

# BOONSUNGNOEN

## PUMP & VALVE (THAILAND) CO., LTD.

Manufacturer and sole distributor.

www.chemtai.com  
 www.boonsungnoen.com  
 www.kuobaothailand.com  
 www.brandexdirectory.com/boonsungnoen



CTN Series  
SELF-PRIMING ENGINE DRIVE PUMP



CMD-X Series  
MAGNETIC DRIVE CHEMICAL PUMP



CTP Series



CTB Series  
SELF-PRIMING CHEMICAL PUMP



CT Series  
SELF-PRIMING CHEMICAL PUMP



CD Series  
VERTICAL CHEMICAL PUMP



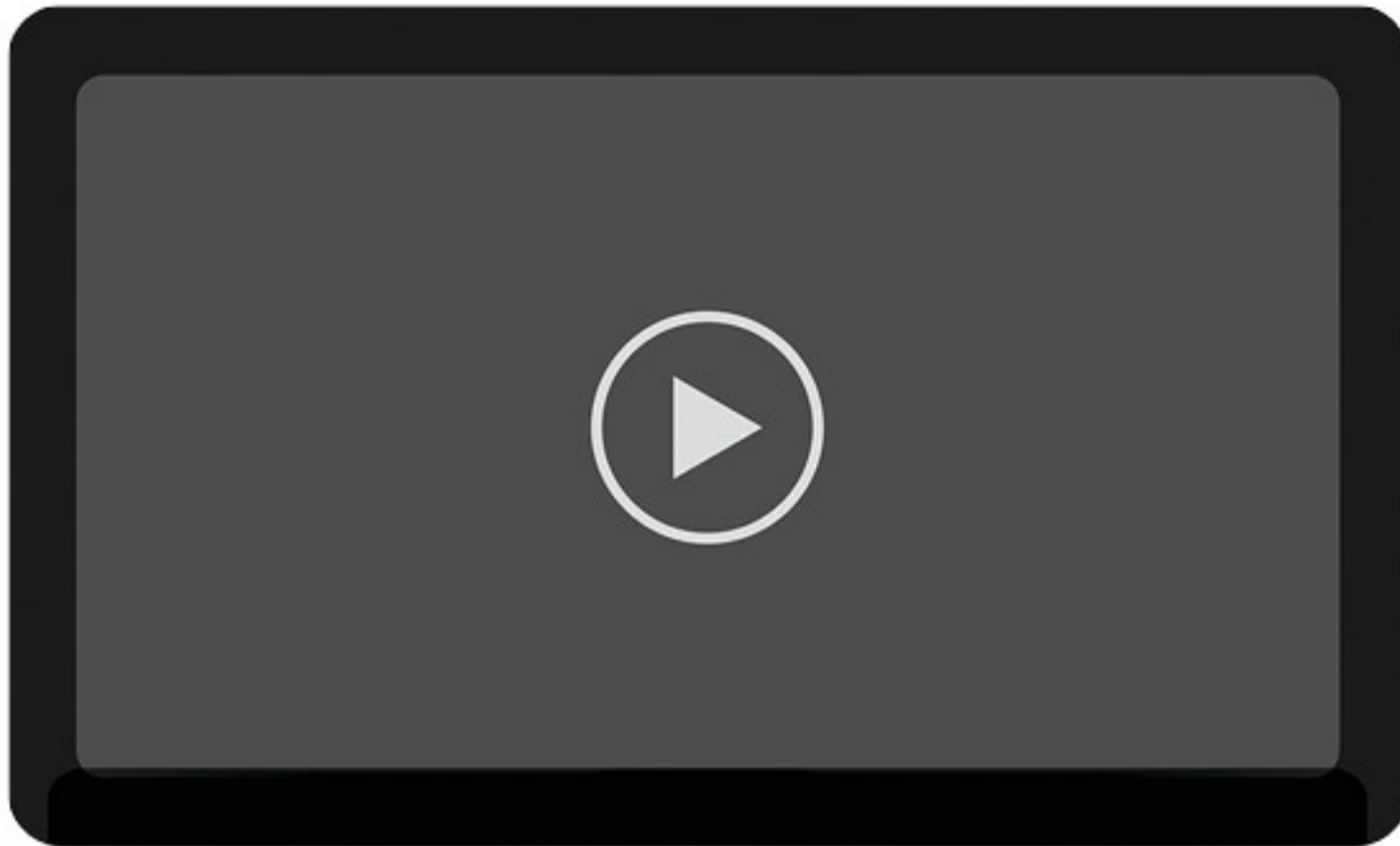
CFL Series

แหล่งรวมสินค้า ปั๊มและวาล์ว เคมี



บริษัท บุญสูงเนิน ปิ๊มแอนด์วาล์ว (ประเทศไทย) จำกัด  
 55/29 หมู่ 3 ต.ลำโพ อ.บางบัวทอง จ.นนทบุรี 11110  
 55/29 Moo 3, Lampo, Bangbuathong, Nonthaburi 11110  
 Tel. : +662 525 8630 (อัตโนมัติ 9 สาย) Fax. : +662 525 8695  
 E-mail : bsn.chemtai@gmail.com





### บุญสูงเนิน บีมแอนด์วาล์ว (ประเทศไทย) บจก.

ตัวแทนจำหน่ายบีมเคมี ยี่ห้อ KUOBAO ที่ใช้ในอุตสาหกรรมต่างๆ เช่น อุตสาหกรรมยานยนต์ อุตสาหกรรมอิเล็กทรอนิกส์ อุตสาหกรรมชุมชนและโรงงานอุตสาหกรรมต่างๆ ที่มีระบบบำบัดน้ำเสีย ด้วยประสบการณ์การทำงานมานานกว่า 20 ปี บริษัทจึงมีความมั่นคง มีความรอบรู้ สามารถให้บริการลูกค้าได้รวดเร็วจนเป็นที่ไว้วางใจจากลูกค้าเสมอมา

เรามีศักยภาพในการให้บริการลูกค้า โดยเริ่มจาก

- ให้คำปรึกษาเกี่ยวกับบีมเคมีทุกชนิด
- ให้คำแนะนำในการเลือกบีมให้ตรงกับวัตถุประสงค์การใช้งาน
- ให้คำแนะนำการใช้บีมให้ถูกวิธี
- ให้บริการตลอดอายุการใช้งาน
- มีทีมบริการหลังการขาย

สินค้าและบริการ  
บีมชนิดต่างๆ

#### Address

### **BOONSUNGNOEN PUMP & VALVE (THAILAND) CO., LTD.**

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Contact : Mr. Suthep Salamtai



**CHEMTAI**

**SELF - PRIMING CHEMICAL PUMP**

# **COAXIAL VACUUM ACID/ALKALINE PUMP**

**CT SERIES / CTB SERIES**

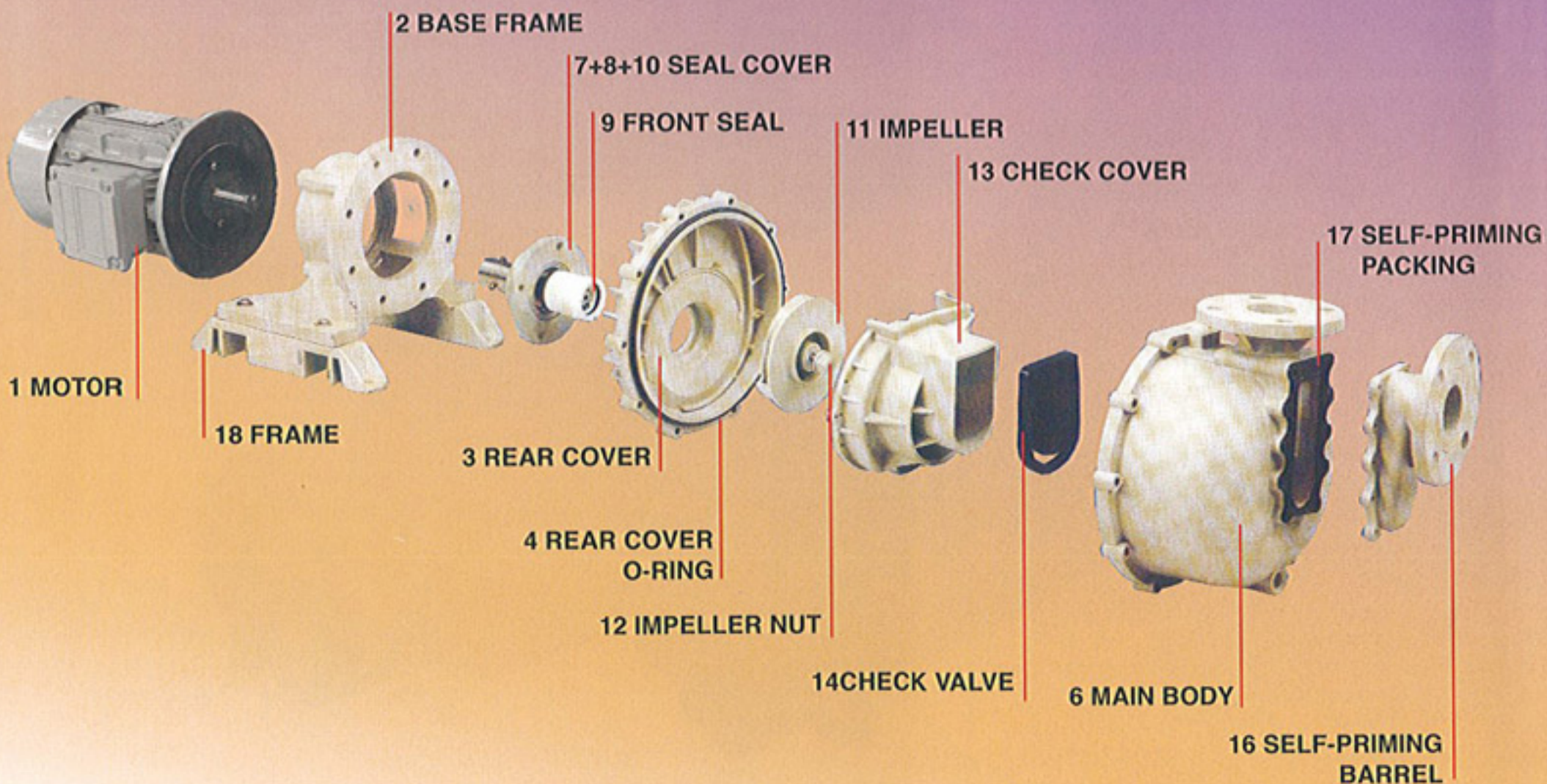
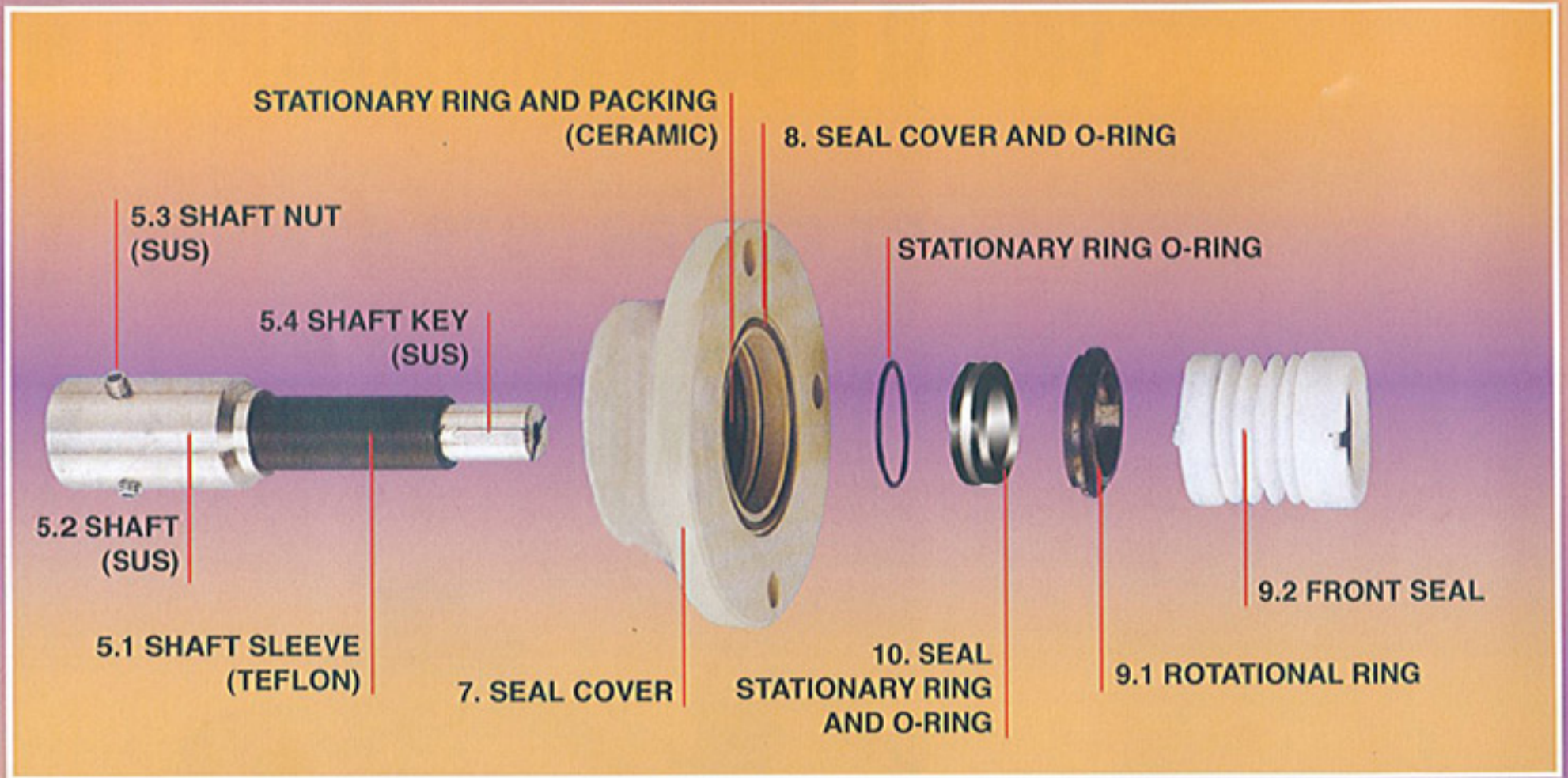
**OPERATION INSTRUCTION**





CHEMTAI

# A combination of theorem and extensive experience.



# CT SERIES

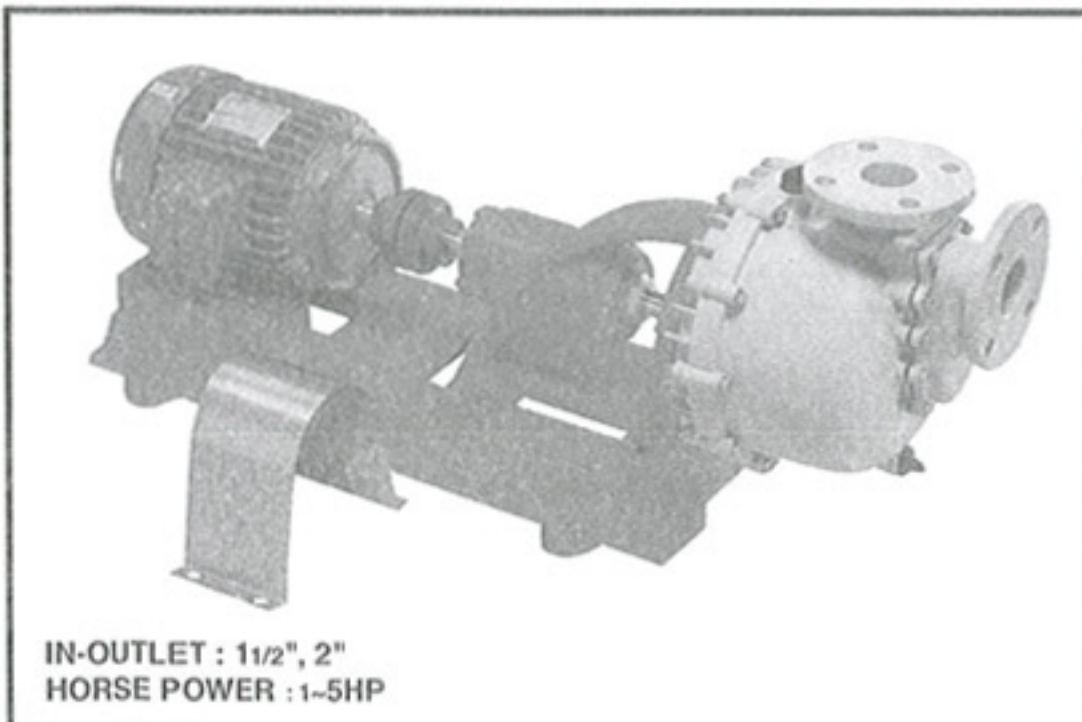
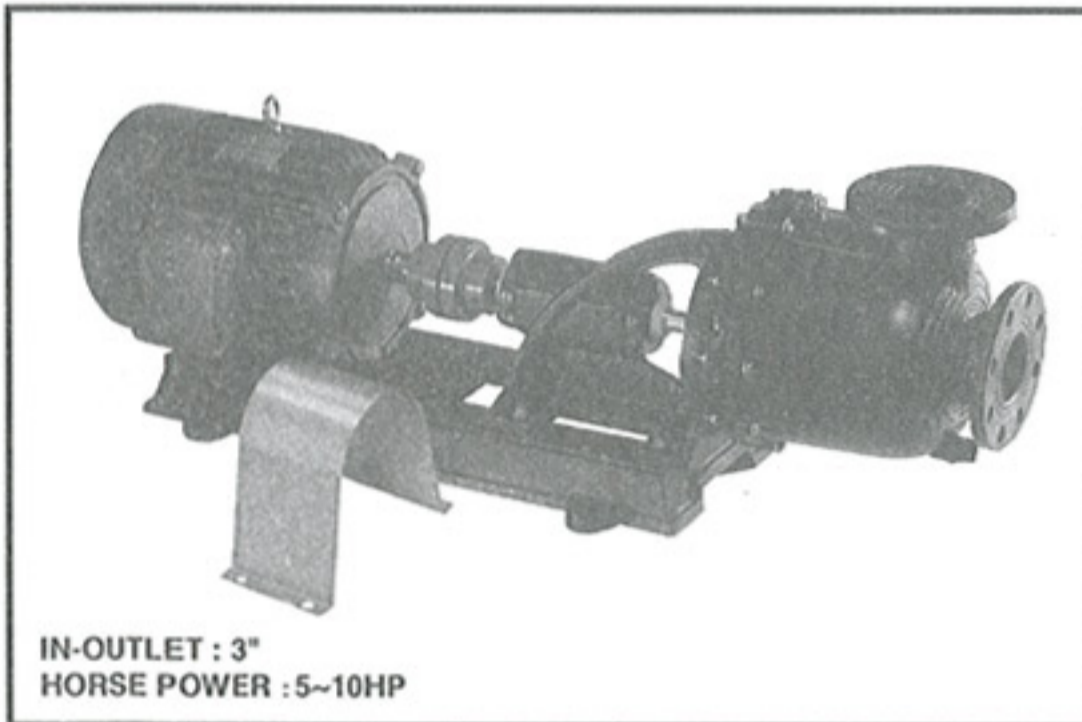
## COAXIAL VACUUM ACID/ALKALINE-RESIST PUMP

# CTB SERIES

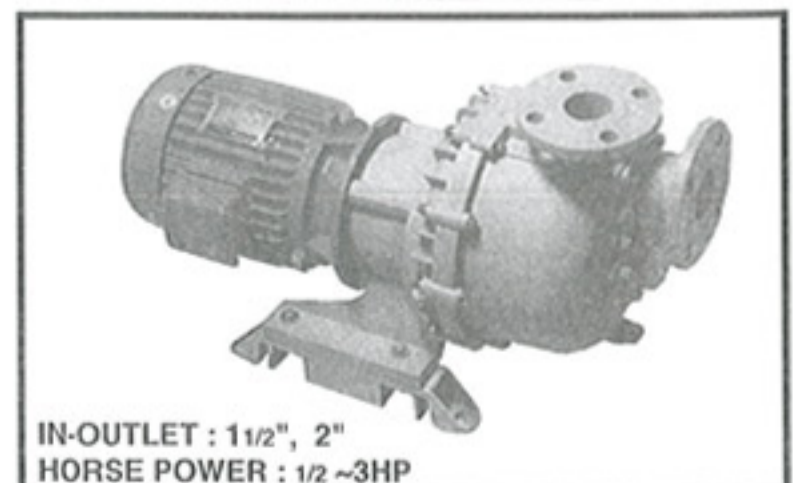
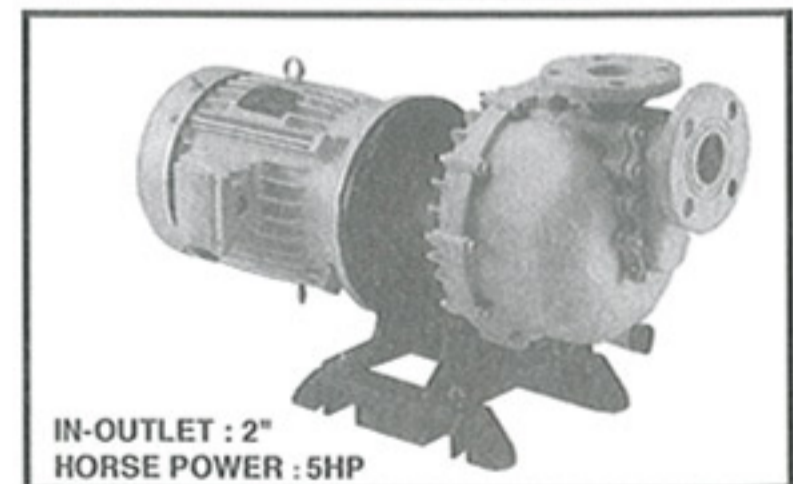
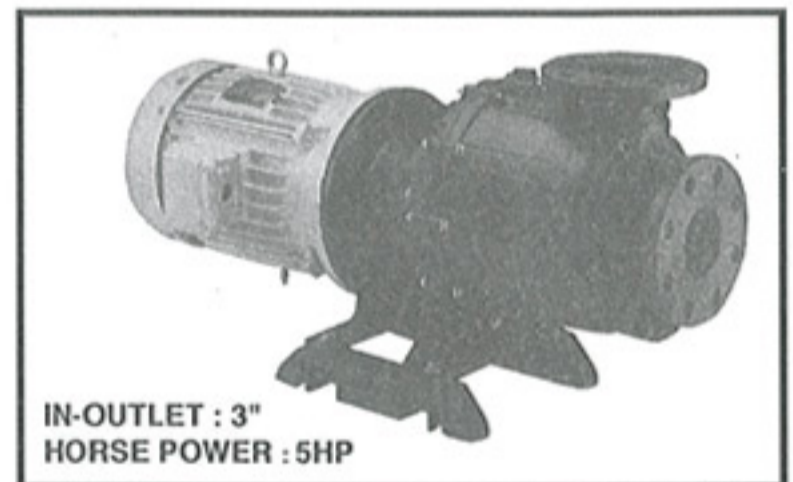
## CONNECTING AND SELF-PRIMING CHEMICAL PUMP

CT / CTB	40	02	2	E	A	L	S	C	H
1	2	3	4	5	6	7	8	9	10
1	2		3		4		5		
<b>CT/CTB-TYPE</b>	<b>IN-OUTLET</b>		<b>POWER</b>		<b>POLE</b>		<b>RUBBER MATERIAL</b>		
<b>CT/CTB</b> - MATERIAL FRPP	40-11/2"		11-1 Ø 1/2HP		2-2P		E-EDPM		
<b>CTC/CTBC</b> - MATERIAL CFRPP	50-2"		13-3 Ø 1/2HP		4-4P		V-VITON		
<b>CTP/CTBP</b> - MATERIAL PVDF	75-3"		01-3 Ø 1HP						
			02-3 Ø 2HP		05-3 Ø 5HP				
			07-3Ø 7.5HP		10-3 Ø 10HP				
6	7		8		9		10		
<b>A-WITH CHECK-VALVE</b> (INLET HIGHER THAN LIQUID LEVEL)	<b>L-LOW HEAD</b> <b>H-HIGH HEAD</b>		<b>STATIONARY RING</b> S-SIC		<b>ROTATIONAL RING</b> C-CARBON S-SIC		<b>SPRING</b> H-HASTELLOY-C S-SUS316		

### CTB SERIES TYPE



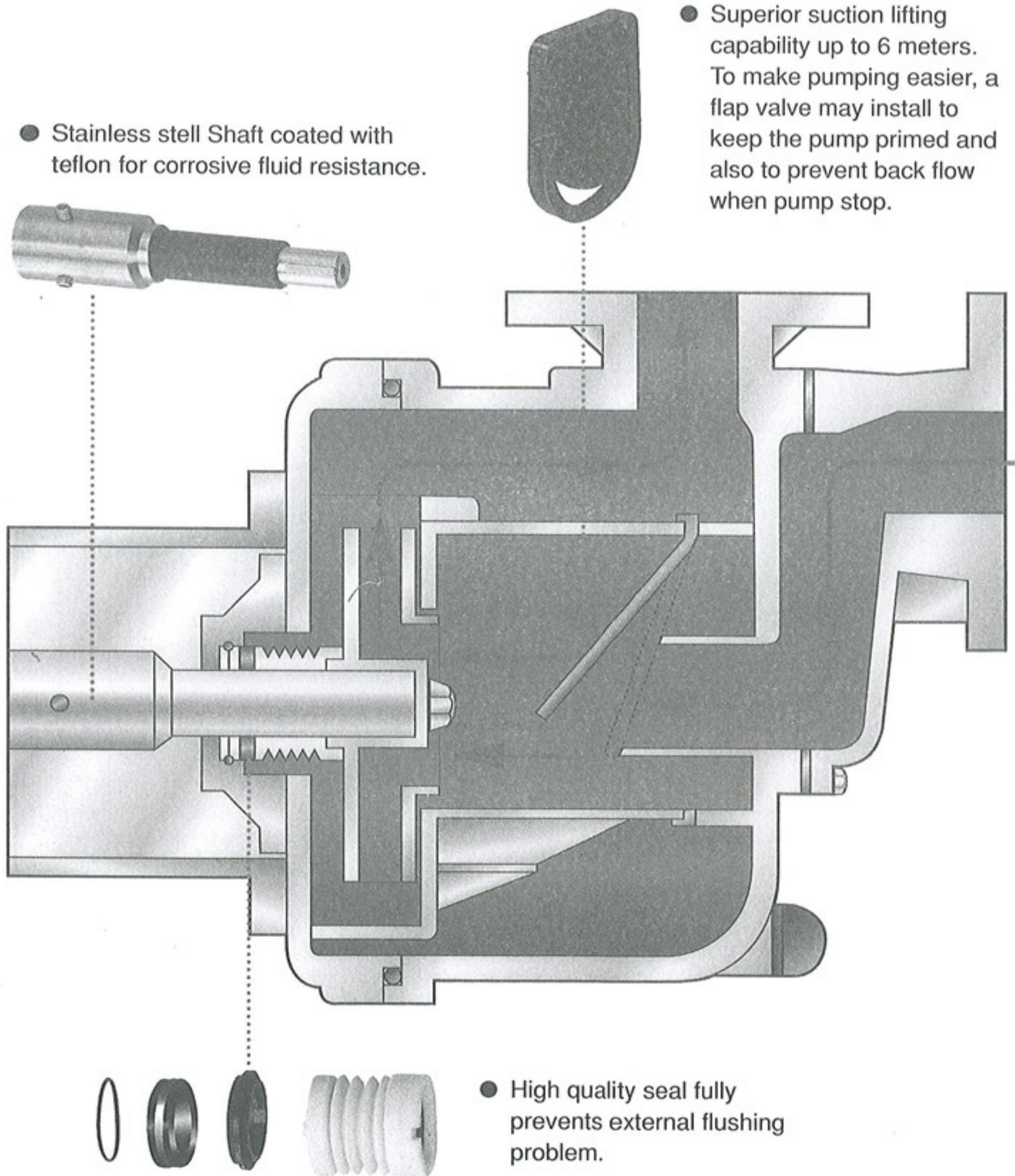
### CT SERIES TYPE



# Superior quality of pump body. One piece injected without welding.

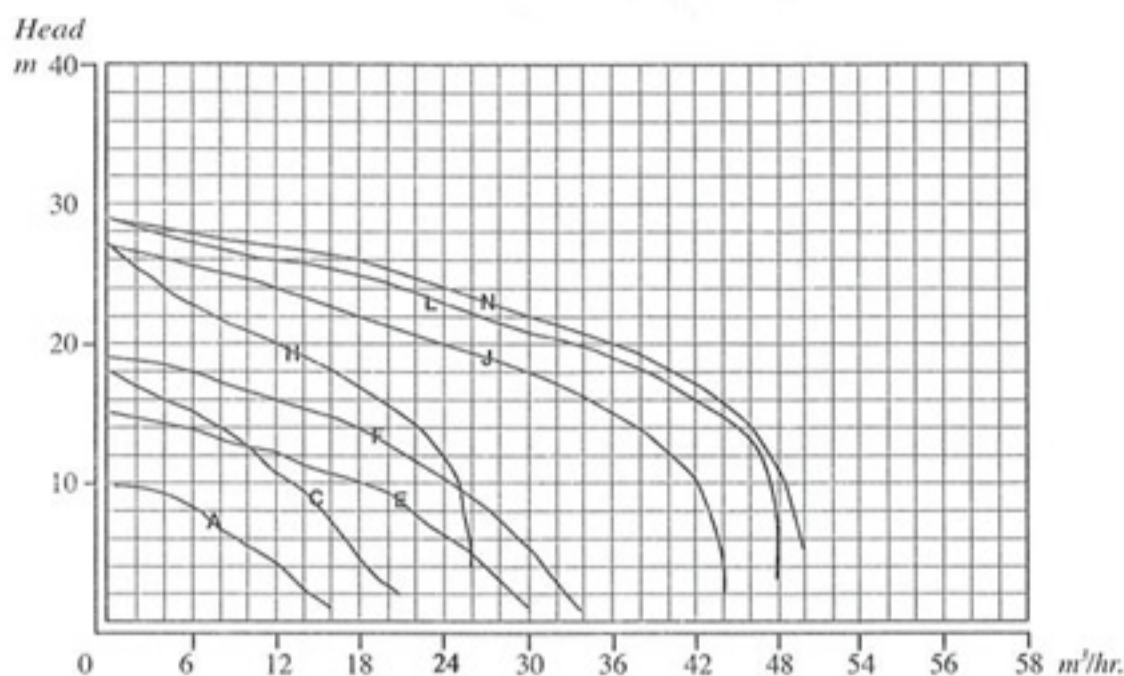
- Stainless steel Shaft coated with teflon for corrosive fluid resistance.

