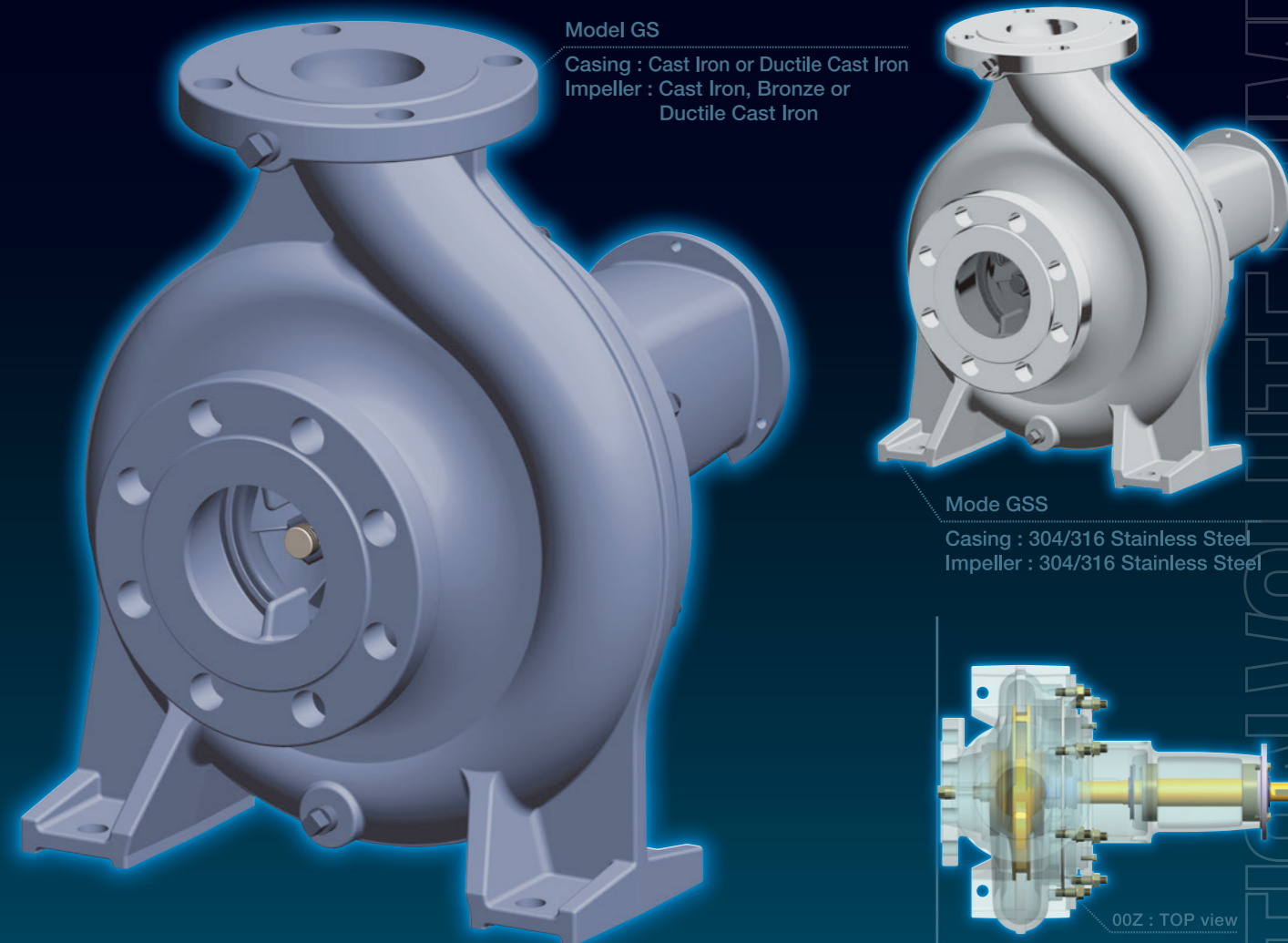


# END SUCTION VOLUTE PUMP Model GS/GSS



**Model GS**  
Casing : Cast Iron or Ductile Cast Iron  
Impeller : Cast Iron, Bronze or Ductile Cast Iron

**Model GSS**  
Casing : 304/316 Stainless Steel  
Impeller : 304/316 Stainless Steel

00Z : TOP view

00X : FRONT view

00Y : SIDE view

**Series Name : GS**  
**Model : GS / GSS**  
**Applicable Standard : EN733**

\*Model GS/GSS in this catalog is our model code.

Before use this product and technology, the contents should be confirmed, complied and revised in accordance with the laws and regulations of the country. (i.e. export control laws and regulations etc.)

※1 "Model GS/GSS" in this catalog is our model code ※2 All specifications subject to change without notice.



**EBARA Corporation**

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Contact to

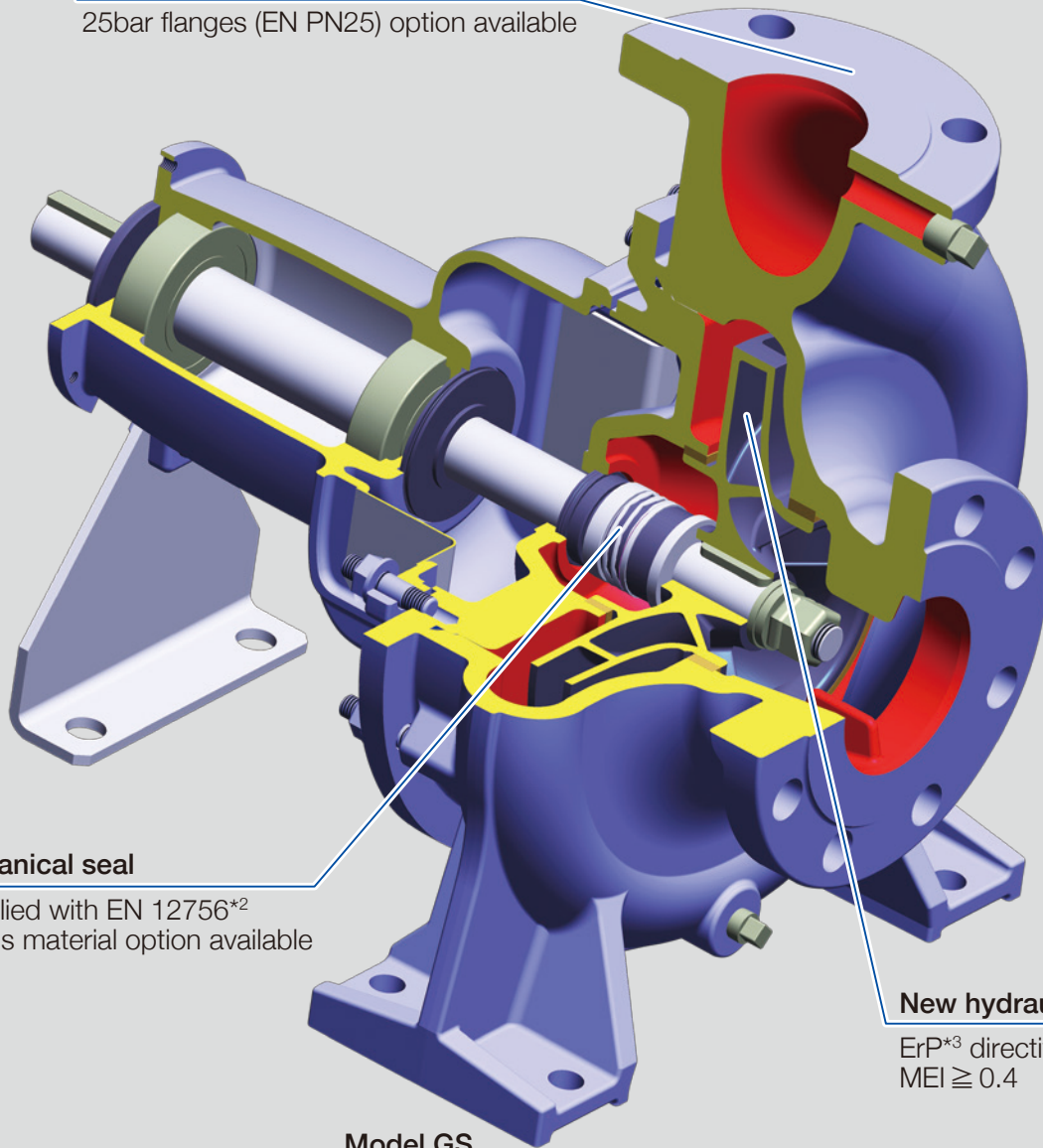
# GS SERIES PUMPS

## Standardized pumps

The European Standard EN733\*1 complied

### DIN 16bar flanges (EN PN16)

25bar flanges (EN PN25) option available



### Mechanical seal

Complied with EN 12756\*2  
Various material option available

### New hydraulic design

ErP\*3 directive complied  
MEI  $\geq 0.4$

Model GS

**EN733\*1** : End-suction centrifugal pumps, rating with 10 bar with bearing bracket - Nominal duty point, main dimensions, designation system

**EN 12756\*2** : Mechanical seals. Principal dimensions, designation and material codes

**ErP\*3** : Eco-design requirements of Energy-related Products

# PRODUCT FEATURES

## 1 ENERGY-SAVING DESIGN

- World top class pump efficiency achieved.
- Major improvement over our previous models by impeller designed using our proprietary 3D inverse design technology.
- Higher efficiency means lower energy consumption and motor output, and more compact size.

## 2 SIMPLE MAINTENANCE

- Back pull-out structure enables disassembly and inspection without removal of suction and discharge piping.
- Shield bearings eliminate need for adding or exchanging lubricating oil.
- Shaft seal flushing and quenching piping not required for the standard application.
- Air-bleeding not required.
- Simplified bearings and shaft seal enable easy assembly.

## 3 PUMP SPECIFICATIONS

- Maximum operating pressure: 25 bar
- Liquid temperature range expansion: -25°C to 140°C
- Compatible with multiple flange standards.
- Able to meet customer specifications with many combinations of shaft seals and materials.

## 4 INTERNATIONAL STANDARDS

- Pump dimensions adopt EN733
- Mechanical seal adopts EN12756
- Protector fitted in accordance with EN294.

# PUMP GENERAL SPECIFICATION

## MODEL GS

Casing Material: **Cast Iron**

		Description
Liquid temperature		<b>-10°C to 140°C</b>
Max. Operating Pressure		<b>Up to 16bar (1.6MPa) / for standard flange DIN-PN16</b> Up to 14bar (1.4MPa) / for standard flange JIS10K
Flange Standard		<b>EN1092-2</b> , JIS B 2239
Construction	Impeller	<b>Closed</b>
	Shaft seal	<b>Mechanical Seal , Gland Packing</b>
	Flushing	<b>N/A</b> , Self , Self + Reverse , External
	Ball bearing	<b>Shield ball bearing (grease lubrication)</b>
Material (*3)	Casing	<b>Cast iron</b>
	Impeller	<b>Cast iron or Ductile cast iron (*1)</b> <b>Bronze</b> , 304 Stainless steel
	Shaft	<b>Cr.steel</b> , Duplex stainless steel (*2)
	Case wear ring	<b>Bronze</b> , Cast iron
	Shaft sleeve	<b>N/A</b> , 304 Stainless steel (in case of Gland packing or some mechanical seal)
	O-ring	<b>NBR</b> , FKM , EPDM

**Bold characters are applied for standard specification**

(\*1) Impellers made of ductile cast iron are applied only the pumps model GS100-400, 125-400, 125-500, 150-400, 150-500, 200-400 and 200-500.

(\*2) Wetted part only

(\*3) Please see P24 and P25 for specific materials

## MODEL GS

Casing Material: **Ductile Cast Iron (Larger than pump model 100X80)**

		Description
Liquid temperature		<b>-10°C to 140°C</b>
Max. Operating Pressure		<b>Up to 25bar (2.5MPa) / for standard flange DIN-PN25</b> Up to 25bar (2.5MPa) / for standard flange JIS20K
Flange Standard		<b>EN1092-2</b> , JIS B 2239
Construction	Impeller	<b>Closed</b>
	Shaft seal	<b>Mechanical Seal</b>
	Flushing	<b>N/A</b> , Self , External
	Ball bearing	<b>Shield ball bearing (grease lubrication)</b>
Material (*3)	Casing	<b>Ductile cast iron</b>
	Impeller	<b>Cast iron or Ductile cast iron (*1)</b> <b>Bronze</b> , 304 Stainless steel
	Shaft	<b>Cr.steel</b> , Duplex stainless steel (*2)
	Case wear ring	<b>Bronze</b> , Cast iron
	Shaft sleeve	<b>N/A</b> , 304 Stainless steel (in case of some mechanical seal)
	O-ring	<b>NBR</b> , FKM , EPDM

**Bold characters are applied for standard specification**

(\*1) Impellers made of ductile cast iron are applied only the pumps model GS100-400, 125-400, 125-500, 150-400, 150-500, 200-400 and 200-500.

