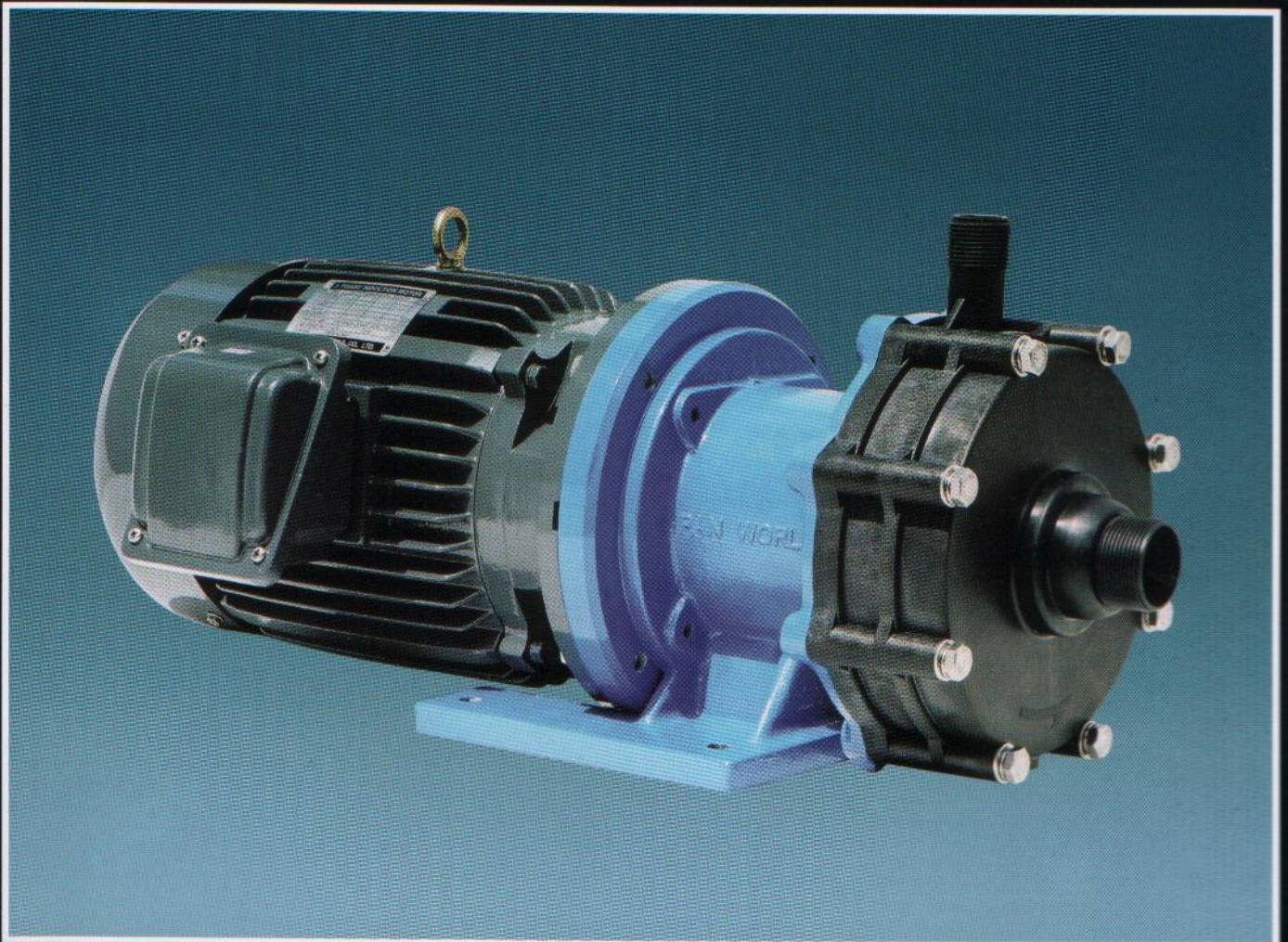


Reliability is our target

PAN WORLD
SEALLESS MAGNETIC
DRIVEN PUMP

PH series(Sealless)



PAN WORLD CO., LTD.

