

Volute pumps

SJ

TERAL



50Hz



TERAL INC.

Applications

- General water supply in buildings and apartments, etc
- Hot and cold water circulation
- Supply of industrial water
- Conveyance and distribution of tap water
- Water sprinkling and irrigation of paddies and fields

Features

- ① Energy-saving pump with a Top Runner efficiency (equivalent to IE3) motor.
- ② Compact and lightweight by adoption of a 2-pole motor.
- ③ Easy installation in a small space.
- ④ B.P.O.(back pull-out) structure for easy disassembly and maintenance.
- ⑤ Robust structure for piping load with stable installation because of upright discharge.

Description of types

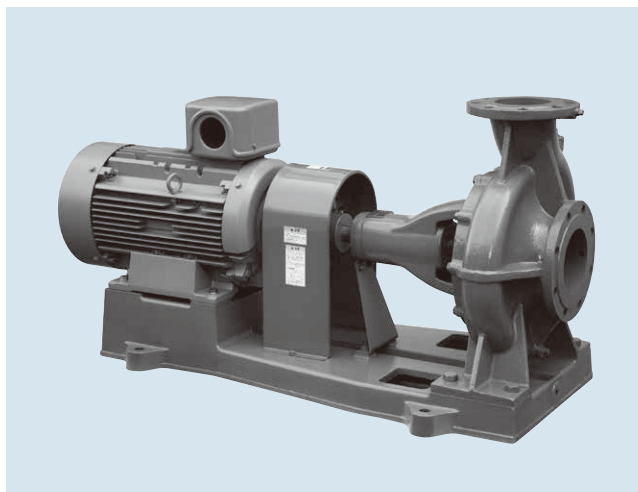
SJ 32 × 32 M 5 1.5 - H - e

① ② ③ ④ ⑤ ⑥ ⑦

- ① Model
- ② Nominal suction diameter (32mm)
- ③ Nominal discharge diameter (32mm)
- ④ Frequency (50Hz)
- ⑤ Output (1.5kW)
- ⑥ Performance code None : Standard

H : According to customer specified point

- ⑦ Equipped with a Top Runner motor (equivalent to IE3)



* Please note that some of the devices in the photo may differ from actual devices in coating color, etc.

Standard specifications/Special specifications

— : Not available

Pumping liquid	Liquid quality	Fresh water	
	Liquid temperature	0~80℃	
Total suction head(In case of 20℃)		-6m but -5m for 100×80	
Allowable positive pressure		See the specification table.	
Specifications		Standard specifications	Special specifications
Structure	Impeller	Closed	—
	Shaft seal	Mechanical seal (SiC vs Carbon)	Mechanical seal(SiC vs SiC) Gland packing External water injection...when handling liquid contains some foreign matter
	Bearing	Sealed ball bearing	—
	Gland drain	Drain hole	Cock
	Casing drain	Plug	Cock
	Coupling guard	TERAL standard	Sealed type coupling guard
Material	Impeller	CAC406(excluding the below) FC200:65×50M, 80×65M	CAC406:65×50M, 80×65M
	Shaft	SUS403	SUS304
	Casing	FC200 or FCD450*1	—
	Others	—	All iron
Motor	Efficiency	Top Runner efficiency (equivalent to IE3)	—
	Starting method	Direct-on-Line start 7.5kW or less Star-delta start 11kW or more	—
	Type	Totally enclosed fan-cooled outdoor...0.75kW Totally enclosed fan-cooled indoor...1.5kW or more	Totally enclosed fan-cooled outdoor ...1.5kW or more
	Power source	3-phase/200V	3-phase/400V
	Synchronous rotation speed	3000min ⁻¹	—
Piping connection		JIS10K standard flange	—
Painting	Paint color	7.5BG5/1.5	Specified color for outer surface
	Painting type	TERAL standard	Salt-resistant paint Heavy-duty salt-resistant paint Japan Sewage Works Agency specifications

* Please note that in case of special specifications, the assembly drawing, etc., may differ from the standard drawing.

* 1 The material differs depending on the type.

