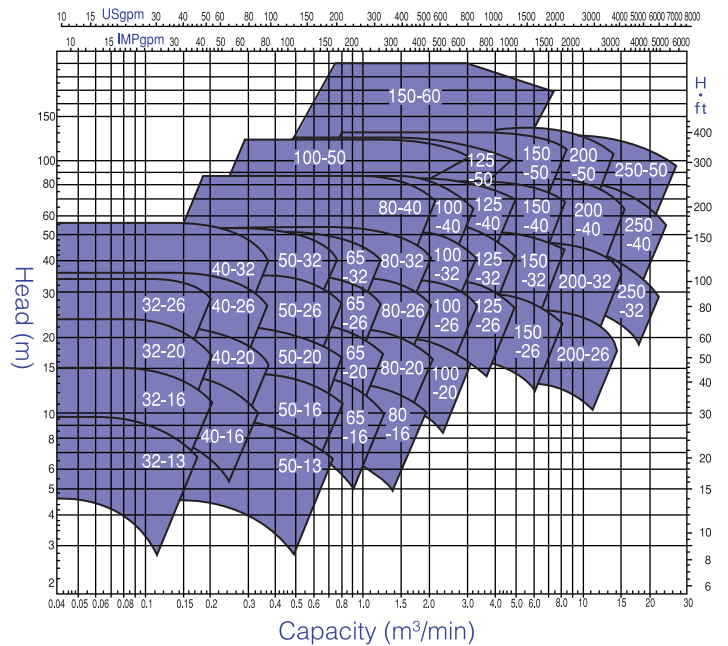
60Hz-2P



50Hz-4P



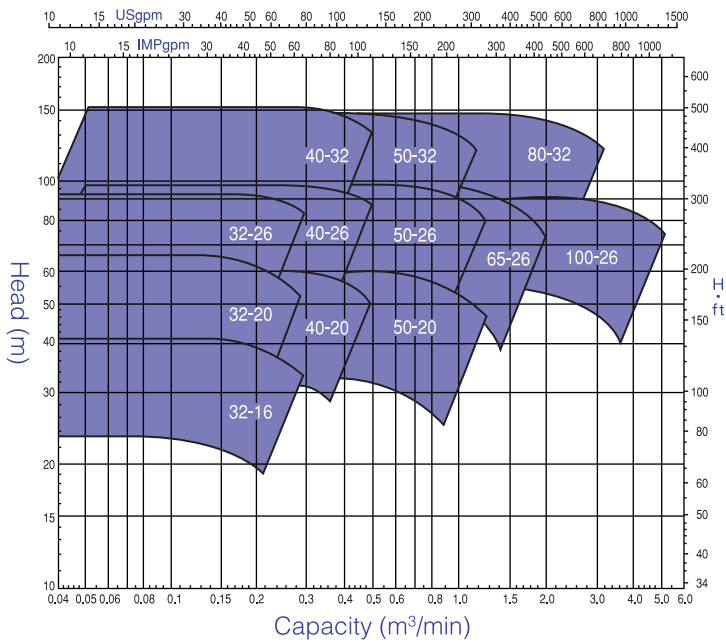
60Hz-4P



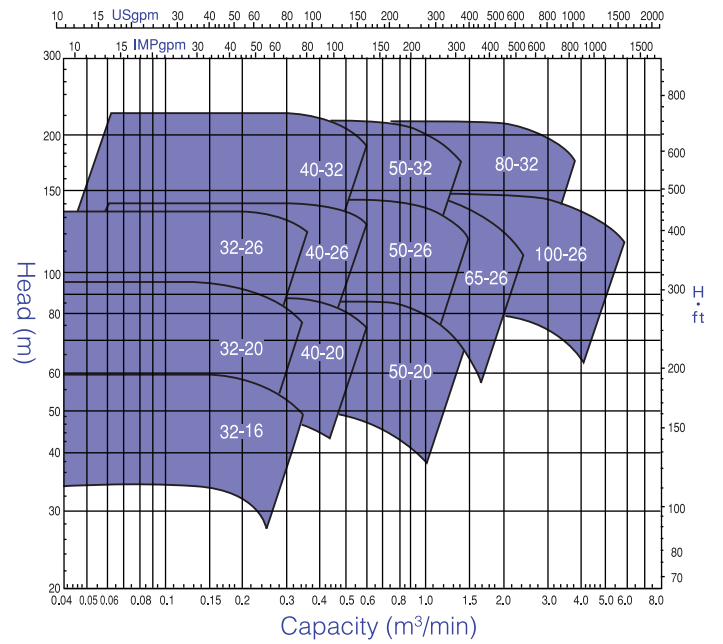
Semi-Open Impeller

Capacity	~336m ³ /hr(~5.6m ³ /min)
Total Head	~220m
Temperature	-100°C ~+300°C
Pressure	~2.45MPa
Size	32~100mm

