



AMXI

系列
SERIES

磁力驅動無軸封泵浦
MAGNETIC DRIVE SEAL-LESS PUMP



榮獲
PATENTED IN
德國、台灣
GERMANY, TAIWAN (R.O.C.),
日本、大陸
JAPAN, CHINA (P.R.C.),
韓國、英國新型專利
KOREA, UK.

[http : //www.assoma.com.tw](http://www.assoma.com.tw)

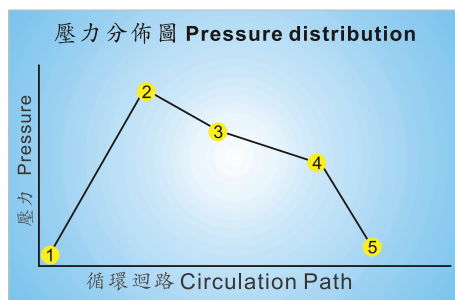
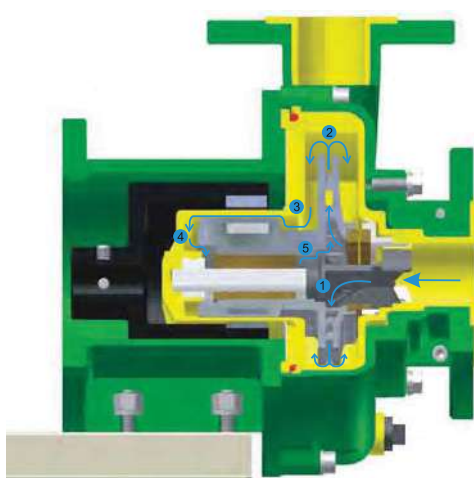
專利功能 Patented Function

AMXI系列是全球內襯氟化塑料磁力驅動泵浦中，唯一具有優異長效耐空轉特性及軸向推力緩衝機構兩項專利，且性能優異的系列機種。

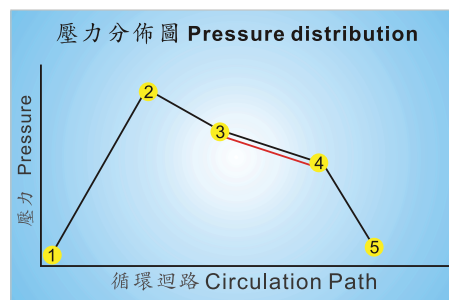
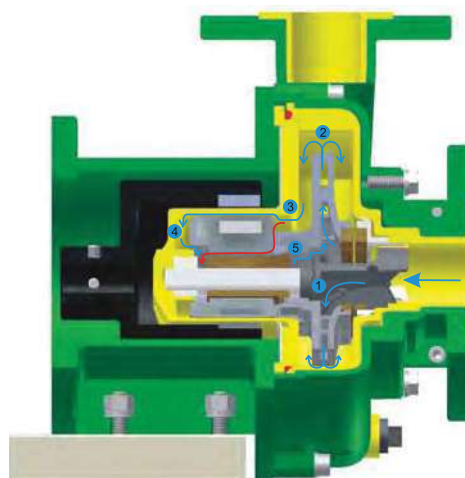
The AMXI Series pumps are the only fluoridated plastic lined pumps in the world that are specifically designed to withstand common abnormal operations that can cause severe damages to pumps. The special designs: a special bearing that can withstand dry-running, and an axial buffer that can absorb shock and vibration from cavitation, has earned the pumps two worldwide patents.

AMXI系列是協磁公司專為克服無軸封泵浦經常遇到的異常現象，如“空轉”、“汽化”等導致泵浦嚴重損壞的全新系列產品。

AMXI is a new series specially designed to overcome harmful damage to a sealless magnetic drive pump by some abnormal conditions, such as dry run, and cavitation, etc.



■ 傳統循環迴路
Traditional Circulation Path



■ 協磁專利循環迴路
ASSOMA Patented Circulation Path
For Cooling

強固的結構 Robust Structure

AMXI 系列不僅適用於一般化學輸送及製程用途，由於其強固的金屬外殼護罩及內襯氟化塑料設計，更適用於高溫、高壓，強酸、強鹼等嚴峻條件。

The AMXI series pumps are not only suitable for chemical transfer and production processes. Its reinforced armor casing allows the pump to be safely used under extreme conditions such as high temperature, high pressure, and with highly corrosive chemicals.

