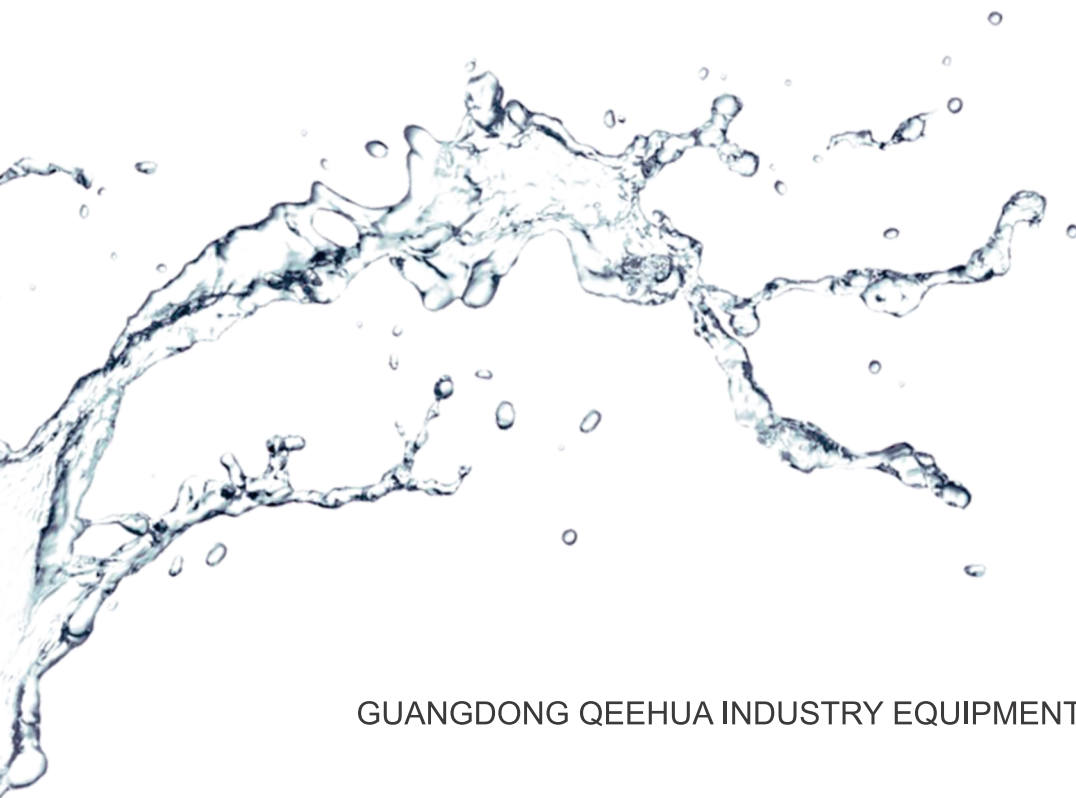




MDH Series Corrosion-Resistant Magnetic Drive Pumps

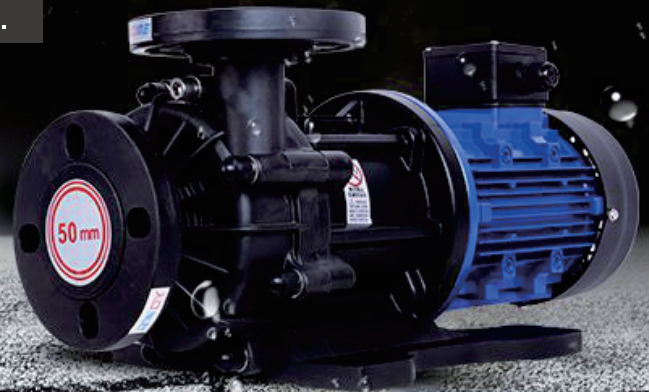
Exceptional Corrosion Resistance

**High Performance, High Cost-effective,
Customizable, Increased Service Life**



High Flow Magnetic Drive Pump

No shaft seal design, and no risk of leakage.

