

## EBARA SLURRY PUMP Model SAL



The Products described herein fall under "the goods listed in row 16 of the appended table 1 of the Export Trade Control Order of Japan", so in cases of export of such Products, you need to confirm "use" and "purchaser and/or end-user" and, as case may be, obtain the approval of the Minister of Economy, Trade and Industry. (Please confirm these conditions on your own.) Furthermore, some of the Products fall under row 1-15 of the appended table 1(listed items). In case of export of these listed items, you are required to obtain the export license from the Minister of Economy, Trade and Industry. For more information, please contact our sales office located near you.

### CAUTION

- Do not attempt to operate, inspect or service this pump before you have read and understood manual of pump.
- Wiring and grounding work must NOT be performed by unqualified persons. It is extremely dangerous for unqualified persons to perform such work. The user should install electrical leakage breakers and overload safety devices to prevent electric shock and fire.

※1 "Model SAL " in this catalog is our model code

※2 All specifications subject to change without notice.



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# EBARA SLURRY PUMP MODEL SAL PRODUCT FEATURES

## 1 FEATURES

- The limit load characteristics of the specially-designed pumps control horsepower regardless of the pump flow.
- The direct coupled type pumps that ensure stable operation are available as standard specifications.
- Special cast iron is used for the casing and impeller to offer high wear resistance.
- The effect of the rear vane of impeller reduces leakage from the gland packing.

## 2 APPLICATIONS

- For recycling of cutting fluids, grinding fluids, and cleaning solutions
- For various types of wastewater treatment and pumping effluent wastewater
- For fishery (e.g. pumping of seawater for aquaculture and processing of fish and shellfish)
- For paper industry (e.g. transfer of pulp, white water, and clay)

## PUMP SPECIFICATION

### SAL 50Hz / 60Hz Slurry Pumps

LIQUID	Slurry liquid including particle 0-80°C
TOTAL SUCTION HEAD	-5m : 125×100SAL and below -3m : 150×125SAL and above
ALLOWABLE POSITIVE SUCTION PRESSURE	0.1MPa (1kgf/cm <sup>2</sup> )
CONSTRUCTION	
IMPELLER	Semi open with rear vane
SHAFT SEAL	Gland packing
FLUSHING *1	External flushing
	Model SALE, F, G: 2-3L/min×0.1MPa(1kgf/cm <sup>2</sup> ) Model SAL, H, J: 3-5L/min×0.2MPa(2kgf/cm <sup>2</sup> )
BEARING	Sealed ball bearing : SALE, F, G
	Oil bath ball bearing : SALH, J
FLANGE	Equivalent to JIS 10K normal type (notch bolt hole type)
MATERIALS	
CASING	Chromium cast iron
IMPELLER	High-chromium cast iron
SHAFT	SUS403 : Model SALE, F, G
SHAFT SLEEVE	S35C : Model SALH, J
	SUS403
MOTOR	Three phase, 4 pole or 6 pole 50Hz:3phase/380-415V, 60Hz:3phase/380-415V
	Total enclosed
Drive metho	Motor direct drive flexible coupling

\*1 External flushing is necessary to protect gland packing and shaft sleeve. Please provide Fresh water.

Cannot be used for food-related liquid transport

In the case of facilities for living creatures (such as fish farms, cages or aquariums), a spare machine must be prepared since there is a risk of lack of oxygen due to pump failure. In the case of important equipment (such as computer cooling equipment or freezer cooling equipment), a spare machine must be prepared in case of pump failure. Depending on the equipment used, flush out the pump sufficiently and check it before use since cutting fluid, rubber mold material or foreign material etc. from pump manufacturing may be mixed in with the liquid used.

## STANDARD ACCESSORIES

Common base	1
Coupling	1 set
Coupling guard	1

## OPTIONAL ACCESSORIES

Priming funnel
Companion flange

## MODEL CODE

\*65 X 50 SALG 5 3.7 BL  
① ② ③ ④ ⑤ ⑥

①Suction Size (mm) ②Discharge Size (mm)  
③Model ④Frequency (5 : 50Hz, 6 : 60Hz)  
⑤Motor Output (kW) ⑥Identification Code

