

## Magnetic Drive Pump

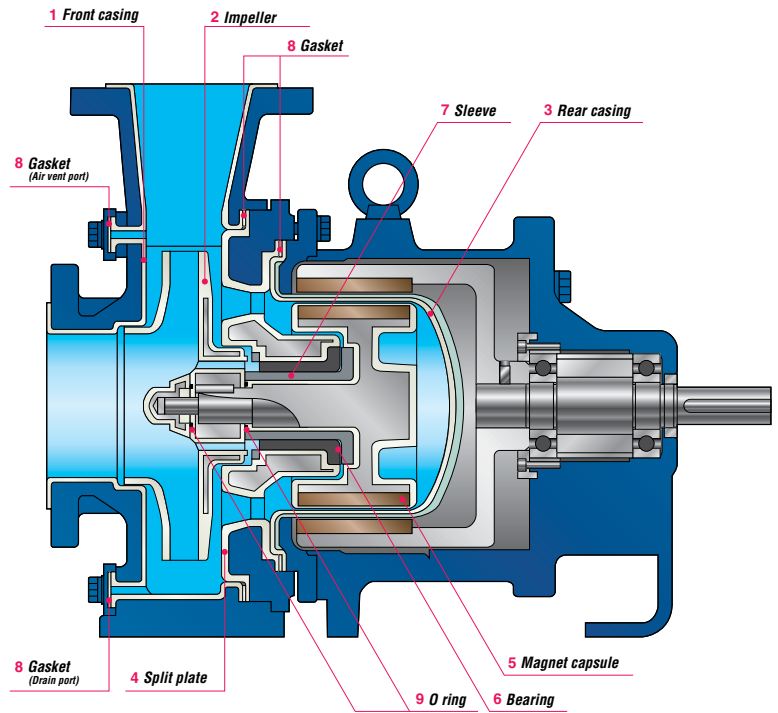


The MDW Series are the largest fluoroplastic magnetic drive pumps in the world, offering high efficiency and durability for chemical process applications.

- **High discharge capacity, High head and high efficiency** - The heavy-duty MDW is capable of a maximum discharge capacity of 5,000 L/min and max. discharge head of 98m, enabling applications in previously unexplored areas with a wide range of liquid specific gravities.
- **Highly chemically resistant** - Fluoroplastic and fine ceramic wetted parts offer high resistance to virtually every industrial chemical, irrespective of concentration.
- **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 (PAT). A special metal shaft is used on the MDW to withstand high radial forces and allow continuous extended operation even under harsh service conditions.
- **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.
- **ISO compliant** - The MDW is dimensionally compliant with the international standard (ISO2858, 3661) and is interchangeable with conventional sealed centrifugal pumps.



Part	Name	MDW50	MDW80,100
1	Front casing	PFA	ETFE
2	Impeller	PFA	CFRETFE
3	Rear casing	PFA	
4	Split plate	PFA	
5	Magnet capsule	PFA	
6	Bearing	SiC	
7	Sleeve	SiC	
8	Gasket	PTFE	
9	O-Ring	Kalrez®	



## Model Identification

**MDW 100 - 200 E K Z C 750 J - D 2**

- Pump size**  
50: 80mm x 50mm  
80: 125mm x 80mm  
100: 125mm x 100mm
- Nominal impeller size**  
170 to 260
- Wet-end main material**  
E: ETFE, CFRETFE, PFA  
P: PFA
- Motor poles**  
2: 2P  
4: 4P
- Material of Bearing/Sleeve**  
K: SiC
- Material of O-ring**  
Z: Kalrez®
- Type of motor**  
C: Foot mounted type motor
- Motor output**  
110 to 750: 11kW to 75kW
- Pump standard**  
J: JIS flange
- Special version**  
A: Without drain + With base, coupling, coupling cover  
S: Without drain + With base, coupling, coupling cover + Special version  
D: With drain + With base, coupling, coupling cover  
X: With drain + With base, coupling, coupling cover + Special version  
B: Without drain + Without base, coupling, coupling cover  
Y: Without drain + Without base, coupling, coupling cover + Special version  
E: With drain + Without base, coupling, coupling cover  
Z: With drain + Without base, coupling, coupling cover + Special version