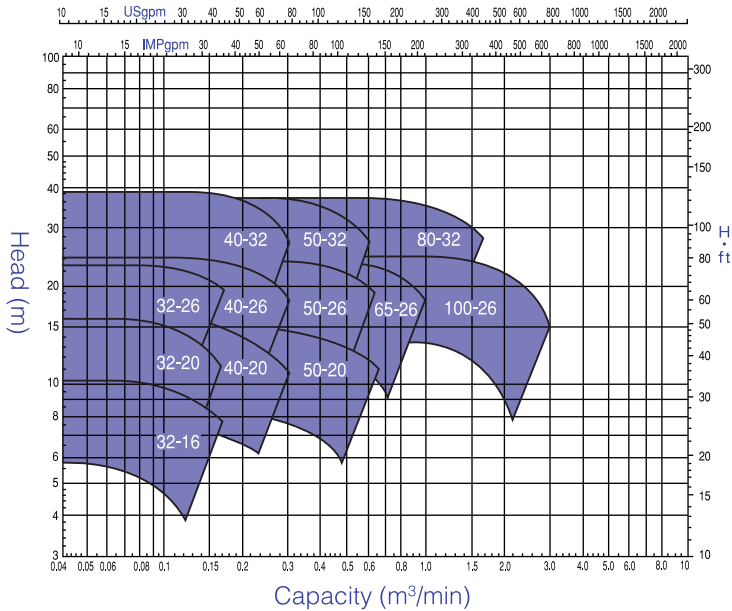
50Hz-2P



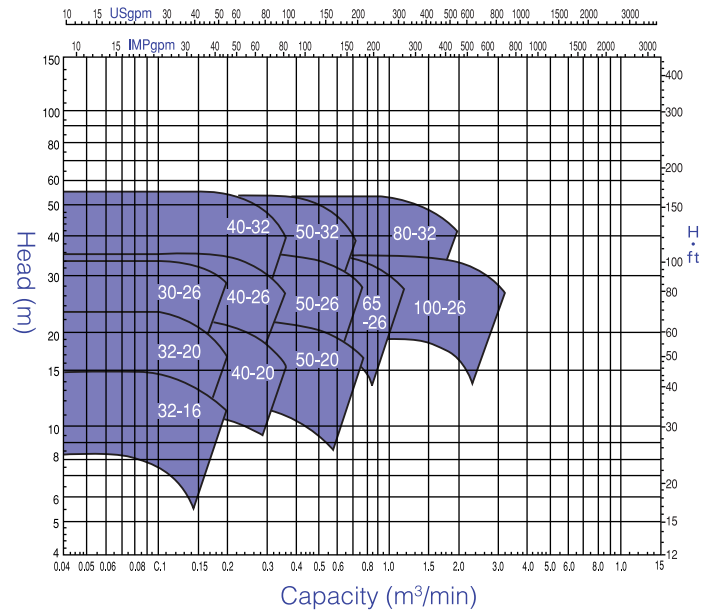
60Hz-2P



50Hz-4P

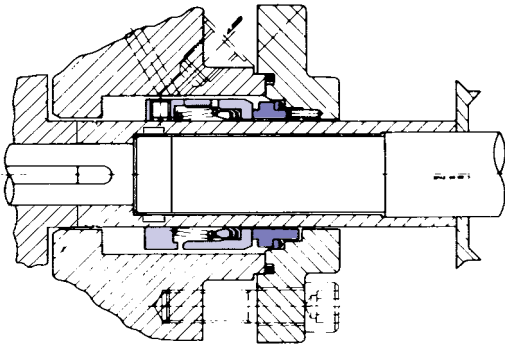


60Hz-4P



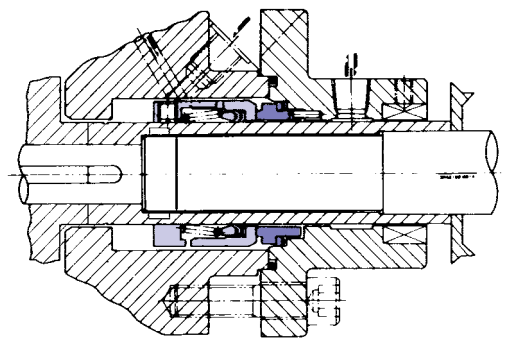
Mechanical Seal

The most suitable mechanical seal provided in response to your spec condition



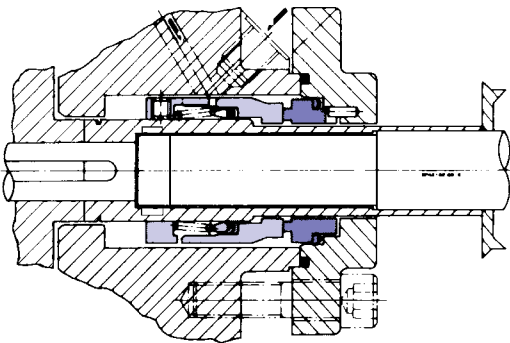
HU2100NN

Seal Pressure MPa: $0 < P \leq 0.49$
 Seal Temperature °C : $-40 \leq T \leq 250$



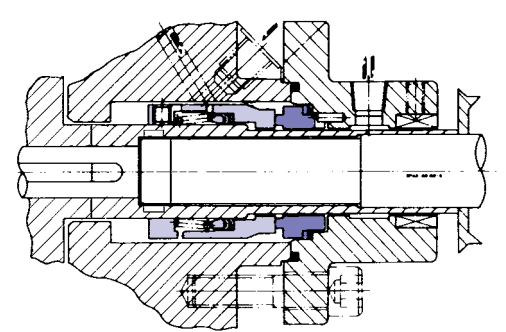
HU2100NB

Seal Pressure MPa: $0 < P \leq 0.49$
 Seal Temperature °C : $-40 \leq T \leq 250$
 with dry gas or cooling water quenching



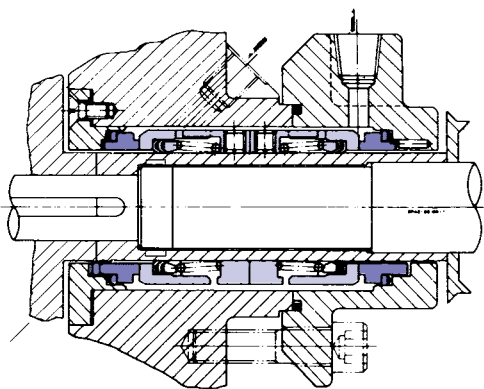
HU2100NN

Seal Pressure MPa: $0.94 < P \leq 2.49$
 Seal Temperature °C : $-40 \leq T \leq 250$
 This type is applicable for the high pressure case of more than 0.49MPa pressure.



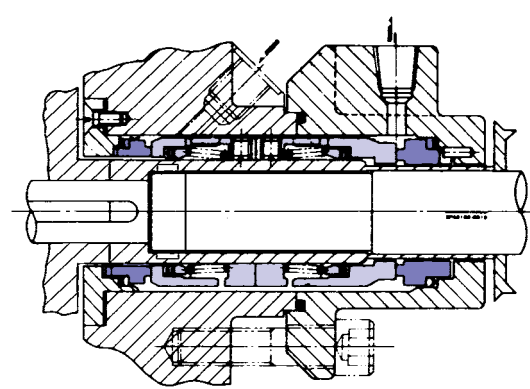
HU2100NB

Seal Pressure MPa: $0.49 < P \leq 2.94$
 Seal Temperature °C : $-40 \leq T \leq 250$
 This type is applicable for the high pressure case of more than 0.49MPa pressure. with dry gas or cooling water quenching



HU2100NA × HU2100NN

Seal Pressure MPa: $P \leq 0.49$
 Seal Temperature °C : $-40 \leq T \leq 250$
 This type is applicable for the case of less than 0.49MPa pressure and seal of liquid including less than 3% slurry, gas or negative pressure. Sealing liquid required.