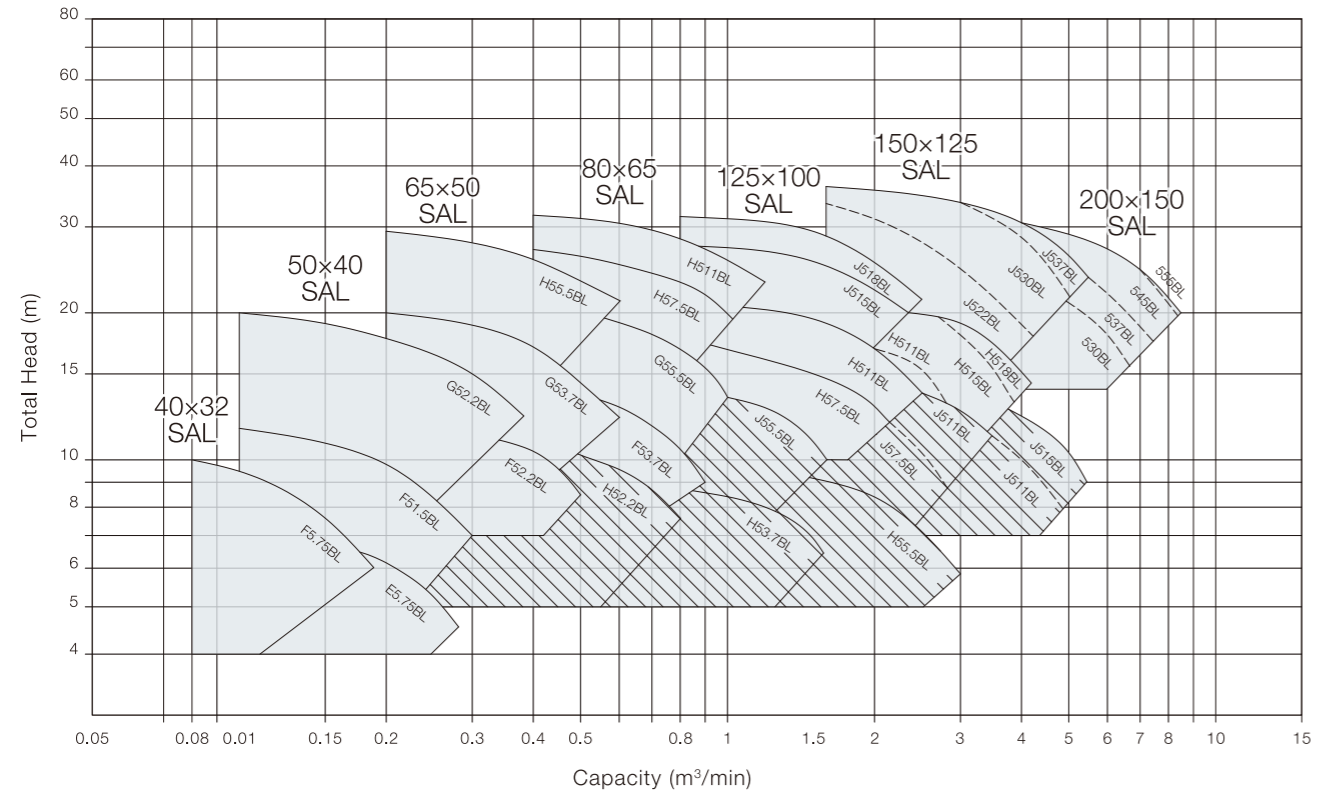
Note:

1. Impeller measurements will vary for 150×125 and 200×150 according to capacities and heads used.
2. Output indicated in the chart is in relation to a 1.1 specific gravity. If specific gravity exceeds 1.1, out-put must be raised one level.

# PERFORMANCE CHART

## Model SAL 50Hz

□ [Synchronous speed :1500min<sup>-1</sup>]  
 ▨ [Shaded portion Synchronous speed :1000min<sup>-1</sup>]



Performance Table 50Hz

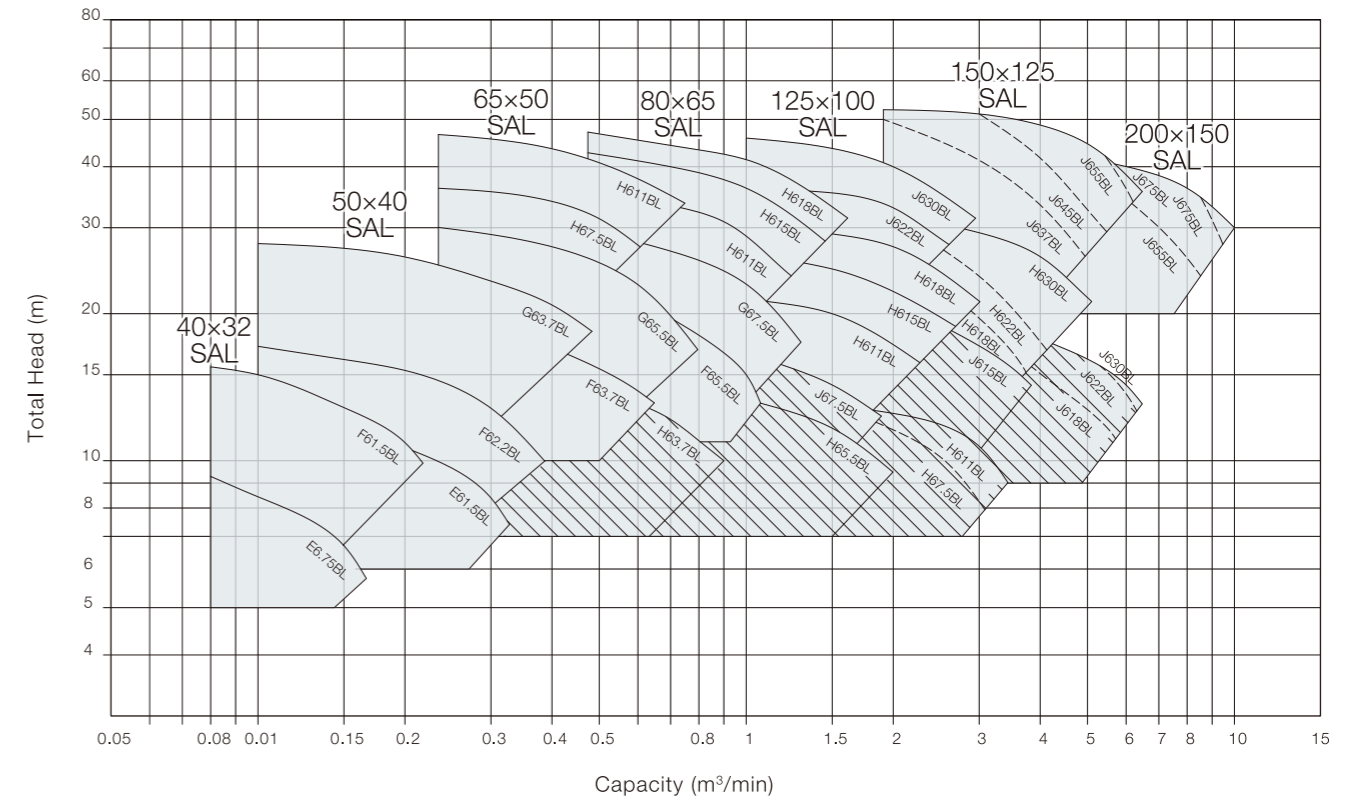
Size φs × φd	Model	Motor Output kW	Pole	Capacity m³/min	Total Head m	Capacity m³/min	Total Head m	Capacity m³/min	Total Head m
40 X 32	40X32SALF5.75BL	0.75	4	0.08	10.2	0.14	8.2	0.18	6.1
	50X40SALE5.75BL	0.75	4	0.18	6.6	-	-	0.28	4.6
50 X 40	50X40SALF5.15BL	1.5		0.10	11.9	0.2	10	0.30	7.4
