



**Polypropylene
magnetic drive process 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). 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.



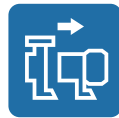
Unique design prevents abnormal operation

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.



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.



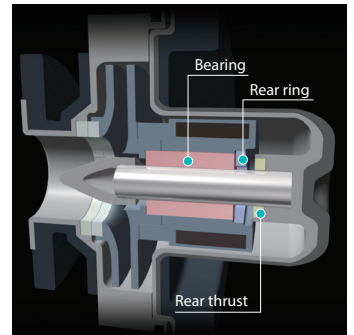
Back pullout system

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).

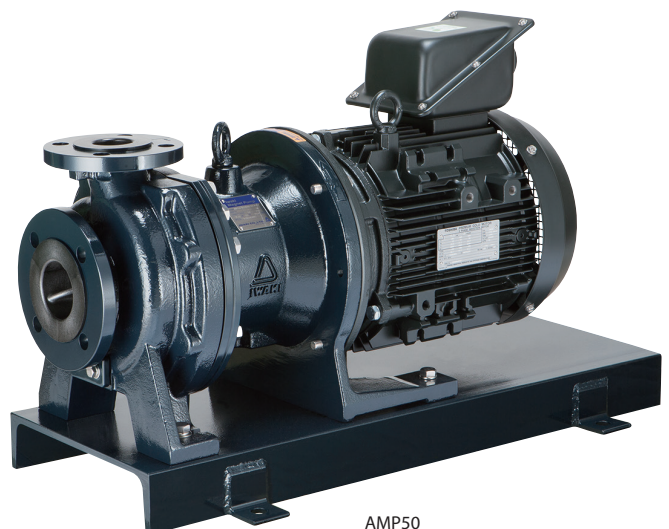


Non contact system

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.