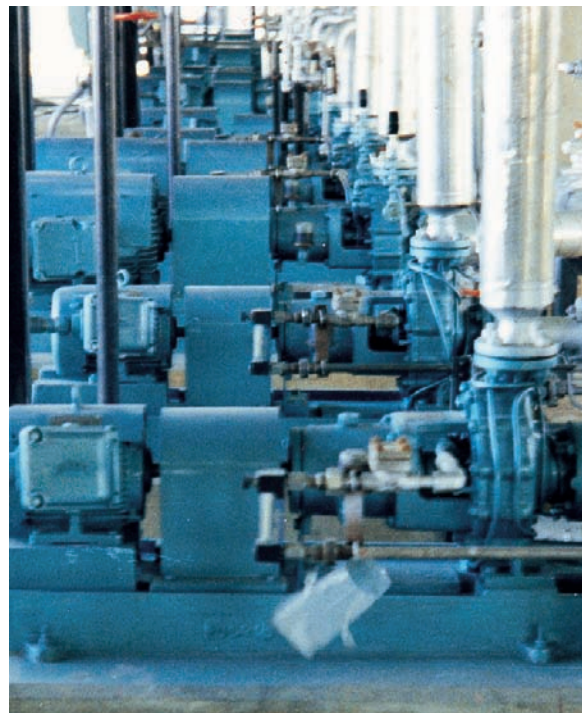
HU2100NA × HB2100NN

Seal Pressure MPa: $0.49 < P \leq 2.94$
 Seal Temperature °C : $-40 \leq T \leq 250$
 This type is applicable for the case of more than 0.49MPa pressure and liquid including less than 3% slurry.

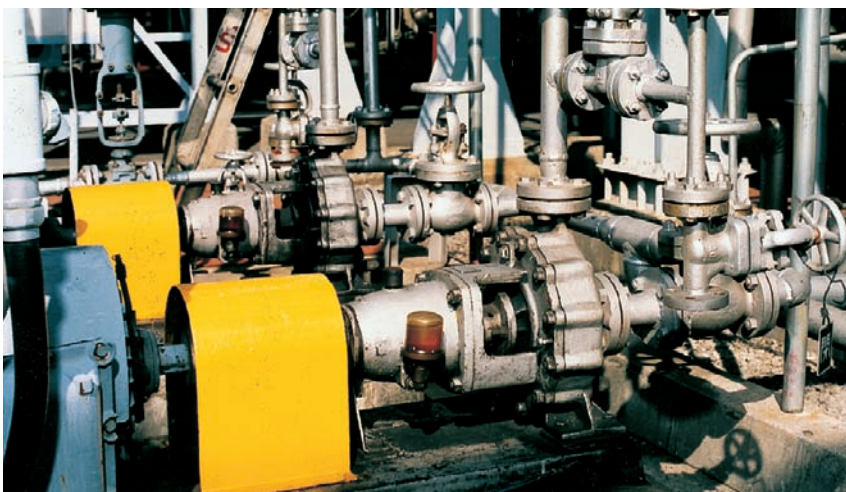
References



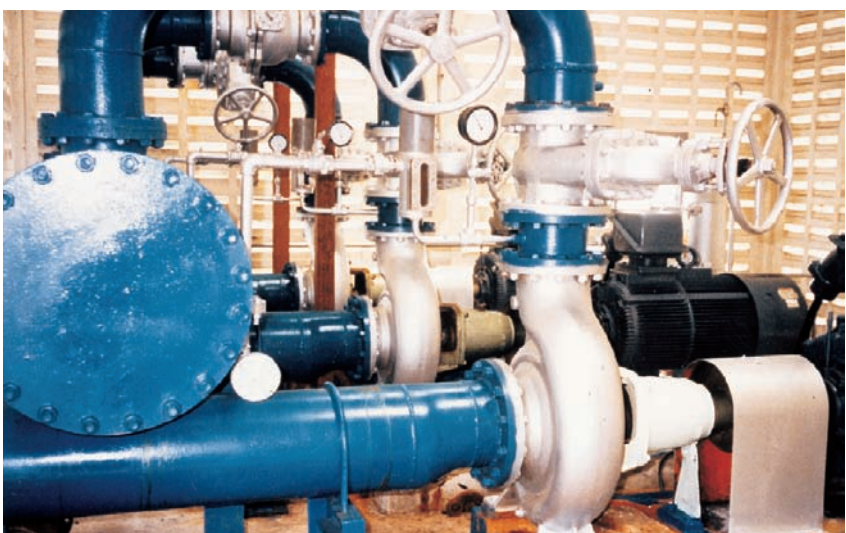
Cooling Water Pump / District Heating and Cooling Plant



Process Pump / DMT Plant

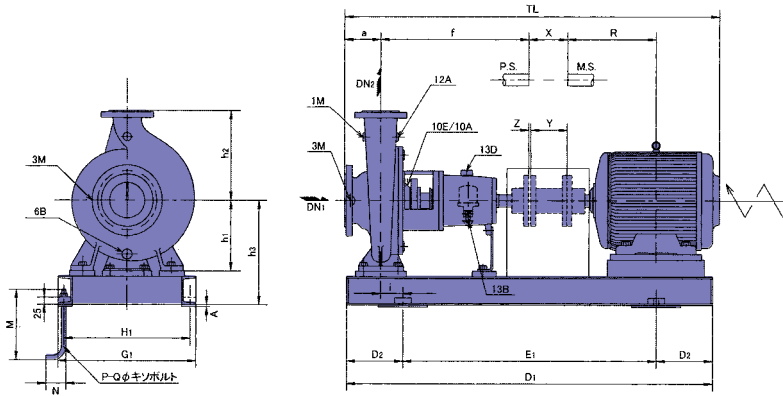


Process Pump / Chemical Plant



Cooling Water Pump / Oil Refinery Plant

Dimension Chart



- Note : 1. Standard flange : JIS10kgf/cm²
 Cast iron including FCD : RF / cast steel
 Stainless : FF
 ASME flange also available
 2. Pump weight : cast iron including FCD
 [] : cast steel / stainless
 3. Motor weight : gross outline
 4. () : 4P motor
 Others : common to 2P and 4P
 5. Usable dimension of pump size 125-26 : up to motor frame 200L