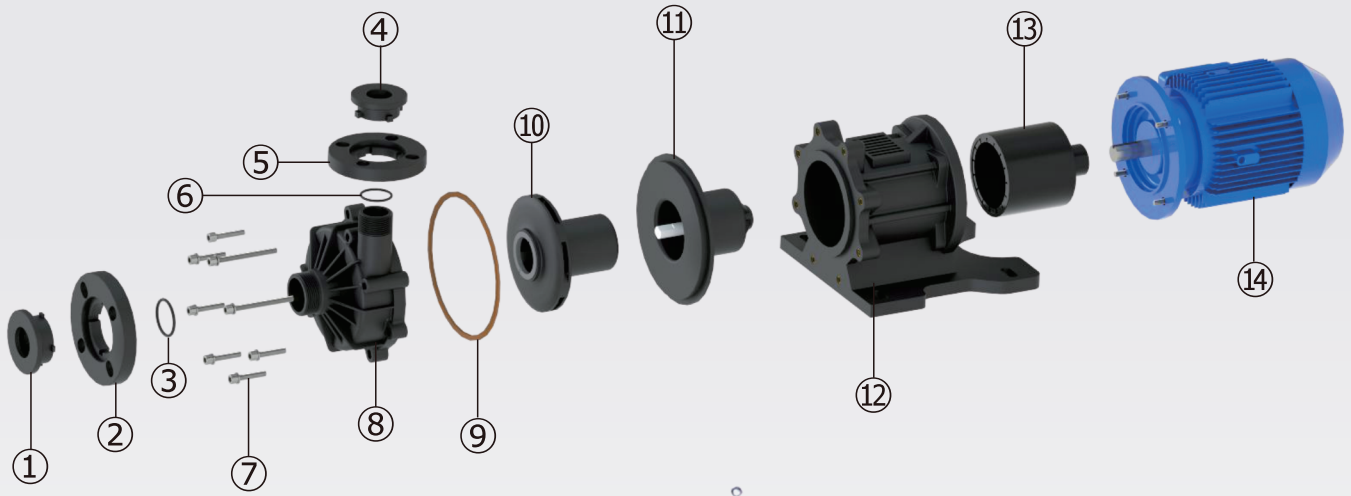


Series Models — 50Hz — 60Hz

Main Material	Models	Maximum flow rate (L/min)						Maximum head(m)				Specification Applicable Reference Specific Gravity Range
		200	400	600	800	1000	1200	10	20	30	40	
PPH/PVDF/CFR/ETFE	MDH-250	— 100 — 100						— 16 — 17				<1.2
	MDH-251	— 125 — 125						— 22 — 24				
	MDH -440	— 230 — 200						— 13 — 12				
	MDH -441	— 233 — 250						— 16.5 — 18				
	MDH -452	— 366 — 366						— 22 — 22				
	MDH-453	— 433 — 450						— 23.5 — 25				
	MDH-455	— 466 — 533						— 26.5 — 32.5				
	MDH-552	— 441 — 465						— 24.5 — 22				
	MDH -553	— 533 — 563						— 25 — 26.5				
	MDH -555	— 600 — 666						— 27 — 32.5				
	MDH-563	— 600 — 600						— 17 — 17.5				
	MDH-565	— 700 — 700						— 24 — 25				
	MDH-663	— 625 — 635						— 13.5 — 17				
	MDH-665	— 750 — 708						— 20.5 — 20.5				

- Medium Temperature: -10°C to +120°C, Medium Specific Gravity: 1 to 2, Operating Environment Temperature: -5°C to +50°C, Maximum Operating Altitude: 2,000 meters, Maximum Working Pressure: 5 Bar
- Testing Basis: The above performance specifications apply to water at 25°C/77°F conveyed at a normal speed. A performance tolerance of +5% exists. Pump performance may vary depending on the specific gravity and temperature of the process fluid being handled.

MDH Series Exploded View Diagram



1. Inlet Flange Connector: PPH/PVDF/CFRETFE
2. Inlet Flange: GFRPP
3. Inlet Sealing O-Ring: EPDM/FKM/FFKM
4. Outlet Flange Connector: PPH/PVDF/CFRETFE
5. Outlet Flange: GFRPP
6. Outlet Sealing O-Ring: EPDM/FKM/FFKM
7. Fastening Screws: SUS304/SUS316/Ti

- * 8. Front Cover: Features a double-lip seal structure design. The connection type can be selected as flange, union or thread depending on different application requirements.
- * 9. Front and Rear Cover Sealing O-Rings: FKM is suitable for acidic chemicals and solvents. EPDM is suitable for alkaline chemicals and weak acids. FFKM can be optionally selected for any strong acids & alkalis and solvents.
- * 10. Impeller Assembly: Composed of an impeller + inner magnet (passive magnet). The inner magnet is integrally injection molded with encapsulation to ensure no leakage, no explosion, and a long service life. The impeller is scientifically designed, with deflection less than 0.2mm, to guarantee stability of flow rate and head pressure output. This can also avoid the problem of leakage because the impeller deflection is too large, resulting in the wear and deflection of the shaft and the sleeve leading to the rear cover being worn through.
- * 11. Rear Cover Assembly: Features a double-lip seal structure design. The rear cover material is PPH/PVDF/CFRETFE.
- 12. Baseplate: Integrally injection molded from PP + glass fiber for increased corrosion resistance and higher support strength, preventing corrosion of the fixing base by chemicals.
- 13. Drive Magnet: Vibration of the drive magnet is below 2.0mm/s. Rare earth strong magnet is used, non-demagnetizing, with a resin baking surface coating process to ensure extremely strong anti-corrosion performance.
- 14. Motor

· Note: Items marked with "*" are Wearing Parts.

Product Features

Stringent material selection and quality control processes are implemented throughout manufacturing. The product stability reaches the international first-class level

Non-explosive magnet patent: Ten years of experience and innovative injection molding technology help to prevent the inner magnet from cracking due to corrosive liquid penetration.

It can be equipped with intelligent protection devices to achieve anti-dry running, anti-overload, anti-phase loss, and improve product service life.