Standard accessories

Common base 1
Priming plug 1
Coupling 1 set
Coupling guard 1

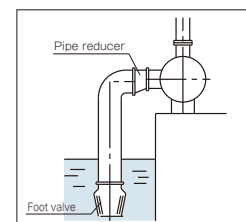
* Standard accessories are included in the product components.

Special accessories

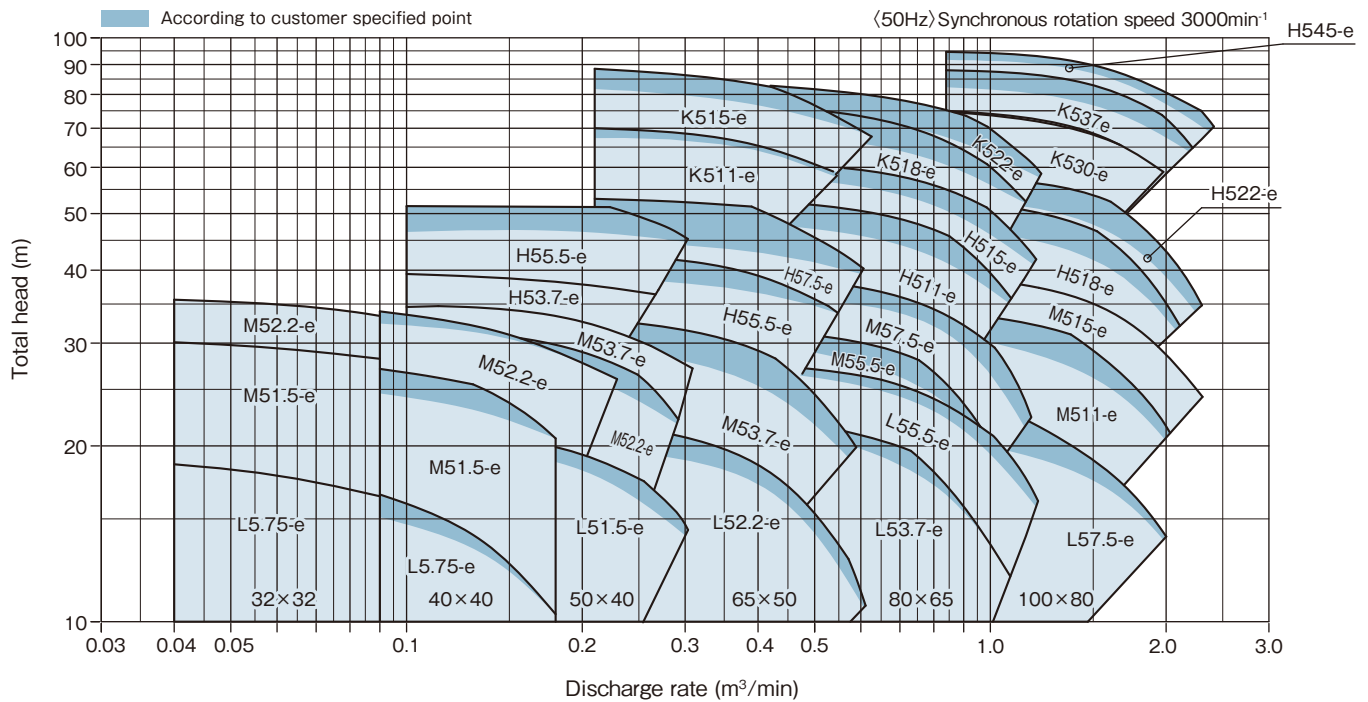
Foot valve
Suction cover
Sluice valve, check valve
Companion flange
(packing, bolt and nut included)
Pipe reducer
Vibration isolator
Pressure gauge, compound gauge
(with cock and pipes)
Vibration isolation joint
Anchor bolt

Foot valve / pipe reducer application table

Nominal diameter mm		Foot valve nominal diameter mm	Pipe reducer
Suction S	Discharge d		
32	32	32	—
40	40	40	—
50	40	50	—
65	50	65	—
80	65	100	80×100
100	80	125	100×125