	50X40SALG52.2BL	2.2	0.10	19.9	0.24	16.7	0.38	12.5	
65 X 50	65X50SALF52.2BL	2.2	4	0.36	11.0	-	-	0.50	8.6
	65X50SALG53.7BL	3.7		0.20	20.0	0.4	17	0.60	12.5
	65X50SALH55.5BL	5.5		0.20	29.0	0.4	25.5	0.60	21.0
80 X 65	80X65SALF53.7BL	3.7	4	0.58	13.0	-	-	0.90	9.0
	80X65SALG55.5BL	5.5		0.58	19.3	0.8	16.5	1.05	13.0
	80X65SALH57.5BL	7.5		0.40	27.0	0.7	24	1.05	19.5
	80X65SALH511BL	11		0.40	32.0	0.8	29	1.25	23.0
125 X 100	80X65SALH52.2BL	2.2	6	0.52	10.0	-	-	0.80	7.5
	125X100SALH57.5BL	7.5	4	0.86	17.2	1.5	15	2.10	12.0
	125X100SALH511BL	11		1.06	20.5	1.8	18	2.50	14.0
	125X100SALH53.7BL	3.7	6	0.85	8.8	-	-	1.60	6.5
	125X100SALJ515BL	15	4	0.90	28.0	1.7	24.5	2.30	20.0
125X100SALJ518BL	18.5	0.90		33.0	1.6	29.5	2.55	22.0	
	125X100SALJ55.5BL	5.5	6	1.00	13.0	-	-	1.65	9.8

