



The Heart of Industry

IWAKI

IWAKI
MAGNETIC
DRIVE
PUMPS

MX



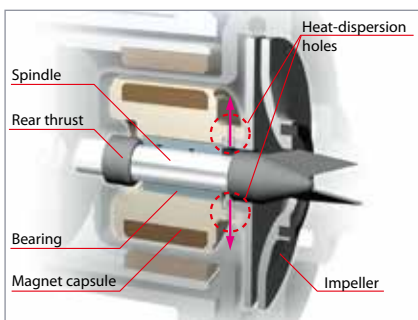
Solutions for chemical handling applications

Even better dry-running resistance Iwaki MX magnetic



Self-radiating structure

Through heat-dispersion holes provided in the fixed portions of the impeller and the magnet capsule, liquid is circulated under pressure between the spindle and bearing to reduce friction heat transmission and prevent thermal deformation.



Non-contact structure

The drive magnet and driven magnet are carefully positioned so that their strong magnetic field limits rear thrust contact of the magnet capsule parts, even during dry running. As a result, heat generation is greatly reduced and liquid circulation is maintained. (Except MX-70, 100)

Volute casing divided into two sections

The MX series is the first resin magnet pump which uses the pump casing divided into the front casing and the rear casing to form a vortex chamber as an ideal form. Therefore, internal leakage is kept to a minimum and overall hydraulic efficiency is enhanced.

(Except MX-70, 400, 505)

Robust structure

All stress bearing portions, such as the front and rear casings, are reinforced by means of ribs to improve the pressure resistance and the mechanical strength of the pump.

The bearing is not only fixed by conventional press fit but is also sandwiched between the abutting portion in the depth of the magnet capsule and the rear end of the impeller to improve its reliability under high temperature.

(Except MX-70, 100)

MX-402(H), 403(H) and 505 models: an unplugging preventive lock pin is adopted for ensuring more steady securing.



