



集中潤滑給油裝置

CENTRALIZED LUBRICATING SYSTEM
PRODUCTION GUIDE



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榮獲 金手獎優良廠商



公司簡介

永鈺公司創立於民國65年，專業製作研發潤滑系統及各相關油路配置。

本公司秉持著「創新、穩定」為指標。不僅提供產品上的服務，更包含各項的技術交流，在其中與使用者相互對著需求，更求精進，研發出更見人性化的產品項目，以應合市場的變化，品質的要求，在出廠前嚴謹的生產裝配與測試是必要的，高技術品質的產品，仍需維持在穩定的作動下，才能達到最高效率，因此我們自我要求的是穩定的高品質"以最小成本為客戶創造最高利潤"，一直都是我們要給予客戶的最大回饋。

在競爭的市場下，永鈺企業特質與其他競爭者的差異化與創新特色，長期與美國先進大廠協定技術交流，不斷推動技術的升級與研發，推出更符合客戶需求的服務和產品。

The company establishes to 1976, specialized manufacture research and development lubrication system and each related oil duct disposition.

This company grasps "Innovation, Stability" is a target. Not only provide the service on the product, (but also) includes each technological exchanges in among with the user mutually to the demand, is striving for to strive, researches and develops the humanized product item to meet the changes of the market.

The request of the quality, before leaving the plant, rigorous production assembly with the test is necessary. The high-tech quality product, had to maintain stably at being made and moved, could achieve peak efficiency. Therefore, our self-request is the stable high quality " create the highest profit with the smallest cost " is always the biggest feedback we want to give to customers.

In the competing market, CHIBA molds the enterprise characteristic, differentiates with other competitors and creates special features, and has a long-term technological exchange agreement with American advanced big plant.

To promote the upgrade and the research development of technique continuously, announcing more services and products to match the customers' demand.



油霧回收機安裝案例

手動系列 Hand Series		Page
▶ LT型手搖式幫浦	Hand-Cranked Pump	04
▶ LT-W型手搖脫壓式幫浦	Handle Pressure Release Pump	04
▶ SMA-3型電動間歇式幫浦	Intermittent Electric Pump	05
▶ SMA-6型電動間歇式幫浦	Intermittent Electric Pump	05
電動系列 Auto Series		
▶ TM型抵抗式/脫壓式潤滑幫浦	Resistant-type / Pressure-relief Lubricant Pump	06~09
▶ YMGP型電動幫浦	Auto Pump	10~13
▶ MFE型液晶顯示型潤滑幫浦	Digital Lubricator	14~17
▶ 連接頭/三通管/四通管	Connector / Triform Tube / Four Sides Tube	18
▶ 比例分配控制器 P※※型	Ratio Distributor Controller P※※ Type	19
▶ DB調整分配器	Adjustable Distributor	20
▶ VB調整分配器	Adjustable Distributor	20
▶ HBL定量容積式分配器	Positive Displacement Injector System Distributor	21
▶ 機油定量閥	Oil-Valve	22
▶ 定量容積式分配器	Positive Displacement Injector System Distributor	22
▶ FSS定量活門	Quantitative Valve	23
氣動系列 Air Series		
▶ ASK型空壓式注油機	Air Type Engine Oil	24~25
▶ DM-A型定量油氣混合分配器	Quota Oil Gas Mix Divider	25

手動系列 Hand Series		
▶ SK手動黃油注油機	Manual Type Engine Grease	26
電動系列 Auto Series		
▶ MSK-10電動脫壓式黃油幫浦	Pressure Relief Grease Pump	27~29
▶ MSK電動黃油幫浦	Auto Grease Pump	30~31
▶ YTCB-3計次控制盒	Counter Control Box	32
▶ SD單一循環式分配器	Single Cycle Oil Distributor	33
氣動系列 Air Series		
▶ ASK氣動脫壓式注油機 機油/ 黃油	Air Type Engine Oil / Grease	34~35
▶ YTCB控制盒 (附計次檢測回饋裝置)	Control Box (With counter detector to feedback system)	36
▶ RH定量黃油容積式分配器	Quantitative Oil Distributor	37
▶ 黃油定量閥	Grease-Valve	38
▶ 定量容積式分配器	Positive Displacement Injector System Distributor	38

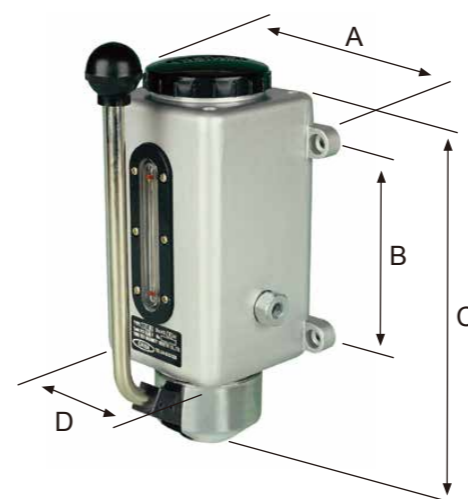
▶ YEM-25型電磁式幫浦	Solenoid Pump	39
▶ MS型循環幫浦	Pressure Release Rated Volume	40
▶ ME型循環幫浦	Pressure Release Rated Volume	40
▶ 給油幫浦/調壓閥	Oil Pump / Top Adjusting Valve	41
▶ NOP型直結幫浦	Tri-way Pump	41
▶ YC-U浸水式幫浦	Under Water Collant Pump	42
▶ YC-S自吸式幫浦	Self-Absorbing Collant Pump	42

▶ AMP油氣混合噴霧式潤滑冷卻切削幫浦	Oil Mist Lubricating Pump	43~44
▶ AMLS精密微量潤滑冷卻切削幫浦	Micro Lubricating & Cooling Oil-mist System	45~46
▶ 油霧回收機	Oil Mist Collector	47

手動系列 Hand System

LT型手搖式幫浦 Hand-Cranked Pump

單位Unit: mm



A. 功能特長 FUNCTION AND FEATURES

手搖式幫浦LT-8，將把手反覆操作，潤滑油經活塞壓縮，即由出油口吐出，放開把手，自然回歸原位。

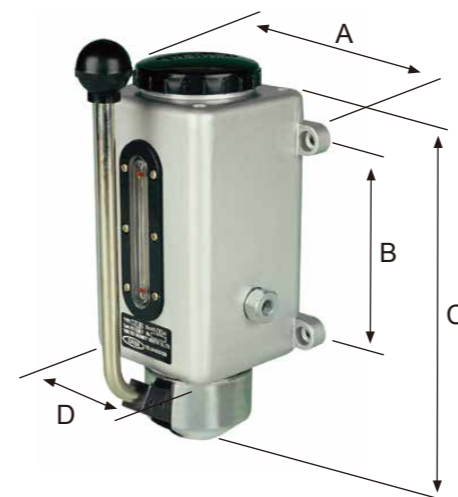
Handle pump type LT-8, operate repeatedly, The oil compress by the piston and the oil output from the ports. Release the handle and return to the original position.

B. 規格表 SPECIFICATION

型式 Model	吐出量 Outlet	容量 Capacity	壓力 Pressure	安裝尺寸AxB SizeAxB	尺寸C Size C	尺寸D Size D	吐出口 Outlet
LT-8	8 cc	650 cc	15 kg/cm ²	100 x 110	208.5	82	1/8PT左右

LT-W型手搖脫壓式幫浦 Handle Pressure Release Pump

單位Unit: mm



A. 功能特長 FUNCTION AND FEATURES

把手反覆操作，將幫浦加壓油輸送到容積式分配器儲存，蓄壓後，把手放鬆管路自動瀉壓，分配器自動將油吐出。

Repeatedly operate the handle. The lubricating oil will compress & save the oil in each distributor. Loosing the hand and pressure release. The distributor put out the oil for each point.

B. 規格表 SPECIFICATION

型式 Model	吐出量 Outlet	容量 Capacity	壓力 Pressure	安裝尺寸AxB SizeAxB	尺寸C Size C	尺寸D Size D	吐出口 Outlet
LT-8W	8 cc	650 cc	30 kg/cm ²	100 x 110	208.5	82	1/8PT

電動系列 Auto System

SMA-3型電動間歇式幫浦 Intermittent Electric Pump

單位Unit: mm



A. 功能特長 FUNCTION AND FEATURES

幫浦附加浮球開關，在油量不足時，能適時發出信號或警報，浮筒開關有A、B接點兩種。

Pump with the oil-level switch. That will be alarm or send out the sign to advice. There are two types for the switch connection: A and B.

B. 規格說明 SPECIFICATION

SMA - 3 01 - 5 F



C. 規格表 SPECIFICATION

型式 Model	吐出量 Outlet	電壓 Voltage	間歇時間 Intermittent off time / min	出油口孔徑 Output Bore	浮動開關 Float switch	容量 Capacity	吐出壓力 Output Pressure
SMA-3	1-3cc 可調	110 / 220 V	3,5,10,15, 30,60	ø4 or ø6	選配 option	1ℓ	2.5 kg/cm ²

SMA-6型電動間歇式幫浦 Intermittent Electric Pump

單位Unit: mm



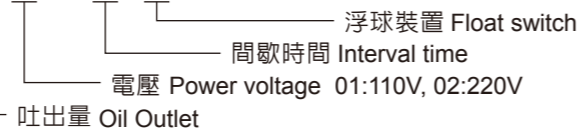
A. 功能特長 FUNCTION AND FEATURES

間歇式電動幫浦，是以同步馬達經由蝸桿凸輪推動活塞的原理，作定時、定量的輸送給油，性能單一卓越廣被運用，屬於間歇吐出蓄壓式的幫浦。應各類機械用油量的需求間歇時間及吐出量，有多種規格，可配合選用，節省能力，確保機械壽命。

Intermittent Electric Pump as the theory of that protruding gear to push the piston through the motor. Supply the oil quantitative regular. It can use in various machines to control the intermittent time and output quantity. There're several type for choosing. Saving the energy and ensure the life of machine.

