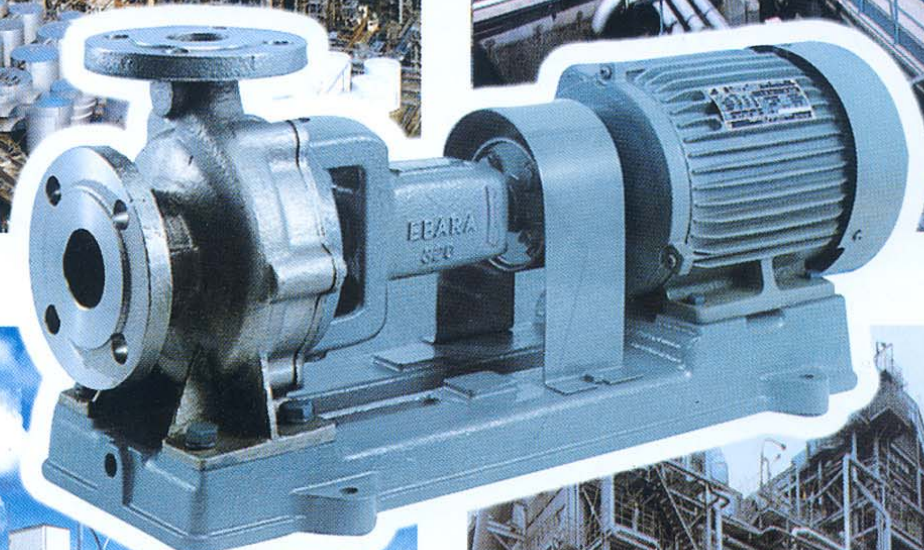
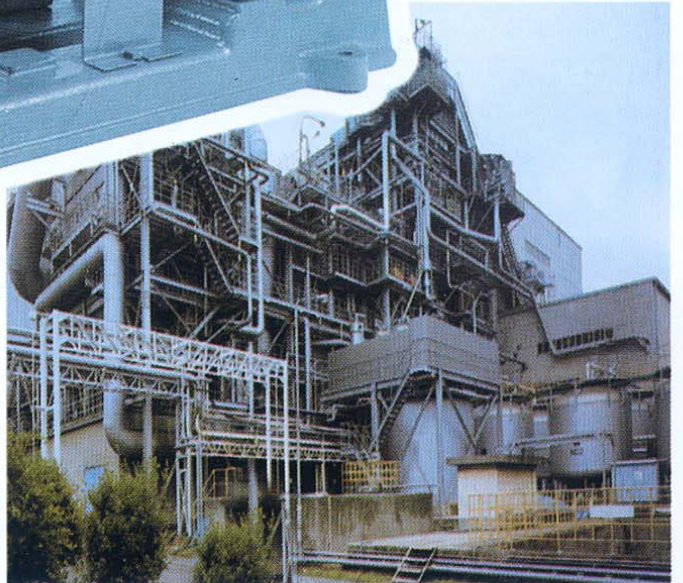
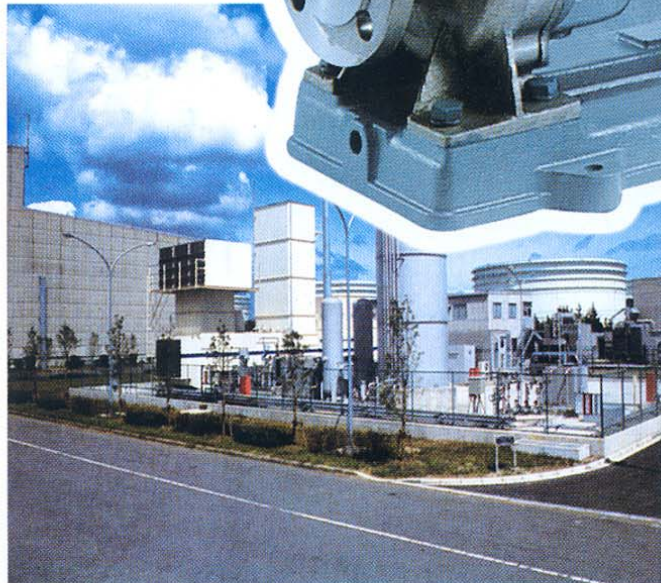
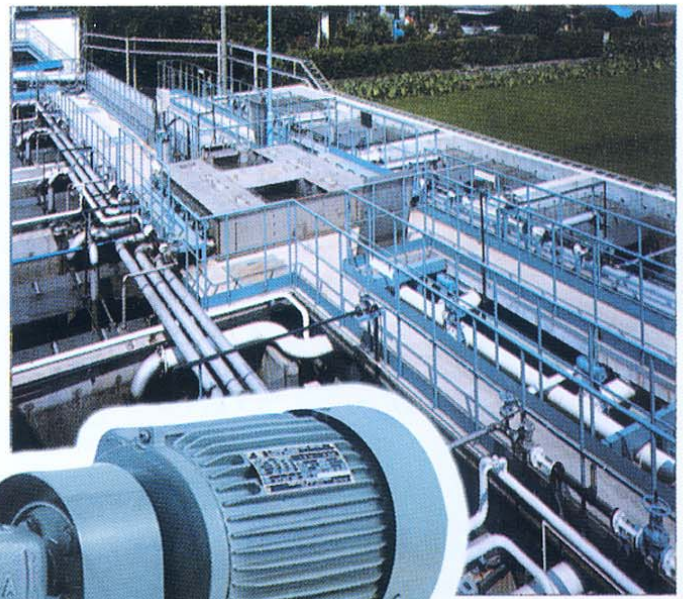


