

# **M** Series

Chemical Process Pumps

Sealless Corrosion Resistant Leak Free





#### **MDM Series**

#### **ANSI Dimensional for ease of installation**

MDM Series is an ANSI dimensional pump with flow rates to 400 GPM and TDH to 348 feet. Available in both ETFE Teflon® and virgin PFA for high purity applications. The MDM series options include an elevated temperature rating up to 302°F and solids handling up to 10%.

Robust ceramic/SiC shafts have front & rear support, eliminating shaft deflection and allowing full-curve operation

\* ANSI dimensional

Model	Connections Suction x Discharge 150# (inch)	Max. Head (ft)	Max. Capacity (GPM)	Motor HP
1516*	1½ x 1	117	60	2/3
1518*	1½ x 1	173	70	5 / 7.5 / 10
1518-2*	1½ x 1	348	120	7.5 / 10 / 15 / 20 / 25
2156	2 x 1½	131	150	5 / 7.5 / 10
2158	2 x 1½	329	160	7.5 / 10 / 15 / 20 / 25
2526	2½ x 2	155	250	5 / 7.5 / 10
326*	3 x 2	176	350	7.5 / 10 / 15 / 20 / 25
3158*	3 x 1.5	312	400	7.5 / 10 / 15 / 20 / 25 / 30 / 40 / 50
328*	3 x 2	323	400	7.5 / 10 / 15 / 20 / 25 / 30 / 40 / 50

### **MXM Series**

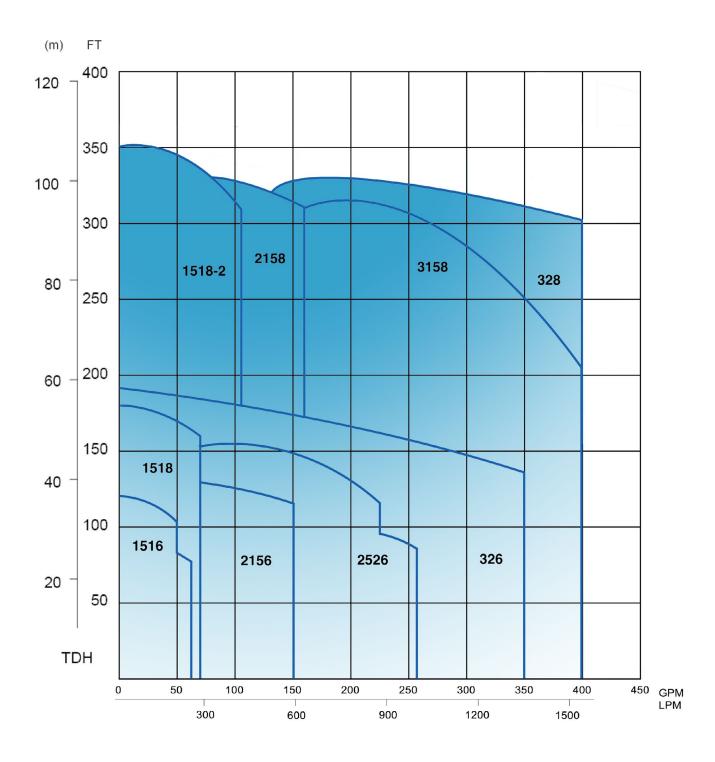
# Cost Effective, Sub ANSI Design for Lower Flow Applications

MXM Series is a compact, cost efficient option where applications fall below ANSI dimensional pumps. The MXM is rated to 160 GPM and TDH up to 142 feet. It comes standard with corrosive resistant ETFE Teflon® internals, 150# ANSI flanges and a back pull-out design for easy maintenance.

Model	Connection Size Suction x Discharge	Min. Flow (GPM)	Max. Head (ft)	Max. Capacity (GPM)	Motor/Frame
MXM-220_	1"x 1"	2.5	38	55	½ - 1 HP / 56C
MXM-221_		2.5	63	55	/2 - 1 HP / 30C
MXM-441_	1½"x 1½"	5.5	80	75	1 HP / 56C
MXM-442_		5.5	95	72	2 HP /145 TC
MXM-542_		5.5	96	115	2 HP/ 145 TC
MXM-543_	2.0" x 1½"	5.5	122	160	3 HP/ 182 TC
MXM-545_		13.2	142	160	5 HP/ 184 TC



# M Series Performance



## **MX-(F) Series**

# High efficiency volute design for improved pump efficiencies

#### 2-piece impeller/magnet design lowers parts costs

MX-(F) Series is available in both glass-filled reinforced polypropylene and ETFE Teflon®. It is rated to 225 GPM and TDH to 126 feet. Male by male NPT connections and NEMA-C-faced motors make the MX series incredibly easy to install and operate.

