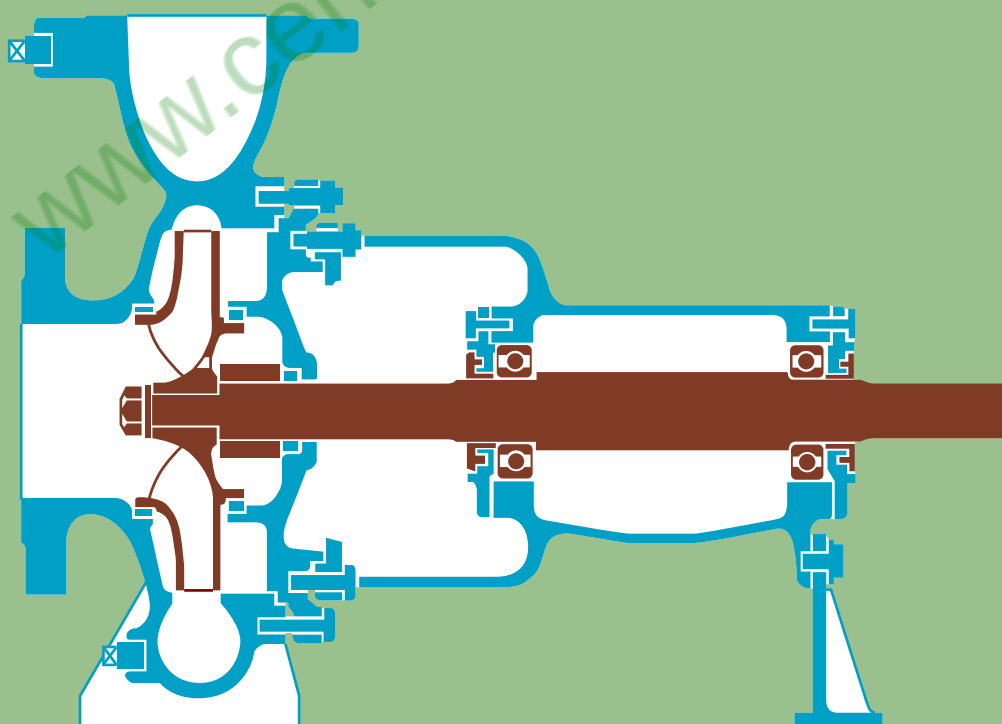


CER

End Suction Volute Pumps

NEW



TORISHIMA PUMP

Relible Designs satisfying Expectations

Newly-designed pumps aimed for the growing product line up!

CER

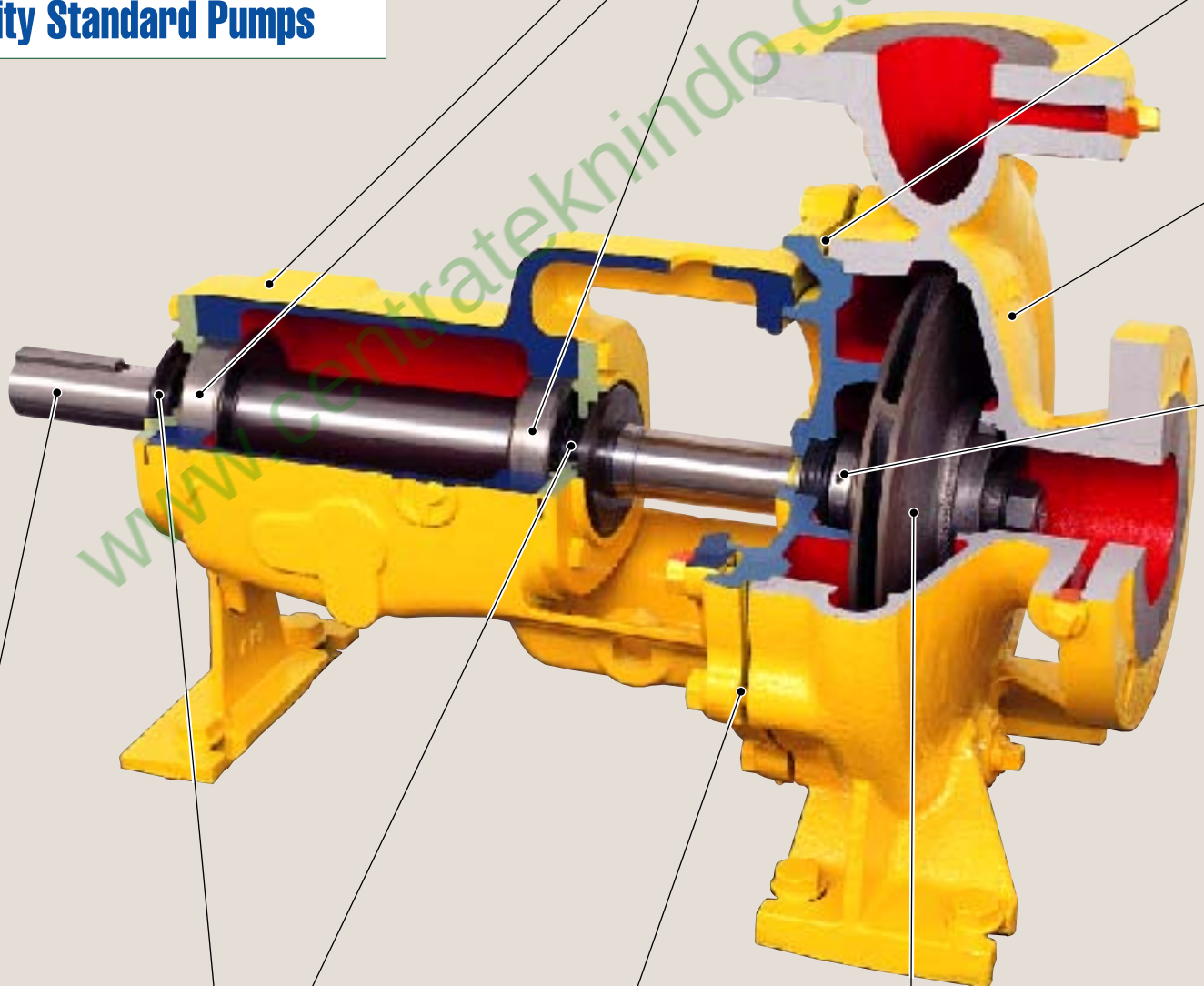
High-quality Standard Pumps

Bearing Case

The bearing case, coupled with sturdy shaft and smooth-running ball bearings, ensures stable pump operation. The case features a construction for outdoor use so that pump can be installed anywhere.

Ball Bearing

Non-contact, grease-lubricated, deep groove ball bearings are used. Thanks for heat-resistant grease used for lubricating the bearings, the pump can withstand high temperature.



Sturdy Shaft

The standard material for the shaft is SUS 420 J2. The shaft is strong enough even when used for two-pole execution.

Labyrinth Ring

The non-contact labyrinth ring has excellent dustproof and waterproof performance. It also contributes to the pump's highly efficient operation.