(\*2) Wetted part only

(\*3) Please see P24 and P25 for specific materials

# PUMP GENERAL SPECIFICATION

## MODEL GSS

Casing Material: **Stainless Steel**

		Description
Liquid temperature		<b>-25°C to 140°C</b>
Max. Operating Pressure		<b>Up to 16bar (1.6MPa) / for standard flange DIN-PN16</b> Up to 14bar (1.4MPa) / for standard flange JIS10K
Flange Standard		<b>EN1092-1</b> , JIS B 2220
Construction	Impeller	<b>Closed</b>
	Shaft seal	<b>Mechanical Seal , Gland Packing</b>
	Flushing	<b>N/A</b> , Self , Self + Reverse , External
	Ball bearing	<b>Shield ball bearing (grease lubrication)</b>
Material (*2)	Casing	<b>304 Stainless steel</b> , 316 Stainless steel , Duplex stainless steel
	Impeller	<b>304 Stainless steel</b> , 316 Stainless steel , Duplex stainless steel
	Shaft	<b>Duplex stainless steel (*1)</b>
	Case wear ring	<b>316 Stainless steel</b> , Duplex stainless steel
	Shaft sleeve	<b>N/A</b> , 304/316 Stainless steel , Duplex stainless steel (in case of Gland packing or some mechanical seal)
	O-ring	<b>FKM</b> , EPDM

**Bold characters are applied for standard specification**

(\*1) Wetted part only

(\*2) Please see P24 and P25 for specific materials

# APPLICATIONS

## BUILDING

- **Air conditioning-District heating & cooling**

- General water supply
- Brine (antifreeze liquid)
- Hot water circulation
- High pressure booster

## WATER SUPPLY

- **Water supply duties for municipalities**

- **Irrigation**
- **Drainage clean water**
- **Fire fighting protection**
- **Swimming pool**

## GENERAL INDUSTRY

- **Semiconductor Industry**

- Pure water

- **Food Industry**

- General water (Cooling water, Recycling water, Filtered water)
- CIP (Cleaning In Place)

- **Pulp and Paper Industry**

- White water (below pulp conc.of 0.3%)

- **Automotive Industry**

- Water (without slurry)
- Detergent (without slurry)

- **Steel Industry, Non-ferrous metals Industry**

- Coolant
- Cooling water

- **Garbage incineration**

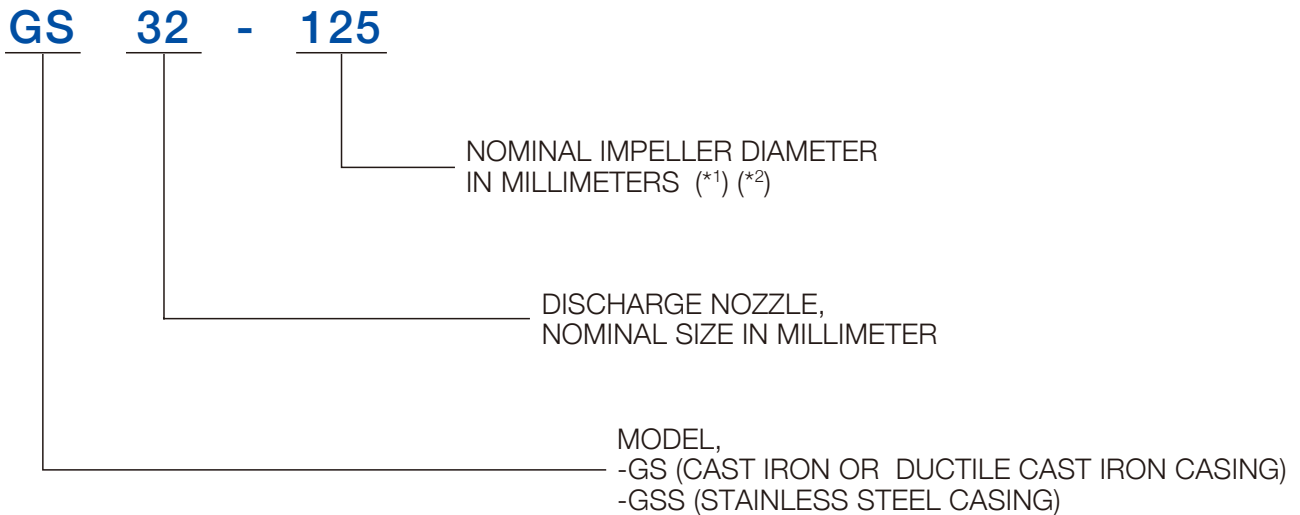
- Cooling water
- Deaerator
- Condensate water

- **Others**

- Seawater
- Brackish water
- Oils
- Other chemical

## MODEL CODE

The following designation is system according to EN733.



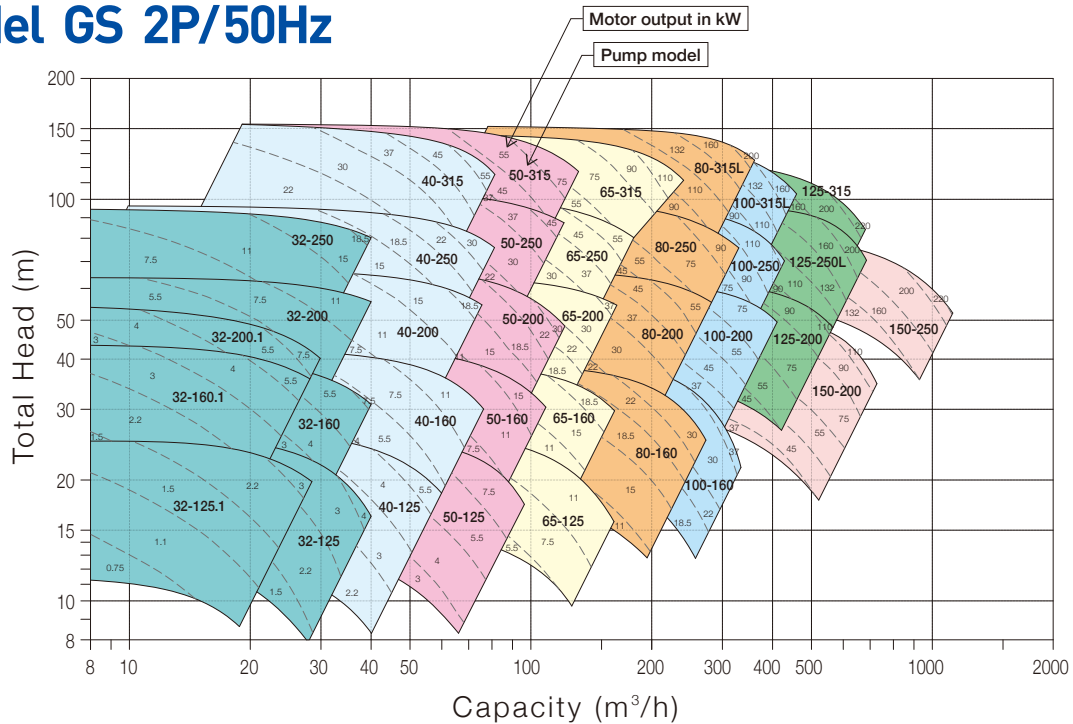
(\*1) The letter "L" following the impeller classification code indicates different bearing designs. To give an example, GS80-315 and GS80-315L have different bearing designs and shaft size.

(\*2) The letter ".1" following the impeller classification code indicates different casing and impeller designs. To give an example, GS32-125 and GS32-125.1 have different casing and impeller designs from one another.

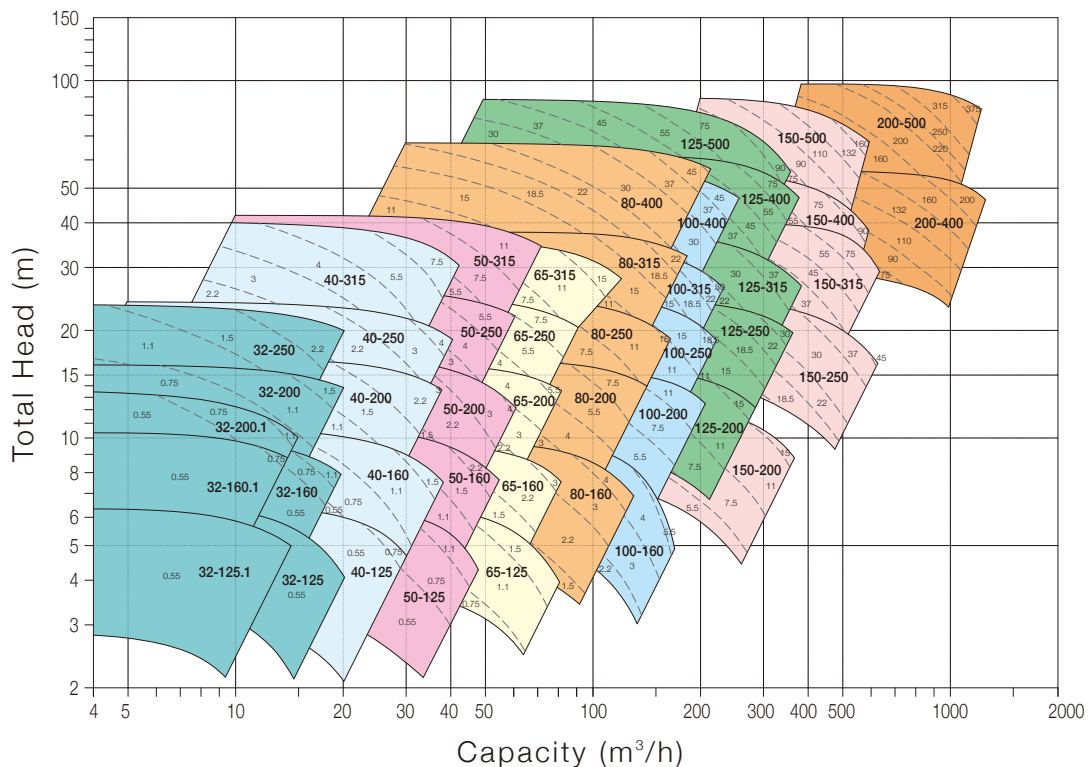


# PERFORMANCE CHART

## Model GS 2P/50Hz



## Model GS 4P/50Hz



Note1 : The values inside the broken lines are motor output(kW) in case of density 1.0kg/L and viscosity 1.0mPa·s.

Note2 : The indicated motor output(kW) value includes the following safety margins ;

up to 7.5kW : 15%

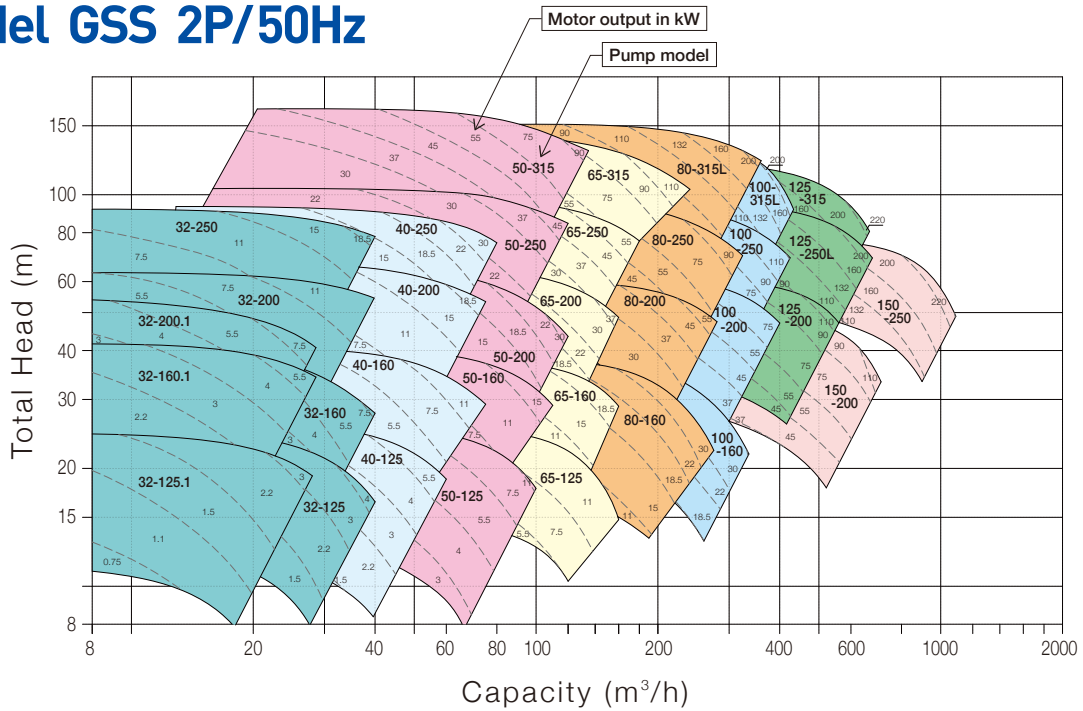
11kW and above : 10%

Note3 : When selecting a pump , NPSH Av. should have a safety margin of at least 0.5m from NPSH Re.

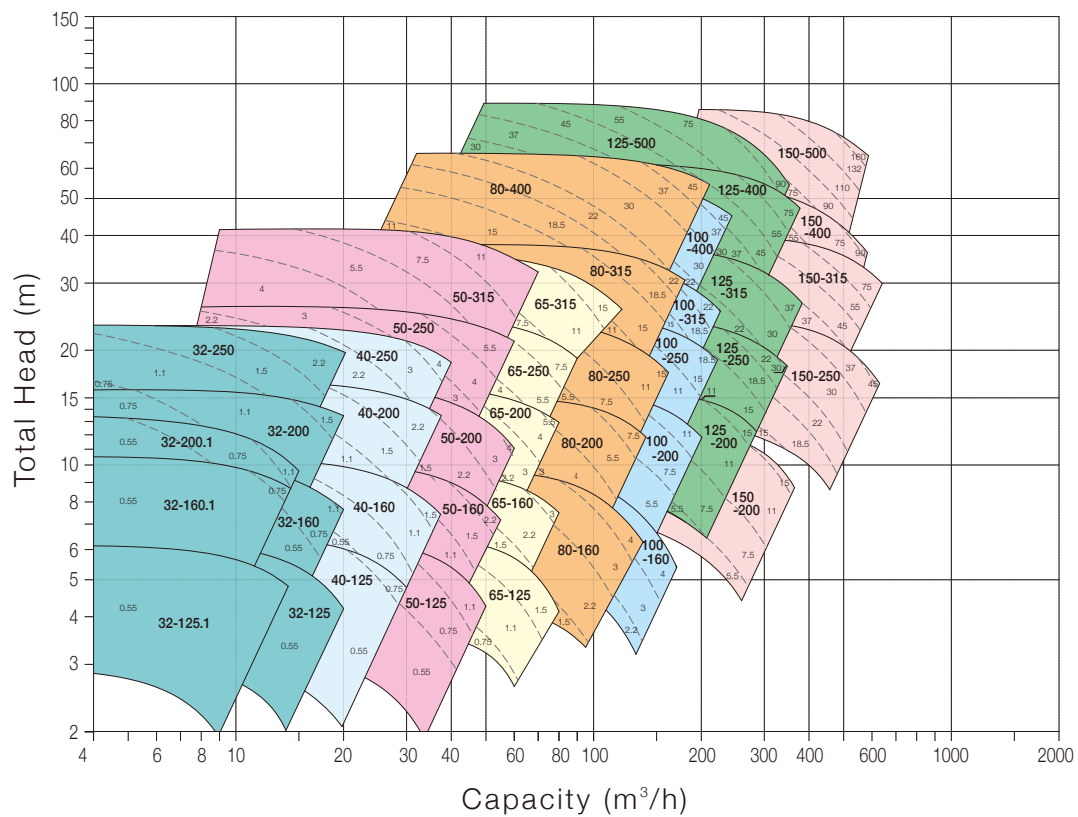


# PERFORMANCE CHART

## Model GSS 2P/50Hz



## Model GSS 4P/50Hz



Note1 : The values inside the broken lines are motor output(kW) in case of density 1.0kg/L and viscosity 1.0mPa·s.