MX Model		el	Suction x Discharge (NPT)	Max Head (ft)	Max. Flow (GPM)	Motor Output @ 60 Hz (HP)
	250		1"x 1"	53	40	0.5
	251		1"x 1"	75	40	1.0
	400	6	1.5" x 1.5"	38	70	0.75
נה		7	1.5" x 1.5"	43	70	0.75
/len	401	6	1.5" x 1.5"	59	80	1.5
Polypropylene		7	1.5" x 1.5"	68	80	1.5
olyp	402		2" x 1.5"	73	107	2
Δ.	402H		2" x 1.5"	99	45	2
	403		2" x 1.5"	101	130	3
	403H		2" x 1.5"	126	70	3
	505*		2.5" x 2"	86	225	5
	F250		1"x 1"	48	43	0.5
	F251		1"x 1"	69	40	1
	F400	٧	1.5" x 1.5"	43	65	0.75
Teflon®		Х	1.5" x 1.5"	34	65	0.75
Teff	F401	٧	1.5" x 1.5"	68	86	1.5
		Х	1.5" x 1.5"	50	75	1.5
	F402		2" x 1.5"	70	120	2
	F403		2" x 1.5"	93	130	3



series

\* Flange only

## **SMX-(F) Series**

### **Self-priming**

SMX-(F) Series is a self-priming compact pump that is capable of lifting up to 13 feet of fluid in under 90 seconds. Available in 10 different flow configurations, this polypropylene or ETFE Teflon® pump produces flows over 130 GPM and TDH up to 120 feet.

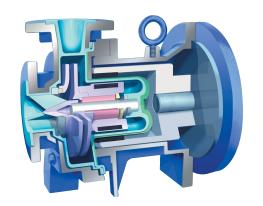
SMX Model	Connections Suction x Discharge	Impeller Code	Max Capacity (GPM)	Max Head (ft)	Motor (HP)
(F)220	1 x 1	Y	25	35	1/2
(F)221	1 x 1	Х	45	60	1
(F)221	1 x 1	Y	34	35	1
(F)222	1 x 1	Х	45	60	2
(F)441	1½ x 1½	Υ	74	49	1
(F)442	1½ x 1½	Х	90	84	2
(F)443	1½ x 1½	Х	90	84	3
(F)543	2 x 1½	Z	110	96	3
(F)545	2 x 1½	Y	132	112	5
(F)545	2 x 1½	Х	132	119	5

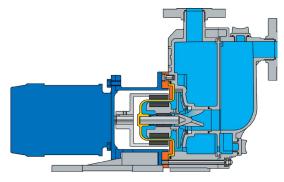




# M Series Dry-Run Capable Pumps

Iwaki America is proud to offer our M Series pumps for your toughest chemical handling applications. All Non-Metallic Series pumps feature our non-contact, dry-run capable structure. When fitted with a carbon bearing, the M Series allows for periods of repeatable dry running with no damage to the pump. This proven non-contact principle also greatly improves the ability to withstand cavitation, poor suction conditions and running against a closed discharge valve. During adverse operating conditions, the M Series high strength magnets align to open contact points in the front or rear of the pump preventing damage to internal bearing surfaces and surrounding materials.







# INDUSTRY APPLICATIONS

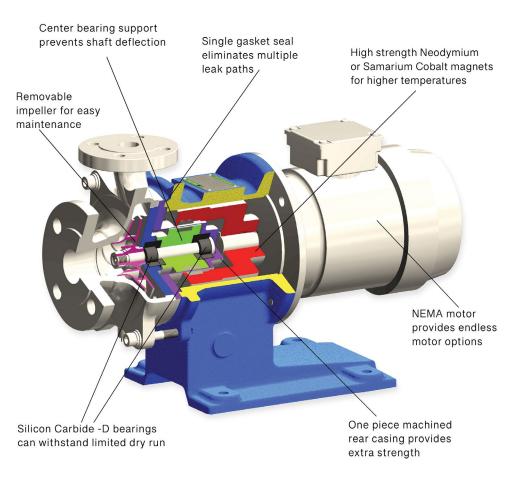
- Battery Manufacturing
  Water Treatment
  Mining
- Desalination Pulp + Paper Chemical Transfer Filling/Toting Ethanol
  - Semiconductor Plating Bio-Fuels Sulfuric Acid Ammonia
    - Bleach Caustic Soda Hydrochloric Acid Nitric Acid