- Superior suction lifting capability up to 6 meters. To make pumping easier, a flap valve may install to keep the pump primed and also to prevent back flow when pump stop.



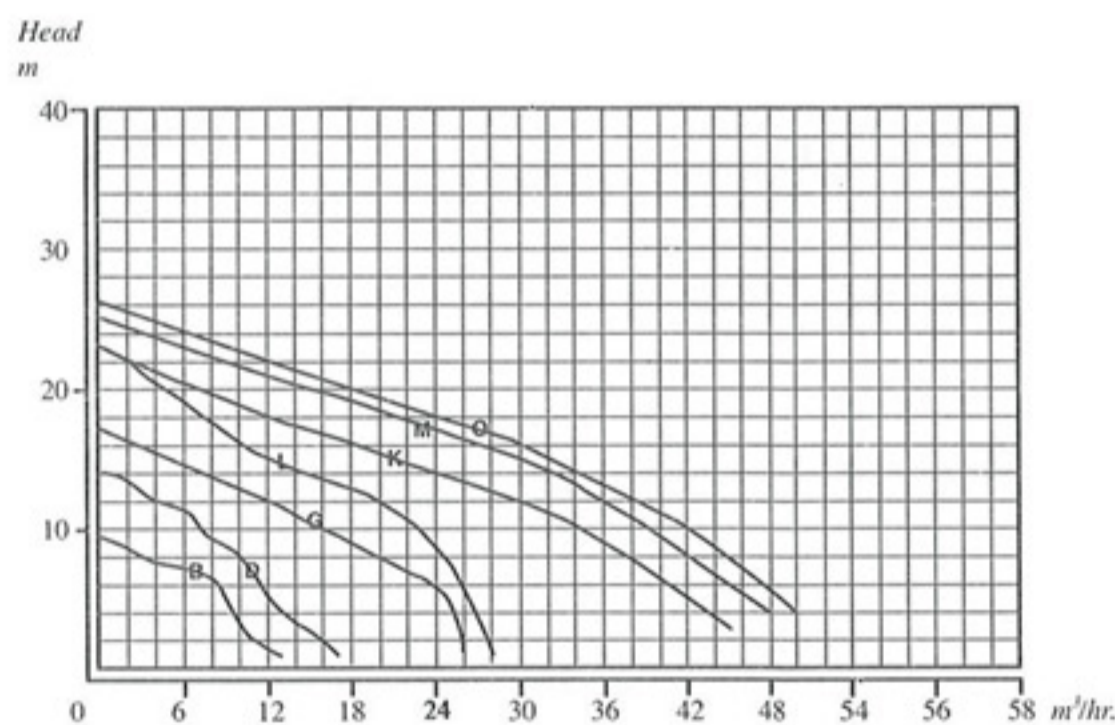
- High quality seal fully prevents external flushing problem.

# Performance Curve Close Impeller



TYPE	MODEL	CURVES NO	IN-OUTLET DIMENSION (M/M)	MOTOR			HEAD (M)	CAPACITY (M3/HR.)	MAX HEAD M	MAX CAPACITY (M3/HR.)	WEIGHT KG
				PHASE	POLARITY	HP					
CT	40012H	A	40/40	3Ø	2	1	6.5	7	10	16	26
CT	40022H	C	40/40	3Ø	2	2	12.5	10	18	20.7	30
CT	50032L	E	50/50	3Ø	2	3	10.5	15	14.7	30	42
CT	50032H	F	50/50	3Ø	2	3	14	17	19	34	42
CT/CTB	50052H	H	50/50	3Ø	2	5.5	19.5	13	27	26	54
CT/CTB	75052H	J	75/75	3Ø	2	5.5	20.5	22	27	44	96
CTB	75072H	L	75/75	3Ø	2	7.5	23	24	29	48	112
CTB	75102H	N	75/75	3Ø	2	10	23.5	24	29	50	122

# Performance Curve Open Impeller

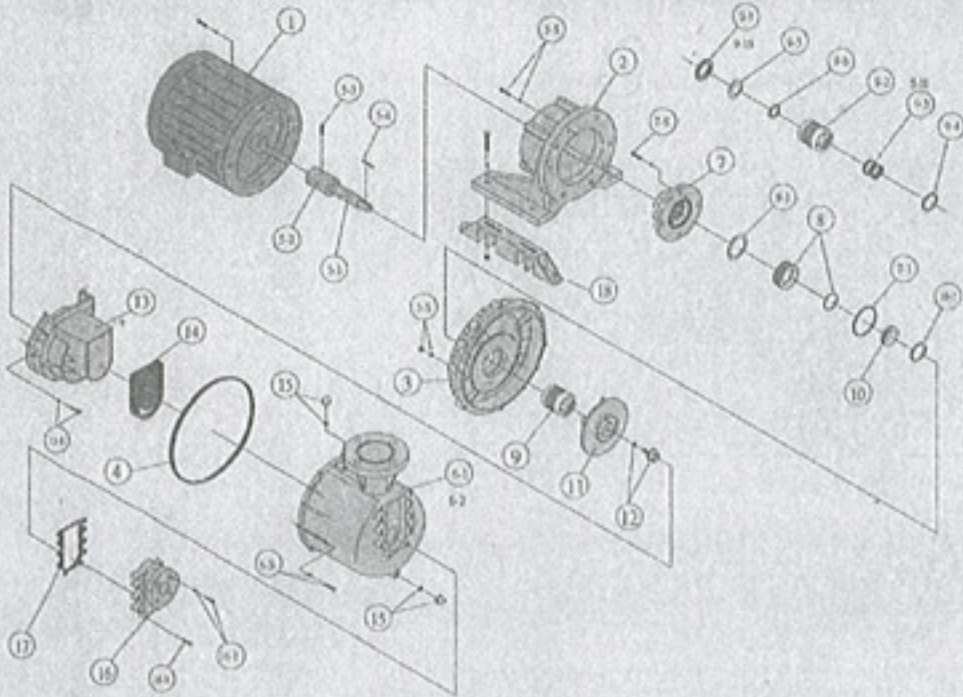


TYPE	MODEL	CURVES NO	IN-OUTLET DIMENSION (M/M)	MOTOR			HEAD (M)	CAPACITY (M3/HR.)	MAX HEAD M	MAX CAPACITY (M3/HR.)	WEIGHT KG
				PHASE	POLARITY	HP					
CT	40012 OPEN	B	40/40	3Ø	2	1	7	6.5	9.5	13	26
CT	40022 OPEN	D	40/40	3Ø	2	2	8.5	8.5	14	17	30
CT	50032 OPEN	G	50/50	3Ø	2	3	11.5	13	17	26	42
CT/CTB	50052 OPEN	I	50/50	3Ø	2	5.5	14	14	23	28	54
CT/CTB	75052 OPEN	K	75/75	3Ø	2	5.5	14.5	22	23	45	96
CTB	75072 OPEN	M	75/75	3Ø	2	7.5	17	24	25	48	112
CTB	75102 OPEN	O	75/75	3Ø	2	10	17.5	26	26	50	122

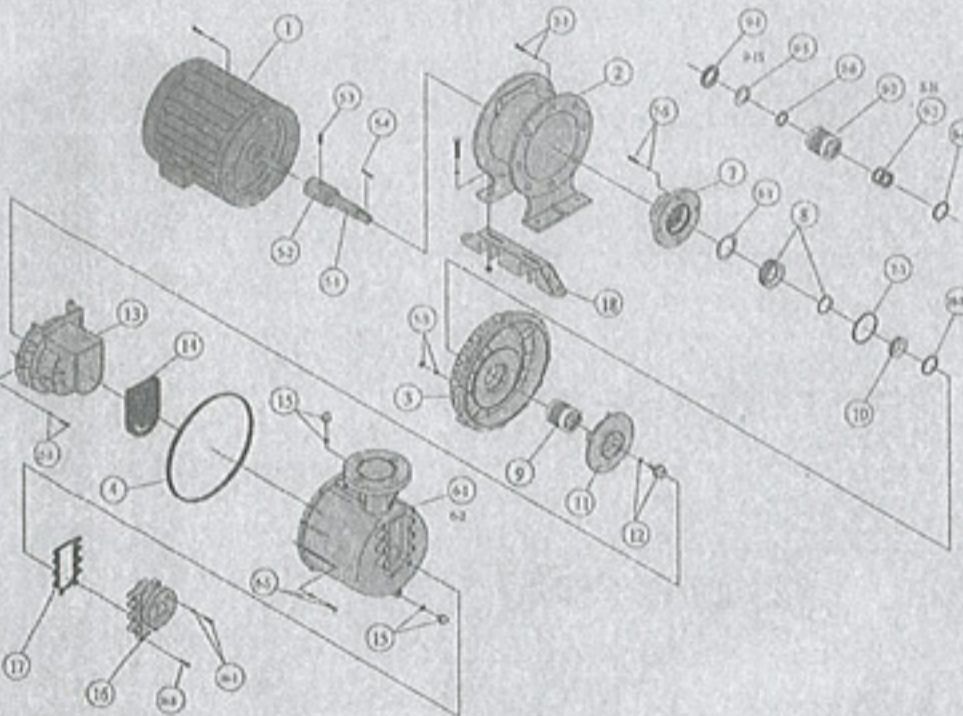
# CT /CTP SERIES

# CONSTRUCTION

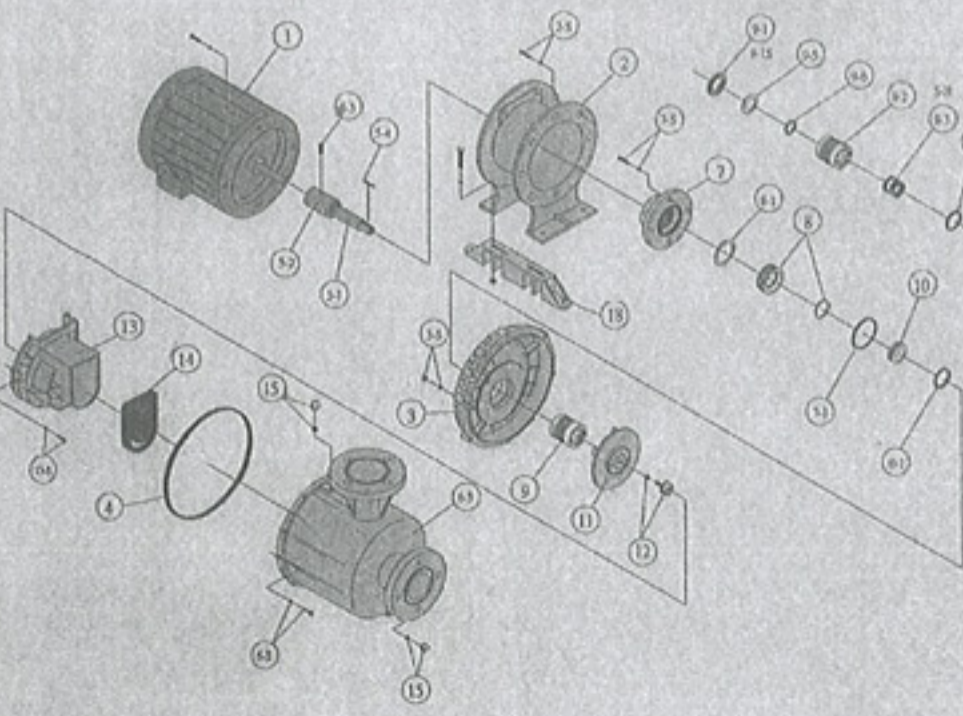
**IN-OUTLET : 1 1/2", 2" HORSE POWER: 1/2 -3HP**



**IN-OUTLET : 2" HORSE POWER : 5HP**

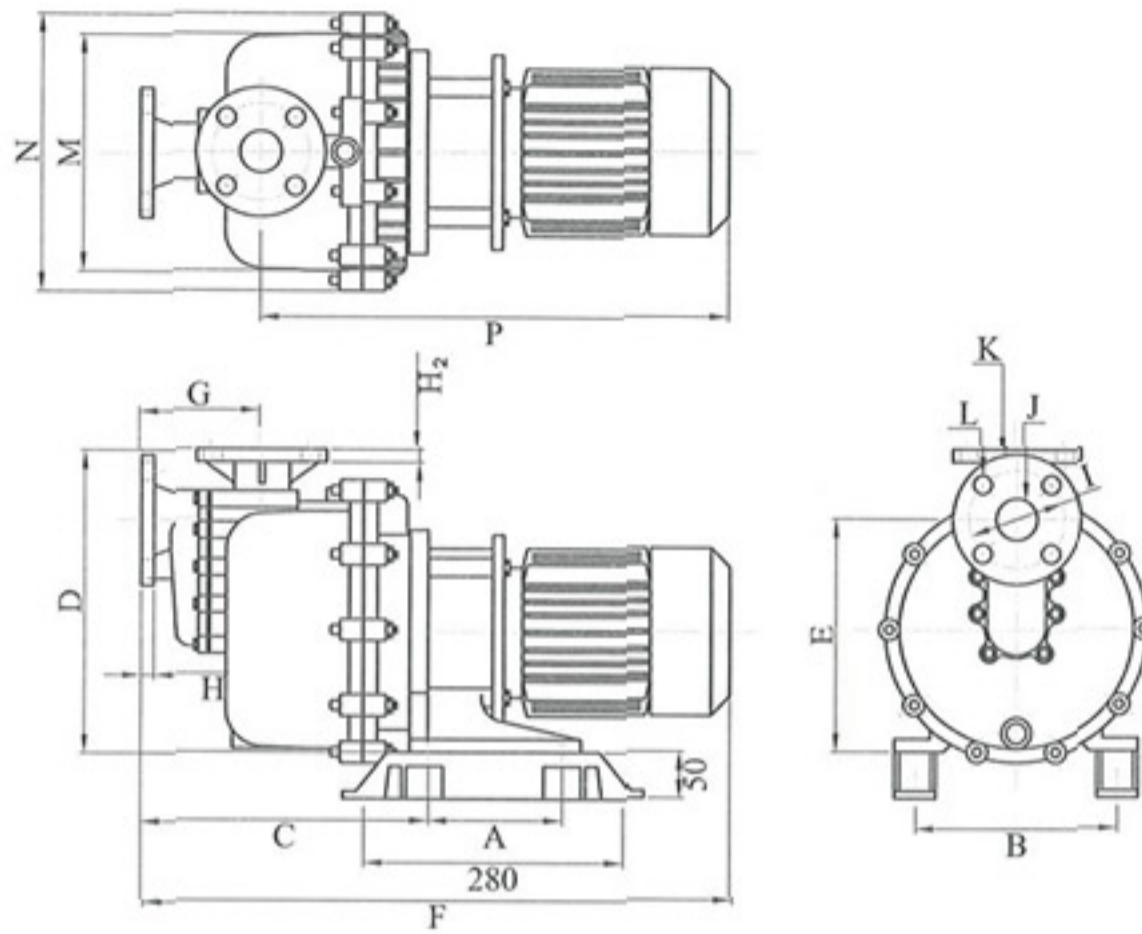


**IN-OUTLET : 3" HORSE POWER : 5HP**



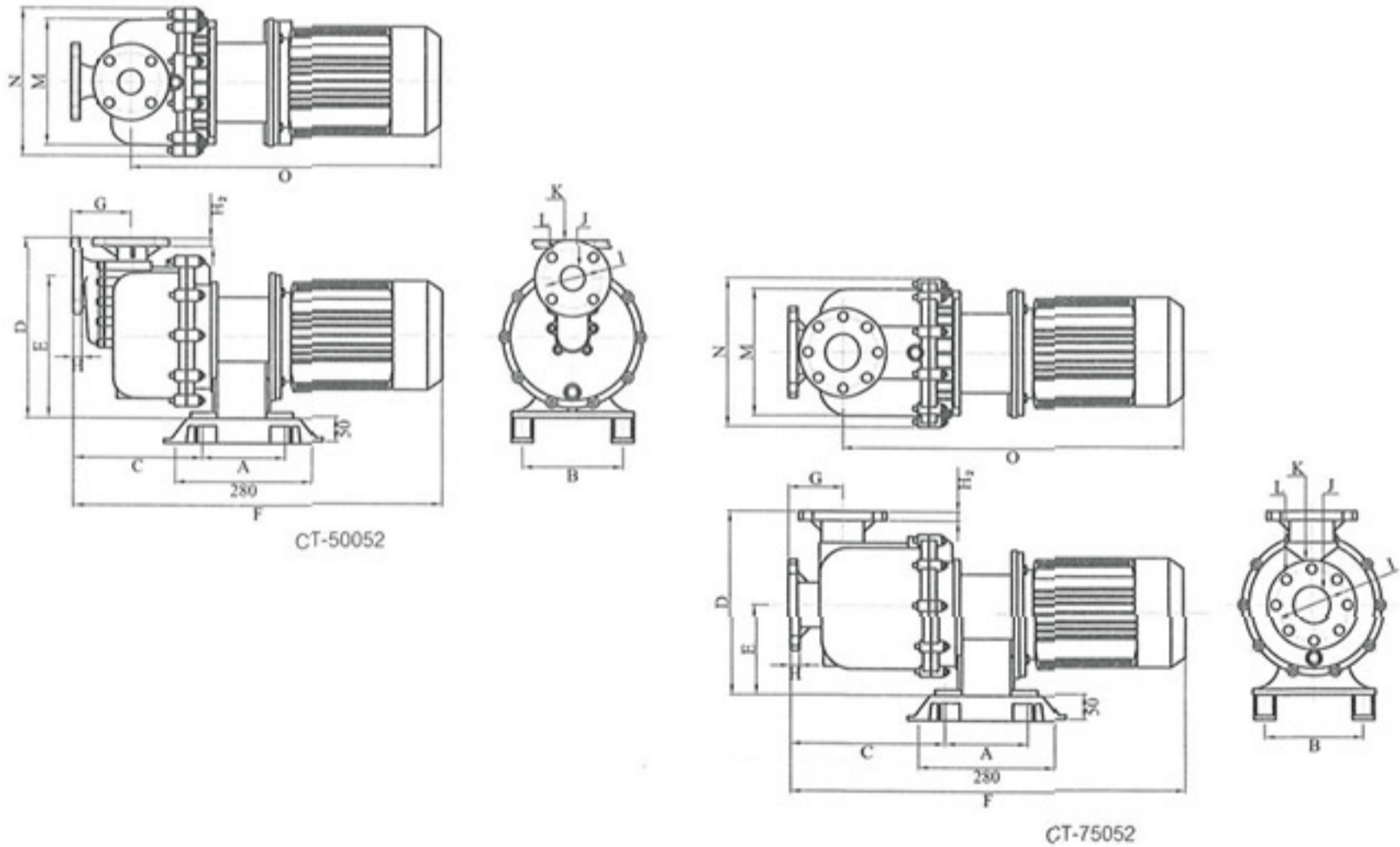
NO.	DESCRIPTION	MATERIAL
1	MOTOR	
2	BASE FRAME	FC, FRPP
3	REAR COVER	FRPP, CFRPP, PVDF
4	REAR COVER O-RING	EPDM, VITON
5-1	SHAFT SLEEVE	TEFLON
5-2	SHAFT	SUS
5-3	SHAFT NUT	SUS
5-4	SHAFT KEY	SUS
6	MAIN BODY	FRPP, CFRPP, PVDF
7	SEAL COVER AND O-RING	FRPP, CFRPP, PVDF/EPDM, VITON
8	STATIONARY RING AND O-RING	PPS, PVDF, EPDM, VITON
9	FRONT SEAL	TEFLON
9-1	ROTATIONAL RING	CARBON, SIC
9-2	TEFLON BELLOWS	TEFLON
9-3	SPRING	SUS, HC
9-4	FRONT O-RING	EPDM, VITON
9-5	PACKING	EPDM, VITON
9-6	REAR O-RING	EPDM, VITON
10	SEAL STATIONARY RING AND O-RING	SIC EPDM, VITON
11	IMPELLER	FRPP, CFRPP, PVDF
12	IMPELLER NUT AND O-RING	FRPP, PVDF/ EPDM, VITON
13	CHECK COVER	FRPP, CFRPP, PVDF
13S	CHECK COVER NUT	SUS
14	CHECK VALVE	EPDM, VITON, TEFLON
15	WATER FILLING CAP AND O-RING	FRPP, CFRPP, PVDF/EPDM, VITON
16	SELF-PRIMING BARREL	FRPP, CFRPP, PVDF
16S	SELF-PRIMING BARREL NUT AND O-RING	FRPP, PVDF/ EPDM, VITON
17	SELF-PRIMING PACKING	EPDM, VITON
18	FRAME	FRPP

# DIMENSION DRAWING



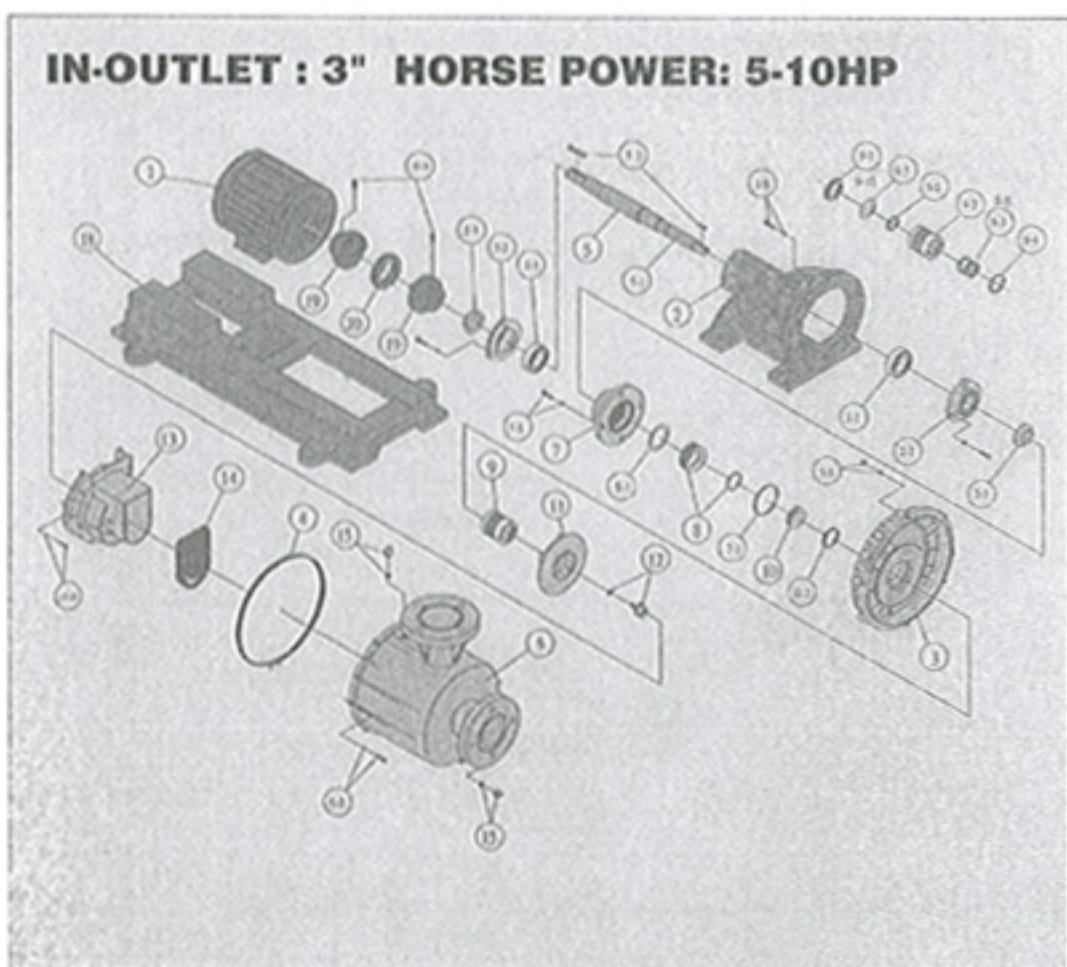
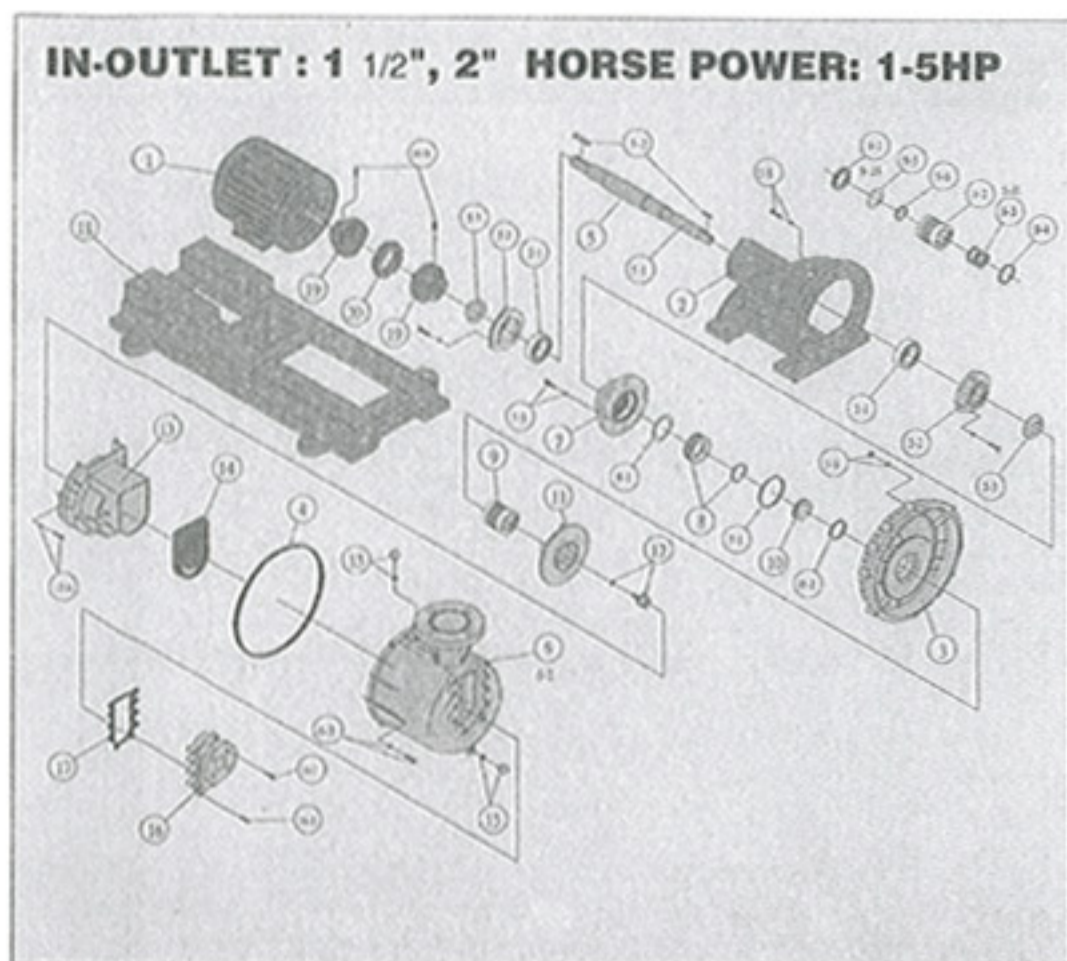
MODEL	A	B	C	D	E	F	G	H	H <sub>2</sub>	I	J	K	L	M	N	P
CT-40011	145	210	320	320	250	640	135	16	12	Ø105	Ø43	Ø140	Ø20	255	300	505
CT-40012	145	210	320	320	250	640	135	16	12	Ø105	Ø43	Ø140	Ø20	255	300	505
CT-40014	145	210	320	320	250	640	135	16	12	Ø105	Ø43	Ø140	Ø20	255	300	505
CT-40022	145	210	320	320	250	660	135	16	12	Ø105	Ø43	Ø140	Ø20	255	300	525
CT-50032	145	210	320	320	250	710	135	16	14	Ø120	Ø50	Ø155	Ø20	255	300	575

