



The Heart of Industry

IWAKI

IWAKI
MAGNETIC
DRIVE
PUMPS

AMP



Solutions for chemical handling applications

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

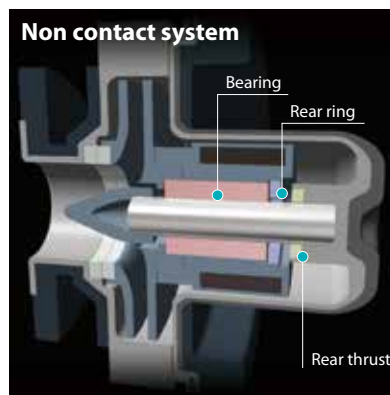
The back pullout system allows easy maintenance and inspection without removing piping. The motor can be safely removed without chemical leakage (Pumps on base plates only).

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.

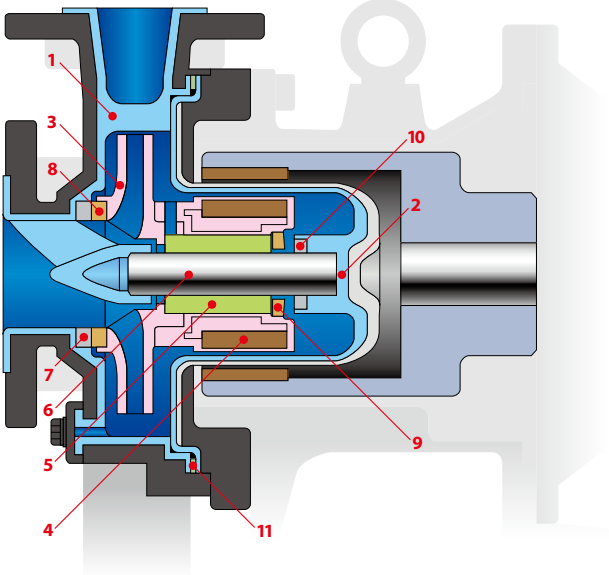


AMP40



AMP50

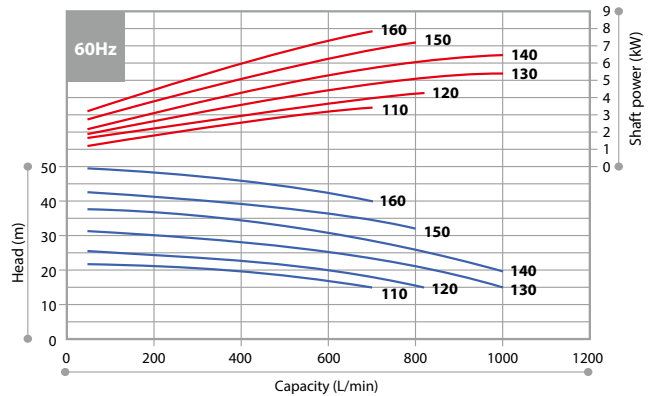
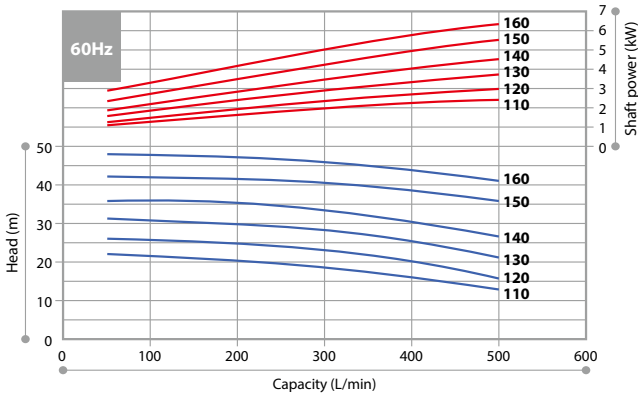
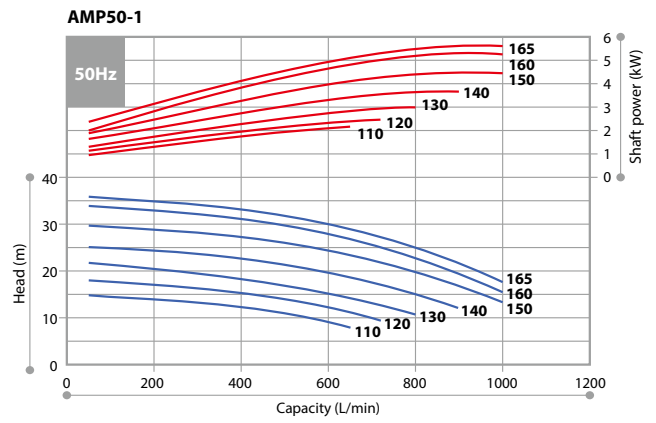
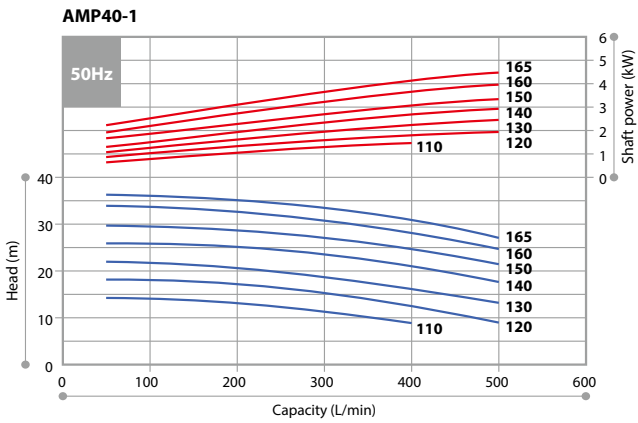
Construction and materials



