

# **SINGLE SUCTION PROCESS PUMP**

## (Chemical / Light slurry) MODEL TFS & TLS



# SINGLE SUCTION PROCESS PUMP

## EASY MAINTENANCE **OSIMPLE ASSEMBLY AND DISASSEMBLY**

TLS : TRIPLE DIVISION CASING SYSTEM TES : BACK PULL-OUT SYSTEM

# VARIABLE SHAFT SEAL

ONOT TO MENTION ABOUT GLAND PACKING, AVAILABLE TO ADAPT TO A WIDE VARIETY OF MECHANICAL SEALS

**w25~100** 

SUCTION DIAMETER

## SUBSTANTIAL SERVICE OMANY CUSTOMER SATISFY OUR SERVICES

## CLEARANCE ADJUSTMENT

To laminate adjustment shims make it easier to adjustment clearance at front side of impeller.

## IMPELLER

Use semi-open impeller with backbane.

## CASING

Easy to disassemble and re-assemble the pump without removing the casing from the discharge pipe.

# MODEL TFS/TLS

## CLEARANCE ADJUSTMENT

Adjustment of clearance between the impeller and the front side plate can be carried out externally, without disassembling the pump, thus reducing the time required for impeller replacement.

## LABYRINTH SEAL

The labyrinth seal eliminates oil leak from the bearing housing without any damage to the shaft.

## IMPELLER

Use open impeller.

## SIDE PLATES

Side plates are provided both front side and back side of the impeller to prevent wear of the casing and suction cover, it contribute to reduce parts cost.

## TRIPLE DIVISION CASING SYSTEM

Triple division of the casing make it easy to disassemble the pump without re-moving the casing from the discharge pipe.

## TLS SUCTION φ125~300 DIAMETER

### SHAFT SEAL

Available to install gland packing and mechanical seal. (Please refer page 'Shaft seal construction)





### **Standard specification**

	Liquid specification Temperature	Water ,Ch	emical liquid				
Liquid	Density	700~1000kg/m <sup>3</sup>	$\{0,7 \sim 1.0 \text{ kg/l}\}$				
	Viscosity	Under 4.3mPa•s	4.3cPl				
Maximum op Maximum suc Installation s	erating pressure ction pressure site	1.37MPa 14kgf/cm <sup>2</sup> .3MPa{3kgf/cm2} However,it should be less than(the maximum operating pres- shut off pressure Indoor Outdoor					
		CAST IRON	STAINLESS STEEL				
	Casing	FC250	SCS14				
M 1	Impeller	FC200/SCS14	SCS14				
Material	Shaft	S35C	SUS316				
Shaft sleeve		SUS403	SUS316				
	Gland packing	P#6501L(Carbon fiber)	P#6501L (Carbon fiber)				
	Shaft seal Flushing method	- Gland packing External	non water cooling flushing				
Construction	Bearing Lubirication	Ball bearing - n Oil bat	non water cooling h				
	Casing split Impeller	Ball bearing - I Semi opo	non water cooling en				
Flange rating	Suction Discharge	JIS10K FF	JIS10K RF				
	Castien	JIGIUN FF					
Nozzle direction	Discharge	END TOP					
Ro	tation	Clockwise view	wed from driver				

### Option

Mechanical seal					
SCS11					
SCS14#、 SCS11					
SUS316#,SUS316L,SUS329J1					
Base Metal : SUS316, SUS316L, SUS329J1 Coating material: stellite, ceramics					
Disc type (with spacer)					
Enclosure type with hinges					
-15~150°C(Cast iron)					
-29~150°C(SCS 14)					

### **Standard accessories**

Common base, Coupling(both the pump side and driver side), External flushing piping Anchor bolts, Coupling guard, Casing drain plug