Model Description

MDH - F - 45 - 3 - C - C - V - 5 - V38 - A - F - A - A - S
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭

- ① Model No. : MDH
- ② Pump Material: F-PPH; P-PVDF; E-CFRETFE
- ③ Outlet calibre: 25-25*25mm; 44-40*40mm; 45-40*50mm; 55-50*50mm; 56-50*65mm; 66-65*65mm
- ④ Horsepower(HP): 0-1/2HP; 1-1HP; 2-2HP; 3-3HP; 5-5HP
- ⑤ Pump Shaft Material: C - Ceramic; S - SSIC; T - Titanium
- ⑥ Bearing Material: C - Carbon; S - SSIC; P - PTFE
- ⑦ Seal material: E-EPDM; V-FKM; F-FFKM
- ⑧ Frequency: 5-50Hz; 6-60Hz
- ⑨ Voltage: V38-3Ø/380V; V41-3Ø/415V; V44-3Ø/440V; V48-3Ø/480V; V66-3Ø/660V; V32-3Ø/220V; V22-1Ø/220V
- ⑩ Specific Gravity: A-1.0-1.2; B-1.3; C-1.4; D-1.5; E-1.6; F-1.7; G-1.8; H-1.9; I-2.0
- ⑪ Connection Options: F-Flange; U-Union; S-Screw
- ⑫ Motor Options: A-IE3 Standard Efficiency Motor; B- IE4 Standard Efficiency Motor; C-IE5 Standard Efficiency Motor; D - Variable frequency motor; E - IE3, BT4 explosion-proof motor; F - IE4, BT4 explosion-proof motor; G - IE5, BT4 explosion-proof motor; H - IE3, CT4 explosion-proof motor; I - IE4, CT4 explosion-proof motor; J - IE5, CT4 explosion-proof motor; K - Permanent-magnet variable frequency motor; L - BT4 explosion-proof variable frequency motor; M - CT4 explosion-proof variable frequency motor
- ⑬ Motor Protection Class: A-IP54; B-IP55; C-IP56; D-IP65
- ⑭ S-Standard; N-Non-Standard

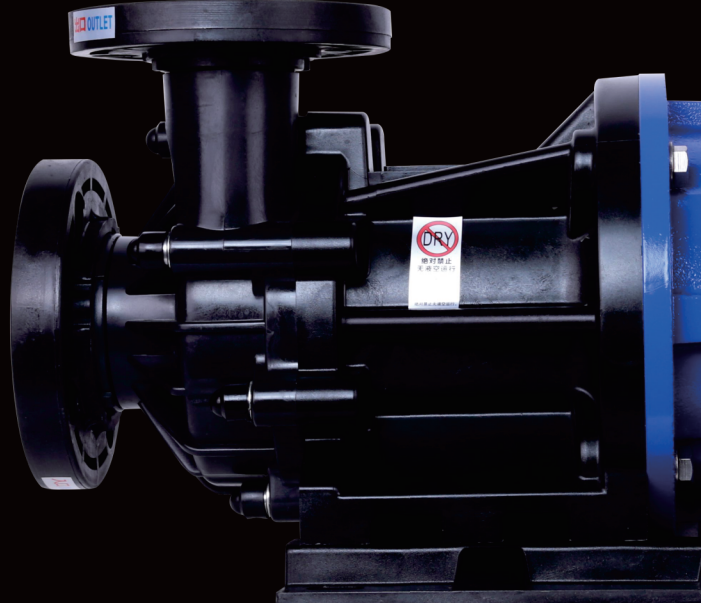
Product Specification Sheet

Model Number	Inlet/Outlet (mm)	Maximum Flow				Maximum Head		Specification Applicable Reference Specific Gravity Range	Power		Weight (kg)
		50Hz		60Hz		50Hz	60Hz		HP	KW	
		(L/min)	(m³/h)	(L/min)	(m³/h)						
MDH-250	25/25	100	6.0	100	6.0	16.0	17.0	<1.2	0.5	0.37	11.7
MDH-251	25/25	125	7.5	125	7.5	22.0	24.0	<1.2	1	0.75	15.6
MDH-440	40/40	230	13.8	200	12.0	13.0	12.0	<1.2	0.5	0.37	12
MDH-441	40/40	233	14.0	250	15.0	16.5	18.0	<1.2	1	0.75	17.8
MDH-452	50/40	366	22.0	366	22.0	22.0	22.0	<1.2	2	1.5	29.2
MDH-453	50/40	433	26.0	450	27.0	23.5	25.0	<1.2	3	2.2	29.5
MDH-455	50/40	466	28.0	533	32.0	26.5	32.5	<1.2	5	4	29.4
MDH-552	50/50	441	26.5	465	27.9	24.5	22.0	<1.2	2	1.5	29.7
MDH-553	50/50	533	32.0	563	33.8	25.0	26.5	<1.2	3	2.2	44.8
MDH-555	50/50	600	36.0	666	40.0	27.0	32.5	<1.2	5	4	45.4
MDH-563	65/50	600	36.0	600	36.0	17.0	17.5	<1.2	3	2.2	29.4
MDH-565	65/50	700	42.0	700	42.0	24.0	25.0	<1.2	5	4	45
MDH-663	65/65	625	37.5	635	37.5	13.5	17.0	<1.2	3	2.2	29.7
MDH-665	65/65	750	45.0	708	42.5	20.5	20.5	<1.2	5	4	45.5

