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# **YANGTECH**

# **SMP-SERIES**

MECHANICAL-DRIVEN DIAPHRAGM PUMP SMP-7015/7030/7060/8015/8020



YANGTECH TECHNOLOGY CO., LTD. (Taiwan)

#### **YANGTECH**

# SMP- Series Diaphragm Metering Pump SMP-7015/7030/7060/8015/8020 Installation & Maintenance Manual

#### 1. NOTICES —



Not in accordance with the manual may cause malfunction of pump or even injury of operator!

- Read this manual thoroughly before installation and operation.
- Install this pump in a place of ventilation (environmental temp. between 5~40°C). Keep away from high temperature / high humidity / corrosive gases.
- Outdoor installation of this pump is allowed (IP55 proof enclosure). But to give a shelter can effectively increase the pump's life.
- This product is not explosion-proof rating, do not install in a place of potentially gas/dust explosion.
- Confirm the power source is correct before use.
- In case of very rating control by 4~20mA signal, a inverter which support 4~20mA signal is necessary. However the frequency setting between 30~60Hz is suitable, too high or too low of frequency may cause damage of this product.
- Must drain the pipe before installation. Install pump to a pressured pipe is extremely high dangerous. It may cause a serious injure of operator.
- Do not operate the pump in a pressure higher than specification, or fluid viscosity >1000 cP or temperature  $>60^{\circ}$ C.
- This unit is not suitable for all kind of chemical fluid. Some solvents, extreme acid, high oxidization high temperature or high viscosity fluid may cause malfunction of pump.
- Wear a chemical protect mask and gloves before repair or maintenance.
- Please do not try to modify the pump or use non-original parts. These damage pump and cause warranty become invalid.

#### 2.WARRANTY -

- Under normal operating and maintenance conditions, we are responsible to this product for one year's warranty from the date of shipment.
- Product failures within the validity period of the warranty are repaired by our company free of charge (except freight).
- Grease, diaphragm and all rubber oil seals and gaskets are consumable parts that are not covered by the warranty.
- Warranty is for the pump itself only. The user extension loss that may occur in the event of a pump failure is not included.

#### 3.MODEL IDENTIFICATION

# **SMP-7015-ACH-221**

#### A B C D E F G

A= Series Code (Pump Series)

B= Diaphragm Diameter (70=φ70mm, 80=φ80mm)

C= Reduce Rate (15=1:15, 20=20:1, 30=30:1, 60=60:1)

D= Material Code (Consult table below)

E= Joint Code (H/H1= Hose Type ,U= Union Type, F= Flange Type) F= Power Code 1 Volts(11=100/110/120V, 22=200/220/240V, 38=380V,

41=415/440V, 48=480V)

G= Power Code 2 Phases(1=one phase, 3=three phase)

#### MATERIAL CODE:

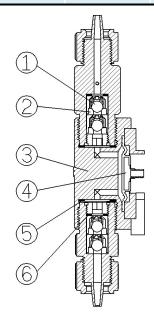
Material Code	AC	AF	BS	VS	SS	
Application	General Acid	Strong Oxidative Acid	General Base	Thick fluid	Solvent	
1.Valve Ball	Ceramic	Ceramic	SUS316	SUS316	SUS316	
2.Valve Seat	FKM	PTFE	PVC	PVC	PTFE	
3.Pump Head	PVC	PTFE	PVC	PVC	SUS420	
4.Diaphragm		PTFE + EPDM +	+ SUS304 + Nylon Fiber			
5.O-Ring	FKM	PTFE	EPDM	EPDM	PTFE	
6.Gasket	FKM	PTFE	EPDM	EPDM	PTFE	

Remark: PVC : Polyvinyl chloride

SUS420/316 : Stainless Steel
FKM : Fluoro Rubber (Viton)
EPDM : Ethylene Propylene Rubber
PVDF : Polyvinylidene fluoride

Ceramic  $Al_2O_3$ 

PTFE : Polytetrafluoro Ethylene



#### 4.PACKING DIMANTIONS AND CONTENTS -

#### • PACKING DIMENSIONS :

Model	Packing Dimensions	Net Weight (Kg)	Gross Weight (Kg)
7015/7030/7060	L253mm*W205mm*H242mm (Double layer corrugated paper carton)	3.6	4.9
8015/8020	L273mm*W225mm*H250mm (Double layer corrugated paper carton)	5.6	6.6

