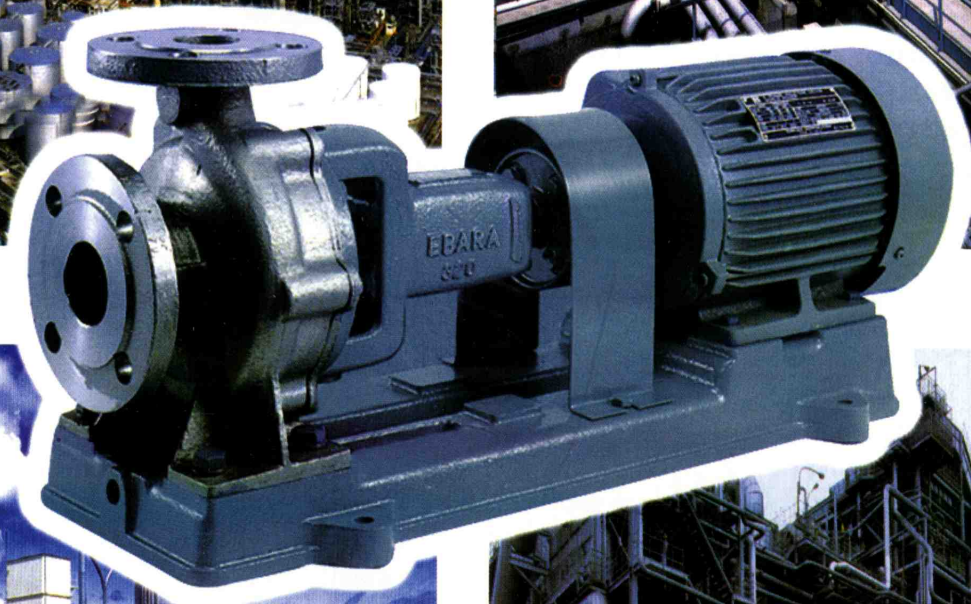
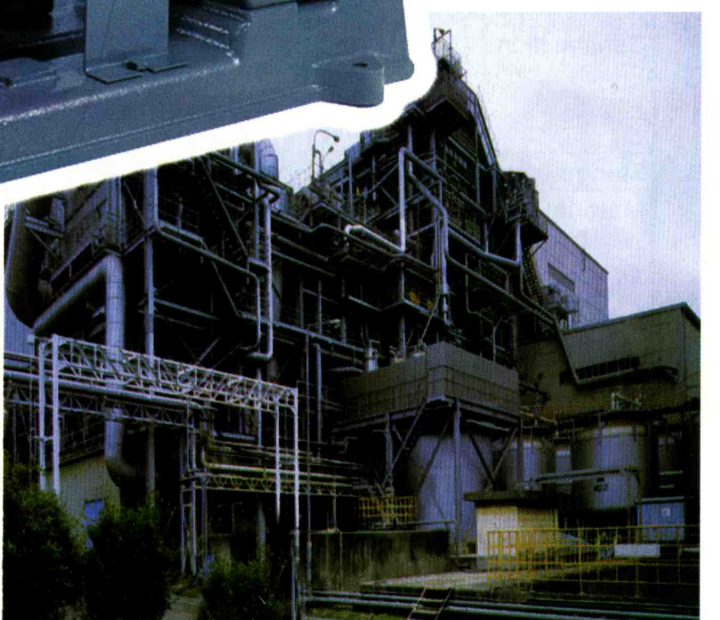
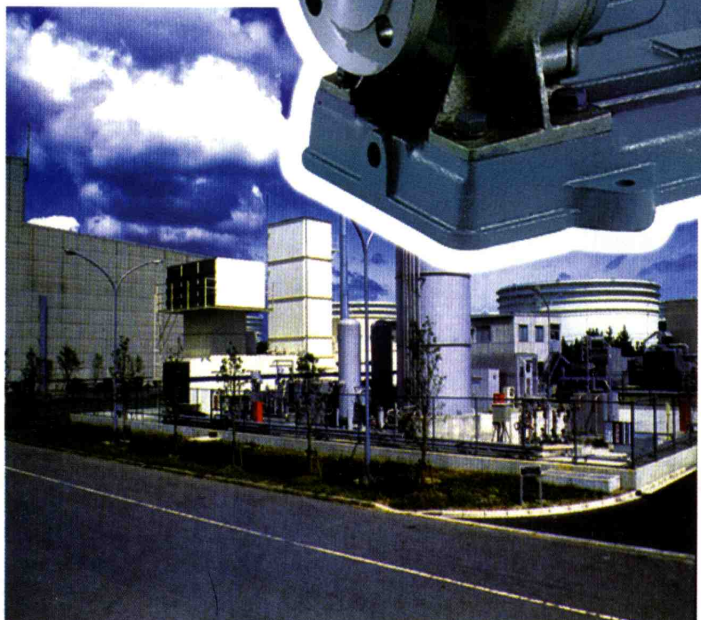
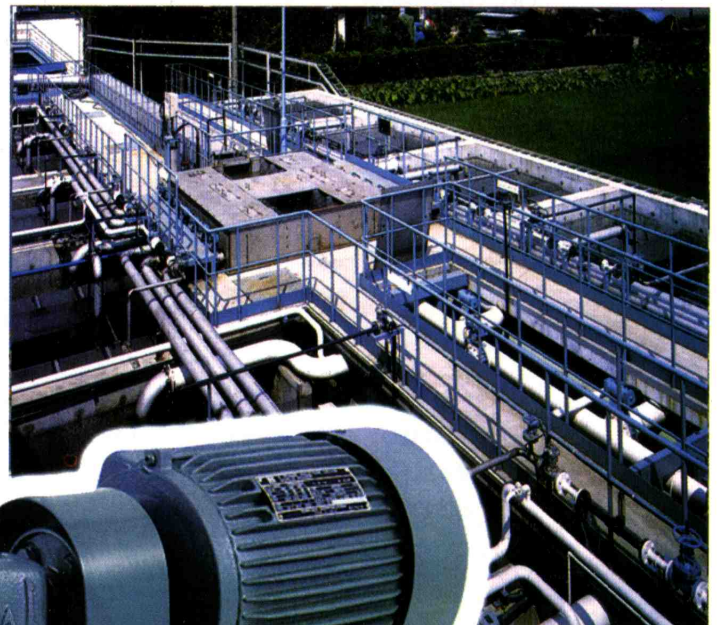