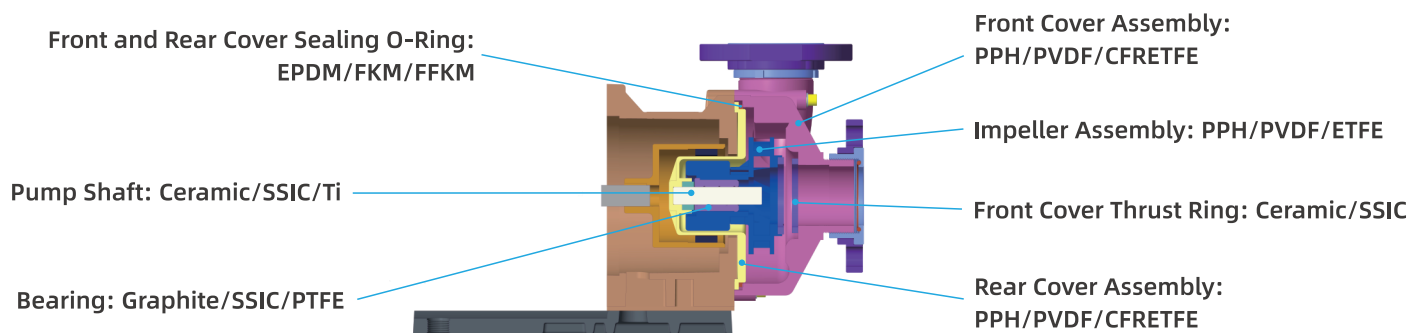
• Medium Temperature: -10°C to +120°C, Medium Specific Gravity: 1 to 2, Operating Environment Temperature: -5°C to +50°C, Maximum Operating Altitude: 2,000 meters, Maximum Working Pressure: 5 Bar
 • Testing Basis: The above performance specifications apply to water at 25°C/77°F conveyed at a normal speed. A performance tolerance of +5% exists. Pump performance may vary depending on the specific gravity and temperature of the process fluid being handled.

MDH - 250/251/440/441/452/453/455 552/553/555/563/565/663/665

- Maximum flow rate: 100-750L/min
- Maximum head: 12-32.5m

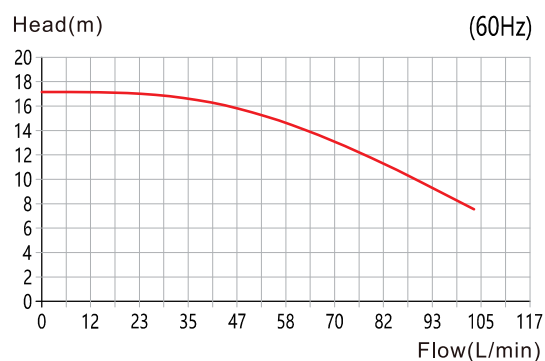
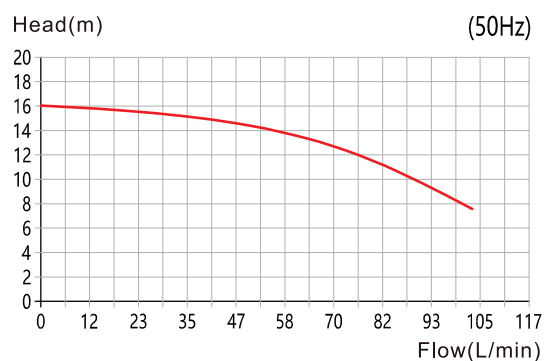


Structural drawings and materials

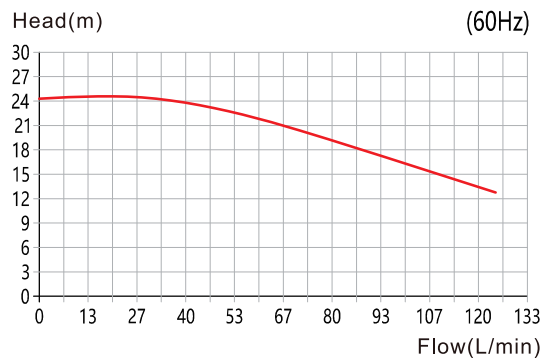
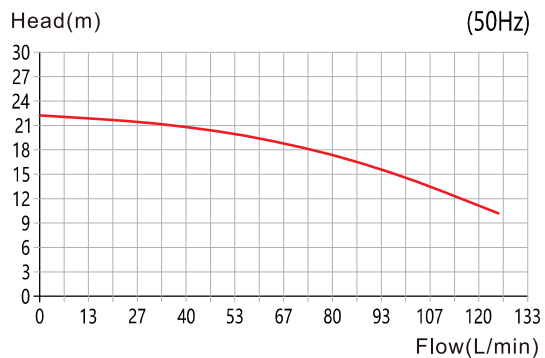


Performance Curve

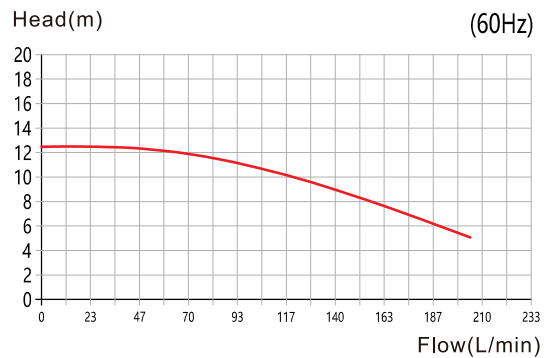
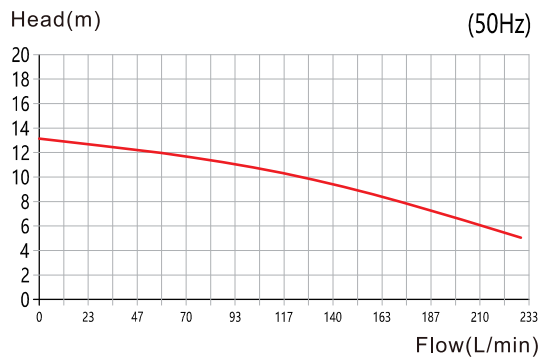
MDH-250 Performance Curve



