

## Magnetic Drive Pump



Iwaki America, the world leader in small magnetically coupled centrifugal pump technology, offers the premier line of non-metallic centrifugal pumps.

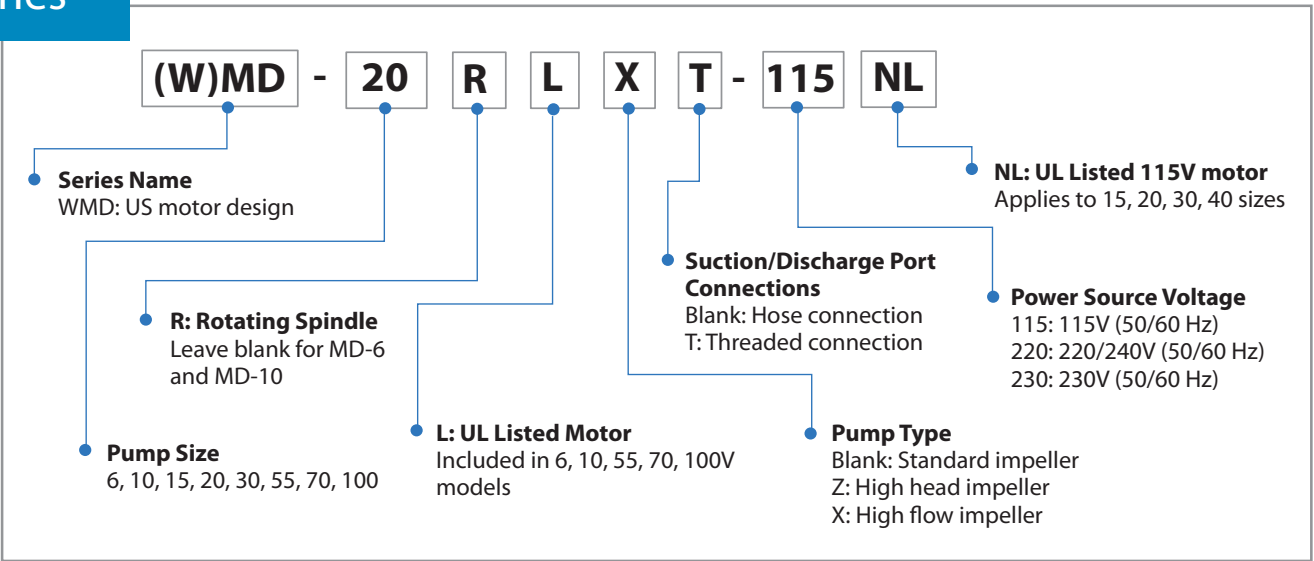
- **Excellent chemical compatibility** - Manufactured from the most corrosion-resistant materials including Polypropylene, ETFE, SiC, or Alumina Ceramic to handle your most aggressive chemicals and high purity applications.
- **Motor options** - Choice of premium, high efficiency motors in AC and DC voltages.
- **Multiple impeller options** - Choose from enclosed, open or semi-open impellers to ensure a perfect hydraulic fit for your application.
- **Dual bearing system** - Leads to longer pump life.
- **Rotating spindle** - Reduces friction and heat generation.
- **Dynamically balanced drive magnet** - Reduces unbalanced loads on the motor shaft leading to longer motor life.
- **Unique internal cooling loop** - Allows for lower pump operating temperature.
- **Impeller balance holes** - Minimize axial thrust for better hydraulics.