# DIMENSION DRAWING



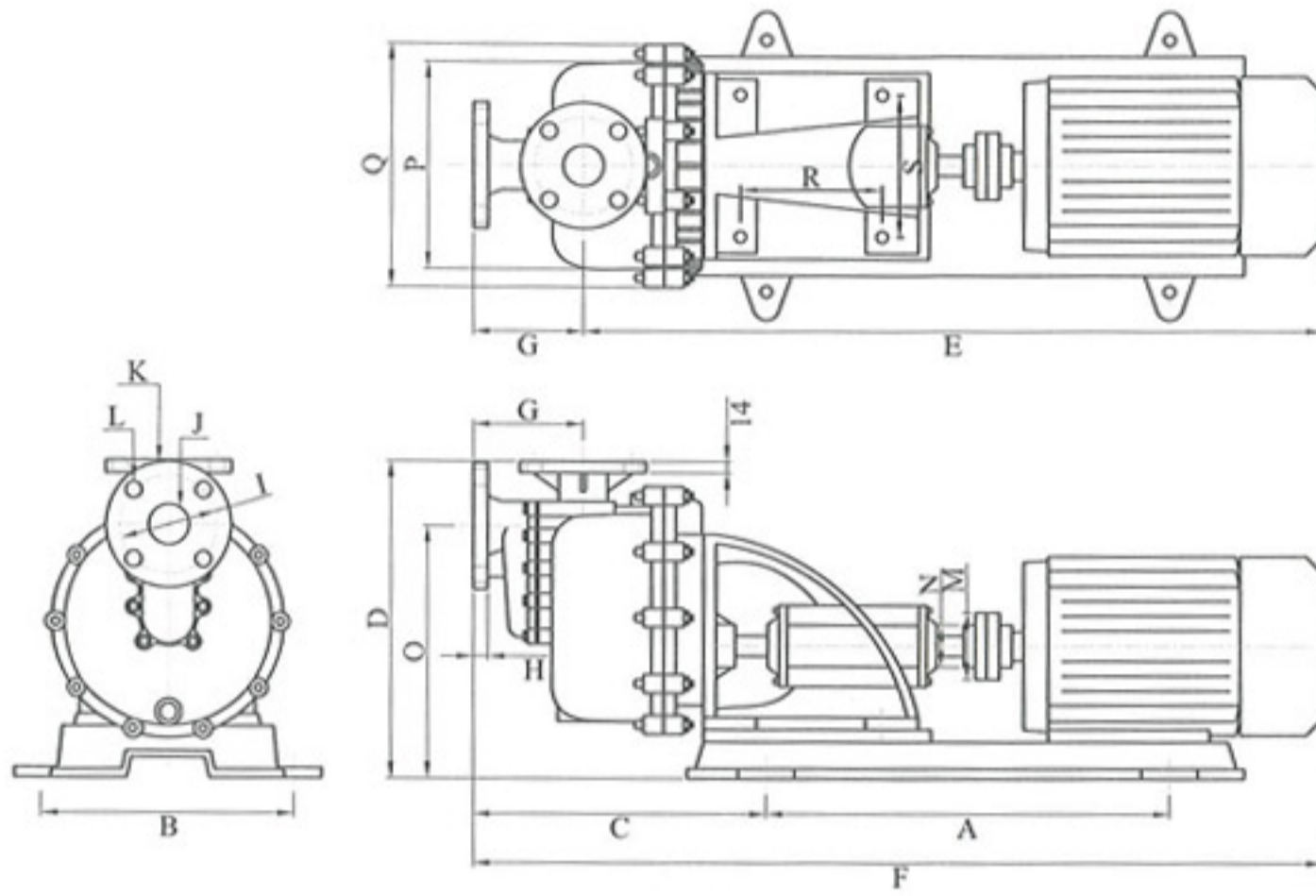
MODEL	A	B	C	D	E	F	G	H	H <sub>2</sub>	I	J	K	L	M	N	O
CT-50052	170	200	265	360	280	760	135	18	14	Ø120	Ø50	Ø155	Ø20	255	300	625
CT-75052	170	200	305	375	180	800	120	18	14	Ø145	Ø75	Ø180	Ø20	255	300	680

# CTB/CTBP SERIES CONSTRUCTION

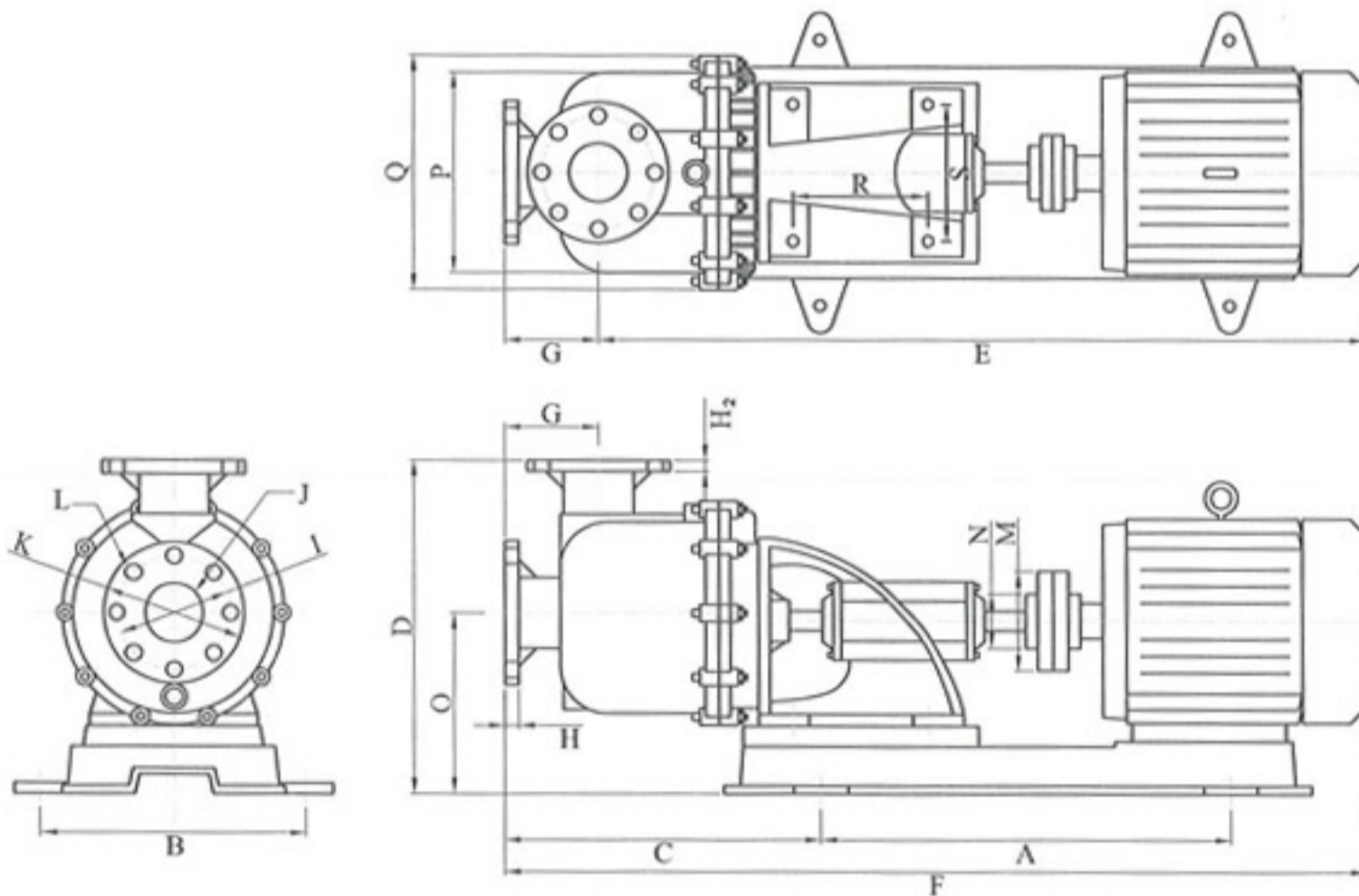


NO.	DESCRIPTION	MATERIAL
1	MOTOR	
2	BASE FRAME	FC, FRPP
3	REAR COVER	FRPP, CFRPP, PVDF
4	REAR COVER O-RING	EPDM, VITON
5-1	SHAFT SLEEVE	TEFLON
5-2	SHAFT	SUS
5-3	SHAFT NUT	SUS
5-4	SHAFT KEY	SUS
6	MAIN BODY	FRPP, CFRPP, PVDF
7	SEAL COVER AND O-RING	FRPP, CFRPP, PVDF/EPDM, VITON
8	STATIONARY RING AND O-RING	PPS, PVDF, EPDM, VITON
9	FRONT SEAL	TEFLON
9-1	ROTATIONAL RING	CARBON, SIC
9-2	TEFLON BELLOWS	TEFLON
9-3	SPRING	SUS, HC
9-4	FRONT O-RING	EPDM, VITON
9-5	PACKING	EPDM, VITON
9-6	REAR O-RING	EPDM, VITON
10	SEAL STATIONARY RING AND O-RING	SIC EPDM, VITON
11	IMPELLER	FRPP, CFRPP, PVDF
12	IMPELLER NUT AND O-RING	FRPP, PVDF, EPDM, VITON
13	CHECK COVER	FRPP, CFRPP, PVDF
13S	CHECK COVER NUT	SUS
14	CHECK VALVE	EPDM, VITON, TEFLON
15	WATER FILLING CAP AND O-RING	FRPP, CFRPP, PVDF/EPDM, VITON
16	SELF-PRIMING BARREL	FRPP, CFRPP, PVDF
16S	SELF-PRIMING BARREL NUT AND O-RING	FRPP, PVDF/EPDM, VITON
17	SELF-PRIMING PACKING	EPDM, VITON
18	FRAME	FC
19	COUPLING	FC
20	COUPLING RUBBER	EPDM

# DIMENSION DRAWING



CTB-50052H



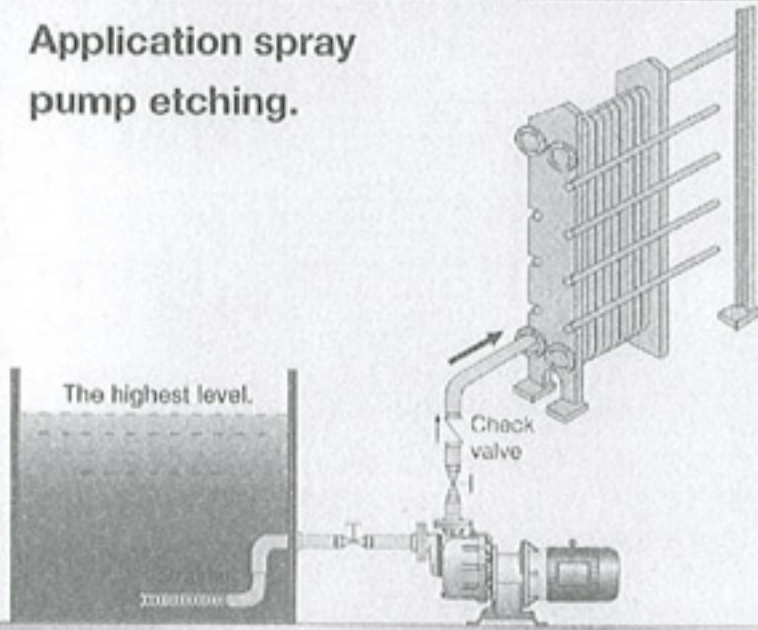
CTB-75052H/CTB-75072H/CTB-75102H

## DIMENSION TABLE

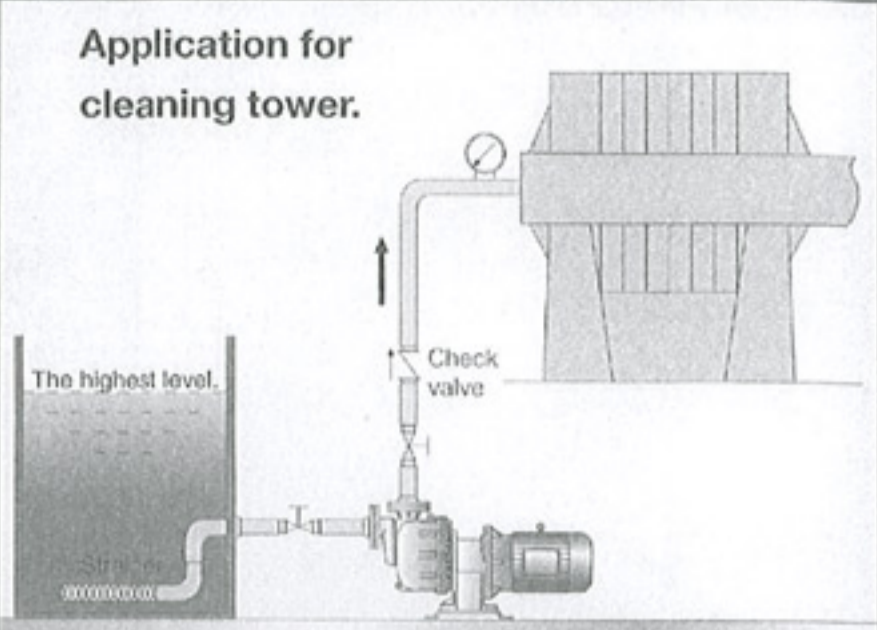
MODEL	A	B	C	D	E	F	G	H	H <sub>2</sub>	I	J	K	L	M	N	O	P	Q	R	S
CTB-50052H	500	310	360	390	915	1050	135	18	14	Ø120	Ø50	Ø155	Ø20	Ø82	Ø52	310	255	300	175	175
CTB-75052H	500	310	400	400	975	1095	120	18	14	Ø145	Ø75	Ø180	Ø20	Ø82	Ø52	210	255	300	175	175
CTB-75072H	530	340	405	425	990	1110	120	18	14	Ø145	Ø75	Ø180	Ø20	Ø127	Ø69	230	255	300	175	175
CTB-75102H	530	340	405	425	990	1110	120	18	14	Ø145	Ø75	Ø180	Ø20	Ø127	Ø69	230	255	300	175	175

# Pump Application Examples

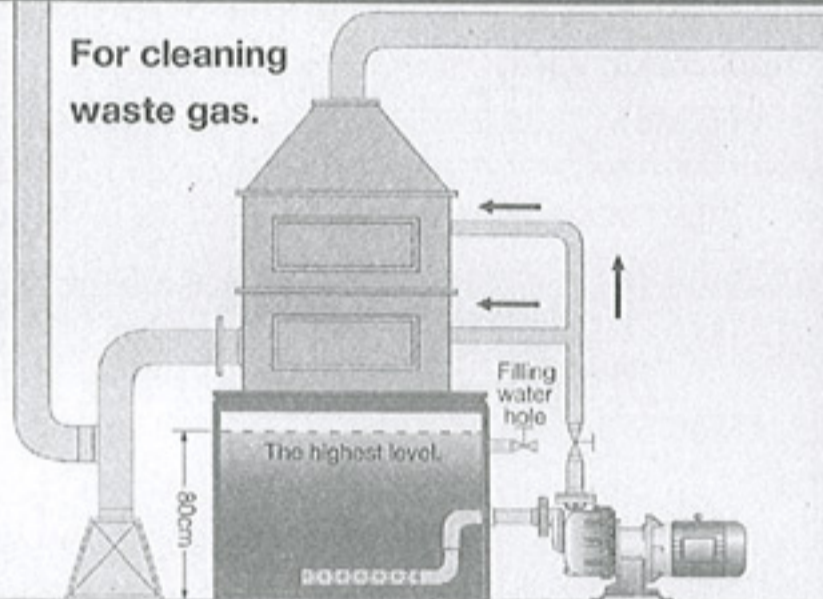
Application spray pump etching.



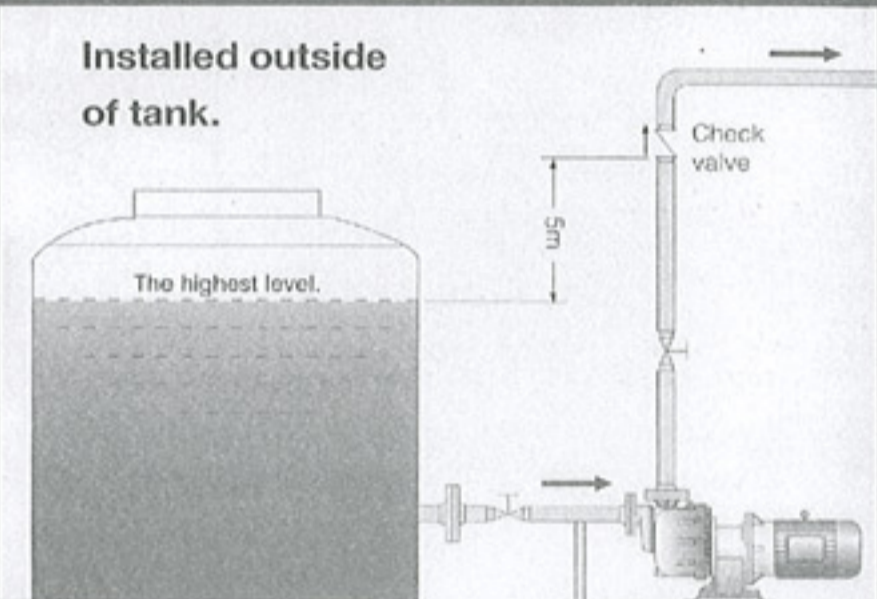
Application for cleaning tower.



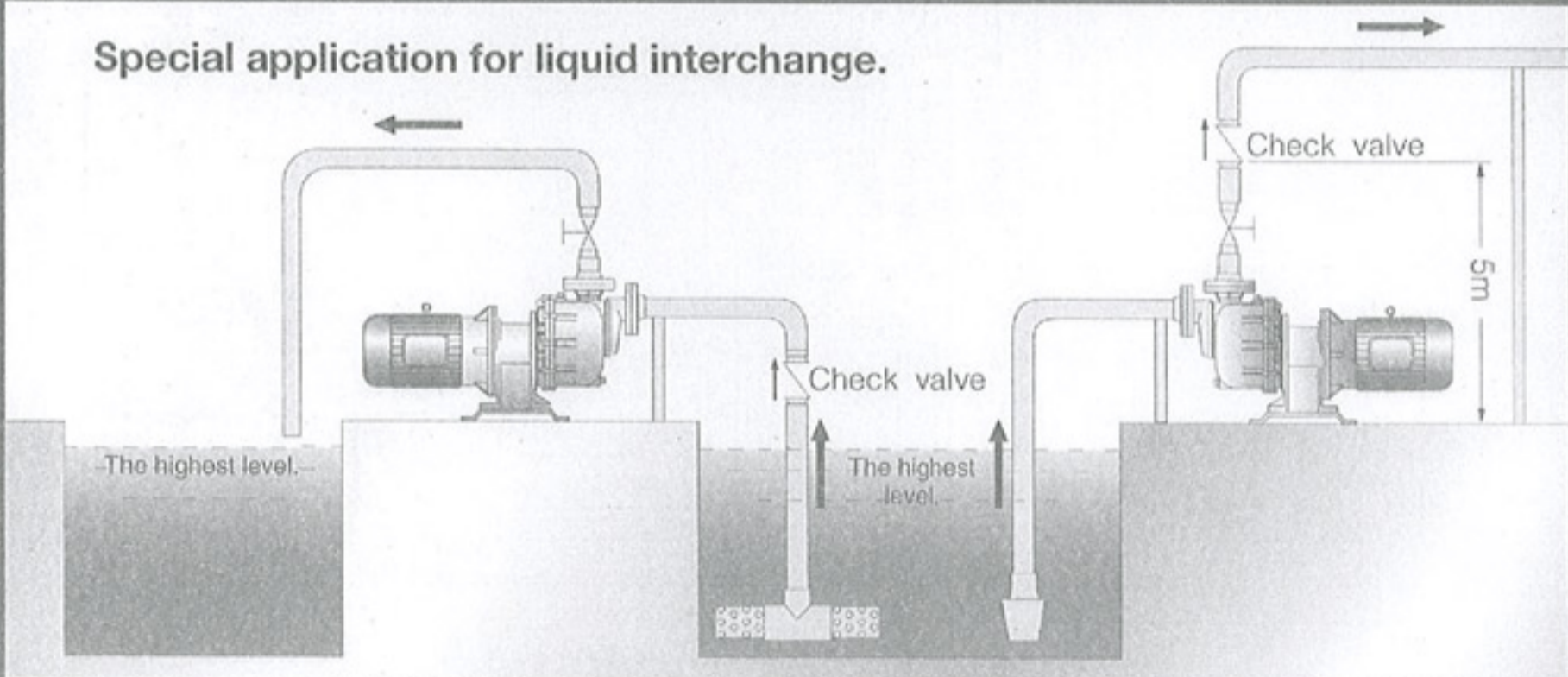
For cleaning waste gas.



Installed outside of tank.



Special application for liquid interchange.



## TYPICAL APPLICATIONS

- Chemical industry.
- Waste water treatment industry
- Pulp and paper making industry
- Textile industry
- Pharmaceutical industry
- Dyeing industry
- PCB and electronic industry
- Plating industry

**TROUBLE SHOOTING**

CONDITON	REASON	SOLUTION
No liquid in the pump outlet.	Whether the pump is full of liquid. Whether the in-outlet valve is open. Whether there is chemical solution in the vessel.	Brin the pump with liquid to prevent dry-running. Open the in-outlet valve. Heighten the liquid level in the chemical vessel.
Small outlet rate of flow in the pump, loud noise from the motor.	Wire wrongly in the motor.	Interchange the wire of the power supply.
Leakage in the pump seal.	Seal breakage caused by dry-running.	Change a new seal to prevent dry running.
The motor doesn't work while starting the power supply.	Cut off the power supply. The motor brunt badly. Imprurities bloced the impeller. Shaft slackenned, bloc between the impeller and check cover.	Connect the power supply. Change the wire. Clear tje imprurities in the impeller. Interchange and strengthen the shafe, change the check cover and impeller.
Low outlet rate of flow in the pump.	Block in the inlet boecom valve or strainer. Breakage to the check valve or the check cover. Impurities checked the impeller. High head. Block in the outlet.	Clear the imprurities. Change the broken fittings. Clear the impeller imprutier. Choose the pump with the right head. Clear the imprurities.
The small amount of outlet liquid in the pump and with bubbles.	The inlet pipe sucked in air. Breakage to the pipe.	Check the inlet liquid level. Repair the broken pipe.
Loud vibration, loud noise from the pump.	The inlet sucked in air. Breakage to pump bearing. Frictiom between impeller, checke cover and rear cover.	Check wheter there is leakage in the inlet pipe and whether the inlet is near to the air mixing pipe. Clear the imprurities. Change the bearing. Reassemble.
Abnomally high temprature in the motor.	Overload. Single-phase run. Wire wrongly.	Make the pump impeller diameter smaller. Check the wiring. Connect the wires according to the mark in the motor connect-box

# CORROSION RESISTANCE CHART



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CHEMICAL NAME	CONCENTRATION %	TEMPERATURE °C	BODY MATERIAL			SEAL MATERIAL			RUBBER MATERIAL		
			FRPP	CFRPP	PVDF	Ceramic	Carbon	Sic	NBR	EPDM	VITON
H <sub>2</sub> SO <sub>4</sub> Sulfuric acid	30	40	●	●	●	●	●	●	●	●	●
		60	●	●	●	●	●	●		●	●
		80	●	●	●	●	●	●		○	●
		95			●	●	●	●			●
	60	40	●	●	●	●	●	●		●	●
		60	●	●	●	●	●	●		●	●
		80	○	○	●	●	●	●		○	●
	98	40			●	●	●	●			●
		60			○	●	●	●			●
HCL Hydrochloric acid	15	40	●	●	●	○	●	●		●	●
		60	●	●	●	●	●	●		●	●
		80	○	○	●	●	●	●		○	●
	32	40	●	●	●	●	●	●		○	○
		60	●	●	●	●	●	●			
		80	○	○	●	●	●	●			
CrO <sub>3</sub> Chromic acid	20	40			●	●					●
		60			●	●					●
		80			●	●					○
HNO <sub>3</sub> Nitric acid	20	40	●	●	●	●		●			●
		60	○	○	●	○		●			●
		80	○	○	●			●			●
	50	40	●	●	●			●			●
		60	○	○	●			●			●
		80	○	○	●			●			●
H <sub>3</sub> PO <sub>4</sub> Phosphoric acid	25	40	●	●	●	●	●	●	●	●	●
		60	●	●	●	●	●	●	○	●	●
		80	○	○	●	●	●	●		○	●
	50	40	●	●	●	●	●	●		●	●
		60	●	●	●	●	●	●		○	●
		80	○	○	●	○	●	●		○	●
NaOCl Sodium Hypochlorite	10	40	○	○	●	●	○	●			●
		60	△	△	●	●	△	●			●
		80	×	△	●	●	×	●			●
CH <sub>3</sub> COOH Acetic acid	25	40	●	●	●	●	●	●			×
		60	●	●	●	●	●	●			×
		80	○	○	●	●	●	●			×
HF Hydrofluoric	25	40	×	●	●	×	○	●		●	●
		60	×	○	●	×	○	●		●	●
		80	×	×	●	×	○	●		○	●
HCl+HNO <sub>3</sub> Aquaregia	3:1	40	×	×	●	●	×	●	×		○
		60	×	×	●	○	×	●	×		○
		80	×	×	●		×	●	×		●
H <sub>2</sub> O <sub>2</sub> Hydrogen Peroxide	10	40	●	●	●	●	×	●	×		●
		60	○	○	●	●	×	●	×		●
		80	×	×	●	●	×	●	×		●
NaOH Caustic soda	45	40	●	●	●	△	●	●	●	●	○
		60	○	○	○	×	●	●	●	●	△
		80	○	○	×	×	●	●	○	○	△
FeCl <sub>3</sub> Ferric chloride		40	●	●	●	●	●	●	●	●	●
		60	●	●	●	●	●	●	○	●	●
		80	●	●	●	●	●	●	●	●	●
Cu(CN) <sub>2</sub> Copper Cyanide		40	●	●	●	△	●	●	●	●	●
		60	●	●	●	△	●	●	●	●	●
Zn Cl <sub>2</sub> Zinc Chlorate		40	●	●	●	●	●	●	●	●	●
		60	●	●	●	●	●	●	●	●	●
NiSO <sub>4</sub> Nickel Sulfate		40	●	●	●	●	●	●	●	●	●
		60	●	●	●	●	●	●	●	●	●

● EXCELLENT ○ GOOD △ NOT GOOD × BAD

บริษัท บุญสูงเนิน ปัมแอนด์วาล์ว (ประเทศไทย) จำกัด  
BOONSUNGNOEN PUMP & VALVE (THAILAND) CO., LTD.

55/52 หมู่ที่ 2 ต.บ้านฉาง อ.เมืองปทุมธานี จ.ปทุมธานี 12000  
55/52 MOO 2, T.BANCHANG, A.MUANGPATHUMTHANI, PATHUMTHANI 12000, THAILAND.

TEL. 0-2593-4018-20. 0-2979-0376, 0-2979-1059, 0-2979-1875 FAX. 0-2979-1170

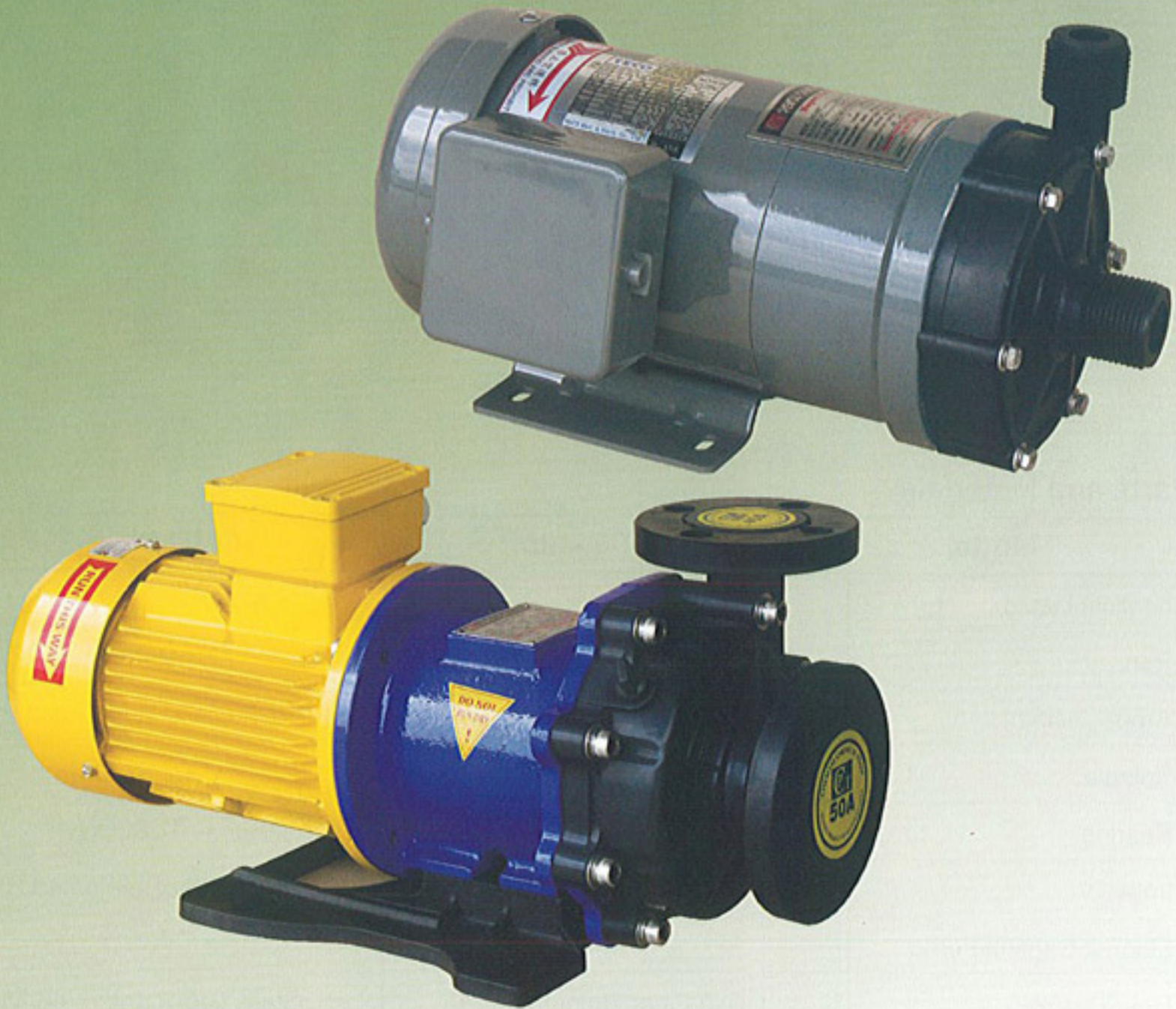
www.kuobaothailand.com E-mail : kuobaothailand@kuobaothailand.com



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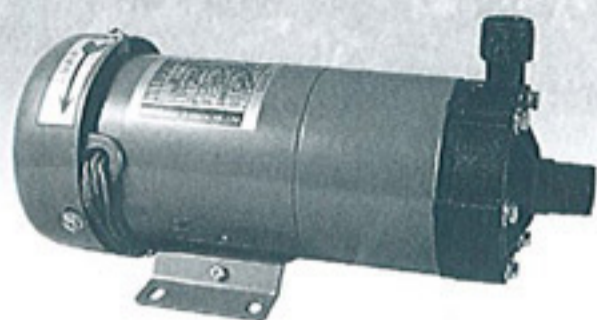
# *Magnetic Drive Pump*



**Specializing in the manufacturing of Magnetic Drive Pump**

# Magnetic Drive Pump Series

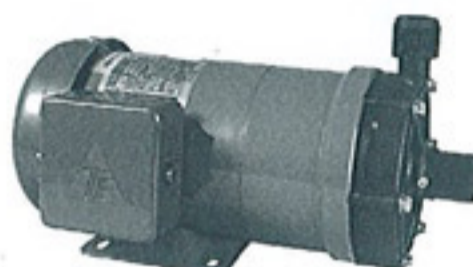
CMD-06, CMD-09, CMD-18, CMD-25 TYPE



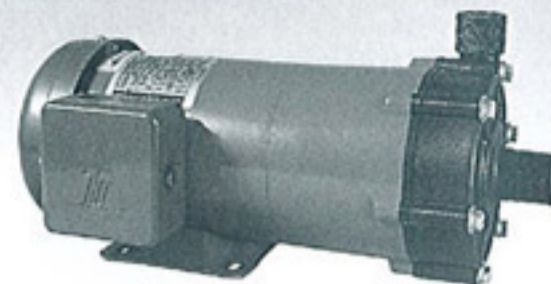
CMD-06



CMD-09



CMD-18

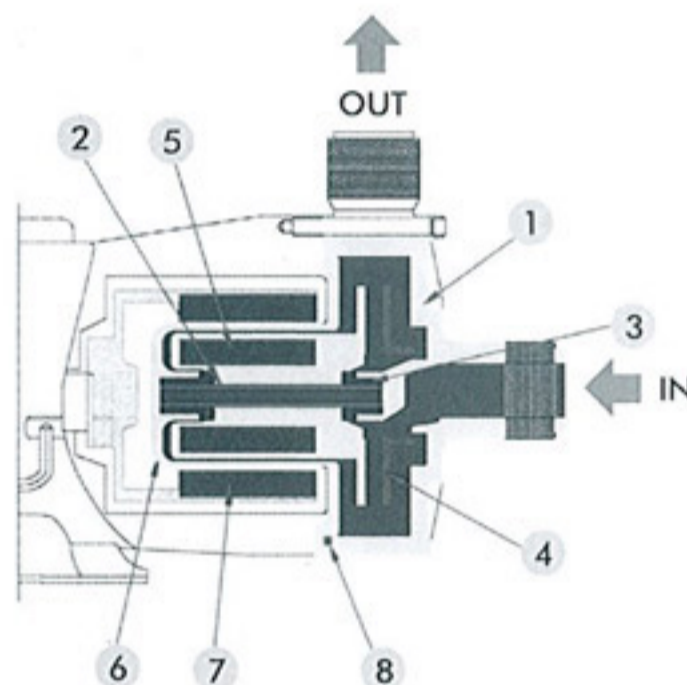


CMD-25

## Features

- \* Superior combination of materials and a leak-free, sealless design.
- \* Excellent corrosion resistant materials such as carbon ceramics, etc....