### • Package Contects:

SMP-7015/7030/7060

No.	Contents	ACH	BSH	AFH	VSH	SSH
1.	Pump*1	S	S	S	S	S
2.	PVC Hose5/16"(8* 13mm) *3.0m	S	S		S(3/8")	
3.	PTFE Hose 8*10mm*3.0m			О		O
4.	Set (M6-25screw+nut*2+washer *4) *1	S	S	S	S	S
5.	Manual*1	S	S	S	S	S
6.	PTFE Connector 8*10mm*1			S		
7.	SUS304 Connector 8*10mm*1					S
8.	PTFE Foot Valve (8*10mm) *1			О		O
9.	PVC Foot Valve 5/16"(8* 13mm) *1	S	S		S(3/8")	
10.	PTFE Injector (8*10mm)*1			О		O
11.	PVC Injector 5/16"(8* 13mm) *1	О	O		О	
12.	PVC M24 to 1/2" pipe adaptor*2	О	O			

S: Standard O: Optional Null: Not suitable, Model H1:For 10mm hose as PP/PVC/PTFE. SMP-8015/8020

No.	Contents	ACH	BSH	AFH	VSH	SSH
1.	Pump*1	S	S	S	S	S
2.	PVC Hose 3/8"(9.5* 15mm) *3.0m	S	S		S	
3.	PTFE Hose 8*10mm*3.0m			О		О
4.	Set(M6-25screw+nut*2+washer*4)*1	S	S	S	S	S
5.	Manual*1	S	S	S	S	S
6.	PTFE Connector 8*10mm*1			S		
7.	SUS304 Connector 8*10mm*1					S
8.	PTFE Foot Valve (8*10mm) *1			О		О
9.	PVC Foot Valve3/8"(9.5* 15mm) *1	S	S		S	
11.	PTFE Injector (8*10mm)*1			О		О
12.	PVC Injector 3/8"(9.5*15mm)*1	0	О		О	
13.	PVC Union-1/2"(13*22mm)*2	ACU (S)	BSU (S)			
14.	PVC Flange+Flange gasket,1/2",10K*2	ACF (S)	BSF (S)			

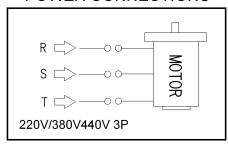
S: Standard O: Optional Null: Not suitable

(Please confirm the contents and quantity of the contents correctly after unpacking.)

#### 5.INSTALLATION '

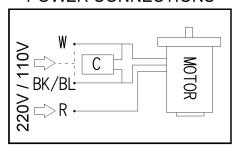
- 1. Make sure this pump is horizontally installed.
- 2. Make sure that the power source is correct before power connections. The correct connections as below:

#### POWER CONNECTIONS



3-Phase

#### **POWER CONNECTIONS**



1-Phase W=White BK=Black BL=Blue R=Red C=Capacitor

- 3. Use diameter of 7-8mm power cable (3 or 4-wires), turn tight cable hold nut and use gasket between cover and power box. Ground terminal must connect to the ground wire and should be fixed.
- 4. Please pay attention to the installation environment to avoid places with high temperature and humidity or poor ventilation. Continuous operation> 2 hours, the motor temperature can reach 65∼75°C (three phase) or 75∼85°C (single phase). This is a normal phenomenon and will not affect the life of the motor, but a well-ventilated place can effectively dissipate heat and reduce acid, The environmental concentration of alkali or volatile chemicals prolongs the life of the pump.
- 5. This product can be installed on the ground or on the wall. Must secure this product to avoid looseness cause by vibration.
- 6. It is necessary to tighten the joints with bare hands when installing. Do not use tools to handle the plastic joints to avoid damage.
- 7. After fixing the pump, connect certificated hose/pipe to the inlet/outlet connector and the foot-valve (with filter). The foot-valve should 10-15cm higher than the bottom of the source tank to prevent from sucking sediments.
- 8. Notices of piping (Piping configuration consult scheme 1):
  - 1. If pump location is above chemical container, do not excess 2.0meters higher than the chemical lowest level in the container and check valve must be installed vertically. High suction head may lead fail inhalation. Permissible suction head is affected by Liquid viscosity, specific gravity, pipeline conditions. (We do not guarantee suction head of this product)
  - 2. When input hose is empty, pump may not be able to suck liquid into pump head automatically. In this case you can try to full the input hose with liquid then raise it up higher than pump head and start pumping. This procedure may solve suction problem. (If a pipe injector will be install, install it after pump can pump out normally.)