The AMXI series pumps feature superior mechanical and hydraulic performance has been well tested both in the laboratory and in the marketplace. The series has also received high acclaims at several international trade shows.

AMXI 系列已獲多項國際專利，其優異的機械及水力性能除在實驗室中長期驗證外，並參加多項國際性展覽，普獲好評。

AMXI series obtained several patents worldwide. It is well receipt by customers for its outstanding mechanical structure and hydraulic performance. It has been verified satisfactorily on the long trial run in the lab and displayed in several international exhibitions, and highly appraised by the public.

由泵浦流體設計軟體計算出最佳流道幾何，配合流場分析，掌握流動特性，使流體損失降為最低，提高葉片流體效率。

The geometry of impeller and casing are generated using professional hydraulic design programs. In addition, Computerized Fluid Dynamic (CFD) tools are used to control stream pattern, thus reducing hydraulic loss and increasing pump efficiency.

高效率水力設計 High Efficient Flow Design

AMXI的軸承潤滑迴路，首創雙面對流冷卻設計，在同樣的潤滑流量下，可帶走更多熱量，即使空轉時，也可降低熱平衡溫度，提高抗空轉能力。



The revolutionized bearing design with dual-channel circulation on both inner and outer surfaces of bearing contributes to rapidly heat dissipation.

The internal circulation of the pump is fully utilized to reinforce convectional heat transfer that lowers thermal balancing temperature and prevents damage even under dry running.

以電腦輔助設計及分析強調可靠度及最佳化的現代設計理念。



Using fully computer aided design and analysis to optimize our product performance and reliability, earning us a place within high-tech industries.

專利耐空轉結構 Patented Dry-run Design

結合CAD/CAE的科技產品 Integrated CAD/CAE System



高強度本體結構 High Strength Construction

全系列採用金屬內襯氟化塑膠材質，可同時符合強度與耐蝕性需求。

The AMXI series uses a FCD metallic outer casing lined with a volute made from engineering plastic to provide the required structural strength as well as the needed corrosion resistance.

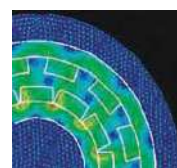
專利緩衝止推系統 Patented Buffer System

獨具創意的動態式緩衝座，除具備緩衝作用以吸收泵浦葉輪在吸入條件惡劣時之振動外，並提供止推環與葉輪磨損環間一動態式的平面接觸，藉以保持摩擦面之有效接觸面積，並大幅提高止推環可靠度及使用壽命，可降低疲勞損害。

Our innovative dynamic buffer is specially designed to absorb vibrations and shock caused by adverse operating conditions. At the same time, the dynamic buffer is self-adjusting, allowing a better face-to-face contact between the thrust ring and the wear ring, thus, minimizing wear and prolonging their service life.