Note2 : The indicated motor output(kW) value includes the following safety margins ;

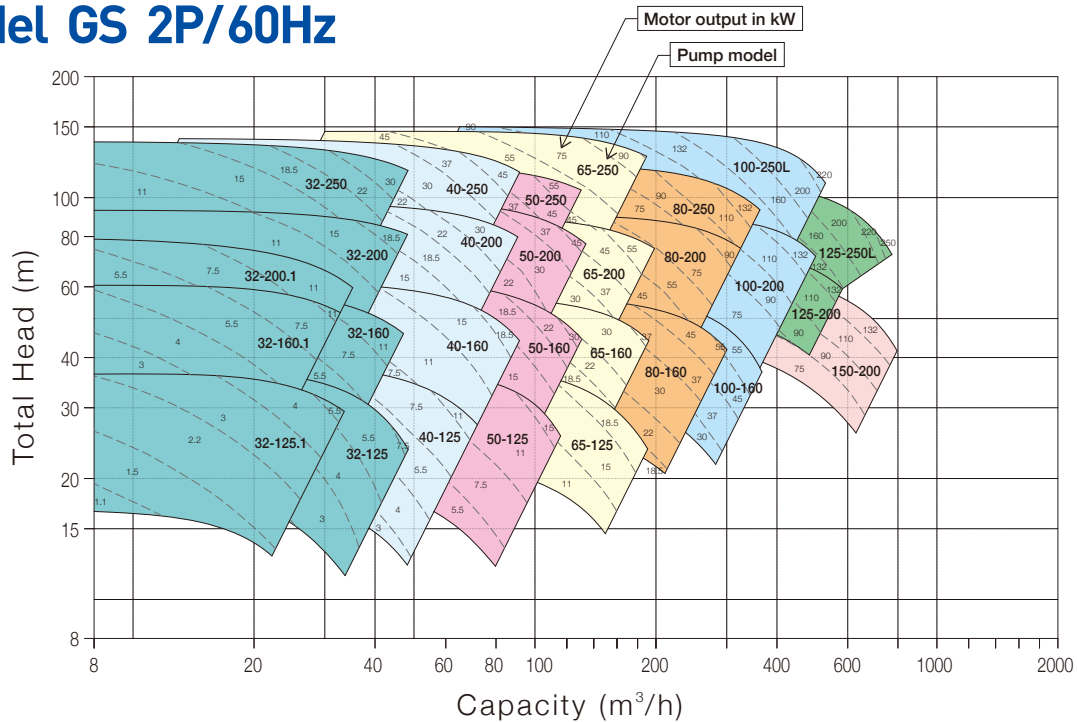
up to 7.5kW : 15%

11kW and above : 10%

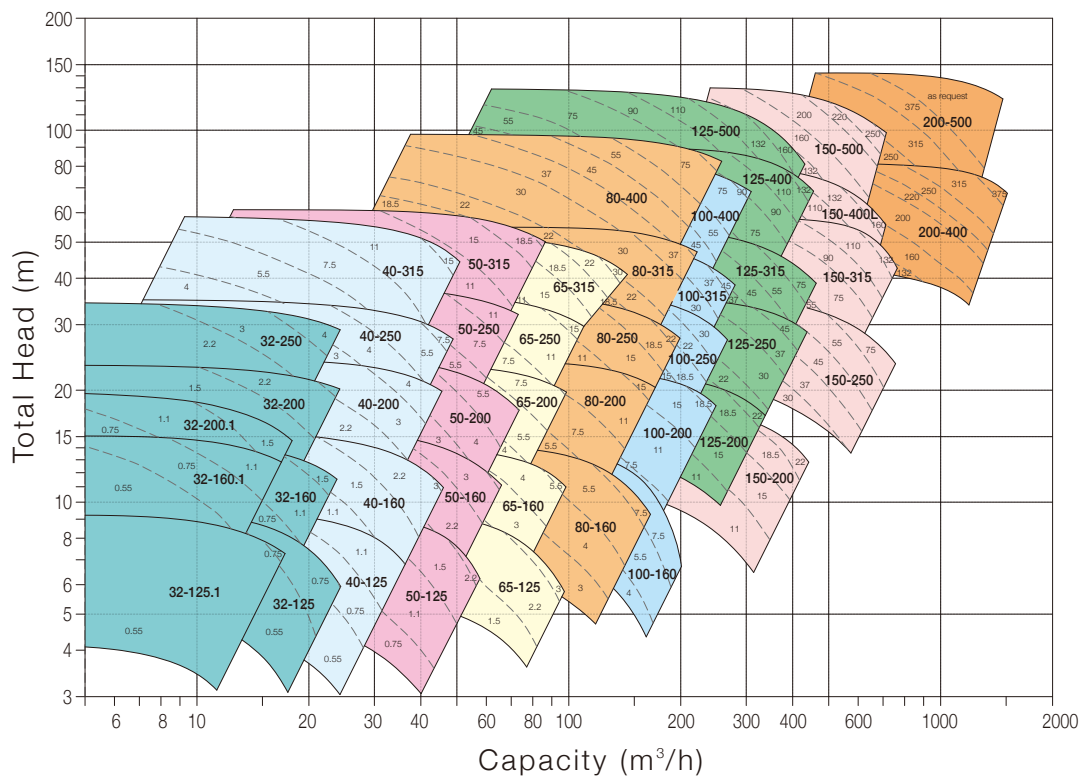
Note3 : When selecting a pump , NPSH Av. should have a safety margin of at least 0.5m from NPSH Re.

# PERFORMANCE CHART

## Model GS 2P/60Hz



## Model GS 4P/60Hz



Note1 : The values inside the broken lines are motor output(kW) in case of density 1.0kg/L and viscosity 1.0mPa·s.

Note2 : The indicated motor output(kW) value includes the following safety margins ;

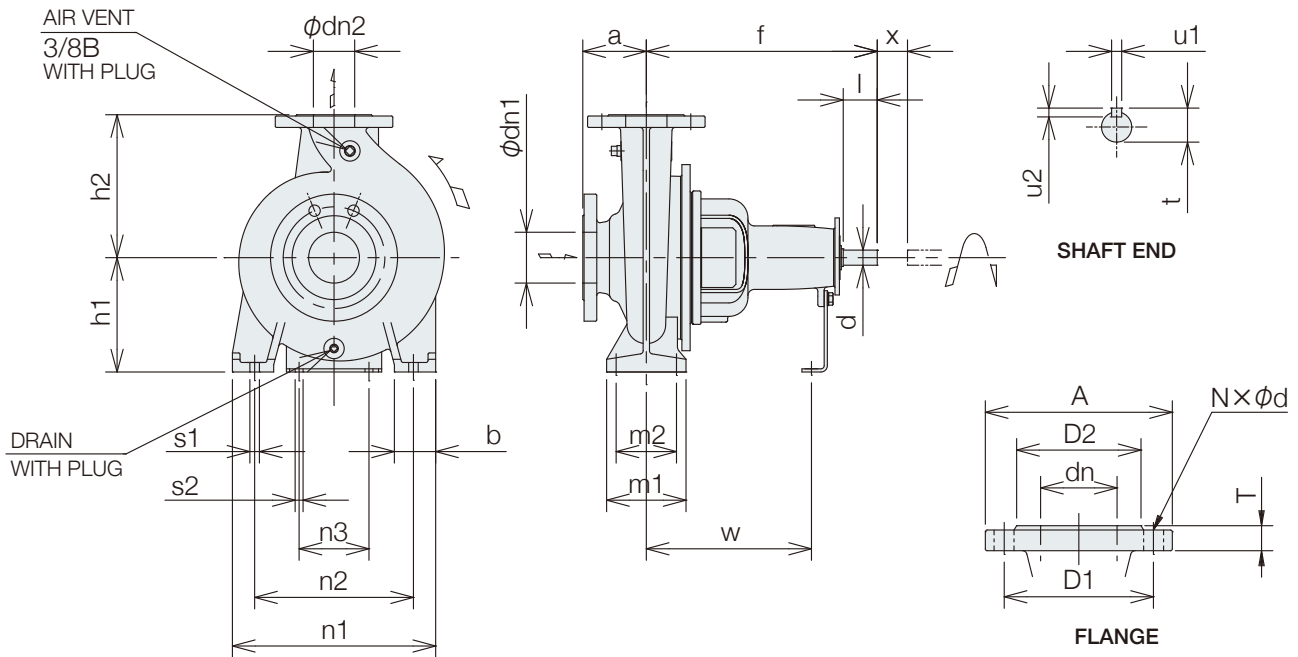
up to 7.5kW : 15%

11kW and above : 10%

Note3 : When selecting a pump , NPSH Av. should have a safety margin of at least 0.5m from NPSH Re.



# DIMENSIONS



## Flange Dimension

Material: Cast Iron

Flange Standard: **EN PN16**

Unit: mm

MODEL	Suction flange							Discharge flange						
	dn1	A	D1	D2	T	N	d	dn2	A	D1	D2	T	N	d
GS32	50	165	125	99	20	4	19	32	140	100	76	18	4	19
GS40	65	185	145	118	20	4	19	40	150	110	84	18	4	19
GS50	65	185	145	118	20	4	19	50	165	125	99	20	4	19
GS65	80	200	160	132	22	8	19	65	185	145	118	20	4	19
GS80	100	220	180	156	24	8	19	80	200	160	132	22	8	19
GS100	125	250	210	184	26	8	19	100	220	180	156	24	8	19
GS125	150	285	240	211	26	8	23	125	250	210	184	26	8	19
GS150	200	340	295	266	30	12	23	150	285	240	211	26	8	23
GS200	250	405	355	319	32	12	28	200	340	295	266	30	12	23

Flange Standard: **JIS 10K**

Unit: mm

MODEL	Suction flange							Discharge flange						
	dn1	A	D1	D2	T	N	d	dn2	A	D1	D2	T	N	d
GS32	50	155	120	96	20	4	19	32	135	100	76	20	4	19
GS40	65	175	140	116	22	4	19	40	140	105	81	20	4	19
GS50	65	175	140	116	22	4	19	50	155	120	96	20	4	19
GS65	80	185	150	126	22	8	19	65	175	140	116	22	4	19
GS80	100	210	175	151	24	8	19	80	185	150	126	22	8	19
GS100	125	250	210	182	24	8	23	100	210	175	151	24	8	19
GS125	150	280	240	212	26	8	23	125	250	210	182	24	8	23
GS150	200	330	290	262	26	12	23	150	280	240	212	26	8	23
GS200	250	400	355	324	30	12	25	200	330	290	262	26	12	23

Material: Ductile Cast Iron

Flange Standard: **EN PN25**

Unit: mm

MODEL	Suction flange							Discharge flange						
	dn1	A	D1	D2	T	N	d	dn2	A	D1	D2	T	N	d
GS80	100	235	190	156	19	8	23	80	200	160	132	19	8	19
GS100	125	270	220	184	19	8	28	100	235	190	156	19	8	23
GS125	150	300	250	211	20	8	28	125	270	220	184	19	8	28
GS150	200	360	310	274	22	12	28	150	300	250	211	20	8	28
GS200	250	425	370	330	24.5	12	31	200	360	310	274	22	12	28

Flange Standard: **JIS 20K**

Unit: mm

MODEL	Suction flange							Discharge flange						
	dn1	A	D1	D2	T	N	d	dn2	A	D1	D2	T	N	d
GS80	100	225	185	160	24	8	23	80	200	160	132	22	8	23
GS100	125	270	225	195	26	8	25	100	225	185	160	24	8	23
GS125	150	305	260	230	28	12	25	125	270	225	195	26	8	25
GS150	200	350	305	275	30	12	25	150	305	260	230	28	12	25
GS200	250	430	380	345	34	12	27	200	350	305	275	30	12	25

Material: Stainless Steel

Flange Standard: **EN PN16**

Unit: mm

MODEL	Suction flange							Discharge flange						
	dn1	A	D1	D2	T	N	d	dn2	A	D1	D2	T	N	d
GSS32	50	165	125	102	18	4	18	32	140	100	78	18	4	18
GSS40	65	185	145	122	18	4	18	40	150	110	88	18	4	18
GSS50	65	185	145	122	18	4	18	50	165	125	102	18	4	18
GSS65	80	200	160	138	20	8	18	65	185	145	122	18	4	18
GSS80	100	220	180	158	20	8	18	80	200	160	138	20	8	18
GSS100	125	250	210	188	22	8	18	100	220	180	158	20	8	18
GSS125	150	285	240	212	22	8	22	125	250	210	188	22	8	18
GSS150	200	340	295	268	24	12	22	150	285	240	212	22	8	22

Flange Standard: **JIS 10K**

Unit: mm

MODEL	Suction flange							Discharge flange						
	dn1	A	D1	D2	T	N	d	dn2	A	D1	D2	T	N	d
GSS32	50	155	120	96	16	4	19	32	135	100	76	16	4	19
GSS40	65	175	140	116	18	4	19	40	140	105	81	16	4	19
GSS50	65	175	140	116	18	4	19	50	155	120	96	16	4	19
GSS65	80	185	150	126	18	8	19	65	175	140	116	18	4	19
GSS80	100	210	175	151	18	8	19	80	185	150	126	18	8	19
GSS100	125	250	210	182	20	8	23	100	210	175	151	18	8	19
GSS125	150	280	240	212	22	8	23	125	250	210	182	20	8	23
GSS150	200	330	290	262	22	12	23	150	280	240	212	22	8	23