#### **Standard specification**

Liquid	Liquid specification Temperature Density Viscosity	Water ,Chem 0~120 700~1000kg/m <sup>3</sup> Under 4.3mPa•s  4.3	Water ,Chemical liquid 0~120°C 700~1000kg/m <sup>3</sup> {0.7~1.0kg/L} Under 4.3mPa•s [4.3cP]					
Maximum op Maximum sud Installation s	erating pressure ction pressure site	0.69~1.27MPa{7~13kgf/cm <sup>2</sup> 0.3MPa{3kgf/cm <sup>2</sup> } However,it should be less - shut off pressure Indoor Ou	It depends on model s than(the maximum operating pressure tdoor					
		STAINLESS STEEL for main parts	STAINLESS STEEL					
Material	Casing Impeller Shaft Shaft sleeve Gland packing	FC200 SCS13 SUS304 SCS304 P#6501L(Carbon fiber)	SCS13 SCS13 SUS304 SUS304 P#6501L(Carbon fiber)					
	Shaft seal Flushing method	Gland packing - non External fl	water cooling ushing					
Construction	Bearing Lubirication	Ball bearing - nor Oil bath	n water cooling					
	Casing split Impeller	Front cover v Full open	ertical split					
Flange rating	Suction Discharge	JIS10K RF JIS10K RF						
Nozzle direction	Suction Discharge	END TOP						
Ro	tation	Clockwise viewed from driver						

### Option

Construction	Shaft seal	Mechanical seal
	Casing	SCS14、 SCS11
	Impeller	SCS14, SCS11
Material	Shaft	SUS316, SUS316L, SUS329J1
	Shaft sleeve (Surface processing)	Base Metal : SUS304, SUS316, SUS316L, SUS329J1 Coating material: stellite, ceramics
С	oupling	Disc type (with spacer)
Coup	oling guard	Enclosure type with hinges
Terr	nperature	-15~150°C (Stainless steel for main parts) -29~150°C (SCS13)

#### Standard accessories

Common base, Coupling(both the pump side and driver side), External flushing piping Anchor bolts, Coupling guard, Casing drain plug



Note 1. Figures inside the chart indicate diameter of pump nozzle and Frame No. Figures inside the broken lines are motor output(kW) in case of density 1000kg/m<sup>3</sup>. Allowance rate against motor output is EBARA standard. 2. In case of viscosity over 4.3mPa • s {4.3cP} needs viscosity correction



<sup>(</sup>Motor direct coupled drive) Pump model Discharge nozzle size Suction nozzle size