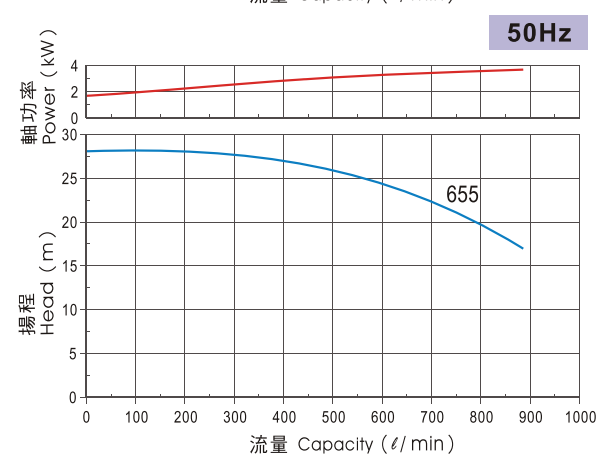
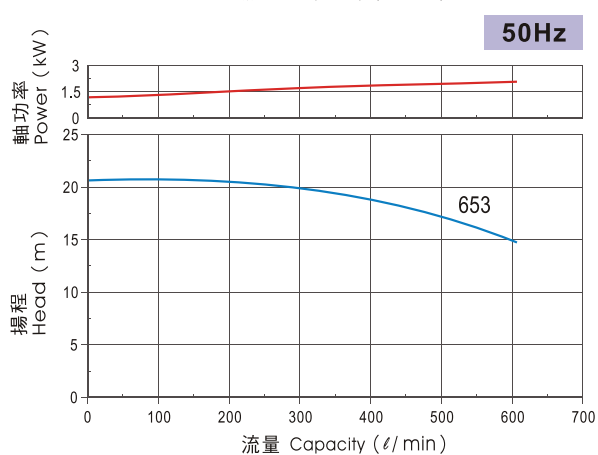
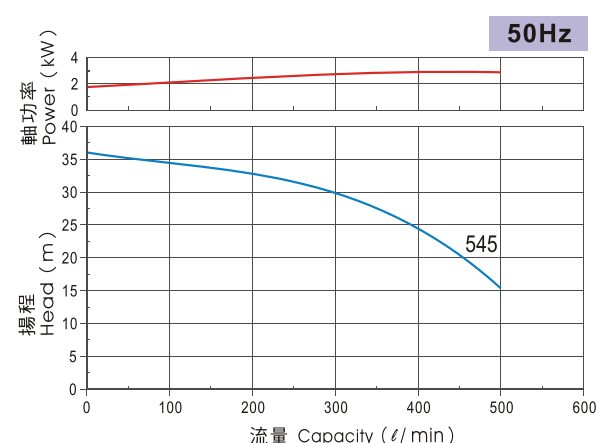
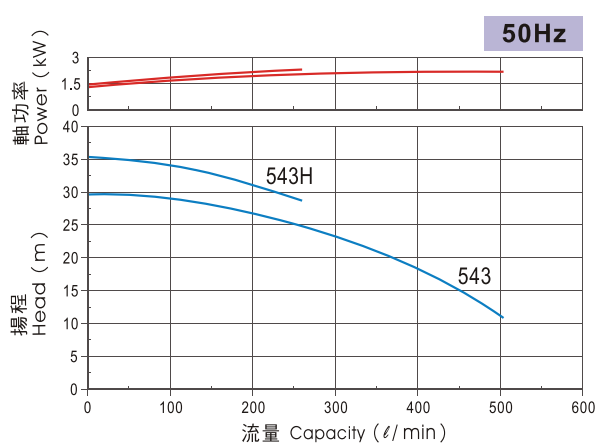
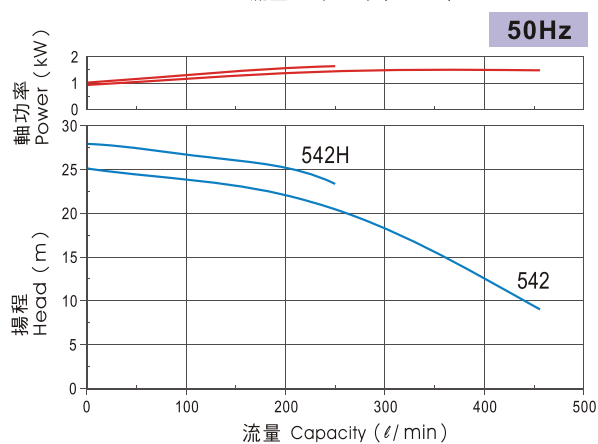
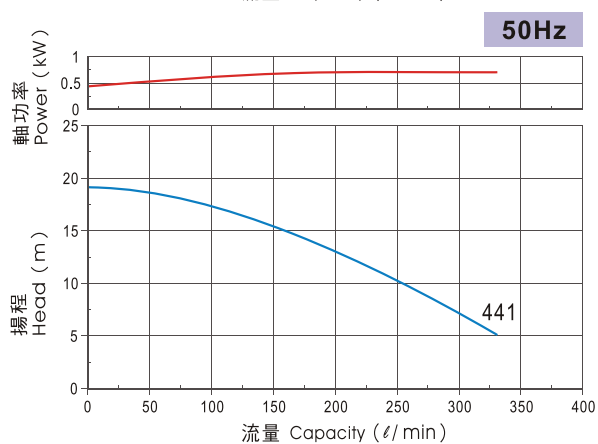
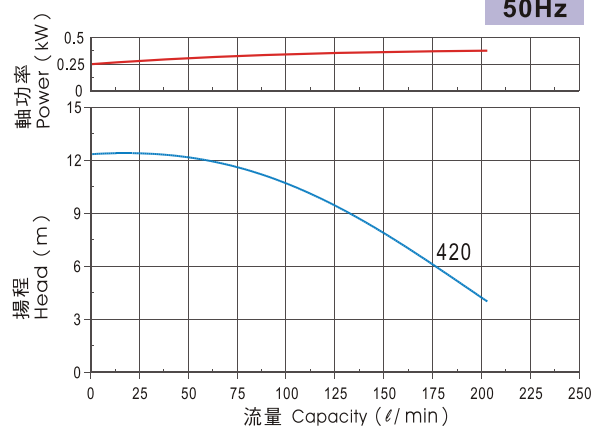
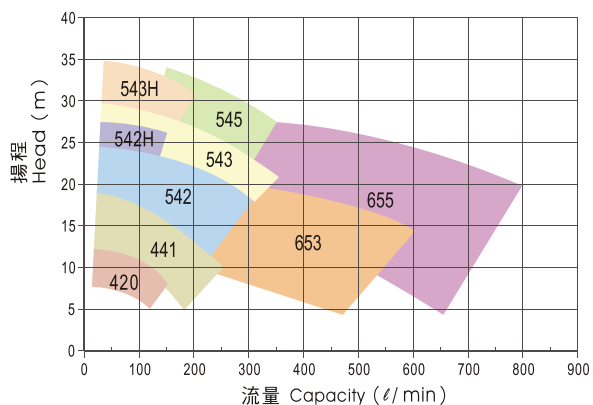
高性能磁偶合器 High Performance Magnetic Coupling