EBARA STAINLESS STEEL VOLUTE PUMP

Model FSSA

50 HZ



Ebara Stainless Steel Volute Pump

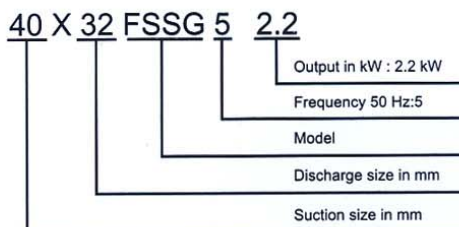
■ Feature

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 and distorsion from pipe loads.
4. Non-overload design to ensure stable performance for all applications.
5. Compact construction, aplicable 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

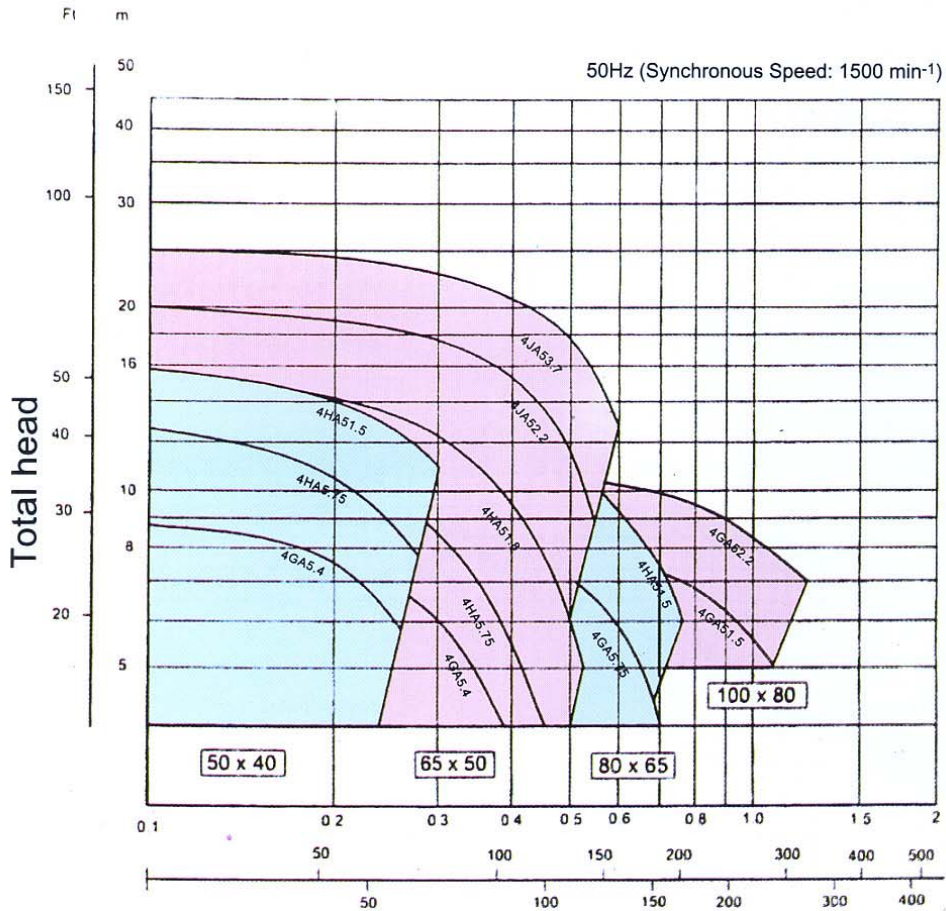
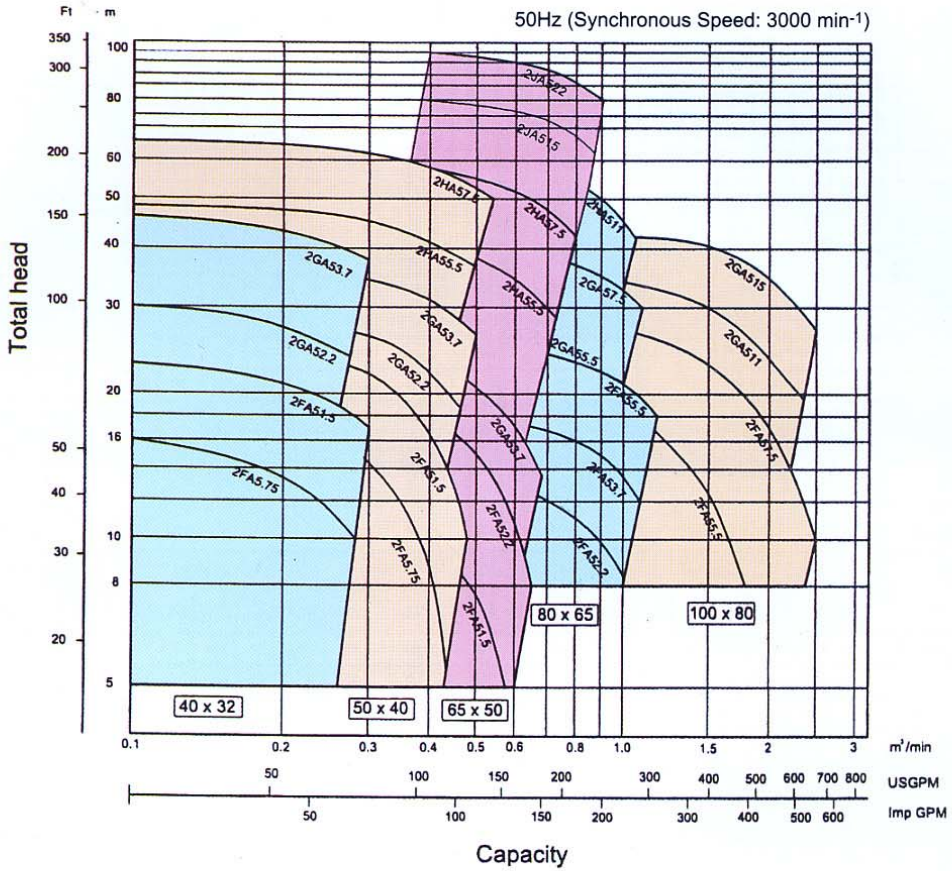


■ SPECIFICATION

		Standard		Optional	
		2 pole model	4 pole model	2 pole model	4 pole model
Liquid	Name	Water, oil, liquid chemicals. Rifer to table 1			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 ² R.F.		-	
Material	Casing	SCS-14 Stainless steel		-	
	Impeller	SCS-14 Stainless steel		-	
	Shaft	316 Stainless steel		-	
	Casing Ring	-		-	
	Casing O-ring	Fluororubber (viton)		Teflon (PTFE)	
	Seal	Teflon (PTFE)		Mech. Seal:SiC/SiC	
Accessories	Bare shaft	-		-	
	With motor	Common base, Coupling, Coupling guard		-	

■ PERFORMANCE

(Specific gravity : 1.0)