#### A05G048

- 3. The pressure loss cause by pump pulse should below 1.0 Kgf/cm2, otherwise the pipe start to vibrate. In this case, a pulse reducer can be installed or reduce piping length/elbow or increase pipe diameter.
- 4. Be aware that pressure discrepancy between input output hose should higher than the inner pressure loss of this pump otherwise, overfeeding even siphon phenomenon may occur. In this case an anti-siphon/backpressure valve(both are optional) should be installed.
- 5. Fluid which is easy to gasify or vaporize (Ex. H<sub>2</sub>O<sub>2</sub>, most solvents). Gas in pump head cause variation of flow rate. In this case purge the gas through drain valve.
- 6. Output pipe may install following devices to solve some problems:

Pulse damper -To reduce pipe vibration especially pipe is long/thin/plenty of

elbows

Pressure gauge -To monitor output pipe pressure.

Release valve -To prevent pipe from rupture cause by exceptional high

pressure and secure operator against hazard.

Back-pressure -To keep constant pressure of output pipe and improve flow

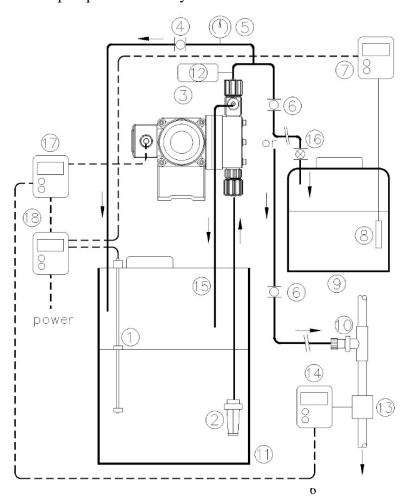
valve rate stability.

Pipe injector -To connect hose/pipe to other pipe.

Anti-siphon - If pumping destination altitude is lower than source tank siphon phenomenon occur. In this case an anti-siphon

valve should be installed.

#### 9. The pump installation system as below



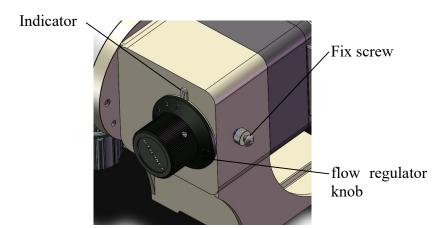
- 1. Level sensor
- 2. Check valve/filter
- 3. Pump
- 4. Release valve
- 5. Pressure gauge
- 6. Back pressure valve
- 7. Analog controller
- 8. Analog sensor
- 9. Target chemical tank
- 10. Pipe injector
- 11. Source chemical tank
- 12. Pulse damper
- 13. Flow sensor
- 14. Digital/analog flowcontroller
- 15. Drain valve pipe
- 16. Anit-siphon valve
- 17. Invertor
- 18. Power supply control box

#### NOTICE:

Not all of these devices are installed. In most case only part of the components will be installed

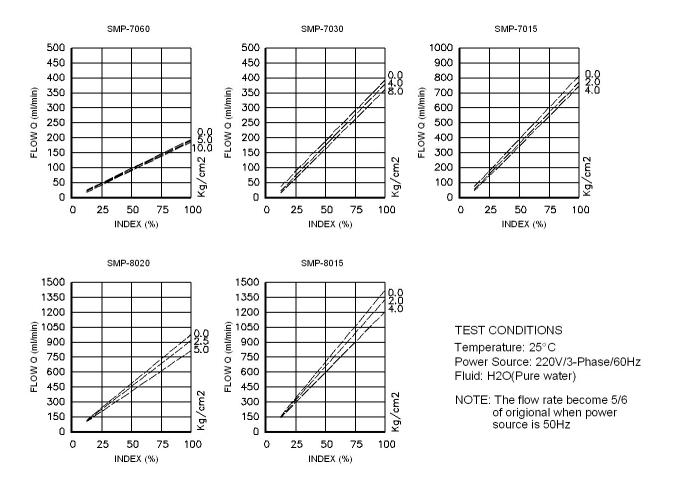
#### 6.OPERATIONS -

- Before operation make sure of correct power source and on leakage of pipe/connectors. Both direction of the motor is suitable for the pump. (No need to check the direction)
- To change the flow rate, loosen the fix-nut then turn the flow regulator knob while the pump is running. (Do not turn the flow regulator knob when pump is stop). Set the indicator between 0-10 (clockwise to reduce flow rate the opposite to increase).