Bearing case sizes	Pump sizes	Pump Dimensions							Motor Dimensions							Base Plate Dimensions				Foundation Dimensions																	
		Bore DN1	DN2	a	f	h1	h2	Wt. (kgf)	Frame	Output(kW) 2P	4P	R	X	Y	Z	Wt. (kgf)	G1	D1	A	Wt. (kgf)	h3	H1	i	D2	E1	M	N	P	Q	TL							
25/62N	32-13	50	32	80	385	112	140	33 [39]	80	0.75	0.75	140	106	100	3	15	280	800	0	26	202	250	35	100	600	200	50	4	12	840							
									90L	1.5	2.2	1.5	168.5	106	100	3	22	330	850	0	32	222	300	35	100	650	200	50	4	12	890						
									100L									2.2	193	106	100	3	28	280	850	0	28	202	250	35	100	650	200	50	4	12	940
									112M	3.7	3.7	200	106	100	3	42	330	900	0	30	202	300	35	100	700	200	50	4	12	950							
									132S	5.5	7.5	5.5	239	106	100	3	60	330	950	0	33	222	300	25	100	750	200	50	4	12	1020						
									132M			7.5	258	106	100	3	72	330	950	0	33	222	300	25	100	750	200	50	4	12	1060						
	32-16	50	32	80	385	132	160	33 [39]	80	0.75	0.75	140	106	100	3	15	330	800	0	30	222	300	35	100	600	200	50	4	12	860							
									90L	1.5	2.2	1.5	168.5	106	100	3	22	330	850	0	32	222	300	35	100	650	200	50	4	12	910						
									100L									2.2	193	106	100	3	28	330	850	0	32	222	300	35	100	650	200	50	4	12	960
									112M	3.7	3.7	200	106	100	3	42	330	900	0	32	222	300	35	100	700	200	50	4	12	970							
									132S	5.5	7.5	5.5	239	106	100	3	60	330	950	0	31	222	300	35	100	750	200	50	4	12	1040						
									132M			7.5	258	106	100	3	72	330	950	0	31	222	300	35	100	750	200	50	4	12	1080						
	40-16	65	40	80	385	132	165	35 [41]	80	0.75	0.75	140	106	100	3	15	330	800	0	30	222	300	35	100	600	200	50	4	12	1200							
									90L	1.5	2.2	1.5	168.5	106	100	3	22	330	850	0	32	222	300	35	100	650	200	50	4	12	910						
									100L									2.2	193	106	100	3	28	330	850	0	32	222	300	35	100	650	200	50	4	12	960
									112M	3.7	3.7	200	106	100	3	42	330	900	0	32	222	300	35	100	700	200	50	4	12	970							
									132S	5.5	7.5	5.5	239	106	100	3	60	330	950	0	31	222	300	35	100	750	200	50	4	12	1040						
									132M			7.5	258	106	100	3	72	330	950	0	31	222	300	35	100	750	200	50	4	12	1080						
	50-13	80	50	100	385	132	165	35 [41]	160M	11	15	11	323	136	130	3	110	390	1100	10	53	277	350	25	100	900	200	50	4	12	1200						
									80	0.75	0.75	140	106	100	3	15	330	800	0	32	250	300	35	100	600	200	50	4	12	860							
									90L	1.5	2.2	1.5	168.5	106	100	3	22	330	850	0	35	250	300	35	100	650	200	50	4	12	910						
									100L									2.2	193	106	100	3	28	330	850	0	34	250	300	35	100	650	200	50	4	12	960
									112M	3.7	3.7	200	106	100	3	42	330	900	0	36	250	300	35	100	700	200	50	4	12	970							
									132S	5.5	7.5	5.5	239	106	100	3	60	330	950	0	35	250	300	35	100	750	200	50	4	12	1040						
32-20	50	32	80	385	160	180	39 [48]	132M			7.5	258	106	100	3	72	330	950	0	35	250	300	35	100	750	200	50	4	12	1080							
								80	0.75	0.75	140	106	100	3	15	330	800	0	32	250	300	35	100	600	200	50	4	12	860								
								90L	1.5	2.2	1.5	168.5	106	100	3	22	330	850	0	35	250	300	35	100	650	200	50	4	12	910							
								100L									2.2	193	106	100	3	28	330	850	0	34	250	300	35	100	650	200	50	4	12	960	
								112M	3.7	3.7	200	106	100	3	42	330	900	0	36	250	300	35	100	700	200	50	4	12	970								
								132S	5.5	7.5	5.5	239	106	100	3	60	330	950	0	35	250	300	35	100	750	200	50	4	12	1040							
40-20	65	40	100	385	160	180	40 [48]	132M			7.5	258	106	100	3	72	330	950	0	35	250	300	35	100	750	200	50	4	12	1080							
								160M	11	15	11	323	136	130	3	110	390	1100	10	50	275	350	35	100	900	200	50	4	12	1200							
								80	0.75	0.75	140	106	100	3	15	330	800	0	32	250	300	35	100	600	200	50	4	12	860								
								90L	1.5	2.2	1.5	168.5	106	100	3	22	330	850	0	35	250	300	35	100	650	200	50	4	12	910							
								100L									2.2	193	106	100	3	28	330	850	0	34	250	300	35	100	650	200	50	4	12	960	
								112M	3.7	3.7	200	106	100	3	42	330	900	0	36	250	300	35	100	700	200	50	4	12	970								
50-16	80	50	100	385	160	180	38 [45]	132S	5.5	7.5	5.5	239	106	100	3	60	330	950	0	35	250	300	35	100	750	200	50	4	12	1040							
								132M			7.5	258	106	100	3	72	330	950	0	35	250	300	35	100	750	200	50	4	12	1080							
								160M	11	15	11	323	136	130	3	110	390	1100	10	50	275	350	35	100	900	200	50	4	12	1200							
								80	0.75	0.75	140	106	100	3	15	330	800	0	32	250	300	35	100	600	200	50	4	12	860								
								90L	1.5	2.2	1.5	168.5	106	100	3	22	330	850	0	35	250	300	35	100	650	200	50	4	12	910							
								100L									2.2	193	106	100	3	28	330	850	0	34	250	300	35	100	650	200	50	4	12	960	
50-20	80	50	100	385	160	200	44 [49]	160L	18.5	15	345	136	130	3	130	390	1100	10	51	275	350	35	100	900	200	50	4	12	1250								
								180M	22	18.5	22	351.5	136	130	3	200	440	1200	10	59	295	400	25	100	1000	200	50	4	12	1270							
								80	0.75	0.75	140	106	100	3	15	330	800	0	32	250	300	35	100	600	200	50	4	12	860								
								90L	1.5	2.2	1.5	168.5	106	100	3	22	330	850	0	35	250	300	35	100	650	200	50	4	12	910							
								100L									2.2	193	106	100	3	28	330	850	0	34	250	300	35	100	650	200	50	4	12	960	
								112M	3.7	3.7	200	106	100	3	42	330	900	0	36	250	300	35	100	700	200	50	4	12	970								
35/80N	32-26	50	32	100	500	180	225	75 [84]	90L	1.5	2.2	1.5	168.5	106	100	3	22	380	950	0	41	270	350	20	100	750	200	50	4	12	1050						
									100L									2.2	193	106	100	3	28	380	1000	0	42	270	350	20	100	800	200	50	4	12	1100
									112M	3.7	3.7	200	106	100	3	42	380	1000	0	41	270	350	20	100	800	200	50	4	12	1110							
									132S	5.5	7.5	5.5	239	106	100	3	60	390	1100	10	56	295	350	20	100	900	200	50	4	12	1180						
									132M			7.5	258	106	100	3	72	3																			

