



Foot mounted type

NEW

Flange-connection type

A New Lineup Has Flange-Connection Type
World's Largest Process Magnetic Drive Pump

Max. Flow Capacity of 5,000 L/min and Max. Discharge Head of 98m The World's Largest Class Fluoroplastic Magnetic Drive Pump

A new lineup has emerged in the world-largest fluoro-resin process magnetic drive pump MDW series. Flange-connection type has been adopted while maintaining high durability for chemical process applications. Contributes to reducing installation space and improving maintainability.

Application Example

- Chemical transfer between supply tanks and through chemical process equipment.
- Chemical recirculation for filtration and heat exchange applications.
- Scrubber liquid recirculation.
- Replacements for conventional sealed pumps.



MDW80-F (Flange motor type)



MDW100-C (Foot mounted motor type)

NEW



MDW100-F (Foot mounted flange motor type)



High Discharge Capacity and High Head

The heavy-duty MDW is capable of a maximum discharge capacity of 5,000 L/min. discharge head of 98m, enabling applications in previously unexplored areas with a wide range of liquid specific gravities.



ISO Compliant

The MDW is dimensionally compliant with the international standard (ISO2858, 3661) and is interchangeable with conventional sealed centrifugal pumps.



Highly Chemically Resistant

Fluoroplastic and fine ceramic wetted parts offer high resistance to virtually every industrial chemical, irrespective of concentration.



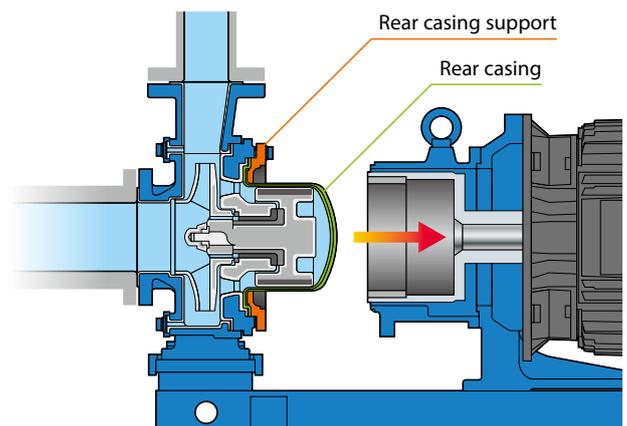
Back Pullout System

The back pullout system allows easy maintenance and inspection without removing pipework. Integrated components and a sealed rear casing support structure enable motor removal safely without chemical leakage.



Robust Structure

Use of the high strength ductile cast iron external armour is mandatory for heavy duty chemical process applications. High casing pressure resistance is achieved with a unique rear casing design preventing stress concentration and incorporating a triple-layer structure. A special metal shaft is used on the MDW to withstand high radial forces and allow continuous extended operation even under harsh service conditions.



Construction and Materials

Gasket

PTFE

Impeller

PFA (MDW50)

CFRETFE (MDW80/100)

Front casing

PFA (MDW50)

ETFE (MDW80/100)