FSS 8001

# STAINLESS STEEL VOLUTE PUMPS

Model FSSA

50 HZ



# Ebara Stainless Steel Volute Pump

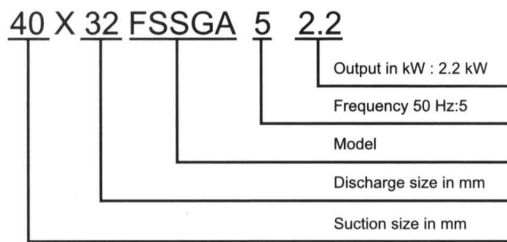
## ■ FEATURES

1. Pump portion contacting liquid is made of high grade stainless steel.
2. BPO (Back Pull Out) system allows all rotating elements to be removed without disconnecting suction and discharge pipework.
3. Top centerline discharge, foot support under casing for maximum resistance to misalignment and distortion from pipe loads.
4. Non-overload design to ensure stable performance for all applications.
5. Compact construction, applicable for two-poles high speed motor provides a compact unit and minimizes installation area.
6. Wide range application due to 316 stainless steel material.

## ■ APPLICATIONS

1. Industrial use
2. Chemical Solutions
3. Industrial drainage
4. Hot and cold water supply
5. Sea water

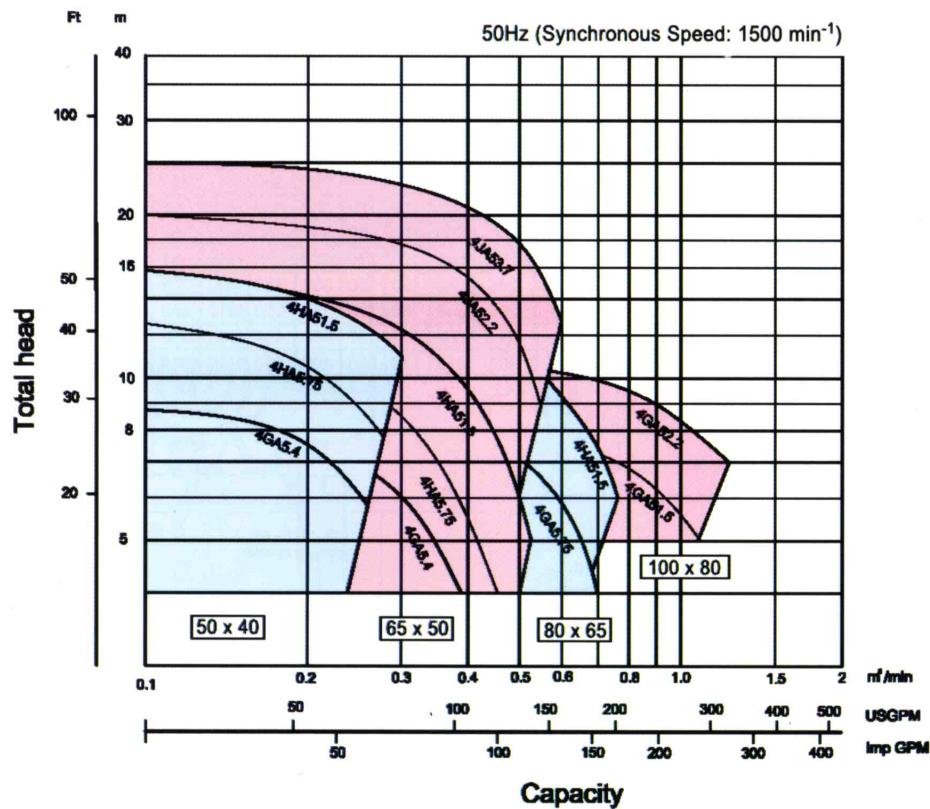
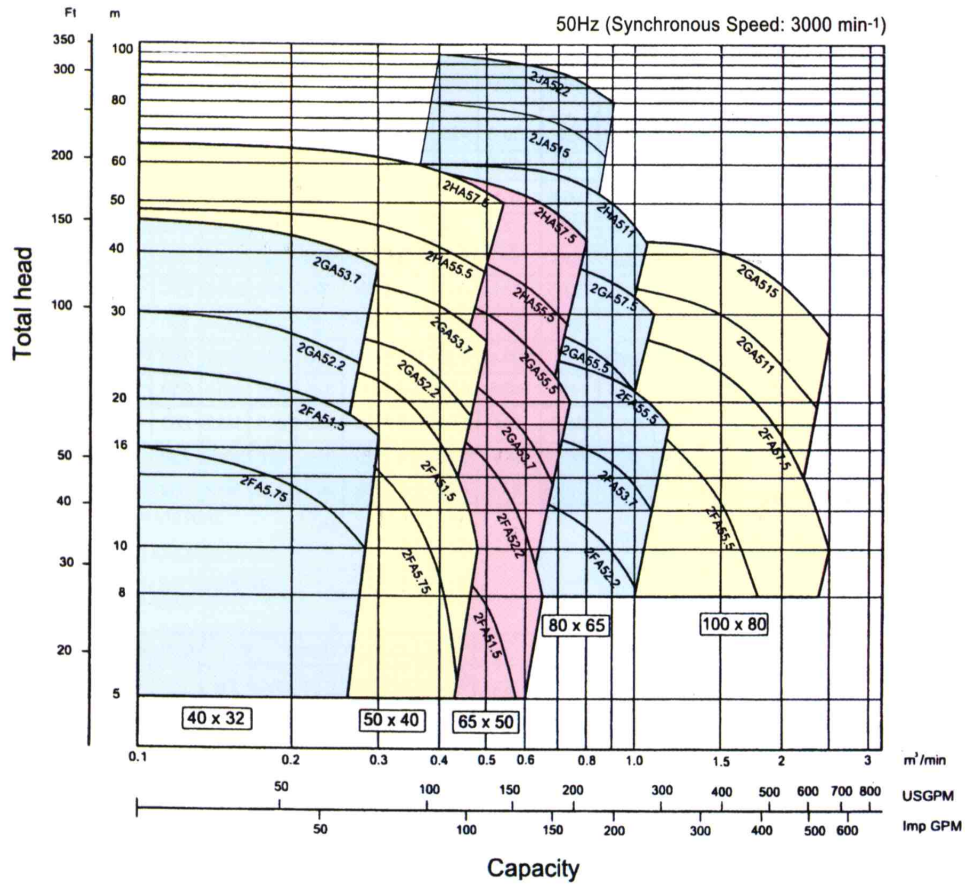
## ■ MODEL CODE