(Unit : mm)

Bearing case sizes	Pump sizes	Pump Dimensions						Motor Dimensions							Base Plate Dimensions			Foundation Dimensions														
		Bore DN ₁	DN ₂	a	f	h ₁	h ₂	Wt. (kgf)	Frame	Output(kW)		R	X	Y	Z	Wt. (kgf)	G ₁	D ₁	A	Wt. (kgf)	h ₃	H ₁	i	D ₂	E ₁	M	N	P	Q	TL		
35/80N	40-32	65	40	125	500	200	250	86 [106]	160M	11	15	11	323	136	130	3	110	440	1250	10	65	320	400	5	100	1050	200	50	4	12	1340	
									160L	18.5	15	345	136	130	3	130	440	1300	10	68	320	400	5	100	1100	200	50	4	12	1390		
									180M	22	18.5	22	351.5	136	130	3	200	440	1300	10	65	320	400	5	100	1100	200	50	4	12	1410	
									180L	30	30	370.5	136	130	3	225	440	1300	10	65	320	400	5	100	1100	200	50	4	12	1450		
									200L	37	45	37	45	395.5 (425.5)	168	160	4	290	490	1400	10	68	320	450	100	200	1000	250	63	4	16	1570 (1600)
									225S	55	55	402	168	160	4	360	540	1400	10	82	345	500	100	200	1000	250	63	4	16	1580		
									250S	75	75	433.5	168	160	4	400	590	1500	10	98	375	550	100	200	1100	250	63	4	16	1650		
									250M	90	90	452.5	168	160	4	550	590	1500	10	97	375	550	100	200	1100	250	63	4	16	1690		
									112M	3.7	3.7	200	106	100	3	42	390	1000	10	59	340	350	20	100	800	200	50	4	12	1110		
									132S	5.5	7.5	5.5	239	106	100	3	60	390	1100	10	61	340	350	20	100	900	200	50	4	12	1180	
	132M		7.5	258	106	100	3	72	390	1100	10	62	340	350	20	100	900	200	50	4	12	1220										
	160M	11	15	11	323	136	130	3	110	440	1250	10	69	345	400	5	100	1050	200	50	4	12	1340									
	160L	18.5	15	345	136	130	3	130	440	1250	10	70	345	400	5	100	1050	200	50	4	12	1390										
	180M	22	18.5	22	351.5	136	130	3	200	440	1300	10	69	345	400	5	100	1100	200	50	4	12	1410									
	180L	30	30	370.5	136	130	3	225	440	1300	10	69	345	400	5	100	1100	200	50	4	12	1450										
	200L	37	45	37	45	395.5 (425.5)	168	160	4	290	490	1400	10	66	345	450	100	200	1000	250	63	4	16	1570 (1600)								
	225S	55	55	402	168	160	4	360	540	1400	10	78	345	500	100	200	1000	250	63	4	16	1580 (1610)										
	250S	75	75	433.5 (463.5)	168	160	4	400	590	1500	10	91	375	550	100	200	1100	250	63	4	16	1650 (1680)										
	250M	90	90	452.5 (482.5)	168	160	4	550	590	1500	10	90	375	550	100	200	1100	250	63	4	16	1690 (1720)										
	90L	1.5	2.2	1.5	168.5	136	130	3	22	390	1050	10	57	295	350	5	100	850	200	50	4	12	1050									
	100L		2.2	193	136	130	3	28	390	1050	10	56	295	350	5	100	850	200	50	4	12	1100										
	112M	3.7	3.7	200	136	130	3	42	390	1050	10	55	295	350	5	100	850	200	50	4	12	1110										
	132S	5.5	7.5	5.5	239	136	130	3	60	390	1150	10	57	295	350	5	100	950	200	50	4	12	1180									
	132M		7.5	258	136	130	3	72	390	1150	10	57	295	350	5	100	950	200	50	4	12	1220										
	160M	11	15	11	323	136	130	3	110	390	1250	10	58	295	350	20	100	1050	200	50	4	12	1340									
	160L	18.5	15	345	136	130	3	130	390	1250	10	58	295	350	20	100	1050	200	50	4	12	1390										
	180M	22	18.5	22	351.5	136	130	3	200	440	1300	10	59	295	400	20	100	1100	200	50	4	12	1410									
	180L	30	30	370.5	136	130	3	225	440	1300	10	59	295	400	20	100	1100	200	50	4	12	1450										
	200L	37	45	37	45	395.5 (425.5)	168	160	4	290	490	1400	10	71	320	450	100	200	1000	250	63	4	16	1480 (1600)								
	100L		2.2	193	136	130	3	28	390	1050	10	59	315	350	20	100	850	200	50	4	12	1130										
	112M	3.7	3.7	200	136	130	3	42	390	1050	10	56	315	350	20	100	850	200	50	4	12	1140										
	132S	5.5	7.5	5.5	239	136	130	3	60	390	1150	10	58	315	350	20	100	950	200	50	4	12	1210									
	132M		7.5	258	136	130	3	72	390	1150	10	59	315	350	20	100	950	200	50	4	12	1250										
	160M	11	15	11	323	136	130	3	110	440	1250	10	65	320	400	5	100	1050	200	50	4	12	1370									
	160L	18.5	15	345	136	130	3	130	440	1300	10	68	320	400	5	100	1100	200	50	4	12	1420										
	180M	22	18.5	22	351.5	136	130	3	200	440	1300	10	65	320	400	5	100	1100	200	50	4	12	1440									
	180L	30	30	370.5	136	130	3	225	440	1300	10	65	320	400	5	100	1100	200	50	4	12	1480										
	200L	37	45	37	45	395.5 (425.5)	168	160	4	290	490	1400	10	68	320	450	100	200	1000	250	63	4	16	1600 (1630)								
	225S	55	55	402	168	160	4	360	540	1400	10	82	345	500	100	200	1000	250	63	4	16	1610										
	250S	75	75	433.5	168	160	4	400	590	1500	10	98	375	550	100	200	1100	250	63	4	16	1680										
	250M	90	90	452.5	168	160	4	550	590	1500	10	97	375	550	100	200	1100	250	63	4	16	1720										
	112M	3.7	3.7	200	136	130	3	42	440	1050	10	66	345	400	5	100	850	200	50	4	12	1110										
	132S	5.5	7.5	5.5	239	136	130	3	60	440	1150	10	69	345	400	5	100	950	200	50	4	12	1180									
	132M		7.5	258	136	130	3	72	440	1150	10	68	345	400	5	100	950	200	50	4	12	1220										
	160M	11	15	11	323	136	130	3	110	440	1250	10	70	345	400	5	100	1050	200	50	4	12	1340									
	160L	18.5	15	345	136	130	3	130	440	1250	10	71	345	400	5	100	1050	200	50	4	12	1390										
	180M	22	18.5	22	351.5	136	130	3	200	440	1300	10	71	345	400	5	100	1100	200	50	4	12	1410									
	180L	30	30	370.5	136	130	3	225	440	1300	10	71	345	400	5	100	1100	200	50	4	12	1450										
	200L	37	45	37	45	395.5 (425.5)	168	160	4	290	490	1400	10	70	345	450	100	200	1000	250	63	4	16	1570 (1600)								
	225S	55	55	402	168	160	4	360	540	1400	10	79	345	500	100	200	1000	250	63	4	16	1580 (1610)										
	250S	75	75	433.5 (463.5)	168	160	4	400	590	1500	10	93	375	550	100	200	1100	250	63	4	16	1650 (1680)										
	250M	90	90	452.5 (482.5)	168	160	4	550	590	1500	10	92	375	550	100	200	1100	250	63	4	16	1690 (1720)										
	90L	1.5	2.2	1.5	168.5	136	130	3	22	440	1050	10	59	295	400	5	100	850	200	50	4	12	1050									
	100L		2.2	193	136	130	3	28	440	1050	10	58	295	400	5	100	850	200	50	4	12	1100										
	112M	3.7	3.7	200	136	130	3	42	440	1050	10	57	295	400	5	100	850	200	50	4	12	1110										
	132S	5.5	7.5	5.5	239	136	130	3	60	440	1150	10	59	295	400	5	100	950	200	50	4	12	1180									
	132M		7.5	258	136	130	3	72	440	1150	10	59	295	400	5	100	950	200	50	4	12	1220										
	160M	11	15	11	323	136	130	3	110	440	1250	10	60	295	400	5	10															