Pumps with 150x125 and 200x150 diameters must be matched to capacities and heads used. Indicate what principal items will be used.

# PERFORMANCE CHART

## Model SAL 60Hz

□ [Synchronous speed :1800min<sup>-1</sup>]  
 ▨ [Shaded portion Synchronous speed :1200min<sup>-1</sup>]

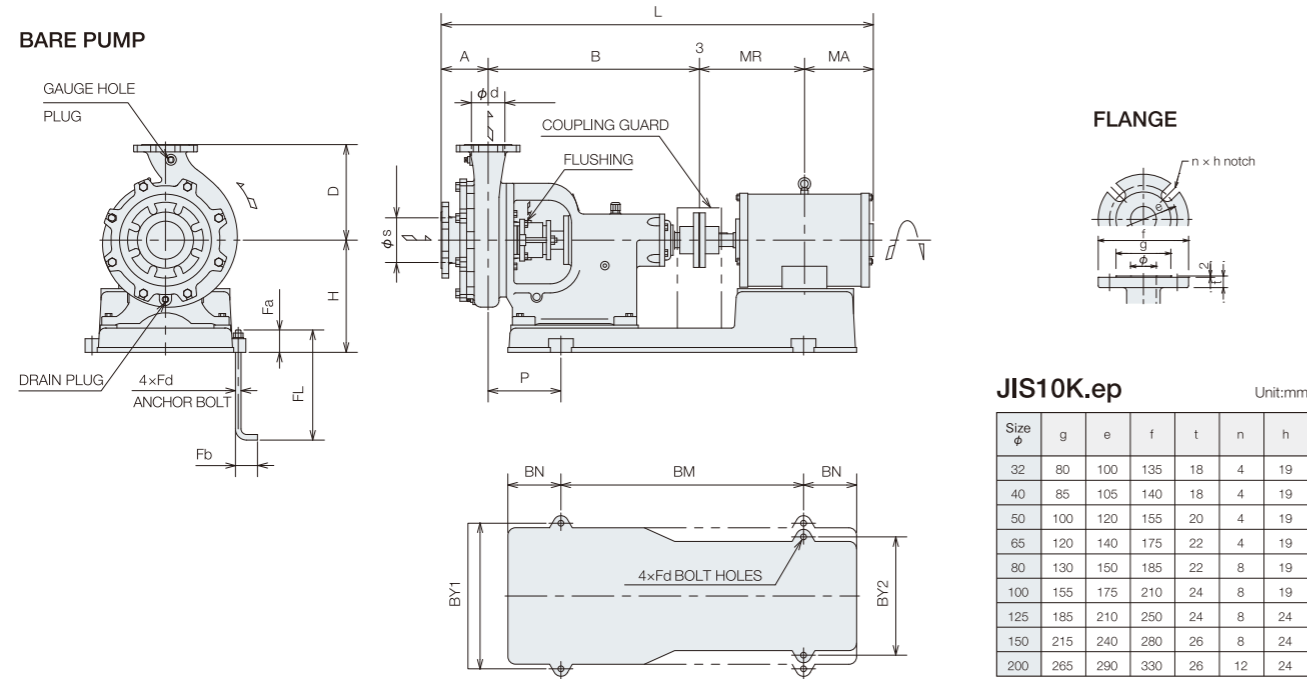


Performance Table 60Hz

Size φs × φd	Model	Motor Output kW	Pole	Capacity m³/min	Total Head m	Capacity m³/min	Total Head m	Capacity m³/min	Total Head m
40 X 32	40X32SALE6.75BL	0.75	4	0.08	9.2	0.13	7.4	0.17	5.7
	40X32SALF61.5BL	1.5		0.08	15.5	0.15	13.2	0.22	9.8
50 X 40	50X40SALE61.5BL	1.5	4	0.21	10.5	-	-	0.33	7.5
	50X40SALF62.2BL	2.2		0.1	17.5	0.2	16	0.38	10.2
	50X40SALG63.7BL	3.7		0.1	28	0.25	25	0.48	18
65 X 50	65X50SALF63.7BL	3.7	4	0.45	16.7	-	-	0.65	13
	65X50SALG65.5BL	5.5		0.24	30.2	0.5	25	0.8	17
	65X50SALH67.5BL	7.5		0.28	35.5	0.5	32	0.6	27
	65X50SALH611BL	11		0.28	45.0	0.5	40	0.75	33.0
80 X 65	80X65SALF65.5BL	5.5	4	0.75	19.0	-	-	1.1	13.0
	80X65SALG67.5BL	7.5		0.64	27.7	0.97	23.5	1.3	17.5
	80X65SALH611BL	11		0.75	32.0	1	29	1.25	24
	80X65SALH615BL	15		0.48	42.0	0.9	38	1.5	28.0
	80X65SALH618BL	18		0.48	47.0	1	42.0	1.65	31
125 X 100	80X65SALH63.7BL	3.7	6	0.55	14.2	-	-	0.9	10
	125X100SALH611BL	11	4	1.1	21	1.6	19	2.2	16.0
	125X100SALH615BL	15		1.35	26	2	23	2.65	19.0
	125X100SALH618BL	18	1.55	29.5	2.2	26.5	3	21	
	125X100SALH65.5BL	5.5	6	1.10	12.5	-	-	2.00	9.4
	125X100SALJ622BL	22	4	1.40	36.0	-	-	2.5	27.5
	125X100SALJ630BL	30	0.96	46.5	1.90	41.0	2.95	31.5	
125X100SALJ67.5BL	7.5	6	1.2	16	-	-	1.85	12.5	

Pumps with 150x125 and 200x150 diameters must be matched to capacities and heads used. Indicate what principal items will be used.