Bearing

SiC

O ring

Kalrez®

FKM

EPDM

Sleeve

SiC

Magnet capsule

PFA

CFRETFE

Rear casing

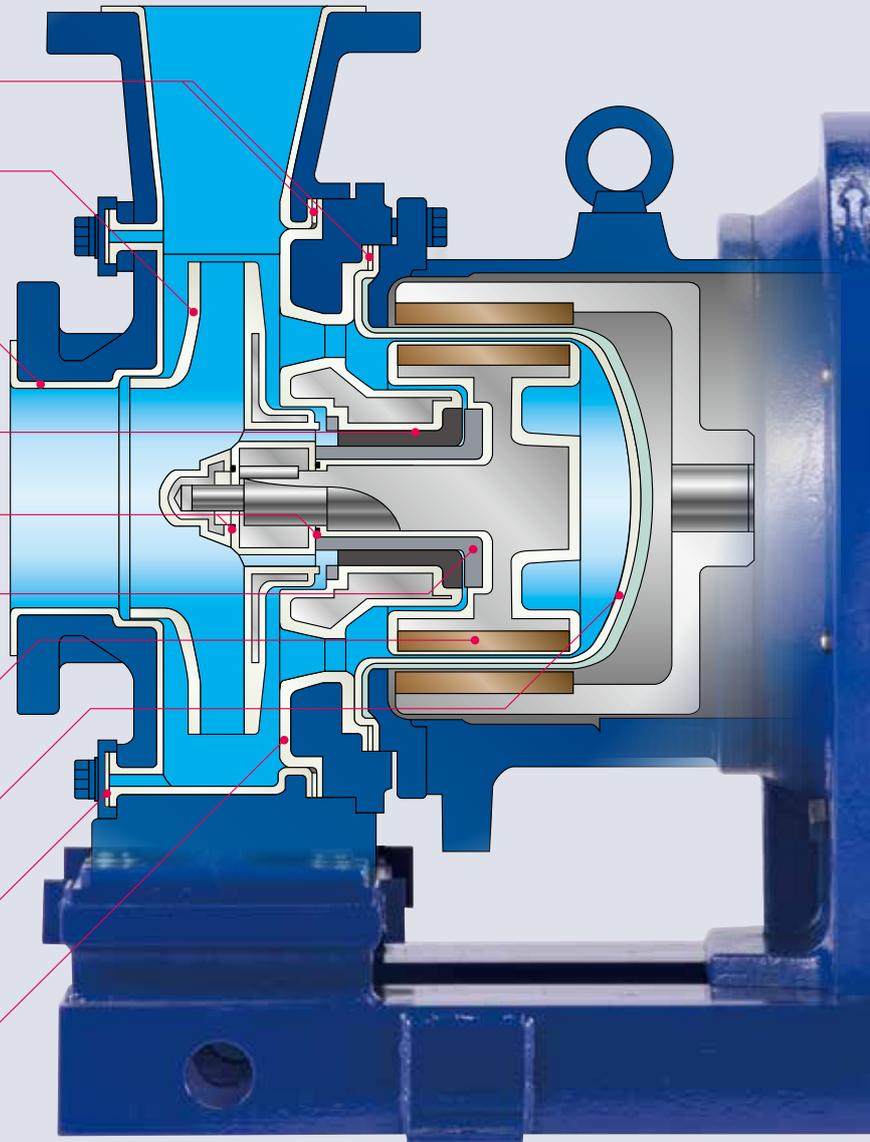
PFA

Gasket

PTFE

Split plate

PFA



Pump Identification

MDW 50 - 260 P K Z F 450 J - E 2
 1 2 3 4 5 6 7 8 9 10

1 Pump diameter · Motor output

Model	Pump diameter (Suction×Discharge) [mm]	Motor output [kW]	
		2P	4P
50	80×50	22, 30, 37, 45, 55, 75	11, 15, 18.5, 22, 37
80	125×80	37, 45, 55, 75	
100	125×100		

2 Nominal impeller size

170 to 260 (mm)

4 Material of Bearing / Sleeve

K : SiC/SiC

3 Wet end main material

**E : ETFE+PFA
P : PFA**

5 Material of O-ring

**Z : Kalrez®
V : FKM
E : EPDM**

6 Type of motor

**F : Flange motor / Foot mounted flange motor (Flange motor type)
C : Foot mounted motor (Coupling type)**

7 Motor output

**110 : 11kW, 150 : 15kW, 185 : 18.5kW, 220 : 22kW, 300 : 30kW,
370 : 37kW, 450 : 45kW, 550 : 55kW, 750 : 75kW**

8 Pump standard

J : JIS flange +JIS motor

*ISO standard flange, ANSI standard flange correspondence is possible. Please consult.