Dimension Chart

(Unit : mm)

Bearing case sizes	Pump sizes	Pump Dimensions							Motor Dimensions							Base Plate Dimensions			Foundation Dimensions													
		Bore DN ₁	Bore DN ₂	a	f	h ₁	h ₂	Wt (kgf)	Frame	Output(kW)		R	X	Y	Z	Wt (kgf)	G ₁	D ₁	A	Wt (kgf)	h ₃	H ₁	i	D ₂	E ₁	M	N	P	Q	TL		
35/80N	80-20	125	80	125	500	180	250	71 [85]	225S	55	55	402 (432)	168	160	4	360	540	1400	10	85 (84)	345	500	100	200	1000	250	63	4	16	1580 (1610)		
								250S	75	75	433.5 (463.5)	168	160	4	400	590	1500	10	88 (89)	375	550	100	200	1100	250	63	4	16	1650 (1680)			
								250M	90	90	452.5 (482.5)	168	160	4	550	590	1500	10	87 (85)	375	550	100	200	1100	250	63	4	16	1650 (1720)			
	100-20	125	100	125	500	200	280	88 [100]	112M	3.7	3.7	200	166	160	3	42	440	1100	10	65	320	400	5	100	900	200	50	4	12	1110		
								132S	5.5	7.5	5.5	239	166	160	3	60	440	1200	10	67	320	400	5	100	1000	200	50	4	12	1180		
								132M		7.5	258	166	160	3	72	440	1200	10	67	320	400	5	100	1000	200	50	4	12	1220			
								160M	11	15	11	323	166	160	3	110	440	1300	10	68	320	400	5	100	1100	200	50	4	12	1340		
								160L	18.5	15	15	345	166	160	3	130	440	1300	10	68	320	400	5	100	1100	200	50	4	12	1390		
								180M	22	18.5	22	351.5	166	160	3	200	440	1350	10	59	320	400	100	200	950	250	63	4	16	1410		
								180L	30	30	370.5	166	160	3	225	440	1350	10	64	320	400	100	200	950	250	63	4	16	1450			
								200L	37	45	37	45	395.5 (425.5)	168	160	4	290	490	1400	10	69	320	450	100	200	1000	250	63	4	16	1570 (1600)	
								225S	55	55	402 (432)	168	160	4	360	540	1400	10	84 (83)	345	500	100	200	1000	250	63	4	16	1580 (1610)			
								250S	75	75	433.5 (463.5)	168	160	4	400	590	1500	10	88 (89)	375	550	100	200	1100	250	63	4	16	1650 (1680)			
								250M	90	90	452.5 (482.5)	168	160	4	550	590	1500	10	87 (85)	375	550	100	200	1100	250	63	4	16	1650 (1720)			
								132S	5.5	7.5	5.5	239	136	130	3	60	440	1200	10	71	345	400	5	100	1000	200	50	4	12	1240		
132M		7.5	258	136	130	3	72	440	1200	10	71	345	400	5	100	1000	200	50	4	12	1280											
160M	11	15	11	323	166	160	3	110	440	1300	10	71	345	400	5	100	1100	200	50	4	12	1400										
160L	18.5	15	15	345	166	160	3	130	490	1350	10	69	345	450	100	200	950	250	63	4	16	1450										
180M	22	18.5	22	351.5	166	160	3	200	440	1350	10	63	345	400	100	200	950	250	63	4	16	1470										
180L	30	30	370.5	166	160	3	225	440	1400	10	70	345	400	100	200	1000	250	63	4	16	1510											
200L	37	45	37	45	395.5 (425.5)	168	160	4	290	490	1450	10	71 (70)	345	450	80 (100)	200	1050	250	63	4	16	1600 (1630)									
225S	55	55	402 (432)	168	160	4	360	540	1450	10	81 (80)	345	500	100	200	1050	250	63	4	16	1650 (1640)											
250S	75	75	433.5 (463.5)	168	160	4	400	590	1500	10	82 (81)	375	550	100	200	1100	250	63	4	16	1680 (1710)											
250M	90	90	452.5 (482.5)	168	160	4	550	590	1500	10	81 (80)	375	550	100	200	1100	250	63	4	16	1680 (1750)											
280S	110	110	484 (544)	168	160	4	690	640	1600 (1850)	10	105 (106)	405	600	100	200	1200 (1250)	250	63	4	16	1800 (1860)											
132S	5.5	7.5	5.5	239	166	160	3	60	440	1200	10	69	345	400	5	100	1000	200	50	4	12	1290										