# DIMENSIONS

## Dimensions of Bare Shaft Pump

Unit: mm

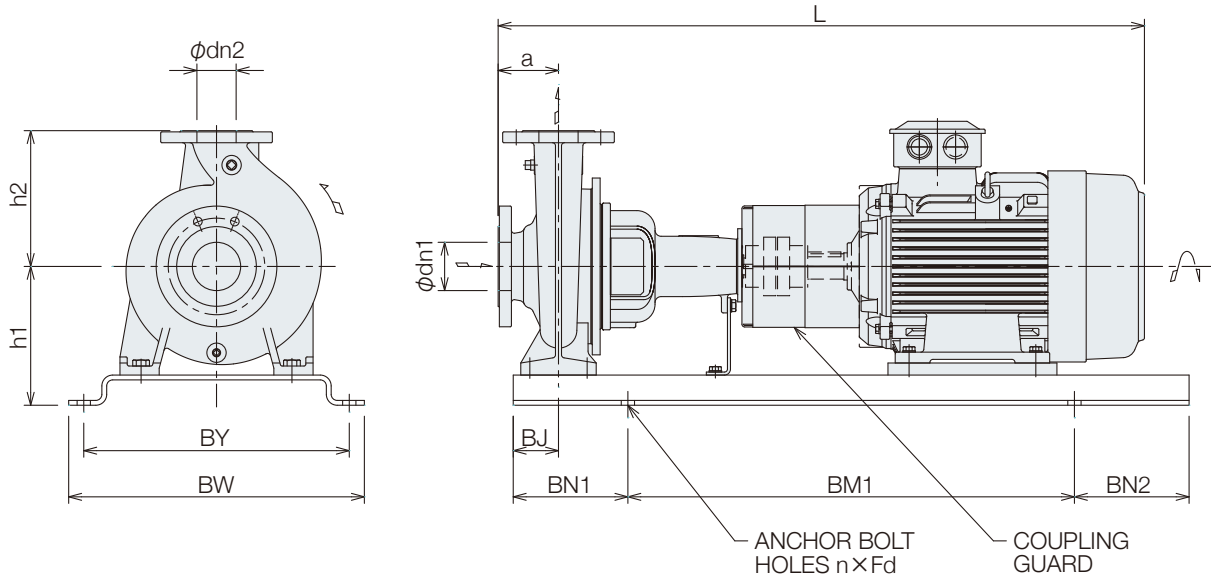
MODEL	Nominal Diameter		Pump				Support						Holes for bolts		Shaft end					1)	Mass (kg)			
	dn1	dn2	a	f	h1	h2	Drain plug	b	m1	m2	n1	n2	n3	W	s1	s2	d	l	t	u1	u2	X	GS	GSS
32-125.1	50	32	80	360	112	140	1/4B	50	100	70	190	140	110	260	M12	M12	24	50	27	8	7	100	28	30
32-125					28	27																		
32-160.1					29	28																		
32-160					29	28																		
32-200.1					39	38																		
32-200					39	37																		
32-250					46	46																		
40-125	65	40	80	360	112	140	1/4B	50	100	70	210	160	110	260	M12	M12	24	50	27	8	7	100	30	29
40-160					132	160					240	190											31	30
40-200					160	180					265	212											41	40
40-250					180	225					320	250											48	48
40-315					125	470					225	250											82	-
50-125	65	50	100	360	132	160	1/4B	50	100	70	240	190	110	260	M12	M12	24	50	27	8	7	100	33	34
50-160					160	180					265	212											33	33
50-200					180	225					320	250											44	43
50-250					200	250					345	280											50	49
50-315					125	470					225	280											86	86
65-125	80	65	100	360	160	180	1/4B	65	125	95	280	212	110	260	M12	M12	24	50	27	8	7	100	37	37
65-160					180	200					320	250											41	43
65-200					180	225					360	280											47	45
65-250					200	250					400	315											73	72
65-315					125	470					225	280											90	89
80-160	100	80	125	360	180	225	1/4B	65	125	95	320	250	110	260	M12	M12	24	50	27	8	7	140	46	48
80-200					200	250					345	280											67	67
80-250					250	280					400	315											77	77
80-315					250	315					400	315											101	102
80-315L					530	315					400	315											112	112
80-400					280	355					435	355											162	160
100-160	125	100	125	470	200	250	3/8B	80	160	120	360	280	110	340	M16	M12	32	80	35	10	8	140	91	90
100-200					225	280					400	315											103	109
100-250					225	280					400	315											108	106
100-250L					530	280					400	315											120	118
100-315					470	250					315	315											109	107
100-315L					470	250					315	315											134	132
100-400					530	280					355	355											189	164
125-200	150	125	140	470	250	315	3/8B	80	160	120	400	315	110	340	M16	M12	32	80	35	10	8	140	120	119
125-250					250	355					500	400											131	128
125-250L					355	355					500	400											148	145
125-315					530	280					500	400											176	170
125-400					530	315					550	450											218	202
125-500					180	670					375	450											365	361
150-200					200	150					160	470											280	355
150-250	280	375	500	400			171	153																
150-315, 2)	315	400	550	450			225	214																
150-400	315	450	550	450			339	341																
150-400L	670	450	550	450			363	365																
150-500	180	670	375	560			491	504																
200-400	250	200	180	670	385	560	1/2B	100	315	250	660	560	140	500	M20	M16	60	110	64	18	11	180	508	-
200-500					200	820					435	630											645	-

1) Dimension to be considered by the manufacturer in respect of removal of inner parts of the Pump. The dimension X must not be identical with the distance between the shafts of the pump and the driving machine. The given dimension considers the use of flexible shaft couplings with spacer. The gap is necessary for the withdrawal of the rotor toward the driven side.  
2) h1 is 35mm higher than EN733 dimension.

# DIMENSIONS

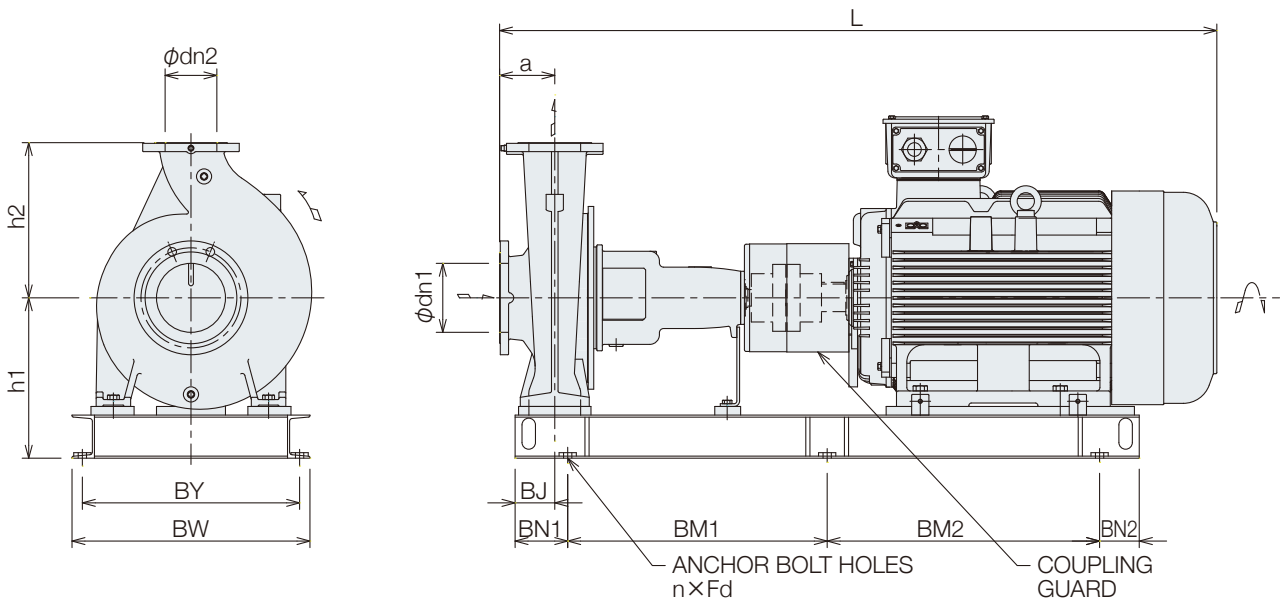
## Model GS/GSS with Motor Steel Baseplate (Fig. A) up to 90kW\*

\*Except for Model GS 200 - 400



This baseplate is not necessary to grout.  
Special baseplate can be provided for grouting.

## Fabricated Baseplate (Fig. B) 110kW and over



# DIMENSIONS

## DIMENSION-Model GS/GSS Pump with Moter-2P 50Hz/60Hz

Model	Pole	Hz		Power kW	Fig	Size				Pump		Motor		Baseplate								Total (Approx.)				
		50	60			dn1	dn2	a	h2	Mass(kg)		Frame	Mass (kg)	h1	BJ	BM1	BM2	BN1	BN2	BY	BW	nxFd	Mass (kg)	L	Mass kg	
		✓	✓			GS	GSS																		GS	GSS
32-125.1	2	✓	✓	0.75	A	50	32	80	140	28	30	80M	16.5	162	60	540	-	130	130	320	360	4xM16	21	736	76	78
		80M	18	78								80														
		90S	23	82								84														
		90L	27	87								89														
		100L	37.5	98								100														
		112M	47.5	110								112														
		132S	61	120								124														
		132S	65	132								134														
32-125	2	✓	✓	0.75	A	50	32	80	140	28	27	80M	16.5	162	60	540	-	130	130	320	360	4xM16	21	736	76	77
		80M	18	78								81														
		90S	23	82								86														
		90L	27	87								91														
		100L	37.5	98								104														
		112M	47.5	110								119														
		132S	61	120								131														
		132S	65	132								135														
32-160.1	2	✓	✓	1.5	A	50	32	80	160	29	28	90S	23	182	60	540	-	130	130	350	390	4xM16	23	812	88	87
		90L	27	92								91														
		100L	37.5	105								104														
		112M	47.5	114								113														
		132S	61	131								130														
		132S	65	136								135														
		160M	105	189								188														
		160M	120	206								205														
32-160	2	✓	✓	2.2	A	50	32	80	160	29	28	90L	27	182	60	540	-	130	130	350	390	4xM16	23	812	92	91
		100L	37.5	105								104														
		112M	47.5	114								113														
		132S	61	131								130														
		132S	65	136								135														
		160M	105	189								188														
		160M	120	206								205														
		160M	120	215								214														
32-200.1	2	✓	✓	3	A	50	32	80	180	39	38	100L	37.5	210	60	540	-	130	130	350	390	4xM16	23	835	117	116
		112M	47.5	129								128														
		132S	61	145								144														
		132S	65	150								149														
		160M	105	199								198														
		160M	120	215								214														
		132S	61	145								143														
		132S	65	150								148														
32-200	2	✓	✓	5.5	A	50	32	80	180	39	37	132S	61	210	60	600	-	150	150	350	390	4xM16	25	909	145	143
		132S	65	150								148														
		160M	105	199								197														
		160M	120	215								213														
		160L	135	232								230														
		180M	175	282								280														
		132S	65	150								148														
		160M	105	199								197														
32-250	2	✓	✓	7.5	A	50	32	100	225	46	46	132S	65	230	75	660	-	170	170	440	490	4xM20	31	929	169	169
		160M	105	215								215														
		160M	120	231								231														
		160L	135	248								248														
		180M	175	288								288														
		200L	240	370								370														
		160M	105	215								215														
		160M	120	231								231														
40-125	2	✓	✓	1.5	A	65	40	80	140	30	29	90S	23	162	60	540	-	130	130	320	360	4xM16	21	787	84	83
		90L	27	89								88														
		100L	37.5	100								99														
		112M	47.5	112								111														
		132S	61	134								133														
		132S	65	138								137														
		160M	105	192								191														
		160M	120	211								210														
40-160	2	✓	✓	4	A	65	40	80	160	31	30	112M	47.5	182	60	540	-	130	130	350	390	4xM16	23	855	116	115
		132S	61	134								133														
		132S	65	138								137														
		160M	105	192								191														
		160M	120	208								207														
		160L	135	225								224														
		160M	105	192								191														
		160M	120	208								207														
40-200	2	✓	✓	7.5	A	65	40	100	180	41	40	132S	65	210	60	660	-	150	150	350	390	4xM16	25	929	152	151
		160M	105	201								200														
		160M	120	217								216														
		160L	135	234								233														
		180M	175	284								283														
		200L	240	369								368														
		200L	270	402								401														
		160M	105	192								191														
40-250	2	✓	✓	11	A	65	40	100	225	48	48	160M	105	230	75	660	-	170	170	440	490	4xM20	35	1071	217	217
		160M	120	233								233														
		160L	135	250								250														
		180M	175	291								291														
		200L	240	376								376														
		200L	270	409								409														
		225MA	315	488								488														
		250MA	405	609								609														
40-315	2	✓	✓	22	A	65	40	125	250	82	-	180M	175	275	75	840	-	205	205	490	540	4xM20	47	1271	355	-
		200L	240	425								-														
		200L	270	458								-														
		225MA	315	520								-														
		250MA	405	641								-														
		280SA	515	802								-														
		180M	175	217								217														
		160M	120	233								233														
160L	135	250	250																							

※Up to 55kW: EBARA motor  
more than 75kW: TECO motor(AESV)