6



#### UNIT:MM

MODEL         PRAME         OUTPUT (MW)         MR         #MA         I         A         B         H         D         P         BM         BN2         BY1         BY2         FD         FL         FA           40×25 TF5M 1613         71         -         0.4         120         121         3         80         385         207         160         55         709         480         115         130         290         250         M12         250         55	FB 44
40×25 TFSM 1613 71 - 0.4 120 121 3 80 385 207 160 55 709 480 115 130 290 250 M12 250 55	50 7
	50 8
80 - 0.75 I40 I33 3 80 385 207 I60 55 74I 480 I15 I30 290 250 MI2 250 55	
90L 1.5/2.2 1.5 168.5 158.5 3 80 385 217 160 55 795 480 115 130 290 250 M12 250 55	50 8
112M 3.7 - 200 187 3 80 385 207 160 70 855 540 130 95 320 320 M12 250 55	50 11
1325 5.5/7.5 - 239 211 3 80 385 240 160 70 918 540 130 135 350 350 M12 250 55	50 14
40×25 TFSM 2013 71 - 0.4 120 121 3 100 385 235 180 55 729 480 115 130 320 250 M12 250 55	50 8
80 - 0.75 i40 i33 3 i00 385 235 i80 55 76i 480 i15 i30 320 250 Mi2 250 55	50 9
90L 1.5/2.2 1.5 168.5 158.5 3 100 385 245 180 55 815 480 115 130 320 250 M12 250 55	50 10
11/2M 3.7 - 200 187 3 100 385 235 180 70 875 540 130 95 320 320 M12 250 55	50 12
1325 5.5/7.5 - 239 211 3 100 385 235 180 70 938 540 130 135 350 350 M12 250 55	50 15
160M 11 - 323 280 3 100 385 250 180 110 1091 660 170 140 400 400 M12 250 55	50 21
50×40 TFSM 1613 71 - 0.4 120 121 3 80 385 207 160 55 709 480 115 130 290 250 M12 250 55	50 7
80 - 0.75 I40 I33 3 80 385 207 I60 55 74I 480 I15 I30 290 250 MI2 250 55	50 8
90L 2.2 1.5 168.5 158.5 3 80 385 217 160 55 795 480 115 130 290 250 M12 250 55	50 9
11/2M 3.7 - 200 187 3 80 385 207 160 70 855 540 130 95 320 320 M12 250 55	50 11
1325 5.5/7.5 - 239 211 3 80 385 235 160 70 918 540 130 135 350 350 M12 250 55	50 14
160M 11 - 323 280 3 80 385 250 160 110 1071 660 170 140 400 400 M12 250 55	50 20
50×40 TFSM 2013 80 - 0.75 140 133 3 100 385 235 180 55 761 480 115 130 320 250 M12 250 55	50 9
90L - 1.5 168.5 158.5 3 100 385 245 180 55 815 480 115 130 320 250 M12 250 55	50 10
100L - 2.2 193 173 3 100 385 235 180 70 854 540 130 95 320 320 M12 250 55.	50 11
112M - 3.7 200 187 3 100 385 235 180 70 875 540 130 95 320 320 M12 250 55	50 12
1325 5.5/7.5 - 239 211 3 100 385 235 180 70 938 540 130 135 350 350 M12 250 55	50 15
160M 11/15 - 323 280 3 100 385 250 180 110 1091 660 170 140 400 400 M12 250 55	50 21
160L 18.5 - 345 302 3 100 385 250 180 110 1135 660 170 140 400 400 M12 250 55	50 24
180M 22 - 351.5 325 3 100 385 270 180 110 1164.5 660 170 185 320 440 M12 250 55	50 27
50×40 TFSM 2514 90L - 1.5 168.5 158.5 3 100 500 270 225 75 930 600 150 150 400 320 M12 250 55	50 13
100L - 2.2 193 173 3 100 500 270 225 75 969 600 150 150 400 320 M12 250 55	50 14
112M - 3.7 200 187 3 100 500 282 225 75 990 600 150 150 400 320 M12 250 55	50 15
1325 5.5/7.5 5.5 239 211 3 100 500 270 225 95 1053 660 170 165 400 400 M12 250 55	50 19
160M 11/15 - 323 280 3 100 500 270 225 115 1206 740 190 190 440 440 M12 250 55	50 24
160L 18.5 - 345 302 3 100 500 270 225 115 1250 740 190 190 440 440 M12 250 55	50 27
180M 22 - 351.5 325 3 100 500 270 225 115 1279.5 740 190 190 440 440 M12 250 55	50 30
180L 30 - 370.5 344 3 100 500 270 225 130 1317.5 840 205 215 490 490 M12 250 55	50 35
200L 37 - 395.5 377 3 100 500 290 225 130 1375.5 840 205 200 400 490 M12 250 55	50 43
80×50 TFSM 1613 80 - 0.75 140 133 3 100 385 235 180 55 761 480 115 130 320 250 M12 250 55	50 9
90L - 1.5 168.5 158.5 3 100 385 245 180 55 815 480 115 130 320 250 M12 250 55	50 10
100L - 2.2 193 173 3 100 385 235 180 70 854 540 130 95 320 320 M12 250 55	50 11
1/2M - 3,7 200 (87 3 100 385 235 180 70 875 540 130 96 370 370 M12 260 56	50 12
1325 5.5/7.5 - 239 2/1 3 100 385 235 180 70 938 540 130 135 350 M12 250 55	50 14
160M 11/15 - 323 280 3 100 385 250 180 110 1091 660 170 140 400 400 M12 250 55	50 21
160L 18.5 - 345 302 3 100 385 250 180 110 1135 660 170 140 400 400 M12 250 55	50 23