• When indicator monitors at 10(100%), the stroke is at full length, when 0(0%), it means stroke is running at 0% of max. stroke length. The pump flow rate is proportionally to the stroke length.

#### 7. FLOW HARTS

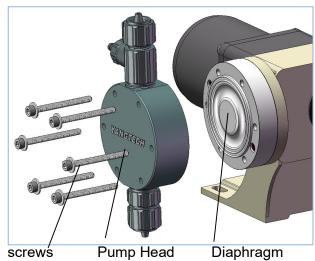


# 8. COMMON ABNORMAL SITUATIONS AND SOLUTIONS -

SITUATIONS	FACTORS	SOLUTIONS
	No power or power source is incorrect	Support correct power source
	Power switch not turn on	Turn on power switch
Can not start the motor	Malfunction of Magnetic switch or an action of current protector	Repair(renew) the magnetic switch or reset the current protector
	The coil of the motor is burned out	Replace a new one
	Loose power connection	Check and reconnect
	Over high viscosity of fluid	Reduce viscosity of the fluid
	Over high pressure of outlet	Reduce the pressure
],,,	Blocking of the pipe	Eliminate the blocking
Motor over heat	Power source is too high or too low	Use correct power source
(>85°C for single phase or >95°C for	Bad insulation of the motor coil	Renew motor coil
three phase)	Abrasion of bearing or the bad lubricity	Renew the bearing or improve the lubricity
	High environmental temperature or	Improve temperature and
	bad ventilation	ventilation of the environment
	Motor is not running (No output)	Start the motor
	Fluid viscosity become high	Reduce fluid viscosity
No fluid output or	Blocking of the pipe or foot valve	Eliminate from blocking
•	Check-ball pad is dirty or deformed	Clean or Renew the pad
output reduce	No fluid to be pumped	Fill the inlet-tank
obviously	Leakage of the pipe	Patch up the leakage
	Rift of the diaphragm	Replace with a new one
	Drive mechanism malfunction (Noise)	Renew the drive mechanism
	Power source problem (incorrect or disconnection of power or lack of a phase)	Check and reinstall power source
Abnormal noise or	Abrasion of bearing or the bad	Renew the bearing or
vibration	lubricity	improve the lubricity
Vibration	Abrasion of gears of the reducer	Replace with a new reducer
	Air choke occur in the pump head	Open purge valve to purge the air
	Looseness inlet/outlet connector or incorrect installation of O-ring	Fix the connector / reinstall O-ring
Leakage of fluid	Looseness of fix-screws	Fix the loosen screws
	O-ring / seal gasket is broken or deformed	Replace with a new one
	Rift of the diaphragm	Replace with a new one

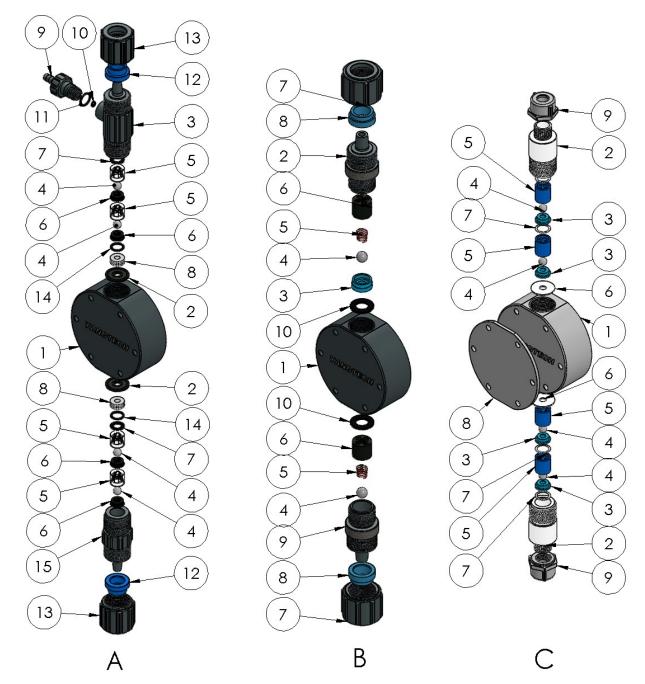
#### 9.MAINTENANCE

- Keep low temperature and good ventilation of the operating environment
- If blocking happens, disassemble the connector/foot-valve/pipe then clean up and reassemble the parts according to the illustrations at P.9-10.
- Check the power cable is normal and connectors are clean and tight regularly.
- Avoid the chemical splash on the pump. If do, wash off immediately.
- Check for abnormal noise/temperature (higher then 80°C)/leakage regularly. Solve them according to the "COMMON ABNORMAL SITUATIONS AND SOLUTIONS" at p.8
- Check and tighten screws of the pump every six months.
- The reducer of this pump is no need of lubrication.
- Diaphragm changing procedure as below:
- 1. Loose and remove screws of six.
- 2. Remove Pump head.
- 3. Turn counterclockwise to remove old diaphragm.
- 4. Turn clockwise to install new diaphragm.
- 5. Install Pump head.
- 6. Tighten screws.