# DIMENSIONS (WITH MOTOR)



## 50Hz

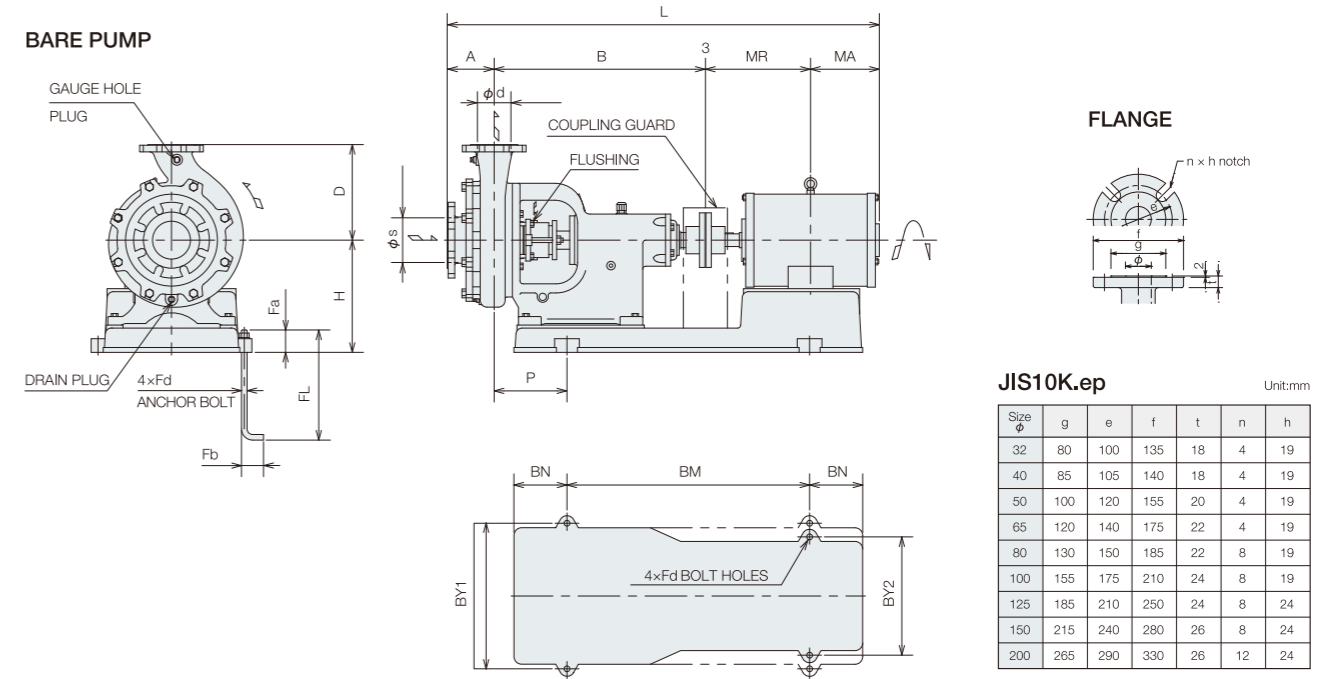
Unit:mm

Size $\phi$ s x $\phi$ d	Model	Motor output kW	Pump					Motor			Common base				Recommended foundation bolt				Mass kg	
			A	B	D	H	L	P	Frame	MA	MR	BM	BN	BY1	BY2	Fd	FL	Fa		Fb
40 X 32	40X32SALF5.75BL	0.75	80	355	180	225	731	160	80M	153	140	340	120	304	244	M10	200	40	40	73
	50X40SALE5.75BL	0.75	100	355	180	225	751	160	80M	153	140	340	120	304	244	M10	200	40	40	73
50 X 40	50X40SALF51.5BL	1.5	100	355	180	225	827.5	160	90L	201	168.5	340	120	304	244	M10	200	40	40	80.5
	50X40SALG52.2BL	2.2	100	375	225	255	870	185	100L	199	193	360	140	350	304	M12	250	55	50	117
65 X 50	65X50SALF52.2BL	2.2	100	460	225	290	955	217.5	100L	199	193	380	180	410	304	M12	250	55	50	148
	65X50SALG63.7BL	3.7	100	460	225	290	975.5	217.5	112M	212.5	200	380	180	410	304	M12	250	55	50	158
	65X50SALH55.5BL	5.5	110	545	280	285	1124	215	132S	227	239	380	170	390	390	M12	250	55	50	234
80 X 65	80X65SALF53.7BL	3.7	100	460	250	290	975.5	217.5	112M	212.5	200	680	170	410	304	M12	250	55	50	162.5
	80X65SALG55.5BL	5.5	100	460	250	290	1029	217.5	132S	227	239	380	180	410	410	M12	250	55	50	202
	80X65SALH57.5BL	7.5	120	550	280	285	1177	220	132M	246	258	540	180	390	390	M12	250	55	50	258
	80X65SALH511BL	11	120	550	280	285	1281	220	160M	285	323	680	170	390	390	M12	250	55	50	285
125 X 100	80X65SALH52.2BL	2.2	120	550	280	275	1085.5	205	112M	212.5	200	500	155	390	310	M12	250	55	50	212.5
	125X100SALH57.5BL	7.5	150	565	280	285	1222	235	132M	246	258	680	170	390	390	M12	250	55	50	258
	125X100SALH511BL	11	150	565	280	285	1326	235	160M	285	323	680	170	390	390	M12	250	55	50	285
	125X100SALH53.7BL	3.7	150	565	280	285	1222	235	132M	246	258	680	170	390	390	M12	250	55	50	242.5
	125X100SALJ515BL	15	155	695	315	370	1505	240	160L	307	345	800	175	480	390	M16	315	70	63	410
150 X 125	125X100SALJ518BL	18.5	155	695	315	380	1525	265	180M	320.5	351.5	860	200	490	490	M16	315	70	63	470
	125X100SALJ55.5BL	5.5	155	695	315	370	1357	240	132M	246	258	800	175	480	390	M16	315	70	63	352.5
	150X125SALH511BL	11	180	710	355	370	1501	255	160M	285	323	800	175	480	390	M16	315	70	63	440
	150X125SALH515BL	15	180	710	355	370	1545	255	160L	307	345	800	175	480	390	M16	315	70	63	465
	150X125SALH518BL	18.5	180	710	355	380	1565	255	180M	320.5	351.5	860	200	490	490	M16	315	70	63	521
	150X125SALH55.5BL	5.5	180	710	355	370	1397	255	132M	246	258	800	175	480	390	M16	315	70	63	412.5
	150X125SALJ522BL	22	180	710	355	380	1603	280	180L	339.5	370.5	860	200	490	490	M16	315	70	63	546
	150X125SALJ530BL	30	180	710	355	380	1663	280	200L	374.5	395.5	860	200	490	490	M16	315	70	63	611
	150X125SALJ537BL	37	180	710	355	380	1709	280	225S	384	432	860	200	490	490	M16	315	70	63	671
	150X125SALJ57.5BL	7.5	180	710	355	370	1501	255	160M	285	323	800	175	480	390	M16	315	70	63	455
200 X 150	150X125SALJ511BL	11	180	710	355	370	1545	255	160L	307	345	800	175	480	390	M16	315	70	63	490
	200X150SALJ530BL	30	220	895	400	460	1888	350	200L	374.5	395.5	960	220	640	500	M16	315	70	63	818
	200X150SALJ537BL	37	220	895	400	460	1934	350	225S	384	432	960	220	640	500	M16	315	70	63	878
	200X150SALJ545BL	45	220	895	400	460	1959	350	225M	396.5	444.5	960	220	640	500	M16	315	70	63	893
	200X150SALJ555BL	55	220	895	400	460	2039	350	250M	438.5	482.5	1040	240	640	640	M20	400	85	80	1043
	200X150SALJ511BL	11	220	895	400	460	1770	350	160L	307	345	960	220	640	500	M16	315	70	63	703
	200X150SALJ515BL	15	220	895	400	460	1828	350	180L	339.5	370.5	960	220	640	500	M16	315	70	63	758

The above dimensions change depending on the electric motor used.