# DIMENSIONS

## DIMENSION-Model GS/GSS Pump with Moter-2P 50Hz/60Hz

Model	Pole	Hz		Power kW	Fig	Size				Pump		Motor※		Baseplate								Total (Approx.)				
		50	60			dn1	dn2	a	h2	Mass(kg)	Frame	Mass (kg)	h1	BJ	BM1	BM2	BN1	BN2	BY	BW	nxFd	Mass (kg)	L	Mass kg		
		GS	GSS			GS	GSS	GS	GSS																	
50-125	2	✓	✓	2.2	A	65	50	100	160	33	34	90L	27	182	60	-	130	130	350	390	4xM16	23	832	97	98	
		100L	37.5	855								110	111													
		112M	47.5	875								118	119													
		132S	61	929								136	137													
		132S	65	140								141														
		160M	105	194								195														
		160M	120	210								211														
50-160	2	✓	✓	5.5	A	65	50	100	180	33	33	132S	61	210	60	-	150	150	350	390	4xM16	25	929	139	139	
		132S	65	143								143														
		160M	105	192								192														
		160M	120	209								209														
		160L	135	1115								225	225													
		180M	175	1136								275	275													
		200L	240	1234								360	360													
50-200	2	✓	✓	11	A	65	50	100	200	44	43	160M	105	210	60	-	170	170	400	450	4xM20	32	1071	204	203	
		160M	120	221								220														
		160L	135	1115								237	236													
		180M	175	1136								287	286													
		200L	240	1234								372	371													
		200L	270	1405								405	404													
		225MA	315	1842								482	481													
50-250	2	✓	✓	22	A	65	50	100	225	50	49	180M	175	230	75	-	190	190	490	540	4xM20	42	1234	378	377	
		200L	240	250								411	410													
		200L	270	840								490	489													
		225MA	315	940								610	610													
		250MA	405	1385								611	610													
		200L	240	275								840	840													
		200L	270	940								1060	1060													
50-315	2	✓	✓	30	A	65	50	125	280	86	86	200L	240	275	75	-	205	205	490	540	4xM20	47	1369	430	430	
		200L	270	940								663	663													
		225MA	315	300								660	660													
		250MA	405	325								670	730													
		280SA	515	1060								1060	1060													
		280MA	552	1060								1060	1060													
		200L	240	275								840	840													
65-125	2	✓	✓	4	A	80	65	100	180	37	37	112M	47.5	210	75	-	130	130	400	450	4xM20	32	929	151	151	
		132S	61	155								155														
		132S	65	196								196														
		160M	105	213								213														
		160M	120	1115								229	229													
		160L	135	1136								281	281													
		180M	175	1246								337	336													
65-160	2	✓	✓	7.5	A	80	65	100	200	41	43	132S	65	210	75	-	170	170	400	450	4xM20	32	929	160	162	
		160M	105	1071								201	203													
		160M	120	1115								217	219													
		160L	135	1115								234	236													
		180M	175	1136								285	287													
		200L	240	1234								370	372													
		200L	270	1403								403	405													
65-200	2	✓	✓	11	A	80	65	100	225	47	45	160M	105	230	75	-	170	170	440	490	4xM20	35	1071	216	214	
		160M	120	1115								249	247													
		160L	135	1136								289	287													
		180M	175	1234								375	373													
		200L	240	1385								608	606													
		200L	270	1495								637	636													
		225MA	315	1661								791	790													
65-250	2	✓	✓	22	A	80	65	100	250	73	72	180M	175	250	90	-	205	205	490	540	4xM20	47	1246	407	406	
		200L	240	1344								440	439													
		200L	270	1385								514	513													
		225MA	315	1495								637	636													
		250MA	405	1661								791	790													
		280SA	515	1661								832	831													
		280MA	552	1661								832	831													
65-315	2	✓	✓	55	A	80	65	125	280	90	89	250MA	405	325	120	680	680	120	120	630	690	6xM20	175	1790	1160	1159
		280SA	515	940								230	230	600										660		
		280MA	552	1060								270	270	670										730		
		315SA	800	120								680	680	120										120	630	690
		315MA	900	120								680	680	120										120	630	690
		160M	105	1096								215	217													
		160M	120	1140								248	250													
80-160	2	✓	✓	15	A	100	80	125	225	46	48	160L	135	230	75	-	170	170	440	490	4xM20	35	1096	215	217	
		160L	135	1140								248	250													
		180M	175	1161								288	290													
		200L	240	1259								374	376													
		200L	270	1407								407	409													
		225MA	315	1630								485	487													
		250MA	405	1790								606	608													
80-200	2	✓	✓	22	A	100	80	125	250	67	67	180M	175	250	75	-	190	190	440	490	4xM20	39	1271	316	316	
		200L	240	1369								402	402													
		200L	270	1435								435	435													
		225MA	315	1630								485	487													
		250MA	405	1790								606	608													
		280SA	515	1636								781	781													
		280MA	552	1686								822	822													
80-250	2	✓	✓	45	A	100	80	125	280	77	77	225MA	315	300	90	-	205	205	550	610	4xM24	66	1410	519	519	
		250MA	405	325								230	230										600	660		
		280SA	515	1060								270	270										670	730		
		280MA	552	1060								270	270										670	730		
		315SA	800	120								680	680										120	120	630	690
		315MA	900	120								680	680										120	120	630	690
		1686	822	1815								1164	1164													
80-315L	2	✓	✓	90	B	100	80	125	315	112	112	280MA	552	380	90	1060	-	270	270	670	730	6xM20	175	1746	875	875
		315SA	800	710								710	120											120	630	690
		315MA	900	760								760	120											120	630	690
		315L	980	1875								1203	1203													
		315LA	1100	1925								1313	1313													
		180	2025	1414								1414														
		1546	1546																							

※Up to 55kW: EBARA motor  
more than 75kW: TECO motor(AESV)

# DIMENSIONS

DIMENSION-Model GS/GSS Pump with Moter-2P 50Hz/60Hz

Model	Pole	Hz		Power kW	Fig	Size			Pump		Motor ※1)		Baseplate								Total (Approx.)																												
		50	60			φ 1	φ 2	a	h2	Mass (kg)	Frame	Mass (kg)	h1	BJ	BM1	BM2	BN1	BN2	BY	BW	nxFd	Mass (kg)	L	Mass (kg)																									
		GS	GSS	GS	GSS	GS	GSS	GS	GSS	GS	GSS	GS	GSS	GS	GSS	GS	GSS	GS	GSS	GS	GSS	GS	GSS																										
100-160	2	✓		15	A	125	100	125	250	91	90	160M	120	250	90	840	-	205	205	490	540	4xM20	47	1206	300	299																							
		✓		18.5								160L	135											1250	317	316																							
		✓	✓	22								180M	175											1271	356	355																							
		✓	✓	30								200L	240											1369	426	425																							
		✓	✓	37								200L	270											1369	459	458																							
		✓	✓	45								225MA	315											300	66	1410	534	533																					
		✓	✓	55								250MA	405											325	79	1520	657	656																					
		✓		22								180M	175											1271	370	376																							
		✓		30								200L	240											1369	440	446																							
		✓	✓	37								200L	270											1369	473	479																							
100-200	2	✓		22	A	125	100	125	280	103	109	180M	175	250	90	840	-	205	205	490	540	4xM20	47	1271	370	376																							
		✓		30								200L	240											1369	440	446																							
		✓	✓	37								200L	270											1369	473	479																							
		✓	✓	45								225MA	315											300	66	1410	547	553																					
		✓	✓	55								250MA	405											325	79	1520	670	676																					
		✓	✓	75								280SA	515											380	104	1636	824	830																					
		✓	✓	90								280MA	552											380	104	1686	865	871																					
		✓	✓	110								315SA	800											465	120	1815	1193	1199																					
		✓	✓	132								315MA	900											465	120	1865	1303	1309																					
		100-250	2	✓									37											A	125	100	140	280	108	106	200L	270	300	90	840	-	205	205	550	610	4xM24	66	1384	508	506				
✓				45	225MA	315	300	66	1425	548	546																																						
✓	✓			55	250MA	405	325	79	1535	671	669																																						
✓	✓			75	280SA	515	380	104	1651	825	823																																						
✓	✓			90	280MA	552	380	104	1701	875	873																																						
✓	✓			110	315SA	800	465	120	1830	1193	1191																																						
✓	✓			132	315MA	900	465	120	1880	1303	1301																																						
100-250L	2			✓		90	A	125	100	140	280	120	118	280MA	552	380	90	1060	-	270	270	670	730								4xM24	104											1761	879	877				
				✓		110								315SA	800																												465	120	1710	710	1890	1211	1209
				✓		132								315MA	900																												465	120	1760	760	1940	1321	1319
		✓	✓	160	315LA	980								465	120									1800	760	2040	1414	1412																					
		✓	✓	200	315LA	1100								505	135									1880	840	2100	1555	1553																					
		✓	✓	220	355MA	1550								505	135									230	2279	2100	2098																						
		✓	✓	75	280SA	515								380	90									1060	-	270	270	670	730	4xM24			104	1711	849	847													
		✓	✓	90	280MA	552								380	90									1060	-	270	270	670	730	4xM24			104	1761	899	897													
		✓	✓	110	315SA	800								465	120									1710	710	1890	1227	1225																					
		✓	✓	132	315MA	900								465	120									1760	760	1940	1337	1335																					
100-315L	2	✓		132	B	125	100	140	315	134	132	315LA	980	465	120	760	760	120	120	630	690	6xM20	180	2040	1438	1436																							
		✓		160								315LA	1100											505	135	1830	1206	1205																					
		✓	✓	200								355MA	1550											505	135	2300	2279	2100	2098																				
		✓	✓	220								315SA	800											465	120	1710	710	1890	1227	1225																			
		✓	✓	250								315MA	900											465	120	1760	760	1940	1337	1335																			
		✓	✓	75								280SA	515											380	90	1060	-	270	270	670	730	4xM24	104	1711	849	847													
		✓	✓	90								280MA	552											380	90	1060	-	270	270	670	730	4xM24	104	1761	899	897													
		✓	✓	110								315SA	800											465	120	1710	710	1890	1227	1225																			
		✓	✓	132								315MA	900											465	120	1760	760	1940	1337	1335																			
		125-200	2	✓									45											A	150	125	140	315	120	119	225MA	315	325	90	840	-	205	205	550	610	4xM24	66	1425	571	570				
✓				55	250MA	405	325	79	1535	680	679																																						
✓	✓			75	280SA	515	380	104	1651	834	833																																						
✓	✓			90	280MA	552	380	104	1701	883	882																																						
✓	✓			110	315SA	800	465	120	1830	1206	1205																																						
✓	✓			132	315MA	900	465	120	1880	1316	1315																																						
✓	✓			75	280SA	515	380	90	1060	-	270	270	670	730	4xM24	104	1711	849	847																														
✓	✓			90	280MA	552	380	90	1060	-	270	270	670	730	4xM24	104	1761	899	897																														
✓	✓			110	315SA	800	465	120	1710	710	1890	1227	1225																																				
✓	✓			132	315MA	900	465	120	1760	760	1940	1337	1335																																				
125-250L	2	✓		75	A	150	125	140	355	148	145	280MA	552	380	90	1060	-	270	270	670	730	4xM24	104	1711	865	862																							
		✓		90								315SA	800											465	120	1710	710	1890	1242	1239																			
		✓		110								315MA	900											465	120	1760	760	1940	1352	1349																			
		✓	✓	132								315LA	980											465	120	1800	760	2040	1454	1451																			
		✓	✓	160								315LA	1100											505	135	1880	840	2100	1586	1583																			
		✓	✓	200								355MA	1550											505	135	2300	2279	2100	2128																				
		✓	✓	220								315SA	800											465	120	1710	710	1890	1283	1277																			
		✓	✓	250								315MA	900											465	120	1760	760	1940	1393	1387																			
		✓	✓	75								280SA	515											380	90	1060	-	270	270	670	730	4xM24	104	1671	866	869													
		✓	✓	90								280MA	552											380	90	1060	-	270	270	670	730	4xM24	104	1721	915	918													
125-315	2	✓		110	B	150	125	140	355	176	170	315SA	800	465	120	710	710	120	120	630	690	6xM20	185	1890	1283	1277																							
		✓		132								315MA	900											465	120	1710	710	1890	1393	1387																			
		✓	✓	160								315LA	980											465	120	1760	760	1940	1495	1489																			
		✓	✓	200								315LA	1100											505	135	1880	840	2100	1627	1621																			
		✓	✓	220								355MA	1550											505	135	2300	2279	2100	2162	2156																			
		✓	✓	250								315SA	800											465	120	1710	710	1890	1283	1277																			
		✓	✓	75								280SA	515											380	90	1060	-	270	270	670	730	4xM24	104	1671	866	869													
		✓	✓	90								280MA	552											380	90	1060	-	270	270	670	730	4xM24	104	1721	915	918													
		✓	✓	110								315SA	800											465	120	1710	710	1890	1254	1257																			
		✓	✓	132								315MA	900											465	120	1760	760	1940	1364	1367																			
150-200	2	✓		37	A	200	150	160	355	154	157	200L	270	380	110	940	-	230	230	670	730	4xM24	92	1404	600	603																							
		✓		45								225MA	315											300	66	1445	649	652																					
		✓	✓	55								250MA	405											325	79	1555	745	748																					
		✓	✓	75								280SA	515											380	104	1671	866	869																					
		✓	✓	90								280MA	552											380	104	1721	915	918																					
		✓	✓	110								315SA	800											465	120	1850	1254	1257																					
		✓	✓	132								315MA	900											465	120	1900	1364	1367																					
		✓	✓	110								315SA	800											465	120	1710	710	1890	1278	1260																			
		✓	✓	132								315MA	900											465	120	1760	760	1940	1388	1370																			
		✓	✓	160								315LA	980											465	120	1880	840	2100	1489	1471																			
150-250	2	✓		200	B	200	150	160	375	171	153	315LA	1100	505	135	840	840	135	135	765	825	6xM20	190	2060	1621	1603																							
		✓		220								355MA	1550											505	135	2300	2279	2100	2156	2138																			
		✓	✓	250								315SA	800											465	120	1710	710	1890	1278																				