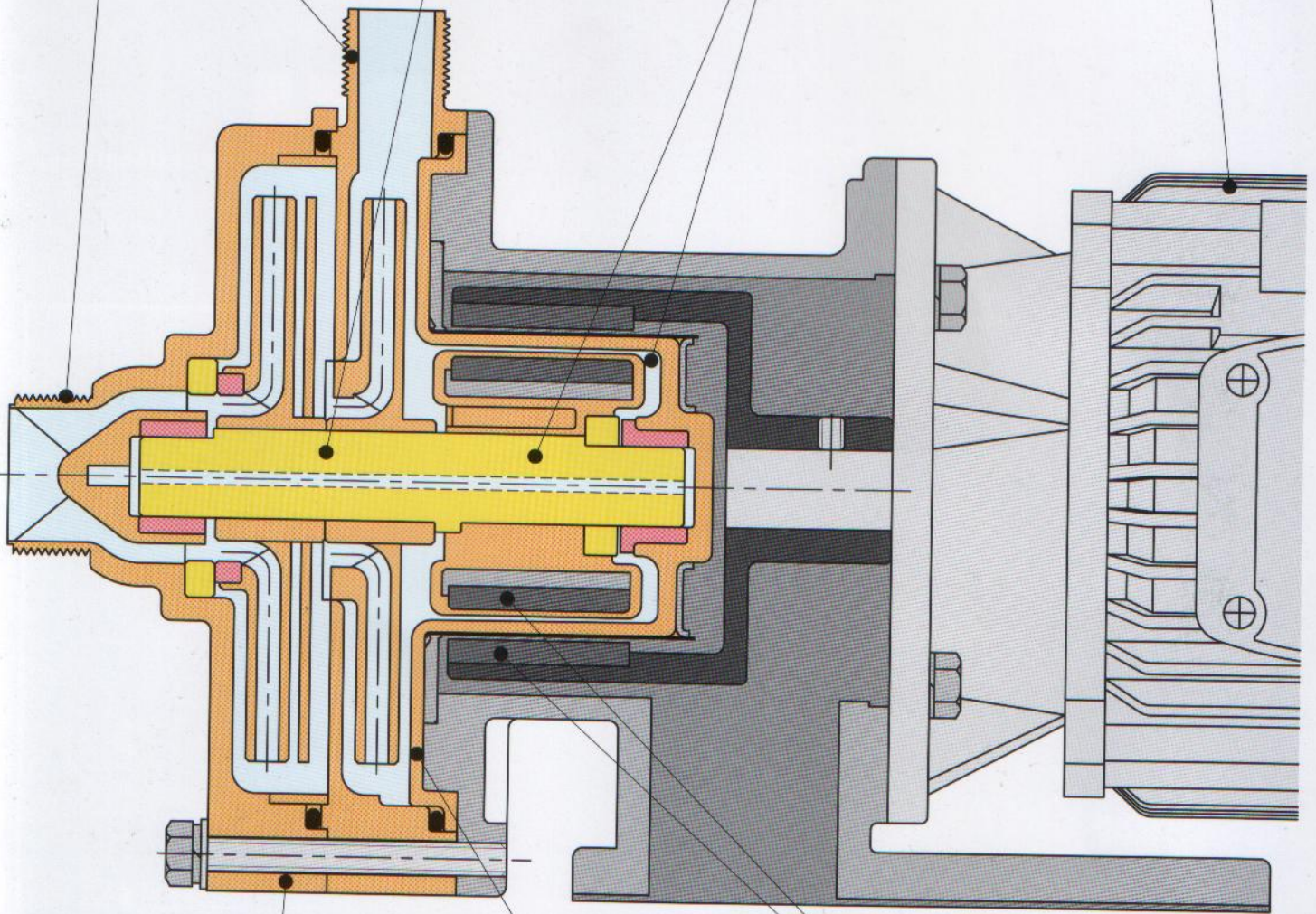
■ The most advanced pump has progressed next step

BS thread,
NPT thread,
ISO/ANSI/JIS/CNS
flange are available

Built in safety
The bearing, thrust
pad, spindle are
united for one
component by PPS
plastic on injection
process.