LIQUID HANDLED

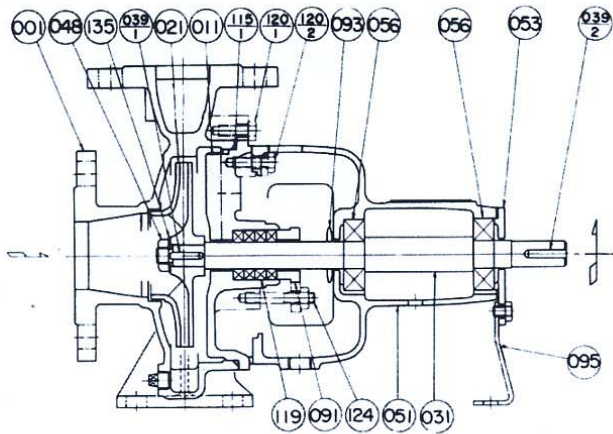
Tabel 1

LIQUID	Gasket	Mechanical Seal		Specific Gravity	Temperature	LIQUID	Gasket	Mechanical Seal		Specific Gravity	Temperature	LIQUID	Gasket	Mechanical Seal		Specific Gravity	Temperature
		Material	Water Activation Method					Material	Water Activation Method					Material	Water Activation Method		
A						E						O					
Acetaldehyde	T	C	1	S	O	Emulsified oil	F	C	2	S		Octane	F	D	1	S	
Acetic acid	T	C	1	S	O	Ethyl acetate	T	C	1	S	O	Octanol	F	C	1	S	
Acetic anhydride	T	C	1	S	O	Ethyl acrylate	T	D	1	S		Oleic acid	F	C	1	S	O
Acetone	T	C	1	S		Ethyl alcohol	F	C	1	S		P					
Acetonitrile	F	D	1	S	O	Ethyl Benzene	F	C	1	S		Paraffine wax	F	C	2	S	
Acrylic Acid	F	D	1	S	O	Ethyl chloride	F	D	2	S	O	Parrila oil	F	C	1	S	
Acrylonitrile	T	C	1	S		Ethyl glycol	F	C	1	S	O	Petroleum	F	C	1	S	
Alcoholic drinks	F	C	1	S		Ethyl pirydine	T	D	1	S		Petroleum benzine	F	C	1	S	
Allyl acetate	T	D	1	S		F						Pinene	F	D	1	S	
Allyl acetone	T	C	1	S		Ferric nitrate	F	D	2	S+Q	O	Potassium bromide	F	D	2	S+Q	O
Allyl alcohol	F	C	1	S		Formaline	F	C	1	S	O	Potassium carbonate	F	D	2	S+Q	O
Allyl chloride	F	C	1	S		Fruit juice	F	C	1	S		Potassium chloride	F	C	2	S+Q	O
Ammonium carbonate	F	D	2	S+Q	O	Fruit oil	F	C	1	S		Potassium dichromate	F	C	2	S+Q	O
Ammonium Bicarbonate	F	C	2	S+Q	O	Fuel oil	F	C	1	S		Potassium iodide	F	D	2	S+Q	O
Amyl acetate	T	C	1	S	O	Furfural	T	C	1	S	O	Potassium nitrate	F	C	2	S+Q	O
Amyl Alcohol	F	C	1	S		G						Propyl acetate	T	D	1	S	
Amyl chloride	T	D	1	S	O	Gas oil	F	C	1	S		Propylene	F	C	1	S	O
Amyl ether	F	C	1	S		Gasoline	F	C	1	S		R					
Aqueous ammonia	F	C	2	S	O	Glycerine	F	C	1	S	O	Rapeseed oil	F	C	1	S	
B						H						S					
Barium chloride	F	C	2	S+Q	O	Heavy oil	F	C	1	S		Salad oil	F	C	1	S	
Benzaldehyde	T	C	1	S	O	Heptane	F	C	1	S		Sea water	F	C	1	S	
Benzene	T	C	1	S		Hexane	F	C	2	S		Soapsuds	F	C	2	S+Q	O
Benzene	F	C	2	S		Hexyl alcohol	F	C	1	S		Soda bromide	F	D	2	S+Q	O
Benzyl Acetate	T	D	1	S	O	Hydraulic fluids	F	C	1	S		Soda nitrate	F	C	2	S+Q	O
Boric acid	F	C	2	S+Q	O	I						Soda sulfate	F	D	2	S+Q	O
Boric acid	F	C	2	S+Q	O	Ink	T	D	1	S	O	Sodium silicate	F	C	2	S+Q	O
Brake Oil	F	C	1	S		Isoamil alcohol	F	C	1	S		Solar oil	F	D	1	S	
Butyl Acetate	T	D	1	S	O	Isoamil alcohol	F	C	1	S	O	Solar oil	F	C	1	S	
Butyl acetate diamyl	F	D	1	S	O	Isobutil alcohol	F	D	1	S		Soya been oil	F	C	1	S	