Front casing



Rear casing

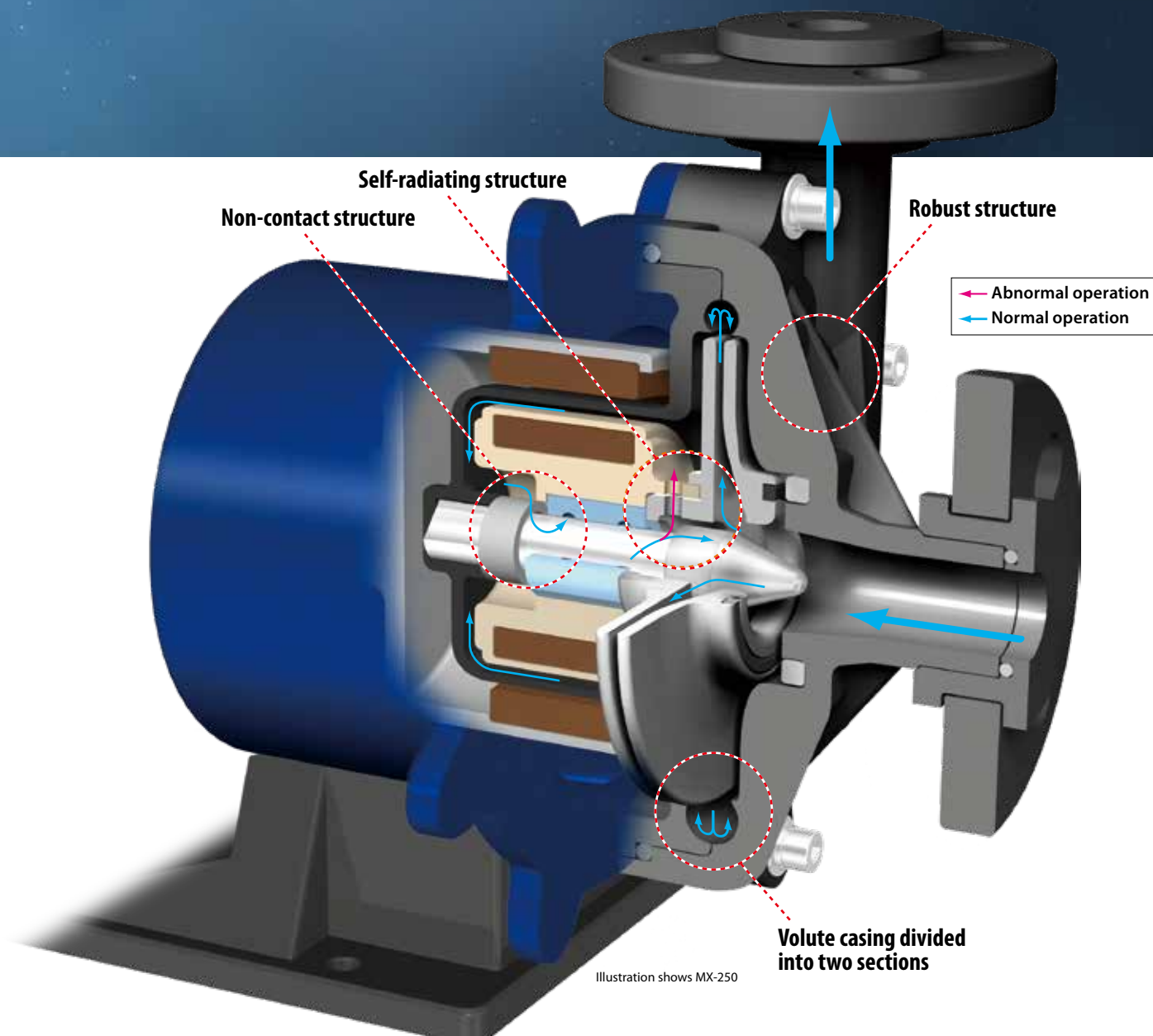


Front casing of type 100 and 402/403

nce and efficiency than previous models. drive pumps - reliable & energy efficient.

The MX Series represents the latest state of the art design in plastic magnetic drive pumps to meet the most severe of operating conditions. When fitted with a carbon bearing the MX will allow for brief periods of dry running. The new "self radiating structure" in addition to the existing proven non contact principle and front and rear supported spindle greatly improves the pumps ability to withstand some cavitation and running against closed discharge valve. Our innovative design has achieved higher efficiency. MX series pumps are highly recommended for use in various production processes such as filtering, spraying, washing and etching in surface treatment processes.

- An improved mechanical strength design allows operation under abnormal conditions and results in reduction of running cost and maintenance cost.
- The split-volute casing significantly improves efficiency over previous versions.
- Simple yet robust construction allows easy maintenance.
- Enhanced intake features and pump efficiency (MX-505)
- Lap joint construction