Back Pull-Out Construcion

The back pull-out construction allows the rotating assembly to be removed without disconnecting the piping. Disassembly and inspection are simple.

High-Efficiency Impeller

The closed impeller, available in a two-dimensional or three dimensional type, makes use of new hydraulics for assuring higher efficiency.



Non-Asbestos Packing

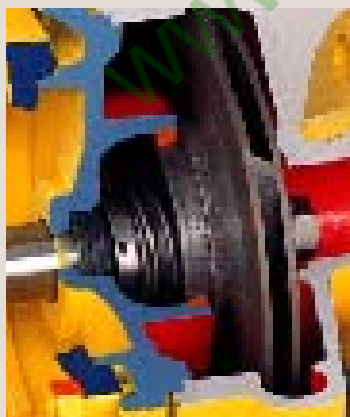
Non-asbestos packings are used, taking environmental preservation into account.

Volute Casing

The volute casing has integrally cast pump feet, helping back pull-out construction. In addition, the suction and discharge nozzles are arranged end-top to resist piping loads.

One-Touch Seal

A one-touch mechanical seal is used for easy setting. The sealing effectiveness of the shaft seal is extremely stable.



Specifications

Dis.Pres.	up to 0.98MPa(10kgf/cm ²)
Suc.Pres.	up to 0.5MPa(5kgf/cm ²)
Total head	up to 98m
Capacity	up to 720m ³ /hr(12m ³ /min)
Temp.	— 10to+80°C

For special requirements, including handling of heat transfer oils, the CER pumps are available in various constructions and materials. Please contact us for details.

Applications



Building installation, district heating and cooling:

Cold water circulation, cooling water circulation, hot water circulation, boiler water feeding, water supply, fire-fighting.

Industrial machinery:

As a component of unit products of set manufacturers, circulations of heat transfer oils.

Chemical industry:

Water supply, drainage, various other processes.

General industries:

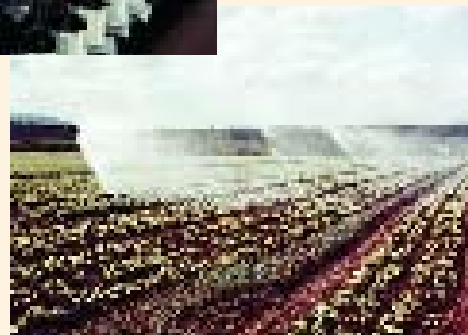
Water supply, drainage

Water services:

Water intake, water supply, water distribution, water for industrial use.

Agriculture:

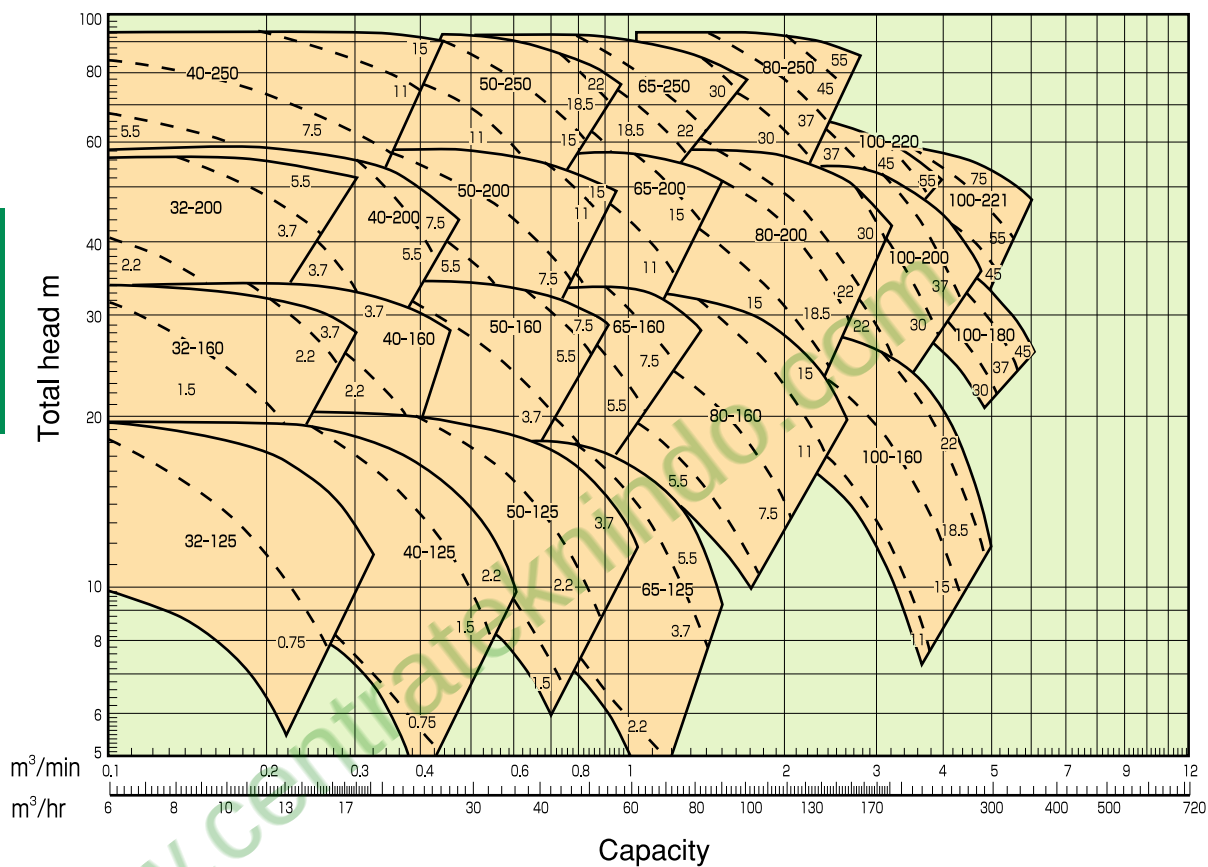
Irrigation, sprinkling.