#### **MODEL TFS**

11	N	IT	٠ı	١Л	NЛ
0	1.4		••	vı	1 1 1

8

MODEL		N	юто	R					PUMP	2	_			COM	MON	BAS	SE	ANCHOR BOLT				WEIGHT
MODEL	FRAME No.	OUTPUT	(kW)	MR	# MA		A	B	н	D	P	ar.	BM	BNI	BN2	BYI	BYZ	FD	FL	FA	FB	hg
80×50 TFSM 2013	90L	2 FOLES	4 POLES	168.5	158.5	3	100	385	245	200	55	815	480	115	130	320	250	MIZ	250	55	50	111
	100L	· .	2.2	193	173	3	100	385	235	200	70	854	540	130	95	320	320	MIZ	250	55	50	120
	112M	-	3.7	200	187	3	100	385	235	200	70	875	540	130	95	320	320	MIZ	250	55	50	133
	1325	~	5.5	239	211	3	100	385	235	200	70	938	540	130	135	350	350	M12	250	55	50	151
	160M	11/15		323	280	3	100	385	250	200	110	1091	660	170	140	400	400	MIZ	250	55	50	221
	160L	18.5		345	302	3	100	385	250	200	110	1135	660	170	140	400	400	M12	250	55	50	249
	180M	22	-	351.5	325	3	100	385	270	200	110	1164.5	660	170	185	320	440	MIZ	250	55	50	283
	180L	30		370.5	344	3	100	385	270	200	110	1202.5	660	170	185	320	440	M12	250	55	50	311
	200L	37		395.5	377	3	100	385	290	200	130	1260.5	740	190	190	320	490	MIZ	250	55	50	408
80×50 TFSM 2514	100L		2.2	193	173	3	125	500	270	225	75	994	600	150	150	400	320	MIZ	250	55	50	152
	112M	-	3.7	200	187	3	125	500	282	225	75	1015	600	150	150	400	320	MIZ	250	55	50	165
	1325	-	5.5	239	211	3	125	500	270	225	95	1078	660	170	165	400	400	MI2	250	55	50	193
	132M	-	7.5	258	230	3	125	500	270	225	95	11/6	660	170	165	400	400	MI2	250	55	50	206
	160M	1 (A)	11	323	280	3	125	500	270	225	115	1231	740	190	190	440	440	MIZ	250	55	50	259
	1601.	18.5	-	345	302	3	125	500	270	225	115	1275	740	190	190	440	440	MIZ	250	55	50	280
	180M	22	-	351.5	325	3	125	500	270	225	115	1304.5	740	190	190	440	440	M12	250	55	50	313
	1801	30		370.5	344	3	125	500	270	225	130	1342.5	840	205	215	490	490	MIZ	250	55	50	361
	200L	37/45	-	395.5	377	3	125	500	290	225	130	1400.5	840	205	200	400	490	MIZ	250	55	50	508
	2255	55	-	402	388	4	125	500	335	225	130	1419	840	205	175	400	550	Mi6	315	70	63	557
	2505	75		433.5	521	4	125	500	360	225	130	1583.5	840	205	215	440	600	MIS	315	70	63	746
80×50 TFSM 3214	112M		3.7	200	187	3	125	500	327	280	75	1015	600	150	155	400	320	MI2	250	55	50	204
	1325	-	5.5	239	211	3	125	500	315	280	95	1078	660	170	160	440	350	MIZ	250	55	50	224
	132M		7.5	258	230	3	125	500	315	280	95	1116	660	170	160	440	350	MIZ	250	55	50	236
	160M	-	11	323	280	3	125	500	315	280	115	1231	740	190	190	440	440	MIZ	250	55	50	288
	160L	-	15	345	302	3	125	500	315	280	115	1275	740	190	190	440	440	M12	250	55	50	316
100×80 TFSM 1614	90L	~	1.5	168.5	158.5	3	100	500	235	200	75	930	600	150	130	350	290	MIZ	250	55	50	123
	1001		2.2	193	173	3	100	500	235	200	75	969	600	150	130	350	290	MIZ	250	55	50	129
	112M		3.7	200	187	3	100	500	235	200	75	990	600	150	150	350	350	MIZ	250	55	50	146
	1325	7.5	5.5	239	211	3	100	500	250	200	95	1053	660	170	140	400	400	M12	250	55	50	184
	160M	11/15	-	323	280	3	100	500	250	200	115	1206	740	190	190	440	440	MIZ	250	55	50	234