B. 規格說明 SPECIFICATION

SMA - 6 01 - 5 F



C. 規格表 SPECIFICATION

型式 Model	吐出量 Outlet	電壓 Voltage	間歇時間 Intermittent off time / min	出油口孔徑 Output Bore	浮動開關 Float switch	容量 Capacity	吐出壓力 Output Pressure
SMA-6	3-6 cc 可調	110 / 220 V	3,5,10,15, 30,60	ø4 or ø6	選配 option	2, (4, 6) ℓ	3.5 kg/cm ²

電動系列 Auto System

TM型抵抗式 / 脫壓式潤滑幫浦 Resistant-type / Pressure-relief Lubricant Pump



由PLC控制型 Controlled by PLC

TM-3F
抵抗式潤滑幫浦
Resistant-type Lubricant Pump

TM-3FW
脫壓式潤滑幫浦
Pressure-relief Lubricant Pump



有時間控制型 With time controller

TM-3CF
抵抗式潤滑幫浦
Resistant-type Lubricant Pump

TM-3CFW
脫壓式潤滑幫浦
Pressure-relief Lubricant Pump

A.

	TM-3F / 3CF 抵抗式 Resistant-type	TM-3FW / 3CFW 脫壓式 Pressure-relief
馬達 (感應式) Motor (Permanent split capacitor)	AC110 / 220 V, 1, 2P, 70W, 50 / 60 Hz	
吐出量 Output volume	0.3 / 0.36 L/min	50 / 60 Hz
最大吐出壓力 Max. vomit volume	1~10 kgf/cm ²	15 / 20 kgf/cm ²
電壓 Voltage	110 / 220V	
定格電流 Rated Current	110 / 220V 3A	
全容量 Full capacity	2L (3 . 4 . 6 . 8 . 10 . 12)	
有效容量 Effective capacity	1.8L (3 . 4 . 6 . 8 . 10 . 12)	
檢知壓力 Detective pressure	5 kgf/cm ² ON	12 kgf/cm ² ON
檢知壓力 Deterctive pressure	3 kgf/cm ² OFF	8 kgf/cm ² OFF
遮斷容量 Shield off capacity	176 / 248 VA 110 / 220V	
最大遮斷電流 Max. shield off current	3A	
最大遮斷電壓 Max. shield off current	AC250V	
最小通過電流 Min.current through	10UA 最小通過電壓 Min. voltage through 10mV	

B. 規格說明 SPECIFICATION

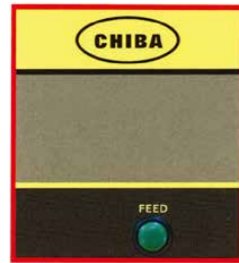
TM - 3 01 C F W - T 2 P



電動系列 Auto System

TM型抵抗式 / 脫壓式潤滑幫浦 Resistant-type / Pressure-relief Lubricant Pump

C. 配電控制說明 DIRECTION OF POWER DISTRIBUTION CONTROL



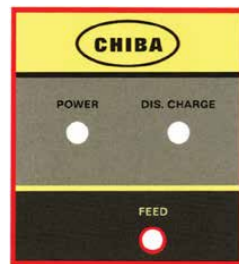
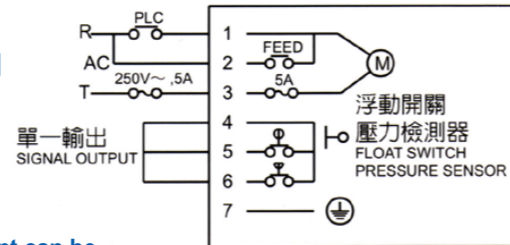
TM-3F / 3FW(I)

■ 無時間控制型可由PLC指令控制作動週期

- 1.3 電源接點
- 2.3 手動注油接點
- 4.5 浮動開關接點AorB，最大電流250V/0.1A
- 4.6 壓力檢知接點
- 7 接地

Without time controller model cycle movement can be controlled by PLC digital

- 1.3 Power contact point
- 2.3 Manual oil filling contact point
- 4.5 Float switch contact point, AorB, max. current 250V/0.1A
- 4.6 Pressure detective point
- 7 Ground connection



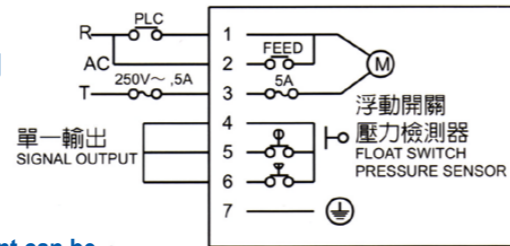
TM-3F / 3FW

■ 無時間控制型可由PLC指令控制作動週期

- 1.3 電源接點
- 2.3 手動注油接點
- 4.5 浮動開關接點AorB，最大電流250V/0.1A
- 4.6 壓力檢知接點
- 7 接地

Without time controller model cycle movement can be controlled by PLC digital

- 1.3 Power contact point
- 2.3 Manual oil filling contact point
- 4.5 Float switch contact point, AorB, max. current 250V/0.1A
- 4.6 Pressure detective point
- 7 Ground connection



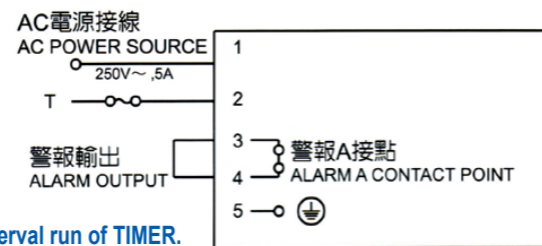
TM-3CF / 3CFW

■ 有時間控制型設有間歇及運轉TIMER

- 1.2 電源接點
- 3.4 異常狀態下警報輸出接點，最大電流1A
- 5 接地

With time controller model has deviced with interval run of TIMER.

- 1.2 Power contact point
- 3.4 Under abnormal condition, alarm output contact point, max. current 1A
- 5. Ground connection



有時間控制型面板操作說明 Operation Direction for Model with time controller

- RST鍵 — 係依DIS設定之秒數手動注油。 RST Button DIS preset by second for manual oil filling.
- FEED鍵 — 係手動控制注油 (鬆手即停)。 FEED Button Manual control oil filling (Stop when hand is released.)
- DIS鍵 — 運轉時間觸控鍵，1-99秒自由設定。 DIS Button Running time touch button, 1-99 seconds free setting.
- INT鍵 — 間歇時間觸控鍵，1-99分自由設定。 INT Button Interval time touch button, 1-99 minutes free setting.

D. 規格表 SPECIFICATION

型式 Model	流量 Outlet	電壓 Voltage	浮動開關 Float switch	脫壓裝置 Pressure release unit	使用壓力 Pressure applied	休止時間 Release time	運轉時間 Running time
抵抗式 Resistant-type	0.3 / 0.36 L / min	TM-301F	110 V	O	X	1-10 kgf/cm ²	PLC 控制
		TM-302F	220 V	O	X		PLC 控制
		TM-301CF	110 V	O	X		1-99 min.
		TM-302CF	220 V	O	X		1-99 sec.
脫壓式 Pressure-relief	0.3 / 0.36 L / min	TM-301FW	110 V	O	O	15 kgf/cm ²	PLC 控制
		TM-302FW	220 V	O	O		PLC 控制
		TM-301CFW	110 V	O	O		1-99 min.
		TM-302CFW	220 V	O	O		1-99 sec.

