



# IWAKI

**AMP**  
series

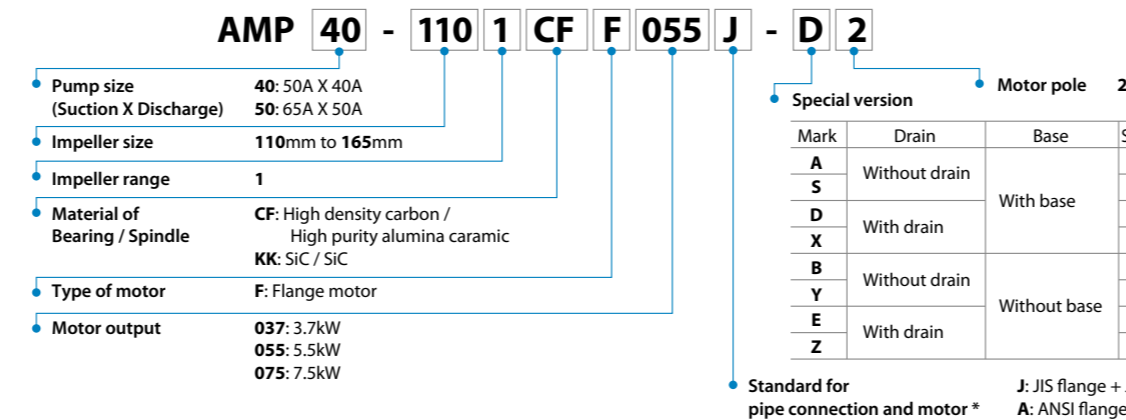
## Magnetic drive pumps Polypropylene magnetic drive process pumps



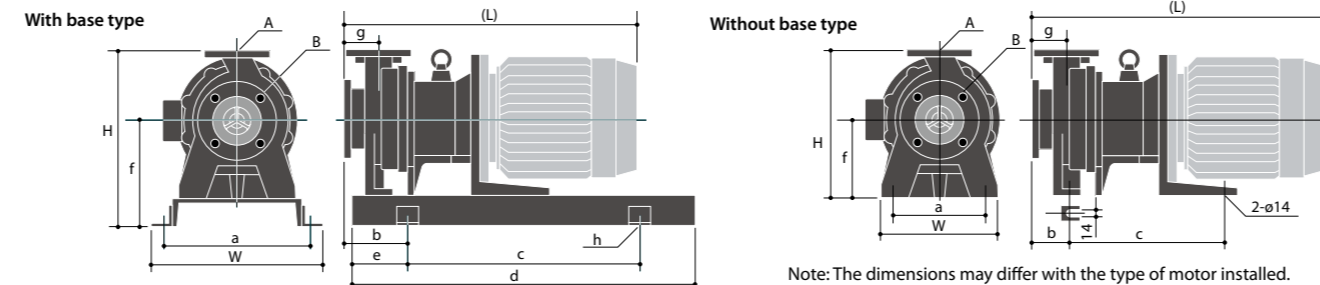
The AMP series are magnetic drive process pumps with polypropylene wet ends, featuring a unique configuration which gives greatly improved tolerance to abnormal operating conditions (Non contact system).



### Pump identification



### Dimensions



With base type		in mm													
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		in mm													
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 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

	50/60Hz	
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	100V ±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	

### 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).

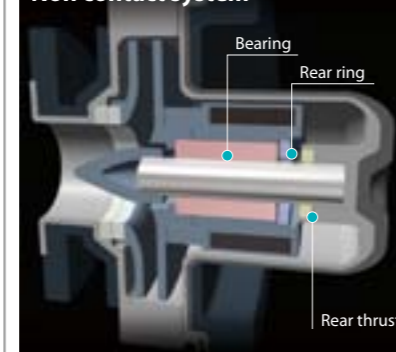
### Modular design and low maintenance cost

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.