Selection chart

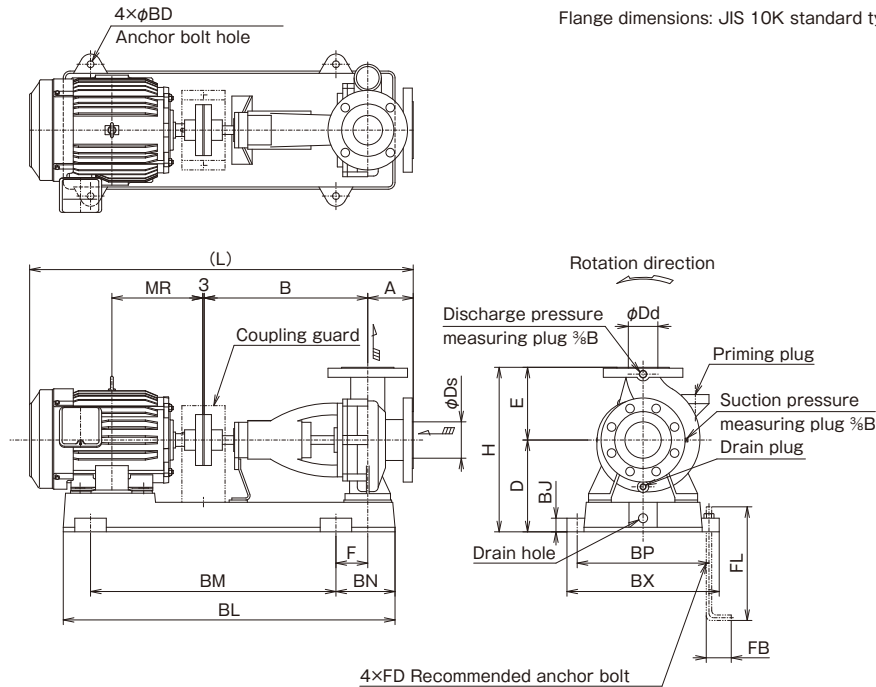


Specification table

Nominal diameter mm		Type	Output kW	Specifications		
Suction	Discharge			Discharge rate m ³ /min	Total head m	Allowable positive pressure MPa
32	32	SJ32×32L5.75-e	0.75	0.06	17.8	0.08
		SJ32×32M51.5-e	1.5	0.06	29.4	0.69
		SJ32×32M52.2-e	2.2	0.09	33.4	0.63
40	40	SJ40×40L5.75-e	0.75	0.14	12.8	0.82
		SJ40×40L5.75H-e	0.75	—	—	—
		SJ40×40M51.5-e	1.5	0.14	22.6	0.73
		SJ40×40M51.5H-e	1.5	—	—	—
		SJ40×40M52.2-e	2.2	0.15	30.5	0.66
		SJ40×40M52.2H-e	2.2	—	—	—
		SJ40×40M52.2H-e	2.2	—	—	—
50	40	SJ50×40L51.5-e	1.5	0.21	17.8	0.79
		SJ50×40L51.5H-e	1.5	—	—	—
		SJ50×40M52.2-e	2.2	0.21	25.9	0.70
		SJ50×40M52.2H-e	2.2	—	—	—
		SJ50×40M53.7-e	3.7	0.21	32.2	0.64
		SJ50×40H53.7-e	3.7	0.21	37.6	0.60
		SJ50×40H55.5-e	5.5	0.21	46.4	0.52
		SJ50×40H55.5H-e	5.5	—	—	—
		SJ50×40H55.5H-e	5.5	—	—	—
65	50	SJ65×50L52.2-e	2.2	0.42	16.7	0.79
		SJ65×50L52.2H-e	2.2	—	—	—
		SJ65×50M53.7-e	3.7	0.42	24.7	0.69
		SJ65×50M53.7H-e	3.7	—	—	—
		SJ65×50H55.5-e	5.5	0.42	36.3	0.61
		SJ65×50H55.5H-e	5.5	—	—	—
		SJ65×50H57.5-e	7.5	0.42	42.6	0.55
		SJ65×50H57.5H-e	7.5	—	—	—
		SJ65×50K511-e	11	0.42	63.3	0.30
		SJ65×50K511H-e	11	—	—	—
		SJ65×50K515-e	15	0.42	76.0	0.16
		SJ65×50K515H-e	15	—	—	—
		SJ65×50K515H-e	15	—	—	—