電動系列 Auto System

TM型抵抗式 / 脫壓式潤滑幫浦 Resistant-type / Pressure-relief Lubricant Pump



2L規格



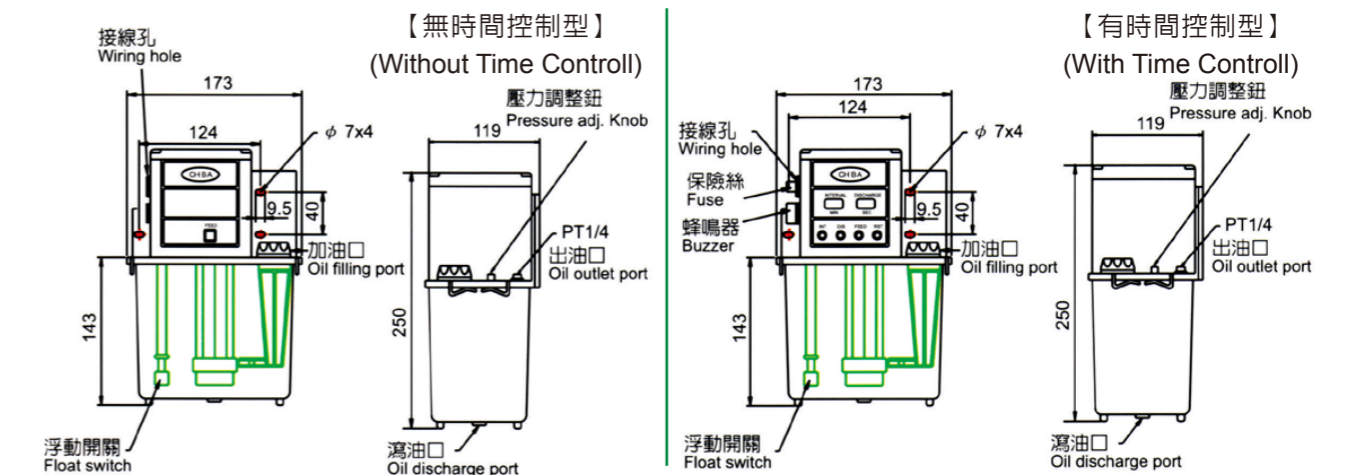
3L、4L規格



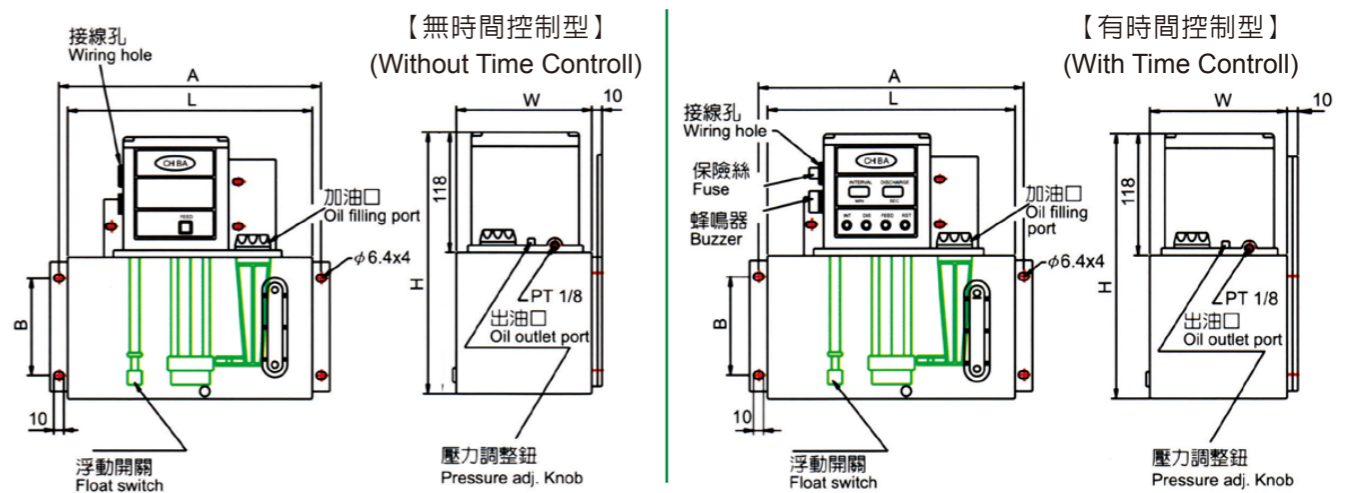
6L、8L、10L規格

E. 尺寸圖 DIMENSION

■ 2L外部相關尺寸圖 2L Outside Specification



■ 3L~12L外部相關尺寸圖 3L~12L Outside Specification



型式 Model	A x B (mm)	長 L(mm)	寬 W(mm)	高 H(mm)	油桶容量 Tank Capacity
T-2L	124 x 40	173	119	250	2 (L)
T-3L	200 x 95	180	130	260	3.10 (L)
T-4L	240 x 110	210	130	260	4.09 (L)
T-6L	320 x 110	280	145	260	6.09 (L)
T-8L	340 x 110	300	180	260	8.10 (L)
T-10L	370 x 110	320	180	260	10.10 (L)
T-12L	390 x 110	350	230	260	12.07 (L)

電動系列 Auto System

TM型抵抗式 / 脫壓式潤滑幫浦 Resistant-type / Pressure-relief Lubricant Pump

F. 功能特長 FUNCTION AND FEATURES

1. 壓力輸出方式為可調式的輸出結構，符合各種機器的需求，可做出相對壓力的匹配調整。
2. 附有油位檢知裝置，測知儲油箱內供油的存量，適時反應回報，連接應變動作。
3. 立即鈕即時需求按鍵裝置，可使機器在剛開始使用時，便立即得到應有之油量可順暢啟動，減少不必要摩擦。
4. 深入底部吸油，應用巴斯卡(Pascal)原理，使得出油功率大為提高，並能清除掉油管中空氣間隔的缺失。
5. 配有油壓檢知裝置(3~10kg/cm²)特性，可偵測反應下列漏失：

- ★ (一) 管路破裂：測知管內壓力不足。
- ★ (二) 油網阻塞：測知油料混濁吸油口阻塞。
- ★ (三) 馬達不良：測知馬達運轉不良。
- ★ (四) 油壓不足：測知零件汰舊，輸出功率不良等致使壓力不足的情況。
- ★ (五) 油桶無油：油位低於安全量會警報輸出。

1. Pressure output is designed with adjustable output structure to meet the demand of various machines and available to couple with relative pressure adjustment.
2. Designed with oil level detector to detect the oil capacity stored in the tank and response well at appropriate time to succeed for connection movement step.
3. Instant knob to have deviced with in-time demand button and lets machine, while at initial start, have the deserved oil capacity for smooth operation to reduce unnecessary friction.
4. Absorbs oil from the deepest part and makes use of principle of Pascal to increase greatly the oil output power as well as to remove the shortcoming of gap between oil tubes.
5. Designed with oil pressure detector (3~10kg/cm²), featured as follows to detect for the loss below:
 - ★ (1) Broken oil tube: detecting if insufficient pressure inside the tube.
 - ★ (2) Blockaded oil network: detecting if any blockaded on oil inlet for the sake of turbid oil condition.
 - ★ (3) Poor motor: detecting if the motor had poor running,
 - ★ (4) Insufficient oil pressure: detecting if the output power is insufficient for old used part to result in insufficient pressure condition.
 - ★ (5) No oil in the tank: Detecting and alarm output if the oil level than the safe level.

G. 使用說明 DIRECTION OF USE

1. TM-3F、TM-3CF型可由PLC直接輸出或由外部計時器做直接或間接的控制運轉。
2. 使用TM-3F、3CF型時可配合調整式分配器，VB, DB-A, DB-AS及抵抗式接頭P型，使用壓力可調整在3-5kg/cm²，接頭流量規格使用設計差距勿過大，如(#0, #1, #2)，(#1, #2, #3)配較適合。
3. 使用TM-3FW、3CFW型附有脫壓結構型時可配合使用定量容積式分配器HA、HBL、HBH，並可增設壓力檢知回饋，以確認管路壓力是否達到標準15kg/cm²使用壓力檢知回饋信號時，必須增設延時TIMER及偵測TIMER在正常時壓力開關確認後而帶動延時TIMER計時適時的動作，反之在偵測時間60秒內無法達到所設定的壓力時，必須設定警報及斷電，繼而檢查各項的缺失。
4. 使用TM-3FW、3CFW型配合使用容積式分配器時因使用壓力較高，因此所使用的各式油管也必須配合使用較高壓力油管，才能發揮最大的功能。
5. 因使用地區的溫度不同，使用者必須注意因溫差所導致油粘度變化，而更換適合的油質及使用壓力，氣溫在20°以下的則可選用20#的機油，而氣溫在20°以上的則可選用30#的機油，而使用的壓力也必須有所調整。

1. Model TM-3F, TM-3CF, can be available direct output from P.L.C. or direct or indirect from outer timer to control for the running.
2. When use of models TM-3F and 3CF, it is available to mate with adjustable distributor, VB, DB-A, DB-AS, As to resistant-type joints of three types: P type applied can be adjustable at 3-5kg/cm². Don't use of varied differences on joints flow specification, such as: (#0, #1, #2), mating to (#1, #2, #3) will be ideal.
3. When use of TM-3FW, 3CFW with pressure-relief structure model, DPI distributors HA, HBL, HBH can be mated for use. Also, they can be added with pressure detector to feedback and confirm if the pressure of the pipe is compliance with the standard specification 15kg/cm². When use of pressure detector feedback signal, the TIMER delay must be setup. When detecting TIMER under normal pressure switch and confirmed, then TIMER delay is actuated at appropriate time. Otherwise, if the detecting failed to reach the preset pressure within 60 seconds, an alarm signal and power-off must be setup to check for every failure or default.
4. Because use of TM-3FW, 3CFW for DPI distributors and the pressure applied is higher, various pipes have to adopt higher-pressure type of oil pipe for use to develop the maximum function desired.
5. Because the temperature of different areas is varied, the user must pay attention to the change of oil viscosity caused by different temperature degree to replace with appropriate oil and pressure applied. If temperature under 20°, the engine oil #20 is recommended for use. While for temperature above 20°, then #30 is recommended. Also, the pressure applied also has to be adjusted.

電動系列 Auto System

YMGP型電動幫浦 Auto Pump (快插式電源接頭)

由PLC控制型 Controlled by PLC

YMGP-3F
抵抗式潤滑幫浦
Resistant-type Lubricant Pump

YMGP-3FW
脫壓式潤滑幫浦
Pressure-relief Lubricant Pump



有時間控制型 With time controller

YMGP-3CF
抵抗式潤滑幫浦
Resistant-type Lubricant Pump

YMGP-3CFW
脫壓式潤滑幫浦
Pressure-relief Lubricant Pump



A.