### Non contact system



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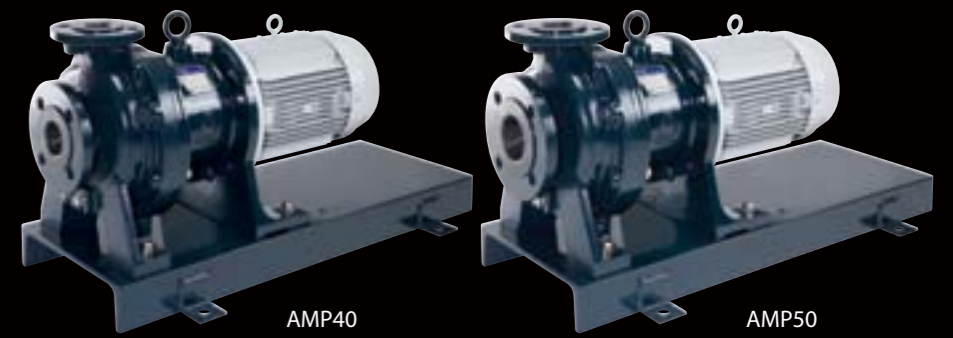
( ) Country codes

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.

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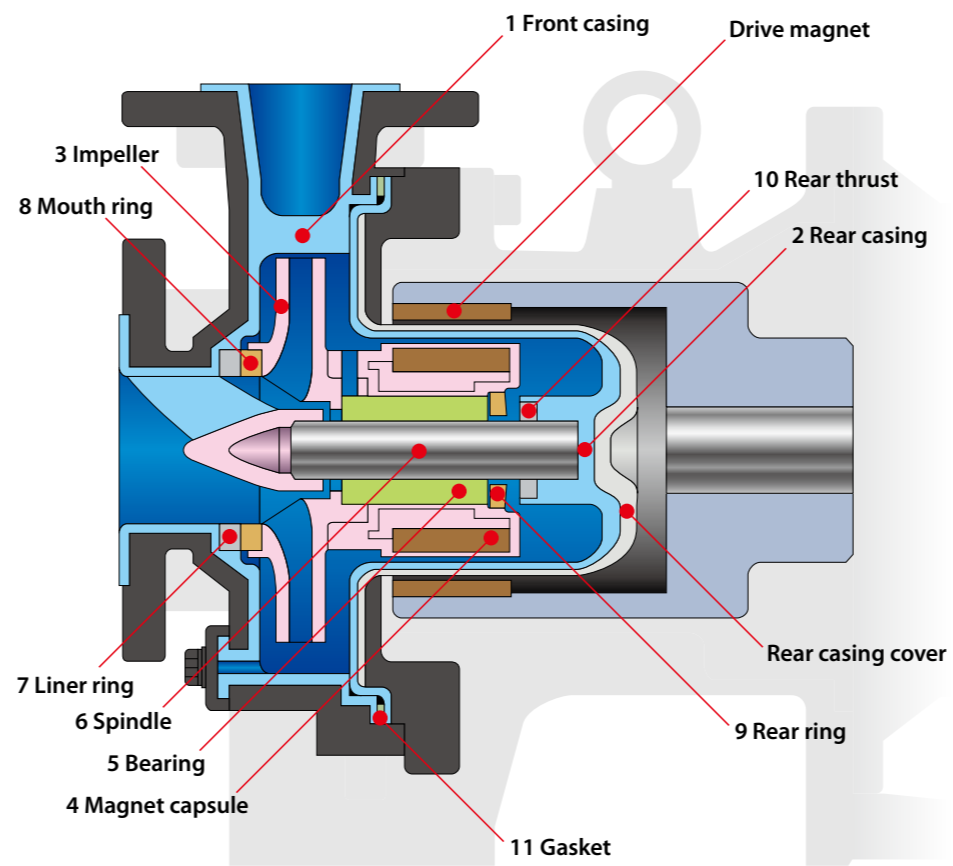
# Polypropylene magnetic drive process pumps



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.