132M		7.5	258	166	160	3	72	440	1200	10	69	345	400	5	100	1000	200	50	4	12	1330											
160M	11	15	11	323	166	160	3	110	440	1300	10	71	345	400	5	100	1100	200	50	4	12	1420										
160L	18.5	15	15	345	166	160	3	130	490	1350	10	69	345	450	100	200	950	250	63	4	16	1460										
180M	22	18.5	22	351.5	166	160	3	200	440	1350	10	63	345	400	100	200	950	250	63	4	16	1490										
180L	30	30	370.5	166	160	3	225	440	1400	10	70	345	400	100	200	1000	250	63	4	16	1530											
200L	37	45	37	45	395.5 (425.5)	168	160	4	290	490	1450	10	71 (70)	345	450	80 (100)	200	1050	250	63	4	16	1610 (1640)									
225S	55	55	402 (432)	168	160	4	360	540	1450	10	81 (80)	345	500	100	200	1050	250	63	4	16	1630 (1660)											
250S	75	75	433.5 (463.5)	168	160	4	400	590	1500	10	82 (81)	375	550	100	200	1100	250	63	4	16	1680 (1720)											
250M	90	90	452.5 (482.5)	168	160	4	550	590	1500	10	81 (80)	375	550	100	200	1100	250	63	4	16	1680 (1760)											
280S	110	110	484 (544)	168	160	4	690	640	1600 (1850)	10	105 (106)	405	600	100	200	1200 (1250)	250	63	4	16	1820 (1890)											
45/120N	80-32	125	80	125	530	250	315	122 [130]	132S	5.5	7.5	5.5	239	166	160	3	60	440	1200	10	72	370	400	5	100	1000	200	50	4	12	1290	
								132M		7.5	258	166	160	3	72	440	1200	10	72	370	400	5	100	1000	200	50	4	12	1330			
								160M	11	15	11	323	166	160	3	110	440	1300	10	74	370	400	5	100	1100	200	50	4	12	1420		
	100-32	125	100	140	530	250	315	131 [140]	160L	18.5	15	15	345	166	160	3	130	490	1350	10	73	370	450	100	200	950	250	63	4	16	1460	
								180M	22	18.5	22	351.5	168	160	4	200	490	1350	10	69	370	450	100	200	950	250	63	4	16	1490		
								180L	30	30	370.5	168	160	4	225	490	1400	10	77	370	450	100	200	1000	250	63	4	16	1530			
	125-26	150	125	140	530	250	355	132 [138]	200L	37	45	37	45	395.5 (425.5)	168	160	4	290	490	1450	10	75	370	450	80 (100)	200	1050	250	63	4	16	1610 (1640)
								225S	55	55	402 (432)	168	160	4	360	540	1450	10	81 (80)	370	500	100	200	1050	250	63	4	16	1630 (1660)			
								250S	75	75	433.5 (463.5)	168	160	4	400	590	1500	10	88 (87)	370	550	100	200	1100	250	63	4	16	1680 (1720)			
	80-40	125	80	125	530	280	355	151 [162]	250M	90	90	452.5 (482.5)	168	160	4	550	590	1500	10	87 (89)	375	550	100	200	1100	250	63	4	16	1730 (1760)		
								280S	110	110	484 (544)	168	160	4	690	640	1600 (1850)	10	101	405	600	100	200	1200 (1250)	250	63	4	16	1820 (1890)			
								132S	5.5	7.5	5.5	239	136	130	3	60	490	1200	10	81	400	450	5	100	1000	200	50	4	12	1240		
								132M		7.5	258	136	130	3	72	490	1200	10	80	400	450	5	100	1000	200	50	4	12	1280			
								160M	11	15	11	323	166	160	3	110	490	1300	10	83	400	450	5	100	1100	200	50	4	12	1400		
								160L	18.5	15	15	345	166	160	3	130	490	1350	10	79	400	450	100	200	950	250	63	4	16	1450		
								180M	22	18.5	22	351.5	168	160	4	200	540	1350	10	76	400	500	100	200	950	250	63	4	16	1470		
								180L	30	30	370.5	168	160	4	225	540	1400	10	85	400	500	100	200	1000	250	63	4	16	1510			
								200L	37	45	37	45	425.5	168	160	4	290	490	1450	10	80	400	450	80								

(Unit : mm)