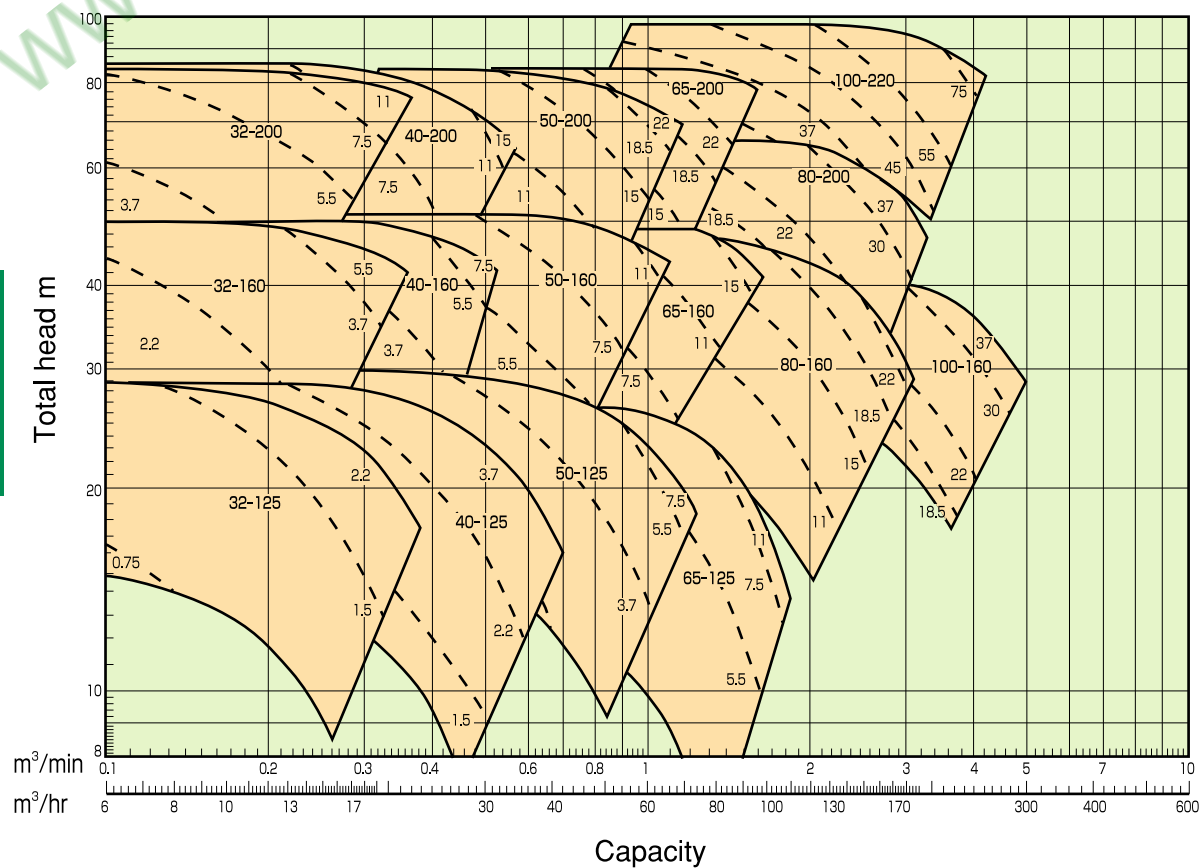
Selection Chart

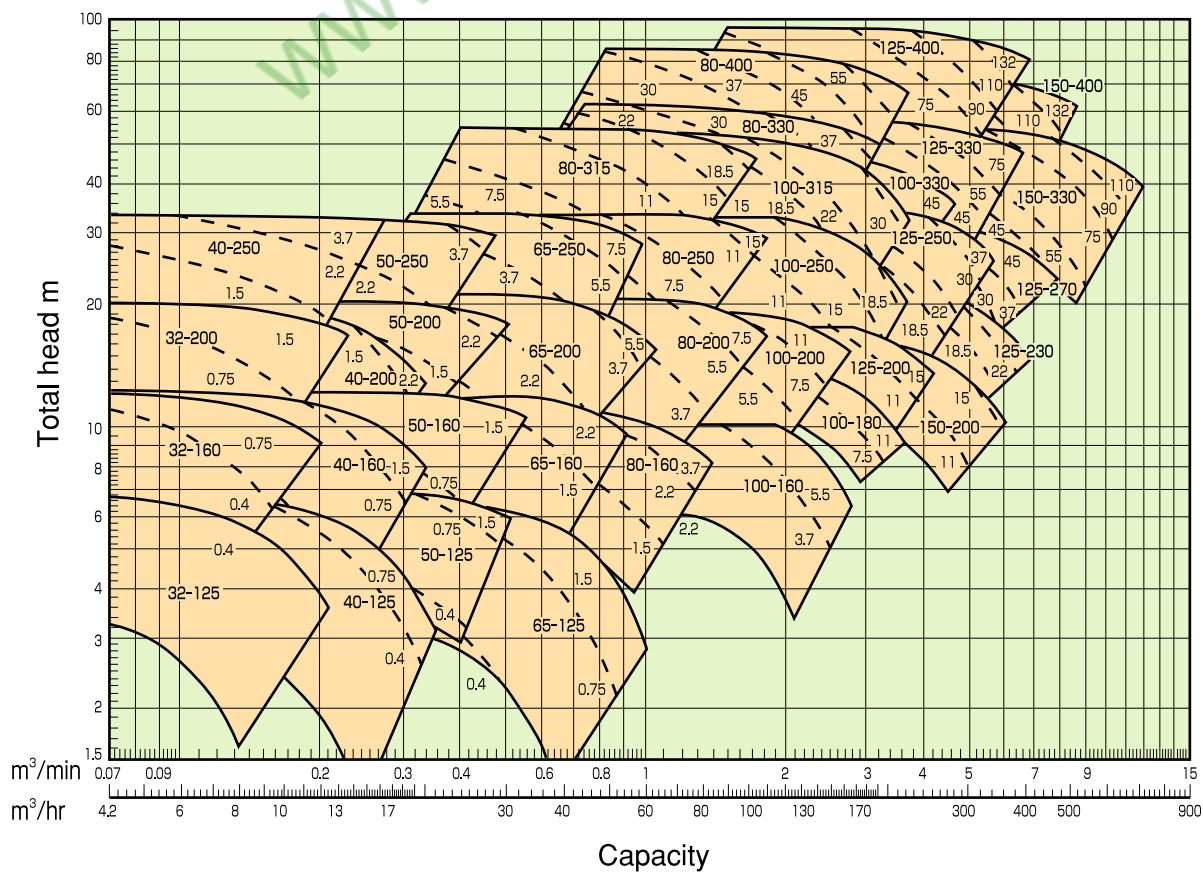
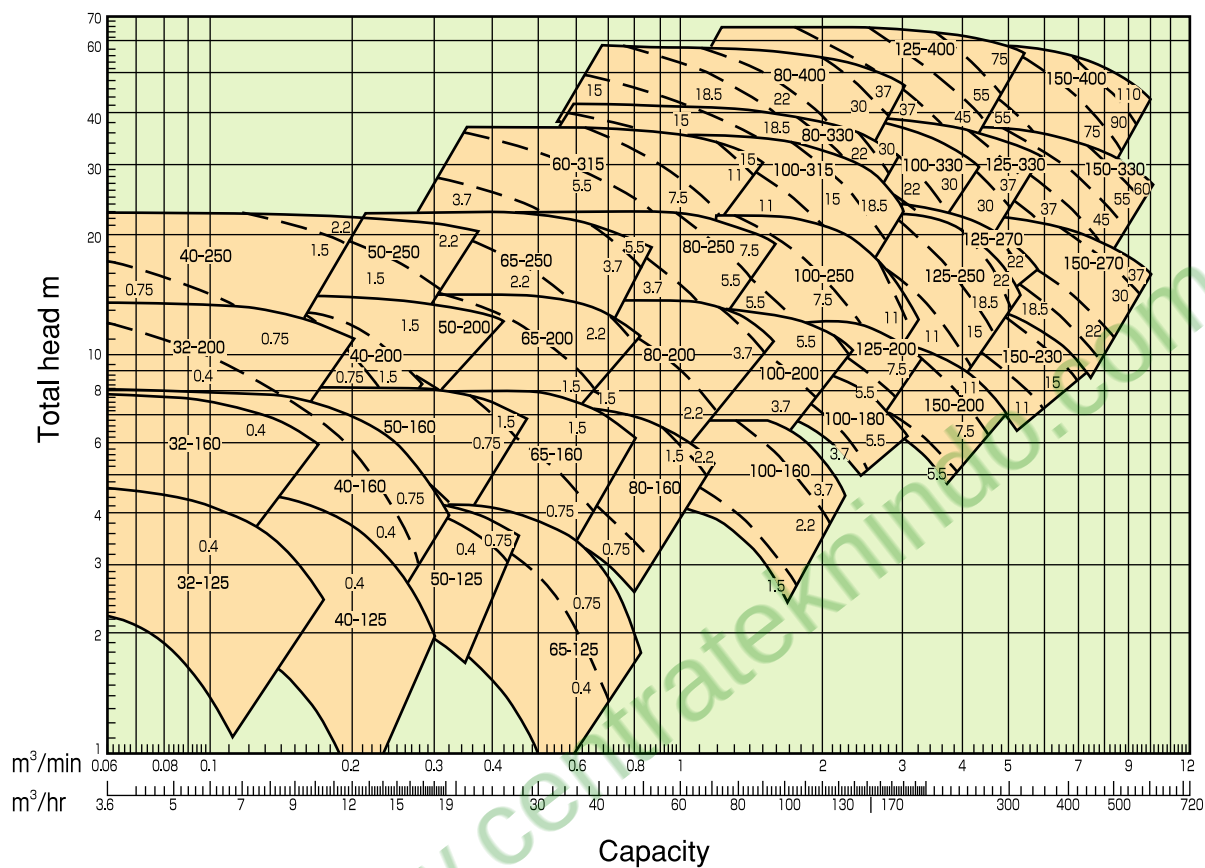
--- Shows motor rating in kW.