# DIMENSIONS

## DIMENSION-Model GS/GSS Pump with motor-4P 50Hz/60Hz

Model	Pole	Hz		Power kW	Fig	Size				Pump		Motor**		Baseplate								Total (Approx.)					
		50	60			dn1	dn2	a	h2	Mass(kg)		Frame	Mass (kg)	h1	BJ	BM1	BM2	BN1	BN2	BY	BW	nxFd	Mass (kg)	L	Mass kg		
		GS	GSS	GS		GSS	Frame	Mass (kg)	h1	BJ	BM1	BM2	BN1	BN2	BY	BW	nxFd	Mass (kg)	L	GS	GSS						
32-125.1	4	✓	✓	0.55	A	50	32	80	140	28	30	80M	15	162	60	540	-	130	130	320	360	4xM16	21	736	75	77	
		✓	✓	0.75								80M	16.5												76	78	
32-125	4	✓	✓	0.55	A	50	32	80	140	28	27	80M	15	162	60	540	-	130	130	320	360	4xM16	21	736	75	76	
		✓	✓	0.75								80M	16.5												76	77	
		✓	✓	1.1								90S	22												78	81	82
		✓	✓	1.5								80M	15												79	78	
32-160.1	4	✓	✓	0.55	A	50	32	80	160	29	28	80M	16.5	182	60	540	-	130	130	350	390	4xM16	23	736	80	79	
		✓	✓	0.75								80M	16.5												80	79	
		✓	✓	1.1								90S	22												78	81	86
		✓	✓	1.5								90L	24												81	89	88
32-160	4	✓	✓	0.55	A	50	32	80	160	29	28	80M	15	182	60	540	-	130	130	350	390	4xM16	23	736	79	78	
		✓	✓	0.75								80M	16.5												80	79	
		✓	✓	1.1								90S	22												78	81	86
		✓	✓	1.5								90L	24												81	89	88
32-200.1	4	✓	✓	0.55	A	50	32	80	180	39	38	80M	15	210	60	540	-	130	130	350	390	4xM16	23	736	90	89	
		✓	✓	0.75								80M	16.5												92	91	
		✓	✓	1.1								90S	22												78	99	98
		✓	✓	1.5								90L	24												81	101	100
		✓	✓	2.2								100L	32												83	111	110
32-200	4	✓	✓	0.75	A	50	32	80	180	39	37	80M	16.5	210	60	540	-	130	130	350	390	4xM16	23	736	92	90	
		✓	✓	1.1								90S	22												78	99	97
		✓	✓	1.5								90L	24												81	101	99
		✓	✓	2.2								100L	32												83	111	109
		✓	✓	3								100L	37.5												83	118	116
		✓	✓	0.75								80M	16.5												75	109	109
32-250	4	✓	✓	1.1	A	50	32	100	225	46	46	80M	16.5	230	75	600	-	150	150	440	490	4xM20	31	756	109	109	
		✓	✓	1.5								90S	22												80	116	116
		✓	✓	2.2								90L	24												82	118	118
		✓	✓	3								100L	32												85	129	129
		✓	✓	4								100L	37.5												85	136	136
		✓	✓	5.5								112M	47.5												87	147	147
		✓	✓	0.55								132S	64.0												92	168	168
		✓	✓	0.75								80M	15												77	76	
40-125	4	✓	✓	0.75	A	65	40	80	140	30	29	80M	16.5	162	60	540	-	130	130	320	360	4xM16	21	736	79	78	
		✓	✓	1.1								80M	16.5												77	78	
		✓	✓	1.5								90S	22												78	83	82
		✓	✓	2.2								90L	24												81	86	85
		✓	✓	3								80M	15												81	80	
40-160	4	✓	✓	0.55	A	65	40	80	160	31	30	80M	16.5	182	60	540	-	130	130	350	390	4xM16	23	736	81	80	
		✓	✓	0.75								80M	16.5												83	82	
		✓	✓	1.1								90S	22												78	89	88
		✓	✓	1.5								90L	24												81	91	90
		✓	✓	2.2								100L	32												83	101	100
		✓	✓	3								100L	37.5												85	108	107
40-200	4	✓	✓	1.1	A	65	40	100	180	41	40	90S	22	210	60	540	-	130	130	350	390	4xM16	23	807	101	100	
		✓	✓	1.5								90L	24												82	103	102
		✓	✓	2.2								100L	32												85	113	112
		✓	✓	3								100L	37.5												85	120	119
		✓	✓	4								112M	47.5												87	132	131
		✓	✓	5.5								132S	64												92	151	150
		✓	✓	0.55								90L	24												82	103	102
40-250	4	✓	✓	1.5	A	65	40	100	225	48	48	90S	22	230	75	600	-	150	150	440	490	4xM20	31	832	120	120	
		✓	✓	2.2								100L	32												85	131	131
		✓	✓	3								100L	37.5												85	138	138
		✓	✓	4								112M	47.5												87	149	149
		✓	✓	5.5								132S	64												92	170	170
		✓	✓	7.5								132M	78												97	186	186
		✓	✓	2.2								100L	32												83	120	120
		✓	✓	3								100L	37.5												85	108	107
40-315	4	✓	✓	4	A	65	40	125	250	82	-	112M	47.5	275	75	660	-	170	170	440	490	4xM20	35	1011	195	-	
		✓	✓	5.5								132S	64												106	215	-
		✓	✓	7.5								132M	78												110	230	-
		✓	✓	11								160M	105												120	269	-
		✓	✓	15								160L	130												125	296	-
		✓	✓	0.55								100L	32												83	120	120
		✓	✓	0.75								100L	37.5												85	108	107
		✓	✓	1.1								112M	47.5												87	132	131
		✓	✓	1.5								132S	64												92	151	150
50-125	4	✓	✓	1.5	A	65	50	100	160	33	34	90L	24	182	60	540	-	130	130	350	390	4xM16	23	756	83	84	
		✓	✓	0.55								80M	15												75	85	86
		✓	✓	0.75								80M	16.5												80	91	92
		✓	✓	1.1								90S	22												82	94	95
		✓	✓	1.5								90L	24												83	94	95
		✓	✓	2.2								100L	32												85	103	104
		✓	✓	0.55								80M	15												75	84	84
		✓	✓	0.75								80M	16.5												76	86	86
		✓	✓	1.1								90S	22												80	92	92
		✓	✓	1.5								90L	24												82	94	94
50-160	4	✓	✓	1.1	A	65	50	100	180	33	33	90L	24	210	60	540	-	130	130	350	390	4xM16	23	832	94	94	
		✓	✓	0.75								80M	16.5												86	86	
		✓	✓	1.1								90S	22												87	92	92
		✓	✓	1.5								90L	24												88	94	94
		✓	✓	2.2								100L	32												89	105	105
		✓	✓	3								100L	37.5												89	112	112
		✓	✓	4								112M	47.5												87	123	123
		✓	✓	0.55								90S	22												80	104	103
50-200	4	✓	✓	1.5	A	65	50	100	200	44	43	90L	24	210	60	540	-	130	130	350	390	4xM16	23	832	106	105	
		✓	✓	2.2								100L	32												85	117	116
		✓	✓	3								100L	37.5												85	124	123
		✓	✓	4								112M	47.5												87	135	134
		✓	✓	5.5								132S	64												92	154	153
		✓	✓	7.5								132M	78												97	169	168
		✓	✓	0.55								100L	32												85	133	132
		✓	✓	0.75								100L	37.5												85	140	139
		✓	✓	1.1								112M	47.5												87	151	150
50-250	4	✓	✓	4	A	65	50	100	225	50	49	112M	47.5	230	75	600	-	150	150	440	490	4xM20	31	876	172	171	
		✓	✓	5.5								132S	64												92	172	171
		✓	✓	7.5								132M	78												97	188	187
		✓	✓	11								160M	105												97	188	187
		✓	✓	2.2								100L	32												85	133	132
		✓	✓	3								100L	37.5												85	140	139
		✓	✓	4								112M	47.5												87	151	150
		✓	✓	5.5								132S	64												92	172	171
50-315	4	✓	✓	4	A	65	50	125	280	86	86	112M	47.5	275	75	660	-	170	170	440	490	4xM20	35	1011	198	198	
		✓	✓	5.5								132S	64												106	219	219
		✓	✓	7.5								132M	78												110	234	234
		✓	✓	11								160M	105												120	273	273
		✓	✓	15								160L	130												125	300	300
		✓	✓	18.5								180M	175												127	359	359
		✓	✓	22								180L	190												130	379	3

# DIMENSIONS

## DIMENSION-Model GS/GSS Pump with motor-4P 50Hz/60Hz

Model	Pole	Hz		Power kW	Fig	Size				Pump		Motor※		Baseplate								Total (Approx.)					
		50	60			dn1	dn2	a	h2	Mass(kg)		Frame	Mass (kg)	h1	BJ	BM1	BM2	BN1	BN2	BY	BW	nxFd	Mass (kg)	L	Mass kg		
		✓	✓	GS		GSS																			GS	GSS	
65-125	4	✓		0.55	A	80	65	100	180	37	37	80M	15	210	75	540	-	130	130	400	450	4xM20	26	756	92	92	
				0.75								80M	16.5											807	100	100	
		✓	✓	1.1								90S	22											832	102	102	
		✓	✓	1.5								90L	24											855	112	112	
		✓	✓	2.2								100L	32														
		✓	✓	3								100L	37.5														
65-160	4	✓		0.75	A	80	65	100	200	41	43	80M	16.5	210	75	540	-	130	130	400	450	4xM20	26	756	98	100	
				1.1								90S	22											807	104	106	
		✓	✓	1.5								90L	24											832	106	108	
		✓	✓	2.2								100L	32											855	117	119	
		✓	✓	3								100L	37.5														
		✓	✓	4								112M	47.5											876	135	137	
		✓	✓	5.5								132S	64											929	158	160	
65-200	4	✓		1.5	A	80	65	100	225	47	45	90L	24	230	75	600	-	150	150	440	490	4xM20	31	832	119	117	
				2.2								100L	32											855	130	128	
		✓	✓	3								100L	37.5											929	169	167	
		✓	✓	4								112M	47.5											976	184	182	
		✓	✓	5.5								132S	64														
		✓	✓	7.5								132M	78														
		✓	✓	11								160M	105											1071	216	214	
65-250	4	✓		3	A	80	65	100	250	73	72	100L	37.5	250	90	740	-	190	190	490	540	4xM20	42	965	178	177	
				4								112M	47.5											986	190	189	
		✓	✓	5.5								132S	64											1039	211	210	
		✓	✓	7.5								132M	78											1077	226	225	
		✓	✓	11								160M	105											1181	264	263	
		✓	✓	15								160L	130											1226	293	292	
65-315	4	✓		7.5	A	80	65	125	280	90	89	132M	78	300	90	840	-	205	205	550	610	4xM24	66	1102	273	272	
				11								160M	105											1207	307	306	
		✓	✓	15								160L	130											1251	335	334	
		✓	✓	18.5								180M	175											1271	384	383	
		✓	✓	22								180L	190											1309	405	404	
		✓	✓	30								200L	255											1369	472	471	
80-160	4	✓		1.1	A	100	80	125	225	46	48	90S	22	230	75	600	-	150	150	440	490	4xM20	31	832	116	119	
				1.5								90L	24											857	118	120	
		✓	✓	2.2								100L	32											880	129	131	
		✓	✓	3								100L	37.5											890	136	138	
		✓	✓	4								112M	47.5											901	147	149	
		✓	✓	5.5								132S	64											954	168	170	
		✓	✓	7.5								132M	78											992	183	185	
80-200	4	✓		2.2	A	100	80	125	250	67	67	100L	32	230	75	660	-	170	170	440	490	4xM20	35	990	153	153	
				3								100L	37.5											1011	175	175	
		✓	✓	4								112M	47.5											1064	196	196	
		✓	✓	5.5								132S	64											1102	211	211	
		✓	✓	7.5								132M	78											1206	242	242	
		✓	✓	11								160M	105											1251	271	271	
		✓	✓	15								160L	130														
80-250	4	✓		5.5	A	100	80	125	280	77	77	132S	64	275	90	840	-	205	205	550	610	4xM24	66	1064	241	241	
				7.5								132M	78											1102	257	257	
		✓	✓	11								160M	105											1207	291	291	
		✓	✓	15								160L	130											1251	319	319	
		✓	✓	18.5								180M	175											1271	362	362	
		✓	✓	22								180L	190											1309	382	382	
80-315	4	✓		11	A	100	80	125	315	101	102	160M	105	325	90	840	-	205	205	550	610	4xM24	66	1207	321	322	
				15								160L	130											1251	349	350	
		✓	✓	18.5								180M	175											1271	402	403	
		✓	✓	22								180L	190											1309	418	419	
		✓	✓	30								200L	255											1369	493	494	
		✓	✓	37								225SC	315											1415	555	556	
		✓	✓	45								225MC	330											1440	572	573	
80-400	4	✓		11	A	100	80	125	355	162	160	160M	105	355	90	940	-	230	230	550	610	4xM24	66	1267	390	388	
				15								160L	130											1311	418	416	
		✓	✓	18.5								180M	175											1331	480	478	
		✓	✓	22								180L	190											1369	497	495	
		✓	✓	30								200L	255											1429	578	576	
		✓	✓	37								225SC	315											1475	643	641	
		✓	✓	45								225MC	330											1500	668	666	
		✓	✓	55								250MC	450											79	1580	798	796
		✓	✓	75								280SB	566											104	1696	940	938
		✓	✓	90								280MB	624												1746	1012	1010

※Up to 55kW: EBARA motor  
more than 75kW: TECO motor(AESV)