9 Special version

	With or without drain / air release	Product form	Special version
A	Without drain / air release	Pump body + Base set	Standard
S			Special version
D			Standard
X	With drain / air release	Pump body set Without base (Applies to coupling type)	Special version
B	Without drain / air release		Standard
Y			Special version
E	With drain / air release		Standard
Z		Special version	

10 Motor poles

**2 : 2P
4 : 4P**



• Photograph shows model MDW-F

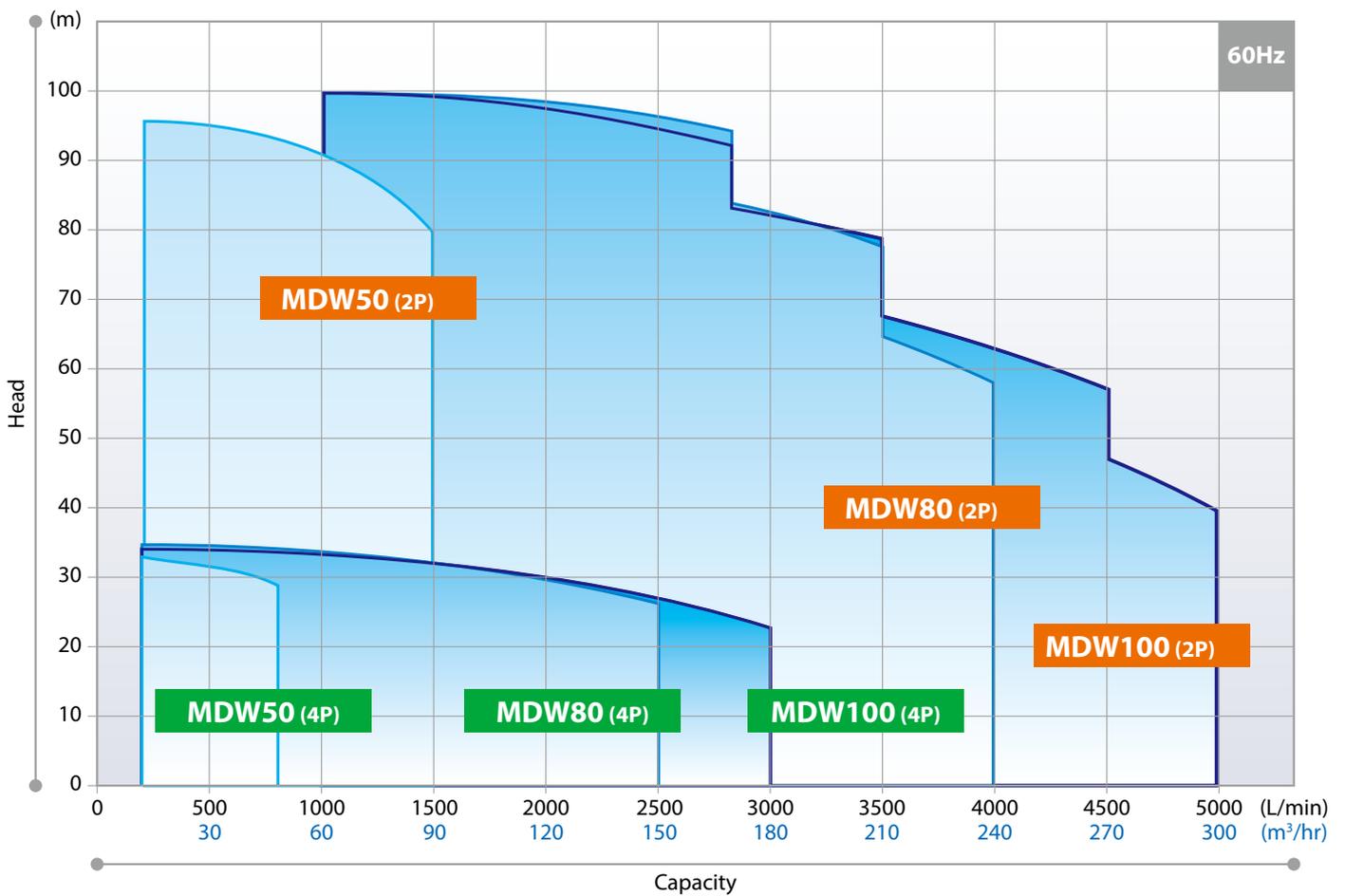
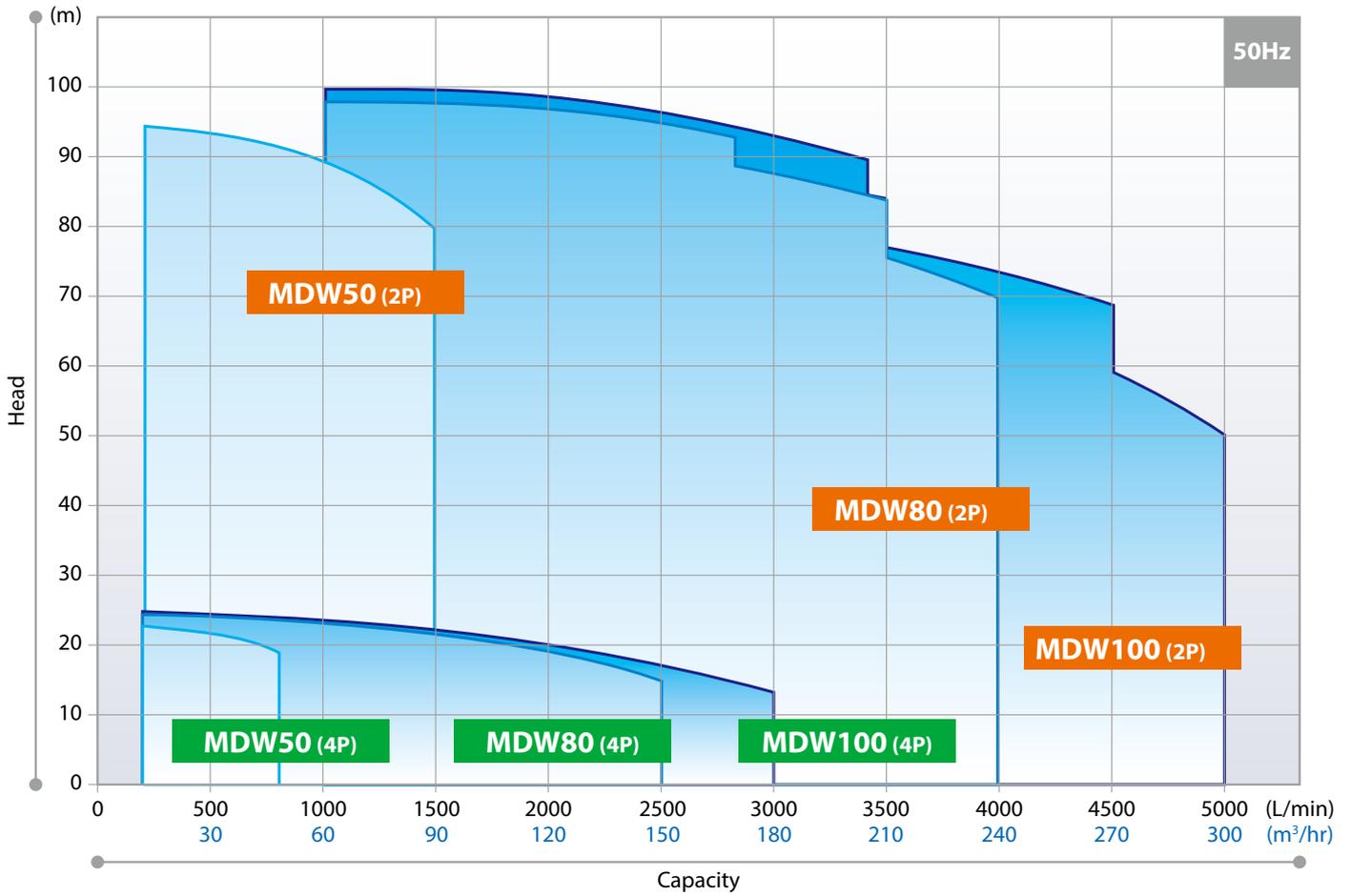
Specification (50/60Hz)