**50Hz
-2P**



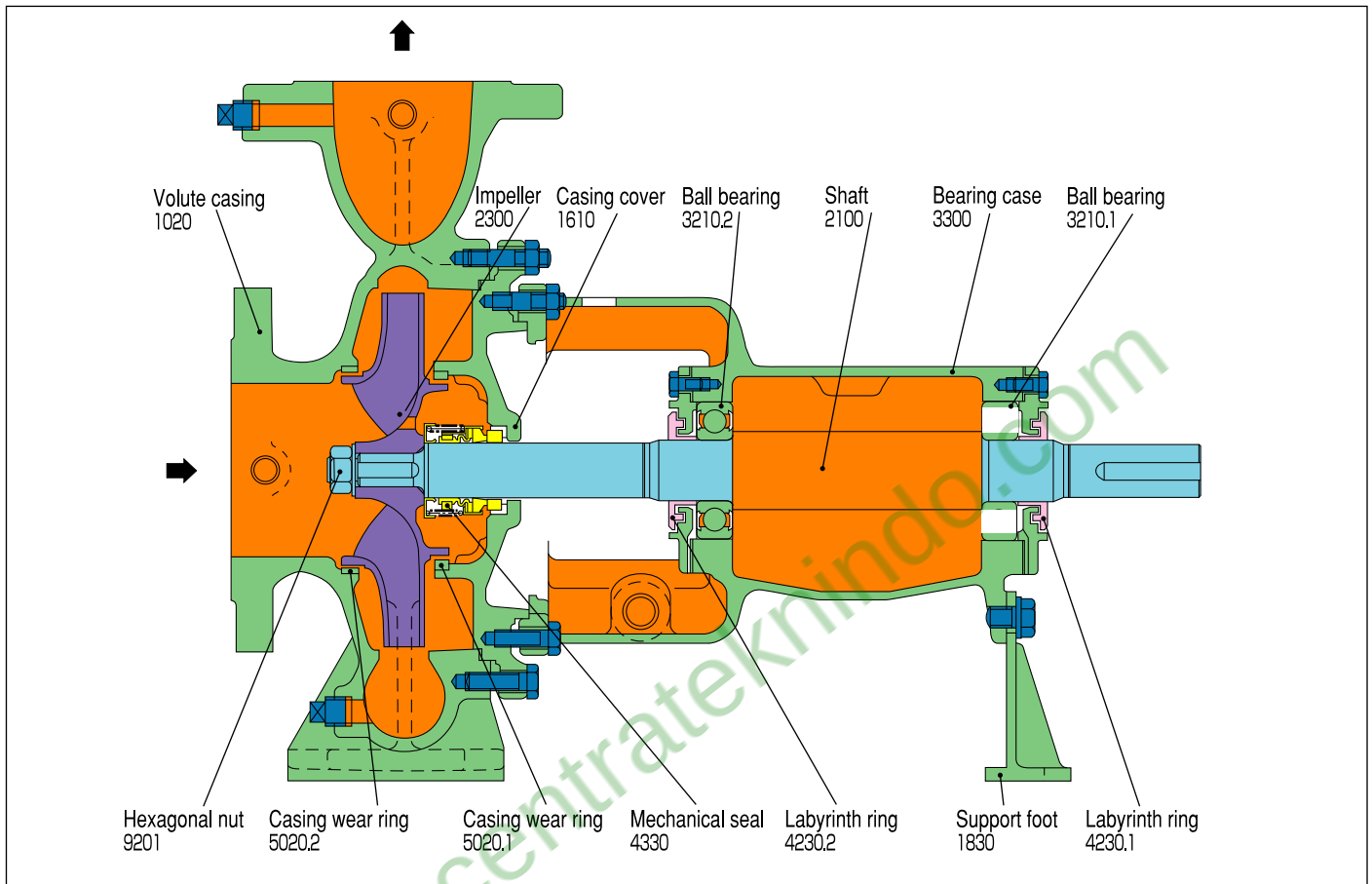
**60Hz
-2P**





Sectional Drawing

(Pump construction is a little different depending on size.)