# MD

## series

### Model Code



### Specifications

\* Varies with motor

Polypropylene Model	Connections		Motor Output (HP)	Motor Speed (RPM)	Current (Amps)	Max Flow (GPM)	Max Head (Ft)	Max Sys. Pressure (PSI)	Specific Gravity	Weight (Lbs)
	Hose	NPT								
MD-6	1/2	---	1/250	3100	0.25	2.3	4.5	2.80	1.2	1.8
MD-10	1/2	---	1/125	2900	0.40	3.1	6.8	4.30	1.1	1.6
MD-15R(T)	1/2	1/2	1/75	3100	0.29	5.0	11.1	7.20	1.3	3.5
WMD-15R(T)	1/2	1/2	1/38	3100	0.82	5.0	11.1	7.20	1.3	6.0
MD-20RT(T)	5/8	3/4	1/38	3100	0.48	8.2	14.1	9.95	1.1	4.4
WMD-20R(T)	5/8	3/4	1/38	3100	0.48	8.2	14.1	9.95	1.1	7.0
MD-20RX(T)	1	1	1/38	3100	0.50	13.7	8.2	5.69	1.3	4.4
WMD-20RX	1	1	1/38	3100	0.50	13.7	8.2	5.69	1.3	7.0
MD-20RZ	5/8	3/4	1/38	3100	0.53	2.9	22.6	14.22	1.1	4.4
WMD-20RZ	5/8	3/4	1/38	3100	0.53	2.9	22.6	14.22	1.1	7.0
MD-30R	3/4	3/4	1/16	3150	0.80	10.0	17.7	11.60	1.3	7.7
WMD-30R	3/4	3/4	1/16	3150	1.00	10.0	17.7	11.60	1.3	9.0
MD-30RX	1	1	1/16	3150	1.10	19.0	13.5	8.54	1.1	7.7
WMD-30RX	1	1	1/16	3150	1.00	19.0	13.5	8.54	1.1	9.0
MD-30RZ	5/8	3/4	1/16	3150	1.10	4.5	36.1	24.18	1.0	7.7
WMD-30RZ	5/8	3/4	1/16	3150	1.00	4.5	36.1	24.20	1.0	9.0
MD-40R	3/4	3/4	1/12	3200	1.30	13.7	21.3	14.22	1.1	8.6
WMD-40R	3/4	3/4	1/12	3200	1.90	13.7	21.3	14.22	1.1	10.0
MD-40RX	1	1	1/12	3200	1.20	22.4	15.4	9.95	1.1	8.6
WMD-40RX	1	1	1/12	3200	1.90	22.4	15.4	9.95	1.1	10.0
MD-55R	1	1	1/8	3400	1.60	18.4	26.9	17.06	1.2	10.1
MD-70R	1	1	1/4	3400	2.80	25.6	31.8	21.33	1.0	13.2
MD-70RZ	3/4	3/4	2/7	3400	3.80	11.4	66.6	42.70	1.0	13.2
MD-100R	1	1	1/3	3300	3.40	35.6	39.0	25.60	1.2	18.7
WMD-100R	1	1	1/3	3400	*	35.6	39.0	25.60	1.2	*

Fluoroplastic Model	Connections		Motor Output (HP)	Motor Speed (RPM)	Current (Amps)	Max Flow (GPM)	Max Head (Ft)	Max Sys. Pressure (PSI)	Specific Gravity	Weight (Lbs)
	Hose	NPT								
WMD-30FX	---	1/2	1/16	3200	0.9	3.2	35.2	17.0	1.3 (1.5)	9.0
WMD-30FY	---	1/2	1/16	3200	0.9	3.2	26.0	17.0	1.5 (1.8)	9.0
WMD-30FZ	---	1/2	1/16	3200	0.9	2.6	24.0	21.3	1.9 (2.1)	9.0
MD-55FY	---	1	1/8	3300	1.9	17.1	25.6	21.3	1.3 (1.5)	11.9
MD-55FZ	---	1	1/8	3300	1.6	13.0	19.0	31.2	2.0 (2.2)	11.9
WMD-100FY	---	1	1/3	3450	*	36.0	38.0	31.2	1.3 (1.6)	*
MD-100FY	---	1	1/3	3300	3.4	35.7	37.7	31.2	1.3 (1.6)	18.7
WMD-100FZ	---	1	1/3	3450	*	28.0	27.2	31.2	1.9 (2.2)	*
MD-100FZ	---	1	1/3	3300	3.4	28.0	27.2	31.2	1.9 (2.2)	18.7