Model	Suction × Discharge (mm)	Nominal impeller size	Capacity		Head (m)	Motor output (kW)	
			(L/min)	(m ³ /hr)			
MDW50	80×50	250/220	833/1000	50/60	83/93	2P	22, 30, 37, 45, 55, 75
		260/260	417/500	25/30	21.5/31	4P	11, 15, 18.5, 22, 30, 37
MDW80	125×80	250/220	2667/2000	160/120	90/99	2P	37, 45, 55, 75
		255/255	1333/2000	80/120	23/30	4P	11, 15, 18.5, 22, 30, 37
MDW100	125×100	200/200	3333/2000	200/120	62/97	2P	37, 45, 55, 75
		235/235	1667/2000	100/120	21.5/30	4P	11, 15, 18.5, 22, 30, 37

Common Specification

Temperature range of liquid handled	ETFE type : -10 to 105°C, PFA type : -10 to 120°C (In the case of low-temperature specifications, please be careful of dew condensation on the pump.)
Allowable slurry	Please contact us for details.
Maximum operating pressure	1.6MPa
Standard paint color	Ultramarine blue RAL5002

Performance Curves



Dimensions in mm

Illustration 1

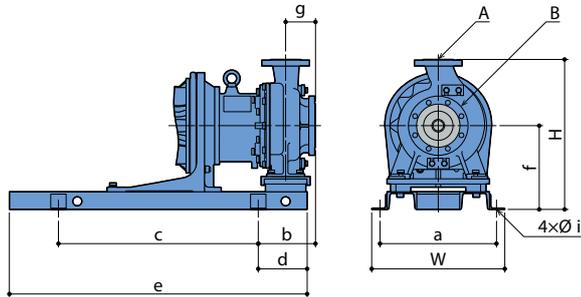
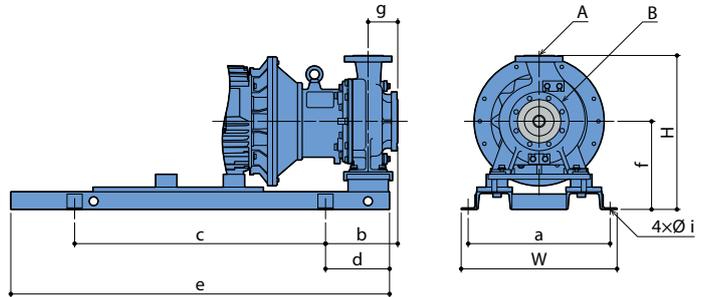


Illustration 2



MDW50-F (Flange motor / Foot mounted flange motor)

Motor output kW	W	H	a	b	c	d	e	f	g	i	A	B	Mass (Less motor) kg	Illustration		
2P	22	560	580	490	255	840	205	1250	125	23	50	80	290	1		
	30			295												
	37	610		550	280	940	230	1400		355			27		275	
	45			290												
	55	660		600	600	320	1060	270		1600			375		27	290
	75	730			670	350	1200	300		1800			305			
4P	11	560	580	490	255	840	205	1250	125	23	50	80	290	1		
	15			290												
	18.5	610		550	280	940	230	1400		355			27		295	
	22			295												
	30	610		550	280	940	230	1400		355			27		295	
	37			295												

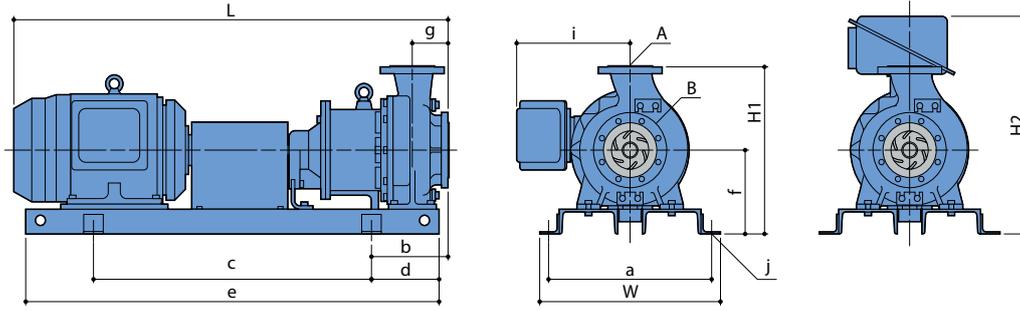
MDW80-F (Flange motor / Foot mounted flange motor)