Impeller and magnet
capsule with bearing
are independently
assembled with
spindle.

IEC, NEMA-C, JEM, CNS
motor and indoor,
weather proof, explosion
motor are available.

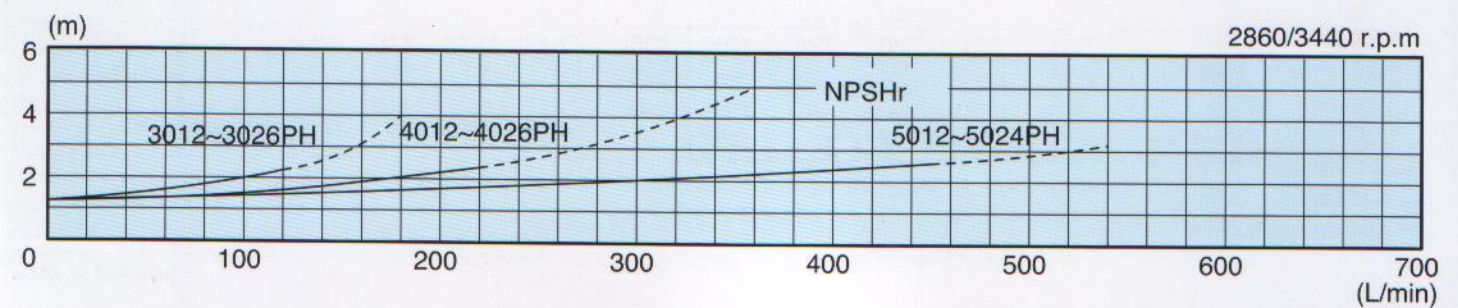
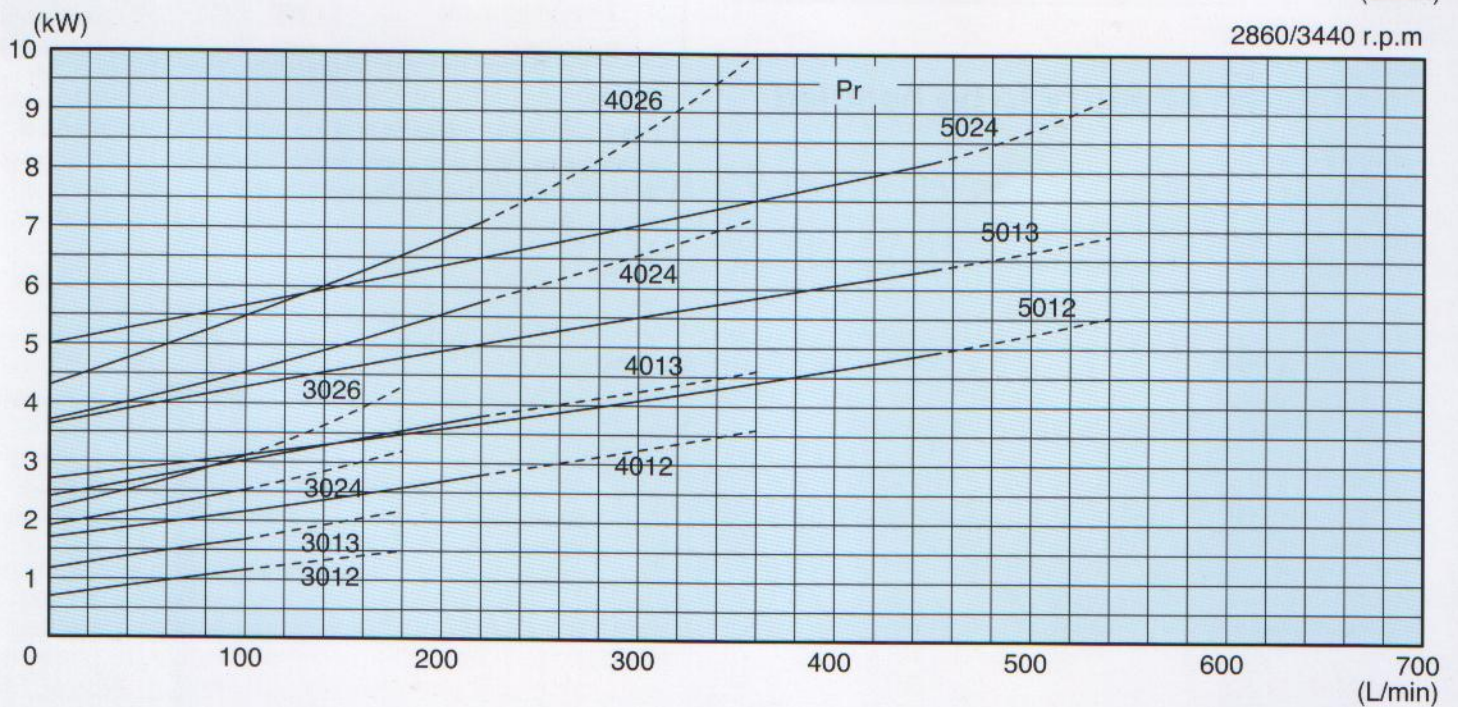
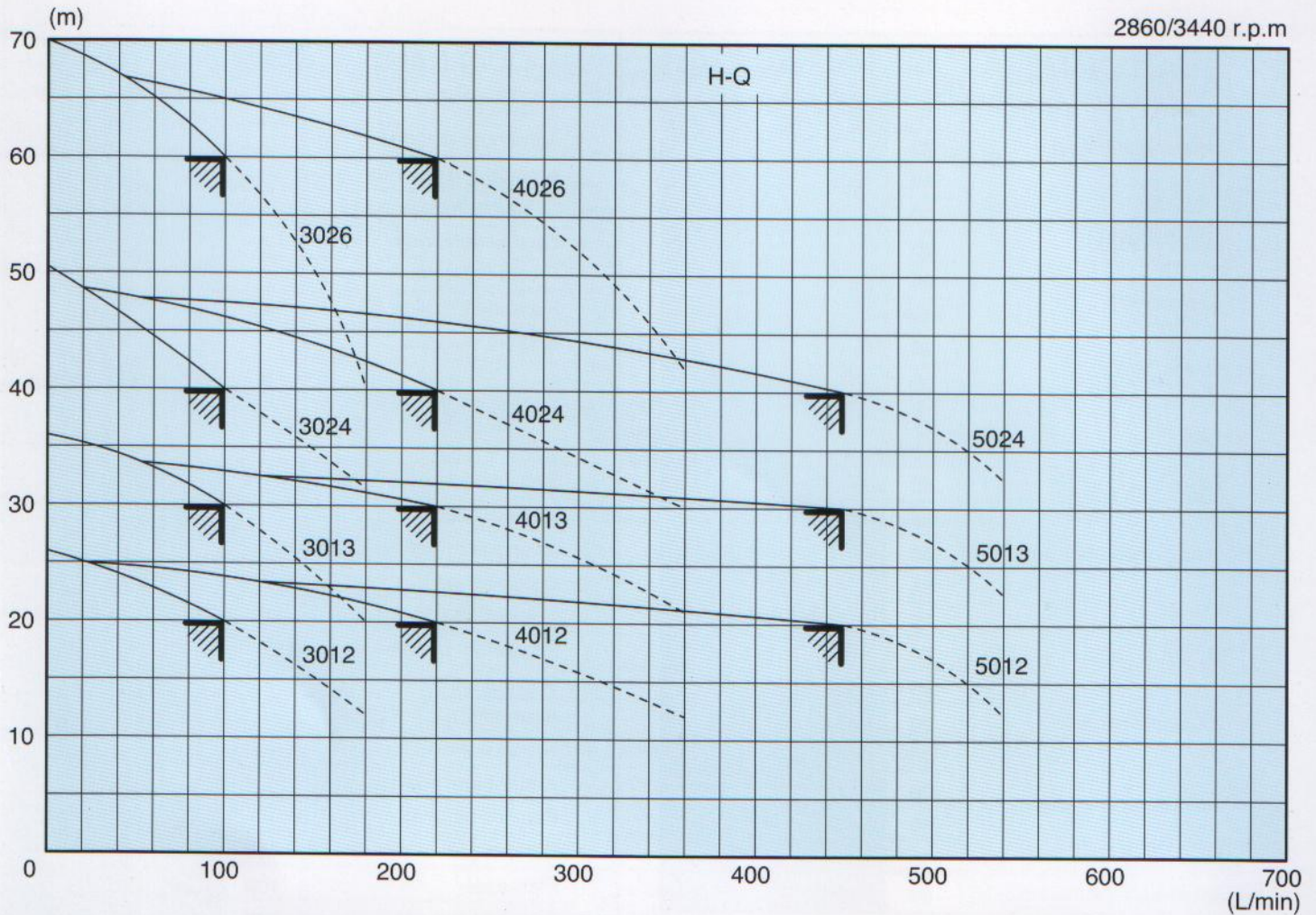