Butyl acetate dibutyl	F	D	1	S	O	Isobutil-metil ketone	F	D	1	S	O	Soya sauce	F	C	1	S	
Butyl acetate diethyl	F	D	1	S	O	Isoktane	F	D	1	S		Stylene	F	D	1	S	
Butyl Alcohol	F	C	1	S		Isopropyl alcohol	F	C	1	S	O	Sugar liquid	F	C	1	S	
Butyl Ether	C	C	1	S		Isopropyl benzene	T	D	1	S		Sunflower oil	F	D	1	S	
Butyric acid	T	C	1	S	O	J						T					
Butyric ethyl	T	D	1	S	O	Juice	F	C	1		Tannic acid	F	D	2	S+Q	O	
Butyric methyl	T	D	1	S		K						Thiophenol	F	D	1	S	O
C						L						Trichloroethylene	F	C	1	S	O
Calcium carbonate	F	C	2	S+Q	O	Kerosene	F	C	1		Triole	T	C	1	S	O	
Calcium hydroxide	F	C	2	S+Q	O	M						Turpentine oil	F	C	1	S	
Carbolic acid	T	D	2	S+Q	O	Magnesium hydroxide	F	C	2	S+Q	O	U					
Carbonate water	F	C	1	S		Methyl acrylate	T	D	1	S	O	Urea	F	D	2	S+Q	O
Caustic soda	F	D	2	S+Q	O	Methyl alcohol	F	C	2	S		V					
Cellosolve	T	D	1	S		Methyl alcohol	F	C	2	S		W					
Cellulose acetate	T	D	1	S	O	Methyl chloride	F	D	2	S+Q	O	Whale oil					
Chlorobenzene	T	C	1	S	O	Methyl chloroform	F	C	1	S	O	Whisky					
Chrome alum	F	D	2	S+Q	O	Methyl ethyl ketone	T	D	1	S	O	Wine					
Citric acid	F	C	2	S+Q	O	Methyl isobutyl ketone	T	D	1	S		X					
Coconut oil	F	C	1	S+Q	O	Milk	F	C	1	S		Xylene	F	C	1	S	
Coffee extract	F	C	1	S		Mineral oil	F	C	1	S		Gasket material : F : Fluororubber (Viton) T : Teflon (PTFE)					
Copper nitrate	F	D	2	S+Q	O	Mineral spirits	F	C	1	S		Gland packing material : C : Carbonized fiber D : Teflon					
Corn oil	F	C	1	S		Monoethylene glicole	F	C	1	S		Mechanical seal material : 1 : Cermin/carbon 2 : SIC/SIC					
Creosote	F	D	1	S	O	Mustard oil	F	C	1	S		Water activation (mechanical seal) : S : Self injection S+Q : Self-injection + Quenching or external injection					
Cresol	F	D	1	S+Q	O	N						Specific gravity O; Check the value Density O; Check the value Temperature O; Check the value					
Cyclohexane	F	C	1	S	O	Naptha	F	C	1	S							
D						Naptha solvent	F	C	1	S							
Diacetone alcohol	T	C	1	S		Natrium carbonat	F	C	2	S+Q	O						
Dichlorobenzene	F	C	1	S	O	Natrium discarbonat	F	C	2	S+Q	O						
Dicloropentane	F	D	1	S	O	Nonyl Phenol	F	D	1	S							
Diethyl benzene	F	C	1	S	O												
Diethylene glycol	F	C	1	S	O												
Dioxane	T	D	1	S	O												
Drain	F	C	2	S													
Dyeing solut ion	F	D	2	S	O												

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

SECTIONAL VIEW

Packing Type (Standard)