# DIMENSIONS

DIMENSION-Model GS/GSS Pump with motor-4P 50Hz/60Hz

Model	Pole	Hz		Power kW	Fig	Size			Pump		Motor ※1		Baseplate										Total (Approx.)			
		50	60			φ1	φ2	a	h2	Mass (kg)	Frame	Mass (kg)	h1	BJ	BM1	BM2	BN1	BN2	BY	BW	nxFd	Mass (kg)	L	Mass (kg)		
		✓	✓						GS	GSS														GS	GSS	
100-160	4	✓		2.2	A	125	100	125	250	91	90	100L	32	250	90	740	-	190	190	490	540	4xM20	42	990	192	191
		100L	37.5	198								197														
		112M	47.5	1011								210	209													
		132S	64	1064								230	229													
		132M	78	1102								246	245													
100-200	4	✓		4	A	125	100	125	280	103	109	112M	47.5	250	90	740	-	190	190	490	540	4xM20	42	1011	223	229
		132S	64	1064								243	249													
		132M	78	1102								259	265													
		160M	105	1207								299	305													
		160L	130	1251								326	332													
		180M	175	1271								370	376													
		132S	64	1079								277	275													
100-250	4	✓		5.5	A	125	100	140	280	108	106	132M	78	300	90	840	-	205	205	550	610	4xM24	66	1079	293	291
		160M	105	1117								293	291													
		160L	130	1222								327	325													
		180M	175	1266								358	356													
		180L	190	1286								410	408													
		200L	255	1324								427	425													
		225SC	315	1384								507	505													
		225MC	330	1430								564	562													
		160L	130	1326								476	451													
100-315	4	✓		7.5	A	125	100	140	315	109	107	180M	175	325	90	840	-	205	205	550	610	4xM24	66	1326	530	505
		180L	190	1346								530	505													
		200L	255	1384								546	521													
		225SC	315	1444								627	602													
		225MC	330	1490								692	667													
		250MC	450	1515								718	693													
		280SB	566	1595								842	817													
		280MB	624	1711								969	944													
		160L	130	1761								1042	1017													
		160M	105	1079								291	290													
		100-400	4	✓									15												A	125
160M	105			1346	530	505																				
180L	190			1384	546	521																				
200L	255			1444	627	602																				
225SC	315			1490	692	667																				
225MC	330			1515	718	693																				
250MC	450			1595	842	817																				
280SB	566	1711	969	944																						
280MB	624	1761	1042	1017																						
125-200	4	✓		5.5	A	150	125	140	315	120	119	132M	78	325	90	840	-	205	205	550	610	4xM24	66	1079	291	290
		160M	105	1117								307	306													
		160L	130	1222								342	341													
		180M	175	1266								370	369													
		180L	190	1286								419	418													
		200L	255	1324								439	438													
		225SC	315	1384								531	528													
225MC	330	1430	588	585																						
160L	130	1455	605	602																						
125-250	4	✓		11	A	150	125	140	355	131	128	160M	105	325	90	840	-	205	205	550	610	4xM24	66	1222	354	351
		160L	130	1266								382	379													
		180M	175	1286								435	432													
		180L	190	1324								451	448													
		200L	255	1384								531	528													
		225SC	315	1430								588	585													
		225MC	330	1455								605	602													
160L	130	1595	828	822																						
125-315	4	✓		15	A	150	125	140	355	176	170	180M	175	380	110	940	-	230	230	670	730	4xM24	92	1326	462	456
		180L	190	1346								516	510													
		200L	255	1384								532	526													
		225SC	315	1444								613	607													
		225MC	330	1490								678	672													
		250MC	450	1515								703	697													
		280SB	566	1595								828	822													
280MB	624	1711	955	949																						
125-400	4	✓		22	A	150	125	140	400	218	202	180L	190	415	110	940	-	230	230	670	730	4-M24	92	1384	580	564
		200L	255	1444								661	645													
		225SC	315	1490								728	712													
		225MC	330	1515								754	738													
		250MC	450	1595								901	885													
		280SB	566	1711								1040	1024													
		280MB	624	1761								1104	1088													
180L	190	1920	1338	1322																						
125-500	4	✓		30	A	150	125	180	450	365	361	200L	255	475	110	1060	-	270	270	670	730	4xM24	104	1624	840	836
		225SC	315	1670								908	904													
		225MC	330	1695								933	929													
		250MC	450	1775								1071	1067													
		280SB	566	1891								1226	1222													
		280MB	624	1941	1290							1286														
		180L	190	2100	1535							1531														
		200L	255	2150	1645							1641														
		225SC	315	2250	1762							1758														
		200L	255	465	120							710	710	120	120	630	690	6-M20	185	1920	1338	1322				
225SC	315	475	110	1060	-	270	270	670	730	4xM24	104	1670	908	904												
225MC	330	475	110	1060	-	270	270	670	730	4xM24	104	1695	933	929												
250MC	450	475	110	1060	-	270	270	670	730	4xM24	104	1775	1071	1067												
280SB	566	475	110	1060	-	270	270	670	730	4xM24	104	1891	1226	1222												
280MB	624	475	110	1060	-	270	270	670	730	4xM24	104	1941	1290	1286												
315SB	800	525	115	790	790	115	115	630	690	6xM20	220	2100	1535	1531												
315MB	900	525	115	845	845	115	115	630	690	6xM20	220	2150	1645	1641												
315LB	990	525	115	845	845	115	115	630	690	6xM20	220	2250	1762	1758												

※1) Up to 55kW: EBARA motor  
more than 75kW: TECO motor(AESV)

# DIMENSIONS

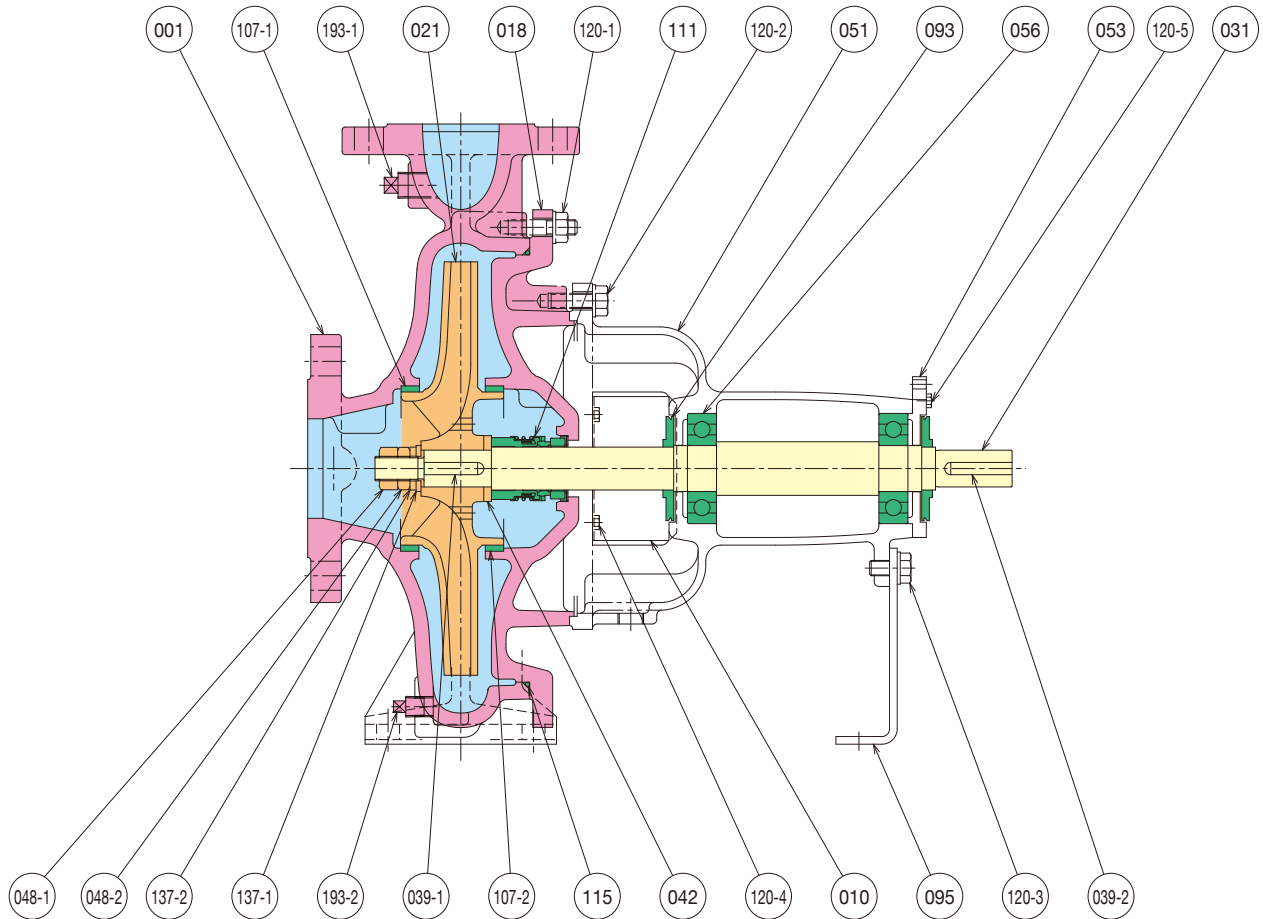
## DIMENSION-Model GS/GSS Pump with motor-4P 50Hz/60Hz

Model	Pole	Hz		Power kW	Fig	Size			Pump		Motor ※1		Baseplate								Total (Approx.)						
		50	60			φ 1	φ 2	a	h2	Mass (kg)	Frame	Mass (kg)	h1	BJ	BM1	BM2	BN1	BN2	BY	BW	nxFd	Mass (kg)	L	Mass (kg)			
		GS	GSS	GS		GSS	GS	GSS	GS															GSS			
150-200	4	✓		4	A	200	150	160	355	154	157	112M	47.5	380	110	940	-	230	230	670	730	4xM24	92	1046	337	340	
		✓		5.5								132S	64											1099	358	361	
		✓	✓	7.5								132M	78											1137	374	377	
		✓	✓	11								160M	105											1242	410	413	
		✓	✓	15								160L	130											1286	437	440	
		✓	✓	18.5								180M	175											1306	488	491	
		✓	✓	22								180L	190											1344	508	511	
		✓	✓	15								160L	130											1346	457	439	
150-250	4	✓		18.5	A	200	150	160	375	171	153	180M	175	380	110	940	-	230	230	670	730	4xM24	92	1366	510	492	
		✓		22								180L	190											1404	527	509	
		✓	✓	30								200L	255											1464	607	589	
		✓	✓	37								225SC	315											1510	672	654	
		✓	✓	45								225MC	330											1535	698	680	
		✓	✓	55								250MC	450											1615	822	804	
		✓	✓	75								280SB	566											1731	950	932	
		✓	✓	18.5								180M	175											104	1731	950	932
150-315	4	✓		22	A	200	150	160	400	225	214	180M	175	415	110	940	-	230	230	670	730	4xM24	92	1366	571	560	
		✓		30								180L	190											1404	588	577	
		✓	✓	37								200L	255											1464	669	658	
		✓	✓	45								225SC	315											1510	736	725	
		✓	✓	55								225MC	330											1535	761	750	
		✓	✓	75								250MC	450											1615	909	898	
		✓	✓	90								280SB	566											1731	1058	1047	
		✓	✓	110								280MB	624											1781	1122	1111	
150-400	4	✓		132	A	200	150	160	450	339	341	315MB	900	415	110	940	-	230	230	670	730	4xM24	92	1510	861	863	
		✓		37								225SC	315											1535	887	889	
		✓		45								225MC	330											1615	1035	1037	
		✓		55								250MC	450											1731	1173	1175	
		✓		75								280SB	566											1781	1237	1239	
		✓		90								280MB	624											1871	1215	1217	
		✓		110								315MB	900											1921	1288	1290	
		✓		132								315LB	990											1990	1456	1445	
150-400L	4	✓		55	A	200	150	160	450	363	365	250MC	450	415	110	1060	-	270	270	670	730	4xM24	104	1755	1061	1063	
		✓		75								280SB	566											1871	1215	1217	
		✓		90								280MB	624											1921	1288	1290	
		✓		110								315SB	800											2080	1502	1504	
		✓		132								315MB	900											2130	1612	1614	
		✓		160								315LB	990											2230	1735	1737	
		✓		55								250MC	450											104	1775	1210	1223
		✓		75								280SB	566											117	1891	1365	1378
150-500	4	✓		90	A	200	150	180	560	491	504	280MB	624	475	110	1200	-	300	300	670	730	4xM24	117	1941	1429	1442	
		✓		110								315SB	800											2100	1673	1686	
		✓		132								315MB	900											2150	1796	1809	
		✓		160								315LB	990											2250	1900	1913	
		✓		200								355MB	1550											2087	2100		
		✓		220								355MB	1650											2643	2656		
		✓		250								355MB	1650											2499	2753	2766	
		✓		315								355LB	1900											3028	3041		
200-400	4	✓		75	B	250	200	180	560	508	-	280SB	566	535	220	650	650			680	740	6xM20	235	1891	1449	-	
		✓		90								280MB	624											1941	1513	-	
		✓		110								315SB	800											2100	1752	-	
		✓		132								315MB	900											2150	1875	-	
		✓		160								315LB	990											2183	-		
		✓		200								355MB	1550											2712	-		
		✓		220								355MB	1650											2499	2822	-	
		✓		250								355LB	1900											3097	-		
200-500	4	✓		375	B	250	200	200	630	645	-	355CB	2340	585	220	870	870			680	740	6xM20	260	2420	2304	-	
		✓		160								315LB	990											2671	3249	-	
		✓		200								315LB	1160											2843	-		
		✓		220								355MB	1550											2869	2953	-	
		✓		250								355MB	1650											2671	3249	-	
		✓		315								355LB	1900											3800	3813	-	
		✓		375								355CB	2340											3800	3813	-	
		✓		160								315LB	990											585	220	870	870
✓		200	315LB	1160	610	220	975	975	755	825	6xM22	370	2869	2953	-												
✓		220	355MB	1550	610	220	1070	1070	755	825	6xM22	380	2861	3743	-												
✓		250	355MB	1650	610	220	1070	1070	755	825	6xM22	380	2861	3743	-												
✓		315	355LB	1900	610	220	1070	1070	755	825	6xM22	380	2861	3743	-												
✓		375	355CB	2340	610	220	1070	1070	755	825	6xM22	380	2861	3743	-												

※1) Up to 55kW: EBARA motor  
more than 75kW: TECO motor(AESV)

# SECTIONAL VIEW

## MECHANICAL SEAL TYPE



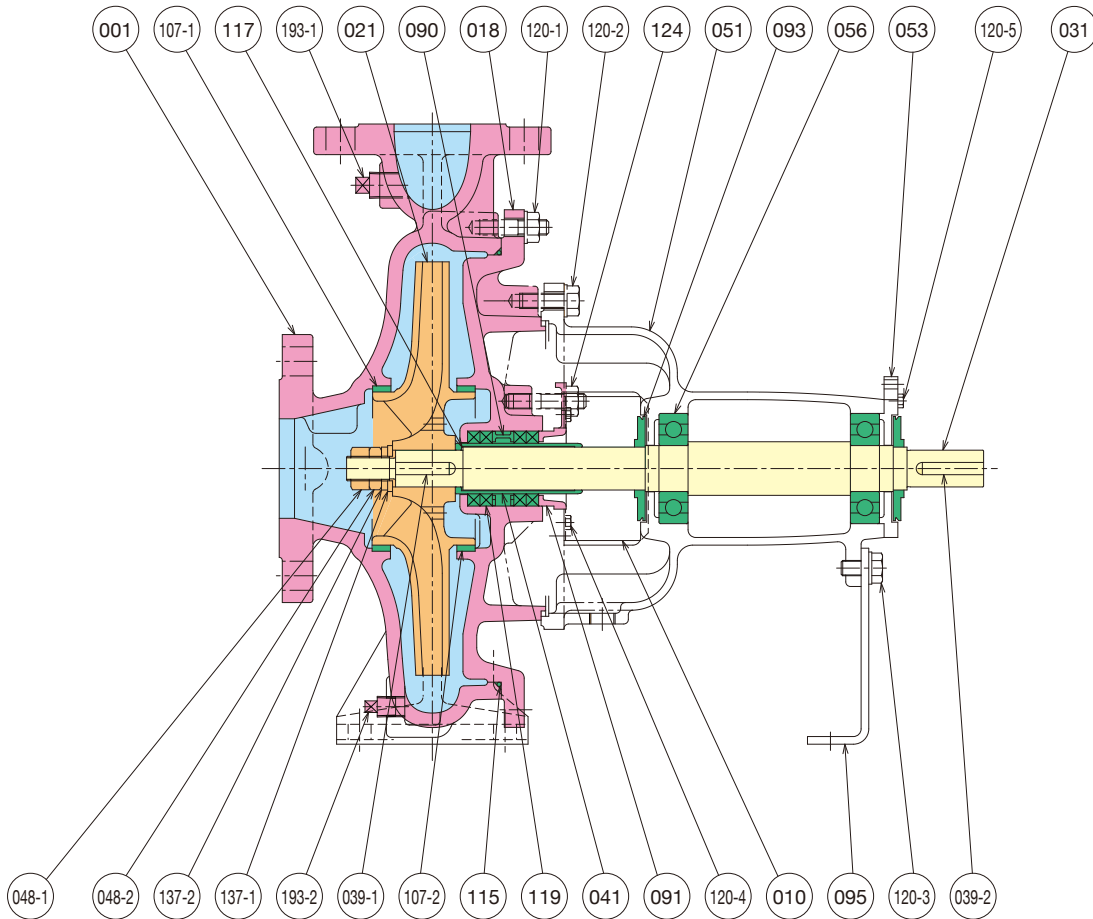
No.	Part name	Qty
001	CASING	1
010	PROTECTOR	2
018	CASING COVER	1
021	IMPELLER	1
031	SHAFT	1
039-1	KEY	1
039-2	KEY	1
042	SPACER	1
048-1	IMPELLER NUT (A)	1
048-2	IMPELLER NUT (B)	1
051	BEARING HOUSING	1
053	BEARING COVER	1
056	BALL BEARING	2
093	DEFLECTOR	2