6 Pole

# DIMENSIONS (WITH MOTOR)



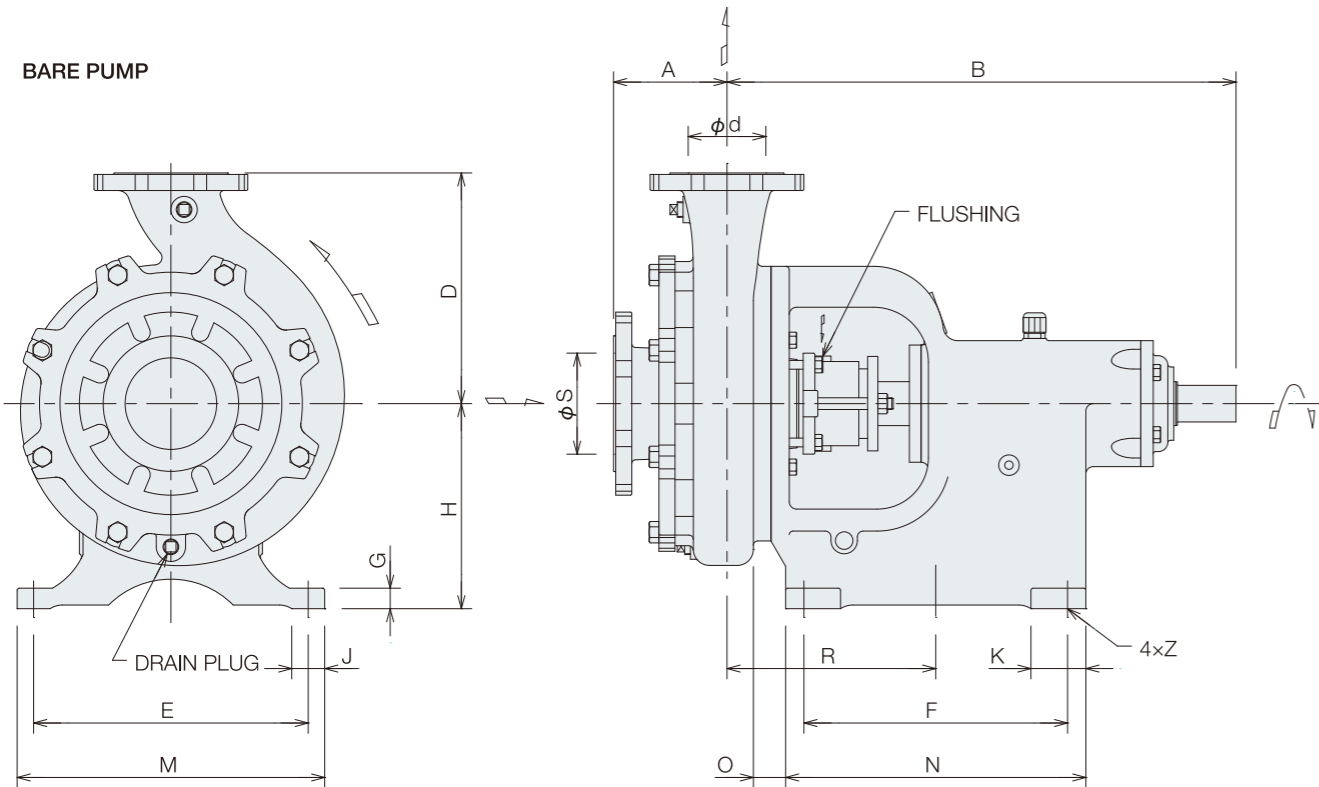
## 60Hz

Unit:mm

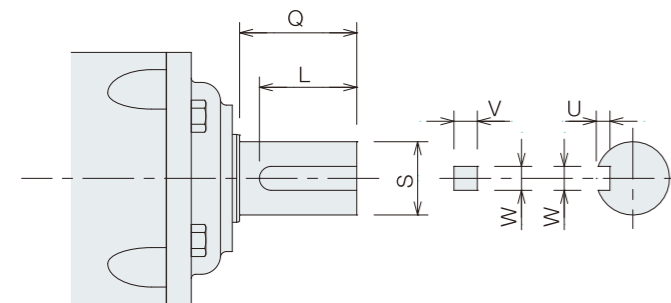
Size $\phi$ s x $\phi$ d	Model	Motor output kW	Pump					Motor			Common base				Recommended foundation bolt				Mass kg	
			A	B	D	H	L	P	Frame	MA	MR	BM	BN	BY1	BY2	Fd	FL	Fa		Fb
40 X 32	40X32SALE6.75BL	0.75	80	355	180	225	731	160	80M	153	140	340	120	304	244	M10	200	40	40	73
	40X32SALF61.5BL	1.5	80	355	180	225	807.5	160	90L	201	168.5	340	120	304	244	M10	200	40	40	80.5
50 X 40	50X40SALE61.5BL	1.5	100	355	180	225	827.5	160	90L	201	168.5	340	120	304	244	M10	200	40	40	80.5
	50X40SALF62.2BL	2.2	100	355	180	225	850	160	100L	199	193	360	120	304	304	M10	200	40	40	92
65 X 50	50X40SALG63.7BL	3.7	100	375	225	255	890.5	185	112M	212.5	200	360	140	350	304	M12	250	55	50	127
	65X50SALF63.7BL	3.7	100	460	225	290	975.5	217.5	112M	212.5	200	380	180	410	304	M12	250	55	50	158
	65X50SALG65.5BL	5.5	100	460	225	290	1029	217.5	132S	227	239	540	180	410	410	M12	250	55	50	198
	65X50SALH67.5BL	7.5	110	545	280	285	1162	215	132M	246	258	680	170	390	390	M12	250	55	50	248
80 X 65	65X50SALH611BL	11	110	545	280	285	1266	215	160M	285	323	680	170	390	390	M12	250	55	50	275
	80X65SALF65.5BL	5.5	100	460	250	290	1029	217.5	132S	227	239	540	180	410	410	M12	250	55	50	201
	80X65SALG67.5BL	7.5	100	460	250	290	1067	217.5	132M	246	258	540	180	410	410	M12	250	55	50	216
	80X65SALH611BL	11	120	550	280	285	1281	220	160M	285	323	680	170	390	390	M12	250	55	50	285
	80X65SALH615BL	15	120	550	280	285	1325	220	160L	307	345	680	170	390	390	M12	250	55	50	310
	80X65SALH618BL	18.5	120	550	280	295	1345	230	180M	320.5	351.5	780	180	480	480	M16	315	70	63	360
125 X 100	80X65SALH63.7BL	3.7	120	550	280	285	1177	220	132M	246	258	680	170	390	390	M12	250	55	50	242.5
	125X100SALH611BL	11	150	565	280	285	1326	235	160M	285	323	680	170	390	390	M12	250	55	50	285
	125X100SALH615BL	15	150	565	280	285	1370	235	160L	307	345	680	170	390	390	M12	250	55	50	310
	125X100SALH618BL	18.5	150	565	280	295	1390	230	180M	320.5	351.5	780	180	480	480	M16	315	70	63	360
	125X100SALH65.5BL	5.5	150	569	280	285	1226	235	132M	246	258	680	170	390	390	M12	250	55	50	257.5
	125X100SALJ622BL	22	155	695	315	380	1563	265	180L	339.5	370.5	860	200	490	490	M16	315	70	63	485
	125X100SALJ630BL	30	155	695	315	380	1623	265	200L	374.5	395.5	860	200	490	490	M16	315	70	63	550
	125X100SALJ67.5BL	7.5	155	695	315	370	1461	240	160M	285	323	800	175	480	390	M16	315	70	63	385
150 X 125	150X125SALH618BL	18.5	180	710	355	380	1501	280	180M	320.5	351.5	860	200	490	490	M16	315	70	63	521
	150X125SALH622BL	22	180	710	355	380	1603	280	180L											