Nominal diameter mm		Type	Output kW	Specifications		
Suction	Discharge			Discharge rate m ³ /min	Total head m	Allowable positive pressure MPa
80	65	SJ80×65L53.7-e	3.7	0.84	16.5	0.77
		SJ80×65L53.7H-e	3.7	—	—	—
		SJ80×65L55.5-e	5.5	0.84	22.3	0.72
		SJ80×65L55.5H-e	5.5	—	—	—
		SJ80×65M55.5-e	5.5	0.84	23.6	0.70
		SJ80×65M55.5H-e	5.5	—	—	—
		SJ80×65M57.5-e	7.5	0.84	31.2	0.63
		SJ80×65M57.5H-e	7.5	—	—	—
		SJ80×65H511-e	11	0.84	41.2	0.51
		SJ80×65H511H-e	11	—	—	—
		SJ80×65H515-e	15	0.84	50.6	0.41
		SJ80×65H515H-e	15	—	—	—
		SJ80×65K518-e	18.5	0.84	60.7	0.31
		SJ80×65K518H-e	18.5	—	—	—
		SJ80×65K522-e	22	0.84	67.6	0.23
		SJ80×65K522H-e	22	—	—	—
100	80	SJ100×80L57.5-e	7.5	1.67	16.3	0.79
		SJ100×80L57.5H-e	7.5	—	—	—
		SJ100×80M511-e	11	1.67	24.4	0.70
		SJ100×80M511H-e	11	—	—	—
		SJ100×80M515-e	15	1.67	33.2	0.62
		SJ100×80H518-e	18.5	1.67	39.2	0.54
		SJ100×80H518H-e	18.5	—	—	—
		SJ100×80H522-e	22	1.67	45.4	0.48
		SJ100×80H522H-e	22	—	—	—
		SJ100×80K530-e	30	1.67	65.5	0.26
		SJ100×80K530H-e	30	—	—	—
		SJ100×80K537-e	37	1.67	73.9	0.19
		SJ100×80K537H-e	37	—	—	—
		SJ100×80K545-e	45	1.67	84.0	0.09
		SJ100×80K545H-e	45	—	—	—

Assembly drawing



Note) Overall length dimensions, approximate mass and terminal box position may vary depending on the motor manufacturer.

Dimensions

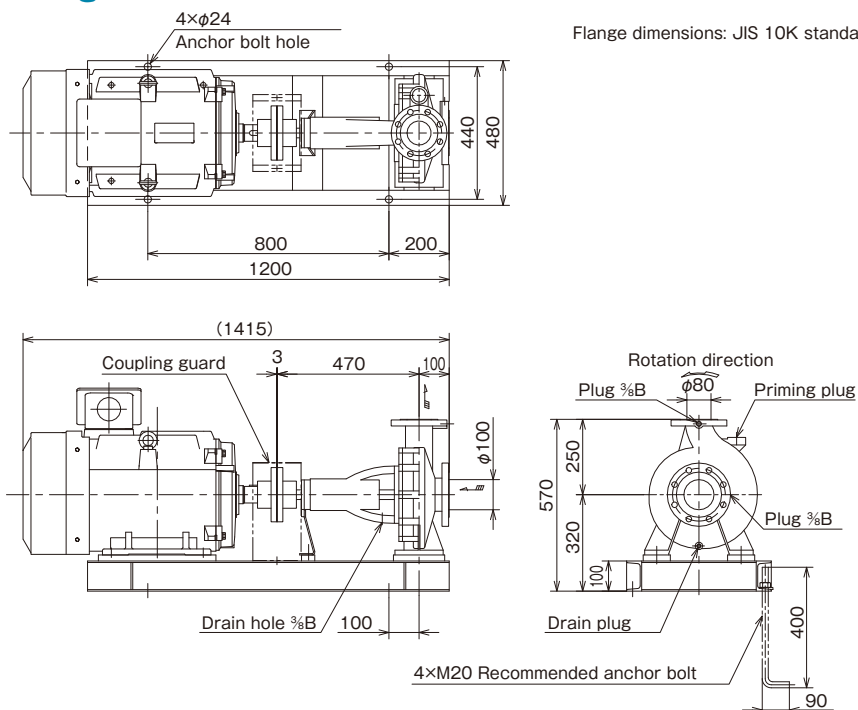
(Unit: mm)