Easy assembly and
disassembly. The parts
are easy to replace
without any special tool
and jig.

Plastic rear casing shell
is reinforced by metal
cover to ensure inside
pressure.

Magnet coupling can
transmit required power
sufficiently under 110%
of rated voltage power
supply.

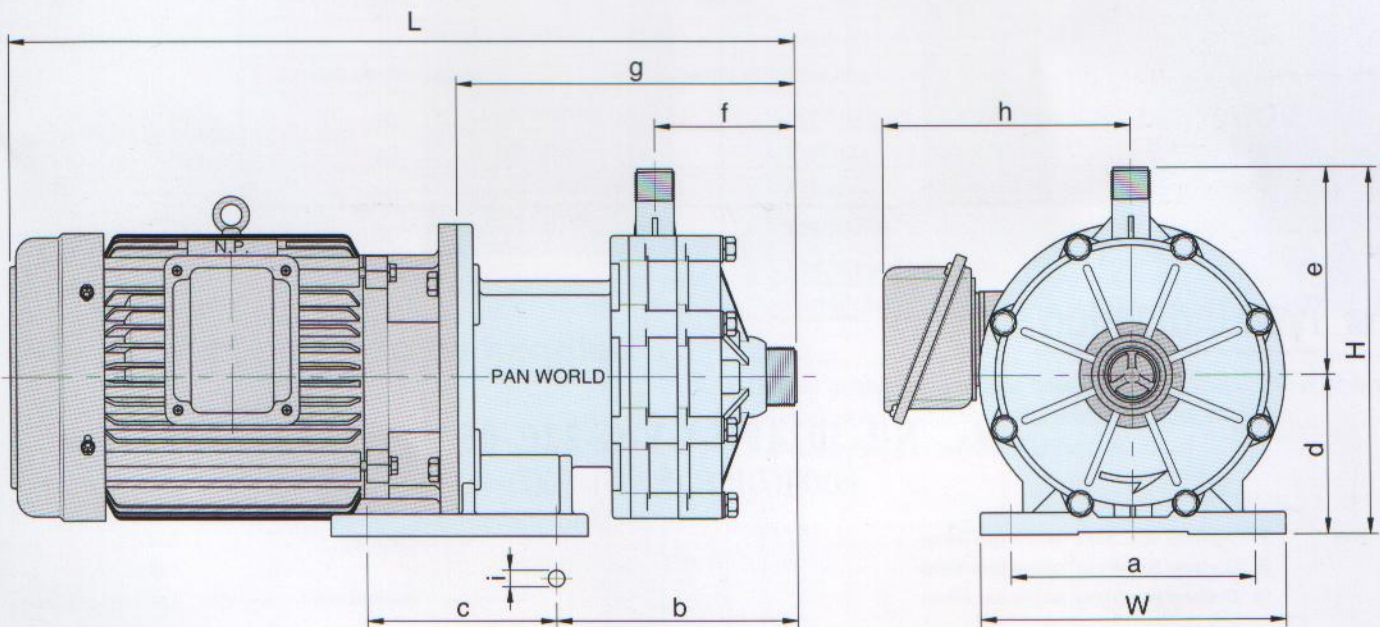
Performance curve



■ Pump performance table

Model	Pipe connection Outlet * Inlet (mm)	Pump performance		motor kW at L/min discharge flow	Applicable motor, kW		
		Specified point m at L/min	Max. point m - L/min		S.G. 1.0	S.G. 1.3	S.G. 1.5
	50Hz / 60Hz	50Hz / 60Hz					
NH-3012PH	25 * 40	20 at 100	26 - 180	at 100 L/min	1.5	1.5	2.2
NH-3013PH		30 at 100	36 - 180		2.2	2.2	3.7
NH-3024PH		40 at 100	51 - 180		3.7	3.7	5.5
NH-3026PH		60 at 100	70 - 180		3.7	5.5	5.5
NH-4012PH	40 * 50	20 at 220	25 - 360	at 220 L/min	2.2	3.7	5.5
NH-4013PH		30 at 220	34 - 360		3.7	5.5	7.5
NH-4024PH		40 at 220	49 - 360		5.5	7.5	11
NH-4026PH		60 at 220	68 - 360		7.5	11	11
NH-5012PH	50 * 65	20 at 450	24 - 540	at 450 L/min	3.7	5.5	7.5
NH-5013PH		30 at 450	33 - 540		5.5	7.5	11
NH-5024PH		40 at 450	48 - 540		7.5	11	11

■ Installation dimension



MODEL	W	H	L	a	b	c	d	e	f	g	h	l	Applicable motor output (kW)
NH-3012PH	250	295	516	200	165	165	125	170	82	233	170	12	1.5