No.	Part name	Qty
095	STAY	1
107-1	CASE WEAR RING	1
107-2	CASE WEAR RING	1
111	MECHANICAL SEAL	1
115	O-RING	1
120-1	BOLT	-
120-2	BOLT	6
120-3	BOLT	1
120-4	BOLT	4
120-5	BOLT	4
137-1	PLAIN WASHER	1
137-2	SPRING LOCK WASHER	1
193-1	PLUG	1
193-2	PLUG	1



# SECTIONAL VIEW

## GLAND PACKING TYPE



No.	Part name	Qty
001	CASING	1
010	PROTECTOR	2
018	CASING COVER	1
021	IMPELLER	1
031	SHAFT	1
039-1	KEY	1
039-2	KEY	1
041	SHAFT SLEEVE	1
048-1	IMPELLER NUT (A)	1
048-2	IMPELLER NUT (B)	1
051	BEARING HOUSING	1
053	BEARING COVER	1
056	BALL BEARING	2
090	LANTERN RING	1
091	GLAND	1
093	DEFLECTOR	2

No.	Part name	Qty
095	STAY	1
107-1	CASE WEAR RING	1
107-2	CASE WEAR RING	1
115	O-RING	1
117	GASKET	1
119	GLAND PACKING	4
120-1	BOLT	-
120-2	BOLT	6
120-3	BOLT	1
120-4	BOLT	4
120-5	BOLT	4
124	GLAND BOLT	2
137-1	PLAIN WASHER	1
137-2	SPRING LOCK WASHER	1
193-1	PLUG	1
193-2	PLUG	1

# MATERIALS

## Materials of mechanical seal application (conical type)

●: Standard ○: Optional

No.	Name of part	Material	JIS Material	ASTM equivalent	ISO or EN equivalent	Material group						
						G1	G2	G3	G4	A1	A2	D1
001	CASING	Cast iron	FC250	A278-35	EN-GJL-250 (EN-JL1040)	●	●	●	●			
		Ductile cast iron	FCD400	A536-60-40-18	EN-GJS-400-15 (5.3106)	○	○	○	○			
		304 Stainless steel	SCS13	A351-CF8	GX5CrNi19-10 (1.4308)					●		
		316 Stainless steel	SCS14A	A351-CF8M	GX5CrNiMo19-11-2 (1.4408)						○	
		Duplex stainless steel	---	A890-1B (CD4MCuN)	GX2CrNiMoCuN-25-6-3-3 (1.4517)							○
010	PROTECTOR	Carbon steel	SPCC	A569	DC01 (1.0330)	●	●	●	●	●	●	●
018	CASING COVER (conical)	Cast iron	FC250	A278-35	EN-GJL-250 (EN-JL1040)	●	●	●	●			
		Ductile cast iron	FCD400	A536-60-40-18	EN-GJS-400-15 (5.3106)	○	○	○	○			
		304 Stainless steel	SCS13	A351-CF8	GX5CrNi19-10 (1.4308)					●		
		316 Stainless steel	SCS14A	A351-CF8M	GX5CrNiMo19-11-2 (1.4408)						○	
		Duplex stainless steel	---	A890-1B (CD4MCuN)	GX2CrNiMoCuN-25-6-3-3 (1.4517)							○
021	IMPELLER	Cast iron (*)	FC200	A278-30	EN-GJL-200 (EN-JL1030)	●	●					
		Ductile cast iron (**)	FCD400	A536-60-40-18	EN-GJS-400-15 (5.3106)	●	●					
		Bronze	CAC406	B584-C83600	CuSn5Zn5Pb5 (CC491K)			●				
		304 Stainless steel	SCS13	A351-CF8	GX5CrNi19-10 (1.4308)				○	●		
		316 Stainless steel	SCS14A	A351-CF8M	GX5CrNiMo19-11-2 (1.4408)						○	
031	SHAFT	Cr. steel	SUS431eq. or SUS420J2	A276-431 or A276-420 eq.	X17CrNi16-2 (1.4057) or X30Cr13 (1.4028) eq.	●	●	●				
		Duplex stainless steel (**)	SUS329J3L/S35C	A276-S31803 / Grade1035	X2CrNiMoN22-5-3 (1.4462) / C35				○	●	●	●
039-1	KEY	12% Cr. steel	SUS420J2	A276-420	X30Cr13 (1.4028)	●	●	●				
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)				○	●	●	
		Duplex stainless steel	SUS329J3L	A276-S31803	X2CrNiMoN22-5-3 (1.4462)							○
039-2	KEY	Carbon steel	S50C	A576-1050	C50 (1.0540)	●	●	●	●	●	●	●
042	SPACER	304 Stainless steel	SUS304	A276-304	X5CrNi18-10 (1.4301)	●	●	●	●	●		
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)						○	
		Duplex stainless steel	SUS329J3L	A276-S31803	X2CrNiMoN22-5-3 (1.4462)							○
048-1	IMPELLER NUT (A)	304 Stainless steel	SUS304	A276-304	X5CrNi18-10 (1.4301)	●	●	●	●	●		
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)						○	
		Duplex stainless steel	SUS329J3L	A276-S31803	X2CrNiMoN22-5-3 (1.4462)							○
048-2	IMPELLER NUT (B)	304 Stainless steel	SUS304	A276-304	X5CrNi18-10 (1.4301)	●	●	●	●	●		NA
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)						○	NA
051	BEARING HOUSING	Cast iron	FC150	A48-20	EN-GJL-150 (EN-JL1020)	●	●	●	●	●	●	●
053	BEARING COVER	Cast iron	FC150	A48-20	EN-GJL-150 (EN-JL1020)	●	●	●	●	●	●	●
056	BALL BEARING	Steel (**)	---	---	---	●	●	●	●	●	●	●
093	DEFLECTOR	EPDM	---	---	---	●	●	●	●	●	●	●
095	STAY	Carbon steel	SPHC	A569	---	●	●	●	●	●	●	●
107	CASE WEAR RING	Bronze	CAC406	B584-C83600	CuSn5Zn5Pb5 (CC491K)	●	●					
		Cast iron	FC150	A48-20	EN-GJL-150 (EN-JL1020)		●		●			
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)					●	●	
		Duplex stainless steel	SUS329J3L	A276-S31803	X2CrNiMoN22-5-3 (1.4462)							○
111	MECHANICAL SEAL	SiC/carbon/FKM (**)	---	---	---	●	●	●	●	●	●	
		SiC/carbon/EPDM (**)	---	---	---	○	○	○	○	○	○	
		Tc/carbon/EPDM (**)	---	---	---	○	○	○	○	○	○	
		SiC/SiC/EPDM/HAS-C (**)	---	---	---							○
115	O-RING	NBR	---	---	---	●	●	●	●			
		FKM (**)	---	---	---	○	○	○	○	●	●	●
		EPDM	---	---	---	○	○	○	○	○	○	○
120-1	BOLT	Carbon steel	SS	A283-D	---	●	●	●	●	●	●	
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)							○
120-2,3,4,5	BOLT	Carbon steel	SS	A283-D	---	●	●	●	●	●	●	
137-1	PLAIN WASHER	304 Stainless steel	SUS304	A276-304	X5CrNi18-10 (1.4301)	●	●	●	●	●		NA
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)						○	NA
137-2	SPRING LOCK WASHER	304 Stainless steel	SUS304	A276-304	X5CrNi18-10 (1.4301)	●	●	●	●	●		NA
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)						○	NA
193-1	PLUG	Carbon steel	SS	A283-D	---	●	●	●	●			
		304 Stainless steel	SUS304	A276-304	X5CrNi18-10 (1.4301)					●		
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)						○	
		Duplex stainless steel	SUS329J3L	A276-S31803	X2CrNiMoN22-5-3 (1.4462)							○
193-2	PLUG	Carbon steel	SS	A283-D	---	●	●	●	●			
		304 Stainless steel	SUS304	A276-304	X5CrNi18-10 (1.4301)					●		
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)						○	
		Duplex stainless steel	SUS329J3L	A276-S31803	X2CrNiMoN22-5-3 (1.4462)							○

(\*) Except pumps model GS100-400, 125-400, 125-500, 150-400, 150-500, 200-400 and 200-500, impellers made of cast iron are applied for all pumps.

(\*\*) Impellers made of ductile cast iron are applied only the pumps model GS100-400, 125-400, 125-500, 150-400, 150-500, 200-400 and 200-500.

(\*\*\*) Duplex stainless steel is used for wetted part only. The remaining atmospheric side of shaft is made of carbon steel.

(\*\*) Deep groove ball bearing, single row / Vacuum degassed steel

(\*\*) Elastomer bellows seal (\*\*\*) O ring/Spring (\*\*\*) Viton

# MATERIALS

## Materials of gland packing application <sup>(\*)8</sup>

●:Standard ○:Optional

No.	Name of part	Material	JIS Material	ASTM equivalent	ISO or EN equivalent	Material group						
						G1	G2	G3	G4	A1	A2	D1
018	CASING COVER (cylindrical)	Cast iron	FC250	A278-35	EN-GJL-250 (EN-JL1040)	●	●	●	●			
		304 Stainless steel	SCS13	A351-CF8	GX5CrNi19-10 (1.4308)					●		
		316 Stainless steel	SCS14A	A351-CF8M	GX5CrNiMo19-11-2 (1.4408)						○	
		Duplex stainless steel	---	A890-1B (CD4MCuN)	GX2CrNiMoCuN-25-6-3-3 (1.4517)							NA
041	SHAFT SLEEVE	304 Stainless steel	SUS304	A276-304	X5CrNi18-10 (1.4301)	●	●	●	●	●		
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)						○	
		Duplex stainless steel	---	A890-1B (CD4MCuN)	GX2CrNiMoCuN-25-6-3-3 (1.4517)							NA
090	LANTERN RING	Cast iron	FC150 or 200	A48-20 or 30	EN-GJL-150 (EN-JL1020) or EN-GJL-200 (EN-JL1030)		○					NA
		Bronze	CAC406	B584-C83600	CuSn5Zn5Pb5 (CC491K)	●		●				NA
		304 Stainless steel	SCS13	A351-CF8	GX5CrNi19-10 (1.4308)				○	●		NA
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)						○	NA
091	GLAND	Cast iron	FC150	A48-20	EN-GJL-150 (EN-JL1020)		○					NA
		Bronze	CAC406	B584-C83600	CuSn5Zn5Pb5 (CC491K)	●		●				NA
		304 Stainless steel	SCS13	A351-CF8	GX5CrNi19-10 (1.4308)				○	●		NA
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)						○	NA
117	GASKET	Joint sheet gasket <sup>(*)9</sup>	---	---	---	●	●	●	●	●	●	NA
119	GLAND PACKING	Silicone carbide fiber packing <sup>(*)10</sup>	---	---	---	●	●	●	●	●	●	NA
124	GLAND BOLT	12% Cr. steel	SUS403	A276-403	---		○					NA
		Brass	C3604BD	B16-C36000	---	●		●				NA
		304 Stainless steel	SUS304	A276-304	X5CrNi18-10 (1.4301)				○	●		NA
		316 Stainless steel	SUS316	A276-316	X5CrNiMo17-12-2 (1.4401)						○	NA

<sup>(\*)8</sup> The components which constitute the gland packing pump are these parts instead of P/N 018, 042 and 111 of the mechanical seal pump.

<sup>(\*)9</sup> V#6500AC

<sup>(\*)10</sup> P#6501L

## Explanation of Material Group

Material Group	Casing, 001 and Casing Cover, 018	Impeller, 021	Case Wear Ring, 107	Shaft, 031	Notes
G1	Cast iron or Ductile cast iron	Cast iron or Ductile cast iron	Bronze	Cr.steel	Cast iron casing, Cast iron impeller with Bronze case wear ring
G2		Cast iron or Ductile cast iron	Cast iron	Cr.steel	All wetted parts are Iron material.
G3		Bronze	Bronze	Cr.steel	Cast iron casing, Bronze impeller with Bronze case wear ring
G4		304 Stainless steel	Cast iron	Duplex stainless steel	Cast iron casing, Stainless steel impeller with Duplex stainless steel shaft
A1	304 Stainless steel	304 Stainless steel	316 Stainless steel	Duplex stainless steel	304/316 Stainless steel wetted parts with Duplex stainless steel shaft
A2	316 Stainless steel	316 Stainless steel	316 Stainless steel	Duplex stainless steel	316 Stainless steel wetted parts with Duplex stainless steel shaft
D1	Duplex stainless steel	Duplex stainless steel	Duplex stainless steel	Duplex stainless steel	All wetted parts are Duplex stainless steel

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