

IWAKI



AMP
series

Magnetic drive pumps

Polypropylene magnetic drive process pumps

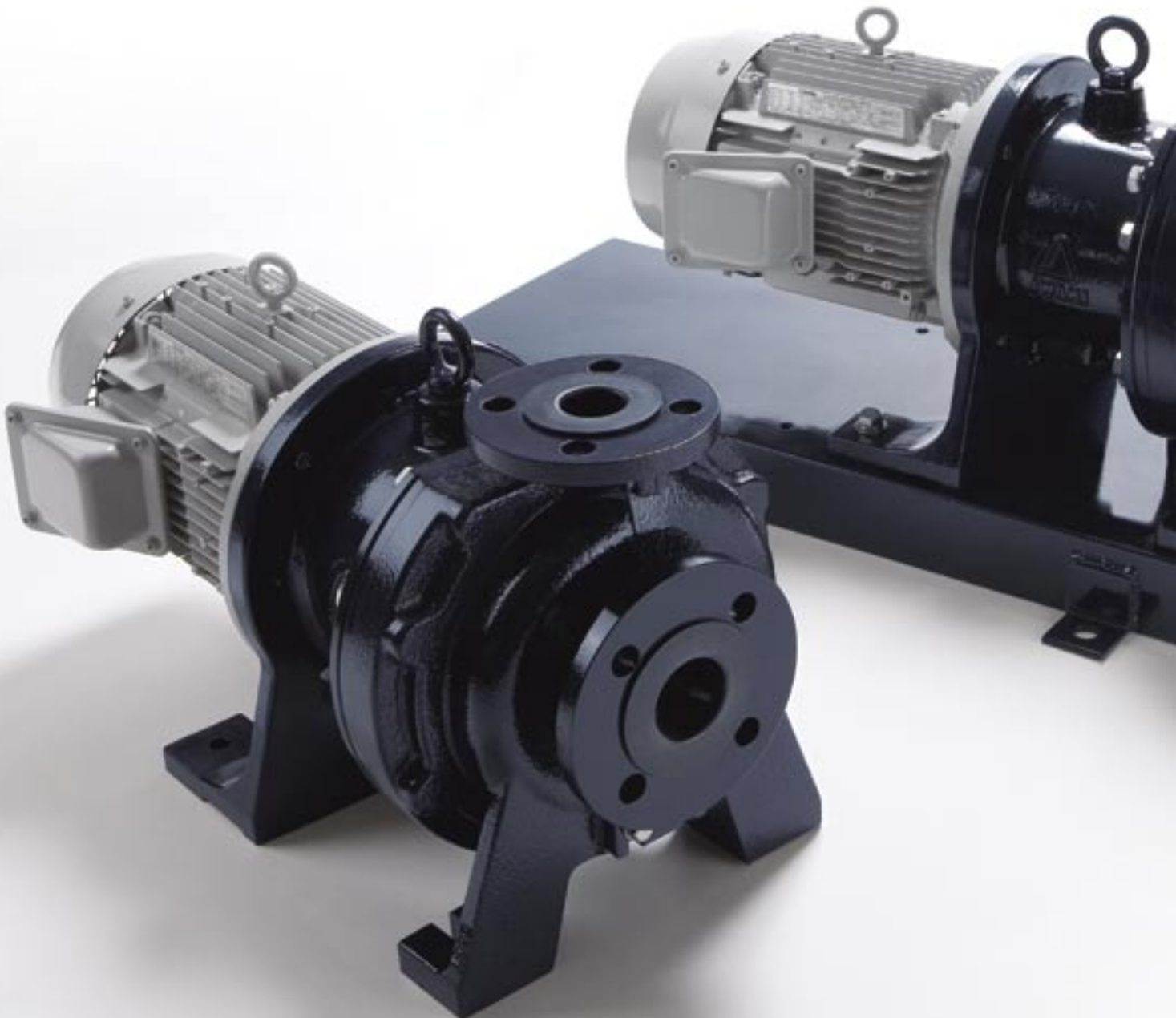


The AMP series are magnetic drive process pumps with polypropylene wet ends, featuring a unique configuration which gives greatly improved tolerance to abnormal operating conditions (Non contact system).



Polypropylene magnetic drive process pumps

The AMP series are magnetic drive process pumps with polypropylene wet ends, featuring a unique configuration which gives greatly improved tolerance to abnormal operating conditions (Non contact system). Applications cover a wide range of light chemical duties from acid to alkaline.