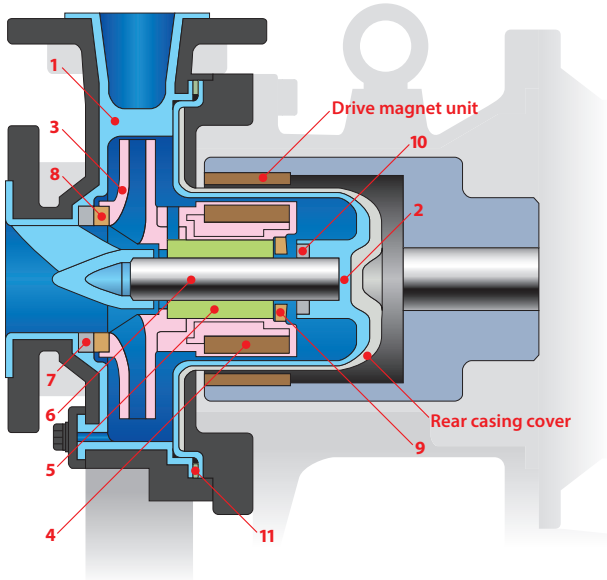


AMP40



AMP50

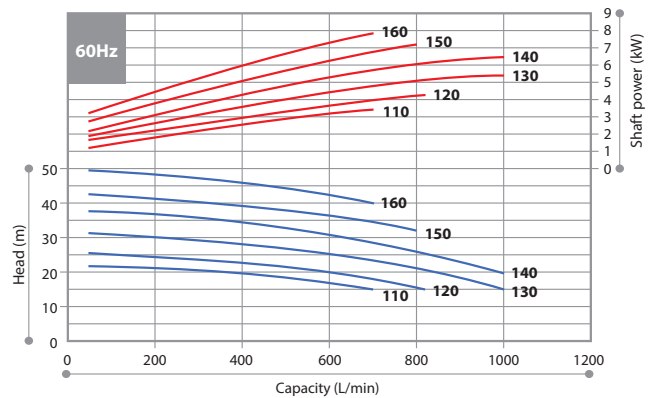
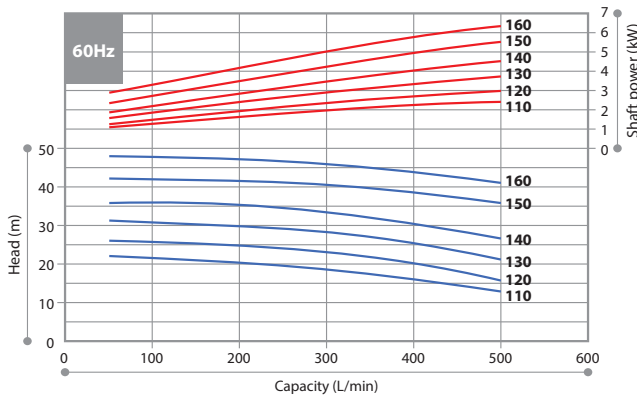
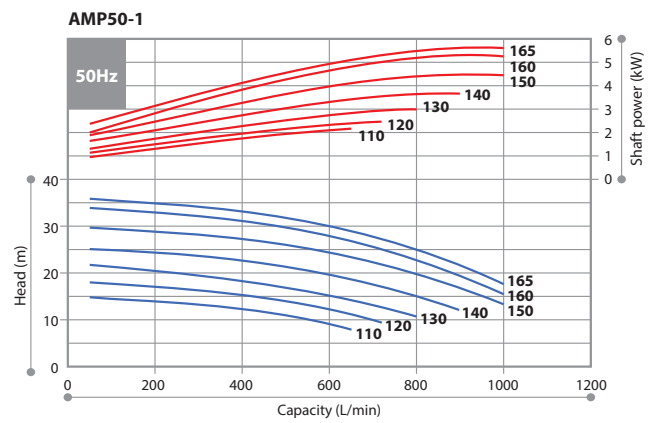
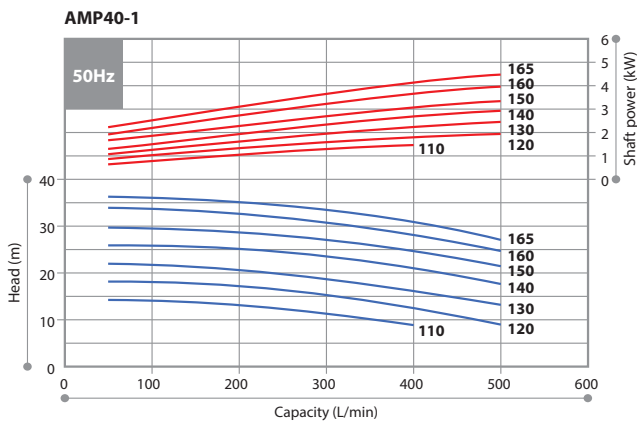
Construction and materials



Materials	CF	KK
1 Front casing	CFRPP	SiC
2 Rear casing		
3 Impeller		
4 Magnet capsule	CFRETFE	
5 Bearing	High density carbon	
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		
11 Gasket		

Note: Liquid temperature range 0 to 80°C Maximum operating pressure 1.0 MPa
 Note: Please contact us for corrosion resistance.

Performance curves



Specifications

Model	Pump size SuctionDischarge	Impeller size	50Hz		60Hz	
			Capacity (L/min)	Head (m)	Capacity (L/min)	Head (m)
AMP40-1	50 × 40	165	208	35.0	250	-
		160		32.5		46.5
		150		28.5		41.0
		140		25.0		34.5
		130		20.5		29.0
		120		17.0		24.0
		110		13.0		19.5
AMP50-1	65 × 50	165	417	33.0	500	-
		160		31.0		44.5
		150		27.0		38.0
		140		22.5		33.0
		130		18.0		27.0
		120		15.0		21.5
		110		12.0		18.5

■ Pump identification

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

1 Pump size (Suction×Discharge)

40 : 50A×40A
50 : 65A×50A

2 Impeller size

110mm - 165mm

3 Impeller range

1

4 Material of Bearing/Spindle

CF : High density carbon/High purity alumina ceramic
KK : SiC/SiC

5 Type of motor

F : Flange motor

6 Motor output

037 : 3.7kW
055 : 5.5kW
075 : 7.5kW

7 Standard for pipe connection and motor

J : JIS flange +JIS motor
A : ANSI flange +JIS motor

9 Motor pole

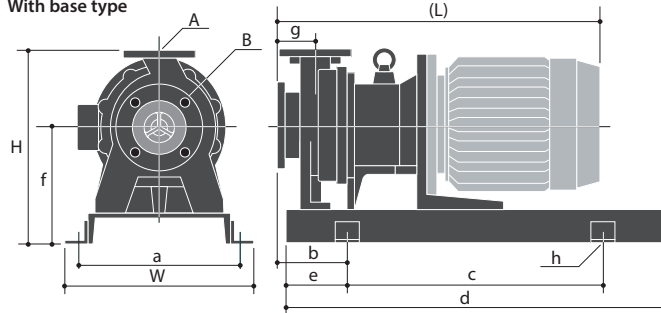
2

8 Special version

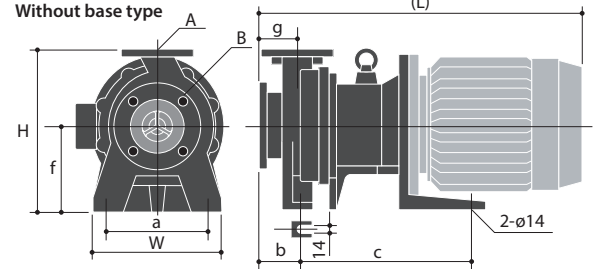
Mark	Drain	Base	Special version
A	Without drain	With base	Standard
S	Without drain	With base	Special
D	With drain	With base	Standard
X	With drain	With base	Special
B	Without drain	Without base	Standard
Y	Without drain	Without base	Special
E	With drain	Without base	Standard
Z	With drain	Without base	Special