	1601.	18.5	-	345	302	3	100	500	250	200	115	1250	740	190	190	440	440	MIZ	250	55	50	257
	180M	22	-	351.5	325	3	100	500	270	200	115	1279.5	740	190	190	440	440	MIZ	250	55	50	297
	1801.	30	-	370.5	344	3	100	500	270	200	130	1317.5	840	205	200	400	490	MIZ	250	55	50	343
	2001.	37	-	395.5	377	3	100	500	290	200	130	1375.5	840	205	200	400	490	MIZ	250	55	50	423
100×80 TFSM 2014	100L		2.2	193	173	3	100	500	270	225	75	969	600	150	150	400	320	MIZ	250	55	50	152
	112M	-	3.7	200	187	3	100	500	282	225	75	990	600	150	150	400	320	MI2	250	55	50	166
	1325	-	5.5	239	211	3	100	500	270	225	95	1053	650	170	165	400	400	M12	250	55	50	193
	132M	-	7.5	258	230	3	100	500	270	225	95	1091	660	170	165	400	400	MIZ	250	55	50	205
	160M	15	11	323	280	3	100	500	270	225	115	1206	740	190	190	440	440	MIZ	250	55	50	259
	160L	18.5	-	345	302	3.	100	500	270	225	1.15	1250	740	190	190	440	440	M12	250	55	50	282
	180M	22	-	351.5	325	3	100	500	270	225	115	1279.5	740	190	190	440	440	M12	250	55	50	313
	1801	30	-	370.5	344	3	100	500	270	225	130	1317.5	840	205	215	490	490	MIZ	250	55	50	361
	200L	37/45	-	395.5	377	3	100	500	290	225	130	1375.5	840	205	200	400	490	M12	250	55	50	508
	2255	55	-	402	388	4	100	500	335	225	130	1394	840	205	175	400	550	MIS	315	70	63	557
	2505	75	-	433.5	521	4	100	500	360	225	130	1558.5	840	205	215	440	600	M16	315	70	63	744
100×80 TFSM 2514	1325		5.5	239	211	3	125	500	315	250	80	1078	660	170	160	440	350	MIZ	250	55	50	213
	132M		7.5	258	230	3	125	500	315	250	80	1116	660	170	160	440	350	M12	250	55	50	225
	160M		11	323	280	3	125	500	315	250	100	1231	740	190	190	440	440	MIZ	250	55	50	276
	160L		15	345	302	3	125	500	315	250	100	1275	740	190	190	440	440	M12	250	55	50	304
	180L	30	-	370.5	344	3	125	500	290	250	115	1342.5	840	205	215	490	490	M12	250	55	50	384
	200L	37/45	-	395.5	377	3	125	500	290	250	115	1400.5	840	205	215	490	490	MIZ	250	55	50	524
	2255	55	-	402	388	4	125	500	335	250	115	1419	840	205	220	550	550	MIE	315	70	63	580
	2505	75		433.5	521	4	125	500	360	250	115	1583.5	840	205	215	440	600	M16	315	70	63	756
	250M	90	-	452.5	540	4	125	500	360	250	140	1621.5	940	230	250	440	600	M16	315	70	63	834
	2805	110		484	599.5	4	125	500	390	250	140	1712.5	940	230	250	440	670	MIE	315	70	63	1063
100×80 TFSM 3215A	132M		7.5	258	230	3	125	530	315	280	80	1146	660	170	190	490	350	MIZ	250	55	50	271
	160M	-	11	323	280	3	125	530	343	280	100	1261	740	190	185	490	400	M12	250	55	50	321
	160L		15	345	302	3	125	530	315	280	115	1305	840	205	210	490	400	MIZ	250	55	50	355
	180M		18.5/22	351.5	325	3	125	530	315	280	115	1334.5	840	205	220	490	490	MIZ	250	55	50	400
	180L	-	30	370.5	344	4	125	530	315	280	115	1373.5	840	205	220	490	490	MIZ	250	55	50	441

Note 1. Frame No. of motor is applied for general low pressure three phase squirrel cage type induction motor all closed type. 2. \*MA and \*L length are different depend on motor manufacturer.