Highly durable structure

A ductile cast iron shell adds strength and durability to the polypropylene wet ends. The rear casing which is subject to the highest stress, is reinforced with an FRP cover to increase strength. The maximum allowable casing pressure of 1.0MPa is a highlight feature amongst polypropylene pumps.

Unique design prevents abnormal operation

The pump design features a Non contact system. The pump exhibits outstanding durability in air ingress to the suction.

Note: Dry running is not permitted.

Back pullout system

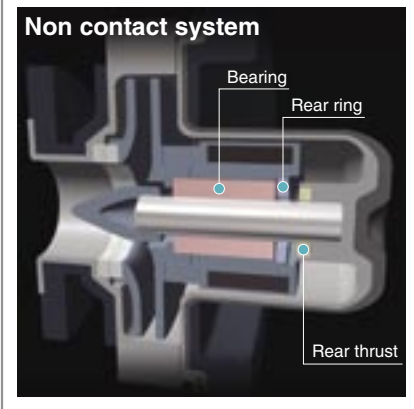
The back pullout system allows easy maintenance and inspection without removing piping. The motor can be safely removed without chemical leakage (Pumps on base plates only).

Modular design and low maintenance cost

The pump is a modular design for ease of maintenance. Specific adjustments such as centering or checking clearances are not required. Any wear part can simply be replaced individually and reduces maintenance costs.

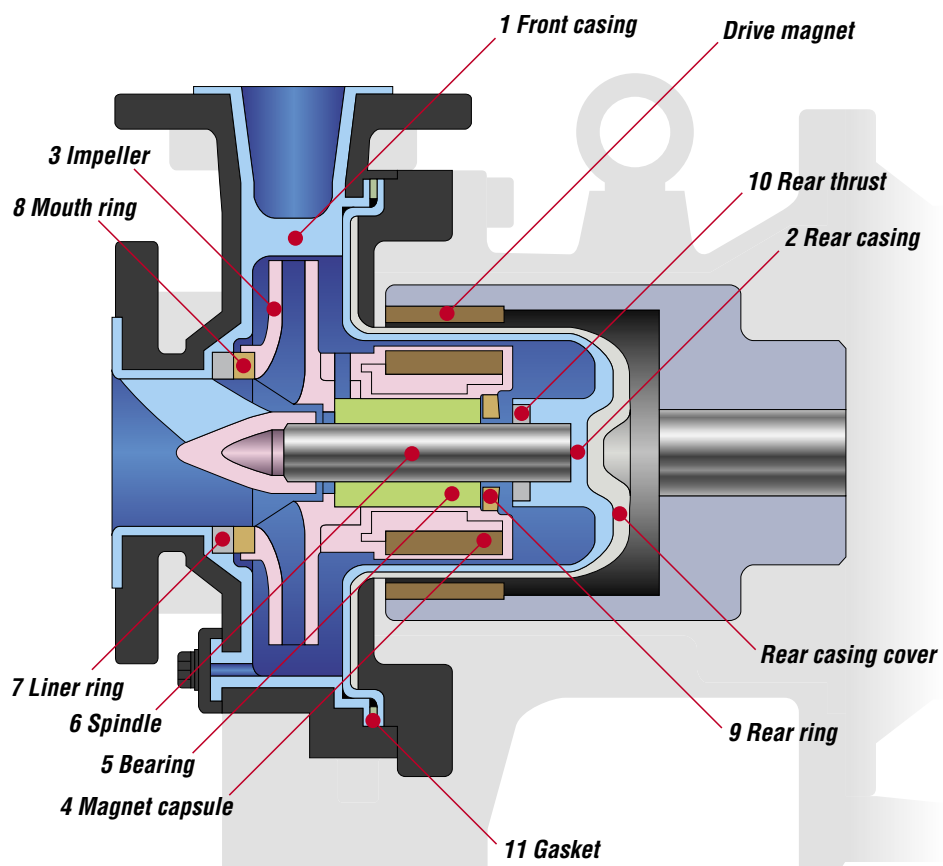
Non contact system

The pump design features a mechanism to withstand abnormal operating. High magnet power of the rare earth magnets prevents the magnet capsule coming into contact with the thrust ring of the rear casing, thus preventing melting of components due to heat generation. This greatly improves resistance against abnormal operating in comparison with conventional magnetic drive pumps.