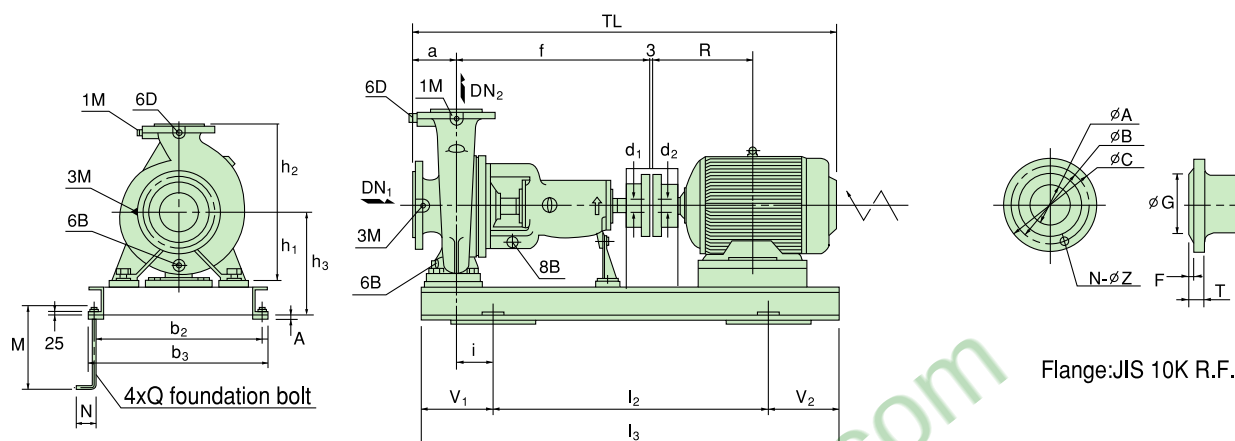


Materials and Interchangeability of Main Parts

Parts designation Parts No.		Standard material	Table of parts interchangeability																																										
			32-125	40-125	50-125	65-125	32-160	40-160	50-160	65-160	32-200	40-200	80-160	100-160	50-200	65-200	80-200	40-250	50-250	65-250	100-200	125-200	150-200	80-250	100-250	125-250	80-315	100-315	100-180	100-220	100-221	125-230	150-230	125-270	80-330	100-330	150-270	125-330	150-330	80-400	125-400	150-400			
Volute casing 1020		FC200 (Cast iron)																																											
Casing cover 1610		FC200 (Cast iron)																																											
Impeller 2300		FC200 (Cast iron)																																											
Casing wear ring	Suction side 5020.2	FC200 (Cast iron)																																											
	Balancing side 5020.1	FC200 (Cast iron)																																											
Mechanical seal 4330																																													
Shaft 2100		SUS420J2 (Stainless steel)																																											
Bearing case 3300		FC200 (Cast iron)																																											
Ball bearing 3210.1/2																																													
Labyrinth ring 4230.1/2		Plastic																																											
Impeller nut 9201		SS400 (Rolled steel)																																											
Support foot 1830		FC200 (Cast iron)																																											

Same color in same parts indicates interchangeability

Dimensional Drawing



Dimension Table

(Unit:mm)

Sizes	Pump dimensions								Motor dimensions		Baseplate dimensions				Foundation dimensions										TL
	DN ₁	DN ₂	a	d ₁ k ₆	f	h ₁	h ₂	Wt. (kgf)	Sizes	R	b ₃	l ₃	A	Wt. (kgf)	h ₃	i	b ₂	l ₂	M	N	Q	V ₁	V ₂		
32-125 40-125	40	32	80	24	364	112	140	25	71M	120	320	670	0	27	202	49	290	420	200	50	M12	105	145	685	
	50	40	80	24	364	112	140	26	80M	140	320	670	0	27	202	49	290	420	200	50	M12	105	145	751	
									90L	168.5	320	750	0	28	202	59	290	480	200	50	M12	115	155	795	
									100L	193	320	750	0	28	202	59	290	480	200	50	M12	115	155	822	
									112M	200	320	750	0	27	202	59	290	480	200	50	M12	115	155	842	
32-160 40-160 50-125 50-160 65-125	40	32	80	24	364	132	160	26	71M	120	320	670	0	28	222	49	290	420	200	50	M12	105	145	705	
	50	40	80	24	364	132	160	27	80M	140	320	670	0	28	222	49	290	420	200	50	M12	105	145	771	
									90L	168.5	320	750	0	30	222	59	290	480	200	50	M12	115	155	810	
	65	50	80	24	364	132	160	28	100L	193	320	750	0	29	222	59	290	480	200	50	M12	115	155	842	
									112M	200	320	750	0	28	222	59	290	480	200	50	M12	115	155	862	
	65	50	80	24	364	132	160	29	132S	239	350	870	0	31	222	94	320	600	200	50	M12	150	120	930	
	80	65	100	24	364	132	180	31	160M	323	430	1000	0	41	250	114	400	660	200	50	M12	170	170	1056	
									160L	345	430	1000	0	41	250	114	400	660	200	50	M12	170	170	1111	
32-200 65-160									180M	351.5	430	1000	0	43	270	114	400	660	200	50	M12	170	170	1142	
	40	32	80	24	364	160	180	32	71M	120	320	670	0	30	250	49	290	420	200	50	M12	105	145	705	
									80M	140	320	670	0	30	250	49	290	420	200	50	M12	105	145	771	
									90L	168.5	320	750	0	33	250	59	290	480	200	50	M12	115	155	810	
	80	65	100	24	364	160	180	31	100L	193	320	750	0	33	250	59	290	480	200	50	M12	115	155	842	
									112M	200	320	750	0	32	250	59	290	480	200	50	M12	115	155	862	
									132S	239	350	870	0	34	250	94	320	600	200	50	M12	150	120	930	
									160M	323	430	1000	0	39	250	114	400	660	200	50	M12	170	170	1056	
40-200									160L	345	430	1000	0	39	250	114	400	660	200	50	M12	170	170	1111	
									180M	351.5	430	1000	0	42	270	114	400	660	200	50	M12	170	170	1142	
									80M	140	320	670	0	30	250	41	290	420	200	50	M12	105	145	771	
									90L	168.5	320	750	0	33	250	51	290	480	200	50	M12	115	155	810	
	50	40	80	24	356	160	180	32	100L	193	320	750	0	33	250	51	290	480	200	50	M12	115	155	842	
									132S	239	350	870	0	34	250	86	320	600	200	50	M12	150	120	930	
									160M	323	430	1000	0	39	250	106	400	660	200	50	M12	170	170	1056	
									160L	345	430	1000	0	39	250	106	400	660	200	50	M12	170	170	1111	
40-250 50-200									180M	351.5	430	1000	0	42	270	106	400	660	200	50	M12	170	170	1142	
									80M	140	320	750	0	30	250	45	290	480	200	50	M12	115	155	884	
									90L	168.5	320	870	0	30	250	80	290	600	200	50	M12	150	120	923	
									100L	193	320	870	0	30	250	80	290	600	200	50	M12	150	120	955	
	50	40	80	32	460	160	225	44	112M	200	320	870	0	29	250	80	290	600	200	50	M12	150	120	975	
									132S	239	350	1000	0	33	250	100	320	660	200	50	M12	170	170	1043	
	65	50	100	32	460	160	200	41	160M	323	430	1120	0	36	250	120	400	740	200	50	M12	190	190	1169	
									160L	345	430	1120	0	36	250	120	400	740	200	50	M12	190	190	1224	
50-250									180M	351.5	430	1120	0	44	270	120	400	740	200	50	M12	190	190	1255	
									200L	395.5	470	1250	10	63	317	135	430	840	200	63	M16	205	205	1376	
									90L	168.5	380	870	0	36	270	65	350	600	200	50	M12	150	120	951	
									100L	193	380	870	0	38	270	65	350	600	200	50	M12	150	120	983	
									112M	200	380	870	0	38	270	65	350	600	200	50	M12	150	120	1003	
									132S	239	430	1000	0	42	270	85	400	660	200	50	M12	170	170	1071	

● TL dimensions are reference only

● * shows dimensions in case of drip-proof type motor. Other dimensions are same regardless of motor types.