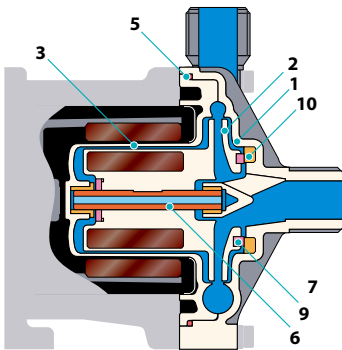


MX-505

MX-403

Wet end materials

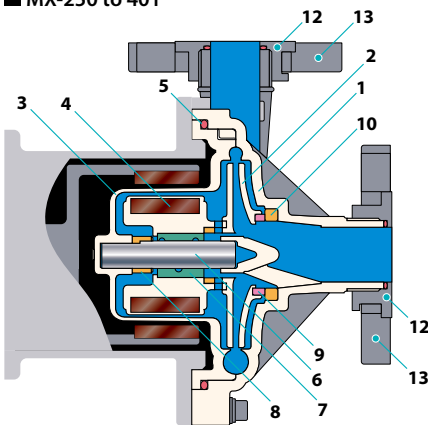
■ MX-70,100



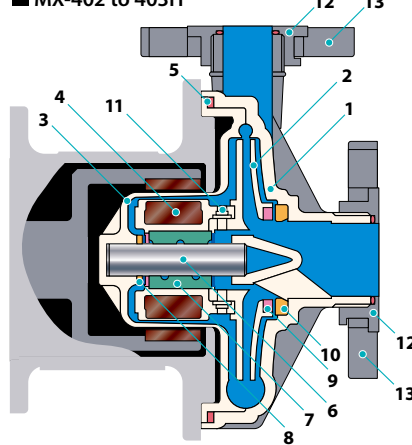
Model	MX-70	MX-100
Mark	V(E)	
1 Front casing	GFRPP	
2 Impeller	CFRPP	
3 Rear casing	GFRPP	
5 O ring	FKM(EPDM)	
6 Spindle	Alumina ceramic	
7 Bearing	CFRPPS	PTFE(with filler)
9 Mouth ring	-	PTFE(with filler)
10 Thrust/Liner ring	Alumina ceramic	