## Construction

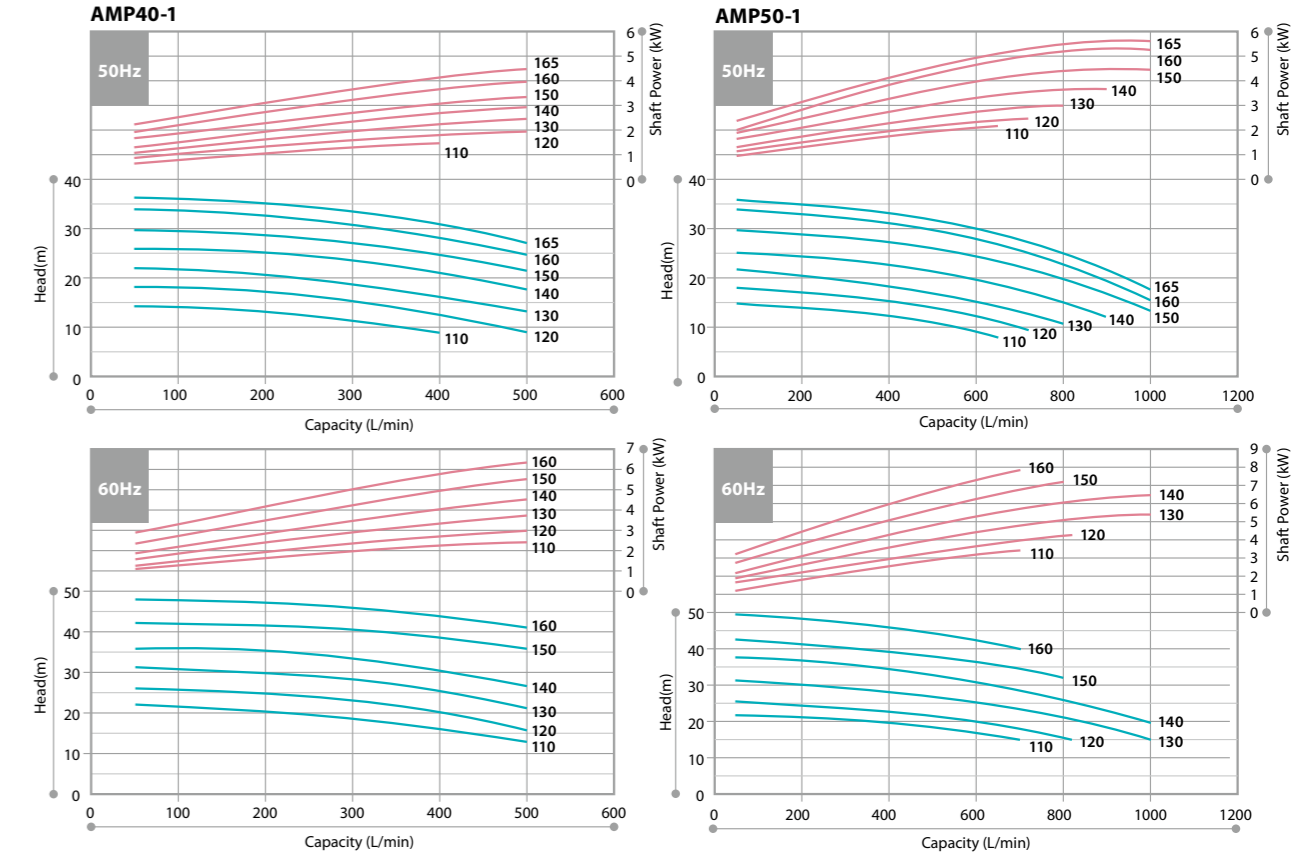


## Wet-end materials

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



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
AMP50-1	65 X 50	110	417	13	500	19.5
		165		33		—
		160		31		44.5
		150		27		38
		140		22.5		33
		130		18		27
	120	15	21.5			
	110	12	18.5			