## ■ Specification

Description		Standard		Optional	
		2 pole model	4 pole model	2 pole model	4 pole model
Liquid	Name	Water, oil, liquid chemicals. See the liquids list.		For specifications other than at left, please contact Ebara	
	Temperature	0 to 100 °C (32 to 212 °F)			
	Viscosity	below 10 cSt			
	Specific gravity	0.7 to 1.0			
Re. NPSH		4m... Expect for Models 100x80 (2 pole) 7m... Model 100x80 (2 pole)			
Instalation		Indoors		Outdoors	
Construction	Impeller	Enclosed		Mechanical seal (0 - 90 °C)	
	Shaft seal	Packing			
	Sealing	Self			
	Bearing	Sealed ball bearing			
	Shaft sleeve	No			
Casing Ring		No			
Flange		JIS 10 kg/cm <sup>2</sup> R.F.			
Material	Casing	SCS-14 Stainless steel		Cermic/Carbon, SiC/SiC	
	Impeller	SCS-14 Stainless steel			
	Shaft	316 Stainless steel			
	Casing Ring	—			
	Casing Gasket Seal	Teflon			
		Carbonized fiber			
Accessories	Bare shaft				
	With motor	Common base, Coupling, Coupling guard			

■ PERFORMANCE



■ LIQUID HANDLED

LIQUID	Gasket	Gland Packing	Mechanical Seal		Specific Gravity	Density	Temperature
			Material	Activation Method			
A							
Acetaldehyde	T	C	1	S		O	
Acetic acid	T	C	1	S	O	O	O
Acetic anhydride	T	C	1	S	O	O	O
Acetone	T	C	1	S			
Acetonitrile	F	D	1	S			O
Acrylic Acid	F	D	1	S	O		O
Acrylonitrile	T	C	1	S			
Alcoholic drinks	F	C	1	S			
Allyl acetate	T	D	1	S			
Allyl acetone	T	C	1	S			
Allyl alcohol	F	C	1	S			
Allyl chloride	F	C	1	S			
Ammonium carbonate	F	D	2	S+Q	O	O	O
Ammonium Bicarbonate	F	C	2	S+Q	O	O	O
Amyl acetate	T	C	1	S			O
Amyl Alcohol	F	C	1	S			O
Amyl chloride	T	D	1	S			O
Amyl ether	F	C	1	S			
Aqueous ammonia	F	C	2	S		O	O
B							
Barium chloride	F	C	2	S+Q	O	O	O
Benzaldehyde	T	C	1	S	O		
Benzene	T	C	1	S			
Benzene	F	C	2	S			
Benzyl Acetate	T	D	1	S	O		
Boric acid	F	C	2	S+Q	O	O	O
Boric acid	F	C	1	S			
Brake Oil	T	D	1	S			O
Butyl Acetate	F	D	1	S	O		
Butyl acetate diamyl	T	D	1	S	O		
Butyl acetate dibutyl	T	D	1	S	O		
Butyl acetate diethyl	F	D	1	S	O		
Butyl Alcohol	F	C	1	S			
Butyl Ether	C	C	1	S			O
Butyric acid	T	C	1	S		O	
Butyric ethyl	T	D	1	S		O	
Butyric methyl	T	D	1	S			
C							
Calcium carbonate	F	C	2	S+Q	O	O	
Calcium hydroxide	F	C	2	S+Q	O	O	
Carbolic acid	T	D	2	S+Q	O		O
Carbonate water	F	C	1	S			
Caustic soda	F	D	2	S+Q		O	O
Cellosolve	T	D	1	S			
Cellulose acetate	T	D	1	S	O		O
Chlorobenzene	T	C	1	S	O		
Chrome alum	F	D	2	S+Q	O	O	O
Citric acid	F	C	2	S+Q	O	O	O
Coconut oil	F	C	1	S+Q			
Coffee extract	F	C	1	S			
Copper nitrate	F	D	2	S+Q	O	O	O
Corn oil	F	C	1	S			
Creosote	F	D	1	S	O		
Cresol	F	D	1	S+Q	O		
Cyclohexane	F	C	1	S			O
D							
Diacetone alcohol	T	C	1	S			
Dichlorobenzene	F	C	1	S	O		O
Dicloropentane	F	D	1	S	O		
Diethyl benzene	F	C	1	S			O
Diethylene glycol	F	C	1	S	O	O	
Dioxane	T	D	1	S	O		O
Drain	F	C	2	S			
Dyeing solut ion	F	D	2	S			O