Note: An O-ring made of AFLAS® is also available

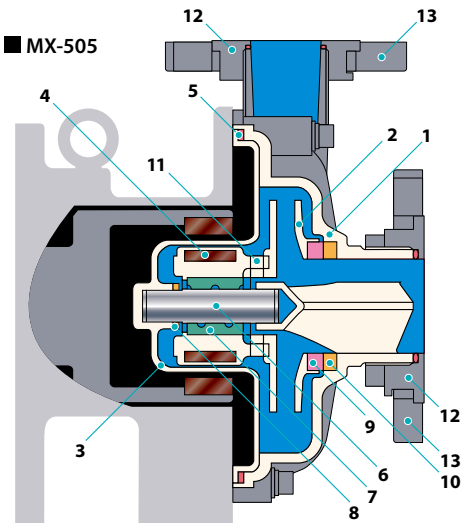
■ MX-250 to 401



■ MX-402 to 403H



■ MX-505

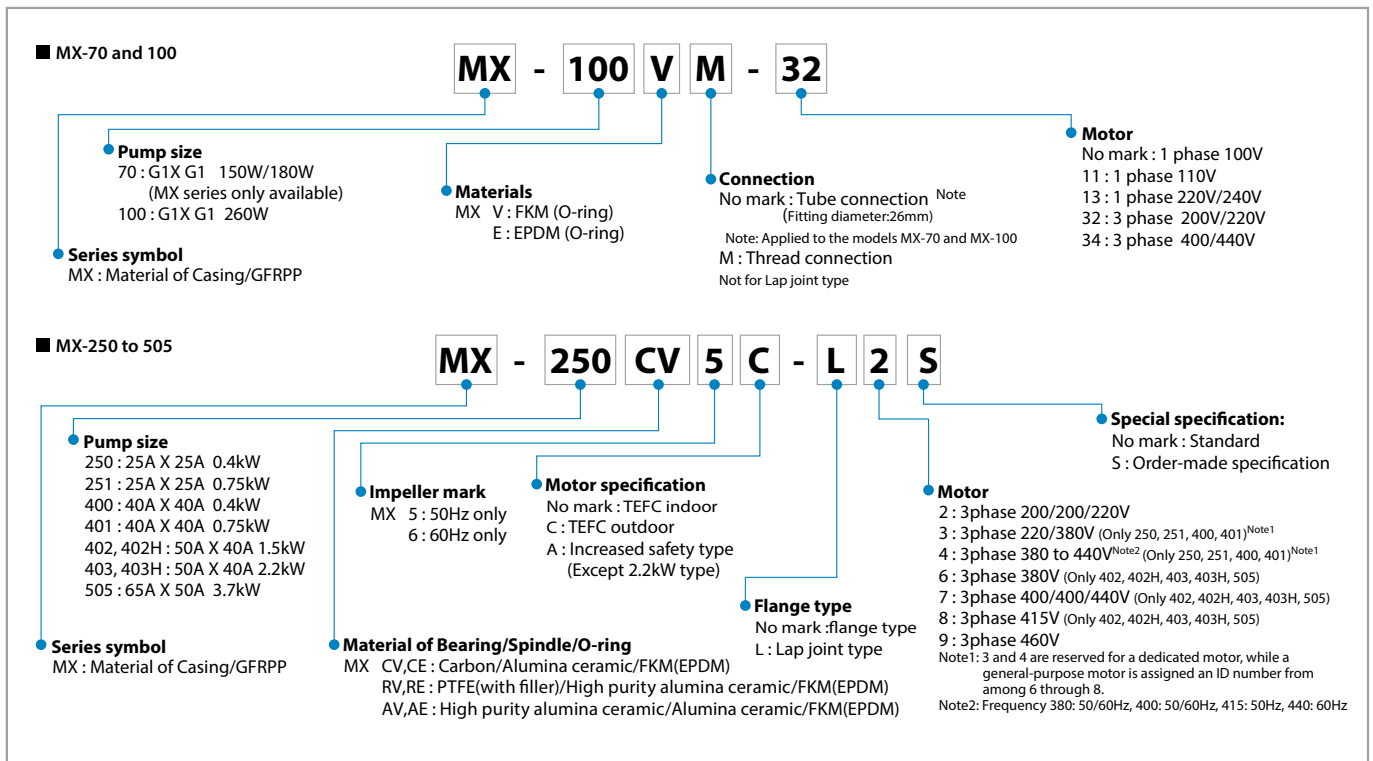


Model	MX-250 to 505		MX-250 to 401
	CV(CE)	RV(RE)	AV(AE)
1 Front casing	GFRPP		
2 Impeller	GFRPP		
3 Rear casing	GFRPP		
4 Magnet capsule	PP		
5 O ring	FKM(EPDM)		
6 Spindle	High purity alumina ceramic		
7 Bearing	Carbon	PTFE(with filler)	Alumina ceramic
8 Rear thrust	CFRPPS (MX-402 to 505: CFRPEEK)		
9 Mouth ring	PTFE(with filler)		
10 Thrust/Liner ring	Alumina ceramic		
11 Lock pin	GFRPPS(Only available type 402 to 505)		-
12 Inner flange	GFRPP		
13 Outer flange	GFRPP		

Note: An O-ring made of AFLAS® is also available



Pump identification



Specifications

50/60Hz

Model	Connection Suction X Discharge	Limit of specific gravity	Standard capacity L/min - m	Maximum capacity L/min	Motor kW	Mass kg
MX-70	G1 x G1	1.2	50 - 5.4 / 7.8	90 / 100	0.15 / 0.18	6.5
MX-100			70 - 6 / 9	110 / 125		
MX-250	25A x 25A	1.0	50 - 14 / 13.5	150	0.4	13.5
MX-251			80 - 19		0.75	22
MX-400	40A x 40A	1.2	100 - 10.5 / 10	280	0.4	13.5
MX-401			150 - 14.5	320	0.75	22
MX-402	50A x 40A	1.2	200 - 20/19.5	450	1.5	38
MX-402H		1.0	100 - 30	160		
MX-403	50A x 40A	1.2	250 - 23 / 25	500	2.2	43
MX-403H		1.0	100 - 35 / 36	300 / 250		
MX-505	65A x 50A	1.2	500 - 24.5 / 23.5	800	3.7	64

Note1: The specific gravity limit varies with the discharge. For details, please contact us.