#### 10. WET PARTS EXPLODED VIEWS

#### SMP-7015/30/60



#### A(SMP-7015/30/60-AC/BS)

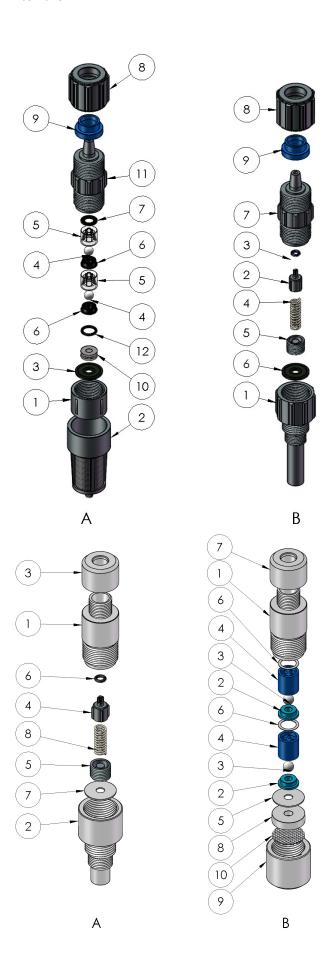
No.	Parts Code / Name	Qty.
1	SMP5-05A1Pump Head	1
2	SMP5-14D_M24 Gasket	2
3	SMP5-16B Hose Connector Outlet M24	1
4	SMP5-15B Check Ball	4
5	SMP5-15A Check Ball Guide	4
6	SMP5-15C1Check Ball VT/C2-PTFE	4
7	SMP5-15D Gasket	2
8	SMP5-15E1 Check Module Cover PP	2
9	SMP5-16C Ppurge Valve	1
10	SMP5-16D Gasket FKM	1
11	SMP5-16E O-ring AS-903	1
12	SMP5-33A Hose collar 5_16	2
13	EMP3-32 M24 Hose Fasten Nut	2
14	SMP5-15E1A O-ring AS-012 FKM	2
15	SMP5-16A Hose Connector Input M24	1

#### B(SMP-7015/30/60-VS)

No.	Parts Code/ Name	Qty.
1	SMP5-05A1 Pump Head	1
2	EMP3-55 VS Hose Connector-3/8"	1
3	EMP3-56 VS Check Ball Seat	1
4	MP3-15B Check Ball-Ceramic	2
5	EMP3-54 VS Spring	2
6	EMP3-53 VS Check Ball Guide	2
7	MP3-14A1 Hose Nut-M27	2
8	MP3-14A2 Hose Hold Rim-M27	2
9	EMP3-52 VS Hose Connector-3/8"	1
10	SMP5-14D Gasket-M24 EPDM	2

#### C(SMP-7015/30/60-AF)

No.	Parts Code/ Name	Qty.
1	SMP5-05A1Pump Head	1
2	EMP3-47 AF Hose Connector-PTFE	2
3	SMP5-15C4 Check Ball Seat-PTFE	4
4	SMP5-15B Check Ball	4
5	EMP3-45 AF Check Ball Guide-PTFE	4
6	EMP3-14D M24 Gasket-PTFE	2
7	EMP3-15E Check Module Gasket- PTFE	4
8	SMP5-58 AF Pump Head Protector	1
9	EMP3-46 AF_M16 Hose Fasten Nut 8_10 PTFE	2



# A SMP-7015/30/60-ACH/BSH (Foot Valve)

No.	Parts Code/ Name	Qty.
1	SMP5-14C Filter Connector	1
2	SMP5-14E Filter	1
3	SMP5-14D Gasket-M24	1
4	SMP5-15B Check Ball	2
5	SMP5-15A Check Ball Guide	2
6	SMP5-15C1 Check Ball Seat-FKM	2
7	SMP5-15D Check Module Gasket	1
8	EMP3-32 Hose Nut-M24	1
9	SMP5-33A Hose Hold Rim-5_16	1
10	SMP5-15E1 Check Module Cover	1
11	SMP5-16A Hose Connector-M24	1
12	SMP5-15E1A Gasket AS-012 FKM	1