LIQUID	Gasket	Gland Packing	Mechanical Seal		Specific Gravity	Density	Temperature
			Material	Activation Method			
E							
Emulsified oil	F	C	2	S			
Ethyl acetate	T	C	1	S		O	O
Ethyl acrylate	T	D	1	S			
Ethyl alcohol	F	C	1	S			
Ethyl Benzene	F	C	1	S			
Ethyl chloride	F	D	2	S		O	
Ethyl glycol	F	C	1	S			
Ethyl pirydine	T	D	1	S			
F							
Ferric nitrate	F	D	2	S+Q	O	O	O
Formaline	F	C	1	S		O	
Fruit juice	F	C	1	S			
Fruit oil	F	C	1	S			
Fuel oil	F	C	1	S			
Furfural	T	C	1	S		O	
G							
Gas oil	F	C	1	S			
Gasoline	F	C	1	S		O	O
Glycerine	F	C	1	S		O	O
H							
Heavy oil	F	C	1	S			
Heptane	F	C	1	S			
Hexane	F	C	2	S			
Hexyl alcohol	F	C	1	S			
Hydraulic fluids	F	C	1	S			
I							
Ink	T	D	1	S			O
Isoamil alcohol	F	C	1	S			
Isobutil alcohol	F	C	1	S			O
Isobutil-metil ketone	F	D	1	S			
Isooktane	F	D	1	S			O
Isopropyl alcohol	F	C	1	S			O
Isopropyl benzene	T	D	1	S			
J							
Juice	F	C	1	S			
K							
Kerosene	F	C	1	S			
L							
Lactic acid	F	C	2	S		O	O
Linseed oil	F	C	1	S			
Lubricating oil	F	C	1	S			
M							
Magnesium hydroxide	F	C	2	S+Q		O	O
Methyl acrylate	T	D	1	S			
Methyl alcohol	F	C	2	S			
Methyl chloride	F	D	2	S+Q			
Methyl chloroform	F	C	1	S		O	O
Methyl ethyl ketone	T	D	1	S			
Methyl isobutyl ketone	T	D	1	S			
Milk	F	C	1	S			
Mineral oil	F	C	1	S			
Mineral spirits	F	C	1	S			
Monoethylene glicole	F	C	1	S			
Mustard oil	F	C	1	S			
N							
Naptha	F	C	1	S			
Naptha solvent	F	C	1	S			
Natrium carbonat	F	C	2	S+Q	O	O	O
Natrium discarbonat	F	C	2	S+Q	O	O	O
Nonyl Phenol	F	D	1	S			

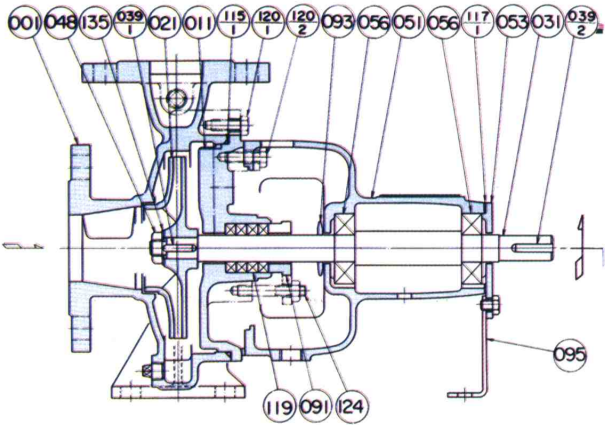
LIQUID	Gasket	Gland Packing	Mechanical Seal		Specific Gravity	Density	Temperature
			Material	Activation Method			
O							
Octane	F	D	1	S			
Oxtanol	F	C	1	S			
Oleic acid	F	C	1	S		O	O
P							
Paraffine wax	F	C	2	S			
Parrila oil	F	C	1	S			
Petroleum	F	C	1	S			
Petroleum benzine	F	C	1	S			
Pinene	F	D	1	S			
Potassium bromide	F	D	2	S+Q	O	O	O
Potassium carbonate	F	D	2	S+Q	O	O	O
Potassium chloride	F	C	2	S+Q	O	O	O
Potassium dichromate	F	C	2	S+Q	O	O	O
Potassium iodide	F	D	2	S+Q	O	O	O
Potassium nitrate	F	C	2	S+Q	O	O	O
Propyl acctate	T	D	1	S			
Propylene	F	C	1	S		O	
R							
Rapeseed oil	F	C	1	S			
Refrigeration oil	F	C	1	S			
S							
Salad oil	F	C	1	S			
Sea water	F	C	1	S			
Soapsuds	F	C	2	S+Q			O
Soda bromide	F	D	2	S+Q	O	O	O
Soda nitrate	F	C	2	S+Q	O	O	O
Soda sulfate	F	D	2	S+Q	O	O	O
Sodium silicate	F	C	2	S+Q			
Solar oil	F	D	1	S			
Solar oil	F	C	1	S			
Soya been oil	F	C	1	S			
Soya sauce	F	C	1	S			
Stylene	F	D	1	S			
Sugar liquid	F	C	1	S			
Sunflower oil	F	D	1	S			
T							
Tannic acid	F	D	2	S+Q		O	O
Thiophenol	F	D	1	S		O	O
Trichloroethylene	F	C	1	S			O
Triole	T	C	1	S			O
Turpentine oil	F	C	1	S			
U							
Urea	F	D	2	S+Q	O	O	
V							
Vegetable oil							
W							
Whale oil							
Whisky							
Wine							
X							
Xylene	F	C	1	S			