利用磁場分析軟體計算磁扭矩，提高磁鐵利用率，確保足夠的偶合動力餘裕以避免滑脫。

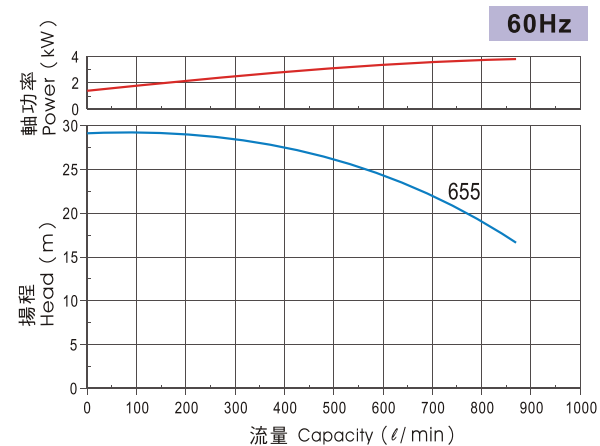
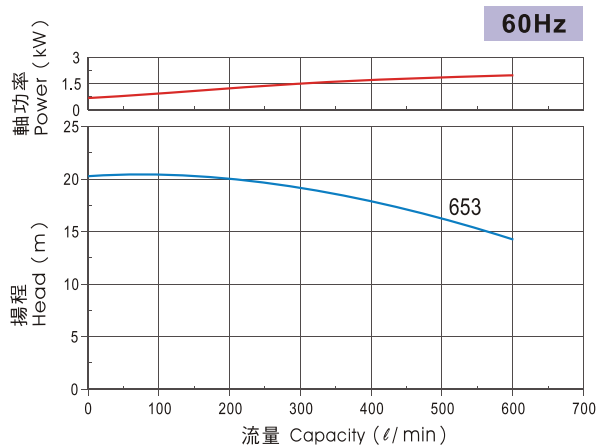
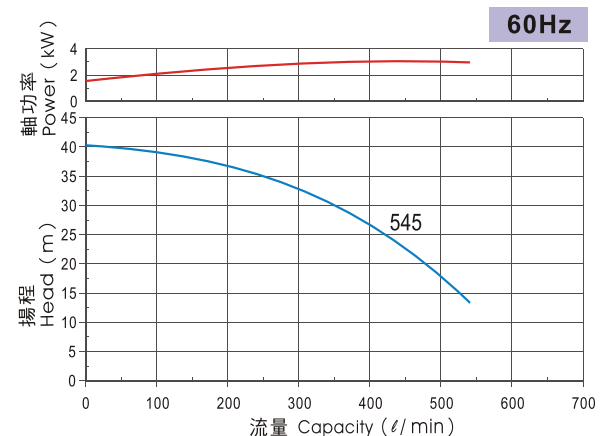
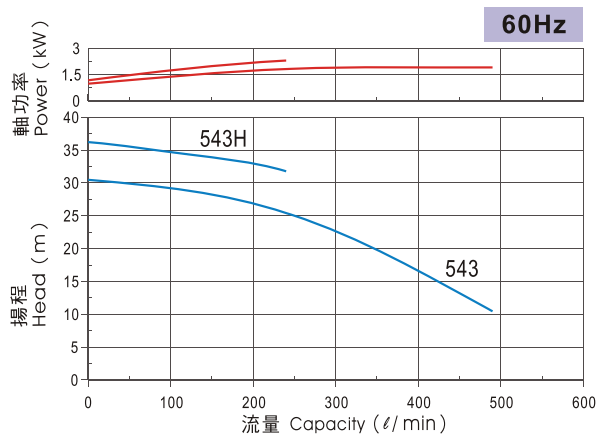
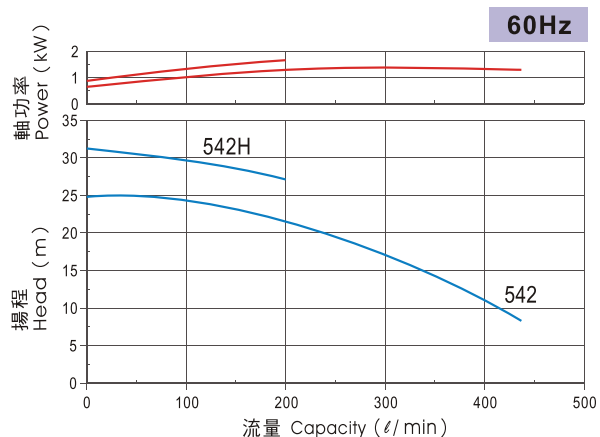