Motor output kW	W	H	a	b	c	d	e	f	g	i	A	B	Mass (Less motor) kg	Illustration	
2P	37	610	655	550	265	940	230	1400	125	27	80	125	280	1	
	45			295											
	55	730		600	305	1060	270	1600		375			23	310	2
	75			670	335	1200	300	1800							
4P	11	560	635	490	240	840	205	1250	125	23	80	125	295	1	
	15			295											
	18.5	610		550	265	940	230	1400		355			27		300
	22			300											
	30	610		550	265	940	230	1400		355			27		300
	37			300											

MDW100-F (Flange motor / Foot mounted flange motor)

Motor output kW	W	H	a	b	c	d	e	f	g	i	A	B	Mass (Less motor) kg	Illustration	
2P	37	610	655	550	265	940	230	1400	125	27	100	125	285	1	
	45			300											
	55	730		600	305	1060	270	1600		375			23	315	2
	75			670	335	1200	300	1800							
4P	11	560	635	490	240	840	205	1250	125	23	100	125	300	1	
	15			300											
	18.5	610		550	265	940	230	1400		355			27		305
	22			305											
	30	610		550	265	940	230	1400		355			27		305
	37			305											

Dimensions in mm



MDW50-C (Foot mounted motor)

Motor output kW	W	H1	H2	L	a	b	c	d	e	f	g	i	j	A	B	Mass kg		
2P	22	(540)	(485)	(1364)	500	(255)	840	205	1250	260	125	(390)	4xØ23	50A	80A	440		
	30			(1442)												465		
	37	(610)	(505)	(1515)	550	(280)	940	230	1400	280						(410)	4xØ27	605
	45			(1508)														615
	55	(660)	-	(782)	(1737)	600	(320)	1060	270	1600						330	-	735
75															735			
4P	11	(540)	(485)	(1338)	500	(255)	840	205	1250	260	125	(283)	4xØ23	80A	80A	350		
	15			(1364)												365		
	18.5			(1364)												420		
	22			(1442)												425		
	30	(1545)	470															
	37	(610)	(505)	(1545)	550	(280)	940	230	1400	280						(410)	4xØ27	615

MDW80-C (Foot mounted motor)

Motor output kW	W	H1	H2	L	a	b	c	d	e	f	g	i	j	A	B	Mass kg	
2P	37	(610)	(580)	(1555)	550	(265)	940	230	1400	300	125	(410)	4xØ27	80A	125A	590	
	45			(1548)												600	
	55	(1777)	645														
	75	(660)	-	(782)	(1777)	600	(305)	1060	270	1600						330	-
4P	11	(540)	(580)	(1378)	500	(240)	840	205	1250	300	125	(283)	4xØ23	80A	125A	365	
	15			(1404)												380	
	18.5			(1404)												440	
	22			(1482)												445	
	30	(610)	(580)	(1482)	550	(265)	940	230	1400	(410)						4xØ27	500
	37			(1585)													(410)

MDW100-C (Foot mounted motor)

Motor output kW	W	H1	H2	L	a	b	c	d	e	f	g	i	j	A	B	Mass kg	
2P	37	(610)	(560)	(1555)	550	(265)	940	230	1400	280	125	(410)	4xØ27	100A	125A	585	
	45			(1548)												600	
	55	(580)	695														
	75	(660)	-	(782)	(1777)	600	(305)	1060	270	1600						330	-
4P	11	(540)	(560)	(1378)	500	(240)	840	205	1250	280	125	(283)	4xØ23	100A	125A	370	
	15			(1404)												385	
	18.5			(1404)												445	
	22			(1482)												450	
	30	(610)	(560)	(1482)	550	(265)	940	230	1400	(410)						4xØ27	505
	37			(1585)													(410)