Gasket material : F; Flourorubber, T; PTFE  
 Gland packing material : C; Carbonized fiber, D; Teflon  
 Mechanical seal material : 1 : Ceramic/carbon 2 : Superhard alloy/carbon  
 Water activation (mechanical seal) : S : Self injection S+Q : Self-injection + Quenching or external injection  
 Specific gravity O; Check the value.  
 Density O; Check the value.  
 Temperature O; Check the value.

Note : The above chart is a general guide. Liquids have been listed according to the commonly used classification, but corrosion resistance will vary considerably according to the nature of the liquid (temperature, density and purity) and the circumstances under which used.

## SECTIONAL VIEW

### Packing Type (Standard)

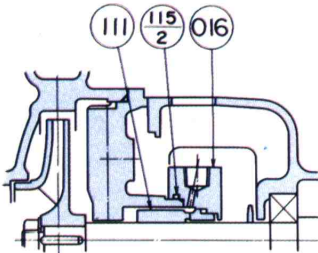


PART NO.	PART NAME	MATERIAL	Q'TY/ UNIT
001	CASING	SCS14, STAINLESS STEEL CASTING	1
011	CASING COVER	SCS14, STAINLESS STEEL CASTING	1
021	IMPELLER	SCS14, STAINLESS STEEL CASTING	1
031	SHAFT	316 STAINLESS STEEL	1
039-1	KEY	316 STAINLESS STEEL	1
039-2	KEY	316 STAINLESS STEEL	1
048	IMPELLER NUT	316 STAINLESS STEEL	1
051	BEARING HOUSING	CAST IRON	1
053	BEARING COVER	CAST IRON	1
056	BALL BEARING	-	2
093	DEFLECTOR	RUBBER (EPDM)	1
095	BEARING SUPPORT	STEEL	1
115-1	O-Ring	TEFLON	1
117-1	BEARING GASKET	PRESS BOARD	1
120-1	BOLT, CASING	304 STAINLESS STEEL	1 SET
120-2	BOLT, B.HOUSING	STEEL	4
135	IMP. WASHER	304 STAINLESS STEEL	1

### Packing type (Standard)

PART NO.	PART NAME	MATERIAL	Q'TY/ UNIT
091	GLAND	316 STAINLESS STEEL	1
119	GLAND PACKING	TEFLON IMPREGNATED ASBESTOS	4
124	GLAND BOLT	316 STAINLESS STEEL	2