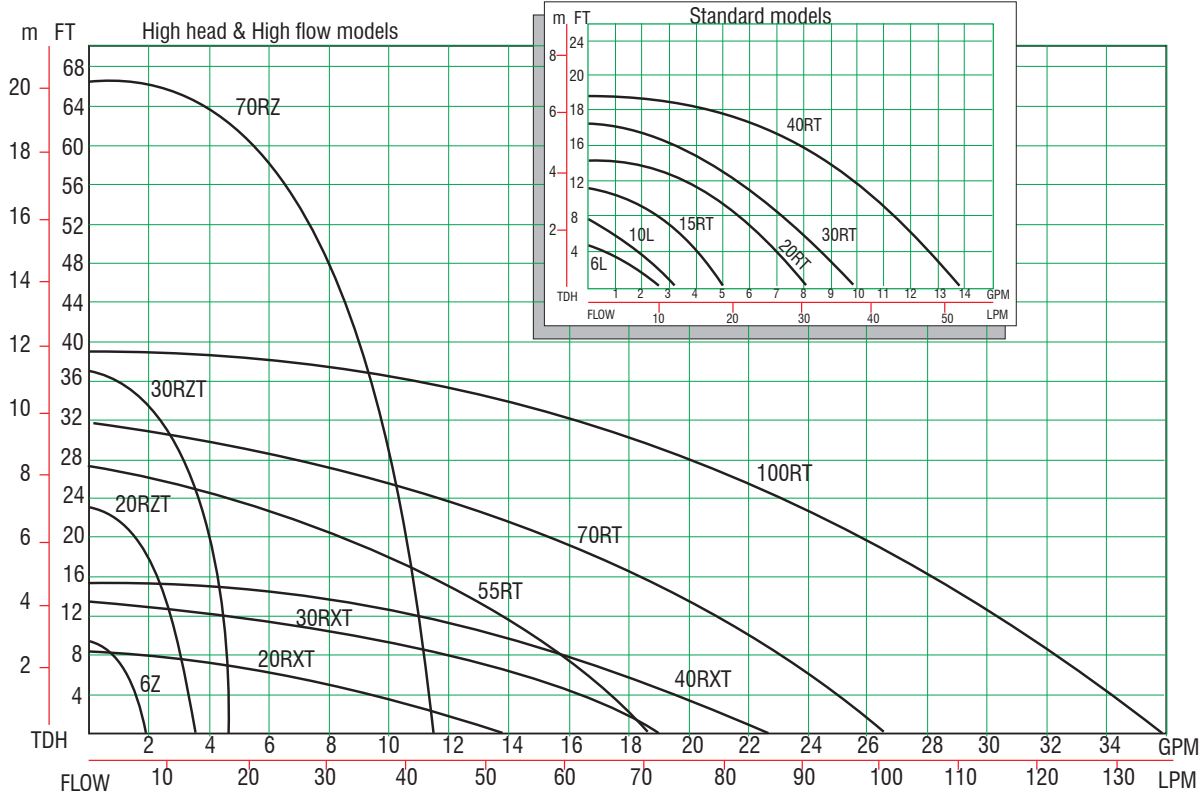
Pumps with "T" in the model number have NPT connections, models without "T" have hose barb connections.

GFRPP pumps rated to 80°C max. liquid temperature.

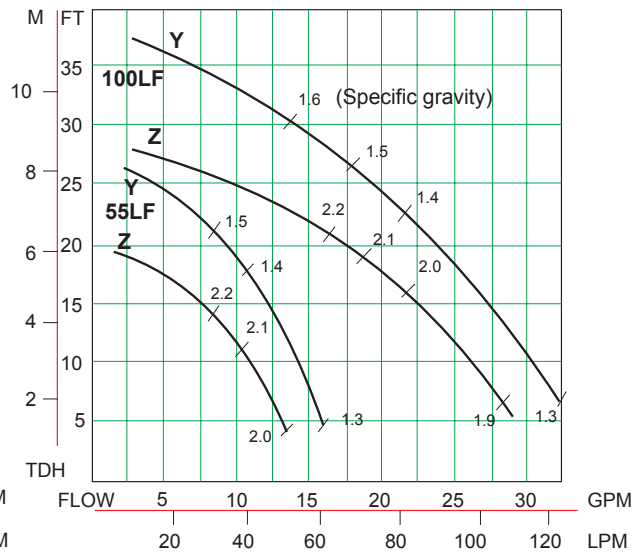
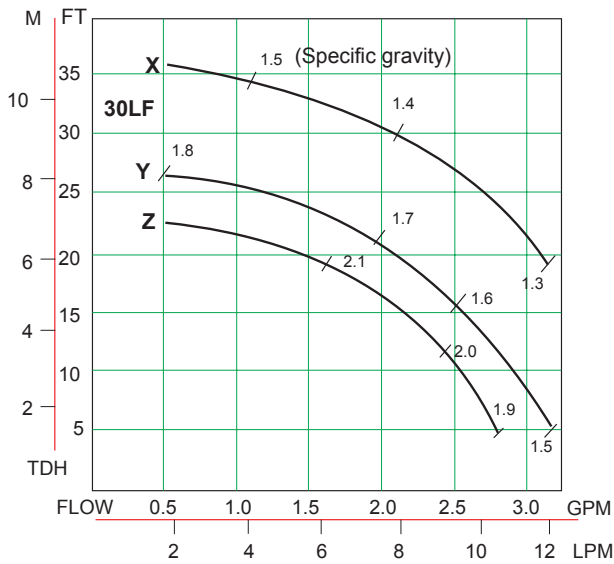
Metric threads available upon request. Please call Iwaki America for details.