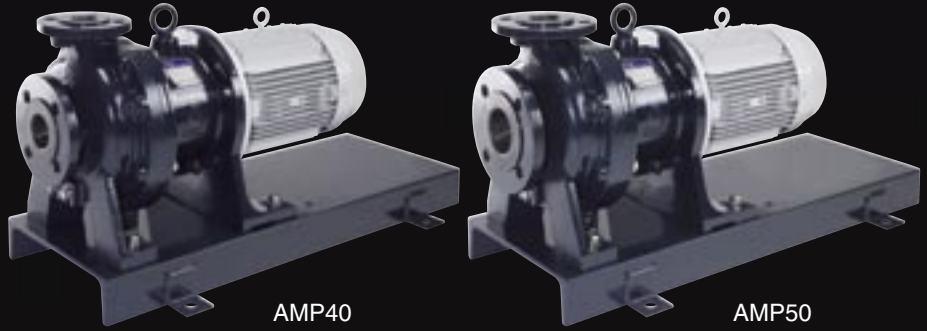
Construction



Wet-end materials

Materials	CF	KK
1 Front casing	CFRPP	SIC
2 Rear casing		
3 Impeller		
4 Magnet capsule	CFRETFE	
5 Bearing	High density carbon	SIC
6 Spindle	High purity alumina ceramic	
7 Liner ring	PTFE (with filler)	
8 Mouth ring	High purity alumina ceramic	
9 Rear ring	PTFE	
10 Rear thrust	PTFE	
11 Gasket	PTFE	

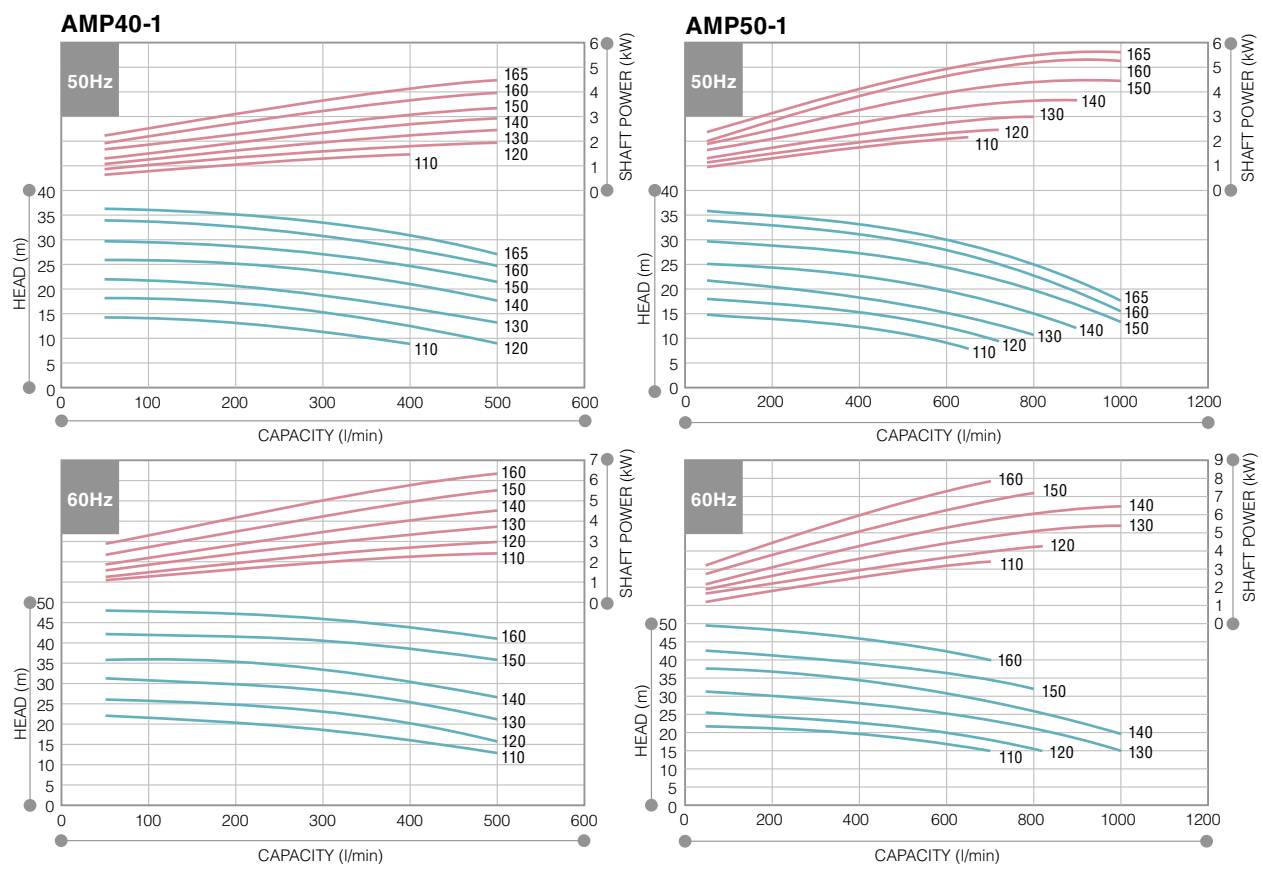
Temperature: 0 - 80°C Pressure Resistance: 1MPa
 Note: Please contact us for corrosion resistance.