	YMGP-3F / 3CF 抵抗式 Resistant-type	YMGP-3FW / 3CFW 脫壓式 Pressure-relief
□ 馬達 (感應式) Motor(Permanent split capacitor)	AC110 / 220 V, 1, 2P, 70W, 50 / 60 Hz	
□ 吐出量 Output volume	0.3 / 0.36	50 / 60 Hz
□ 最大吐出壓力 Max. vomit volume	1-10 kgf/cm ²	15 kgf/cm ²
□ 電壓 Voltage	110 / 220V	50 / 60 Hz
□ 定格電流 Rated Current	110 / 220V	3A
□ 全容量 Full capacity	2L (3, 4, 6, 8, 10, 12)	
□ 有效容量 Effective capacity	1.6L (3, 4, 6, 8, 10, 12)	
□ 檢知壓力 Detective pressure	5 kgf/cm ² ON	12 kgf/cm ² ON
□ 檢知壓力 Deterctive pressure	3 kgf/cm ² OFF	8 kgf/cm ² OFF
□ 遮斷容量 Shield off capacity	176 / 248 VA	110 / 220V
□ 最大遮斷電流 Max. shield off current	3A	
□ 最大遮斷電壓 Max. shield off current	AC250V	
□ 最小通過電流 Min.current through	10UA 最小通過電壓 Min. voltage throught 10mV	

B. 規格說明 SPECIFICATION

YMGP - 3 0 1 C F W - T 2 P

- 透明桶 P: Plastic
- 鐵桶 A: Iron bucket
- 油桶容量 Tank Capacity 2, 3, 4, 6, 8, 10, 12L
- 附脫壓裝置 With pressure-relief installation
- 附浮動開關 With float switch
- 時間控制型式 With timer controller
- 電源電壓 Power voltage 01:110V, 02:220V
- 最大流量 Discharge volume(c.c/min) 3=300cc

電動系列 Auto System

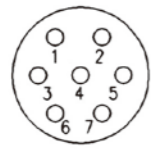
YMGP型電動幫浦 Auto Pump

C. 配電控制說明 DIRECTION OF POWER DISTRIBUTION CONTROL



YMGP-3F / 3FW

■ 無時間控制器 (七插) 電源接線圖 :

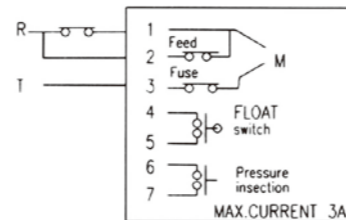


- 1.3 係輸入電源
- 2.3 係手動注油接點
- 4.5 係浮動開關
- 6.7 係壓力檢知

Without time controller model

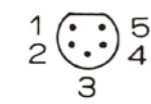
- 1.3 Power contact point
- 2.3 Manual oil filling contact point
- 4.5 Float switch contact point
- 6.7 Pressure detective point

(NC-PLC) Connection Diagram



YMGP-3CF / 3CFW

■ 有時間控制器 (五插) 電源接線圖 :

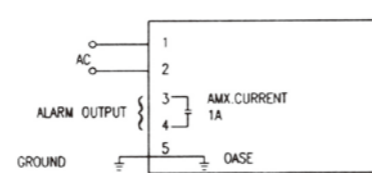


- 1.2 係輸入電源
- 3.4 係警報A接點輸出
- 5 係接地

With time controller model

- 1.2 Power contact point
- 3.4 Under abnormal condition, alarm output contact point
- 5 Ground connection

AC Power source



有時間控制型面板操作說明 Operation Direction for Model with time controller

- RST鍵 — 係依DIS設定之秒數手動注油。 RST Button DIS preset by second for manual oil filling.
- FEED鍵 — 係手動控制注油 (鬆手即停)。 FEED Button Manual control oil filling (Stop when hand is released).
- DIS鍵 — 運轉時間觸控鍵, 1-99秒自由設定。 DIS Button Running time touch button, 1-99 seconds free setting.
- INT鍵 — 間歇時間觸控鍵, 1-99分自由設定。 INT Button Interval time touch button, 1-99 minutes free setting.

- ▶ 附有定時控制裝置, 能使供油時間及間歇時間可做雙段式調整。
- ▶ 附有蜂鳴器裝置, 得適時反應回報。

D. 規格表 SPECIFICATION

型式 Model	流量 Outlet	電壓 Voltage	浮動開關 Float switch	脫壓裝置 Pressure release unit	容量 Capacity	使用壓力 Pressure applied	間歇時間 Release time	作動時間 Running time	
抵抗式 Resistant-type	0.3 / 0.36 ℓ/min	110 V	O	X	2, 3, 4L (6,8,10,12)	1-10 kgf/cm ² 可調	PLC 控制	PLC 控制	
		220 V	O	X					
		110 V	O	X			1-99 min.	1-99 sec.	
		220 V	O	X					
脫壓式 Pressure-relief	0.3 / 0.36 ℓ/min	110 V	O	O	15 kgf/cm ²	PLC 控制	PLC 控制		
		220 V	O	O					
		110 V	O	O				1-99 min.	1-99 sec.
		220 V	O	O					

電動系列 Auto System

YMGP型電動幫浦 Auto Pump



2L規格



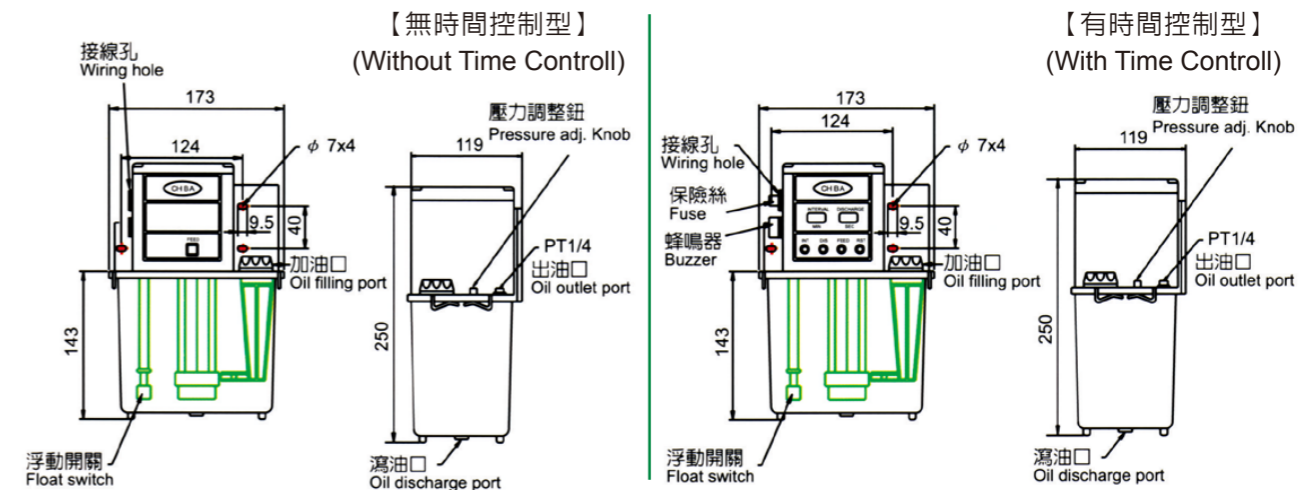
3L、4L規格



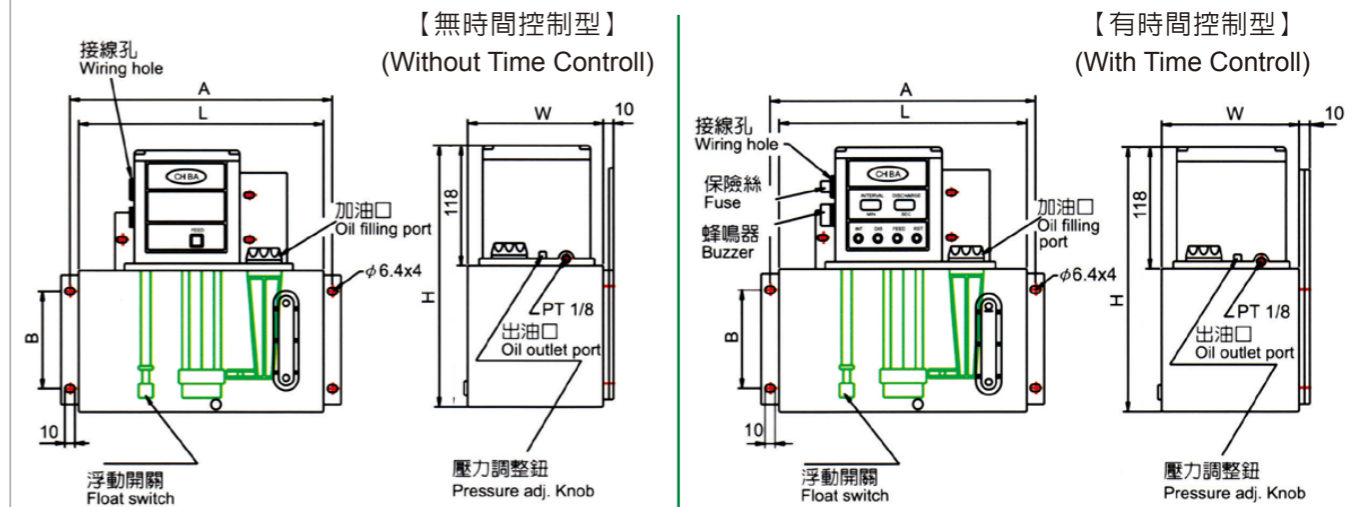
6L、8L、10L規格

E. 尺寸圖 DIMENSION

2L外部相關尺寸圖 2L Outside Specification



3L~12L外部相關尺寸圖 3L~12L Outside Specification



型式Model	A x B (mm)	長L(mm)	寬W(mm)	高H(mm)	油桶容量Tank Capacity
T-3L	200 x 95	180	130	260	3.10 (L)
T-4L	240 x 110	210	130	260	4.09 (L)
T-6L	320 x 110	280	145	260	6.09 (L)
T-8L	340 x 110	300	180	260	8.10 (L)
T-10L	370 x 110	320	180	260	10.10 (L)
T-12L	390 x 110	350	230	260	12.07 (L)