Consult factory for available DC motor options.

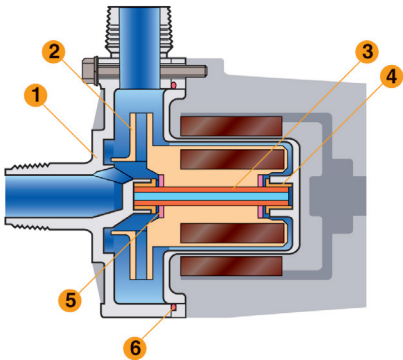
## Polypropylene Models



## Fluoroplastic Models



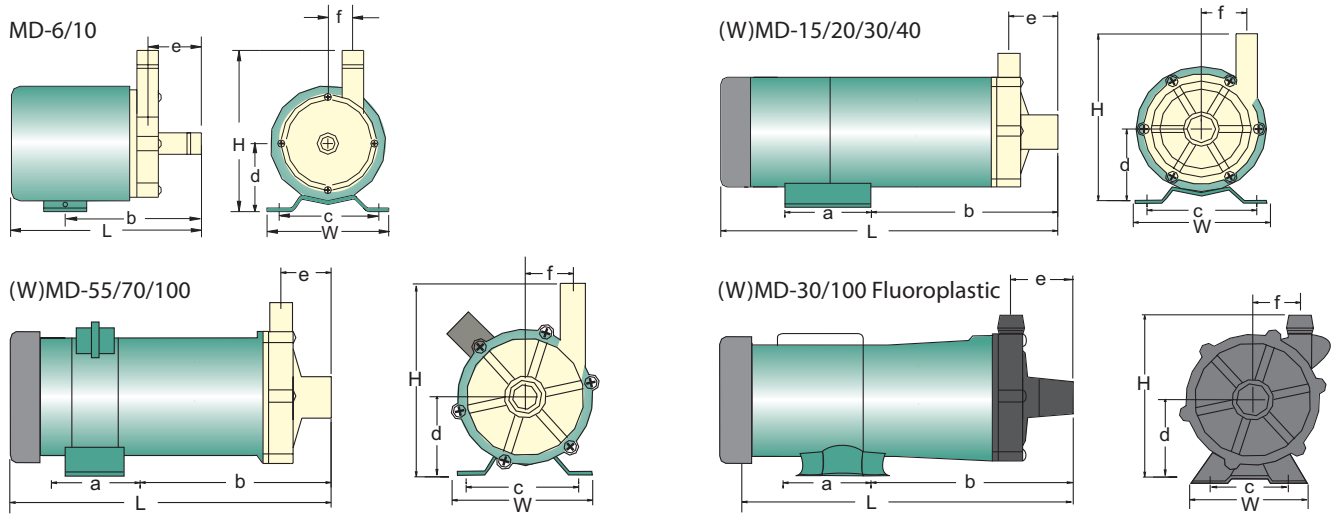
## Wet End Materials



	Part	Polypropylene	Fluoroplastic
1	Casing	GFRPP	CFRETFE
2	Impeller	GFRPP or CFRPP	CFRETFE
3	Spindle	Alumina Ceramic	Silicon carbide
4	Bearing	PTFE or PPS	Silicon carbide
5	Thrust ring	Alumina Ceramic or PE	Silicon carbide
6	O-ring*	FKM or EPDM	FKM