AMP40

AMP50

Performance curves



Specification

Model	Pump size Suction X Discharge	Impeller size	50Hz		60Hz	
			Capacity (l/min)	Head (m)	Capacity (l/min)	Head (m)
AMP40-1	50 X 40	165	208	35	250	—
		160		32.5		46.5
		150		28.5		41
		140		25		34.5
		130		20.5		29
		120		17		24
		110		13		19.5
AMP50-1	65 X 50	165	417	33	500	—
		160		31		44.5
		150		27		38
		140		22.5		33
		130		18		27
		120		15		21.5
		110	12	18.5		

Pump identification

AMP 40 - 110 1 CF F 055 J - D 2

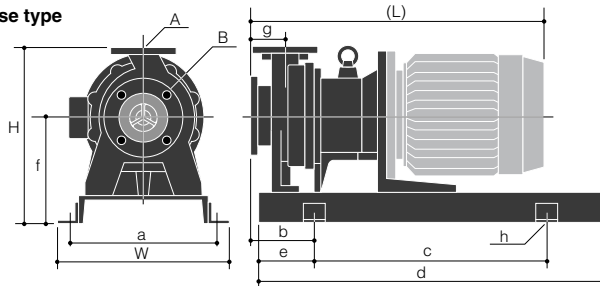
- Pump size: **40**: 50A X 40A (Suction X Discharge) **50**: 65A X 50A
- Impeller size: **110mm to 165mm**
- Impeller range: **1**
- Material of Bearing / Spindle: **CF**: High density carbon / High purity alumina ceramic **KK**: SiC / SiC
- Type of motor: **F**: Flange motor
- Motor output: **037**: 3.7kW **055**: 5.5kW **075**: 7.5kW
- Special version: **D**
- Motor pole: **2**

Mark	Drain	Base	Special version
A	Without drain	With base	Standard
S			Special
D	With drain	With base	Standard
X			Special
B	Without drain	Without base	Standard
Y			Special
E	With drain	Without base	Standard
Z			Special

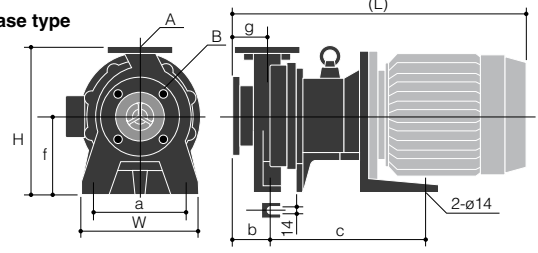
Standard for pipe connection and motor * **J**: JIS flange + JIS motor
A: ANSI flange + JIS motor

Dimensions

With base type



Without base type



Note: The dimensions may differ with the type of motor installed.

With base type

Model	Motor	W	H	(L)	a	b	c	(d)	(e)	f	g	h	A	B	Mass kg
AMP40-1	3.7kW	400	410	625	350	150	540	800	130	250	80	4-ø19	40A	50A	115
	5.5kW			689											135
	7.5kW			689											135
AMP50-1	3.7kW	400	410	625	350	150	540	800	130	250	80	4-ø19	50A	65A	115
	5.5kW			689											135
	7.5kW			689											135

Without base type

Model	Motor	W	H	(L)	a	b	c	f	g	A	B	Mass kg
AMP40-1	3.7kW	280	340	625	220	90	285	180	80	40A	50A	85
	5.5kW			689								105
	7.5kW			689								110
AMP50-1	3.7kW	280	340	625	220	90	285	180	80	50A	65A	90
	5.5kW			689								110
	7.5kW			689								110

Iwaki dry running protector DR series (Option)

Model DR is electric current sensing type dry running protector. It detects the decreased load current (lower limit) to stop the pump when it runs dry or runs with air sucking in. It can detect over-load, too.