# B SMP-7015/30/60-ACH/BSH (Injector)

	.,	
No.	Parts Code / Name	Qty.
1	SMP5-18A Injector Head	1
2	SMP5-18B Check-Module-Front	1
3	SMP5-18E Front O-ring-P4 FKM	1
4	SMP5-18D Spring	1
5	SMP5-18CCheck Module-Rear	1
6	SMP5-14D Gasket-M24	1
7	SMP5-16A Hose Connector-M24	1
8	EMP3-32 Hose Connector-M24	1
9	SMP5-33A Hose Hold Rim-5_16	1

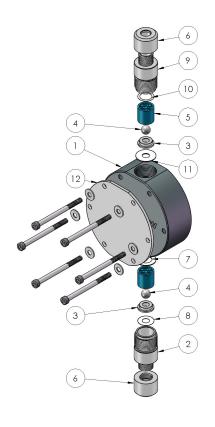
#### A(SMP-7015/30/60-AFH) Injector

No.	Parts Code / Name	Qty.
1	EMP3-16A2_AF Injector hose connector PTFE	1
2	SMP5-18A1_AF Injector PTFE	1
3	EMP3-46 AF_M16 Hose nut 8_10	1
4	SMP5-18B Check module-front	1
5	SMP5-18C Check module-rear	1
6	SMP5-18E O-ring P4	1
7	EMP3-14D_M24 Gasket PTFE	1
8	SMP5-18D Spring	1

#### B(SMP-7015/30/60-AFH Foot valve)

No.	Parts Code / Name	Qty.
1	EMP3-47 AF Hose connector PTFE	1
2	SMP5-15C3 Check ball seat PTFE	2
3	SMP5-15B Check ball	2
4	EMP3-45 AF Check ball guide PTFE	2
5	EMP3-14D_M24 Gasket PTFE	1
6	EMP3-15E Check moduld gasket PTFE	2
7	EMP3-46 AF_M16 Hose nut 8_10	1
8	EMP3-49 AF Mesh seat	1
9	EMP3-48 AF Mesh cover	1
10	EMP3-50 AF Mesh	1

#### SMP-8015/20





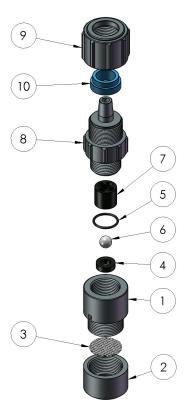
#### A:SMP-8015/8020-AFH

No.	Parts Code / Name							
1	SMP7-05A2 Pump head /PTFE							
2	MP3-16A3_AF Hose connector /PTFE							
3	MP3-15C2 Check ball seat /PTFE	2						
4	MP3-15B Check ball Ceramic or PTFE	2						
5	MP3-15A1 Check ball guide /PTFE	2						
6	EMP3-46 AF_M16 Hose nut 8_10	2						
7	MP3-15E1_AF Inlet gasket /TPFE	1						
8	MP3-15F1_AF Inlet check module gasket /PTFE							
9	MP3-16A2_AF Outlet hose connector /PTFE	1						
10	MP3-15F_AF Outlet check module gasket /PTFE	1						
11	MP3-15E_AF Outlet M24 gasket /TPFE	1						
12	SMP7-58 AF Pump head cover /SUS304	1						
13	M5 Washer	6						
14	M5-65 Screw	6						

#### B:SMP-8015/8020-ACF/BSF

No.	Parte Code / Name	Qty.
1	SMP7-05A1 Pump head /PVC	1
2	MP3-17A Union type connector /PVC	2
3	MP3-17E Union O-ring	2
4	MP3-17C Union	2
5	MP3-17D Union fix nut	2
6	MP3-15A Check ball guide	2
7	MP3-15D M24 Gasket	2
8	MP3-15B Check ball Ceramic/SUS316	2
9	MP3-15C Check ball seat	2
10	MP3-17F Flange 1_2PVC	2





Α

#### A:SMP-8015/8020-ACH,BSH,VSH Foot Valve

No.	Parts Code / Name	Qty.
1	MP3-14C Mesh seat	1
2	MP3-14D Mesh cover	1
3	MP3-14E Mesh	1
4	MP3-15C Check ball seat	1
5	MP3-15D M24 Gasket	1
6	MP3-15B Check ball Ceramic/SUS316	1
7	MP3-15A Check ball guide	1
8	MP3-16A4 Hose connector M27	1
9	MP3-14A1 Hose nut M27	1
10	MP3-14A2 Hose hold rim M27	1