電動系列 Auto System

YMGP型電動幫浦 Auto Pump

F. 功能特長 FUNCTION AND FEATURES

1. 壓力輸出方式為可調式的輸出結構，符合各種機器的需求，可做出相對壓力的匹配調整。
2. 附有油位檢知裝置，測知儲油箱內供油的存量，適時反應回報，連接應變動作。
3. 立即鈕即時需求按鍵裝置，可使機器在剛開始使用時，便立即得到應有之油量可順暢啓動，減少不必要摩擦。
4. 深入底部吸油，應用巴斯卡(Pascal)原理，使得出油功率大為提高，並能清除掉油管中空氣間隔的缺失。
5. 配有油壓檢知裝置(3~10kg/cm²)特性，可偵測反應下列漏失：
 - ★(一) 管路破裂：測知管內壓力不足。
 - ★(二) 油網阻塞：測知油料混濁吸油口阻塞。
 - ★(三) 馬達不良：測知馬達運轉不良。
 - ★(四) 油壓不足：測知零件汰舊，輸出功率不良等致使壓力不足的情況。
 - ★(五) 油桶無油：油位低於安全量會警報輸出。

1. Pressure output is designed with adjustable output structure to meet the demand of various machines and available to couple with relative pressure adjustment.
2. Designed with oil level detector to detect the oil capacity stored in the tank and response well at appropriate time to succeed for connection movement step.
3. Instant knob to have deviced with in-time demand button and lets machine, while at initial start, have the deserved oil capacity for smooth operation to reduce unnecessary friction.
4. Absorbs oil from the deepest part and makes use of principle of Pascal to increase greatly the oil output power as well as to remove the shortcoming of gap between oil tubes.
5. Designed with oil pressure detector (3~10kg/cm²), featured as follows to detect for the loss below:
 - ★ (1) Broken oil tube: detecting if insufficient pressure inside the tube.
 - ★ (2) Blocked oil network: detecting if any blockaded on oil inlet for the sake of turbid oil condition.
 - ★ (3) Poor motor: detecting if the motor had poor running.
 - ★ (4) Insufficient oil pressure: detecting if the output power is insufficient for old used part to result in insufficient pressure condition.
 - ★ (5) No oil in the tank: Detecting and alarm output if the oil level than the safe level.

G. 使用說明 DIRECTION OF USE

1. YMGP-3F、YMGP-3CF型可由PLC直接輸出或由外部計時器做直接或間接的控制運轉。
2. 使用YMGP-3F、3CF型時可配合調整式分配器，VB, DB-A, DB-AS及抵抗式接頭P型，使用壓力可調整在3-5kg/cm²，接頭流量規格使用設計差距勿過大，如(#0, #1, #2)，(#1, #2, #3)配較適合。
3. 使用YMGP-3FW、3CFW型附有脫壓結構型時可配合使用定量容積式分配器HA、HBL、HBH，並可增設壓力檢知回饋，以確認管路壓力是否達到標準15kg/cm²使用壓力檢知回饋信號時，必須增設延時TIMER及偵測TIMER在正常時壓力開關確認後而帶動延時TIMER計時適時的動作，反之在偵測時間60秒內無法達到所設定的壓力時，必須設定警報及斷電，繼而檢查各項的缺失。
4. 使用YMGP-3FW、3CFW型配合使用容積式分配器時因使用壓力較高，因此所使用的各式油管也必須配合使用較高壓型油管，才能發揮最大的功能。
5. 因使用地區的溫度不同，使用者必須注意因溫差所導致油粘度變化，而更換適合的油質及使用壓力，氣溫在20°以下的則可選用20#的機油，而氣溫在20°以上的則可選用30#的機油，而使用的壓力也必須有所調整。

1. Model YMGP-3F, YMGP-3CF, can be available direct output from P.L.C. or direct or indirect from outer timer to control for the running.
2. When use of models YMGP-3F and 3CF, it is available to mate with adjustable distributor, VB, DB-A, DB-AS, As to resistant-type joints of three types: P type applied can be adjustable at 3-5kg/cm². Don't use of varied differences on joints flow specification, such as: (#0, #1, #2), mating to (#1, #2, #3) will be ideal.
3. When use of YMGP-3FW, 3CFW with pressure-relief structure model, DPI distributors HA, HBL, HBH can be mated for use. Also, they can be added with pressure detector to feedback and confirm if the pressure of the pipe is compliance with the standard specification 15kg/cm². When use of pressure detector feedback signal, the TIMER delay must be setup. When detecting TIMER under normal pressure switch and confirmed, then TIMER delay is actuated at appropriate time. Otherwise, if the detecting failed to reach the preset pressure within 60 seconds, an alarm signal and power-off must be setup to check for every failure or default.
4. Because use of YMGP-3FW, 3CFW for DPI distributors and the pressure applied is higher, various pipes have to adopt higher-pressure type of oil pipe for use to develop the maximum function desired.
5. Because the temperature of different areas is varied, the user must pay attention to the change of oil viscosity caused by different temperature degree to replace with appropriate oil and pressure applied. If temperature under 20°, the engine oil #20 is recommended for use. While for temperature above 20°, then #30 is recommended. Also, the pressure applied also has to be adjusted.

電動系列 Auto System

MFE型液晶顯示型潤滑幫浦 Digital Lubricator



由PLC控制型 Controlled by PLC

MFE-3F
抵抗式潤滑幫浦
Resistant-type Lubricant Pump

MFE-3FW
脫壓式潤滑幫浦
Pressure-relief Lubricant Pump



有時間控制型 With time controller

MFE-3CF
抵抗式潤滑幫浦
Resistant-type Lubricant Pump

MFE-3CFW
脫壓式潤滑幫浦
Pressure-relief Lubricant Pump

A.

	MFE-3F / 3CF	MFE-3FW / 3CFW
□ 馬達(感應式) Motor(shield type)	AC110 / 220 V, 1, 2P, 70W, 50 / 60 Hz	
□ 吐出量 Output volume	0.3 / 0.36 L/min	50 / 60 Hz
□ 最大吐出壓力 Max. vomit volume	1-10 kgf/cm ²	20 kgf/cm ²
□ 電壓 Voltage	110 / 220V	50 / 60 Hz
□ 定格電流 Rated Current	110 / 220V	3A
□ 全容量 Full capacity	2L (3. 4. 6. 8. 10. 12) (OPT)	
□ 有效容量 Effective capacity	1.8L (3. 4. 6. 8. 10. 12)	
□ 檢知壓力 Detective pressure	5 kgf/cm ² ON	20 kgf/cm ² ON
□ 檢知壓力 Deterctive pressure	3 kgf/cm ² OFF	15 kgf/cm ² OFF
□ 遮斷容量 Shield off capacity	176 / 248 VA	110 / 220V
□ 最大遮斷電流 Max. shield off current	3A	
□ 最大遮斷電壓 Max. shield off current	AC250V	
□ 最小通過電流 Min.current through	10UA 最小通過電壓	Min. voltage throught 10mV

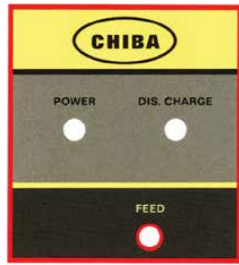
B. 規格說明 SPECIFICATION



電動系列 Auto System

MFE型液晶顯示型潤滑幫浦 Digital Lubricator

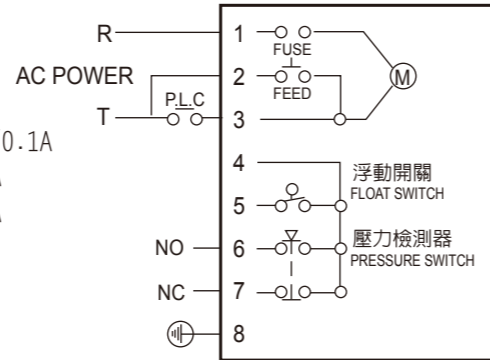
C. 配電控制說明 DIRECTION OF POWER DISTRIBUTION CONTROL



MFE-3F/3FW

■ 無時間控制器電源接線圖：

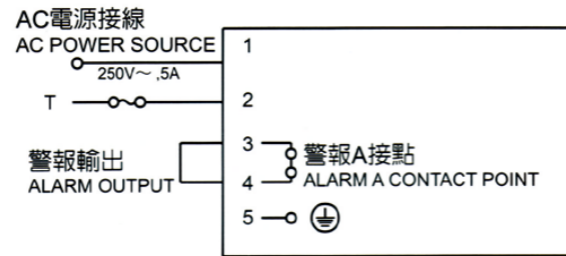
- 1.2 係手動注油接點
 - 1.3 係輸入電源
 - 4.5 係浮動開關, A or B接點, 最大電流250V/0.1A
 - 4.6 係壓力檢知, NO接點, 最大電流250V/0.1A
 - 4.7 係壓力檢知, NC接點, 最大電流250V/0.1A
 - 8 接地
- Without time controller model
- 1.3 Manual oil filling contact point
 - 2.3 Power contact point
 - 4.5 Float switch contact point, AorB, max. current 250/0.1A
 - 4.6 Pressure detective point, NO, max. current 250/0.1A
 - 4.7 Pressure detective point, NC, max. current 250/0.1A
 - 8 Ground connection



MFE-3CF/3CFW

■ 有時間控制器電源接線圖：

- 1.2 係輸入電源
 - 3.4 係警報A接點輸出, 最大電流1A
 - 5 係接地
- With time controller model
- 1.2 Power contact point
 - 3.4 Under abnormal condition, alarm output contact point, max.current 1A
 - 5 Ground connection



有時間控制型面板操作說明 Operation Direction for Model with time controller

- RST鍵 — 係依DIS設定之秒數手動注油。 RST Button DIS preset by second for manual oil filling.
- FEED鍵 — 係手動控制注油(鬆手即停)。 FEED Button Manual control oil filling (Stop when hand is released.)
- DIS鍵 — 運轉時間觸控鍵, 1-99秒自由設定。 DIS Button Running time touch button, 1-99 seconds free setting.
- INT鍵 — 間歇時間觸控鍵, 1-99分自由設定。 INT Button Interval time touch button, 1-99 minutes free setting.