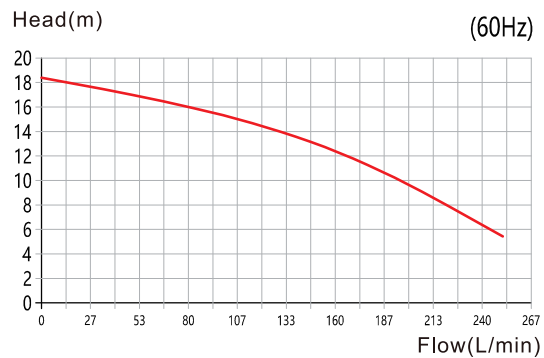
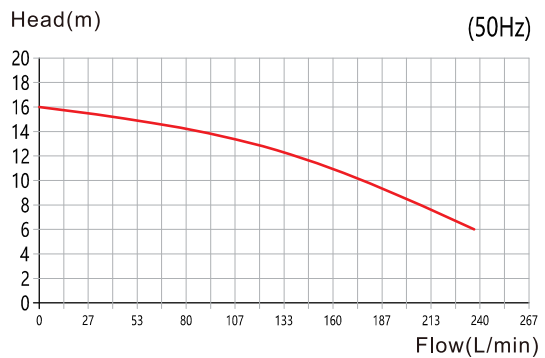
MDH-251 Performance Curve



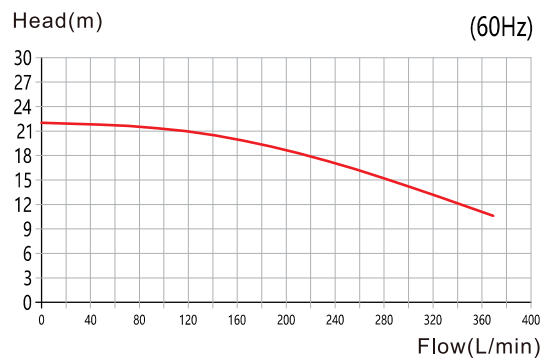
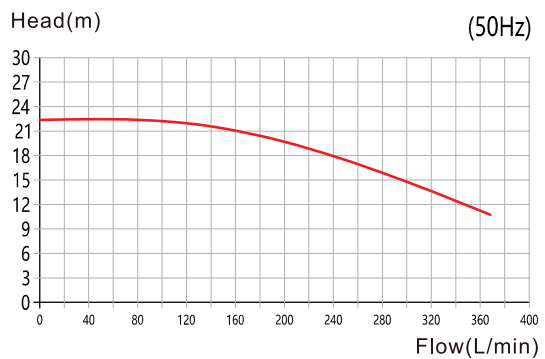
MDH-440 Performance Curve



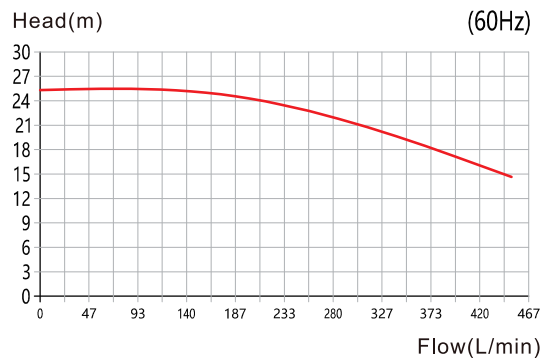
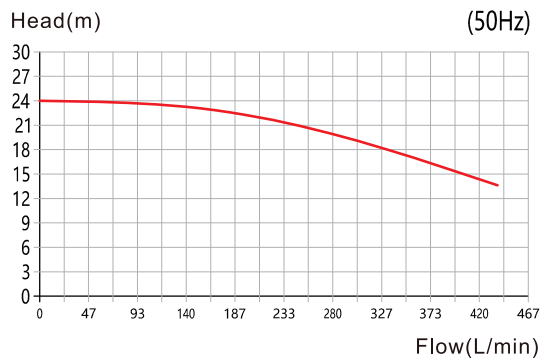
MDH-441 Performance Curve



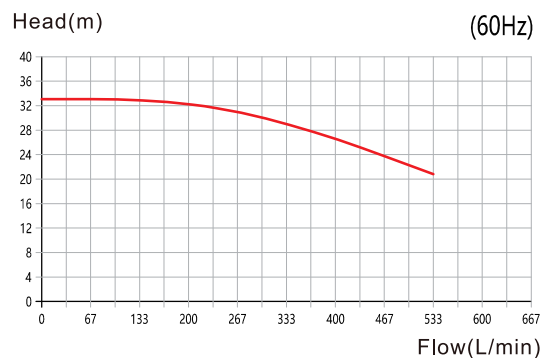
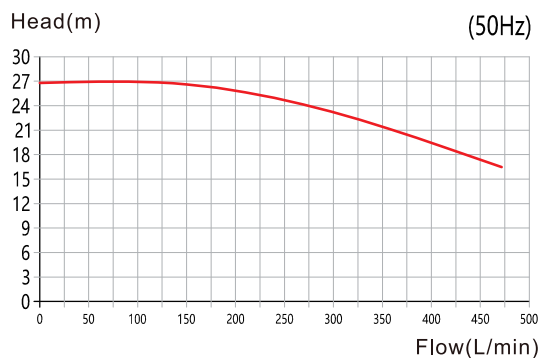
MDH-452 Performance Curve