# DIMENSIONS (BARE SHAFT)

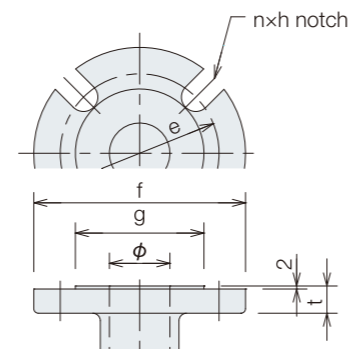
BARE PUMP



SHAFT



FLANGE



# DIMENSIONS (BARE SHAFT)

Flange (JIS10K.eq)

Unit:mm

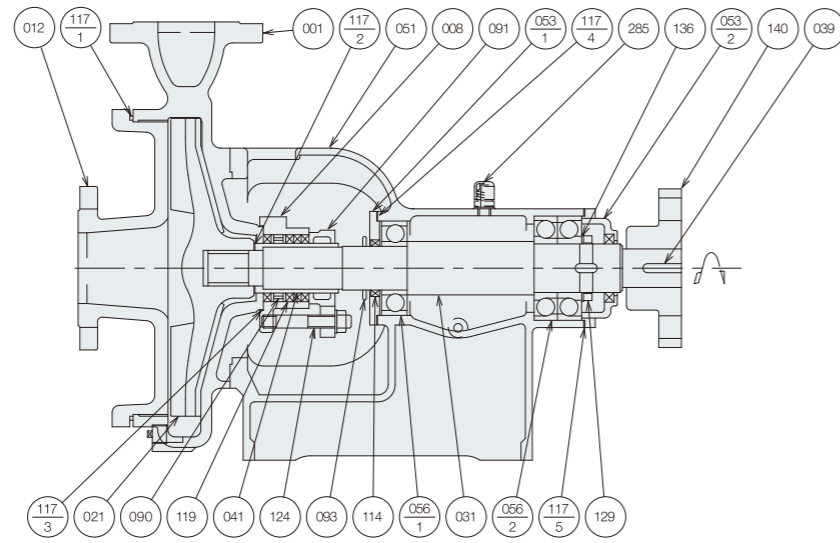
Size $\phi$	g	e	f	t	n	h
32	80	100	135	18	4	19
40	85	105	140	18	4	19
50	100	120	155	20	4	19
65	120	140	175	22	4	19
80	130	150	185	22	8	19
100	155	175	210	24	8	19
125	185	210	250	24	8	24
150	215	240	280	26	8	24
200	265	290	330	26	12	24

Size $\phi_s \times \phi_d$	Model	Pump														Shaft						Mass kg
		A	B	D	E	F	G	H	J	K	M	N	O	R	Z	S	Q	L	U	V	W	
40 X 32	40X32SALEBL	80	355	180	230	120	22	160	37	44	260	164	40	150	15	24	54	40	4	7	7	39
	40X32SALFBL	80	355	180	230	120	22	160	37	44	260	164	40	150	15	24	54	40	4	7	7	39
50 X 40	50X40SALEBL	100	355	180	230	120	22	160	37	44	260	164	40	150	15	24	54	40	4	7	7	39
	50X40SALFBL	100	355	180	230	120	22	160	37	44	260	164	40	150	15	24	59	40	4	7	7	39
	50X40SALGBL	100	375	225	260	130	22	180	37	44	290	174	39	155	15	32	66	50	4.5	8	10	61
65 X 50	65X50SALFBL	100	460	225	320	215	30	205	49	54	360	269	47	202.5	19	40	59	50	4.5	8	10	89
	65X50SALGBL	100	160	225	320	215	30	205	49	54	360	269	47	202.5	19	40	59	50	4.5	8	10	89
	65X50SALHBL	110	545	280	285	280	22	205	35	60	320	320	34	220	15	35	59	45	4.5	8	10	120
80 X 65	80X65SALFBL	100	460	250	320	215	30	205	47	54	360	269	60	202.5	19	40	59	50	4.5	8	10	92
	80X65SALGBL	100	460	250	320	215	30	205	47	54	360	269	60	202.5	19	40	59	50	4.5	8	10	93
	80X65SALHBL	120	550	280	285	20	22	205	35	60	320	320	36	225	15	35	59	45	4.5	8	10	130
125 X 100	125X100SALHBL	150	565	280	285	280	22	205	35	60	320	320	35	240	15	35	59	45	4.5	8	10	130
	125X100SALJBL	155	695	315	375	360	28	280	45	75	410	420	44	280	19	50	80	50	4.5	8	12	220
150 X 125	150X125SALHBL	180	710	355	375	360	28	280	45	75	410	420	44	300	19	50	80	50	4.5	8	12	280
	150X125SALJBL	180	710	355	375	360	28	280	45	75	410	420	44	300	19	50	80	50	4.5	8	12	290
200 X 150	200X150SALJBL	220	895	400	490	440	40	350	50	85	540	490	76	400	24	70	107	64	6	12	18	455