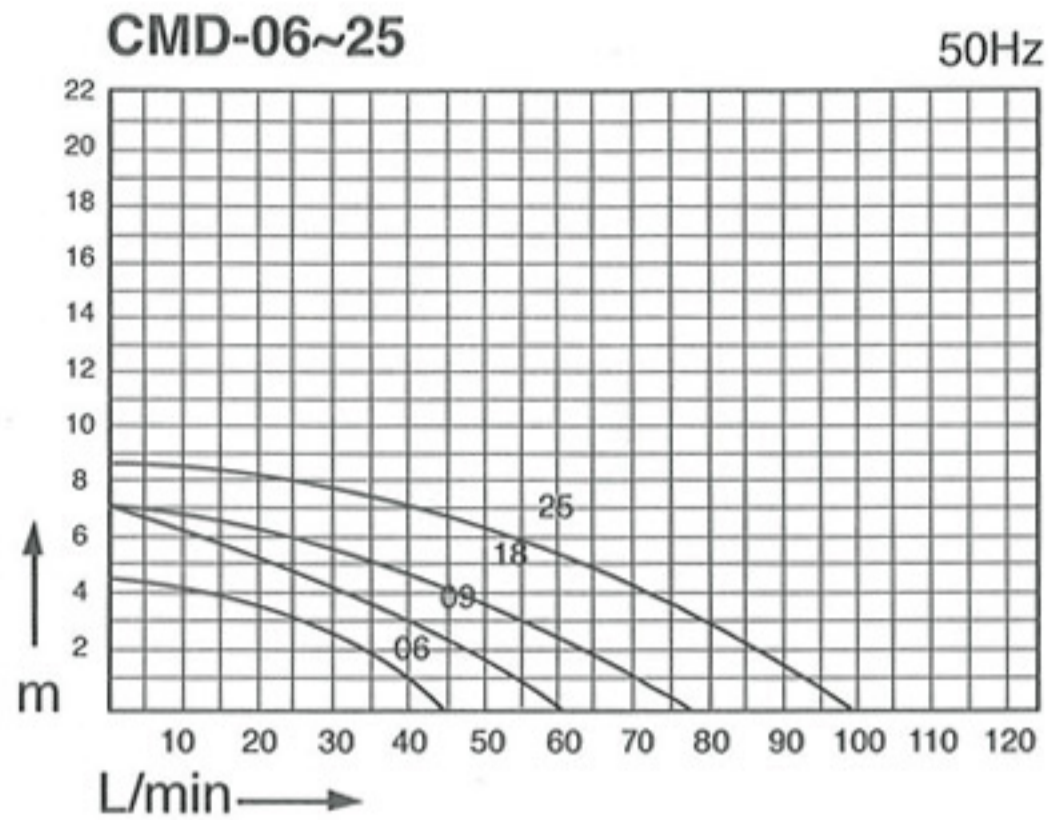
## The Structural Graph



## Parts and Materials

Model	CMD-06 ~ 25P		CMD-06 ~ 25F	
	AC	AL	AC	AL
Chemical Liquid	AC	AL	AC	AL
Part	Material		Material	
1 Front Casing	Glass Fiber-Reinforced PP		PVDF Glass-Reinforced PVDF	
2 Spindle	CERAMIC		CERAMIC	
3 Bearing	TEFLON		TEFLON	
4 Impeller	Glass Fiber-Reinforced PP		Glass Fiber-Reinforced PVDF	
5 Magnet Capsule	Ferric		FERRIC	
6 Rear Casing	Glass Fiber-Reinforced PP		Glass floo-Reinforced PVDF	
7 Drive Magnet	FERRIC		FERRIC	
8 O-Ring	VITON	EPDM	VITON	EPDM

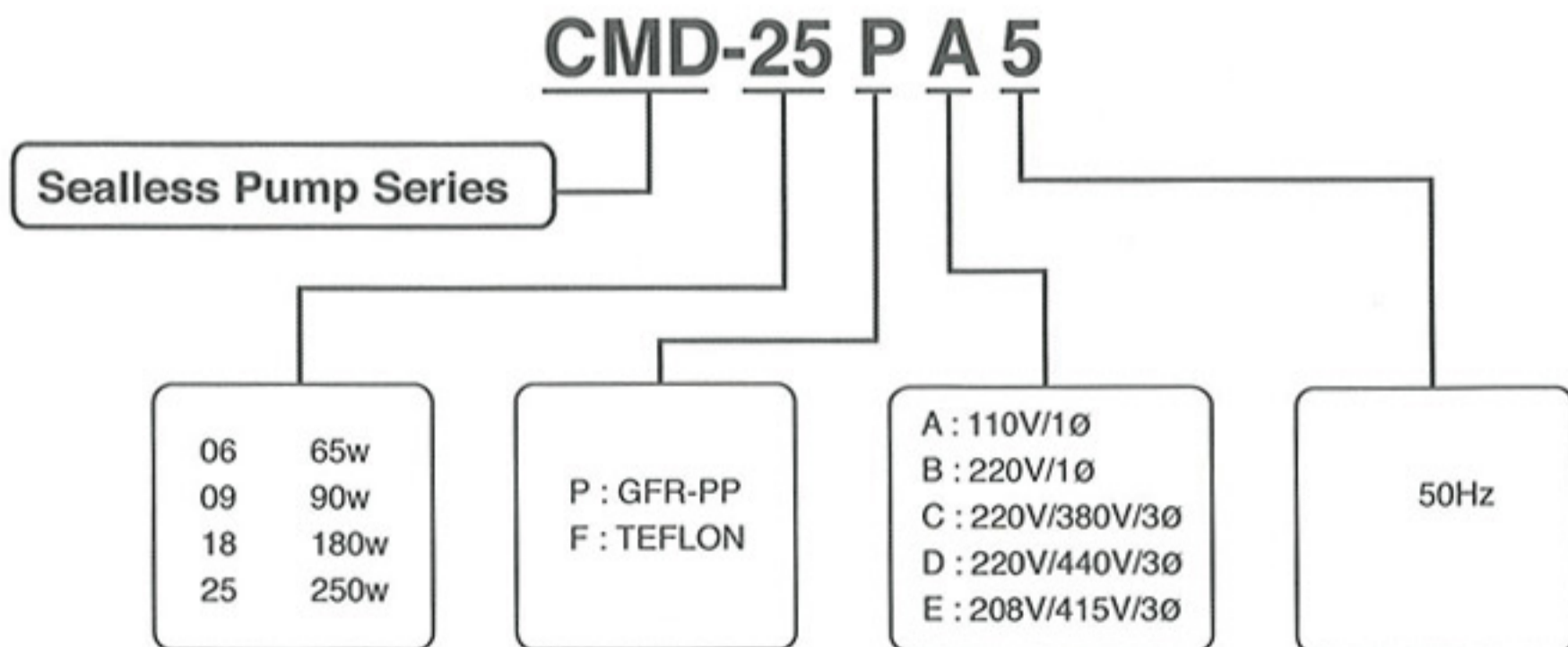
# Performance curves



## Specifications

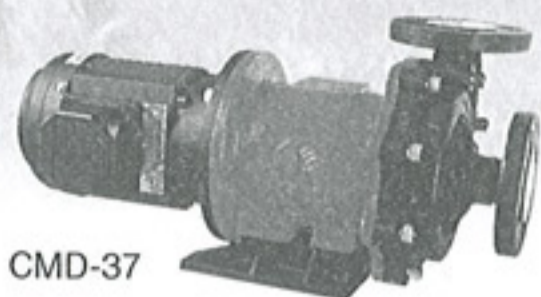
Model	Bore		Thread		Max. Capacity L/min	Max. Head m	Temp. Limit	Current	S.G*	Motor		Pole
	Inlet	Outlet	Inlet Outlet	Union						Outlet	Phase	
<b>CMD-06</b>	20mm	20mm	PF3/4"	16mm	37	4.6	0-80 °C	0.35/0.35	1.1	65W	1 or 3	2
<b>CMD-09</b>	26mm	26mm	PF1"	20mm	60	7	0-80 °C	0.96/0.92	1.2	90W	1 or 3	2
<b>CMD-18</b>	26mm	26mm	PF1"	20mm	73	7	0-80 °C	0.96/0.92	1.1	180W	1 or 3	2
<b>CMD-25</b>	26mm	26mm	PF1"	20mm	91	8.6	0-80 °C	1.4/1.3	1.2	250W	1 or 3	2

## Pump Identification

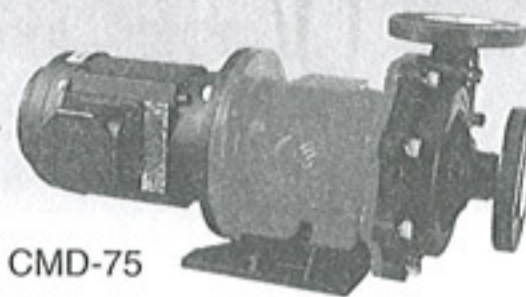


# Magnetic Drive Pump Series

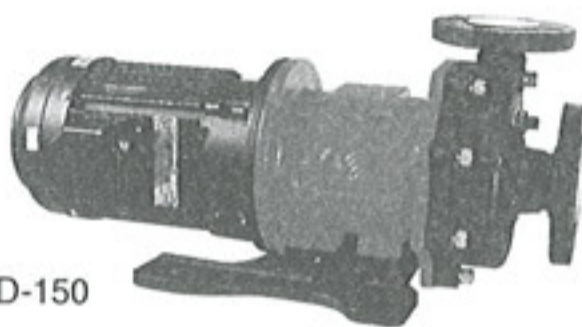
CMD-37, CMD-75, CMD-150, CMD-220, 350 TYPE



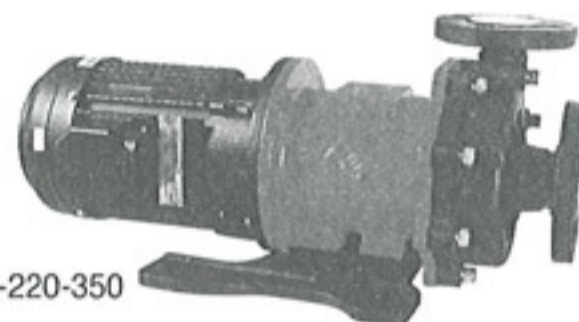
CMD-37



CMD-75



CMD-150

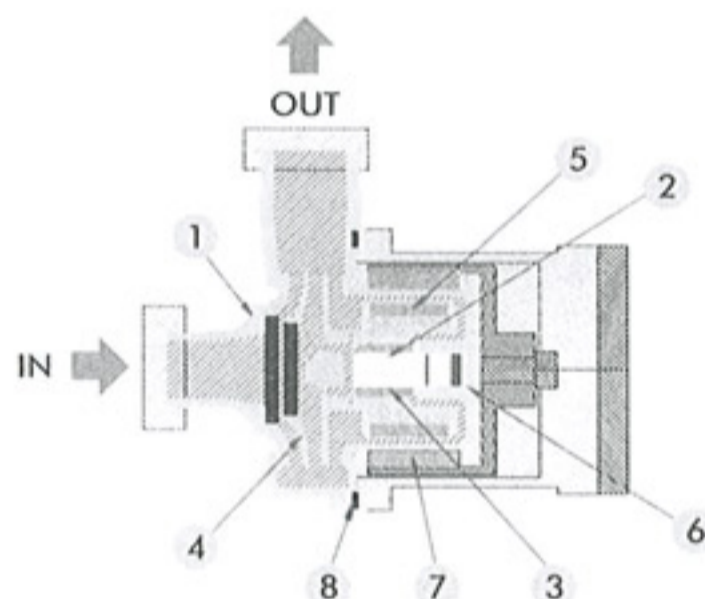


CMD-220-350

## Features

- \* Superior combination of materials and a leak-free, sealless design.
- \* Excellent corrosion resistant materials such as carbon ceramics, etc....
- \* Designed with an emphasis on improved durability.
- \* Featuring enhanced reliability and safety.
- \* The series can be arranged with NEMA or IEC standard motors.
- \* Easy maintenance, assembly and disassembly.

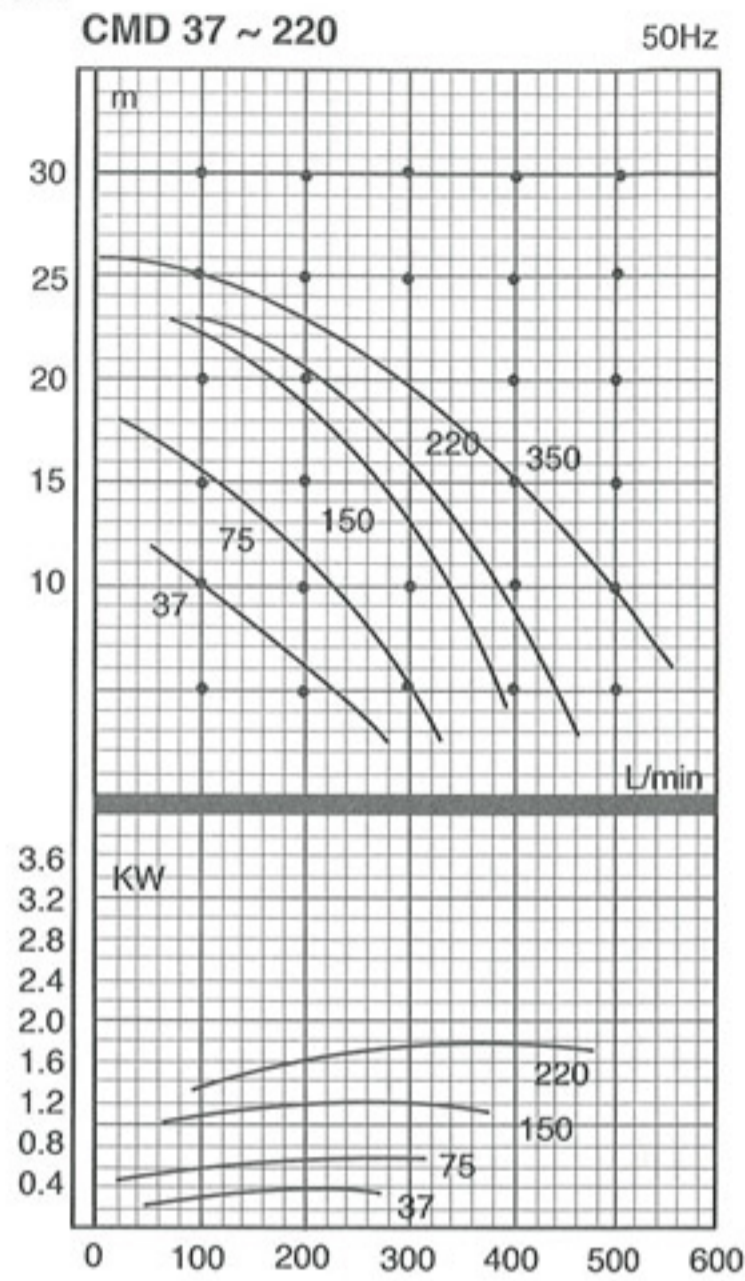
## The Structural Graph



## Parts and Materials

Model	CMD-37-75P		CMD-150-220-350P		CMD-37-75F		CMD-150-220-350F	
Chemical Liquid	AC	AL	AC	AL	AC	AL	AC	AL
Part	Material				Material			
① Front Casing	Glass Fiber-Reinforced PP				PVDR Glass-Reinforced PVDF			
② Spindle	CERAMIC	SUS316	CERAMIC	SUS316	CERAMIC	SUS316	CERAMIC	SUS316
③ Bearing	SIC				SIC			
④ Impeller	Glass Fiber-Reinforced PP				Glass Fiber-Reinforced PVDF			
⑤ Magnet Capsule	FERRIC		NFb		FERRIC		NFb	
⑥ Rear Casing	Glass Fiber-Reinforced PP				Glass Fiber-Reinforced PVDF			
⑦ Drive Magnet	FERRIC		NFb		FERRIC		NFb	
⑧ O-Ring	VITON	EPDM	VITON	EPDM	VITON	EPDM	VITON	EPDM

# Performance Curves



Model	Inhale Bore Size Suction x Discharge	Specific	Max. Capacity L/min	Max.Head m	Motor Output	Pole
		Gravity Limit	50 Hz	50 Hz	KW	
<b>CMD-37</b>	40A X 40A FF	1.05	285	12.0	0.37	2
<b>CMD-75</b>	40A X 40A FF	1.05	355	18.0	0.75	2
<b>CMD-150</b>	50A X 40A FF	1.2	390	23.0	1.5	2
<b>CMD-220</b>	50A X 40A FF	1.2	465	23.0	2.2	2
<b>CMD-350</b>	50A X 40AFF	1.2	570	26.0	3.7	2

## PUMP Identification **CMD-75 P AC A5**

50Hz

Sealless Pump Series

37 0.37 kw  
75 0.75kw  
150 1.5kw  
220 2.2kw  
350 3.75kw

P: GFR-PP  
F: TEFLON

For Acid Lique  
For Strong Alkali Liquid

Motor Power  
A : 220/380V 3ø  
B : 220V/440V 3ø  
C : 280V/4150V 3ø

**S: Special Motor**

**None:**

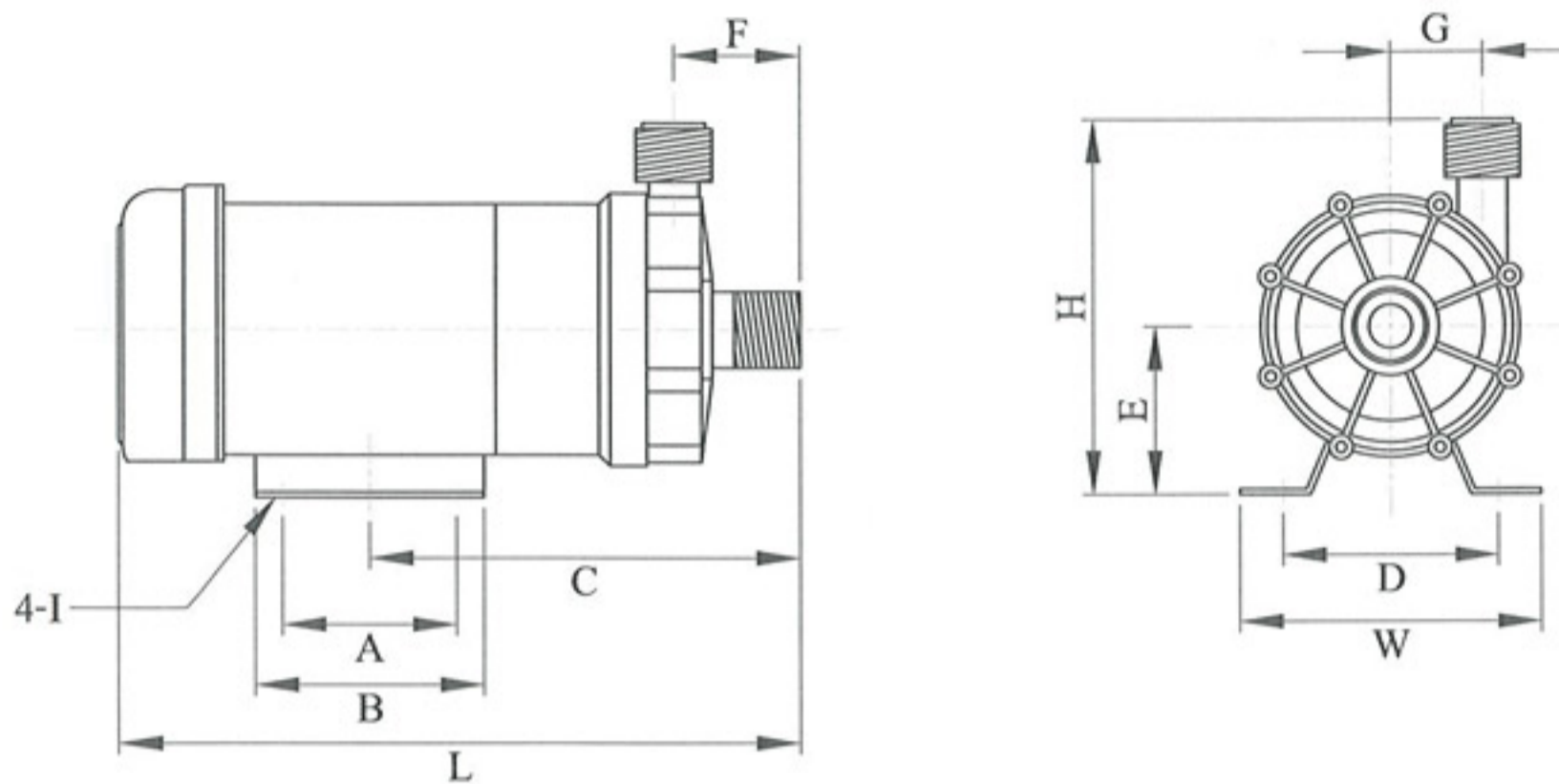
Totally-Enclosed Fan-Cooled (Indoor)

1: Totally-Enclosed Fan- Cooled (Outdoor)

2: EG3 Explosion Proof Type

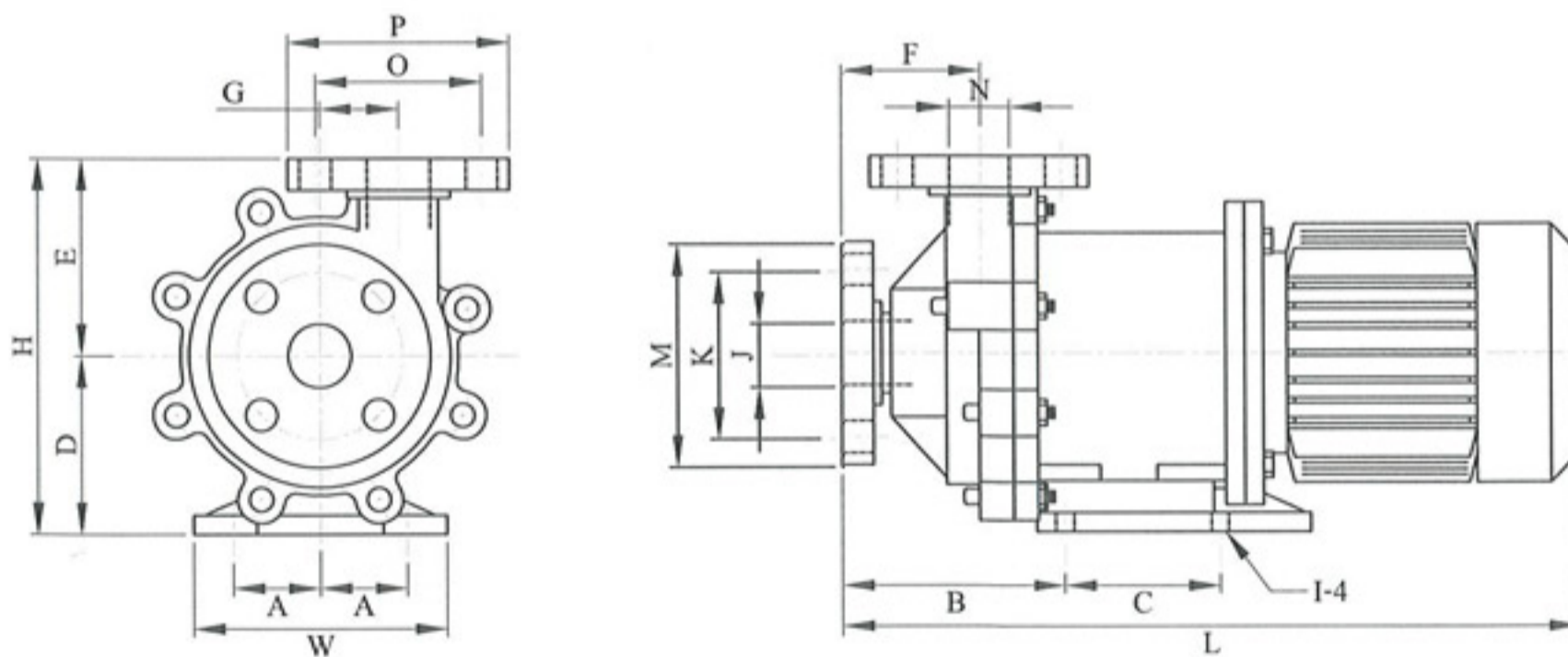
3: D2G4 Explosion Proof Type

# DIMENSION DRAWING



**DIMENSION TABLE**

MODEL	A	B	C	D	E	G	H	I	L	W
CMD-06	50	67	174	84	57	34	126	6.5x10	272	103
CMD-09	80	106	198	100	64	45	153	7x14	270	136
CMD-18	80	106	198	100	64	45	153	7x14	270	130
CMD-25	80	105	230	100	77	43	157	7x14	313	135



**DIMENSION TABLE**

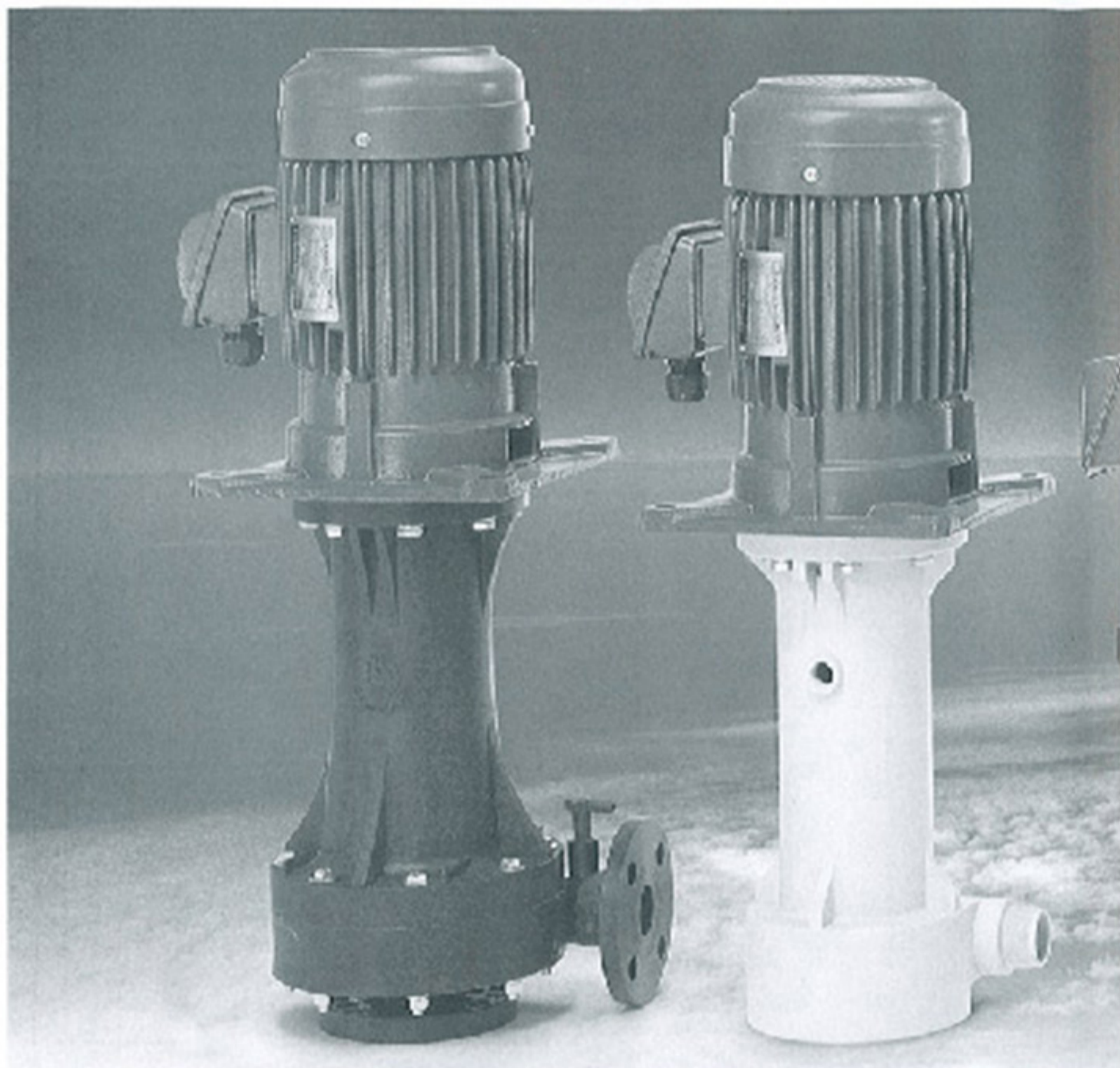
MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	W
CMD-37	55	142	99	112	124	88	50	236	Ø11	Ø40	Ø105	470	Ø140	Ø40	Ø105	Ø140	160
CMD-75	65	168	130	120	140	88	72	260	Ø11	Ø40	Ø105	525	Ø140	Ø40	Ø105	Ø140	160
CMD-150	104	155	200	115	140	87	72	255	Ø13	Ø50	Ø120	591	Ø155	Ø40	Ø105	Ø140	260
CMD-220	104	155	200	115	140	87	72	255	Ø13	Ø50	Ø120	610	Ø155	Ø40	Ø105	Ø140	260