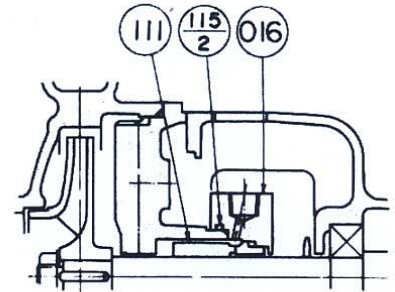
Packing type (Standard)

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

Mechanical seal type (Optional)

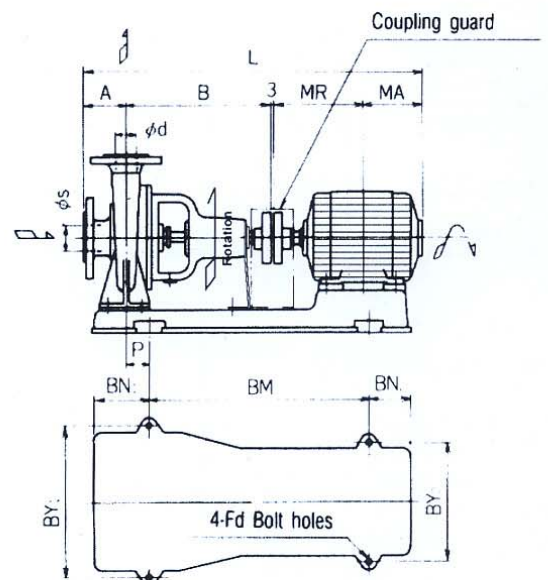
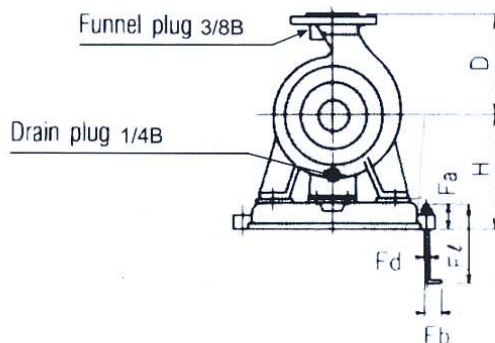
PART NO.	PART NAME	MATERIAL	Q'TY/UNIT
016	MECH. SEAL COVER	316 STAINLESS STEEL	1
111	MECH. SEAL	SIC/SIC	1
115-2	"O" RING	FLUORORUBBER (VITON)	1

Mechanical seal type (Optional)



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	Carbon 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	FLUORORUBBER (VITON)	1
120-1	BOLT, CASING	304 STAINLESS STEEL	1 SET
120-2	BOLT, B.HOUSING	STEEL	4
135	IMP. WASHER	304 STAINLESS STEEL	1

DIMENSIONS



■ DIMENSIONS

■ 4 Pole - 1500 rpm

SIZE	MODEL		Out put kW	Pump						Motor			Common Base				Anchor Bolt				Weight kg	
				Ø s	Ø d	A	B	H	D	L	p	Frame No.	MR	MA	BM	BN1	BN2	BY1	BY2	Fd		Fl
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	360	215	180	725.5	45	80	140	142.5	420	105	115	320	320	M10	200	40	40	56
		50x40 FSS4HA51.5	1.5	80	360	220	180	775.5	100	90L	168.5	164	550	115	75	360	290	M10	200	40	40	71
65	50	65x50 FSS4GA5.4	0.75	80	280	202	160	645.5	45	80	140	142.5	420	105	115	350	210	M10	200	40	40	55
		65x50 FSS4HA5.75	0.75	100	360	215	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	220	180	795.5	40	90L	168.5	164	550	115	75	360	290	M10	200	40	40	71
		65x50 FSS4JA52.2	2.2	100	360	230	225	837.5	40	100L	193	181.5	480	115	145	400	260	M10	200	40	40	95
		65x50 FSS4JA53.7	3.7	100	360	230	225	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	215	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	220	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	220	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	220	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	
				Ø s	Ø d	A	B	H	D	L	p	Frame No.	MR	MA	BM	BN1	BN2	BY1	BY2	Fd		Fl
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 FSS2GA53.7	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	360	230	180	887	55	132S	239	205	540	130	150	350	350	M12	250	50	50	121
		50x40 FSS2HA57.5	7.5	80	360	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	280	202	160	818	70	112M	200	175	540	130	60	290	290	M12	250	50	50	88
		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	133
		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

Steel best application is available upon request

All specifications are subject to change without notice



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