Nominal diameter		Type	Output kW	Pump / Motor								Common base								Anchor bolt			Approx. mass kg
Suction Ds	Discharge Dd			A	B	D	E	F	H	L	MR	BD	BJ	BL	BM	BN	BP	BX	FB	FD	FL		
32	32	SJ32×32L5.75-e	0.75	75	360	162	120	55	282	700	140	13	25	650	445	115	230	265	45	M10	200	56	
		SJ32×32M51.5-e	1.5	75	360	182	160	55	342	750	169	13	25	685	480	115	290	325	45	M10	200	76	
		SJ32×32M52.2-e	2.2	75	360	182	160	55	342	750	169	13	25	685	480	115	290	325	45	M10	200	78	
40	40	SJ40×40L5.75(H)-e	0.75	75	360	162	120	55	282	700	140	13	25	650	445	115	230	265	45	M10	200	57	
		SJ40×40M51.5(H)-e	1.5	75	360	182	160	55	342	750	169	13	25	685	480	115	290	325	45	M10	200	77	
		SJ40×40M52.2(H)-e	2.2	75	360	182	160	55	342	750	169	13	25	685	480	115	290	325	45	M10	200	79	
50	40	SJ50×40L51.5(H)-e	1.5	80	360	162	140	55	302	755	169	13	25	685	480	115	230	265	45	M10	200	74	
		SJ50×40M52.2(H)-e	2.2	80	360	182	160	55	342	755	169	13	25	685	480	115	290	325	45	M10	200	84	
		SJ50×40M53.7-e	3.7	80	360	202	160	70	362	824	200	15	30	730	540	130	290	335	55	M12	250	100	
		SJ50×40H53.7-e	3.7	80	360	230	180	70	410	824	200	15	30	730	540	130	290	335	55	M12	250	107	
		SJ50×40H55.5(H)-e	5.5	80	360	230	180	55	410	894	239	15	30	820	540	130	350	395	55	M12	250	139	
65	50	SJ65×50L52.2(H)-e	2.2	80	360	162	140	55	302	755	169	13	25	685	480	115	260	295	45	M10	200	77	
		SJ65×50M53.7(H)-e	3.7	80	360	202	160	70	362	824	200	15	30	730	540	130	290	335	55	M12	250	104	
		SJ65×50H55.5(H)-e	5.5	100	360	230	180	55	410	914	239	15	30	820	540	130	350	395	55	M12	250	153	
		SJ65×50H57.5(H)-e	7.5	100	360	230	180	55	410	914	239	15	30	820	540	130	350	395	55	M12	250	159	
		SJ65×50K511(H)-e	11	100	360	265	225	95	490	1107	323	20	40	950	660	170	400	456	70	M16	315	254	
		SJ65×50K515(H)-e	15	100	360	265	225	95	490	1107	323	20	40	950	660	170	400	456	70	M16	315	255	
80	65	SJ80×65L53.7(H)-e	3.7	100	360	202	160	70	362	844	200	15	30	730	540	130	290	335	55	M12	250	112	
		SJ80×65L55.5(H)-e	5.5	100	360	202	160	70	362	914	239	15	30	820	540	130	320	365	55	M12	250	139	
		SJ80×65M55.5(H)-e	5.5	100	360	230	180	55	410	914	239	15	30	820	540	130	350	395	55	M12	250	148	
		SJ80×65M57.5(H)-e	7.5	100	360	230	180	55	410	914	239	15	30	820	540	130	350	395	55	M12	250	154	
		SJ80×65H511(H)-e	11	100	360	245	200	95	445	1107	323	20	40	950	660	170	400	456	70	M16	315	241	
		SJ80×65H515(H)-e	15	100	360	245	200	95	445	1107	323	20	40	950	660	170	400	456	70	M16	315	242	
		SJ80×65K518(H)-e	18.5	100	360	265	225	95	490	1137	345	20	40	950	660	170	400	456	70	M16	315	285	
		SJ80×65K522(H)-e	22	100	360	265	225	95	490	1136	352	20	40	1000	660	170	440	496	70	M16	315	343	
100	80	SJ100×80L57.5(H)-e	7.5	100	360	230	180	55	410	914	239	15	30	820	540	130	350	395	55	M12	250	162	
		SJ100×80M511(H)-e	11	100	360	245	200	95	445	1107	323	20	40	950	660	170	400	456	70	M16	315	249	
		SJ100×80M515-e	15	100	360	245	200	95	445	1107	323	20	40	950	660	170	400	456	70	M16	315	262	
		SJ100×80H518(H)-e	18.5	100	360	265	225	95	490	1137	345	20	40	950	660	170	400	456	70	M16	315	297	
		SJ100×80H522(H)-e	22	100	360	265	225	95	490	1136	352	20	40	1000	660	170	440	496	70	M16	315	356	
		SJ100×80K530(H)-e	30	100	470	290	250	100	540	1284	371	25	50	1120	740	190	440	510	90	M20	400	409	