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# VERTICAL ACID/ALKALINE RESISTANT PUMP





**CD series**

Motor : 1 HP ~ 10 HP

**CPT series**

Motor : 2 HP ~ 5HP

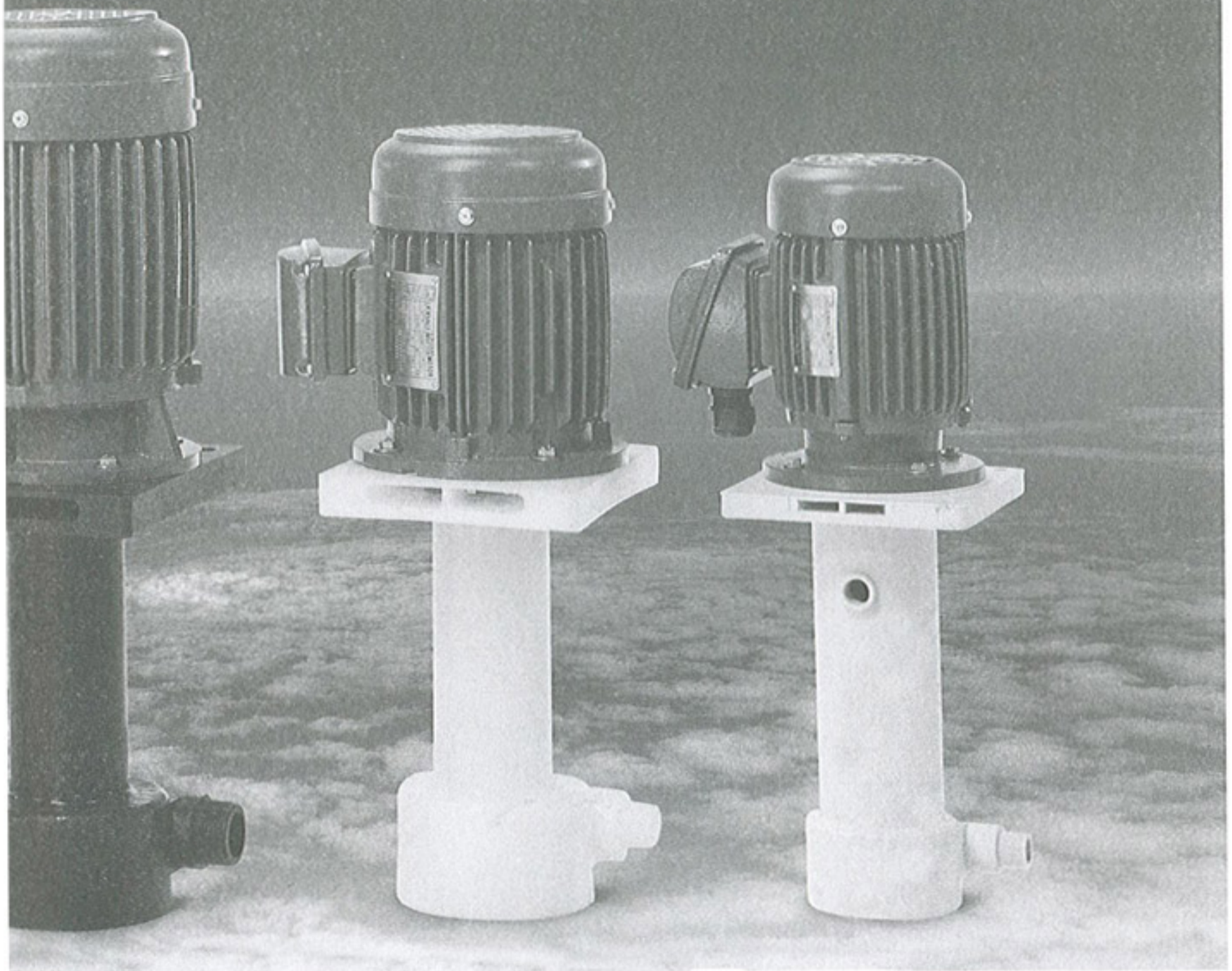
## **VERTICAL ACID/ALKALINE RESISTANT PUMP**

### **CHEMICAL VAPOR AND DRY VAPOR SEAL**

When the motor is operating, the lid of the vapor seal is forced open by centrifugal force, thus no friction results. Once the motor stops, the lid bounces back to completely stop any leakage of chemical vapor. Moreover, the oil seal, which is located above the vapor seal, can protect the motor and bearing against chemical corrosion and can prolong the life of the motor and pump.



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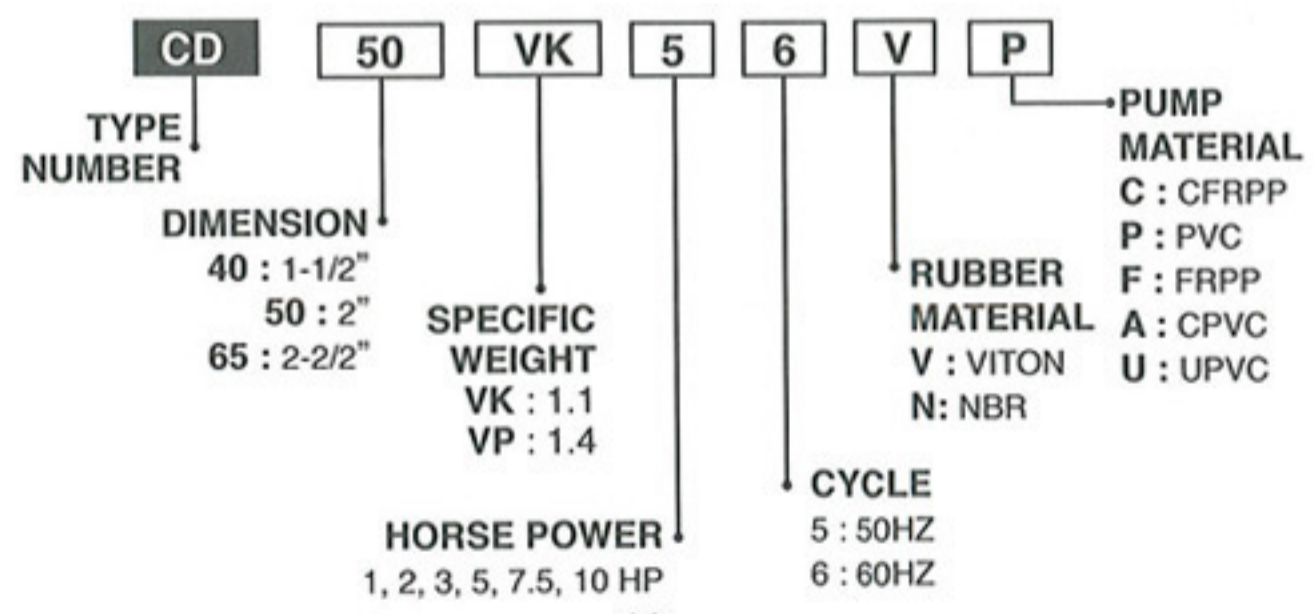


**CP series**  
 Motor : 1/2 HP ~ 2 HP

**CP series**  
 Motor : 1/3 HP

**CP series**  
 Motor : 1/4 HP

**Introduction to the model :**



# NEW TECHNOLOGICAL THEORY, MANUFACTURING OUTSTANDING PUMPS.

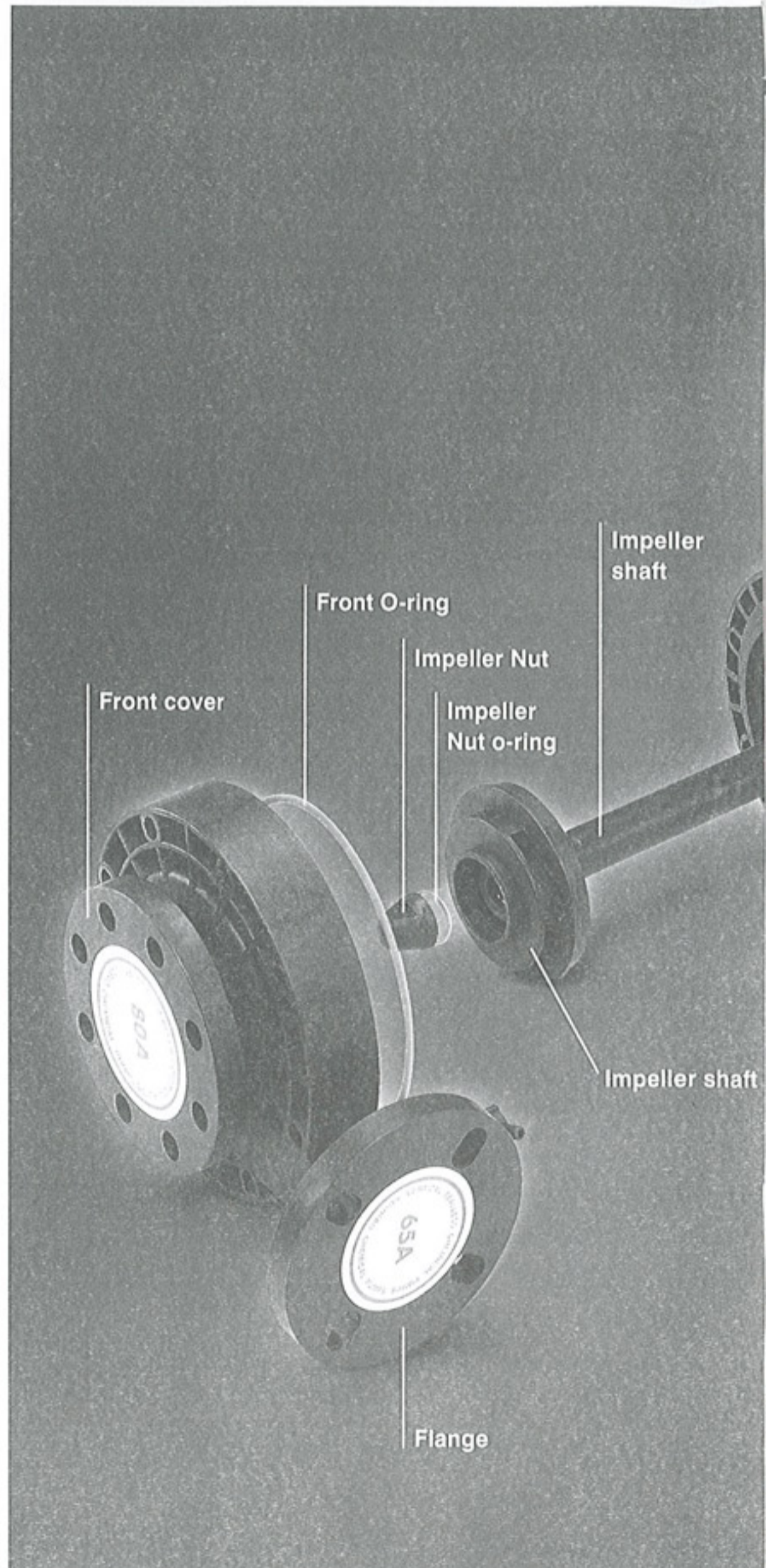
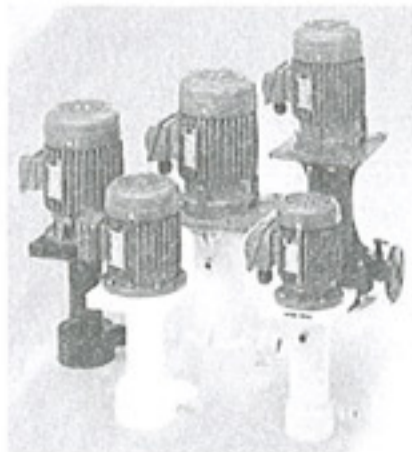
## NO SEAL STRUCTURE

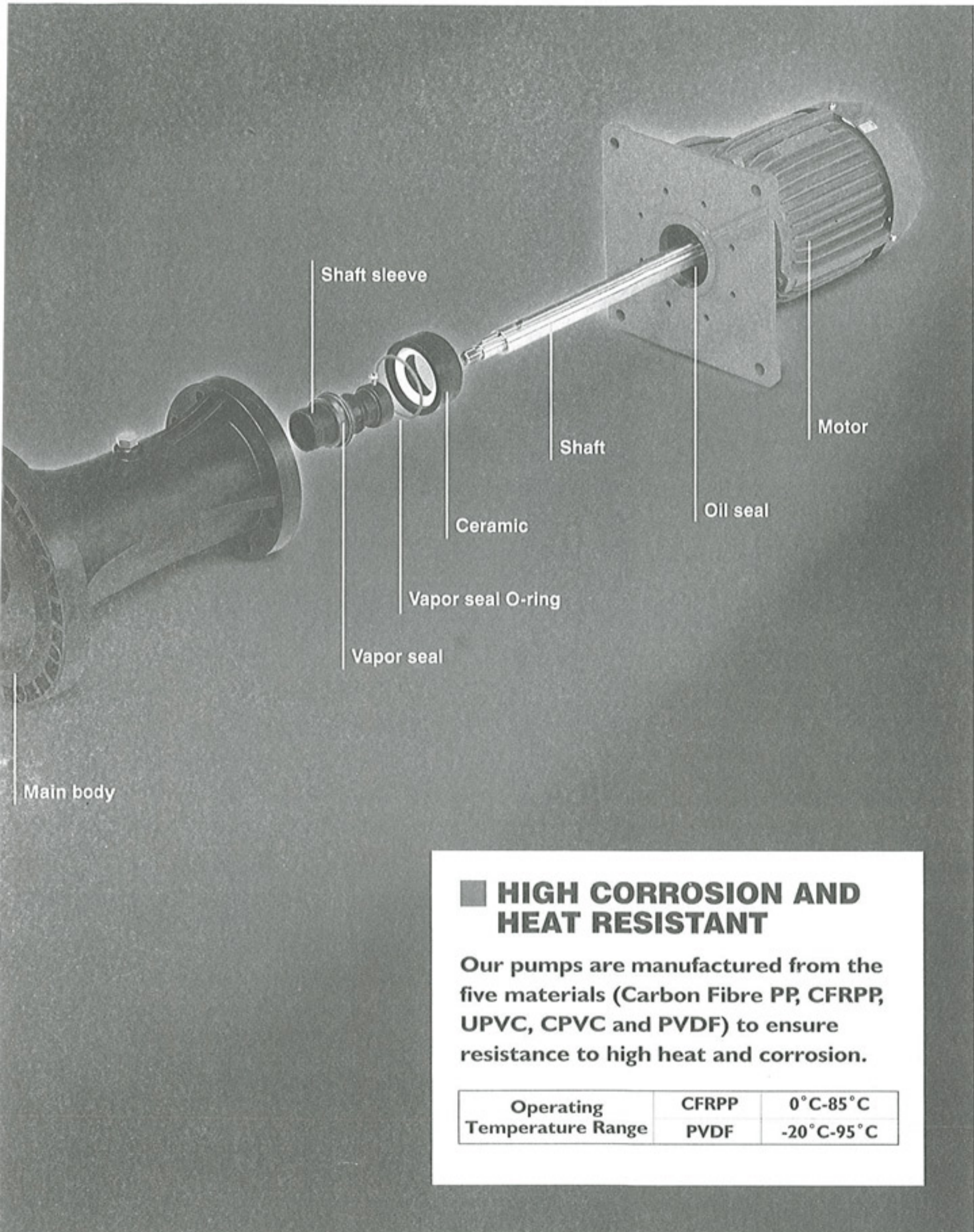
- 1.The NO-SEAL design allows no friction when the pumps are working, so dry running or chemical liquid with particles will not cause malfunction of the pumps.
- 2.Because of the impeller specially designed, it balances the inside pressure, sealing the liquid completely, And also, the special features of the two-layered impeller control and reduce the air and fluid intake, helping the pump function smoothly.
- 3.The impellers are specially designed to prevent air from getting into the pumps to ensure efficient work and high performance.

## LEAST MIXTURE OF AIR, LONGER HEAD (CD)series)

Considering of gas-sealed problem of before NO-SEAL pump, we now use new design-DRY VAPOR SEAL to solve it.

- 1.The impellers are specially designed to reduce the friction.
- 2.Because of the least mixture of air, it can increase the pump stability performance and transport high heat liquid.



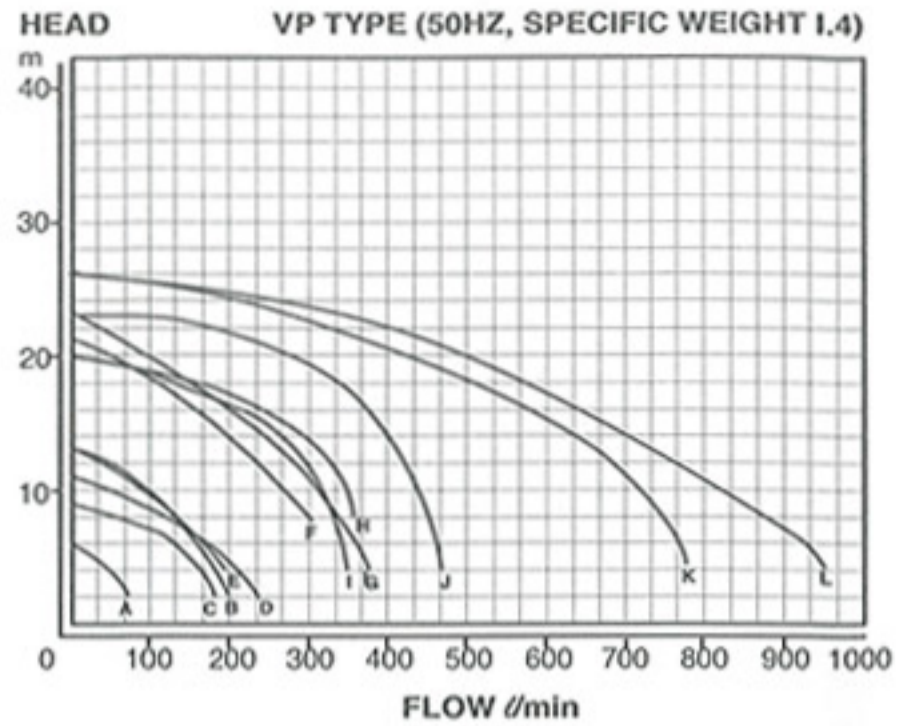
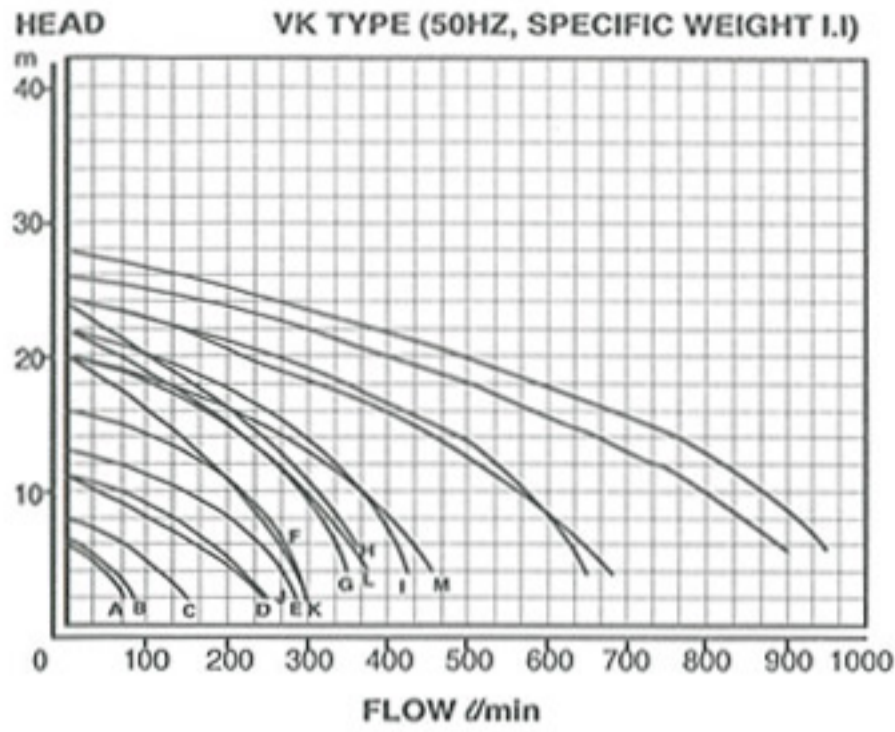


**■ HIGH CORROSION AND HEAT RESISTANT**

Our pumps are manufactured from the five materials (Carbon Fibre PP, CFRPP, UPVC, CPVC and PVDF) to ensure resistance to high heat and corrosion.

Operating Temperature Range	CFRPP	0°C-85°C
	PVDF	-20°C-95°C

# PERFORMANCE CURVE CHART :



## VK TYPE 50Hz

## SPECIFIC WEIGHT 1.1

MODEL	CURVES No	DIAMETER(mm) In Out	HORSE POWER HP	HEAD M	FLOW AMOUNT L/min	MAX HEAD M	MAX FLOW L/min	WEIGHT Kg
CP-20VK-1/4	A	25 20	1/4	4	50	6	70	13
CP-20VK-1/3	B	25 20	1/3	4	60	6.5	80	13
CP-25VK-1/2	C	40 25	1/2	5	100	8	150	20
CP-40VK-15	D	50 40	1	8	130	11	240	20
CP-40VK-25	E	50 40	2	10	150	13	290	24
CPT-40VK-25	F	50 40	2	12	180	20	270	38
CPT-40VK-35	G	50 40	3	16	280	22	350	40
CPT-40VK-55	H	50 40	5	16	20	24	360	55
CPT-50VK-55	I	50 50	5	18	200	22	420	55
CD-41VK-15	J	50 40	1	6	175	11	250	29
CD-42VK-25	K	50 40	2	12	190	16	300	38
CD-42VK-35	L	50 40	3	12	270	20	375	41
CD-50VK-35	M	65 50	3	12	330	20	460	41
CD-50VK-55	N	65 50	5	14	470	24	650	55
CD-65VK-55	O	80 65	5	14	550	24	680	55
CD-65VK-7.55	R	80 65	7.5	16	590	26	900	95
CD-65VK-105	Q	80 65	10	18	590	28	950	106

## VP TYPE 50Hz

## SPECIFIC WEIGHT 1.4

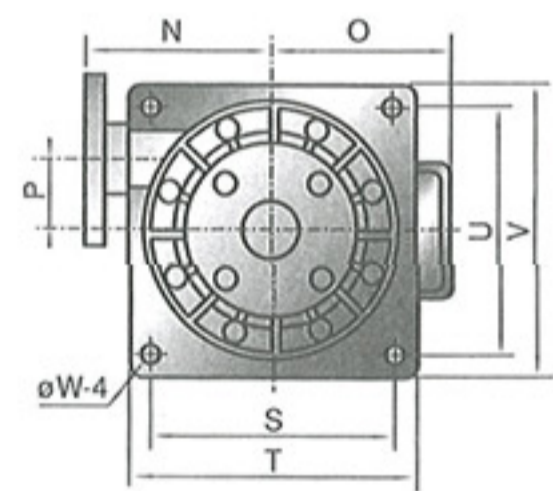
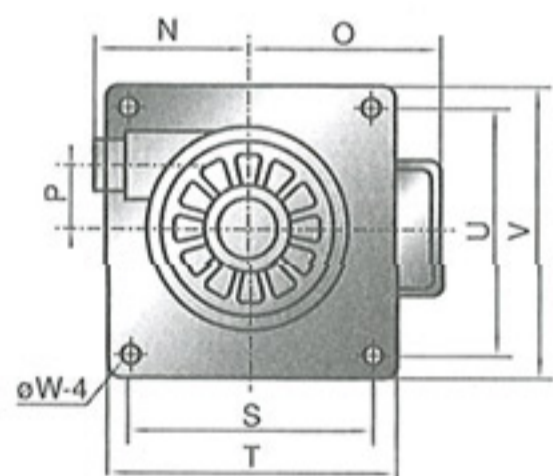
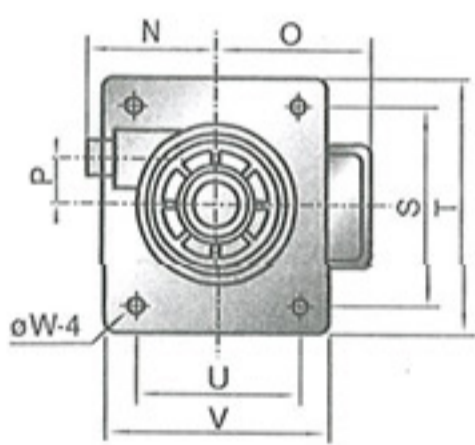
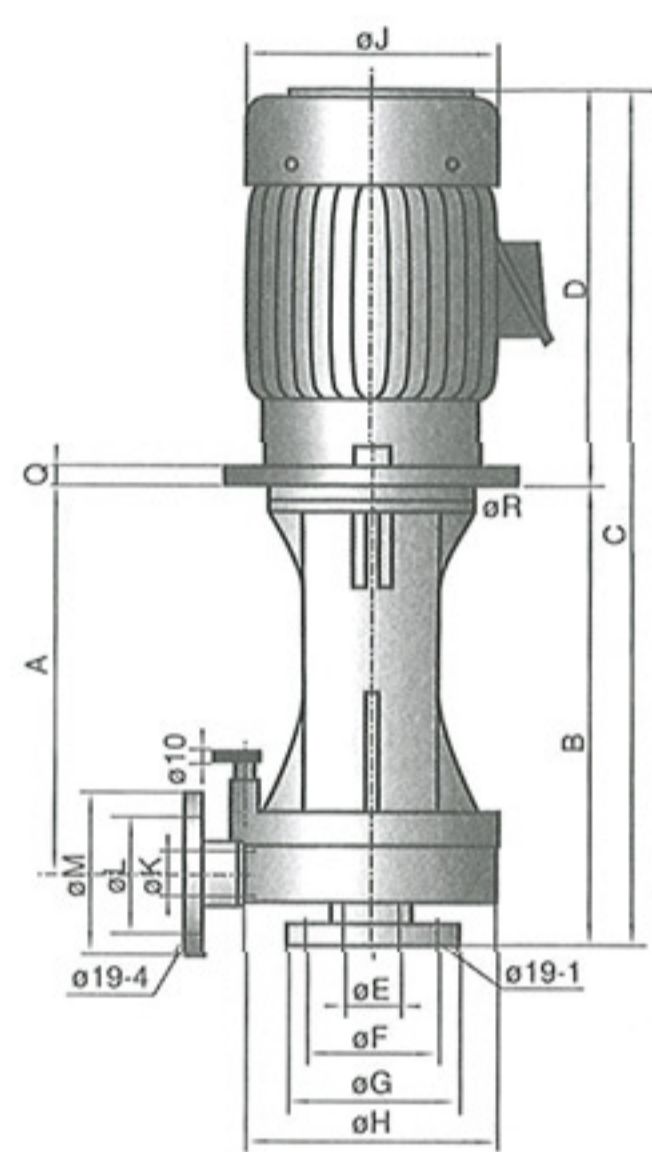
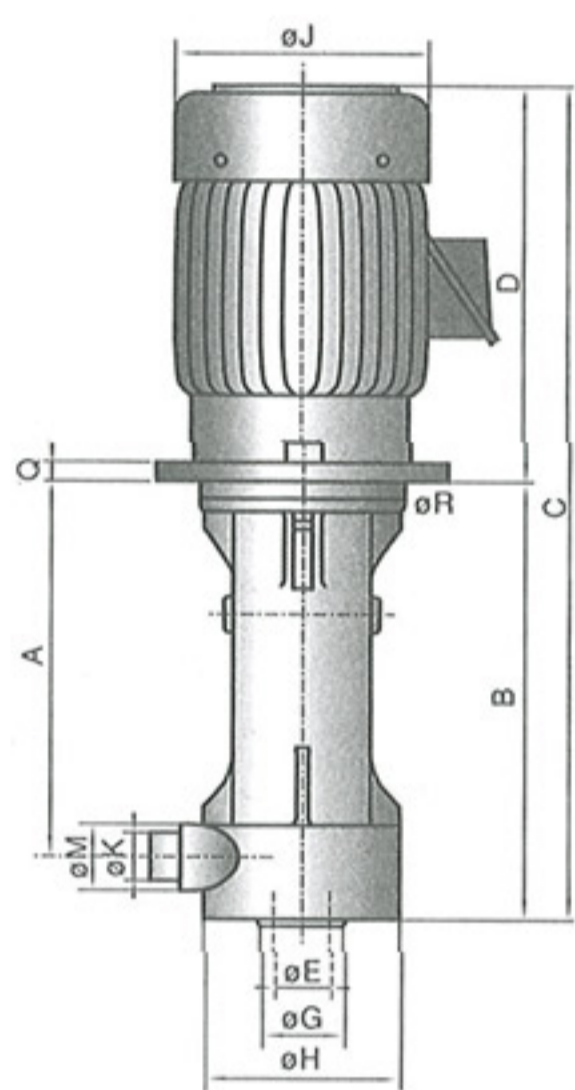
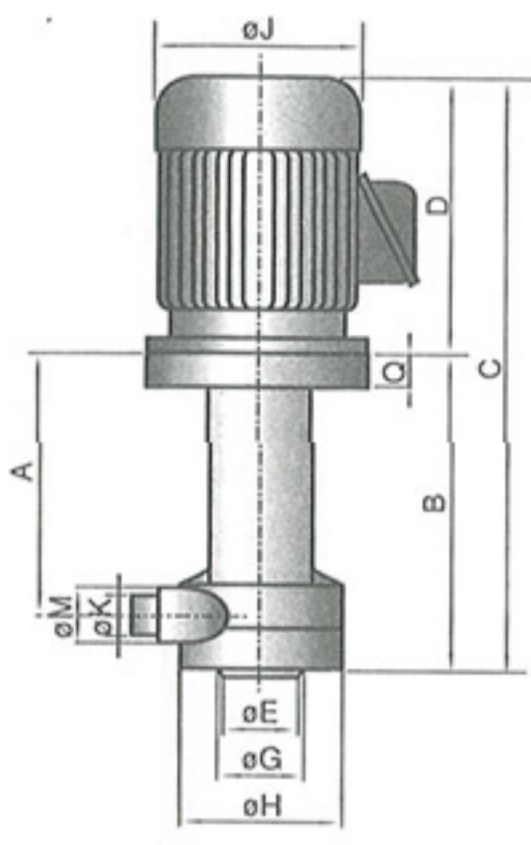
MODEL	CURVES No	DIAMETER(mm) In Out	HORSE POWER HP	HEAD M	FLOW AMOUNT L/min	MAX HEAD M	MAX FLOW L/min	WEIGHT Kg
CP-20VP-1/3	A	25 20	1/3	4	50	6	70	13
CP-25VP-15	B	25 20	1	6	160	11	200	20
CP-40VP-15	C	40 25	1	6	140	9	190	20
CP-40VP-25	D	50 40	2	7	160	11	225	24
CPT-40VP-25	E	50 40	2	8	130	13	200	38
CPT-40VP-35	F	50 40	3	14	200	21	310	40
CPT-40VP-55	G	50 40	5	16	200	23	370	55
CPT-50VP-55	H	50 40	5	16	240	20	360	55
CD-50VP-35	I	65 50	3	12	250	20	350	41
CD-50VP-55	J	65 50	5	14	400	23	470	55
CD-50VP-7.55	K	80 65	7.5	18	500	26	765	95
CD-65VP-105	L	80 65	10	18	570	26	950	106