- TL dimensions are reference only
- * shows dimensions in case of drip-proof type motor. Other dimensions are same regardless of motor types.

(Unit:mm)

Sizes	Pump dimensions								Motor dimensions		Baseplate dimensions					Foundation dimensions											TL
	DN ₁	DN ₂	a	d·K ₆	f	h ₁	h ₂	Wt. (kgf)	Sizes	R	b ₃	l ₃	A	Wt. (kgf)	h ₃	i	b ₂	l ₂	M	N	Q	V ₁	V ₂				
100-200	125	100	125	42	470	200	250	60	180M	351.5	530	1250	10	66	317	115	490	840	250	63	M16	205	205	1183	*		
									180L	370.5	530	1250	10	66	317	115	490	840	250	63	M16	205	205	1286			
									200M	376.5	530	1250	10	66	317	115	490	840	250	63	M16	205	205	1076			
									200L	395.5	530	1250	10	66	317	115	490	840	250	63	M16	205	205	1394			
									225S	402	530	1250	10	73	345	115	490	840	250	63	M16	205	205	1440			
									225M	414.5	530	1250	10	73	345	115	490	840	250	63	M16	205	205	1463			
									250S	433.5	530	1250	10	77	370	115	490	840	250	63	M16	205	205	1448			
									250M	452.5	530	1250	10	77	370	115	490	840	250	63	M16	205	205	1596			
									132S	239	430	1000	0	49	317	80	400	660	200	50	M12	170	170	1081			
100-250	125	100	125	42	470	225	280	72	132M	258	430	1000	0	49	317	80	400	660	200	50	M12	170	170	1119			
									160M	323	470	1120	0	52	317	100	440	740	200	50	M12	190	190	1207			
									160L	345	470	1120	0	52	317	100	440	740	200	50	M12	190	190	1262			
											470	1120	0	52	317	100	440	740	200	50	M12	190	190	1189			
									180M	351.5	470	1120	0	53	317	100	440	740	200	50	M12	190	190	1293			
											470	1120	0	53	317	100	440	740	200	50	M12	190	190	1203			
									200L	425.5	530	1250	10	74	342	115	490	840	250	63	M16	205	205	1414			
									160M	323	470	1120	0	56	342	100	440	740	200	50	M12	190	190	1232			
									160L	345	470	1120	0	56	342	100	440	740	200	50	M12	190	190	1287			
100-315	125	100	140	42	470	250	355	88			470	1120	0	56	342	100	440	740	200	50	M12	190	190	1214			
									180M	351.5	470	1120	0	56	342	100	440	740	200	50	M12	190	190	1318			
											470	1120	0	56	342	100	440	740	200	50	M12	190	190	1228			
									180L	370.5	470	1120	0	56	342	100	440	740	200	50	M12	190	190	1331			
									200L	395.5	530	1250	10	75	367	115	490	840	250	63	M16	205	205	1439			
											425.5	530	1250	10	75	367	115	490	840	250	63	M16	205	205	1424		
									225S	432	530	1250	10	75	367	115	490	840	250	63	M16	205	205	1440			
									132S	239	430	1000	0	49	317	85	400	660	200	50	M12	170	170	1081			
									132M	258	430	1000	0	49	317	85	400	660	200	50	M12	170	170	1119			
125-200	150	125	140	42	475	225	280	70	160M	323	470	1120	0	52	317	105	440	740	200	50	M12	190	190	1207			
									160L	345	470	1120	0	52	317	105	440	740	200	50	M12	190	190	1262			
									160M	323	470	1120	0	56	342	105	440	740	200	50	M12	190	190	1232			
									160L	345	470	1120	0	56	342	105	440	740	200	50	M12	190	190	1287			
											470	1120	0	56	342	105	440	740	200	50	M12	190	190	1214			
									180M	351.5	470	1220	0	56	342	105	440	740	200	50	M12	190	190	1318			
											470	1220	0	56	342	105	440	740	200	50	M12	190	190	1228			
									180L	370.5	470	1220	0	56	342	105	440	740	200	50	M12	190	190	1331			
									200L	395.5	530	1250	10	75	367	120	490	840	250	63	M16	205	205	1439			
125-250	150	125	140	42	475	250	355	87			425.5	530	1250	10	75	367	120	490	840	250	63	M16	205	205	1424		
									225S	432	530	1250	10	75	367	120	490	840	250	63	M16	205	205	1440			
									112M	200	430	870	0	46	342	70	400	600	200	50	M12	150	120	1038			
									132S	239	430	1000	0	51	342	90	400	660	200	50	M12	170	170	1106			
									132M	258	430	1000	0	51	342	90	400	660	200	50	M12	170	170	1144			
									160M	323	470	1120	0	56	342	110	440	740	200	50	M12	190	190	1232			
									160L	345	470	1120	0	56	342	110	440	740	200	50	M12	190	190	1287			
											470	1120	0	56	342	110	440	740	200	50	M12	190	190	1214			
									180M	351.5	470	1220	0	56	342	105	440	740	200	50	M12	190	190	1318			
150-200	150	150	160	42	480	250	355	96			470	1220	0	56	342	105	440	740	200	50	M12	190	190	1228			
									180L	370.5	470	1220	0	56	342	105	440	740	200	50	M12	190	190	1331			
									200L	395.5	530	1250	10	75	367	120	490	840	250	63	M16	205	205	1439			
											425.5	530	1250	10	75	367	120	490	840	250	63	M16	205	205	1424		
									225S	432	530	1250	10	75	367	120	490	840	250	63	M16	205	205	1440			
									112M	200	430	870	0	46	342	70	400	600	200	50	M12	150	120	1038			
									132S	239	430	1000	0	51	342	90	400	660	200	50	M12	170	170	1106			
									132M	258	430	1000	0	51	342	90	400	660	200	50	M12	170	170	1144			

(Unit:mm)