NH-3013PH	250	295	516	200	165	165	125	170	82	233	170	12	2.2
NH-3024PH	250	300	643	200	198	165	130	170	115	277	203	12	3.7
NH-3026PH	250	300	643	200	198	165	130	170	115	277	203	12	3.7
NH-4012PH	250	300	648	200	180	165	130	170	85	282	203	12	3.7
NH-4013PH	250	300	648	200	180	165	130	170	85	282	203	12	3.7
NH-4024PH	280	350	686	220	222	195	180	170	127	346	252	14	5.5
NH-4026PH	280	350	720	220	222	195	180	170	127	346	252	14	7.5
NH-5012PH	280	350	644	220	180	195	180	170	85	304	252	14	5.5
NH-5013PH	280	350	678	220	180	195	180	170	85	304	252	14	7.5
NH-5024PH	280	350	880	220	222	195	180	170	127	376	288	14	11

- Remarks :
1. The size in above table is shown with JEM motor .
 2. Over all size & construction may be changed without notice .
 3. L, g, b, c, a, w, h may change depend on required motor to be mounted .

■ Features

1. PH pumps available up to 2 stages.
2. Precision injection parts.
3. Max flow rate up to 540L/min and max discharge head up to 70m.
4. Suitable for higher lift head under small discharge flow application such as P.C.B machine, filtration, etching machine.
5. Available BS thread, NPT thread and flange in compliance with ISO, ANSI, JIS, CNS.
6. Available IEC motor, NEMA-C, JEM, CNS motor.
7. Long operation life expectancy up to 10,000 hours.