**DIMENSION DRAWING :**

**CP series**

**CPT series**

**CD series**



## MACHINE SPECIFICATIONS :

### VK TYPE SPECIFIC WEIGHT 1.1

UNIT : MM

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
CP-20VK-1/4	260	299	495	196	25		42	110		145	20		35	95	120	36	18		150	180	150	180	10
CP-25VK-1/3	260	299	495	196	25		42	110		177	40		35	95	120	36	18		150	180	150	180	10
CP-25VK-1/2	265	315	550	235	40		75	143		200	40		49	115.5	142	41	30		180	235	148	195	15
CP-40VK-1	265	315	550	235	50		75	143		238	40		52	115.5	142	41	30		180	235	148	195	15
CP-40VK-2	265	315	637	322	50		75	143		202	50		52	115.5	142	41	30		180	235	148	195	15
CPT-40VK-2	345	398	726	328	50		76.5	180		243	50		60	138	156	57	16	185	222	260	222	260	15
CPT-40VK-3										285	65		60	138	156	57	16	185	222	260	222	260	15
CPT-50VK-5										285	65		60	138	177	57	16	185	222	260	222	260	15
CD-40VK-16												105	145	170	142	65	16	185	222	260	222	260	15
CD-40VK-26												105	145	170	156	65	16	185	222	260	222	260	15
CD-40VK-36	350	425	753	328	50	120	155	230	4			105	145	170	156	65	16	185	222	260	222	260	15
CD-50VK-36	35	425	753	363	65	140	175	230	4			120	155	170	177	65	16	185	222	260	222	260	15
CD-50VK-56	350	425	788	363	65	140	175	260	4			120	155	200	177	65	16	185	222	260	222	260	15
CD-65VK-56	350	425	860	363	80	150	190	260	8			140	175	200	212	65	16	185	222	260	222	260	15
CD-65VK-7.56	350	425	860	435	80	150	190	260	8			140	175	200	212	65	20	185	300	350	300	350	18
CD-65VK-106	350	425	860	435	80	150	190	260	8			140	175	200	212	65	20	185	300	350	300	350	18

### VP TYPE SPECIFIC WEIGHT 1.4

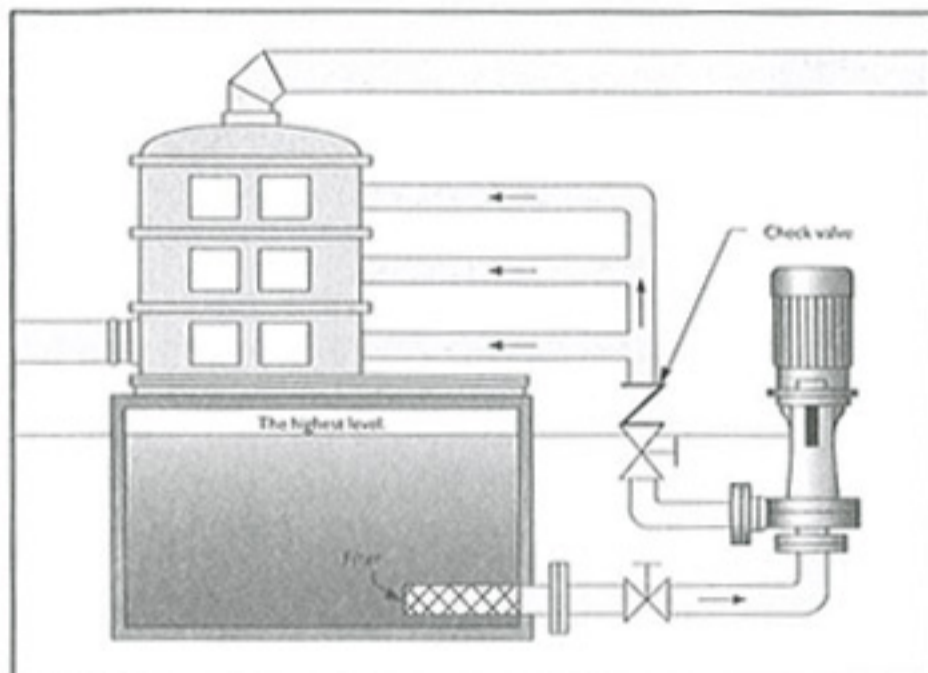
UNIT : MM

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
CP-20VP-1/3	260	305	495	196	20		42	110		145	20		35	95	120	36	18		150	180	150	180	10
CP-25VP-1	265	315	550	235	40		75	143		177	40		49	115.5	142	41	30		180	235	148	195	15
CPT-40VP-3	345	989	726	328	50		76.5	180		200	40		60	138	156	57	16	185	222	260	222	260	15
CPT-40VP-5	345	398	767	369	50		76.5	180		238	40		60	138	177	57	16	185	222	260	222	260	15
CD-50VP-3	350	425	753	328	65	140	175	260	4	202	50	120	155	170	177	65	16	185	222	260	222	260	15
CD-50VP-5	350	425	788	363	65	140	175	26	4	243	50	120	155	200	212	65	16	185	222	260	222	260	15
CD-65VP-7.5	350	425	860	435	80	150	190	26	4	285	65	140	175	200	212	65	20	185	300	350	300	350	18
CD-65VP-10	350	405	860	435	80	150	190	260	4	285	65	140	175	200	245	65	20	185	300	350	300	350	18

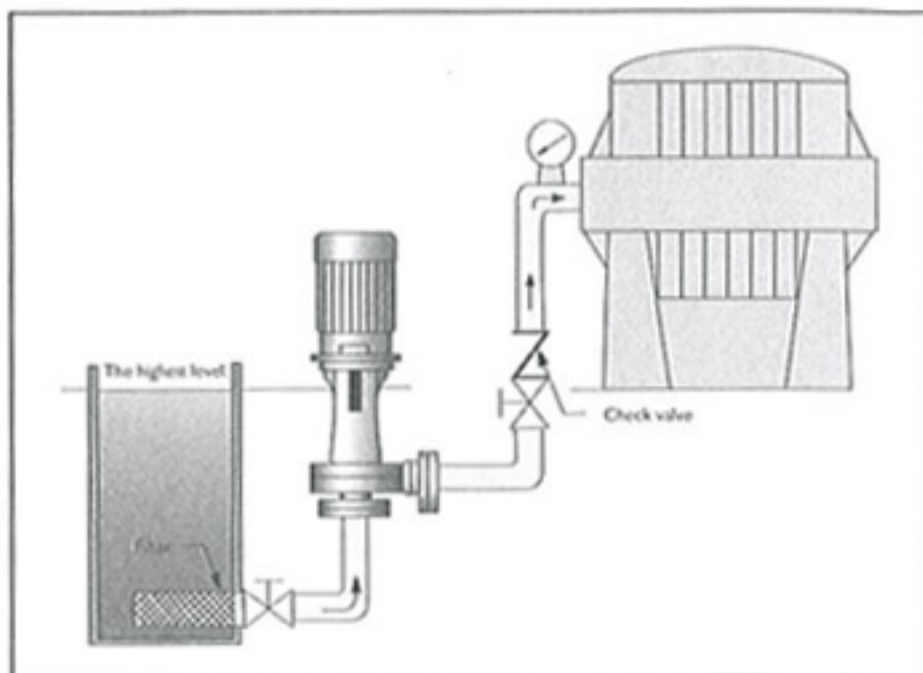
# PUMP APPLICATION EXAMPLES

The following is the examples of vertical and no-seal pump CD-VK/VP, which can be combined according to special requirements.

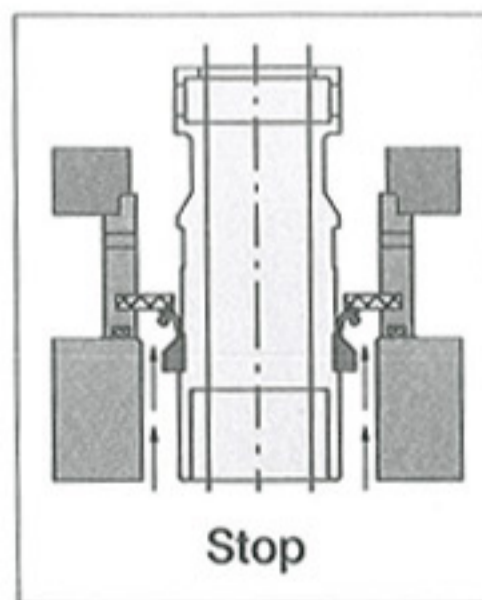
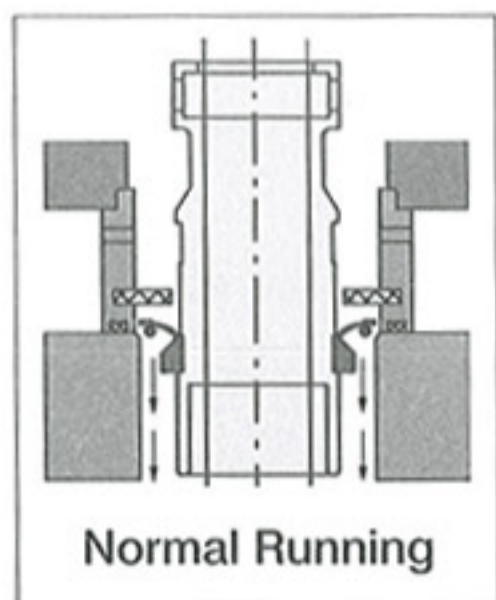
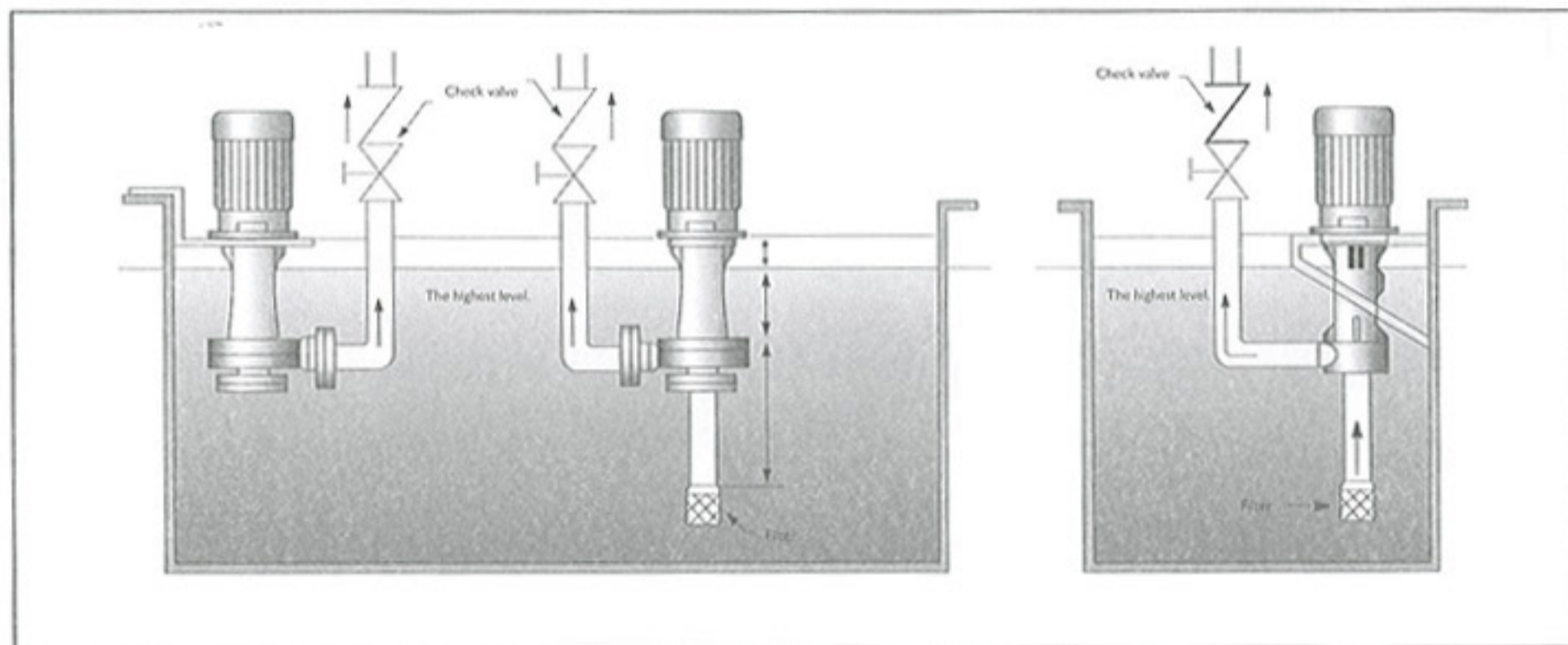
▼ For cleaning waste gas.



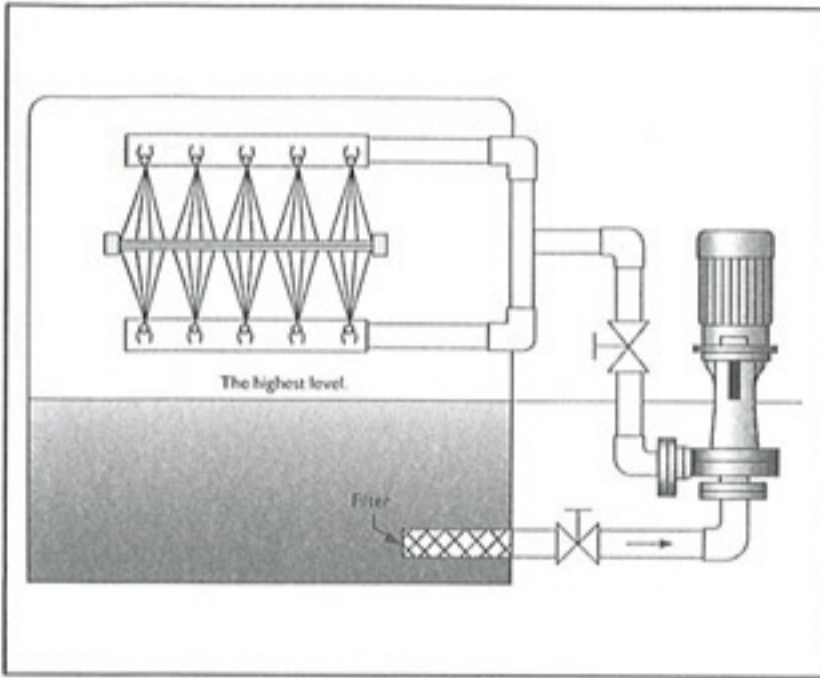
▼ Application for cleaning tower.



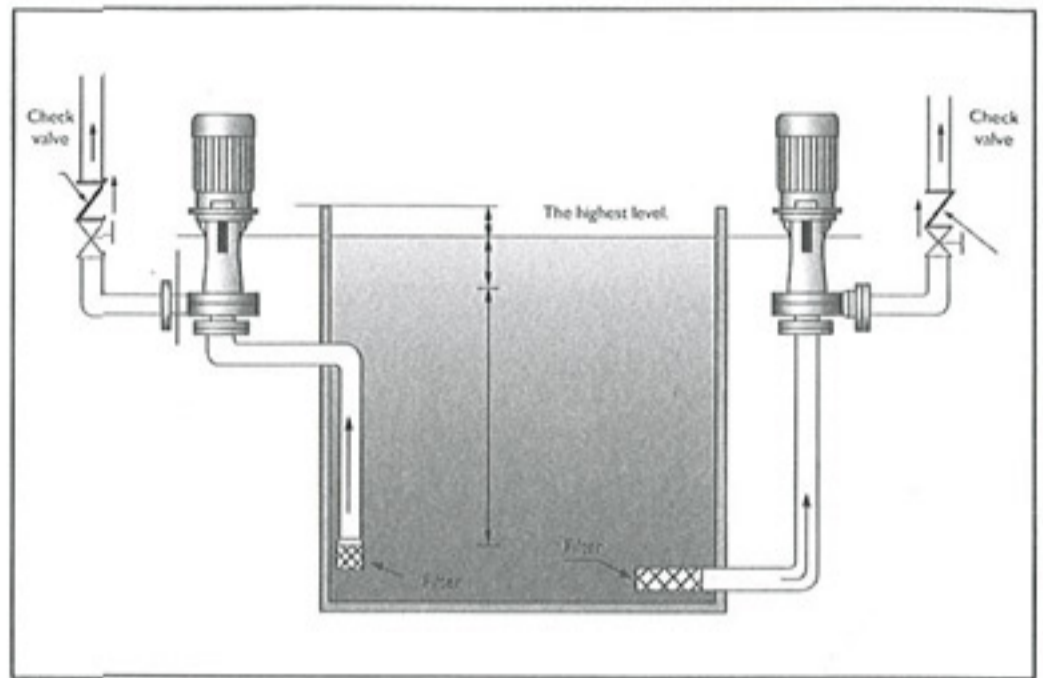
▼ Special application for liquid interchange.



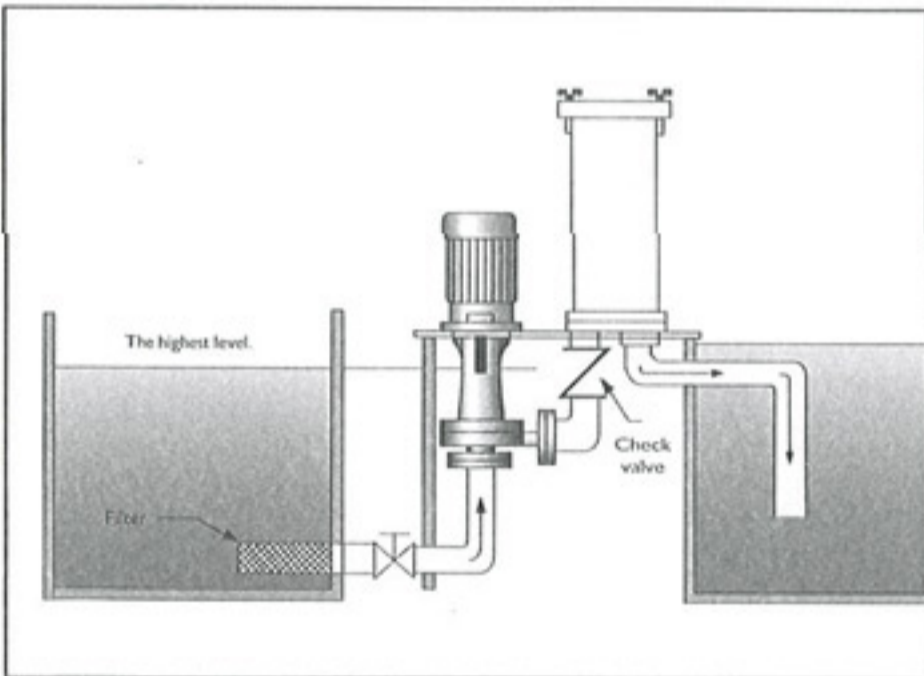
▼ Application spray pump etching.



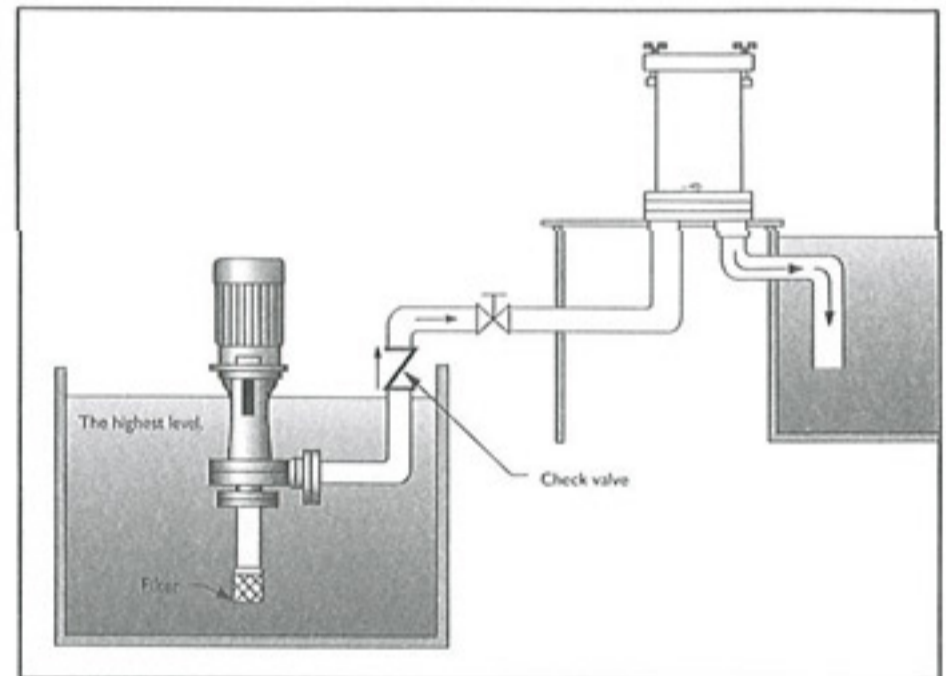
▼ Installed outside of tank.



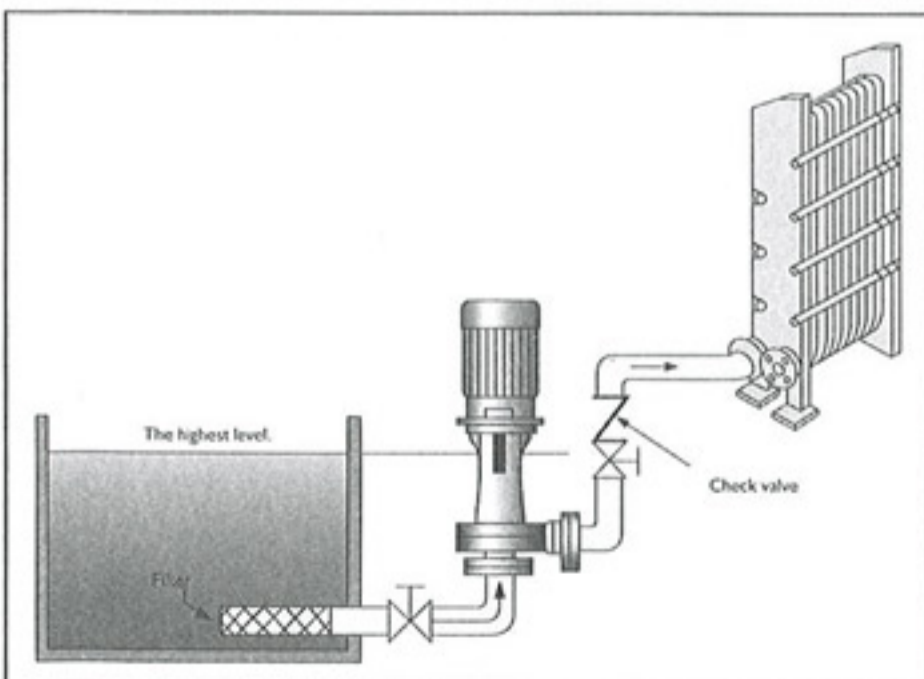
▼ Installed outside tank for filter.



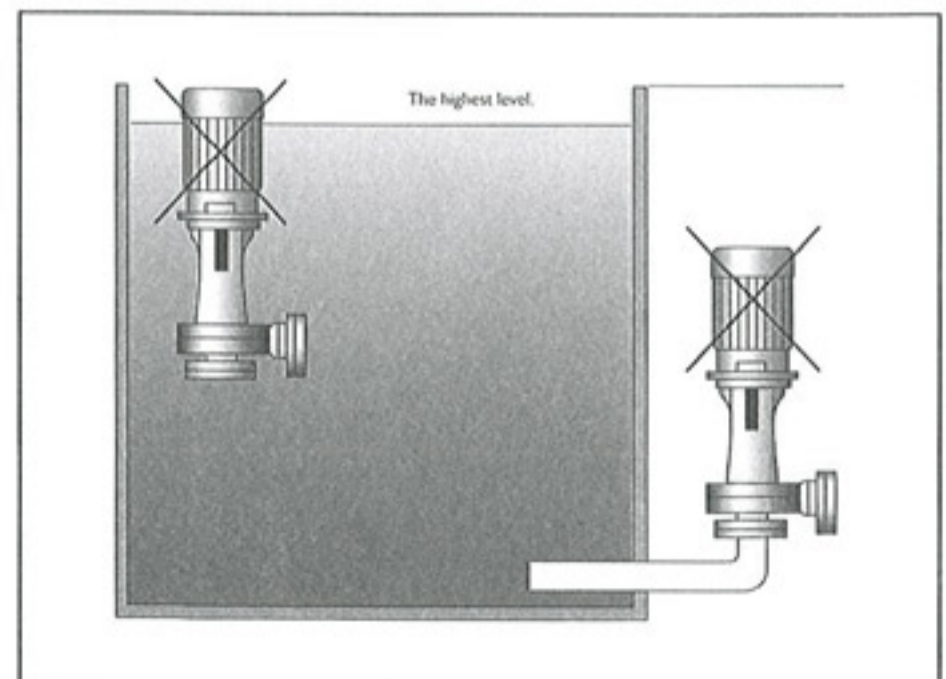
▼ Installed inside tank for filter.



▼ For heat exchanger.



▼ Warning: Wrong application.

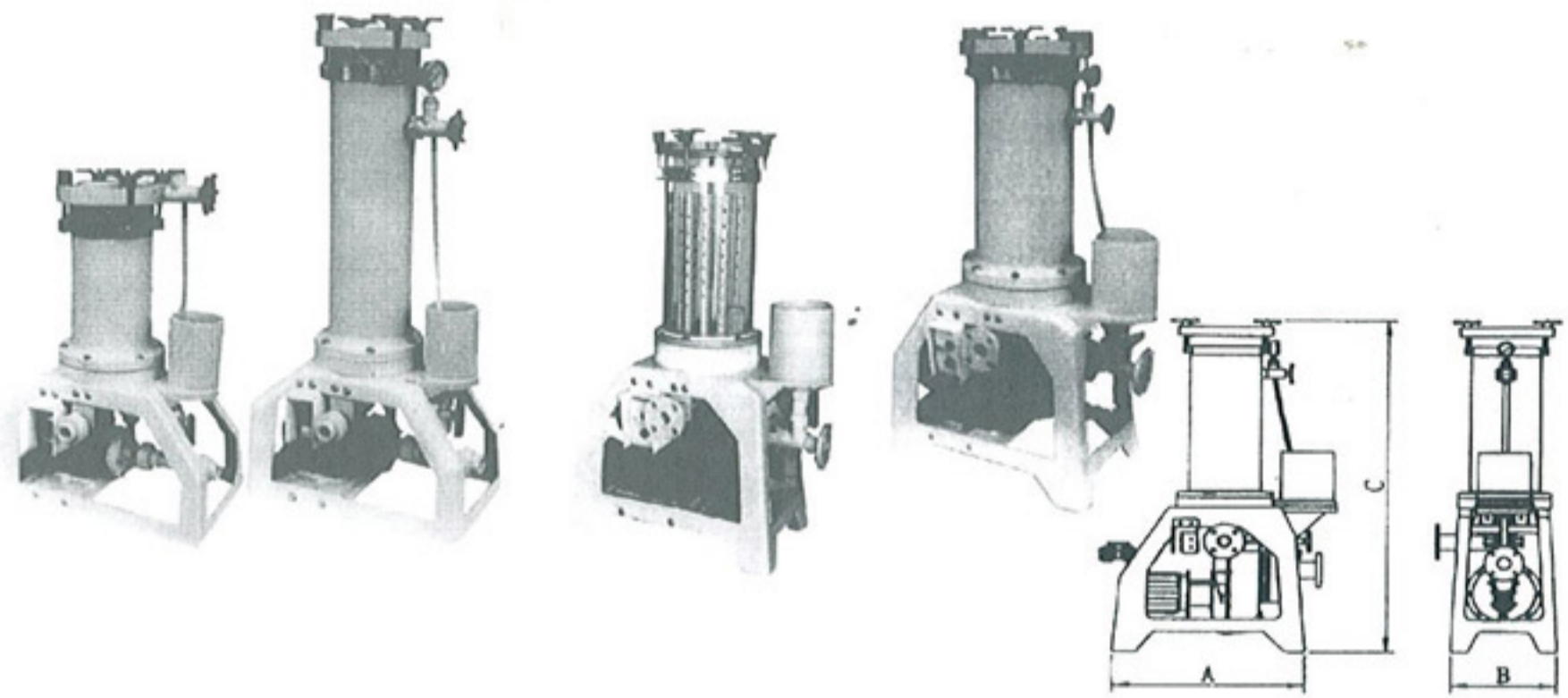




**CHEMTAI**

# **CHEMICAL FILTER**





## Features:

- Aversatile filter provide outstanding performance. Choice of various filtering elements to meet specific filtering requirements.
- Thefilter body is injection molded from FRPP plastic steel, featuring high temperature resistance and acid/alkaline resistance.
- In the event of motor overload or single phase runng, power shut off automatically.
- Humanified design with modular structure ensures 100% interchangeability. Easy to change for various filtering elements.
- Motor guard avoids corrosin in acid environent.
- The core filtering with bellow shaped filtering cloth provides high precision with wide area filtering high efficiency, each to operate and clean.
- Furnished with 1 bottom or check valve, 1 PVC, 1 set PVC inlet/outlet or PP flange.
- Variuos filter elements for choice pressure core filter, presure tube filter, bellow filter, lock core filter and filter paper.
- Also available to fit self-circulation circuit, active carbon treatment device, active carbon shaft with core. Easy to operate.