Sizes	Pump dimensions								Motor dimensions		Baseplate dimensions					Foundation dimensions										TL
	DN ₁	DN ₂	a	d _{1K6}	f	h ₁	h ₂	Wt. (kgf)	Sizes	R	b ₃	l ₃	A	Wt. (kgf)	h ₃	i	b ₂	l ₂	M	N	Q	V ₁	V ₂			
125-230	150	125	140	42	470	250	315	100	160L	345	470	1120	0	56	342	100	440	740	200	50	M12	190	190	1184		
											470	1120	0	56	342	100	440	740	200	50	M12	190	190	1288		
									180M	351.5	470	1120	0	56	342	100	440	740	200	50	M12	190	190	1198		
									180L	370.5	470	1120	0	56	342	100	440	740	200	50	M12	190	190	1295		
125-270	150	125	140	42	470	250	355	115	160L	345	470	1120	0	56	342	100	440	740	200	50	M12	190	190	1184		
											470	1120	0	56	342	100	440	740	200	50	M12	190	190	1288		
									180M	351.5	470	1120	0	56	342	100	440	740	200	50	M12	190	190	1198		
											470	1120	0	56	342	100	440	740	200	50	M12	190	190	1288		
									180L	370.5	470	1120	0	56	342	100	440	740	200	50	M12	190	190	1295		
											400.5	470	1250	10	66	367	115	440	840	250	63	M16	205	205	1291	
									200L	395.5	530	1250	10	75	367	115	490	840	250	63	M16	205	205	1409		
											425.5	530	1250	10	75	367	115	490	840	250	63	M16	205	205	1409	
150-230	200	150	160	42	470	280	400	151	160M	323	580	1120	0	66	372	80	550	740	200	50	M12	190	190	1202		
											580	1120	0	66	372	80	550	740	200	50	M12	190	190	1184		
									180M	351.5	590	1250	10	86	400	95	550	840	250	63	M16	205	205	1288		
											590	1250	10	86	400	95	550	840	250	63	M16	205	205	1288		
80-400	100	80	125	42	530	280	355	141	160M	323	530	1250	10	77	397	115	490	840	250	63	M16	205	205	1247		
											530	1250	10	77	397	115	490	840	250	63	M16	205	205	1302		
									160L	345	530	1250	10	77	397	115	490	840	250	63	M16	205	205	1229		
											530	1250	10	77	397	115	490	840	250	63	M16	205	205	1333		
									180M	351.5	530	1250	10	77	397	115	490	840	250	63	M16	205	205	1243		
											530	1250	10	77	397	115	490	840	250	63	M16	205	205	1340		
									180L	370.5	530	1250	10	77	397	115	490	840	250	63	M16	205	205	1331		
											400.5	530	1250	10	77	397	115	490	840	250	63	M16	205	205	1331	
									200M	406.5	590	1400	10	89	397	140	550	940	250	63	M16	230	230	1366		
											395.5	590	1400	10	89	397	140	550	940	250	63	M16	230	230	1454	
									200L	425.5	590	1400	10	89	397	140	550	940	250	63	M16	230	230	1454		
											432	590	1400	10	84	397	140	550	940	250	63	M16	230	230	1530	
									225S	432	590	1400	10	84	397	140	550	940	250	63	M16	230	230	1470		
											432	590	1400	10	84	397	140	550	940	250	63	M16	230	230	1515	
									225M	444.5	590	1400	10	84	397	140	550	940	250	63	M16	230	230	1553		
											463.5	590	1400	10	84	397	140	550	940	250	63	M16	230	230	1538	
125-330	150	125	140	42	530	280	355	137	180M	351.5	530	1250	10	80	400	95	490	840	250	63	M16	205	205	1348		
											530	1250	10	80	400	95	490	840	250	63	M16	205	205	1258		
									180L	370.5	530	1250	10	80	400	95	490	840	250	63	M16	205	205	1355		
											400.5	530	1250	10	80	400	95	490	840	250	63	M16	205	205	1346	
									200M	406.5	590	1400	10	91	397	120	550	940	250	63	M16	230	230	1381		
											395.5	590	1400	10	91	397	120	550	940	250	63	M16	230	230	1469	
									200L	425.5	590	1400	10	91	397	120	550	940	250	63	M16	230	230	1469		
											432	590	1400	10	87	397	120	550	940	250	63	M16	230	230	1545	
									225S	432	590	1400	10	87	397	120	550	940	250	63	M16	230	230	1485		
											432	590	1400	10	87	397	120	550	940	250	63	M16	230	230	1530	
									225M	444.5	590	1400	10	87	397	120	550	940	250	63	M16	230	230	1568		
											444.5	590	1400	10	87	397	120	550	940	250	63	M16	230	230	1530	
									250S	463.5	590	1400	10	87	397	120	550	940	250	63	M16	230	230	1553		
											452.5	590	1400	10	87	397	120	550	940	250	63	M16	230	230	1607	
									250M	482.5	590	1400	10	87	397	120	550	940	250	63	M16	230	230	1640		
											345	530	1250	10	81	400	95	490	840	250	63	M16	205	205	1264	
150-270	200	150	160	42	530	280	375	161	160L	345	530	1250	10	80	400	95	490	840	250	63	M16	205	205	1368		
											530	1250	10	80	400	95	490	840	250	63	M16	205	205	1278		
									180L	370.5	530	1250	10	80	400	95	490	840	250	63	M16	205	205	1375		
											400.5	530	1250	10	80	400	95	490	840	250	63	M16	205	205	1366	
									200L	395.5	590	1400	10	91	400	120	550	940	250	63	M16	230	230	1489		
											425.5	590	1400	10	91	400	120	550	940	250	63	M16	230	230	1489	
125-400	150	125	140	42	530	315	400	177	180M	351.5	590	1250	10	90	435	95</										

(Unit:mm)

Sizes	Pump dimensions								Motor dimensions		Baseplate dimensions					Foundation dimensions										
	DN ₁	DN ₂	a	d ₁ k ₆	f	h ₁	h ₂	Wt. (kgf)	Sizes	R	b ₃	l ₃	A	Wt. (kgf)	h ₃	i	b ₂	l ₂	M	N	Q	V ₁	V ₂	TL		
150-330	200	150	160	42	530	315	400	165	225S	432	590	1400	10	95	397	120	550	940	250	63	M16	230	230	1505		
										432	590	1400	10	95	397	120	550	940	250	63	M16	230	230	1550		
									225M	444.5	590	1400	10	95	397	120	550	940	250	63	M16	230	230	1588		
										444.5	590	1400	10	95	397	120	550	940	250	63	M16	230	230	1550		
									250S	463.5	640	1400	10	99	435	120	600	940	250	63	M16	230	230	1573		
										493.5	640	1400	10	99	435	120	600	940	250	63	M16	230	230	1550		
									250M	452.5	640	1400	10	99	435	120	600	940	250	63	M16	230	230	1627		
										482.5	640	1400	10	99	435	120	600	940	250	63	M16	230	230	1660		
									250M	512.5	640	1400	10	99	435	120	600	940	250	63	M16	230	230	1751		
										280S	514	710	1600	10	109	435	160	670	1060	250	63	M16	270	270	1718	
									544		710	1600	10	109	435	160	670	1060	250	63	M16	270	270	1725		
									150-400	200	150	160	42	530	315	450	202	180L	400.5	590	1250	10	90	435	95	550
406.5	590	1400	10	99	435	120	550	940											250	63	M16	230	230	1401		
200M	425.5	590	1400	10	99	435	120	550										940	250	63	M16	230	230	1489		
	432	590	1400	10	95	435	120	550										940	250	63	M16	230	230	1505		
225S	432	590	1400	10	95	435	120	550										940	250	63	M16	230	230	1550		
	444.5	590	1400	10	95	435	120	550										940	250	63	M16	230	230	1588		
225M	444.5	590	1400	10	95	435	120	550										940	250	63	M16	230	230	1550		
	463.5	640	1400	10	99	435	120	600										940	250	63	M16	230	230	1573		
250S	493.5	640	1400	10	99	435	120	600										940	250	63	M16	230	230	1550		
	452.5	640	1400	10	99	435	120	600										940	250	63	M16	230	230	1627		
250M	482.5	640	1400	10	99	435	120	600										940	250	63	M16	230	230	1660		
	512.5	640	1400	10	99	435	120	600										940	250	63	M16	230	230	1751		
280S	514	710	1600	10	109	435	160	670										1060	250	63	M16	270	270	1718		
	544	710	1600	10	109	435	160	670										1060	250	63	M16	270	270	1725		
280M	539.5	710	1600	10	109	435	160	670										1060	250	63	M16	270	270	1771		
	569.5	710	1600	10	109	435	160	670										1060	250	63	M16	270	270	1776		

● TL dimensions are reference only

● * shows dimensions in case of drip-proof type motor. Other dimensions are same regardless of motor types.