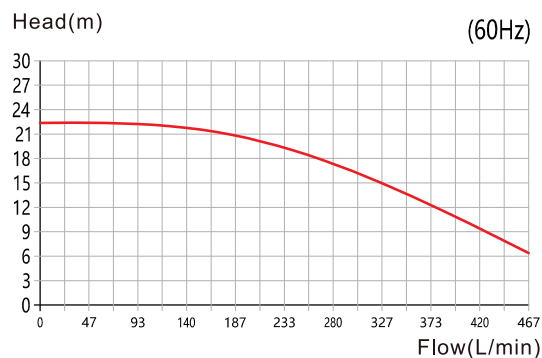
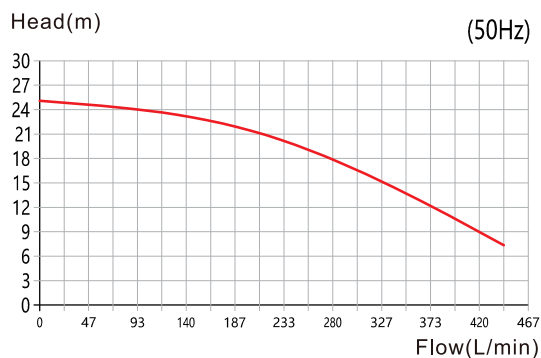
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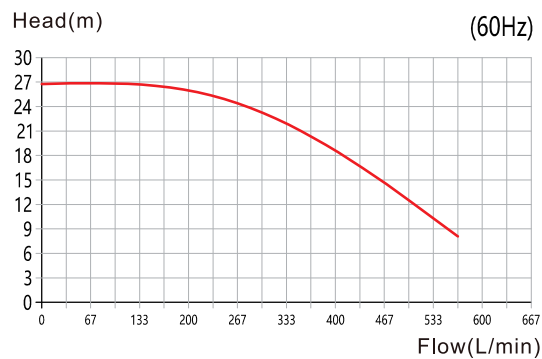
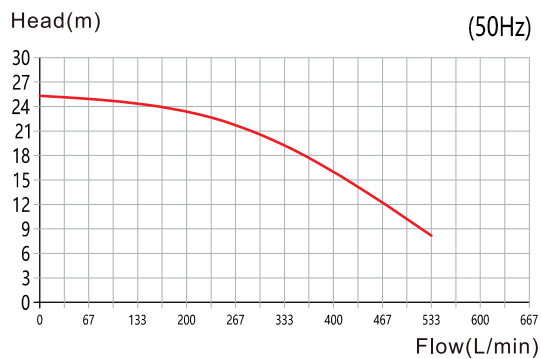
MDH-455 Performance Curve



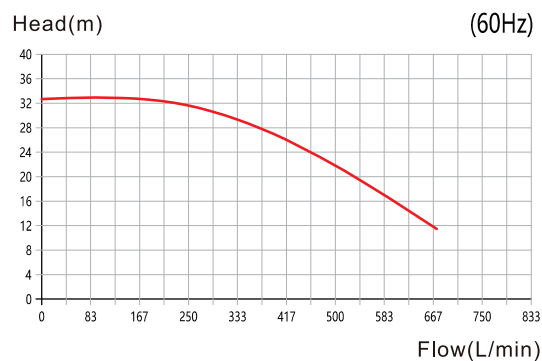
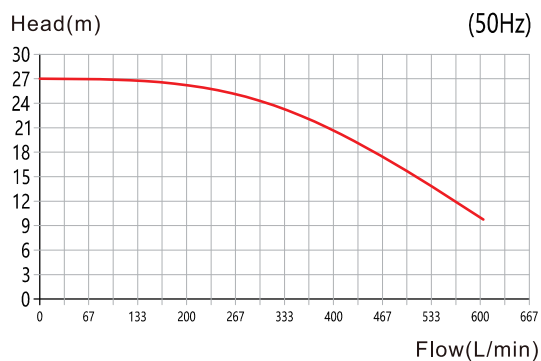
MDH-552 Performance Curve



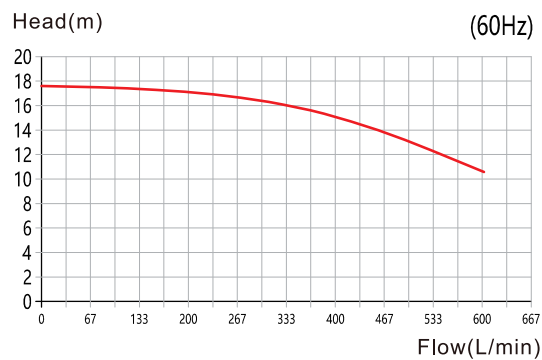
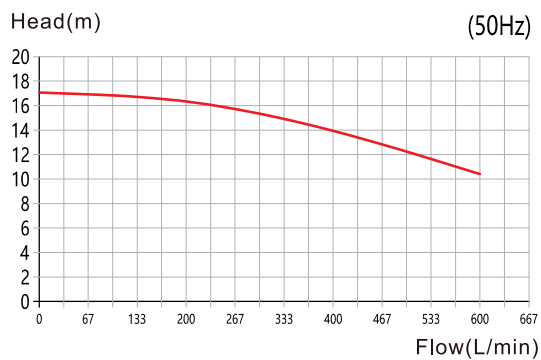
MDH-553 Performance Curve