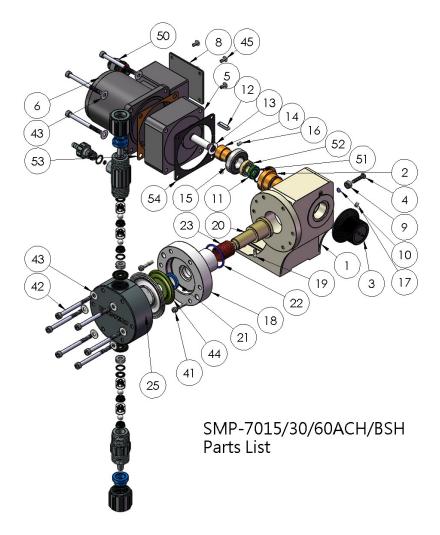
#### B:SMP-8015/8020ACH,BSH,VSH Injector

No.	Parts Code / Name	Qty.
1	MP3-18A Injector	1
2	MP3-18C Check module-rear	1
3	MP3-18B Check module-front	1
4	MP3-18E O-ring P5 FKM	1
5	MP5-18D Spring	1
6	MP3-16A1 Hose connector	1
7	MP3-14A1 Hose nut M27	1
8	MP3-15D M24 O-ring	1
9	MP3-14A2 Hose hold rim M27	1



#### 11. SYSTEM EXPLODED VIEWS -

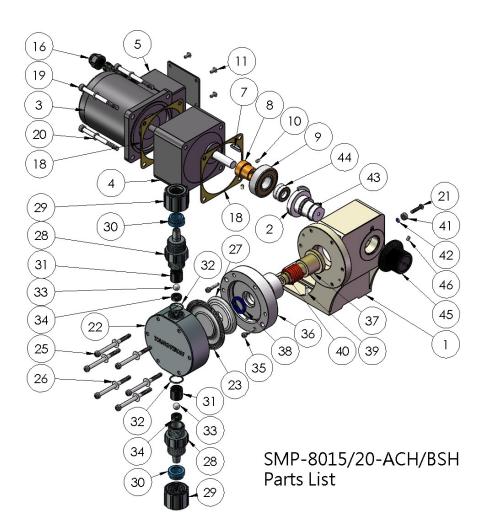
#### SMP-7015/30/60



Item	Parts Code / Name	Qty.							
1	SMP5-02A Driving chassis	1							
2	SMP5-12A Stroke length adjustor	1							
3	SMP5-13A Stroke length adjustment knob								
4	Screw M4-20	1							
5	4GN15- Reducer(Gear box)	1							
6	4GN Induction motor	1							
8	4GN Power connection box	1							
9	SMP5-12C Screw nut M4	1							
10	EMP3-20D O-ring S4 NBR	1							
11	SMP5-02C Bearing 6800ZZ	1							
12	SMP5-01F Shaft bond 4*4-20	1							
13	Snap ring type-C STWN10	1							
14	SMP5-10A Eccentric wheel	1							
15	SMP5-10C Eccentric wheel bearing 6003vv	1							
16	Set screw M4-6	2							
17	Set screw M4-6	1							
18	SMP5-04A Driving shaft holder	1							
19	SMP5-09B Set screw M4-12	1							
20	SMP5-09A Driving Shaft	1							
21	SMP5-04E Oil seal VB17*23.5*t3.2	1							
22	SMP5-04D O-ring S32	1							
23	SMP5-09C Spring	1							
25	SMP5-06A Diaphragm	1							
41	Screw M4-20	2							
42	Screw M5-60	10							
43	Washer M5	10							
44	SMP5-08 Diaphragm seat	1							
45	Screw M4-8	4							
50	SMP5-20A_MG12A-08 Power cable gland	1							
51	SMP5-12D O-ring S18 NBR	1							
52	SMP5-02C1 Bearing 6900ZZ	1							
53	SMP5-01C Gasket	1							
54	SMP5-01D Gasket	1							