Flange Dimensions acc. to JIS 10kg/cm²

Nominal dia.	φA	φB	φC	φG	F	T	N-φZ
32	32	100	135	76	2	20	4-19
40	40	105	140	81	2	20	4-19
50	50	120	155	96	2	20	4-19
65	65	140	175	116	2	22	4-19
80	80	150	185	126	2	22	8-19
100	100	175	210	151	2	24	8-19
125	125	210	250	182	2	24	8-23
150	150	240	280	212	2	26	8-23
200	200	290	330	262	2	26	12-23

Comparison Table of Motor Specifications by Motor Type

		Motor dimensions(low-tension,3-phase,squirrel-cage induction motor)																			
Sizes	R (mm)	Totally enclosed fan-cooled type																Drip-proof type			
		Standard type								Increased safety type(eG3)								Explosion-proof type(d2G4)			
		2P		4P		2P		4P		2P		4P		2P		4P		2P		4P	
		Rating (kW)	Wt. (kgf)	Rating (kW)	Wt. (kgf)	Rating (kW)	Wt. (kgf)	Rating (kW)	Wt. (kgf)	Rating (kW)	Wt. (kgf)	Rating (kW)	Wt. (kgf)	Rating (kW)	Wt. (kgf)	Rating (kW)	Wt. (kgf)	Rating (kW)	Wt. (kgf)	Rating (kW)	Wt. (kgf)
71M	120	14	0.4	7	0.4	8	0.4	7.2	0.4	9	0.4	17	0.4	17	—	—	—	—	—	—	—
80M	140	19	0.75	10.5	0.75	11	0.75	11.5	0.75	12	0.75	26	0.75	26	0.75	9	0.75	10.5	0.75	10.5	1.5
90L	168.5	24	1.5	17	20.5	1.5	20	1.5	18.5	1.5	20	1.5	28	1.5	30	1.5	15.5	1.5	16	1.5	16
100L	193	28	—	—	—	2.2	25	2.2	29	2.2	34.5	—	—	—	—	2.2	38	—	—	2.2	22
112M	200	28	3.7	33	3.7	36	3.7	43	3.7	45.5	3.7	54	3.7	55	3.7	27	3.7	30	3.7	30	3.7
132S	239	38	5.5	47	5.5	49	5.5	60.5	5.5	65	5.5	74	5.5	78	5.5	34	5.5	40	5.5	40	5.5
132M	258	38	—	—	—	7.5	60	—	—	7.5	74.5	—	—	—	—	7.5	88	—	—	7.5	51
160M	323	42	11.5	80	11	85	7.5	90	11	100	11	115	11	115	11	95	11	70	11	70	11
160L	345	42	18.5	115	15	105	11	120	15	125	18.5	160	15	145	18.5	85	15	85	15	85	15
180L	48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
180M	351.5	48	22	140	18.5	130	145	155	18.5	150	22	205	18.5	200	—	—	—	—	—	—	—
180L	370.5	55	30	170	30	175	—	—	—	—	—	—	—	—	—	30	120	—	—	—	—
200M	400.5	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
200L	376.5	55	—	—	—	—	—	—	—	—	—	—	—	—	—	55	230	—	—	—	—
200M	406.5	65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
200L	395.5	55	37	225	—	—	22	245	—	—	30	345	30	375	—	—	—	—	—	—	—
225S	425.5	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
225S	402	55	55	275	—	—	30	275	—	—	37	390	—	—	—	75	320	—	—	—	—
225S	432	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
225S	432	65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
225S	432	75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
225M	414.5	55	—	—	—	—	—	—	—	—	—	—	—	—	—	90	340	—	—	—	—
225M	444.5	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
225M	444.5	75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250S	493.5	55	75	460	—	—	—	—	—	—	—	—	—	—	—	110	500	—	—	—	—
250S	463.5	75	—	—	—	—	75	470	—	—	—	—	—	—	—	—	—	—	—	—	—
250S	493.5	85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250M	482.5	55	90	5																	

www.centrateknindo.com



TORISHIMA PUMP MFG.CO.,LTD.

Head Office & Works: 1-1-8, Miyata-cho, Takatsuki City, Osaka, Japan. Phone: 072-695-0551 Telefax: 072-693-1288

TORISHIMA SINGAPORE

SINGAPORE BRANCH 30 Ubi Crescent #01-02 Ubi Techpark Singapore 408566 Phone: (65)6779-0123 Telefax: (65)6779-6900

TORISHIMA HONG KONG

TORISHIMA (HONG KONG) LIMITED Unit 603, 6/F., Tower III, Enterprise Square, 9 Sheung Yuet Road, Kowloon Bay, Kowloon, Hong Kong
Phone: (852)2795-1838 Fax: (852)2754-3293

TORISHIMA MALAYSIA

TORISHIMA MALAYSIA SDN.BHD Suite 1906, 19th Floor Kenanga International Jalan Sultan Ismail 50250 Kuala Lumpur, Malaysia
Phone: (603)2715-0068 Fax: (603)2715-0019

TORISHIMA INDONESIA

P.T. TORISHIMA GUNA INDONESIA JL Rawa Sumur Timur No.1, Pulogadung Industrial Estate, P.O Box.:1160 JAT., Jakarta 13930, Indonesia
Phone: (62)21-460-3963,(62)21-460-3964,(62)21-480-0205 Fax:(62)21-460-3937

P.T. TORISHIMA GUNA ENGINEERING JL Rawa Sumur Timur No.1, Pulogadung Industrial Estate, P.O Box.:1160 JAT., Jakarta 13930, Indonesia
Phone: (62)21-460-3963,(62)21-460-3964,(62)21-480-0205 Fax:(62)21-460-3937

P.T. GETEKA FOUNINDO JL Rawa Sumur Timur No.1, Pulogadung Industrial Estate, P.O Box.:1160 JAT., Jakarta 13930, Indonesia
Phone: (62)21-460-3936,(62)21-460-3937 Fax: (62)21-460-3937

TORISHIMA U.A.E

MIDDLE EAST OFFICE 5th Floor, office No.503, Al Salmeen Golden Tower, P.O Box.:72197, Electra Street, Abu Dhabi. U.A.E
Phone: (971)2-6743880 Fax:(971)2-6743881

TORISHIMA U.K.

EUROPE OFFICE 20/23 Woodside place Glasgow G3 7QF, Scotland, United Kingdom Phone: (44)141-304 4546 Fax:(44)141-332 4927

TORISHIMA U.S.

U.S. OFFICE 82B Daniels Road, Charlton, MA01507, United States of America Phone: (1)866-374-1130 Fax:(1)508-248-9321