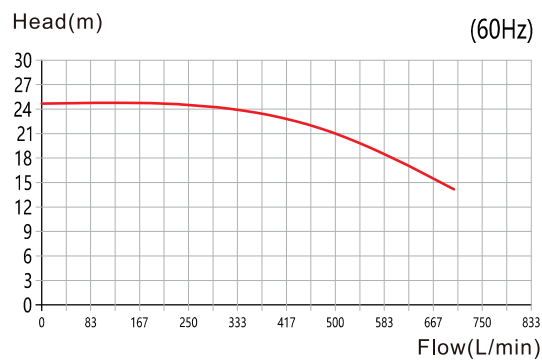
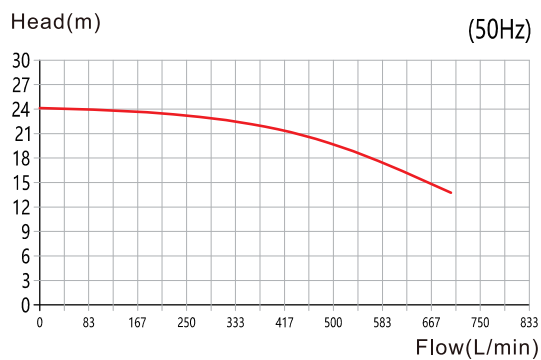
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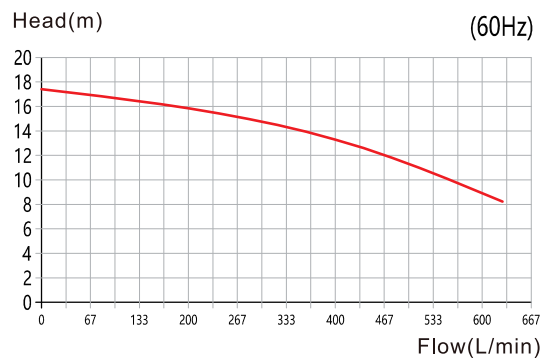
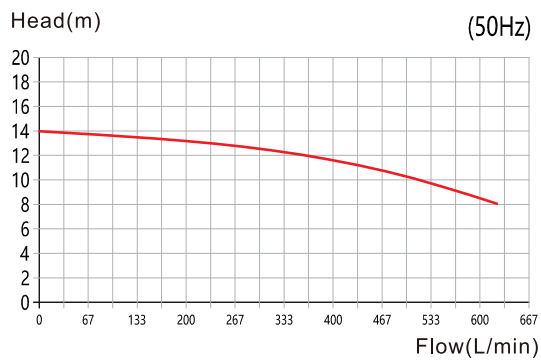
MDH-563 Performance Curve



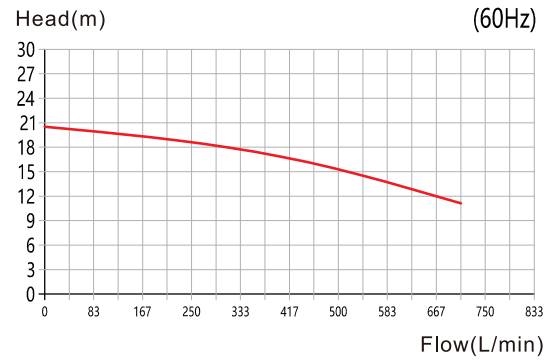
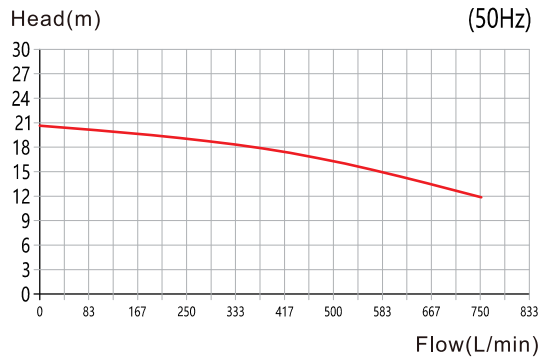
MDH-565 Performance Curve



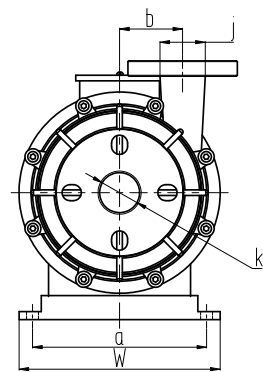
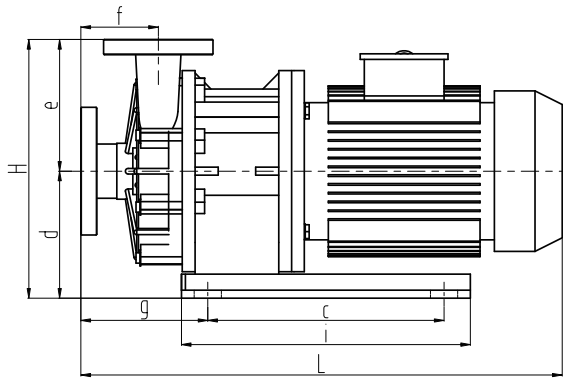
MDH-663 Performance Curve