3. Please pay attention in case of use previous JEM standard motor, base dimensions are different from this table.

4. This dimension table will change without notice.



#### UNIT:MM

PUMP													
MODEL	FRAME No.	A	8	с	D	BF	Ē	WEIGHT					
150×125 TLSM	27445	185	565	185	230	65	5	130					

		MOTO	OR			COMMON BASE						
FRAME	OUTPU	TKW	SHAFT	MD	-	014	1244	DM.		BY. /BY.	WEIGHT	
No.	4 POLES	6 POLES	DIAMETER	MR.	ST HIM	C3(4)	(Old)	CONV		01/01/	¥g.	
100L	2.2	1.5	28	193	173	155	155	500	275	390/310	40	
112M	3.7	2.2	28	200	175	155	155	500	275	390/310	40	
1325	5.5	3.7	38	239	205	170	170	680	285	390/390	50	
132M	7.5	5.5	38	258	225	170	170	680	285	390/390	50	
160M	H.	7.5	42	323	255	170	170	680	285	390/390	50	
160L	15	TI.	42	345	275	170	170	680	285	390/390	50	
180M	18.5/22	15	48	351.5	325	180	180	780	295	480/480	55	
18DL	30	18.5/22	55	370.5	344	180	180	780	295	480/480	55	

#### UNIT:MM

			PUI	ИР				
MODEL	FRAME No.	A	8	с	D	BF	F.	WEIGHT
125×100 TLSM	3946A	180	695	220	270	65	0	230
150×125 TLSM	3246A	195	695	210	250	65	5	220
200 × 150 TLSM	2746A	210	715	225	240	85	10	220
200×150 TLSM	3246	215	715	240	265	85	5	260

	1	МОТО	DR			COMMON BASE						
FRAME	OUTPU	TRW	SHAFT	MR	# MA	BN.	RN.	BM	н	BY./BY.	WEIGHT	
NO.	4 POLES	6 POLES	DIAMETER			area.		0,00			kg	
1325	5.5	3.7	38	239	205	175	175	800	370	480/390	60	
132M	7.5	5.5	38	258	225	175	175	800	370	480/390	60	
160M	- 11	7.5	42	323	255	175	175	800	370	480/390	60	
160L	15	H.	42	345	275	175	175	800	370	480/390	60	
180M	18.5/22	15	48	351.5	325	200	200	860	380	490/490	75	
180L	30	18.5/22	55	370.5	344	200	200	860	380	490/490	75	
200L	37/45	-	60	425.5	377	200	200	860	380	490/490	75	
2255	55		65	432	388	220	220	960	380	600/600	100	

#### UNIT:MM

			PUP	ЛР				
MODEL	FRAME No.	A	в	с	D	BF	F	WEIGHT
150×100 TLSM	4648AT	195	855	250	300	90	5	440
200×150 TLSM	3948A	200	860	240	280	95	25	360
200×150 TLSM	4648AT	215	865	275	310	100	20	460
200 TLSM	3948A	210	870	260	310	105	5	440
250×200 TLSM	3248A	240	890	265	285	125	50	520
250×200 TLSM	4648TX	240	880	290	350	115	25	550
250 TLSM	3948T	280	885	305	350	051	10	530
250 × 200 TLSM	4648TY	280	875	300	335	110	15	540
350 × 300 TLSM	3948	280	895	320	350	130	0	550