Bearing case sizes	Pump sizes	Pump Dimensions						Motor Dimensions						Base Plate Dimensions			Foundation Dimensions																
		Bore DN ₁	Bore DN ₂	a	f	h ₁	h ₂	Wt. (kgf)	Frame	Output(kW) 2P	Output(kW) 4P	R	X	Y	Z	Wt. (kgf)	G ₁	D ₁	A	Wt. (kgf)	h ₃	H ₁	i	D ₂	E ₁	M	N	P	Q	TL			
45/120N	125-40	150	125	140	530	315	400	177 [193]	160L	18.5	15	345	166	160	3	130	540	1350	10	91	440	500	80	200	950	250	63	4	16	1460			
									180M	22	18.5	22	351.5	168	160	4	200	590	1350	10	90	440	550	80	200	950	250	63	4	16	1490		
									180L	30	30	370.5	168	160	4	225	590	1400	10	98	440	550	80	200	1000	250	63	4	16	1530			
									200L	37	45	37	45	(425.5)	168	160	4	290	540	1450	10	95	440	500	80	200	1050	250	63	4	16	1640	
									225S	55	55	(432)	168	160	4	360	540	1500	10	102	440	500	80	200	1100	250	63	4	16	1660			
									250S	75	75	(463.5)	168	160	4	400	590	1550	10	101	440	550	80	200	1150	250	63	4	16	1720			
									250M	90	90	482.5	168	160	4	550	590	1550	10	99	440	550	80	200	1150	250	63	4	16	1760			
55/140N	150-32	200	150	160	670	280	400	240 [250]	200L	37	45	37	45	425.5	168	160	4	360	590	1600	10	94	405	550	80	200	1200	250	63	4	16	1800	
									225S	55	55	432	168	160	4	360	590	1600	10	97	405	550	80	200	1200	250	63	4	16	1820			
									250S	75	75	463.5	168	160	4	400	590	1700	10	97	405	550	80	200	1300	250	63	4	16	1880			
									250M	90	90	482.5	168	160	4	550	590	1700	10	94	405	550	80	200	1300	250	63	4	16	1920			
	150-40	200	150	160	670	315	450	275 [290]	200L	37	45	37	45	425.5	168	160	4	290	590	1600	10	100	440	550	80	200	1200	250	63	4	16	1800	
									225S	55	55	432	168	160	4	360	590	1600	10	105	440	550	80	200	1200	250	63	4	16	1820			
									250S	75	75	463.5	168	160	4	400	590	1700	10	105	440	550	80	200	1300	250	63	4	16	1880			
									250M	90	90	482.5	168	160	4	550	590	1700	10	102	440	550	80	200	1300	250	63	4	16	1920			
	150-50	200	150	180	670	375	500	344 [365]	200L	37	45	37	45	425.5	168	160	4	290	590	1600	10	100	500	550	80	200	1200	250	63	4	16	1820	
									225S	55	55	432	168	160	4	360	590	1600	10	105	500	550	80	200	1200	250	63	4	16	1840			
									250S	75	75	463.5	168	160	4	400	590	1700	10	105	500	550	80	200	1300	250	63	4	16	1900			
									250M	90	90	482.5	168	160	4	550	590	1700	10	102	500	550	80	200	1300	250	63	4	16	1940			
	200-26	200	200	180	670	355	440	230 [240]	200L	37	45	37	45	425.5	168	160	4	290	590	1600	10	100	480	550	80	200	1200	250	63	4	16	1840	
									225S	55	55	432	168	160	4	360	590	1600	10	105	480	550	80	200	1200	250	63	4	16	1860			
									250S	75	75	463.5	168	160	4	400	590	1700	10	105	480	550	80	200	1300	250	63	4	16	1920			
									250M	90	90	482.5	168	160	4	550	590	1700	10	102	480	550	80	200	1300	250	63	4	16	1960			
	200-32	250	200	200	670	355	450	270 [280]	200L	37	45	37	45	425.5	168	160	4	290	590	1600	10	100	500	550	80	200	1200	250	63	4	16	1840	
									225S	55	55	432	168	160	4	360	590	1600	10	105	500	550	80	200	1200	250	63	4	16	1860			
									250S	75	75	463.5	168	160	4	400	590	1700	10	105	500	550	80	200	1300	250	63	4	16	1920			
									250M	90	90	482.5	168	160	4	550	590	1700	10	102	500	550	80	200	1300	250	63	4	16	1960			
	200-40	250	200	180	670	355	500	314 [335]	200L	37	45	37	45	425.5	168	160	4	290	590	1600	10	100	500	550	80	200	1200	250	63	4	16	1840	
									225S	55	55	432	168	160	4	360	590	1600	10	105	500	550	80	200	1200	250	63	4	16	1860			
									250S	75	75	463.5	168	160	4	400	590	1700	10	105	500	550	80	200	1300	250	63	4	16	1920			
									250M	90	90	482.5	168	160	4	550	590	1700	10	102	500	550	80	200	1300	250	63	4	16	1960			
	55/140N (250-32) 65/160S	250-32	300	250	250	670	400	560	447 [475]	180L	30	30	370.5	208	200	4	225	750	1800	15	172	550	700	50	200	(600)	315	80	6	20	1820		
										200L	37	45	37	45	425.5	208	200	4	290	750	1700	15	176	550	700	50	200	(650)	315	80	6	20	1930
										225S	55	55	432	210	200	4	360	750	1700	15	181	550	700	50	200	(650)	315	80	6	20	1950		
										250S	75	75	463.5	210	200	4	400	750	1750	15	179	550	700	50	200	(675)	315	80	6	20	2010		
250-40		300	250	200	720	425	600	485 [515]	250M	90	90	482.5	210	200	4	550	750	1750	15	177	550	700	50	200	(675)	315	80	6	20	2050			
									280S	110	110	544	210	200	4	690	750	1850	15	179	550	700	50	200	(725)	315	80	6	20	2170			
									280M	132	132	569.5	210	200	4	720	750	1900	15	182	550	700	50	200	(750)	315	80	6	20	2220			
									180L	30	30	370.5	208	200	4	225	850	1650	15	194	575	800	50	200	(625)	315	80	6	20	1900			
250-50	300	250	200	720	475	670	570 [610]	200L	37	45	37	45	425.5	208	200	4	290	850	1750	15	198	575	800	50	200	(675)	315	80	6	20	2010		
								225S	55	55	432	210	200	4	360	850	1750	15	205	575	800	50	200	(675)	315	80	6	20	2030				
								250S	75	75	463.5	210	200	4	400	850	1800	15	203	575	800	50	200	(700)	315	80	6	20	2090				
								250M	90	90	482.5	210	200	4	550	850	1800	15	202	575	800	50	200	(700)	315	80	6	20	2210				
55/140N (250-32) 65/160S	250-40	300	250	200	720	425	600	485 [515]	280S	110	110	544	210	200	4	690	850	1900	15	205	575	800	50	200	(750)	315	80	6	20	2250			
									280M	132	132	569.5	210	200	4	720	850	1950	15	209	575	800	50	200	(775)	315	80	6	20	2300			
									180L	30	30	370.5	208	200	4	225	850	1650	15	194	625	800	50	200	(625)	315	80	6	20	1895			
									200L	37	45	37	45	425.5	208	200	4	290	850	1750	15	198	625	800	50	200	(675)	315	80	6	20	2010	
	250-50	300	250	200	720	475	670	570 [610]	225S	55	55	432	210	200	4	360	850	1750	15	205	625	800	50	200	(675)	315	80	6	20	2030			
									250S	75	75	463.5	210	200	4	400	850	1800	15	203	625	800	50	200	(700)	315	80	6	20	2100			
									250M	90	90	482.5	210	200	4	550	850	1800	15	202	625	800	50	200	(700)	315	80	6	20	2130			
									280S	110	110	544	210	200	4	690	850	1900	15	205	625	800	50	200	(750)	315	80	6	200	2250			
280M	132	132	569.5	210	200	4	720	850	1950	15	209	625	800	50	200	(775)	315	80	6	20	2300												

Note : TL dimensions indicate outline.

Connection						
1 M	3 M	6 B	10E / 10A	12 A	13 B	13 D
Pressure gaze	Pressure gaze	Casing drain	Flushing inlet / outlet	Circulation	Oil drain	Air vent
G 3/8"	G 3/8"	G 1/4" [25/62N] G 3/8" [35/80N] G 1/2" [45/120N] 55/140N 65/160S	G 1/4"	G 1/4"	G 1/4"	20 φ