MDH-665 Performance Curve



Dimensions

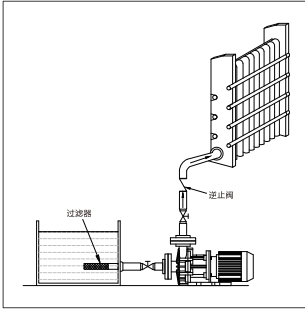


Model	L	H	W	a	b	c	d	e	f	g	i	j	k	Weight (kg)
MDH-250	436	257	192	146	66	133	117	140	90	166	206	Ø21	Ø21	11.7
MDH-251	459	254	193	128	66	131	114	140	90	160	215	Ø21	Ø21	15.6
MDH-440	434	223.5	140	111	50	80	97.5	126	90.5	160	134	Ø36	Ø36	12
MDH-441	524	256.5	162	132.5	55	132	115	141.5	106.5	182	199	Ø36	Ø36	17.8
MDH-542	575	259	267	210	65	203	114	145	95	160	270	Ø36	Ø45	29.2
MDH-543	575	259	267	210	65	203	114	145	95	160	270	Ø36	Ø45	29.5
MDH-552	575	259	267	210	65	203	114	145	95	160	270	Ø36	Ø45	29.4
MDH-553	575	259	267	210	65	203	114	145	95	160	270	Ø36	Ø45	29.7
MDH-545	635	280	260	228	65	272	135.5	144.5	95	150	325	Ø36	Ø45	44.8
MDH-555	635	280	260	228	65	272	135.5	144.5	95	150	325	Ø36	Ø45	45.4
MDH-653	589	272	268	211	65	204	114.5	157.5	113	175	271	Ø50	Ø66	29.4
MDH-655	649	295	260	228	65	272	137	158	111.5	168	325	Ø50	Ø66	45
MDH-663	560	291	262	208	80	200	121	170	96	182	275	Ø66	Ø66	29.7
MDH-665	617	330	252	218	80	295	162.5	167.5	97	174	363	Ø66	Ø66	45.5

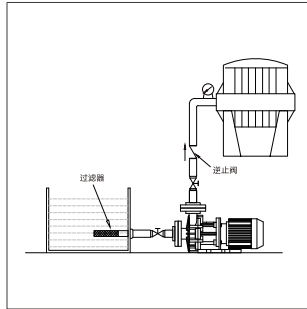
● Note: This is the dimensions of the PPH material pump.

Installation Diagram

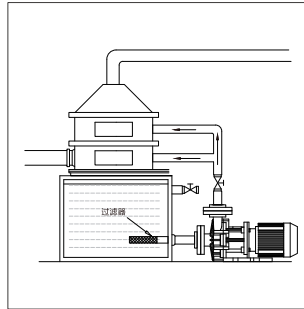
For heat exchangers



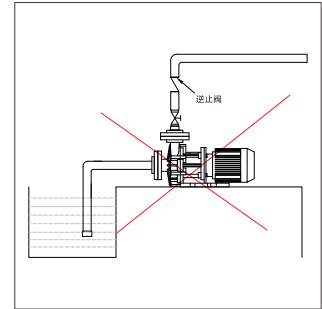
Reaction tanks or filter compressors



For equipment lines or exhaust gas cleaning towers



Warning of incorrect use



Safety Precautions

Safety Warning!

1. There is risk of electrical shock if operated without power being isolated.
2. Do not operate pump unless it is properly grounded and equipped with leakage protection.
3. Only qualified personnel should perform electrical work.
4. Wear appropriate protective equipment when handling chemicals to prevent injury from hazardous fluids.
5. Toxic substances handled by the pump may cause poisoning.
6. Operate pump only as intended and within specified operating conditions.
7. Motor and pump surfaces will be very hot during operation - avoid direct contact.
8. Unauthorized modifications to the pump are prohibited and may result in serious accidents. The manufacturer accepts no liability for damage caused by non-approved or non-written specifications modifications.
9. The magnetic drive pump contains strong magnets. Its powerful magnetic field may significantly impact individuals wearing electronic devices such as pacemakers.

Important note!

1. Do not operate the pump without liquid. Running the pump dry will cause the pump components to rub against each other and overheat, which will damage the pump. (Operating the pump with the suction valve fully closed is also considered dry running.)
2. Immediately stop operation if any abnormality or hazard is detected and resolve any issues found before restarting.
3. Only qualified personnel should operate the pump.
4. Only operate the pump within the specified voltage range; operation outside this may damage the pump or cause fire.
5. The pump location should have protections against fluid splashing or leaks.
6. Toxic substances handled by the pump may cause poisoning; ensure adequate ventilation.
7. Do not forcefully scrape, damage, squeeze or stretch electrical cables. Damaged cables can cause fire or electrical shock.
8. Enclosed pumps can cause fire or mechanical failure due to heat buildup during operation.
9. When maintenance is being performed on the pump, take precautions to prevent other operators from accidentally energizing it. Place a warning sign by the power switch to indicate maintenance is in progress.
10. Fluids discharged from the pump may contain toxic or hazardous chemicals and must be directed safely to approved storage containers.