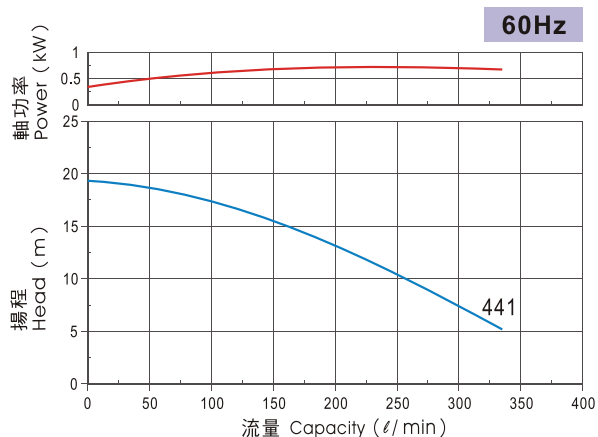
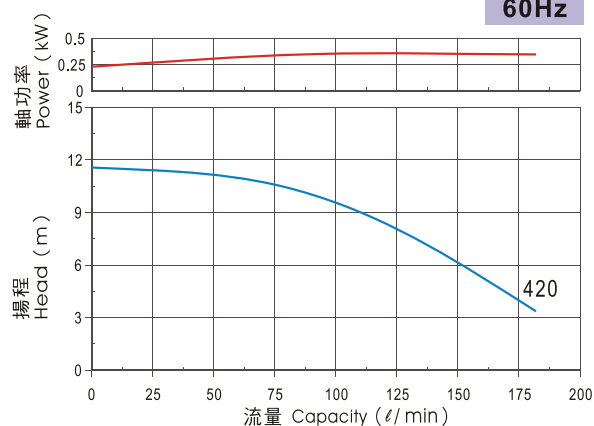
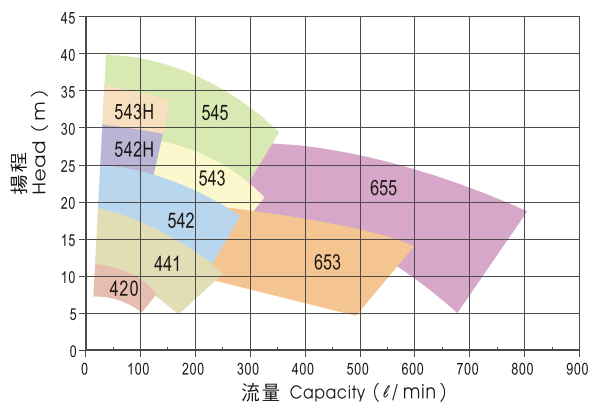


Using magnetic field analysis program, we are able to optimize our magnet design to provide sufficient torque to prevent decoupling.