# SECTIONAL VIEW

## Applied Model

50x40 SALH  
65x50 SALH  
80x65 SALH  
125x100 SALH,J  
150x125 SALH,J  
200x150 SALJ



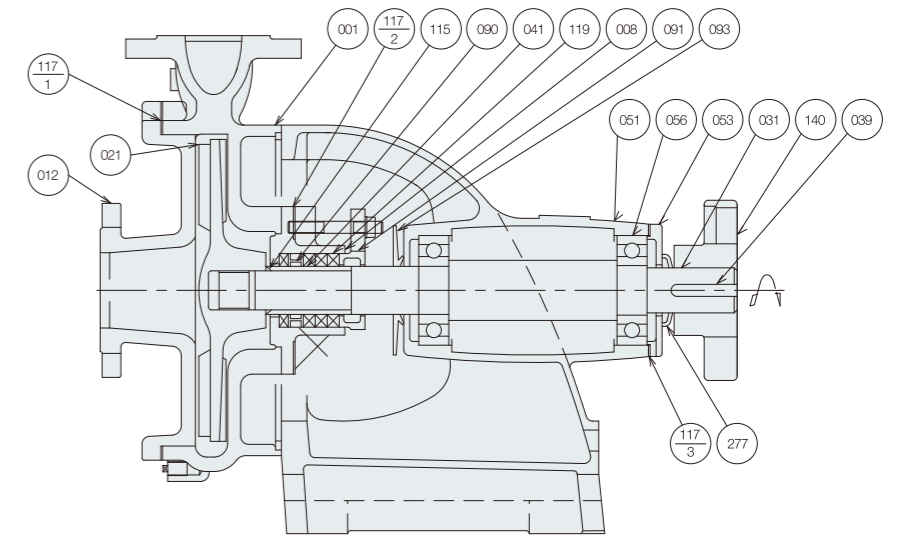
200x150 SALJ	# 6316	# 7318BDB	SB8010513	ISO VG-46 JIS K2213 # 140	3.0
150x125 SALJ	# 6312	# 7313ADB	SB608212		1.4
150x125 SALH					
125x100 SALJ	# 6309	# 7310BDB	SB456812		0.8
125x100 SALH					
80x65 SALH					
65x50 SALH					
50x40 SALH					
MODEL	056-1	056-2	114	OIL	ℓ CAPACITY
	BALL BEARING	BALL BEARING	OIL SEAL		

No.	Part name	Material		Qty
285	AIR BREATHER	POLY CARBONATE	POLY CARBONATE	1
140	COUPLING	FC200	CAST IRON	1
136	WASHER	SS400	CARBON STEEL	1
129	NUT	SS400	CARBON STEEL	1
124	GLAND BOLTS	SUS403	403 STAINLESS STEEL	2
119	GLAND PACKING	CARBONIZED FIBER	CARBONIZED FIBER	4
117-5	GASCKET	OIL SHEET	OIL SHEET	1
117-4	GASCKET	OIL SHEET	OIL SHEET	1
117-3	GASCKET	NON ASBESTOS SHEET	NON ASBESTOS SHEET	1
117-2	GASCKET	PTFE	PTFE	1
117-1	GASCKET	PTFE	NON ASBESTOS SHEET	1
114	OIL SEAL	RUBBER	RUBBER/NBR	2
093	DEFLECTER	SUS316	316 STAINLESS STEEL	1
091	GLAND	FC150	CAST IRON	1
090	LANTERN RING	FC150	CAST IRON	1
056-2	BALL BEARING	-	-	1
056-1	BALL BEARING	-	-	1
053-2	BEARING COVER	FC200	CAST IRON	1
053-1	BEARING COVER	FC200	CAST IRON	1
051	BEARING HOUSING	FC200	CAST IRON	1
041	SHAFT SLEEVE	SUS420J1	420 STAINLESS STEEL	1
039	KEY	S50C-N	CARBON STEEL	1
031	SHAFT	S35C	CARBON STEEL	1
021	IMPELLER	HCrFC	HIGH CHROMIUM CAST IRON	1
012	SUCTION COVER	CrFC	CHROMIUM CAST IRON	1
008	STUFFING BOX	FC200	CAST IRON	1
001	CASING	CrFC	CHROMIUM CAST IRON	1

# SECTIONAL VIEW

## Applied Model

40x32 SALE,F  
50x40 SALE,F,G  
65x50 SALF,G  
80x65 SALF,G



80x65 SALF,G	# 6309ZZ	36xØ 1.5
65x50 SALF,G	# 6307ZZ	24xØ 1.5
50x40 SALG		
50x40 SALE,F	# 6306ZZ	115
40x32 SALE,F		
MODEL	056	115
	BALL BEARING	O RING

No.	Part name	Material		Qty
277	V RING	RUBBER/NBR	RUBBER/NBR	1
140	COUPLING	FC200	CAST IRON	1
119	GLAND PACKING	CARBONIZED FIBER	CARBONIZED FIBER	4
117-3	GASCKET	PRESS BOARD	PRESS BOARD	1
117-2	GASCKET	NON ASBESTOS SHEET	NON ASBESTOS SHEET	1
117-1	GASCKET	NON ASBESTOS SHEET	NON ASBESTOS SHEET	1
115	O RING	RUBBER/CR	RUBBER/CR	1
093	DEFLECTER	RUBBER/NBR	RUBBER/NBR	1
091	GLAND	FC150	CAST IRON	1
090	LANTERN RING	SUS304	304 STAINLESS STEEL	1
056	SEALED BALL BEARING	-	-	2
053	BEARING COVER	FC150	CAST IRON	1
051	BEARING COVER	FC150	CAST IRON	1
041	SHAFT SLEEVE	SUS403	403 STAINLESS STEEL	1
039	KEY	S50C-N	CARBON STEEL	1
031	SHAFT	SUS403	403 STAINLESS STEEL	1
021	IMPELLER	HCrFC	HIGH CHROMIUM CAST IRON	1
012	SUCTION COVER	CrFC	CHROMIUM CAST IRON	1
008	STUFFING BOX	FC200	CAST IRON	1
001	CASING	CrFC	CHROMIUM CAST IRON	1