The wet parts exploded view consult P.10

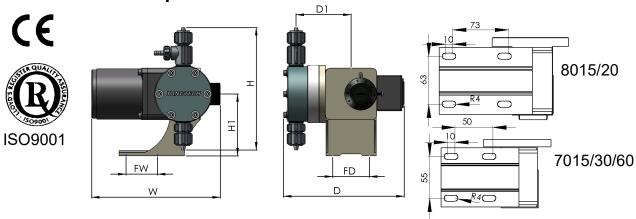
#### SMP-8015/8020



Item	Parts Code / Name	Qty
1	SMP7-02A Driving chassis	1
2	SMP7-12A Stroke length adjustor	1
3	5GN Motor	1
4	5GN20 Reducer	1
5	4GN Power connection box	1
7	SMP5-01F Shaft bond 4*4-20	1
8	SMP7-10A Eccentric wheel	1
9	SMP7-10C Bearing 6204ZZ	1
10	M4-6 Screw	2
11	Screw M4-8	4
16	SMP5-20A_MG12A-08 Cable gland	1
18	SMP7-01D Gasket for reducer	2
19	M6-70 Screw	4
20	M6 Spring washer	4
21	Screw M4-20	1
22	SMP7-05A1 幫浦頭PVC	1
23	SMP7-06A Diaphragm	1
25	M5-65 SMP7 Screw	6
26	Washer M5	6
27	SMP7-08 Diaphragm supporter	1
28	MP3-16A4 Hose connector	2
29	MP3-14A1 Hose clamp nut M27	2
30	MP3-14A2 Hose Clamp ring M27	2
31	MP3-15A Check ball guide	2
32	MP3-15D M24 O-ring	2
33	MP3-15B Check ball Ceramic/PTFE	2
34	MP3-15C Check ball seat	2
35	Screw M4-20	2
36	SMP7-04A Drive shaft fram	1
37	SMP7-09A Drive shaft	1
38	SMP7-04E Oil seal	1
39	M4-15 Set screw	1
40	SMP7-09C Spring	1
41	SMP5-12C Screw nut M4	1
42	EMP3-20D O-ring S4 NBR	1
43	SMP7-12D O-ring S22 NBR	1
44	SMP7-02C Bearing 6901ZZ	2
45	SMP5-13A Stroke length adjustment knob	1
46	Set screw M4-6	1

Other types of head section exploded view consult P.12

## 12. Dimensions and Specifications



#### Dimensions (mm):

機型	Н	W	D	H1	FW	FD	D1
SMP-7060/30	105	215	193	95	50	55	80
SMP-7015	185	202	193	93	30	33	80
SMP-8020	200	250	205	110	73	62	0.5
SMP-8015	200	237	205	110	13	63	95

#### Specifications:

Model			SMP-	7060	SMP-	7030	SMP-	7015	SMP-	8020	SMP	-8015
Item \ Frequency			60	50	60	50	60	50	60	50	60	50
	0.0		150	125	350	290	750	625	1000	800	1400	1150
1. Discharge	1.0	Kg	150	125	350	290	740	615	950	760	1320	1080
Rate (Max.) (ml/min)	3.0	/	150	125	340	280	730	605	890	700	1240	1000
(H2O at 25°C)	5.0	cm <sup>2</sup>	150	125	330	275	720	595	830	650	1150	920
	10.0		145	120	320	265	-	-	_	-		-
2. Pressure Max.(kg/	cm²)		10	0.0	8.0 4.5		5.0 4.5		.5			
3. Stroke Length (mr.	1)		0.0~4.0						0.0~4.5			
4. Pulse Rate (pulse/1	nin)		30	25	90	75	120	100	90	75	120	100
5. Diaphragm Diame	ter.(mm)		70 80							30		
6. Joint / Hose / Pipe	-H:70=5/16" (8*13mm) ,80=3/8" (9.5*15mm)PVC Hose -H1:10mm Hose PP/PVC/PTFE, 80=No such model -U:70=80=1/2" (13*22mm)PVC Union -F:70=80=1/2" ,10K Flange +1/2" (13*22mm)PVC Union											
7. Power	-111=100/110/120V, φ1 -221=220V, φ1 -223=200/220/240V, φ3 -383=380V, φ3 -413=415/440, φ3 -483=480V, φ3 50,60Hz/25W/IP55/E Class 7015/30/60 =25W 8015/20 =40W							40W				
8. Net Weight AC/BS/VS/AF			3.6					5.6				
(Kg) SS			4.9 6.9						5.9			

The above specifications are subject to change without prior notice.

創裕實業股份有限公司(台灣)

YANGTECH TECHNOLOGY CO., LTD.(Taiwan)

Manufacturer/Sale

**YANGTECH®** 

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