性能曲線圖 PERFORMANCE CURVES—50Hz



性能曲線圖 PERFORMANCE CURVES—60Hz



規格表 SPECIFICATIONS

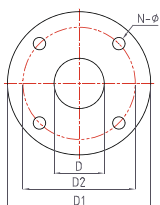
機 型 Model	入口x出口配管 Suction x Discharge (mm)	頻 率 Frequency	額定流量 Rated Capacity (l/min)	額定揚程 Rated Head (m)	最高揚程 Max. Head (m)	馬達輸出功率 Motor Output (kW)
AMXI-420	40x25	50Hz 60Hz	100 100	10.7 9.6	12.3 11.6	0.4
AMXI-441	40x40	50Hz 60Hz	150 150	15.5 15.5	19.2 19.3	0.75
AMXI-542	50x40	50Hz 60Hz	200 200	22.2 21.5	25.1 24.8	1.5
AMXI-542H	50x40	50Hz 60Hz	100 100	26.7 29.9	28.0 31.3	1.5
AMXI-543	50x40	50Hz 60Hz	250 250	25.2 25.1	29.7 30.5	2.2
AMXI-543H	50x40	50Hz 60Hz	150 150	33.2 33.9	35.4 36.2	2.2
AMXI-545	50x40	50Hz 60Hz	250 250	31.0 34.8	35.7 40.1	3.7
AMXI-653	65x50	50Hz 60Hz	400 400	18.8 17.9	20.6 20.3	2.2
AMXI-655	65x50	50Hz 60Hz	500 500	26.0 26.2	28.1 29.1	3.7

型式表示 PUMP IDENTIFICATION

AMXI - 5 4 2 F E A C V - 0

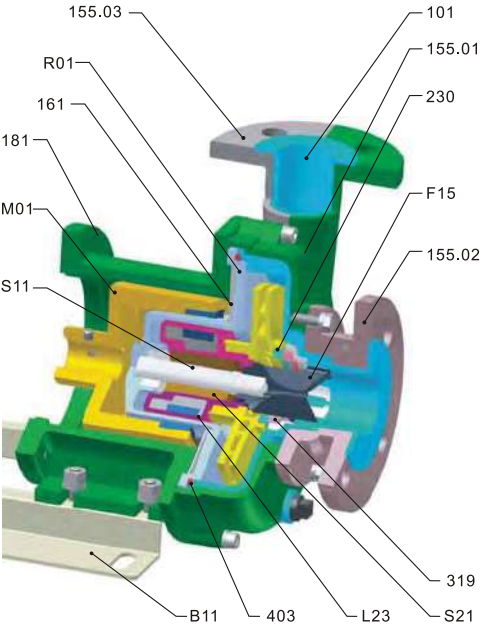
① 系列名稱 Series Symbol	AMXI 系列 Series
② 入口配管 Suction Connection	4 : 40A(1½") 5 : 50A(2") 6 : 65A(2½")
③ 出口配管 Discharge Connection	2 : 25A(1") 4 : 40A(1½") 5 : 50A(2")
④ 馬力數 Motor Power	0 : 1/2 Hp (0.4kW) 1 : 1 Hp (0.75kW) 2 : 2 Hp (1.5kW) 3 : 3 Hp (2.2kW) 5 : 5 Hp (3.75kW)
⑤ 配管形式 Type of Connection	F: 法蘭 Flange
⑥ 本體材質 Casing Material	E: ETFE+CF

⑦ 軸心材質 Shaft Material	A: 995 Al ₂ O ₃ S: SSiC
⑧ 軸承材質 Bearing Material	A: 995 Al ₂ O ₃ C: CARBON R: PTFE含填充料 PTFE with filler S: SSiC
⑨ 密封材質 Sealing Material	E: EPDM V: VITON K: 高氟 Special fluoroelastomer
⑩ 馬達型式 Motor Type	0 : IP54 1 : IP55 2 : eG3安全增防爆型 Explosion proof eG3 3 : d2G4耐壓防爆型 Explosion proof d2G4 S : 特殊馬達 Special motor



DN	Standard	n-Ø	D2	D1	DN	Standard	n-Ø	D2	D1
25 A	ISO	4-Ø18	100mm	125mm	50 A	ISO	4-Ø18	125mm	165mm (Inlet) 160mm (Outlet)
	JIS	4-Ø19	90mm			JIS	4-Ø19	120mm	
	ANSI	4-Ø16	4-3 ½"			ANSI		4-4 ¾"	
40 A	ISO	4-Ø18	110mm	150mm	65 A	ISO	4-Ø18	145mm	178mm
	JIS	4-Ø19	105mm			JIS	4-Ø19	140mm	
	ANSI	4-Ø16	4-3 ⅞"			ANSI		4-5 ½"	