■ Dimensions in mm

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

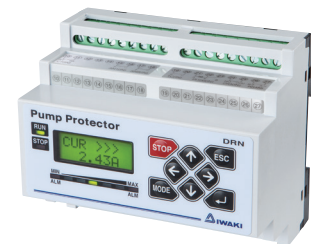
Model	Motor	W	H	L	a	b	c	f	g	A	B	Mass kg
AMP40-1	3.7kW	280	340	(625)	220	90	285	180	80	40A	50A	85
	5.5kW			(689)			365					105
	7.5kW			(689)			365					110
AMP50-1	3.7kW	280	340	(625)	220	90	285	180	80	50A	65A	90
	5.5kW			(689)			365					110
	7.5kW			(689)			365					110

Iwaki pump protector DRN series

Detects unusual pump operating conditions including dry-running and overload

The DRN model protects equipment (including pumps) from damage!
Minimizes production downtime.
Identifies possible causes of alarms so they can be investigated and addressed.

- Multiple Input : Two analog, one digital, one temperature input and one current input
- Easy operation : Equipped with EASY setup mode to remember the operation status and set the lower/upper limit values, as well as AUTO setup mode
- Bar graph : Visible indication of current operating status
- Logging capability : Data log feature for preventative maintenance scheduling
- Communication : RS485 external communication capability



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

IWAKI has global net work: www.iwaki pumps.jp
Please find your distributor location at

European office : **IWAKI Europe GmbH**
Germany : **IWAKI Europe GmbH**
Holland : **IWAKI Europe GmbH** (Netherlands Branch)
Italy : **IWAKI Europe GmbH** (Italy Branch)
Spain : **IWAKI Europe GmbH** (Spain Branch)
Belgium : **IWAKI Belgium N.V.**
Denmark : **IWAKI Nordic A/S**
Finland : **IWAKI Suomi Oy**
France : **IWAKI France S.A.**
Norway : **IWAKI Norge AS**
Sweden : **IWAKI Sverige AB**

TEL: (49)2154 9254 0 FAX: 2154 9254 48
TEL: (49)2154 9254 50 FAX: 2154 9254 55
TEL: (31)74 2420011 FAX: (49)2154 925448
TEL: (39)0444 371115 FAX: 0444 335350
TEL: (34)93 37 70 198 FAX: 93 47 40 991
TEL: (32)13 67 02 00 FAX: 13 67 20 30
TEL: (45)48 24 2345
TEL: (358)9 2745810
TEL: (33)1 69 63 33 70 FAX: 1 64 49 92 73
TEL: (47)23 38 49 00
TEL: (46)8 511 72900

()Country codes

U.S.A. : **IWAKI America Inc.**
Argentina : **IWAKI America Inc.** (Argentina Branch)
Brasil : **IWAKI Do Brasil Comercio De Bombas Hidraulicas LTDA.**
Singapore : **IWAKI Singapore Pte Ltd.**
Indonesia : **IWAKI Singapore** (Indonesia Office)
Malaysia : **IWAKI Sdn. Bhd.**
Australia : **IWAKI Pumps Australia Pty Ltd.**
Hong Kong : **IWAKI Pumps Co., Ltd.**
China : **GFTZ IWAKI Engineering & Trading Co., Ltd.**
Korea : **IWAKI Korea Co., Ltd.**
Taiwan : **IWAKI Pumps Taiwan Co., Ltd.**
Thailand : **IWAKI (Thailand) Co., Ltd.**

TEL: (1)508 429 1440 FAX: 508 429 1386
TEL: (54)11 4745 4116
TEL: (55)19 3244 5900 FAX: 19 3244 5900
TEL: (65)6316 2028 FAX: 6316 3221
TEL: (62)21 6906606 FAX: 21 6906612
TEL: (60)3 7803 8807 FAX: 3 7803 4800
TEL: (61)2 9899 2411 FAX: 2 9899 2421
TEL: (852)2607 1168 FAX: 2607 1000
TEL: (86)20 84350603 FAX: 20 84359181
TEL: (86)21 6272 7502 FAX: 21 6272 6929
TEL: (82)2 2630 4800 FAX: 2 2630 4801
TEL: (886)2 8227 6900 FAX: 3 8227 6818
TEL: (66)2 322 2471 FAX: 2 322 2477

! Caution for safety use:
Before use of pump, read instruction manual carefully to use the product correctly.

! 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.

Actual pumps may differ from the photos. Specifications and dimensions are subject to change without prior notice. For further details please contact us.