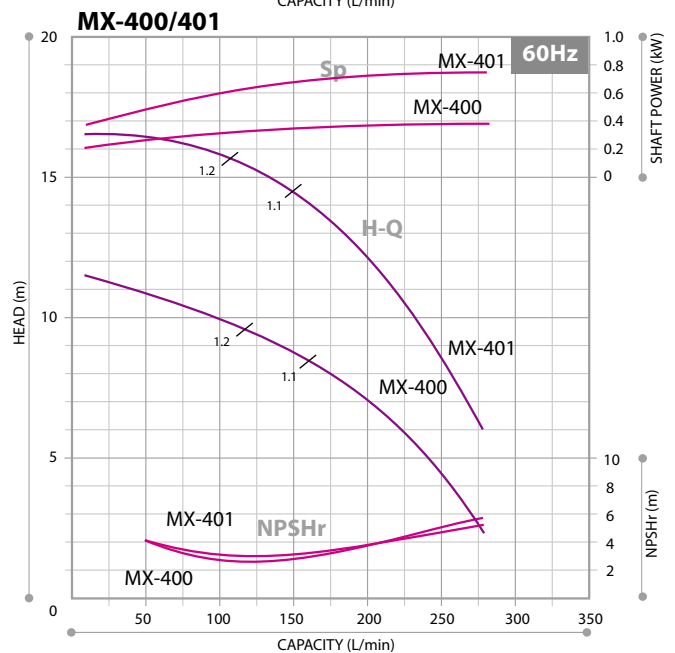
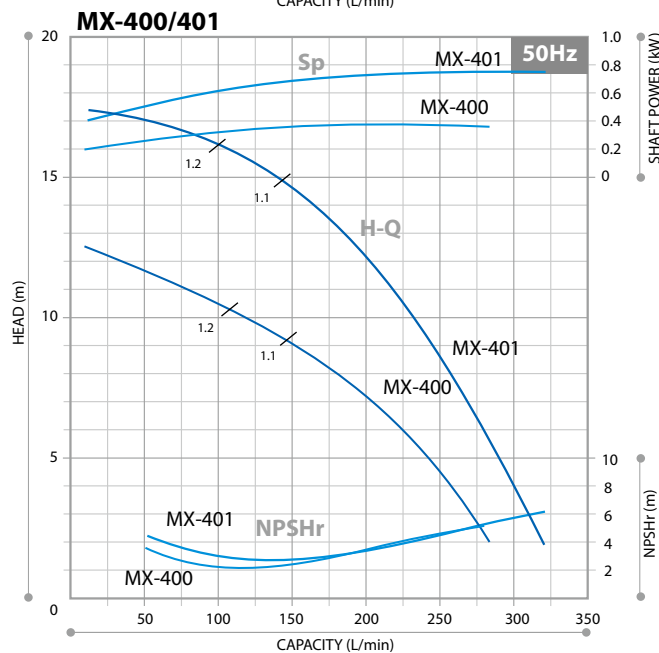
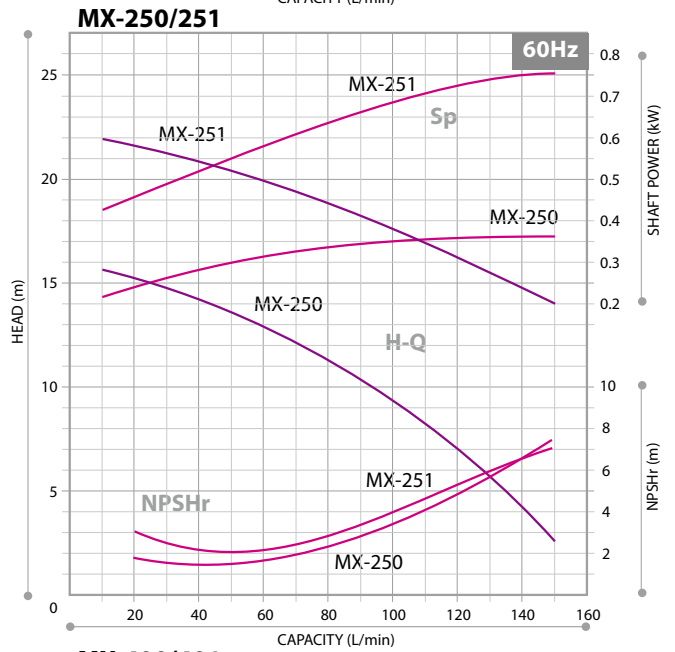
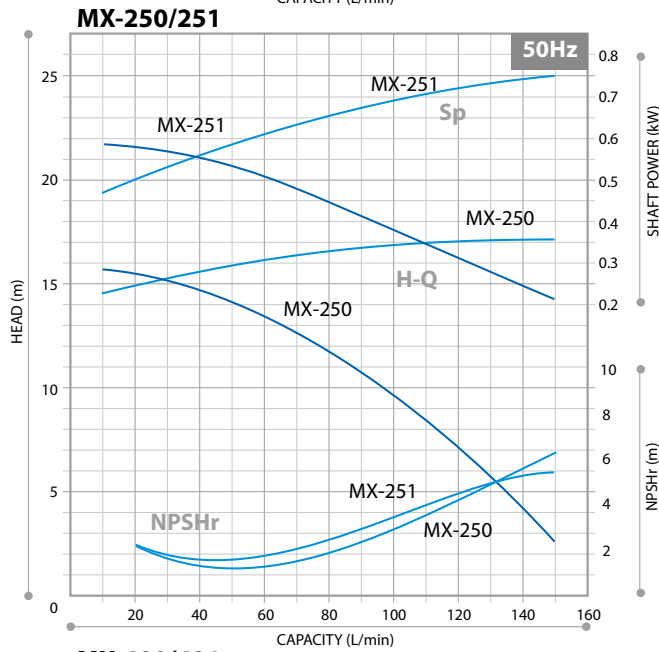
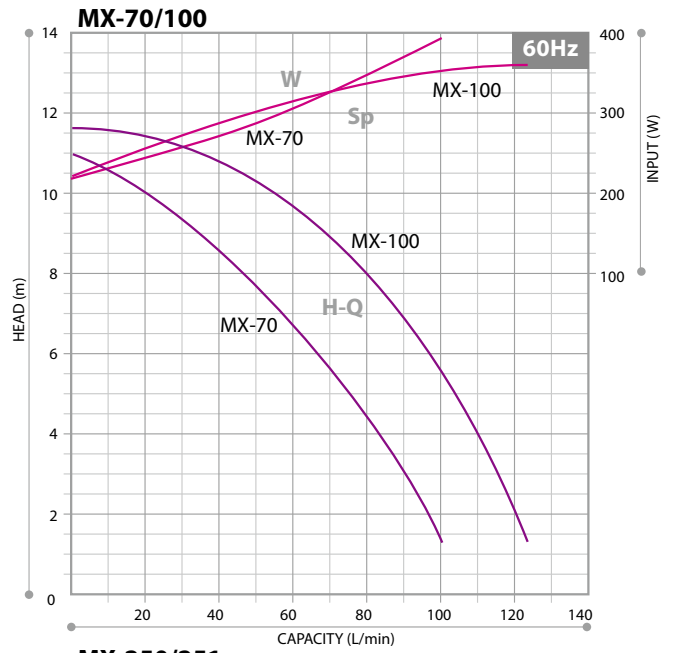
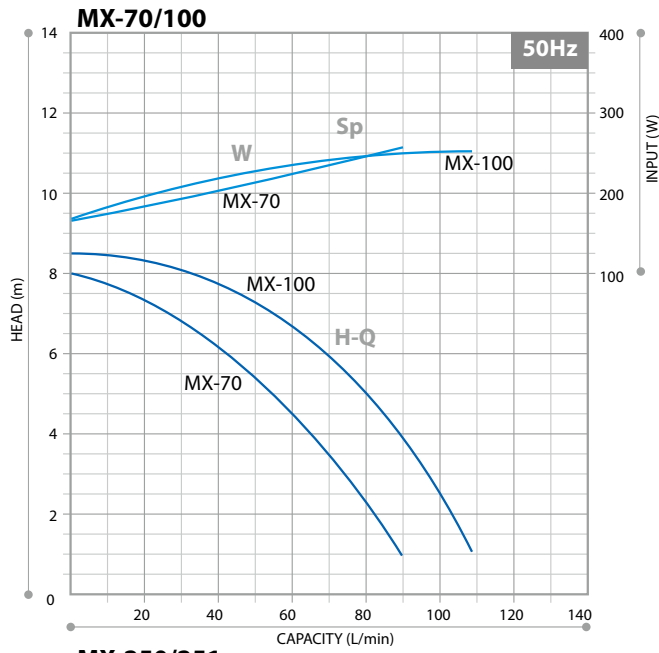
Note2: 26mm tube connection option available on the MX-70 and MX-100.

Note3: AV(AE) type is different in discharge capacity. For details, please contact us.

Common specifications

• Range of liquid temperature : 0 to 80°C (10 to 80°C in case AFLAS® O-rings are used.) • Range of ambient temperature : 0 to 40°C.

Performance curves



Performance curves