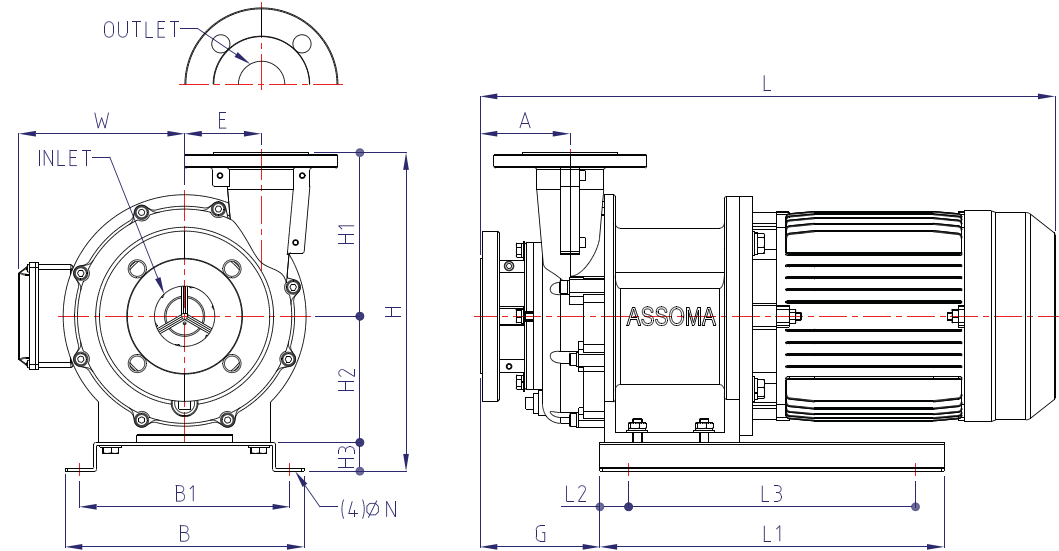
材質構造圖 MATERIAL



編號 Part code	名稱 Part name		可選用材質 Available Materials
101	前蓋 Pump casing		ETFE+CF
155.01	前蓋護體 Casing armour		FCD450
155.02	入口護體 Inlet armour		FCD450
155.03	出口護體 Outlet armour		FCD450
161	後蓋背板 Backup plate		SUS304
181	托架 Bracket		FC
230	葉片磨損環組 Impeller wear ring assembly	葉片組 Impeller	ETFE+CF
		前磨損環 Front wear ring	CARBON / SSiC / PTFE with filler
319	止推環組 Thrust ring & buffer	前緩衝座 Front buffer	ETFE
		前止推環 Front thrust ring	995 Al ₂ O ₃ / SSiC
B11	底座 Base plate*		SUS304
F15	前軸心支撐 Front support, shaft		ETFE+CF
L23	包膠內輪 Magnet capsule		ETFE+CF, Nd-Fe-B
M01	外輪 Drive magnet		Nd-Fe-B
R01	後蓋止推組 Rear casing / thrust ring	後蓋 Rear casing	ETFE+CF
		後止推環 Rear thrust ring	995 Al ₂ O ₃ / SSiC
403	迫緊 Packing / O 形環 O-ring*		EPDM / VITON
S11	軸心 Shaft		995 Al ₂ O ₃ / SSiC
S21	軸承 Bearing		995 Al ₂ O ₃ / CARBON/ SSiC / PTFE with filler

備註 Note : SUS304、SUS316底座或全氟化橡膠密封件可依客戶需求提供。
SUS304, SUS316 base and FFKM o-ring is available upon request.

外型尺寸圖 DIMENSIONS



型式 Model	項目 Item	尺寸 Dimension (mm)														
		A	B	B1	E	G	H	H1	H2	H3	L	L1	L2	L3	N	W
AMXI-420		87	140	110	55	129	225	130	75	20	441	200	20	98	12	117
AMXI-441		102	160	130	72	149	256.5	141.5	85		487	210	35	130		137
AMXI-542											498					
AMXI-543	88		260	204		137	281.5	161.5	90		524	300	20	200		143
AMXI-545					80	115	323.5				591				14	174
AMXI-653			250	220		128			132		533	360	30	300		143
AMXI-655	94					125	333	171			601					174

備註 Note:
(1) 泵浦尺寸將因馬達廠牌和安裝方式之不同而有所區別。
Dimension of the pump will differ depending on the brand and installation of the motor.
(2) 泵浦出入口法蘭規格可依客戶不同規格需求 (ISO、ANSI、JIS) 承製。
Pump flange specification is available in ISO, ANSI, and JIS standard upon customer's request.