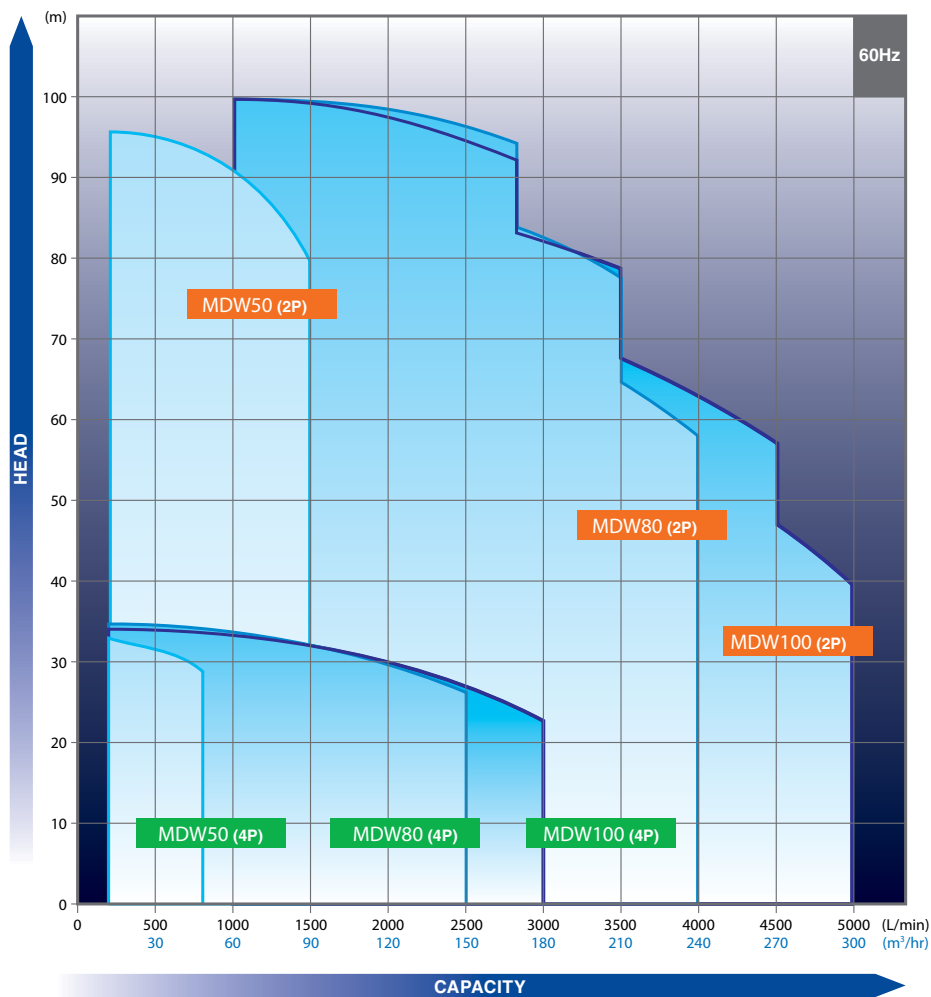
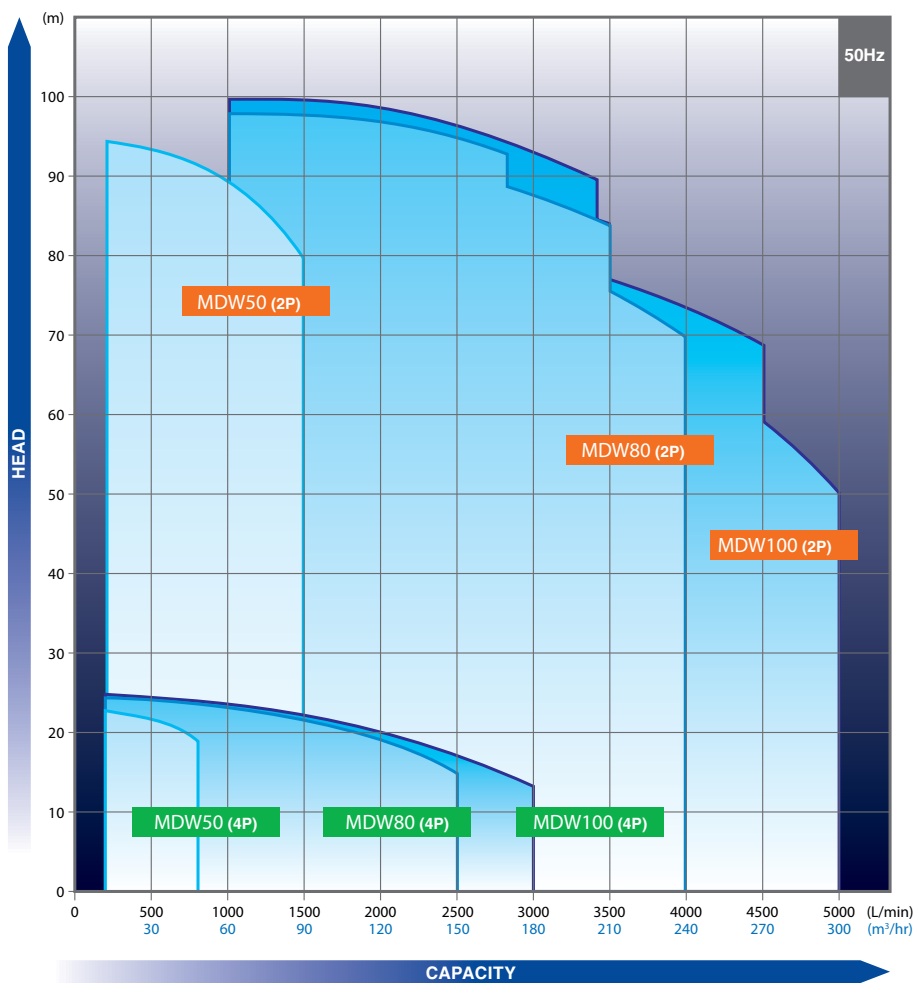
## Specifications