รุ่น / MODEL	CFL 101	CFL 102	CFL 201	CFL202	CFL 104	CFL204	CFL 206-1	CFL 208-1	CFL 208-2	CFL212	CFL 218	CFL 318	
วัสดุถังกรอง/ Material of filter drum	PP และ PVC	PP และ PVC	PP และ PVC	PP และ PVC	PP และ PVC	PP และ PVC	PP และ PVC	PP และ PVC	PP และ PVC	PP และ PVC	PP และ PVC	PP และ PVC	
ปริมาณการกรอง (ลิตร/นาที) Filtering Capacity [l/min]	15	30	30	60	60	80	150	180	220	250	330	400	
เหมาะสมกับความจุเครื่องจิ้ง (ลิตร)	200 L	400 L	400 L	600 L	600 L	800 L	2000 L	2000 L	3000 L	4000 L	6500 L	7500 L	
วัสดุกรอง Filter Material	แบบไส้/Core	10"x1 อัน	10"x2 อัน	20"x1 อัน	20"x2 อัน	10"x4 อัน	20"x4 อัน	20"x6 อัน	20"x8 อัน	20"x8 อัน	20"x12 อัน	20"x18 อัน	30"x18 อัน
	แบบหลอด/Tube	10"x1 อัน	10"x2 อัน	20"x1 อัน	20"x2 อัน	10"x4 อัน	20"x4 อัน	20"x6 อัน	20"x8 อัน	20"x8 อัน	20"x12 อัน	20"x18 อัน	30"x18อัน
	แบบครีบบ/Bellow												
พื้นที่วัสดุกรอง Filtering Area	แบบไส้/Core	0.125	0.25	0.25	0.5	0.5	1	1.5	2	2	3	4.5	6.7
	แบบหลอด/Tube								0.9	0.9	1.2	2	
	แบบครีบบ/Bellow											5.5	
อุณหภูมิที่เหมาะสม C PVC/PP. TEMP LIMTT	50/80	50/80	50/80	50/80	50/80	50/80	50/80	50/80	50/80	50/80	50/80	50/80	
แรงเครื่องปั๊ม 50 Hz POWER	65w	65w	65w	85w	180w	180w	1 HP	1HP	2HP	2HP	3HP	3HP	
ขนาดตัวเครื่อง Dimensions	ความยาว Length (A)	400	485	440	485	445	570	730	735	735	825	825	825
	ความกว้าง Width (B)	278	310	280	345	345	345	425	430	430	520	565	585
	ความสูง Height (C)	770	770	1000	1060	772	1085	1440	1415	1415	1476	1795	1800
เส้นผ่าศูนย์กลางท่อ เข้า-ออก Inlet/Outlet Port	3/4"	3/4"	3/4"	1"	1"	1"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	

# ARO

## *Pro Series Diaphragm and Piston Pumps*

*Non-Metallic and Metallic Diaphragm Pumps*

*Low-Ratio Piston Pumps*

*Specialty Pumps*



**IR** Ingersoll Rand.

## High Performance

Unbalanced valve design eliminates valve centering and pump stall-out-even under low air inlet pressures.

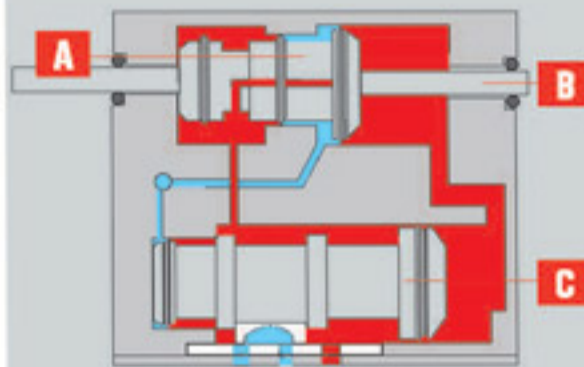
### "D" Valve

- ▷ Provides a positive seal.
- ▷ Helps insure optimum energy efficiency while avoiding costly air "blow-by."
- ▷ Ceramic construction insures long service life.

### "SimulShift™" Valve

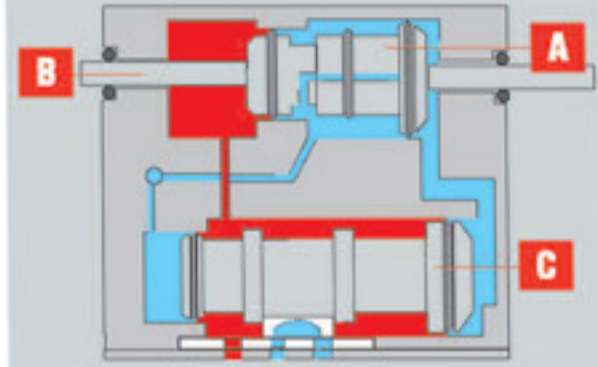
- ▷ Provides an ultra-positive, reliable shift signal that avoids stall-out.
- ▷ Provides faster pump trip-over with more flow.
- ▷ Faster trip-over with less pulsation and superior laminar material flow.

#### Diaphragm Moving Right to Left



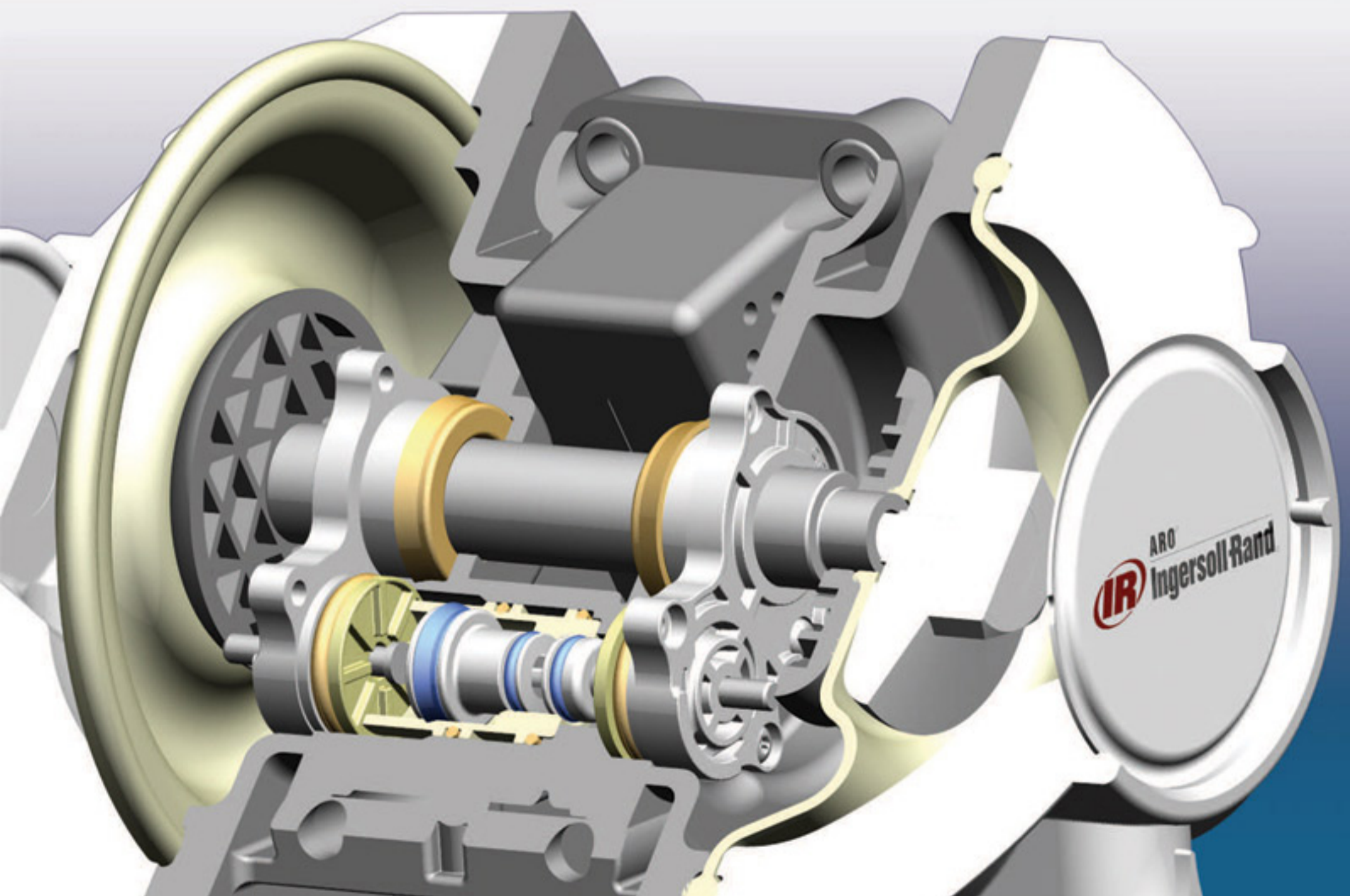
- 1.) The diaphragm pushes the right Actuator Pin (B) mechanically moving the Simul-Shift Valve (A) to the left.
- 2.) Compressed air flows to the large side of the Simul-Shift Valve, pneumatically moving the valve to the position shown.
- 3.) Compressed air also flows to the large end of the Major Air Valve (C), pneumatically shifting it to the left.

#### Diaphragm Moving from Left to Right



At end of stroke:

- 1.) Diaphragm pushes Pin (B) and Simul-Shift Valve (A) to the right.
- 2.) Large ends of Simul-Shift Valve (A) and Major Valve (C) are vented to exhaust pilot signal.
- 3.) Constant compressed air supply acting on the smaller areas of the Simul-Shift Valve and Major Valve shifts both valves to the right and hold them in position until the next cycle begins



# ***Big Delivery. High-Performance.***



## ***Productivity***

Maximized flow rates + Minimized pulsation and air consumption = Maximum Performance



## ***Versatility***

Multiple porting options available along with interface options allow you to customize this pump specifically to your OEM application.



## ***Reliability***

Lube Free Patented Differential Valve both on Major air valve and Simulshift (Pilot Valve) provides reliable Worry Free Operation – Fluid On demand every time



## ***Environmentally Sound***

Bolted Construction in conjunction with a wide range of material options provides maximum chemical and leak resistance

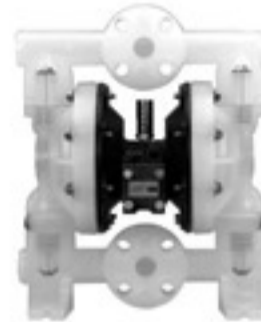


## ***Serviceability***

Modular Construction, reduced parts count and simple to use repair kits will minimize repair time and cost

Don't forget the other compelling reasons to use Aro Diaphragm Pumps: ARO Diaphragm pumps are simple to apply to your application because they are self priming and can be run at variable flows controlled by air pressure or fluid back pressure. They can handle materials that are abrasive and/or shear sensitive. They can also be run dry without damage to the pump.

## Model Overview: Non-Metallic Models Pro-Series Pumps



Model	1/4"	1/2"	1"	1-1/2"	2"
Maximum Flow GPM (LPM)	4.6 (17.4)	13 (49)	47 (178)	100 (378.5)	145 (548.8)
Maximum Discharge Pressure PSI (BAR)	100 (6.8)	100 (6.8)	120 (8.3)	120 (8.3)	120 (8.3)
Fluid Ports Inlet/Outlet (BSP Available)	3/8" (F) – In 1/4" (F) – Out (No BSP)	1/2" (F) – In/Out (No BSP)	1" ANSI/DIN Flange 1" (F) Threaded	1-1/2" ANSI/DIN Flange	2" ANSI/DIN Flange
Materials of Construction	Polypropylene Groundable Acetal Kynar®	Polypropylene Groundable Acetal Kynar®	Polypropylene PVDF	Polypropylene PVDF	Polypropylene PVDF
Pump Weight lbs. (kg.)	4.1 (1.85) Poly 4.6 (2.10) Acetal 4.91 (2.22) Kynar	8.8 (4.0) Acetal 7.2 (3.3) Poly 9.5 (4.3) Kynar	20.3 (9.2) Poly 28.5 (12.9) PVDF 28.8 (13.1) Poly w/ Cast Iron Center 37 (16.8) PVDF w/ Cast Iron Center	62 (28.1) Poly 92 (41.7) PVDF 85 (38.5) Poly w/ Cast Iron Center 115 (52.1) PVDF w/ Cast Iron Center	62 (28.1) Poly 92 (41.7) PVDF 85 (38.5) Poly w/ Cast Iron Center 115 (52.1) PVDFw/ Cast Iron Center
Maximum Solids Inches (mm)	Clean Fluids	3/32 (2.4)	1/8 (3.2)	1/4 (6.4)	1/4 (6.4)
Best Selling Models (BSP Available)	PD02P-APS-PTA PD02P-APS-PTT PD02P-ADS-DTT PD02P-AKS-KTT (No BSP)	66605J-388 66605J-3EB 66605J-344 66605H-244 66605K-444 66605H-2A4 (No BSP)	6661A3-3EB-C 6661A3-344-C 6661B3-344-C 6661A4-444-C 6661B4-444-C	6661T3-3EB-C 6661T3-344-C 6661U3-344-C 6661U4-444-C	6662A3-3EB-C 6662A3-344-C 6662B3-344-C 6662B4-444-C
Recommended Filter/ Regulator	P29122-600	P29122-600	P29221-610	P29241-610	P29241-610
Air Line Kit One Piece Diaphragm Service Kit	66073-1	66073-1	66073-2 48495964	66084-1 48496806	66084-1 48496806

# 1/4" Non-Metallic Models Pro-Series Pumps

## 1/4" Non-Metallic Performance Specifications

Ratio:	1:1
Maximum Flow GPM (LPM):	4.6 (17.4)
Displacement per cycle: Gallons (Liters)	0.014 (0.053)
Air Inlet:	1/4" (F)
Fluid Inlet:	3/8" (F)
Fluid Outlet:	1/4" (F)
Max. operating pressure psi (bar):	100 (6.8)
Suspended solids max. dia.:	Clean Fluid Only
Weight lbs (kg):	PD02P-XDS-XXX 4.6 (2.10) PD02P-XPS-XXX 4.1 (1.85) PD02P-XKS-XXX 4.9 (2.22)
Maximum dry suction lift ft (m):	20 (6.1)



## Ordering Menu

PD02	P	-	X	X	X	-	X	X	X
<b>Model Series</b>	<b>Center Section Material</b>		<b>Fluid Connection</b>	<b>Fluid Caps/Manifold Material</b>	<b>Hardware Material</b>		<b>Seat Material</b>	<b>Disk Check</b>	<b>Diaphragm Material</b>
1/4" Pump	P Polypropylene		A NPT Single Inlet /Single Outlet D NPT Single Inlet /Dual Outlet E NPT Dual Inlet /Single Outlet H NPT Dual Inlet /Dual Outlet	D Acetal P Polypropylene K Kynar (PVDF)	S Stain. Steel		D Acetal P Polypropylene K Kynar(PVDF)	T Teflon	A Santoprene G Nitrile T Teflon

## Accessories

**Air Line Connection Kit\* | Kit No. 66073-1**

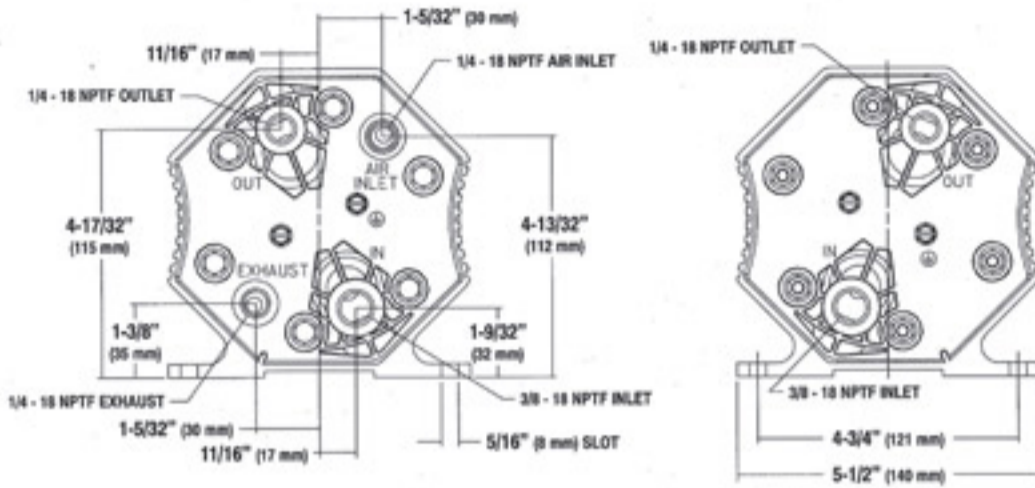
Service Repair Kits | *Kit No. 637276 (air section)*  
*Kit No. 637313-XX (fluid section)*

\*Please note pumps are not included with these kits.

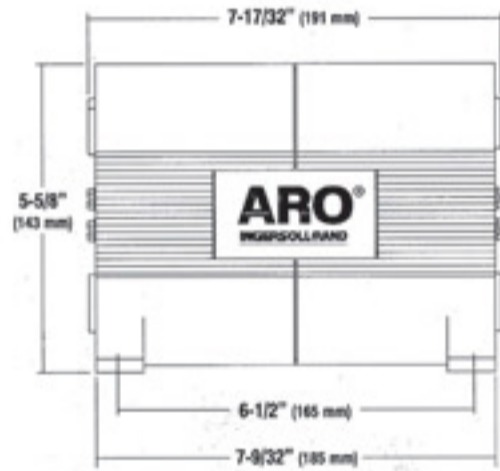
# 1/4" Non-Metallic Dimensions and Flow Curves Pro-Series Pumps

## 1/4" Non-Metallic Dimensions and Flow Charts

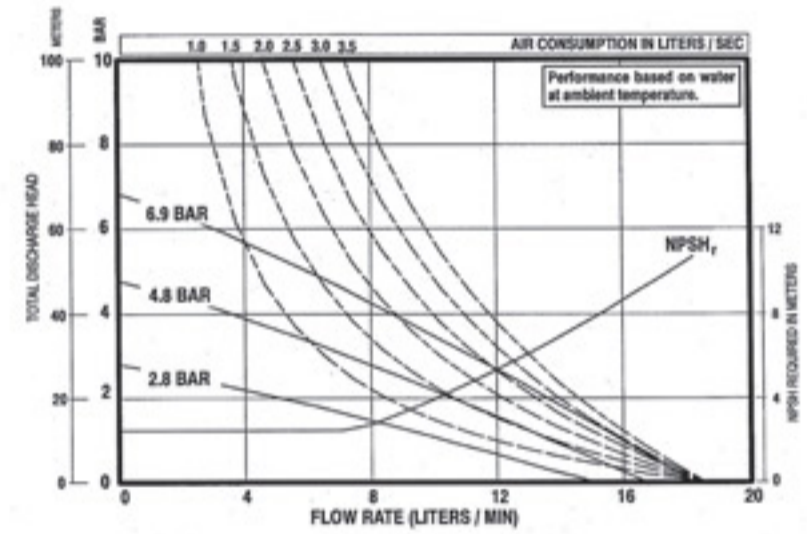
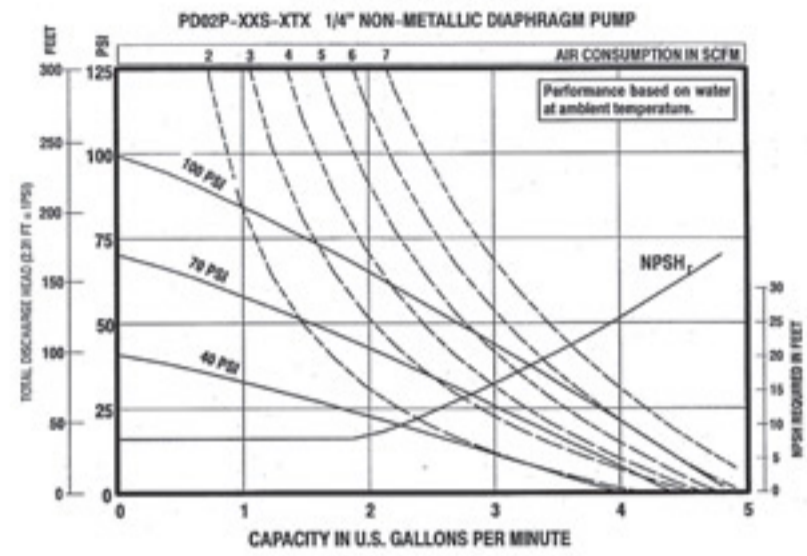
END VIEWS



SIDE VIEW



PERFORMANCE CURVES



Refer to [www.irtools.com/aro/](http://www.irtools.com/aro/) for full size flow curves.

**Model**  
PD02P-X-X

NOTE: Dimensions are shown in inches and (mm), supplied for reference only and are typically rounded up to the nearest 1/16 inch.

# 1/2" Non-Metallic Models Pro-Series Pumps

## 1/2" Non-Metallic Performance Specifications

Ratio:	1:1		
Maximum Flow GPM (LPM):	13 (49) Ball, 10 (37.9) Duckbill Check		
Displacement per cycle Gallons (Liters):	0.04 (0.15) Ball, 0.032 (0.12) Duckbill Check		
Air Inlet:	1/4" NPT (F)		
Fluid Inlet:	1/2" NPT (F)		
Fluid Outlet:	1/2" NPT (F)		
Max. operating pressure psi (bar):	100 (6.9)		
Suspended solids max. dia.:	3/32 (2.4)		
Weight lbs (kg):	66605J-XXX	7.2 (3.3)	
	66605K-XXX	9.5 (4.3)	
Maximum dry suction lift ft (m):	10 (3)		
Sound Level:	PSI	Cycles / Min	db (A)
	70	60	71.1



## Ordering Menu

6660	5	X	-	X	X	X
<b>Model Series</b>	<b>Center Section Material</b>	<b>Fluid Caps/ Manifold Material</b>		<b>Seat Material</b>	<b>Ball Material</b>	<b>Diaphragm Material</b>
1/2" PUMP	Polypropylene	3* Polypropylene 6* Groundable Acetal 7* Pure Kynar H* Groundable Acetal J* Polypropylene K* Pure Kynar		0 (Duckbill) 2 Stainless Steel 3 Polypropylene 4 Kynar PVDF 6 Acetal	1 Neoprene 2 Nitrile 3 Viton 4 Teflon PTFE 8 Polyurethane A Stainless Steel C* Neoprene D* Nitrile E Santoprene®	1 Neoprene 2 Nitrile 3 Viton 4 Teflon PTFE / Santoprene 8 Polyurethane 9 Hytrel B Santoprene®
		* three-Piece Manifold * one-Piece Manifold			* Duckbill models	

## Accessories

Air Line Connection Kit\* | Kit No. 66073-1  
66073-2

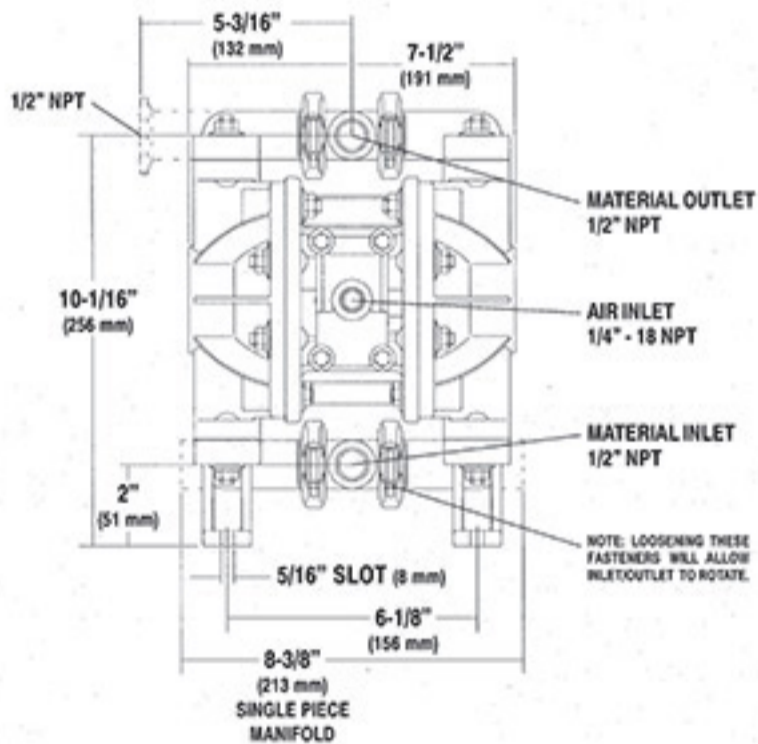
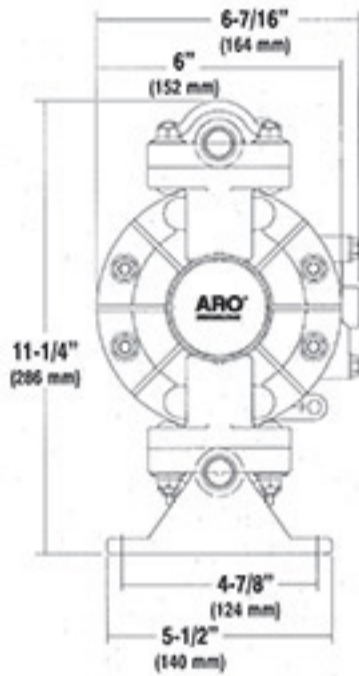
Service Repair Kits | Kit No. 637141 (air section)  
Kit No. 637140-XX (fluid section)

\*Please note pumps are not included with these kits.

# 1/2" Non-Metallic Dimensions and Flow Curves Pro-Series Pumps

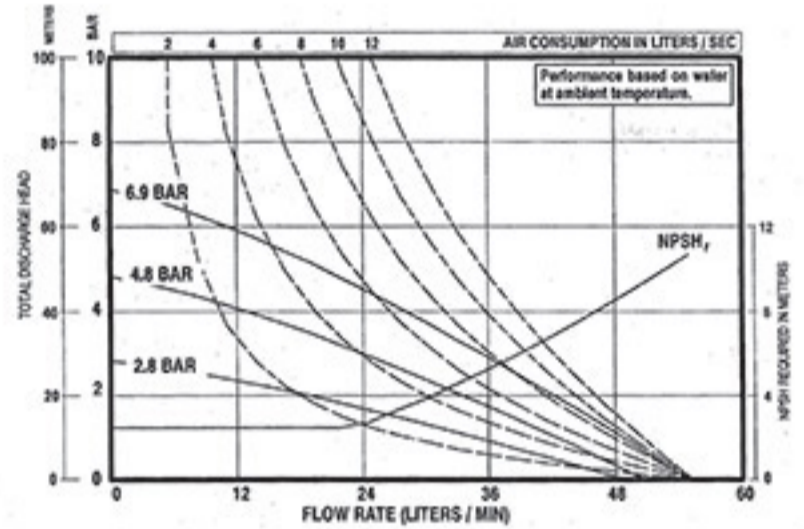
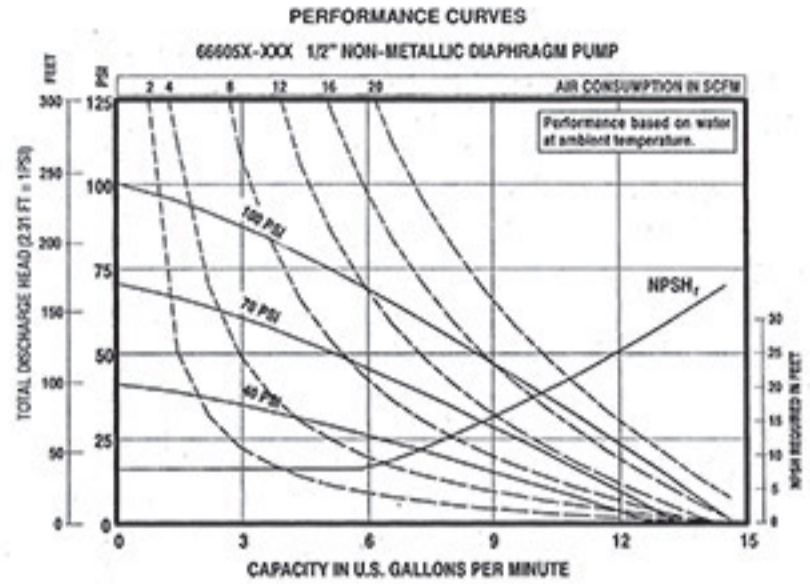
## 1/2" Non-Metallic Dimensions and Flow Charts

NON-METALLIC



**Model**  
66605X-X

NOTE: Dimensions are shown in inches and (mm), supplied for reference only and are typically rounded up to the nearest 1/16 inch.

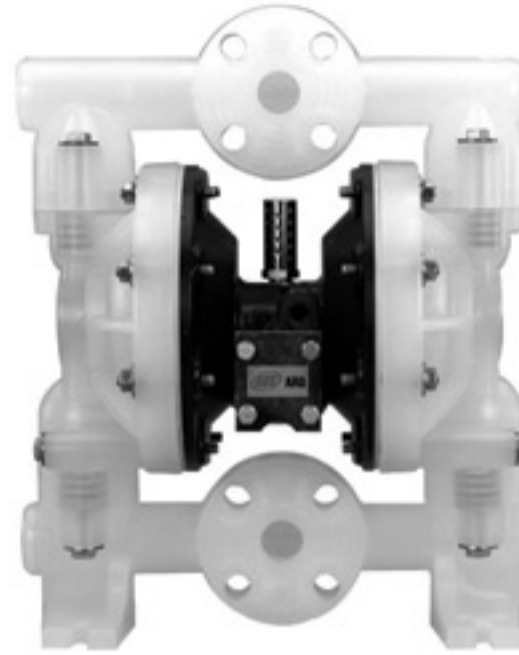


Refer to [www.irttools.com/aro/](http://www.irttools.com/aro/) for full size flow curves.