■ Parts list

Part name	Material	
	FV	Si
1. Front casing	PPS	
2. Front thrust pad	Almina ceramic	Silicon carbide ceramic
3. O ring	FKM, EPDM or NBR	
4. Defuser	PPS	
5. Magnet capsule	PPG	
6. Impeller with rulon mouth ring	PPS	
7. Bearing	Carbon	Silicon carbide ceramic
8. Rear casing	PPS	
9. Spindle & Rear thrust pad	Almina ceramic	Silicon carbide ceramic
10. Drive magnet	Rear earth metal	
11. Bracket	Grey cast iron	
12. Rear casing cover	Hastelloy C	

■ Type indication

Ex. **NH-3024PH-CV-G-22C-05**

(9)(8)(7)(6) (5) (4) (3)(2) (1)

Bore	30 : Discharge bore 25mm* suction bore 40mm 40 : Discharge bore 40mm* suction bore 50mm 50 : Discharge bore 50mm* suction bore 65mm	(9)	(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)	Frequency	: 5	50Hz
												: 6	60Hz
											Required motor	: no symbol	indoor use
												: B	explosion proof motor
												: C	weather proof motor
Number of impeller	1 : 1 stage 2 : 2 stages										Motor output	: 07	0.75kW
												: 15	1.5kW
Impeller I.D.	: Impeller dia at specified point	12 : for 20m T.D.H.										: 22	2.2kW
		13 : for 30m T.D.H.										: 37	3.7kW
		24 : for 40m T.D.H.										: 55	5.5kW
		26 : for 60m T.D.H.										: 75	7.5kW
												: 110	11kW
PH	: Series name										Pipe connection	: G	BS thread
												: F	Flange
Combination of abrasion part												: N	NPT thread

Model, I.D.	Bearing	Spindle / thrust pad	O ring
CV	Carbon	Almina ceramic	F.K.M.
Si	Silicon carbide ceramic	Silicon carbide ceramic	F.K.M.

■ Chemical resistance table (for reference)

LIQUID NAME	(%)	20°C	60°C	70°C
Hydrochloric acid	10	○	○	△
	20	○	○	×
	30	○	×	×
Chromic acid	10	○	△	△
	25	△	×	×
Acetic acid	50	○	○	△
	100	△	×	×
Oxalic acid	30	○	○	△
	50	○	△	×
Nitric acid	10	○	○	△
	30	△	×	×
Hydrogen fluoride acid	40	△	×	×
Phosphoric acid	25	○	○	○
	50	○	○	○
	85	○	△	△
Sulphuric acid	30	○	△	△
	70	△	×	×
	93	×	×	×
Ammonia water	30	○	○	○
Sodium hydroxide	10	○	×	×
	20	○	○	△
	40	○	○	△
	50	△	×	×
Potassium hydroxide	50	○	△	×

LIQUID NAME	(%)	20°C	60°C	70°C
Sulphate		○	○	○
Aluminum chloride		○	○	○
Ammonium chloride		○	○	○
Calcium chloride		○	○	○
Cuprous chloride		○	○	○
Freeic chloride		○	○	△
Mercuric chloride	40	○	○	×
Sodium chloride		○	○	×
Potassium manganate	6	○	○	○
	20	○	○	△
Cupric cyanide		○	○	○
Sodium cyanide		○	○	○
Sodium nitride		○	○	○
Ammonium nitride		○	○	○
Common salt		○	○	○
Sec-chlorite	10	△	△	△
Potassium dichromate		○	○	○
Sodium carbonate		○	○	○
Ammonium carbonate		○	○	○
Nickle solution		○	○	○
Ammonium fluoride		○	○	○
Ferrous sulphate	--	○	○	○
Ethanol	100	○	○	○
Methanol	100	○	○	—
Trichoroethylene	100	×	×	×
Butanone	100	×	×	×

*Limitation of slurry to be handled

Concentration : 5%
 Particle size : 50 μ
 Hardness : HS 80 degree
 Note : Flush pump inside is required every 1-3 months

1. This list is only for reference to select pump model. The chemical resisting effect is shown under certain condition.
2. The temp range to be handled for 0-70 °C .



Usable



Useful with care



Do not use



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