\* Other materials available upon request

## Dimensions



Model	Connections		W	H	L	a	b	c	d	e	f
	Hose	NPTM									
<b>POLYPROPYLENE (MD-115V shown)</b>											
MD-6/10	1/2	---	2.91	3.62	4.09	1.18	2.87	2.36	1.77	1.22	0.67
WMD-15R(T)	1/2	1/2	3.50	4.26	9.46	2.37	4.15	2.50	1.94	1.52	0.85
MD-15R(T)	1/2	1/2	3.74	4.39	7.05	1.97	4.59	3.35	2.17	1.52	0.85
WMD-20R(T)	5/8	3/4	3.50	4.35	9.70	2.37	4.39	2.50	1.94	1.30	1.12
MD-20R(T)	5/8	3/4	4.17	4.19	7.99	1.73	4.05	3.54	1.77	1.52	1.12
WMD-20RX(T)	1	1	3.50	4.95	10.37	2.37	5.06	2.50	1.94	1.83	40°
MD-20RX(T)	1	1	4.17	4.75	8.66	1.73	4.45	3.54	1.74	1.83	40°
WMD-20RZ(T)	5/8	3/4	3.50	4.70	9.98	2.37	4.67	2.50	1.94	1.56	1.52
MD-20RZ(T)	5/8	3/4	4.17	4.92	8.31	1.73	4.17	3.54	2.17	1.56	1.52
WMD-30R(T)	3/4	3/4	3.50	4.70	11.65	2.37	5.72	2.50	1.94	1.89	1.22
MD-30R(T)	3/4	3/4	4.72	5.12	9.76	1.57	5.87	3.94	2.36	1.89	1.22
WMD-30RX(T)	1	1	3.50	5.09	11.89	2.37	5.96	2.50	1.94	1.97	40°
MD-30RX(T)	1	1	4.72	5.51	10.00	1.57	6.10	3.94	2.36	1.97	40°
WMD-30RZ(T)	5/8	3/4	3.50	4.70	10.97	2.37	5.04	2.50	1.94	1.56	1.53
MD-30RZ(T)	5/8	3/4	4.72	5.12	9.05	1.57	5.16	3.94	2.36	1.56	1.53
WMD-40R(T)	3/4	3/4	4.38	4.84	11.34	3.09	6.66	3.37	2.08	1.89	1.22
MD-40R(T)	3/4	3/4	4.72	5.12	9.85	1.57	5.87	3.94	2.36	1.89	1.22
WMD-40RX(T)	1	1	4.38	5.23	11.30	3.09	7.02	3.37	2.08	1.97	43°
MD-40RX(T)	1	1	4.72	5.51	10.08	1.57	6.10	3.94	2.36	1.97	43°
MD-55R (T)	1	1	4.72	6.10	10.77	1.57	7.05	3.94	2.36	2.42	1.57
MD-70R(T)	1	1	5.63	6.11	10.18	2.76	5.71	4.25	2.56	2.07	1.70
MD-70RZ (T)	3/4	3/4	5.63	6.50	9.72	2.76	5.24	4.25	2.56	1.65	1.87
MD-100R(T)	1	1	6.14	6.89	12.67	2.76	6.38	4.33	2.95	2.55	1.71
WMD-100R(T)	1	1	*	7.44	*	3.00	10.43	4.87	3.50	2.55	1.71
<b>FLUOROPLASTIC (MD-115V shown)</b>											
WMD-30F(X,Y,Z)	---	1/2	3.50	5.02	11.82	2.37	6.67	2.62	2.29	1.84	1.22
MD-30(X,Y,Z)	---	1/2	4.72	5.12	9.09	1.57	6.77	3.94	2.36	1.53	1.52
MD-55F (Y,Z)	---	1	4.72	6.11	10.53	1.57	6.61	3.94	2.56	2.30	1.56
WMD-100F (Y,Z)	---	1	*	6.80	*	3.00	12.05	4.88	3.56	2.55	1.71
MD-100F (Y,Z)	---	1	6.14	6.89	12.67	2.76	6.38	4.33	2.95	2.55	1.71

\*Varies with motor manufacturer



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