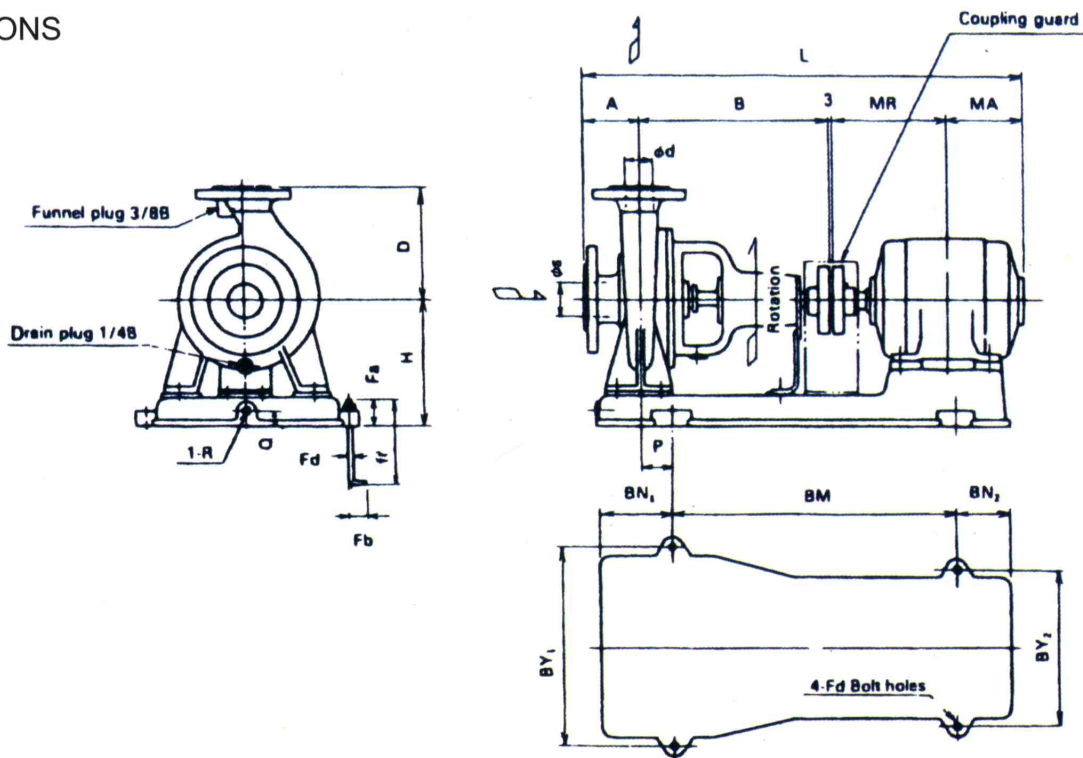
### Mechanical seal type (optional)



### Mechanical seal type (optional)

PART NO.	PART NAME	MATERIAL	Q'TY/ UNIT
091	MECH. SEAL COVER	316 STAINLESS STEEL	1
119	MECH. SEAL	CERAMIC/CARBON; SiC/SiC	1
124	"O" RING	VITON	1

## DIMENSIONS



## ■ DIMENSION

### ■ 4 Pole - 1500 rpm

SIZE	MODEL	Out put kW	Pump							Motor			Common Base				Anchor Bolt				Weight kg	
			A	B	H	D	L	p	Frame No.	MR	MA	BM	BN1	BN2	BY1	BY2	Fd	F1	Fa	Fb		
Ø1	Ø2																					
50	40	50x40 FSS4GA5.4	0.4	80	280	182	160	613.5	45	71	120	130.5	420	105	90	290	190	M10	200	40	40	43
		50x40 FSS4HA5.75	0.75	80	280	230	180	725.5	45	80	140	142.5	420	105	115	320	320	M10	200	40	40	56
		50x40 FSS4HA51.5	1.5	80	280	230	180	775.5	100	90L	168.5	164	550	115	75	360	290	M10	200	40	40	71
65	50	65x50 FSS4GA5.4	0.4	80	360	202	160	645.5	45	71	120	142.5	420	105	115	350	210	M10	200	40	40	55
		65x50 FSS4HA5.75	0.75	100	360	230	180	745.5	45	80	140	142.5	420	105	115	320	230	M10	200	40	40	61
		65x50 FSS4HA51.5	1.5	100	360	230	180	795.5	40	90L	168.5	164	550	115	75	360	290	M10	200	40	40	71
		65x50 FSS4HA52.2	2.2	100	360	230	180	837.5	40	100L	193	181.5	480	115	145	400	260	M10	200	40	40	95
		65x50 FSS4HA53.7	3.7	100	360	230	180	854.5	40	112M	200	191.5	480	115	145	400	290	M12	250	50	50	106
80	65	80x65 FSS4GA5.75	0.75	100	360	230	180	745.5	45	80	140	142.5	420	105	115	320	230	M12	250	50	50	61
		80x65 FSS4HA51.5	1.5	100	360	245	200	795.5	40	90L	168.5	164	550	115	75	360	290	M12	250	50	50	71
100	80	100x80 FSS4GA51.5	1.5	100	360	245	200	795.5	40	90L	168.5	164	550	115	75	360	290	M12	250	50	50	73
		100x80 FSS4GA52.2	2.2	100	360	245	200	837.5	40	100L	193	181.5	550	115	75	360	290	M12	250	50	50	81