Note: The dry run protector can not be used along with inverter.

Specification

Model	DR-10	DR-20
Motor power	200 to 240V three phase	380 to 440V three phase
Applied motor	0.4 to 7.5kW	0.75 to 15kW
Power control	100 to 240V single phase	
Power	V	100V ±10% single phase 200 to 240V ±10% single phase
	Input	3.5W
Detective current	0.5 to 32.0A	
Current transformer(CT)	Built-in	
Outer dimension	D80 X W153 X H122	

www.iwakipumps.jp

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

EUROPE / U.S.A.

European office : IWAKI Europe GmbH	TEL: (49)2154 9254 0	FAX: 2154 9254 48
Austria : IWAKI (Austria) GmbH	TEL: (41)26 674 93 00	FAX: 26 674 93 02
Belgium : IWAKI Belgium N.V.	TEL: (32)13 67 02 00	FAX: 13 67 20 30
Denmark : IWAKI Nordic A/S	TEL: (45)48 24 2345	FAX: 48 24 2346
Finland : IWAKI Suomi Oy	TEL: (358)9 2745810	FAX: 9 2742715
France : IWAKI France S.A.	TEL: (33)1 69 63 33 70	FAX: 1 64 49 92 73
Germany : IWAKI Europe GmbH	TEL: (49)2154 9254 50	FAX: 2154 9254 55
Holland : IWAKI Holland B.V.	TEL: (31)297 241121	FAX: 297 273902
Italy : IWAKI Italia S.R.L.	TEL: (39)02 990 3931	FAX: 02 990 42888
Norway : IWAKI Norge AS	TEL: (47)66 81 16 60	FAX: 66 81 16 61
Spain : IWAKI Iberica Pumps, S.A.	TEL: (34)943 630030	FAX: 943 628799
Sweden : IWAKI Sverige AB	TEL: (46)8 511 72900	FAX: 8 511 72922
Switzerland : IWAKI (Schweiz) AG	TEL: (41)26 674 93 00	FAX: 26 674 93 02
U.K. : IWAKI Pumps (UK) Ltd.	TEL: (44)1743 231363	FAX: 1743 366507
U.S.A. : IWAKI America Inc.	TEL: (1)508 429 1440	FAX: 508 429 1386

ASIA / OCEANIA

Australia : IWAKI Pumps Australia Pty Ltd.	TEL: (61)2 9899 2411	FAX : 2 9899 2421
China		
Hong Kong : IWAKI Pumps Co., Ltd.	TEL: (852)2607 1168	FAX: 2607 1000
Shanghai : IWAKI Pumps (Shanghai) Co., Ltd.	TEL: (86)21 6272 7502	FAX: 21 6272 6929
Beijing : IWAKI Pumps Co., Ltd. (Beijing office)	TEL: (86)10 6442 7713	FAX: 10 6442 7712
Guangzhou : GFTZ IWAKI Engineering & Trading Co., Ltd.	TEL: (86)20 8435 0603	FAX: 20 8435 9181
Indonesia : IWAKI Singapore (Indonesia Branch)	TEL: (62)21 6906606	FAX: 21 6906612
Korea : IWAKI Korea Co., Ltd.	TEL: (82)2 2630 4800	FAX: 2 2630 4801
Malaysia : IWAKI M Sdn. Bhd.	TEL: (60)3 7803 8807	FAX: 3 7803 4800
Philippines : IWAKI Chemical Pumps Philippines, Inc.	TEL: (63)2 888 0245	FAX: 2 843 3096
Singapore : IWAKI Singapore Pte Ltd.	TEL: (65)6316 2028	FAX: 6316 3221
Taiwan : IWAKI Pumps Taiwan Co., Ltd.	TEL: (886)2 8227 6900	FAX: 2 8227 6818
Thailand : IWAKI (Thailand) Co., Ltd.	TEL: (66)2 322 2471	FAX: 2 322 2477
Vietnam : IWAKI Pumps Vietnam Joint Venture Co., Ltd.	TEL: (84)613 933456	FAX: 613 933399

() 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.