D. 規格表 SPECIFICATION

型式 Model	流量 Outlet	電壓 Voltage	浮動開關 Float switch	脫壓裝置 Pressure release unit	使用壓力 Pressure applied	容量 Capacity	間歇時間 Release time	作動時間 Running time	
抵抗式 Resistant-type	0.3 / 0.36 L/min	MFE-301F	110 V	O	X	1-10 kgf/cm ² 可調	3, 4, 6, 8, 10, 12 L	PLC 控制	
		MFE-302F	220 V	O	X			PLC 控制	
		MFE-301CF	110 V	O	X			1-99 min.	1-99 sec.
		MFE-302CF	220 V	O	X			1-99 min.	1-99 sec.
脫壓式 Pressure-relief	0.3 / 0.36 L/min	MFE-301FW	110 V	O	O	25 kgf/cm ²	3, 4, 6, 8, 10, 12 L	PLC 控制	
		MFE-302FW	220 V	O	O			PLC 控制	
		MFE-301CFW	110 V	O	O			1-99 min.	1-99 sec.
		MFE-302CFW	220 V	O	O			1-99 min.	1-99 sec.

電動系列 Auto System

MFE型液晶顯示型潤滑幫浦 Digital Lubricator



2L規格



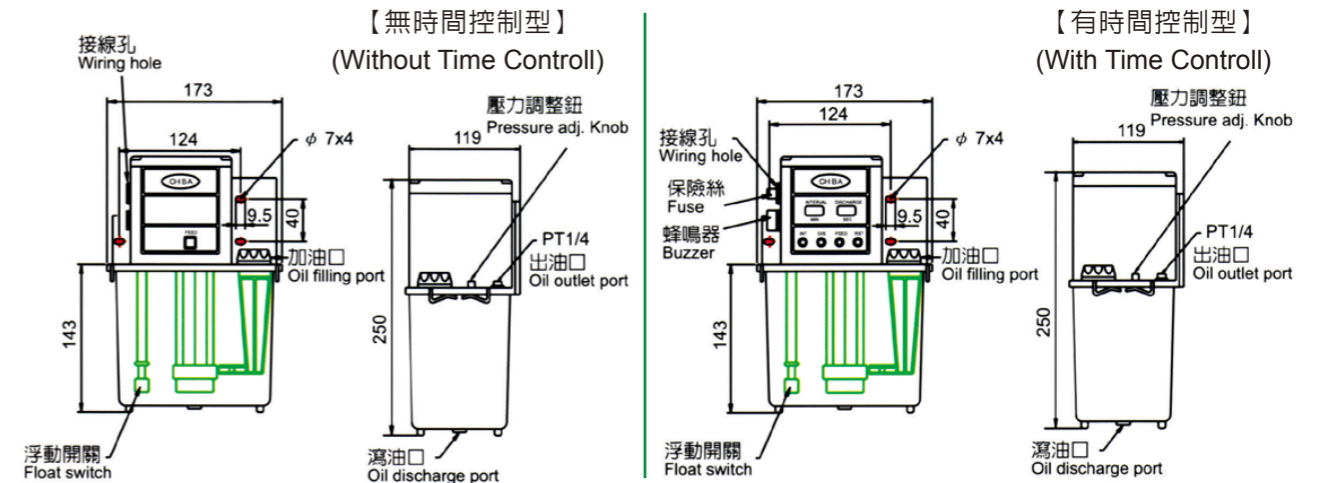
3L、4L規格



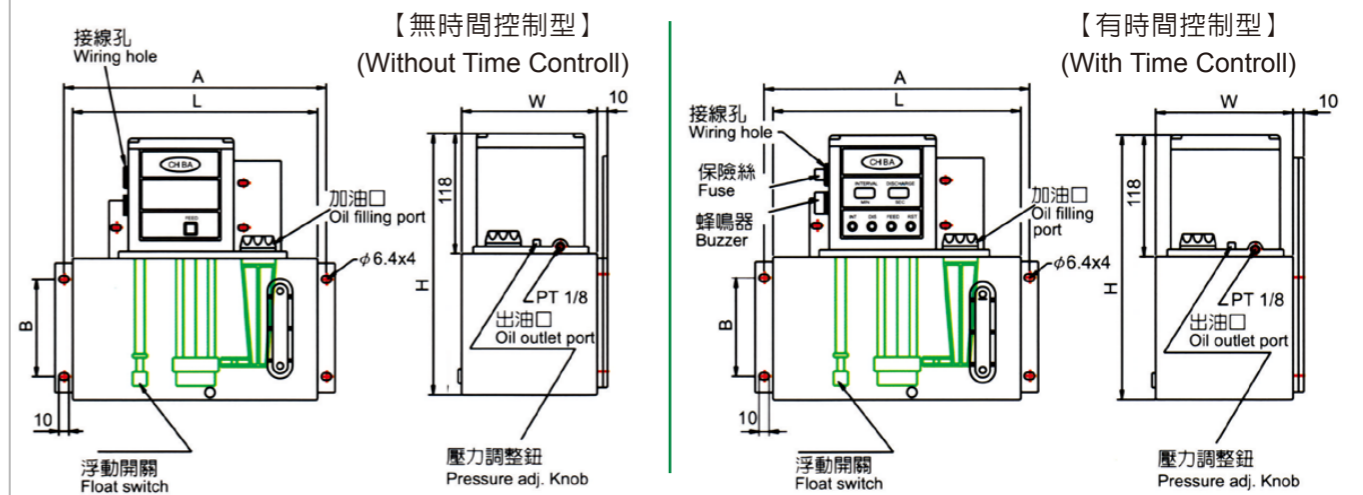
6L、8L、10L規格

E. 尺寸圖 DIMENSION

■ 2L外部相關尺寸圖 2L Outside Specification



■ 3L~12L外部相關尺寸圖 3L~12L Outside Specification



型式 Model	A x B (mm)	長 L(mm)	寬 W(mm)	高 H(mm)	油桶容量 Tank Capacity
T-3L	200 x 95	180	130	260	3.10 (L)
T-4L	240 x 110	210	130	260	4.09 (L)
T-6L	320 x 110	280	145	260	6.09 (L)
T-8L	340 x 110	300	180	260	8.10 (L)
T-10L	370 x 110	320	180	260	10.10 (L)
T-12L	390 x 110	350	230	260	12.07 (L)

電動系列 Auto System

MFE型液晶顯示型潤滑幫浦 Digital Lubricator

F 功能特長 FUNCTION AND FEATURES

1. 壓力輸出方式為可調式的輸出結構，符合各種機器的需求，可做出相對壓力的匹配調整。
 2. 附有油位檢知裝置，測知儲油箱內供油的存量，適時反應回報，連接應變動作。
 3. 立即鈕即時需求按鍵裝置，可使機器在剛開始使用時，便立即得到應有之油量可順暢啟動，減少不必要摩擦。
 4. 深入底部吸油，應用巴斯卡(Pascal)原理，使得出油功率大為提高，並能清除掉油管中空氣間隔的缺失。
 5. 配有油壓檢知裝置(3~10kg/cm²)特性，可偵測反應下列漏失：
 - ★ (一) 管路破裂：測知管內壓力不足。
 - ★ (二) 油網阻塞：測知油料混濁吸油口阻塞。
 - ★ (三) 馬達不良：測知馬達運轉不良。
 - ★ (四) 油壓不足：測知零件汰舊，輸出功率不良等致使壓力不足的情況。
 - ★ (五) 油桶無油：油位低於安全量會警報輸出。
1. Pressure output is designed with adjustable output structure to meet the demand of various machines and available to couple with relative pressure adjustment.
 2. Designed with oil level detector to detect the oil capacity stored in the tank and response well at appropriate time to succeed for connection movement step.
 3. Instant knob to have deviced with in-time demand button and lets machine, while at initial start, have the deserved oil capacity for smooth operation to reduce unnecessary friction.
 4. Absorbs oil from the deepest part and makes use of principle of Pascal to increase greatly the oil output power as well as to remove the shortcoming of gap between oil tubes.
 5. Designed with oil pressure detector (3~10kg/cm²), featured as follows to detect for the loss below:
 - ★ (1) Broken oil tube: detecting if insufficient pressure inside the tube.
 - ★ (2) Blockaded oil network: detecting if any blockaded on oil inlet for the sake of turbid oil condition.
 - ★ (3) Poor motor: detecting if the motor had poor running,
 - ★ (4) Insufficient oil pressure: detecting if the output power is insufficient for old used part to result in insufficient pressure condition.
 - ★ (5) No oil in the tank: Detecting and alarm output if the oil level than the safe level.