50/60 Hz

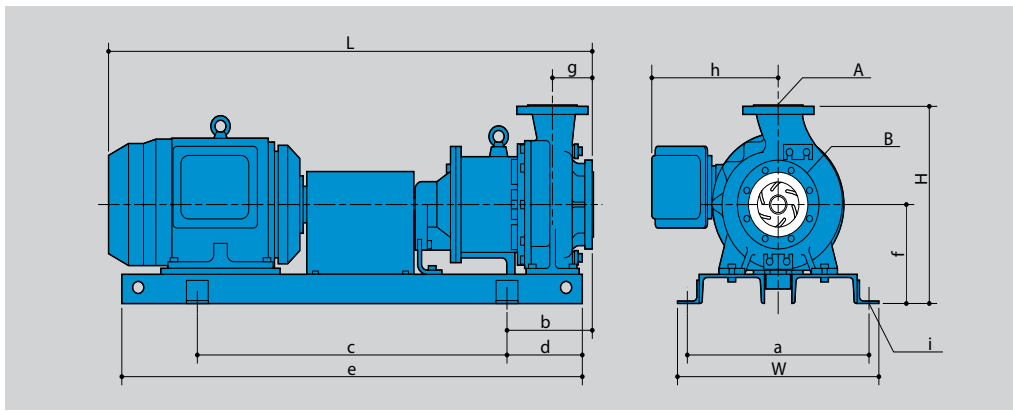
Model	Pump Size (mm)		Nominal Impeller Size	Capacity		Head (m)	Motor (kw)	
	Suction	Discharge		L/min	m³/hr			
MDW-50	80	50	250/220	833/1000	50/60	83/93	2P	22, 30, 37, 45, 55, 75
			250/260	417/500	25/30	21.5/31	4P	11, 15, 18.5, 22, 30, 37
MDW-80	125	80	250/220	2667/2000	160/120	90/99	2P	37, 45, 55, 75
			255/255	1333/2000	80/120	23/30	4P	11, 15, 18.5, 22, 30, 37
MDW-100	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

# MDW

## series



## Dimensions



Model	Motor output (kW)	W	H	L*	a	b	c	d	e	f	g	h	i	A	B	Mass (kg)								
MDW50	2P	22	(540)	(485)	(1397)	500	(255)	840	205	1250	260	125	(380)	4xø23	50A	80A	420							
		30		(1435)	430																			
		37	(610)	(505)	(1495)	550	(280)	940	230	1400	280		(400)	4xø27			530							
		45		(525)	(1508)												545							
		55		---	(1645)								600	(320)			1060	270	1600	330	---	(425)	580	
		75		---	---								---	---			---	---	---	---	---	---	---	735
	4P	11	(540)	(485)	(1350)	500	(255)	840	205	1250	260	125	(259)	4xø23	50A	80A	320							
		15			(1397)								335											
		18.5			(1435)								395											
		22			(1525)								550				(280)	940	230	1400	280	(400)	4xø27	540
		30	---	---	---	---	---	---	---	---	---		---	---			---	---	---	---				
		37	---	---	---	---	---	---	---	---	---		---	---			---	---	---	---				
MDW80	2P	37	(610)	(580)	(1535)	550	(265)	940	230	1400	300	125	(400)	4xø27	80A	125A	515							
		45			(1548)								530											
		55			(1685)								600				(305)	1060	270	1600	330	---	(425)	570
		75			---								---				---	---	---	---	---	---	---	---
	4P	11	(540)	(580)	(1390)	500	(240)	840	205	1250	260	125	(259)	4xø23	80A	125A	335							
		15			(1437)								350											
		18.5			(1475)								415											
		22			(1565)								550				(265)	940	230	1400	---	(380)	425	
		30	---	---	---	---	---	---	---	---	---		---	---			---	---	---					
		37	---	---	---	---	---	---	---	---	---		---	---			---	---	---	---				
	MDW100	2P	37	(610)	(560)	(1535)	550	(265)	940	230	1400	280	125	(400)	4xø27	100A	125A	510						
			45			(1548)								530										
55			(1685)			600								(305)				1060	270	1600	330	---	(425)	620
75			---			---								---				---	---	---	---	---	---	---
4P		11	(540)	(560)	(1390)	500	(240)	840	205	1250	260	125	(259)	4xø23	100A	125A	340							
		15			(1437)								355											
		18.5			(1475)								420											
		22			(1565)								550				(265)	940	230	1400	---	(380)	430	
		30	---	---	---	---	---	---	---	---	---		---	---			---	---	---					
		37	---	---	---	---	---	---	---	---	---		---	---			---	---	---	---				

\* Based on motor manufacturer



IALT00228.A Jan 2012

[www.IwakiAmerica.com](http://www.IwakiAmerica.com) • [www.IwakiCustomPumps.com](http://www.IwakiCustomPumps.com)



Five Boynton Road • Holliston, MA • 01746 USA • Tel: 508-429-1440 • Fax: 508-429-1386 [info@iwakiAmerica.com](mailto:info@iwakiAmerica.com)