Materials	CF	KK
1 Front casing	CFRPP	CFRPP
2 Rear casing		
3 Impeller	CFRPP	
4 Magnet capsule	CFRPP	
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	

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

Performance curves



Specifications (50/60Hz)

Model	Pump size Suction × Discharge	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

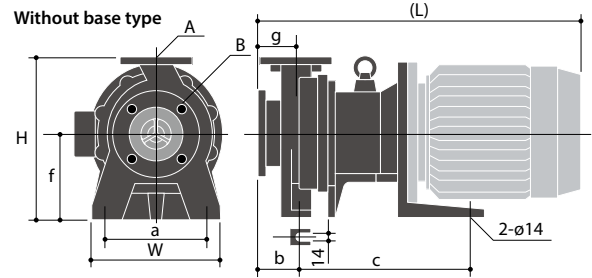
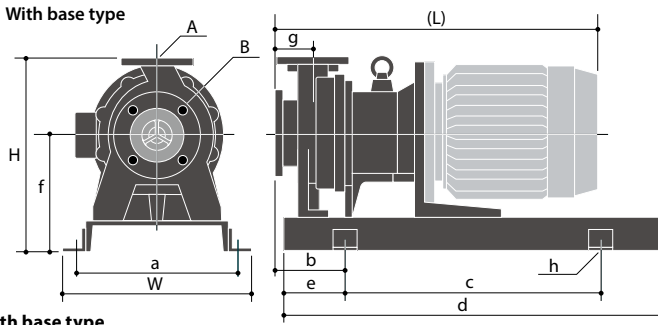
AMP 40 - 110 1 CF F 055 J - D 2

- Pump size** 40: 50A × 40A 50: 65A × 50A (Suction × Discharge)
- Impeller size** 110mm to 165mm
- 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

- Impeller range** 1
- Standard for pipe connection and motor*** J: JIS flange + JIS motor
A: ANSI flange + JIS motor

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

Dimensions in mm



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			(625)											115
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 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

Specifications

Model	DRN-01	DRN-02
Amperometric range	0.5-30.00A	5.0-200.0A
Unit's source voltage	AC100-240V 50/60Hz 10VA	
Operating temperature	0-40°C	
Operating humidity	35-85%RH	

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- 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
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- U.K. : IWAKI Pumps (UK) Ltd.

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- Singapore : IWAKI Singapore Pte Ltd.
- Indonesia : IWAKI Singapore (Indonesia Office)
- Malaysia : IWAKIm Sdn. Bhd.
- Australia : IWAKI Pumps Australia Pty Ltd.
- Hong Kong : IWAKI Pumps Co., Ltd.
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- 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. Actual pumps may differ from the photos. Specifications and dimensions are subject to change without prior notice. For further details please contact us.

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