G 使用說明 DIRECTION OF USE

1. MFE-3F、3CF型可由PLC直接輸出或由外部計時器做直接或間接的控制運轉。
 2. 使用MFE-3F、3CF型時可配合調整式分配器，VA,VB,DB-A, DB-AS及抵抗式接頭S型、P型、C型三種，使用壓力可調整在3-5kg/cm²，接頭流量規格使用設計差距勿過大，如(#0, #1, #2)，(#1, #2, #3)配較適合。
 3. 使用MFE-3FW、3CFW型附有脫壓結構型時可配合使用定量容積式分配器HA、HBL、HBH，並可增設壓力檢知回饋，以確認管路壓力是否達到標準25kg/cm²使用壓力檢知回饋信號時，必須增設延時TIMER及偵測TIMER在正常時壓力開關確認後而帶動延時TIMER計時適時的動作，反之在偵測時間60秒內無法達到所設定的壓力時，必須設定警報及斷電，繼而檢查各項的缺失。
 4. 使用TM-3FW、3CFW型配合使用容積式分配器時因使用壓力較高，因此所使用的各式油管也必須配合使用較高壓型油管，才能發揮最大的功能。
 5. 因使用地區的溫度不同，使用者必須注意因溫差所導致油粘度變化，而更換適合的油質及使用壓力，氣溫在20°以下的則可選用20#的機油，而氣溫在20°以上的則可選用30#的機油，而使用的壓力也必須有所調整。
1. Model MFE-3F, MFE-3CF, can be available direct output from P.L.C. or direct or indirect from outer timer to control for the running.
 2. When use of models MFE-3F and 3CF, it is available to mate with adjustable distributor, VA, VB, DB-A, DB-AS As to resistant-type joints of three types: S type, P type and C type applied can be adjustable at 3-5kg/cm². Don't use of varied differences on joints flow specification, such as: (#0,#1, #2), mating to(#1, #2, #3) will be ideal.
 3. When use of MFE-3FW, 3CFW with pressure-relief structure model, DPI distributors HA, HBL, HBH can be mated for use. Also, they can be added with pressure detector to feedback and confirm if the pressure of the pipe is compliance with the standard specification 25kg/cm². When use of pressure detector feedback signal, the TIMER delay must be setup. When detecting TIMER under normal pressure switch and confirmed, then TIMER delay is actuated at appropriate time. Otherwise, if the detecting failed to reach the preset pressure within 60 seconds, an alarm signal and power-off must be setup to check for every failure or default.
 4. Because use of MFE-3FW, 3CFW for DPI distributors and the pressure applied is higher, various pipes have to adopt higher-pressure type of oil pipe for use to develop the maximum function desired.
 5. Because the temperature of different areas is varied, the user must pay attention to the change of oil viscosity caused by different temperature degree to replace with appropriate oil and pressure applied. If temperature under 20°, the engine oil #20 is recommended for use. While for temperature above 20°, then #30 is recommended. Also, the pressure applied also has to be adjusted.

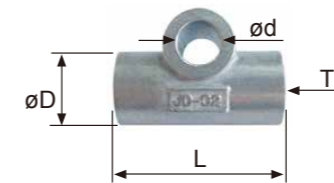
電動幫浦系列 Auto Pump System 注意事頂與保養維護

1. 本機輸入之電源需與本機上標示之使用電源相符。
 2. 安裝時，請一使用說明內之指示接線，以免損壞控制器。
 3. 請務必接上接地線，以策安全。
 4. 油箱加油時，務必經過過濾網過濾，以免除雜物阻塞油路。
 5. 發現過濾網內雜物時，必須即時清除，使維持良好的過濾效果。
 6. 本機內之控制電路不得浸到油或水，或與其他物體接觸，以免故障。
 7. 油箱內之油量添加時，請依指示表，以免溢出。
 8. 本機請避免撞擊。
1. The power source input into the machine must comply with the specification and power required shown on the machine.
 2. When installation, please follow the direction of use to connect the wire to avoid controller being damaged.
 3. Be sure to connect the ground connection for safety purpose.
 4. When filling the oil into oil tank, be sure to get through the filter net to ensure no impurities to block the oil passage.
 5. If found any impurities in the filter, then clean and remove it away immediately to keep well the filtering effect.
 6. The control circuit inside the machine shall not be allowed to dip in and stain with oil or water, or to contact to other objects resulting in malfunction.
 7. When filling the oil into the tank, please follow the instruction shown to avoid overflowing.
 8. Keep no impact against machine.

電動系列 Auto System 配合之分配器 — 抵抗式 Resistant-type

連接頭 Connector

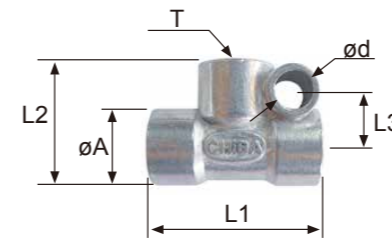
單位Unit: mm



型式 Model	管徑 DIA	ød	øD	L	T
JD2-4	ø4	6.5	13	28	M8x1.0
JD2-6	ø6	6.5	13	28	M10x1.0

三通管 Triform Tube

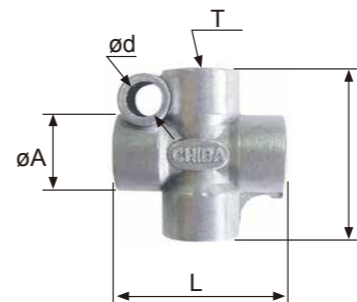
單位Unit: mm



型式 Model	管徑 DIA	øA	L1	L2	L3	ød	T	HEX
PKD-4	ø4	11	28	14	8.1	6.5	M8x1.0	11
PKD-6	ø6	14	30	15	9.2	6.5	M10x1.0	14
PKD-8	ø8	18	40	20	12.0	6.5	M14x1.5	18
PKD-10	ø10	20	45	22.5	13.5	6.5	M16x1.5	20

四通管 Four Sides Tube

單位Unit: mm

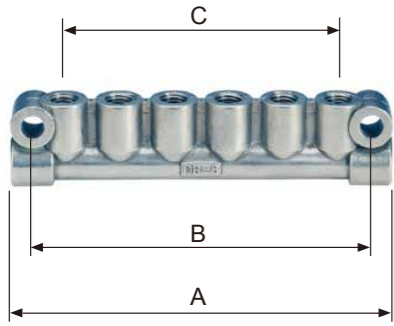


型式 Model	管徑 DIA	øA	ød	L	T	厚度
PJD-404	ø4	11	6.5	28	M8x1.0	11
PJD-406	ø6	14	6.5	28	M10x1.0	14

電動系列 Auto System 配合之分配器 — 抵抗式 Resistant-type

分配器 Distributor

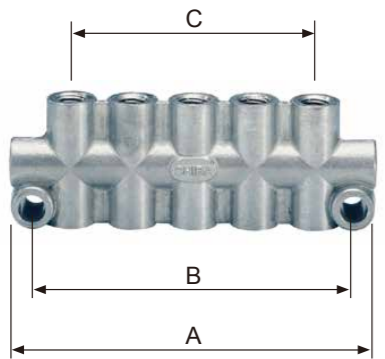
單位Unit: mm



型式 Model	接頭口數	A	B	C
DB-4	4	48	36	16
DB-5	5	64	52	32
DB-6	6	80	68	48
DB-7	7	96	84	64
DB-8	8	112	100	80
DB-9	9	128	116	96
DB-10	10	144	132	112
DB-12	12	176	164	144

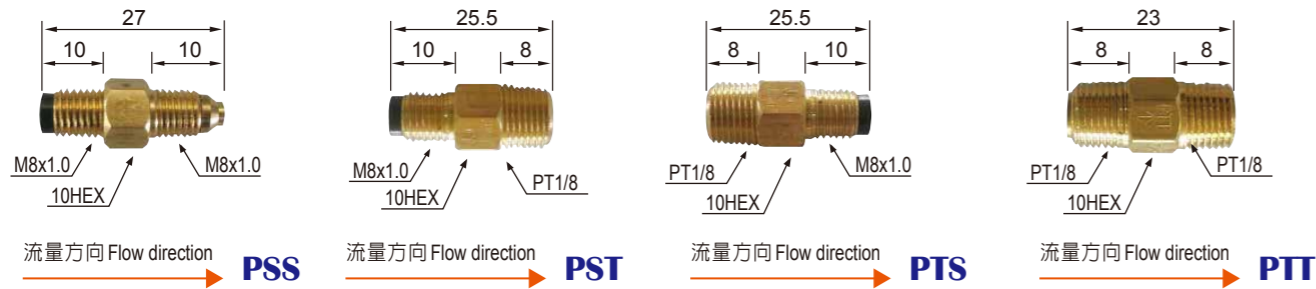
分配器 Distributor

單位Unit: mm



型式 Model	接頭口數	A	B	C
DA-6	6	48	36	16
DA-8	8	64	52	32
DA-10	10	80	68	48
DA-12	12	96	84	64
DA-14	14	112	100	80
DA-16	16	128	116	96
DA-18	18	144	132	112