* Mounting dimensions are compatible with SJ model (product equipped with totally enclosed fan-cooled IE1 motor). Also the motor frame number is the same. Therefore, replacement with a Top Runner efficiency (equivalent to IE3) motor is possible. However, please keep the following point in mind. The number of revolutions will increase because of the characteristics of the motor, which may cause the flow rate to exceed the rated current value. Please adjust the flow rate to use the motor within the rated current value.

* For products equipped with a drip-proof protection type motor, there are some types which also require a common base because the frame No. may be different when only the motor is replaced.

Assembly drawing



Flange dimensions: JIS 10K standard type or equivalent

Note) Overall length dimensions, approximate mass and terminal box position may vary depending on the motor manufacturer.

Dimensions

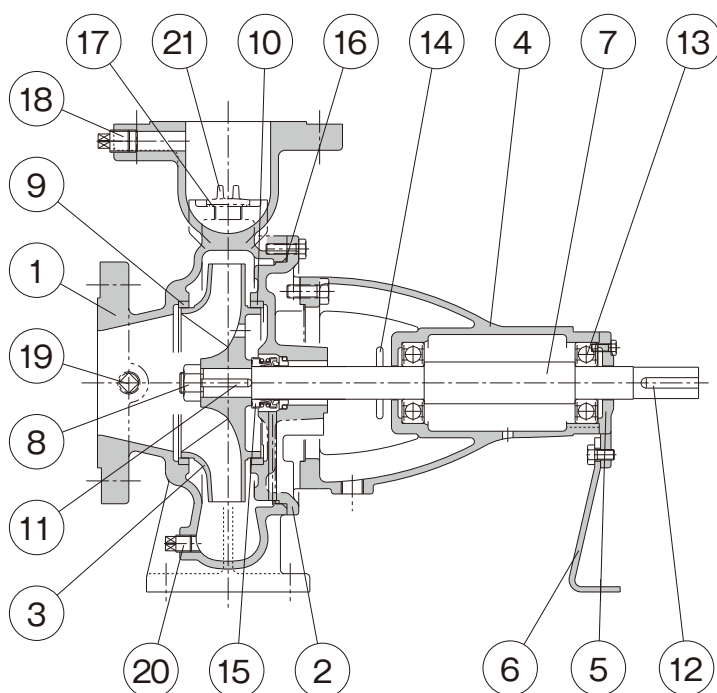
(Unit: mm)