MOTOR						COMMON BASE					
FRAME No.	OUTPUT		SHAFT	MD	-	1154	EN.	BM		BY /BY	WEIGHT
	4 POLES	6 POLES	DIAMETER			Dial.	(Date)	Dee		propris	kg
160M	11	7.5	42	323	255	220	220	960	460	640/500	120
160L	15	11	42	345	275	220	220	960	460	640/500	120
180M	18.5/22	15	48	351.5	325	220	220	960	460	640/500	120
180L	30	18.5/22	55	370.5	344	220	220	960	460	640/500	120
2001.	37/45	30/37	60	425.5	377	220	220	960	460	640/500	120
2255	55	45	65	432	388	240	240	1040	450	640/640	150
2505	75	55	75	453.5	501	240	240	1040	460	640/640	150
250M	90	75	75	482.5	520	240	240	1040	460	640/640	150
2805	110	-	85	544	579	280	280	1160	480	640/740	170
280M	132	-	85	569.5	604.5	280	280	1160	480	640/740	170
3155	160		95	589	640	280	280	1160	480	640/740	170

Note 1. Frame No. of motor is applied for general low pressure three phase squirrel cage type induction motor all closed type. 2. \*MA and \*L length are different depend on motor manufacturer.

3. Please pay attention in case of use previous JEM standard motor, base dimensions are different from this table.

4. This dimension table will change without notice.





Gland packing With Quenching type



1C Doubleseal (Atmodphere side balance type)



Knife edge 2C Double seal



This drawing indicates TFS model. TLS model consists of 6 pieces gland packing (3 pieces on the each side)

> \* For correspond to any specification and condition, every kinds of shaft seal construction is available to manufacture not only above drawing.



#### #xt#社 荏原製作所

本 社 〒144-8510 東京都大田区羽田旭町11-1	話(03)3743-6111	ダイヤルイン代表
富津工場 —— 〒293-0011 千葉県富津市新富78-1 ———— 電	話(0439)29-8000	代表
袖ヶ浦工場 ―― 〒299-0296 千葉県袖ヶ浦市中袖20-1 電	話(0438)60-6111	ダイヤルイン代表
藤沢工場 —— 〒251-8502藤沢市本藤沢4-2-1 電	話(0466)83-8111	ダイヤルイン代表
本カタログに関するお問い合わせ、資料のご請求は下記支社、支店へお願いいたします。		
北海道支店 〒060-0003 北海道札幌市中央区北三条西4-1-1 日本生命札幌ビルー 電	話(011)233-2111	代表
東北支店 —— 〒983-0852 仙台市宮城野区榴岡2-5-30 SFI仙台ビル —— 電	話(022)290-8811	代表
新 潟 支 店 —— 〒950-0941 新潟県新潟市中央区女池6-4-64 ———— 電	話(025)212-5000	ダイヤルイン代表
中 部 支 社 ―― 〒460-0008 愛知県名古屋市中区栄3-7-20 日土地栄町ビル ―― 備	話(052)264-4111	代表
大阪支社 ――〒530-0003 大阪府大阪市北区堂島1-6-20 堂島アバンザーー 電	話(06)6452-6611	ダイヤルイン代表
中国支店 ――〒730-0051 広島県広島市中区大手町4-6-16 山陽ビル ―― 電	話(082)244-5101	ダイヤルイン代表
四 国 支 店 —— 〒761-8071 香川県高松市伏石町2151-2 看	話(087)866-7470	代表
九州支店 〒810-0001 福岡県福岡市中央区天神2-14-8 福岡天神センタービルー 電	(話(092)725-8511	ダイヤルイン代表

营 業 所 — 鹿島·袖ヶ浦·首都圖·鈴鹿·德山·岡山

 ◆ 安全に関するご注意
 ○本機の計画、設置に際しては、当社の作成した「据付要領書」等、施工関連要領書に則して、正しくご計画、 設置いただくようお願い致します。
 ○ご使用に際しては、「取扱説明書」をよくお読みいただいた上、正しくお使いください。
 ○日常の取扱い以外の保守整備には、専門技術を必要とします。当社又はメーカーサービス会社にご相談ください。

●カタログ中「○○○型」の表示は当社の機種記号です。
●本カタログ記載車項は予告なく変更することがありますので、ご計画に際し詳細は当社党お問い合わせください。



26-009-J05 3481(5)JJ-B(AA)K