### ■ 2 Pole - 3000 rpm

SIZE	MODEL	Out put kW	Pump							Motor			Common Base				Anchor Bolt				Weight kg	
			A	B	H	D	L	p	Frame No.	MR	MA	BM	BN1	BN2	BY1	BY2	Fd	F1	Fa	Fb		
Ø1	Ø2																					
40	32	40x32 FSS2FA5.75	0.75	65	280	162	140	621	35	80	140	133	370	95	95	230	230	M10	200	40	40	45
		40x32 FSS2FA51.5	1.5	65	280	162	140	621	35	90S	156	151.5	370	95	95	230	230	M10	200	40	40	52
		40x32 FSS2GA52.2	2.2	80	280	182	160	690	45	90L	168.5	158.5	420	105	80	290	230	M10	200	40	40	60
		40x32 FSS2FA53.7	3.7	80	280	182	160	690	45	112M	200	175	420	105	80	290	230	M10	200	40	40	79
50	40	50x40 FSS2FA5.75	0.75	80	280	162	140	636	35	80	140	133	370	95	95	230	230	M10	200	40	40	45
		50x40 FSS2FA51.5	1.5	80	280	162	140	636	35	90S	156	151.5	370	95	95	230	230	M10	200	40	40	52
		50x40 FSS2GA52.2	2.2	80	280	182	160	690	45	90L	168.5	158.5	420	105	80	290	230	M10	200	40	40	61
		50x40 FSS2GA53.7	3.7	80	280	182	160	690	45	112M	200	175	420	105	80	290	230	M10	200	40	40	80
		50x40 FSS2HA55.5	5.5	80	280	230	180	887	55	132S	239	205	540	130	150	350	350	M12	250	50	50	121
		50x40 FSS2HA57.5	7.5	80	280	230	180	887	55	132S	239	205	540	130	150	350	350	M12	250	50	50	131
65	50	65x50 FSS2FA51.5	1.5	80	280	162	140	636	35	90S	156	151.5	370	95	95	230	230	M10	200	40	40	52
		65x50 FSS2FA52.2	2.2	80	280	182	160	690	45	90L	168.5	158.5	420	105	80	290	230	M10	200	40	40	62
		65x50 FSS2GA53.7	3.7	80	360	202	160	818	70	112M	200	175	540	130	60	290	290	M12	250	50	50	88
		65x50 FSS2GA55.5	5.5	80	360	202	160	818	70	132S	239	205	540	130	60	290	290	M12	250	50	50	121
		65x50 FSS2HA55.5	5.5	100	360	230	180	907	55	132S	239	205	540	130	150	350	350	M12	250	50	50	124
		65x50 FSS2HA57.5	7.5	100	360	230	180	907	55	132S	239	205	540	130	150	350	350	M12	250	50	50	134
		65x50 FSS2JA515	15	100	360	225	225	1041	95	160M	323	255	660	170	120	400	400	M16	315	65	63	211
		65x50 FSS2JA518.5	18.5	100	360	225	225	1041	95	160L	345	275	660	170	120	400	400	M16	315	65	63	221
80	65	80x65 FSS2FA52.2	2.2	100	360	182	160	790	55	90L	168.5	158.5	480	115	90	290	230	M10	200	40	40	70
		80x65 FSS2FA53.7	3.7	100	360	182	160	790	55	112M	200	175	540	130	60	290	290	M12	250	40	50	89
		80x65 FSS2FA55.5	5.5	100	360	182	160	907	70	132S	239	205	540	130	150	350	350	M12	250	50	50	117
		80x65 FSS2GA55.5	5.5	100	360	230	180	907	55	132S	239	205	540	130	150	350	350	M12	250	50	50	123
		80x65 FSS2GA57.5	7.5	100	360	230	180	907	55	132S	239	205	540	130	150	350	350	M12	250	50	50	123
		80x65 FSS2HA511	11	100	360	245	200	1041	95	160M	323	255	660	170	120	400	400	M16	315	65	63	191
100	80	100x80 FSS2FA55.5	5.5	100	360	230	180	907	55	132S	239	205	540	130	150	350	350	M12	250	50	50	124
		100x80 FSS2FA57.5	7.5	100	360	230	180	907	55	132S	239	205	540	130	150	350	350	M12	250	50	50	134
		100x80 FSS2GA511	11	100	360	245	200	1041	95	160M	323	255	660	170	120	400	400	M16	315	65	63	190
		100x80 FSS2GA515	15	100	360	245	200	1041	95	160M	323	255	660	170	120	400	400	M16	315	65	63	190

All specifications are subject to change without notice



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