Type	Output kW	Approx. mass kg
SJ100×80K537(H)-e	37	402
SJ100×80K545(H)-e	45	488

* Mounting dimensions are compatible with SJ model (product equipped with totally enclosed fan-cooled IE1 motor). Also the motor frame number is the same. Therefore, replacement with a Top Runner efficiency (equivalent to IE3) motor is possible. However, please keep the following point in mind. The number of revolutions will increase because of the characteristics of the motor, which may cause the flow rate to exceed the rated current value. Please adjust the flow rate to use the motor within the rated current value.

* For products equipped with a drip-proof protection type motor, there are some types which also require a common base because the frame No. may be different when only the motor is replaced.

Example of sectional drawing



Note) This is a representative example. For details, see the sectional drawing of each model.

Parts list

No.	Part name	Qty	Material
1	Casing	1	FC200/FCD450
2	Casing cover	1	FC200
3	Impeller	1	CAC406/FC200
4	Bearing case	1	FC200
5	Bearing cover	1	FC200
6	Mounting leg	1	SS400
7	Main shaft	1	SUS403
8	Impeller nut	1	SUS304
9	Liner ring	1	CAC406
10	Liner ring	1	CAC406
11	Impeller key	1	SUS304
12	Coupling key	1	S45C
13	Ball bearing	2	SUJ2
14	Deflector	1	CR
15	Mechanical seal	1	SiC vs Carbon
16	O-ring	1	NBR
17	O-ring	1	NBR
18	Plug	1	SWCH
19	Plug	1	SWCH
20	Drain plug	1	SWCH
21	Priming plug	1	C3771B

[illegible]

[illegible]



TERAL INC.

Head Office 230, Moriwake, Miyuki-cyo, Fukuyama-city, Hiroshima, 720-0003, Japan
Tel.+81-84-955-1111 Fax.+81-84-955-5777
www.teral.net

Teral Asia Limited

Room 1001,10/F, Olympia Plaza, 255 King's Road, North Point, Hong Kong
Tel.+852-2571-0935 Fax.+852-2571-0619

TERAL THAI CO.,LTD.

150 Moo 16 Udomsoraryuth Rd., T.Bangkrasan, A.Bangpa-In, Ayutthaya 13160 Thailand
Tel.+66-3535-2148-9 Fax.+66-3535-2150

TERAL TRADING & SERVICE CO.,LTD.

150 Moo 16 Udomsoraryuth Rd., T.Bangkrasan, A.Bangpa-In, Ayutthaya 13160 Thailand
Tel.+66-3535-2145-7 Fax.+66-3535-8549

PT.Teral Indonesia Pumps and Fans

Sinpasa Commercial Blok SB No 001
Jl. Boulevar Selatan Summarecon Bekasi
RT.003/RW.005, Kel. Marga Mulya, Kec. Bekasi Utara, Kota Bekasi, Jawa Barat 17142
TEL:+62-21-8949-4116

Teral Vietnam Limited Liability Company

9th Floor, LADECO Building, No.266 Doi Can Street, Ngoc Ha Ward, Hanoi City, Vietnam
Tel.+84-24-393-52-790 Fax.+84-24-393-52-289

Teral General Machine (Shanghai) Co.,Ltd.

No.285, Yuan Qu Road(N), Bei Qiao, Min Hang District, Shanghai 201109, China
Tel.+86-21-6490-9128 Fax.+86-21-6490-9126

Teral Middle East F.Z.C.

1806-002, 18th floor, BB1, Mazaya Business Avenue, JLT, Dubai, UAE. PO Box 414781
Tel.+971-4369 9039

Teral Pumps & Fans North America Ltd.

Suite # 197, 800-15355 24 Ave Surrey, B.C., CANADA V4A 2H9
Tel.+1-604-839-1008

Teral Philippines Inc.

Roof Deck 3, Vernida 1 Building, 120 Amorsolo St., Legaspi Village, Makati City
Tel.+63 2 7717-9314