# Iwaki Sanwa Metallic Sealless Pumps

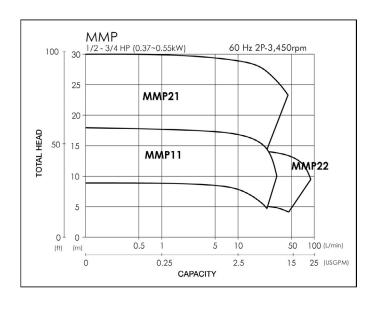
With flows rates to 340 GPM and TDH over 390 ft. this series of 316 Stainless Steel pumps provides incredible performance in a small powerful package. Capable of handling temperatures from negative -112\* to 536\* F the Iwaki Sanwa line of pumps is perfect for high and low temperature applications.

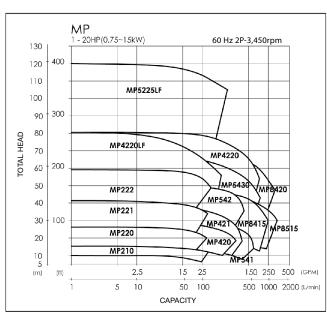






#### **Curves**





# **Metering Pumps**

Iwaki America offers two series of metering pumps for industrial applications. The IX series of pumps feature flow rates to 80 GPH with pressure to 250 PSI. This intuitive pump adjusts to process conditions via a pulse or analog input. It's microprocessor control also allows for timed or batched metering. The LKN series features flows to 114 GPH and pressure to 225 PSI. Multiple liquid end material choices along with motor voltage/service options make the LKN series ideal for the toughest chemical application.

### **IX Series**



Model	Capacity (GPH)	Max Pressure (PSI)	Connection	Material Options	
IX-B007	2.0	250	3/8" OD Tube or 1/2" NPT		
IX-B015	4.0	150	3/8" OD Tube or 1/2" NPT		
IX-B030	7.9	87	1/2" OD Tube or 1/2" NPT	PVDF or Stainless Steel	
IX-B045	11.9	58	1/2" OD Tube or 1/2" NPT		
IX-C060	15.6	145	1/2" NPT	Stairliess Steel	
IX-C150	39.6	58	3/4" NPT		
IX-D150	39.6	145	3/4" NPT		
IX-D300	79.2	73	1"NPT		

	Model	Capacity*	Max Pressure (PSI)		Stroke Speed	Connection
		GPH	PVC/PVDF	SS	SPM	NPT
	LKN32	9.5	150	225	116	1/2"
	LKN45	15.9	150	225	58	1/2"
	LKN47	31.8	120	120	116	1/2″**
	LKN55	53.4	75	75	58	1"
	LKN57	114.3	45	45	116	1"

<sup>\*</sup> Capacities listed are at Max. pressure. \*\* LKN47 with VS liquid end has 1" NPT connections



### **LKN Series**

## **Accessories**

### **Power Monitor (DRN)**

Iwaki DRN monitors the input power to the pump. Capable of detecting both over-load and under-load conditions, the monitor offers protection from off-design conditions such as; dry running, dead head, end of curve, cavitation and excessive bearing wear.



### **Non-Metallic Baseplates**

Corrosion resistant Basetek® polymer concrete non-metallic bases are available for all M-Series products. Bases use stainless steel inserts as a standard and are available with optional grout holes, and drip pan. These non-metallic bases are designed to accommodate all of our close-coupled designs and complement the rugged quality and corrosion resistance of our M-Series products.



### **Variable Frequency Drive**

The Baldor ACS Drives feature eay-to-use, plain language interfaces and control routines to support UL Type 1 and Type 12 applications at 230V, 460V and 600V. The ACS Drive uses a traditional inverter V/Hz control or sensorless vector control to cover a wide variety of applications. At power-up, a start-up assistant quickly and easily guides the user through the first time setup of the drive.