ASSOMA JAPAN CO., LTD

TEL: (81) 48-810-5481
FAX: (81) 48-810-5482
1-17-2, Higashi Urawa, Midori-ku, Saitama-city, Saitama, Japan 336-0926
E-mail: y.inaizumi@assoma.co.jp

A-MAN CO., LTD

TEL: (82) 031-434-9948
FAX: (82) 031-434-9916
Rm211, No. 2, Shihwa Machinery Selling Complex 2166-2 Jungwang-dong, Shiheung-city, Gyeonggi-do, Korea
E-mail: seanhong@a-man.co.kr

CREST PUMPING SERVICES LTD

TEL: (44) 1425-627700
FAX: (44) 1425-627711
7 Queensway, New Milton, Hampshire, BH25 5NN, UK
E-mail: info@crestpumps.co.uk

DYNAPUMPS

TEL: (61) 8-9478-2722
FAX: (61) 8-9478-2750
88 Belgravia Street, Belmont WA 6104, Australia
E-mail: Charlie@dynapumps.com.au

P.V.S. TRADING ENGINEERING CO., LTD

TEL: (66) 2-944-6810
FAX: (66) 2-944-6820
10230 130/39-40 Soi Ramindra 40, Yak 6, Nuanchan, Buengkum, Bangkok, Thailand
E-mail: pvsco@ksc.th.com

TANGERINE ENGINEERING PTE LTD

TEL: (65) 6748-6211
FAX: (65) 6748-9722
54 Senang Crescent, Singapore 416621
E-mail: sales@tangerine.com.sg

協磁股份有限公司台中辦事處 ASSOMA INC. TAICHUNG OFFICE

TEL: (886) 4-24525668
FAX: (886) 4-24525821
台中市西屯區上明一街73號7樓之2
7F.-2, No. 73, Shangming 1st St., Xitun Dist., Taichung City 407, Taiwan
E-mail: daniel@assoma.com.tw

上海協丞化工機械有限公司 PRO BEST CHEM-MECH CO., LTD.

TEL: (86) 21-6768-1081 (86) 21-6768-1089
FAX: (86) 21-6764-8067
上海市松江區新橋鎮春申村金都西路959號 4幢
Tent 4, No. 959, Jindu West Road, Chunshen Village, Xingiao Town, Songjiang Area, Shanghai, China
E-mail: assomapump@vip.163.com

上海協丞化工機械有限公司深圳分公司 PRO BEST CHEM-MECH CO., LTD. (SHEN ZHEN BRANCH)

TEL: (86) 755-2650-0300 (86) 755-2650-3347
FAX: (86) 755-2650-1327
深圳市南山區文光工業區17棟702室
Room 702, Building 17, Industrial Estate Wen Guang, Nanshan District, Shenzhen, China
E-mail: assoma_sz@vip.163.com

北京世紀朝陽科技發展有限公司 BEIJING CEN-SUN TECHNOLOGY DEVELOPMENT CO., LTD.

TEL: (86) 10-8239-8036
FAX: (86) 10-8239-8026
北京市海淀區北四環中路209號健翔園6號樓2202室
Room 2202, No. 6 Jian Xiang Yard, No. 209 North Firth-Ring Zhong Road, Hai Dian District, Beijing, China
E-mail: feihu.lu@vip.163.com

台灣南部總代理 怡台企業股份有限公司 PRELEAD INDUSTRIAL CO., LTD.

TEL: (886) 7-815-3030
FAX: (886) 7-815-3080
高雄市前鎮區興化街135號
No. 135, Xinghua St., Qianzhen Dist., Kaohsiung City, 806, Taiwan, R.O.C.
E-mail: prelead@ms39.hinet.net

專營：變頻罐裝泵浦、磁力驅動無軸封泵浦、過濾機

PECIALIZED IN VARIABLE FREQUENCY DRIVE CANNED MOTOR PUMP, MAGNETIC DRIVE SEAL-LESS PUMP AND FILTER PUMP.



協磁股份有限公司

桃園縣蘆竹鄉坑口村三德街15巷14弄10號
NO.10, ALLEY 14, LANE 15, SAN-TE STREET, KENG KOU VILLAGE,
LUJHU TOWNSHIP, TAOYUAN COUNTY, 338, TAIWAN, R.O.C.
TEL : (886) 3-354-7606
FAX : (886) 3-354-7612
http : //www.assoma.com.tw
E-mail : sales@assoma.com.tw



Copyright © 2017/10 ASSOMA INC. All Rights Reserved.