# 1" Non-Metallic Models Pro-Series Pumps

## 1" Non-Metallic Performance Specifications

Ratio:	1:1		
Maximum Flow GPM (LPM):	47 (177.9)		
Displacement per cycle:	0.17 (0.64)		
<small>Gallons (Liters)</small>			
Air Inlet: (Female)	1/4 - 18 N.P.T.		
Fluid Inlet:	1 - 11-1/2 N.P.T.F. - 1		
	Rp 1 (1 - 11 BSP, parallel)		
	1" ANSI/DIN Flange		
Fluid Outlet:	1 - 11-1/2 N.P.T.F. - 1		
	Rp 1 (1 - 11 BSP, parallel)		
	1" ANSI/DIN Flange		
Max. operating pressure psi (bar):	120 (8.3)		
Suspended solids max. dia.:	1/8 (3.2)		
<small>in. (mm)</small>			
Weight lbs (kg):	6661A3-, 1AF-, 1AJ-, 1AL-	20.3 (9.2)	
	6661A4-, 1AG-, 1AK-, 1AN-	28.5 (12.9)	
	6661B3-, 1BF-, 1BJ-, 1BL-	28.8 (13.1)	
	6661B4-, 1BG-, 1BK-, 1BN-	37.0 (16.8)	
Maximum dry suction lift ft (m):	15 (4.6) Rubber fitted		
Sound Level:	PSI	Cycles / Min	db (A)
	70	60	64.5



## Ordering Menu

<b>6661X</b>	<b>X</b>	<b>-</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>-</b>	<b>C</b>
<b>Center Body</b>	<b>Fluid Caps/ Manifold Material</b>		<b>Seat Material</b>	<b>Ball Check Material</b>	<b>Diaphragm Material</b>		
A Aluminum	3 <sup>*</sup> Colorless Polypropylene Flange		2 316 Stainless Steel	1 Neoprene	1 Neoprene		
B Cast Iron	4 <sup>*</sup> PVDF (Kynar®) Flange		3 Polypropylene	2 Nitrile	2 Nitrile		
	F <sup>*</sup> Colorless Polypropylene Flange		4 PVDF (Kynar®)	3 Viton®	3 Viton		
	G <sup>*</sup> PVDF (Kynar®) Flange		8 Hard 400 Stainless Steel	4 T.F.E. (Teflon®)	4 T.F.E. (Teflon) / Santoprene		
	J <sup>*</sup> Colorless Polypropylene N.P.T.			8 Polyurethane	9 Hytrel®		
	K <sup>*</sup> PVDF (Kynar®), N.P.T.			A 316 Stainless Steel	B Santoprene		
	L <sup>*</sup> Colorless Polypropylene, B.S.P.			E Santoprene®	M Medical Grade Santoprene		
	N <sup>*</sup> PVDF (Kynar®), B.S.P.			M Medical Grade Santoprene			
	P <sup>*</sup> Gray Polypropylene Flange						
	R <sup>*</sup> Gray Polypropylene Flange						
	S <sup>*</sup> Gray Polypropylene, N.P.T.						
	T <sup>*</sup> Gray Polypropylene, B.S.P.						

## Accessories

### Air Line Connection Kit\* | Kit No. 66073-2

Kit includes Piggyback Filter/Regulator with gauge, pipe nipple and a 5-foot section of air hose.

Service Repair Kits | Kit No. 637118-C (air section)

Kit No. 637161-XX-C (fluid section)

One Piece Diaphragm Service Kit | Kit No. 48495964

Kit includes Diaphragms, connecting rod, o-ring, shim pack and grease package.

Flange Connection Kit | Kit No. 67078 (for 1" Non-Metallic Pumps)

For pumps with inlet/outlet flange manifolds. Kit meets ANSI specifications. Flange constructed of glass-filled polypropylene. Bolts, washers and nuts are stainless steel. Gasket is 4401 klinger synthetic fiber nitrile binder.

\*Please note pumps are not included with these kits.

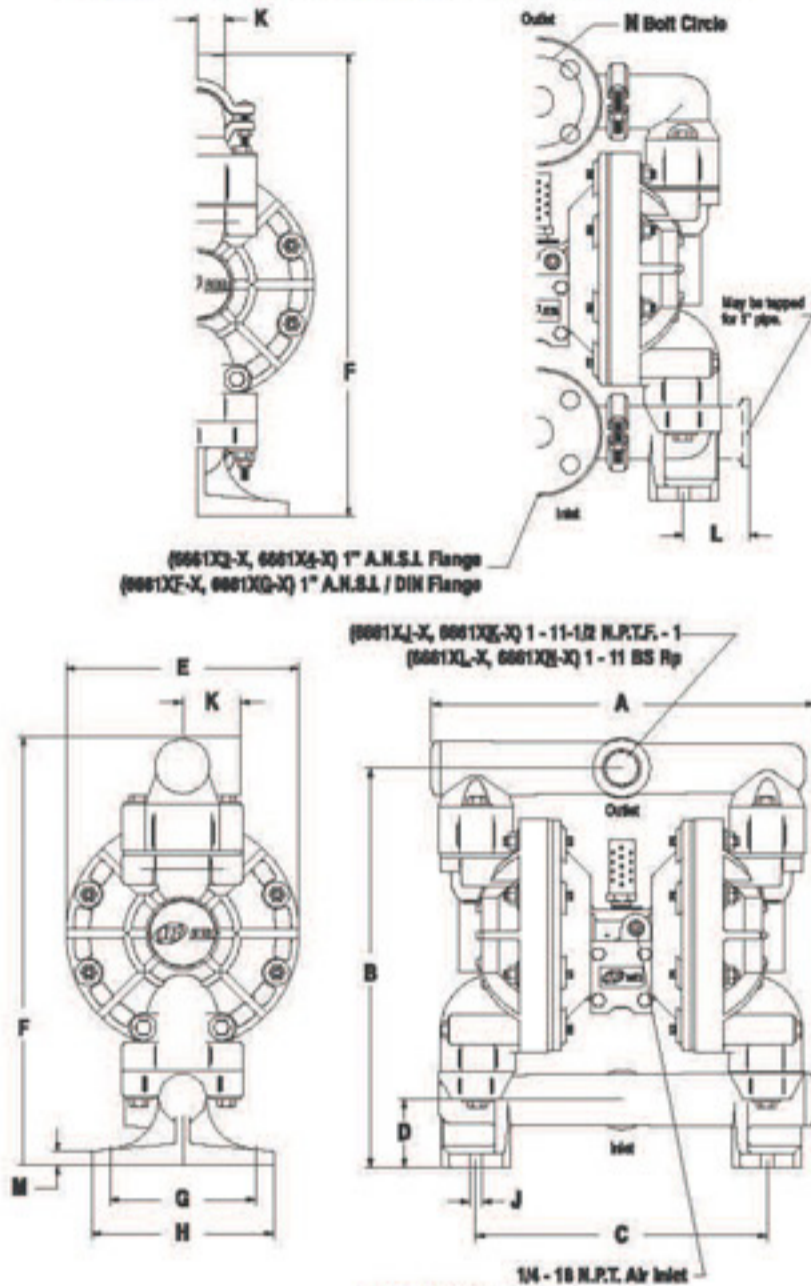


Flange Connection Kit  
67078

# 1" Non-Metallic Dimensions and Flow Curves Pro-Series Pumps

## DIMENSIONAL DATA

Dimensions shown are for reference only, they are shown in inches and millimeters (mm).



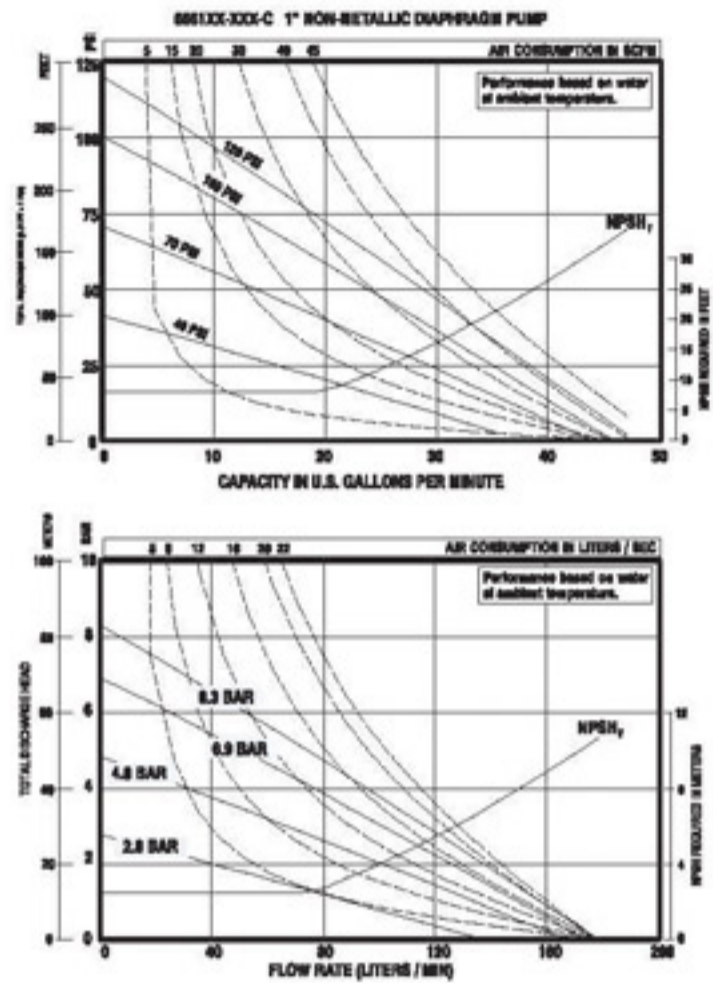
DIMENSIONS

	6661X2-X	6661X4-X	6661XJ-X 6661XL-X
A	12-21/32" (321 mm)	12-15/32" (316 mm)	13-5/32" (334 mm)
B	13-25/32" (349 mm)	13-19/32" (345 mm)	13-25/32" (350 mm)
C	10-1/16" (255 mm)	9-15/16" (252 mm)	10-1/16" (255 mm)
D	2-3/8" (60 mm)	2-11/32" (59 mm)	2-11/32" (59 mm)
E	8-1/16" (204 mm)	7-15/16" (201 mm)	8-1/16" (204 mm)
F	16" (406 mm)	15-25/32" (400 mm)	14-13/16" (376 mm)
G	5-1/32" (128 mm)	4-31/32" (126 mm)	5-1/32" (128 mm)
H	6-9/32" (160 mm)	6-7/32" (157 mm)	6-9/32" (160 mm)
J	7/16" (11 mm)	7/16" (11 mm)	7/16" (11 mm)
K	15/16" (23 mm)	29/32" (23 mm)	2" (51 mm)
L	2-9/32" (57 mm)	2-1/4" (58 mm)	
M	1/2" (13 mm)	1/2" (13 mm)	1/2" (13 mm)
N	3.140" (80 mm)	3.097" (79 mm)	

	6661XK-X 6661XN-X	6661XF-X	6661XG-X
A	13-1/32" (331 mm)	13-5/32" (334 mm)	13-1/32" (331 mm)
B	13-19/32" (345 mm)	13-25/32" (350 mm)	13-19/32" (345 mm)
C	9-15/16" (252 mm)	10-1/16" (255 mm)	9-15/16" (252 mm)
D	2-5/16" (59 mm)	2-11/32" (59 mm)	2-5/16" (59 mm)
E	7-15/16" (201 mm)	8-1/16" (204 mm)	7-15/16" (201 mm)
F	14-5/8" (371 mm)	16" (406 mm)	15-25/32" (401 mm)
G	4-31/32" (128 mm)	5-1/32" (128 mm)	4-31/32" (128 mm)
H	6-7/32" (157 mm)	6-9/32" (160 mm)	6-7/32" (157 mm)
J	7/16" (11 mm)	7/16" (11 mm)	7/16" (11 mm)
K	1-25/32" (50 mm)	1-1/32" (26 mm)	1" (25 mm)
L			
M	1/2" (13 mm)	1/2" (13 mm)	1/2" (13 mm)
N		3.140" (80 mm)	3.097" (79 mm)

## PERFORMANCE CURVES



Refer to [www.irttools.com/aro/](http://www.irttools.com/aro/) for full size flow curves.

# 1-1/2" Non-Metallic Models Pro-Series Pumps

## 1-1/2" Non-Metallic Performance Specifications

Ratio:	1:1		
Maximum Flow GPM (LPM):	100 (378.5)		
Displacement per cycle:	0.67 (2.54)		
<small>Gallons (Liters)</small>			
Air Inlet: (Female)	1/2 - 14 N.P.T.F. - 1		
Fluid Inlet:	1-1/2" A.N.S.I./DIN Flange		
Fluid Outlet:	1-1/2" A.N.S.I./DIN Flange		
Max. operating pressure <small>psi (bar)</small> :	120 (8.3)		
Suspended solids max. dia.:	1/4 (6.4)		
<small>in. (mm)</small>			
Weight <small>lbs (kg)</small> :	6661T3-X-C	62	(28.1)
	6661T4-X-C	92	(41.7)
<b>Note:</b> Add 23-lbs (10.4-kg) for cast iron air motor section			
Maximum dry suction lift <small>ft (m)</small> :	14 (4.27)	Rubber fitted	
Sound Level:	PSI	Cycles / Min	db (A)
	70	60	77.7



## Ordering Menu

<b>6661X</b>	<b>X</b>	-	<b>X</b>	<b>X</b>	<b>X</b>	-	<b>C</b>
<b>Center Body</b>	<b>Fluid Caps/ Manifold Material</b>		<b>Seat Material</b>	<b>Ball Check Material</b>	<b>Diaphragm Material</b>		
T Aluminum	3 Polypropylene		2 316 Stainless Steel	1 Neoprene	1 Neoprene		
U Cast Iron	4 P.V.D.F. (Kynar®)		3 Polypropylene	2 Nitrile	2 Nitrile		
			4 P.V.D.F. (Kynar®)	3 Viton	3 Viton		
			8 400 Stainless Steel	4 Teflon	4 T.F.E. (Teflon) / Santoprene		
				8 Polyurethane	9 Hytrel		
				E Santoprene	B Santoprene		

## Accessories

### Air Line Connection Kit\* | Kit No. 66084-1

Kit includes Piggyback Filter/Regulator with gauge, pipe nipple and a 5-foot section of air hose.

Service Repair Kits | *Kit No. 637118-C (air section)*  
*Kit No. 637165-XX (fluid section)*

### One Piece Diaphragm Service Kit | Kit No. 48496806

Kit includes Diaphragms, connecting rod, o-ring, shim pack and grease package.

### Flange Connection Kit | Kit No. 67079 (for 1-1/2" Non-Metallic Pumps)

For pumps with inlet/outlet flange manifolds. Kit meets ANSI specifications. Flange constructed of glass-filled polypropylene. Bolts, washers and nuts are stainless steel. Gasket is 4401 klinger synthetic fiber nitrile binder.

\*Please note pumps are not included with these kits.

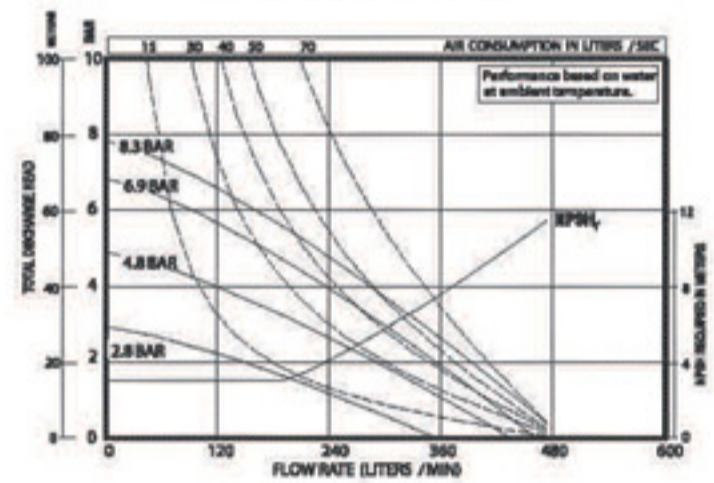
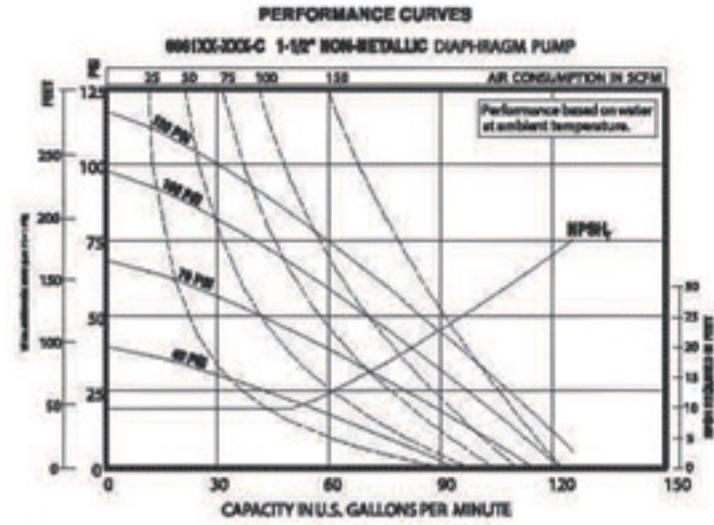
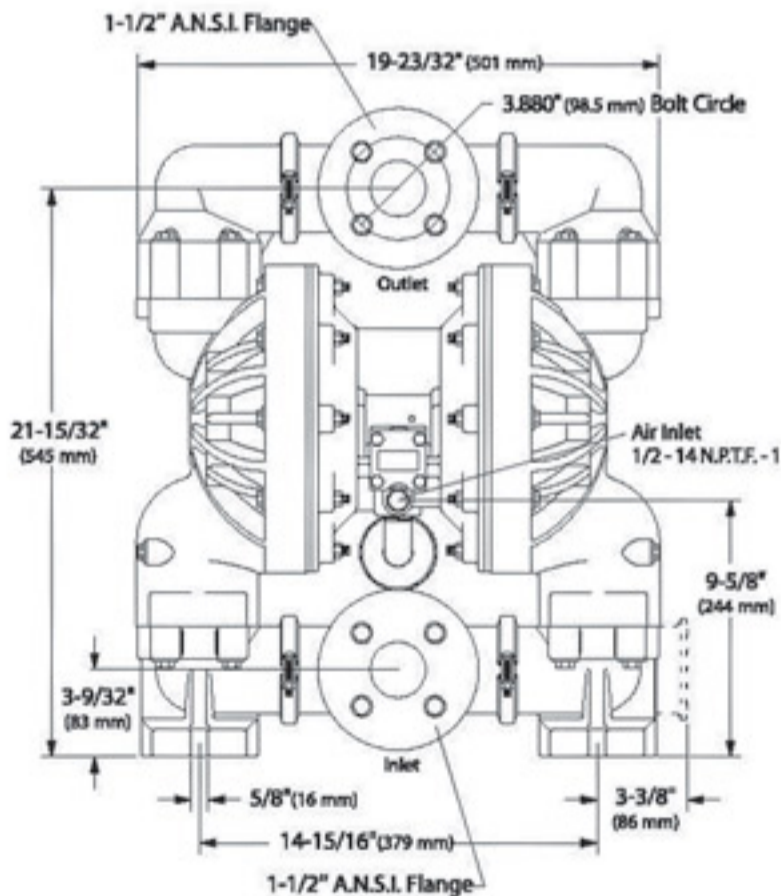
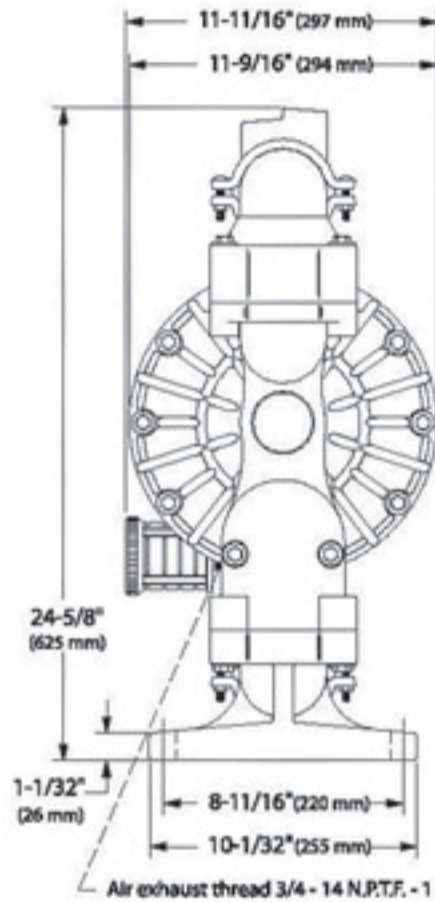


Flange Connection Kit  
67079

# 1-1/2" Non-Metallic Dimensions and Flow Curves Pro-Series Pumps

## 1-1/2" Non-Metallic Dimensions and Flow Charts

All dimensions are given in inches and millimeters (mm).



Refer to [www.irtools.com/aro/](http://www.irtools.com/aro/) for full size flow curves.

# 2" Non-Metallic Models Pro-Series Pumps

## 2" Non-Metallic Performance Specifications

Ratio:	1:1		
Maximum Flow GPM (LPM):	145 (548.8)		
Displacement per cycle:	0.72 (2.7)		
<small>Gallons (Liters)</small>			
Air Inlet: (Female)	1/2 - 14 N.P.T.F. - 1		
Fluid Inlet:	2" A.N.S.I./DIN Flange		
Fluid Outlet:	2" A.N.S.I./DIN Flange		
Max. operating pressure <small>psi (bar)</small> :	120 (8.3)		
Suspended solids max. dia.:	1/4 (6.4)		
<small>in. (mm)</small>			
Weight <small>lbs (kg)</small> :	6662A3-X-C	62 (28.1)	
	6662A4-X-C	92 (41.7)	
<b>Note:</b> Add 23-lbs (10.4-kg) for cast iron air motor section			
Maximum dry suction lift <small>ft (m)</small> :	14 (4.27)	Rubber fitted	
Sound Level:	PSI	Cycles / Min	db (A)
	70	60	77.7



## Ordering Menu

6662X	X	-	X	X	X	-	C
<b>Center Body</b>	<b>Fluid Caps/ Manifold Material</b>		<b>Seat Material</b>	<b>Ball Check Material</b>	<b>Diaphragm Material</b>		
A Aluminum	3 Polypropylene	2 316 Stainless Steel	1 Neoprene	1 Neoprene	1 Neoprene		
B Cast Iron	4 P.V.D.F. (Kynar®)	3 Polypropylene	2 Nitrile	2 Nitrile	2 Nitrile		
		4 P.V.D.F. (Kynar®)	3 Viton	3 Viton	3 Viton		
		8 400 Stainless Steel	4 Teflon	4 Teflon	4 T.F.E. (Teflon) / Santoprene		
			8 Polyurethane	8 Polyurethane	9 Hytel		
			E Santoprene	E Santoprene	B Santoprene		

## Accessories

### Air Line Connection Kit\* | Kit No. 66084-1

Kit includes Piggyback Filter/Regulator with gauge, pipe nipple and a 5-foot section of air hose.

Service Repair Kits | *Kit No. 637118-C (air section)*  
*Kit No. 637165-XX (fluid section)*

### One Piece Diaphragm Service Kit | Kit No. 48496806

Kit includes Diaphragms, connecting rod, o-ring, shim pack and grease package.

### Flange Connection Kit | Kit No. 67080 (for 2" Non-Metallic Pumps)

For pumps with inlet/outlet flange manifolds. Kit meets ANSI specifications. Flange constructed of glass-filled polypropylene. Bolts, washers and nuts are stainless steel. Gasket is 4401 klinger synthetic fiber nitrile binder.



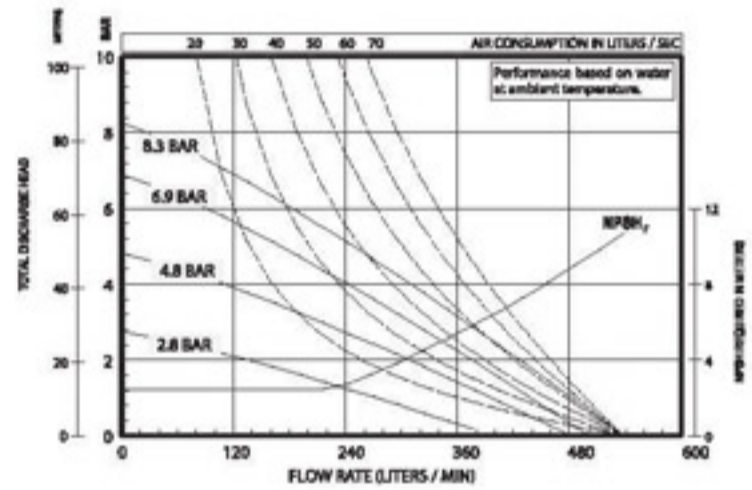
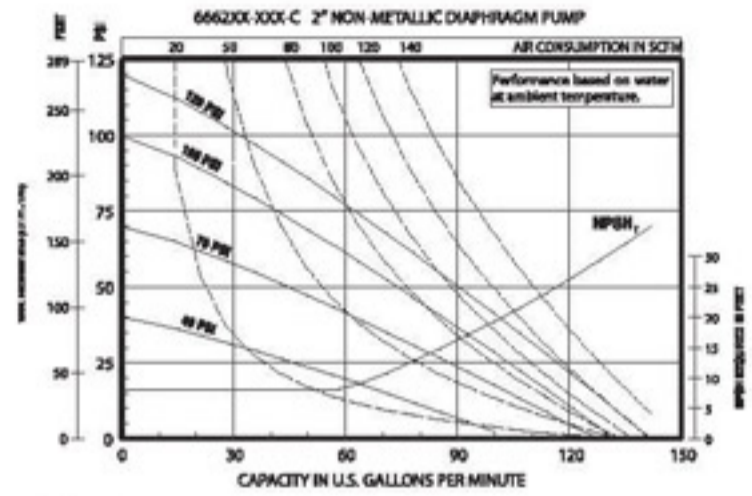
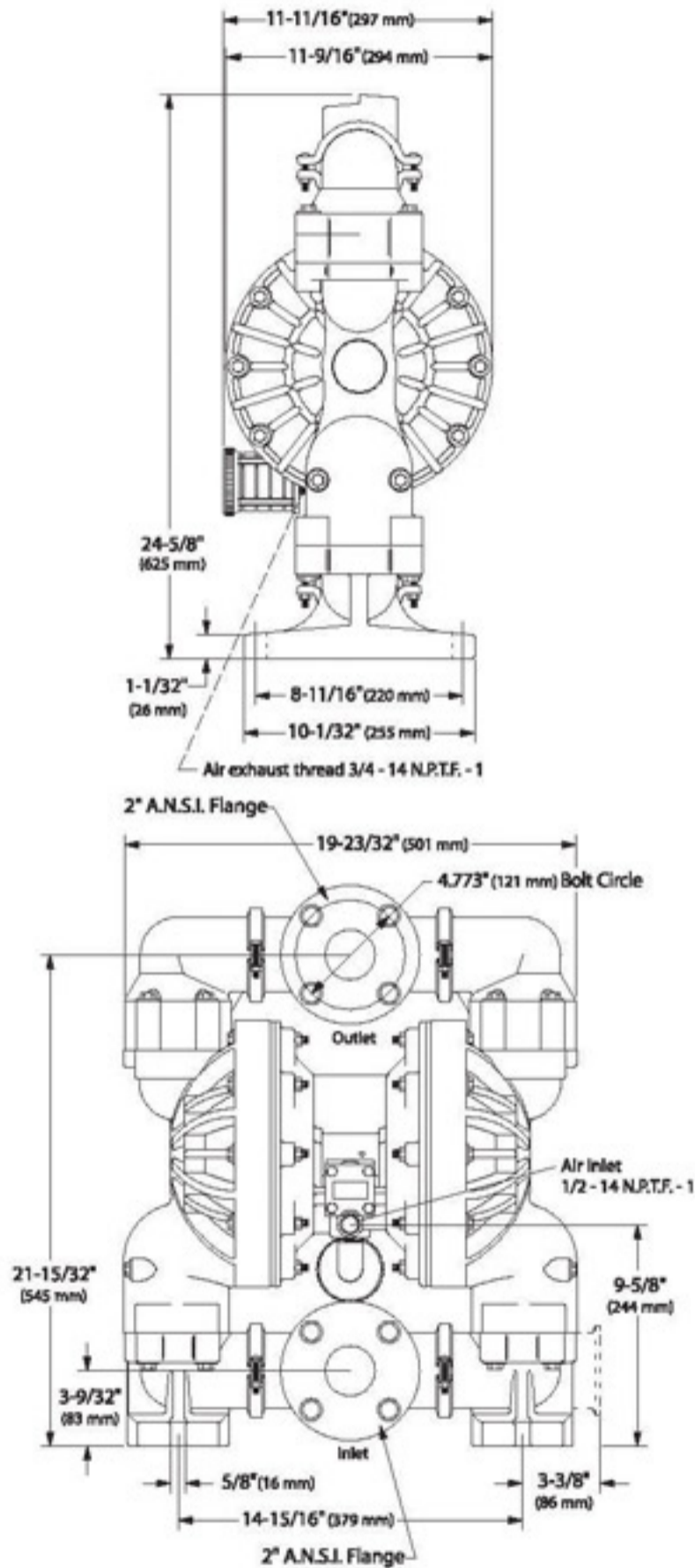
Flange Connection Kit  
67080

\*Please note pumps are not included with these kits.

# 2" Non-Metallic Dimensions and Flow Curves Pro-Series Pumps

## 2" Non-Metallic Dimensions and Flow Charts

All dimensions are given in inches and millimeters (mm).



Refer to [www.irtools.com/aro/](http://www.irtools.com/aro/) for full size flow curves.