IWAKI CO., LTD. 6-6 Kanda-Sudacho 2-chome Chiyoda-ku Tokyo 101-8558 Japan TEL : (81)3 3254 2935 FAX : 3 3252 8892 www.iwakipumps.jp

European Headquarter Germany The Netherlands (Netherlands Branch) Italy (Italy Branch) Spain (Spain Branch) Poland (East Europe Branch) Denmark Finland Norway Sweden Belgium France	IWAKI Europe GmbH IWAKI Europe GmbH IWAKI Europe GmbH IWAKI Europe GmbH IWAKI Europe GmbH IWAKI Europe GmbH IWAKI Nordic A/S IWAKI Suomi Oy IWAKI Norge AS IWAKI Sverige AB IWAKI Belgium N.V. IWAKI France S.A.	TEL: (49)2154 9254 0 TEL: (49)2154 9254 50 TEL: (31)74 2420011 TEL: (39)0445 561219 TEL: (34)934 741 638 TEL: (48)12 347 0755 TEL: (45)48 242345 TEL: (358)10 201 0490 TEL: (47)23 38 49 00 TEL: (46)8 511 72900 TEL: (32)13 670200 TEL: (33)1 69 63 33 70	FAX: (49)2154 9254 48 FAX: (49)2154 9254 55 FAX: (49)2154 9254 48 FAX: (39)0445 569088 FAX: (34)934 741 638 FAX: (48)12 347 0900 FAX: (86)21 6272 7502 FAX: (852)2607 1168 FAX: (86)20 84350603 FAX: (65)6316 2028 FAX: (62)21 6906606 FAX: (60)3 7803 8807 FAX: (82)2 6238 4800 FAX: (886)2 8227 6900 FAX: (66)2 322 2471 FAX: (61)2 9899 2411	U.S.A. Brazil China (Shanghai) China (Hong Kong) China (Guangzhou) Singapore Indonesia (Indonesia Office) Malaysia Korea Taiwan Thailand Australia	IWAKI America Inc. IWAKI Do Brasil Comercio De Bombas Hidraulicas LTDA. IWAKI Pumps (Shanghai) Co., Ltd. IWAKI Pumps Co., Ltd. GFTZ IWAKI Engineering & Trading Co., Ltd. IWAKI Singapore Pte Ltd. IWAKI Singapore Pte Ltd. IWAKim SDN. BHD. IWAKI Korea Co.,Ltd. IWAKI Pumps Taiwan Co., Ltd. IWAKI (Thailand) Co.,Ltd. IWAKI Pumps Australia Pty Ltd.	TEL: (1)508 429 1440 TEL: (55)19 3244 5900 TEL: (86)21 6272 7502 TEL: (852)2607 1168 TEL: (86)20 84350603 TEL: (65)6316 2028 TEL: (62)21 6906606 TEL: (60)3 7803 8807 TEL: (82)2 6238 4800 TEL: (886)2 8227 6900 TEL: (66)2 322 2471 TEL: (61)2 9899 2411	FAX: (1)508 429 1386 FAX: (55)19 3244 5900 FAX: (86)21 6272 6929 FAX: (852)2607 1000 FAX: (86)20 84359181 FAX: (65)6316 3221 FAX: (62) 21 6906612 FAX: (60)3 7803 4800 FAX: (82)2 6238 4801 FAX: (886)2 8227 6818 FAX: (66)2 322 2471 FAX: (61)2 9899 2421
---	---	---	--	---	---	--	---

() Country codes

Caution for safety use: Before use of pump, read instruction manual carefully to use the product correctly. Actual pumps may differ from the photos. Specifications and dimensions are subject to change without prior notice. For further details please contact us.

Legal attention related to export. Our products and/or parts of products fall in the category of goods contained in control list of international regime for export control. Please be reminded that export license could be required when products are exported due to export control regulations of countries. The posting and copying from this catalogue without permission is not accepted firmly.