比例分配控制器 P※※型 Ratio Distributor Controller P※※ Type



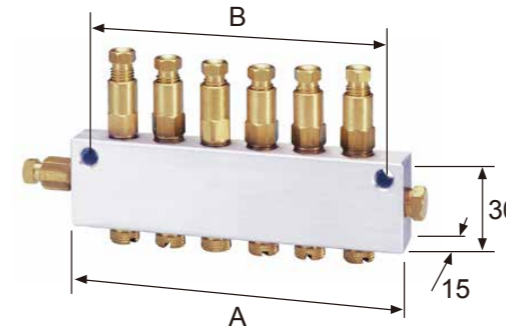
	PSS	PST		PTS			PTT	
分類番號 Category No.		00	0	1	2	3	4	5
流量比 Flow ratio		0.5	2	4	8	16	32	64
接頭口徑 Joint bore	IN	M8 x 1.0	M8 x 1.0		PT 1/8			PT 1/8
	OUT	M8 x 1.0	PT 1/8		M8 x 1.0			PT 1/8
使用壓力 Pressure applied	1.5 ~ 20kg/cm ²							
使用油黏度 Oil viscosity	20 ~ 500cst							

電動系列 配合之分配器 — 抵抗式 Resistant-type

DB調整分配器 Adjustable Distributor

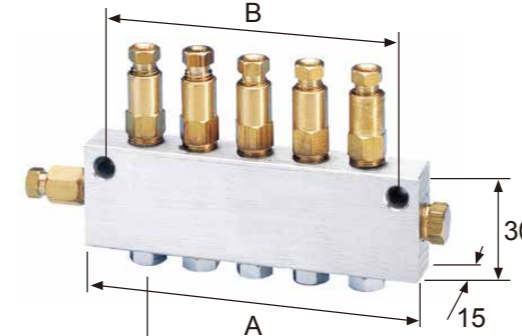
單位Unit: mm

DB-8A



型式 Model	接頭口數 Joint number	吐出口數 Vomiting number	尺寸 Size mm		接頭口徑 Joint bore		使用壓力 Pressure applied	油量粘度 Oil viscosity
			A	B	支管 Branch	主管 Main tube		
DB4A	4	2	48	36	M8x1.0 (PC-4)	M10x1.0 (PD-601)	1~15 kg/cm ²	10~500 cst
DB5A	5	3	64	52				
DB6A	6	4	80	68				
DB7A	7	5	96	84				
DB8A	8	6	112	100				
DB9A	9	7	128	116				
DB10A	10	8	144	132				
DB11A	11	9	160	148				
DB12A	12	10	176	164				

DB-7AS

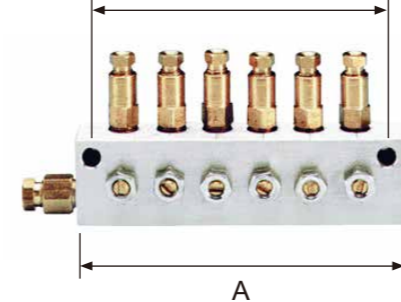


型式 Model	接頭口數 Joint number	吐出口數 Vomiting number	尺寸 Size mm		接頭口徑 Joint bore		使用壓力 Pressure applied	油量粘度 Oil viscosity
			A	B	支管 Branch	主管 Main tube		
DB4AS	4	2	48	36	M8x1.0 (PC-4)	M10x1.0 (PD-601)	1~15 kg/cm ²	10~500 cst
DB5AS	5	3	64	52				
DB6AS	6	4	80	68				
DB7AS	7	5	96	84				
DB8AS	8	6	112	100				
DB9AS	9	7	128	116				
DB10AS	10	8	144	132				
DB11AS	11	9	160	148				
DB12AS	12	10	176	164				

附螺絲固定 With screw for fixing purpose

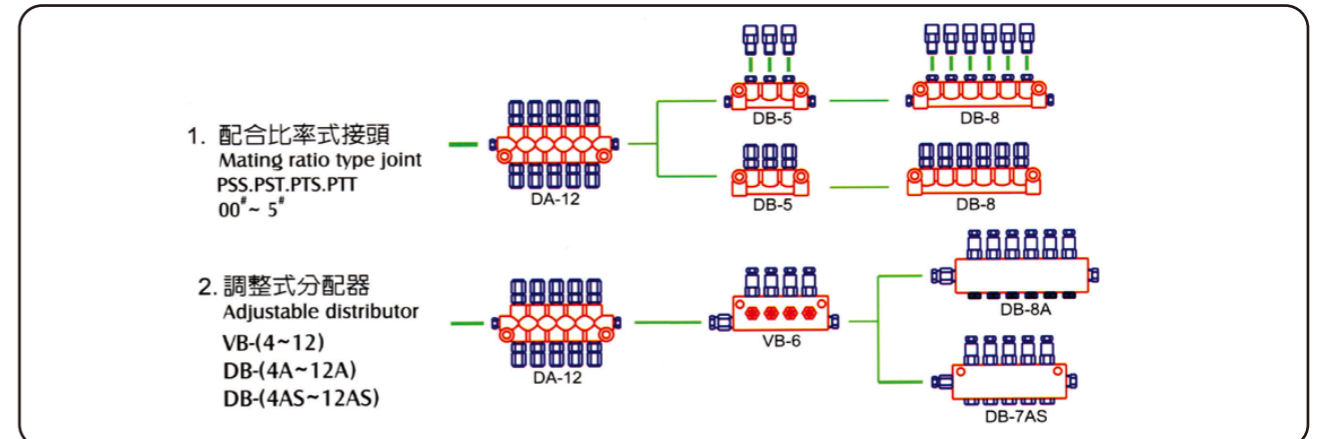
VB調整分配器 Adjustable Distributor

VB-8



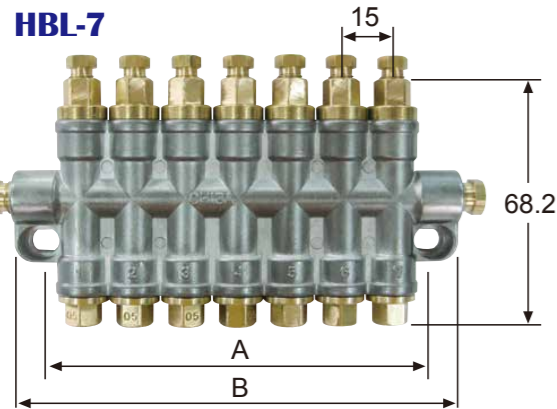
型式 Model	接頭口數 Joint number	吐出口數 Vomiting number	尺寸 Size mm		接頭口徑 Joint bore		使用壓力 Pressure applied	油量粘度 Oil viscosity
			A	B	支管 Branch	主管 Main tube		
VB4	4	2	48	36	M8x1.0 (PC-4)	M10x1.0 (PD-601)	1~15 kg/cm ²	10~500 cst
VB5	5	3	64	52				
VB6	6	4	80	68				
VB7	7	5	96	84				
VB8	8	6	112	100				
VB9	9	7	128	116				
VB10	10	8	144	132				
VB11	11	9	160	148				
VB12	12	10	176	164				

TM-3F; TM-3CF配合比率式接頭，調整式分配器配置說明
Mating ratio type joint & Adjustable distributor distribution direction



電動系列 — 配合之分配器 — 脫壓式 Pressure-relief

HBL定量容積式分配器 Positive Displacement Injector System Distributor



B. 規格表 SPECIFICATION

型式 Model	HA							HBL							
吐出口數 Vomiting number	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
吐油量 Outlet	0.03, 0.06, 0.10, 0.16							0.1, 0.2, 0.3, 0.4, 0.5							
最低作動壓力 Minimum performance pressure	5							5							
尺寸 Size mm	A	23	39	51	66	81	96	111	23	39	51	66	81	96	111
	B	35	50	65	85	85	115	130	35	50	65	85	85	115	130

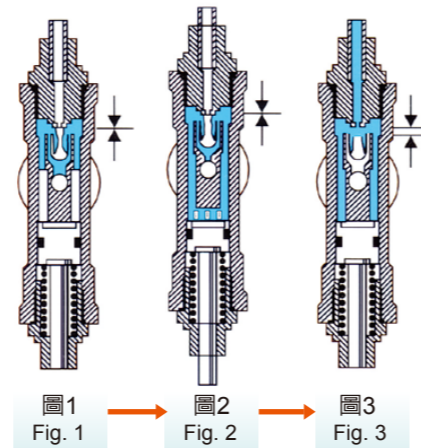
C. 作動圖 STEP 1-3

- 圖1 泵浦供油，自主配管輸送到分配器上，油路打開止逆閥，油量初步流入。
- 圖2 油量繼續流入，壓力繼續上升，迫使活塞閥後退移動，同時計量蓄壓。
- 圖3 泵浦暫停，泵浦內的脫壓機構促使管內的壓力下降，蓄壓的油路使自內回流壓縮，流路的方向迫使止逆閥張開堵住回流口，蓄壓閥的流量便自出口吐出。

Fig.1 Pump pressurizes supply the oil, and from main pipe to deliver the oil to all of the distributors. When oil pressure is rising, open the passage of umbrella check-valve by compression, then the oil flows into initially.

Fig.2 Pump's pressure keeps the oil rising up to force the piston spring move backward and all volume continues to flow into oil storage tank. Simultaneously, the oil storage will gather until it is completed.

Fig.3 Pump stops to run and instant pressure-reller results in rapid pressure descending from main pipe to force the spring inside oil valve to blockade the return access port and therefore output the oil stored inside the oil tank.



A. 規格說明 SPECIFICATION

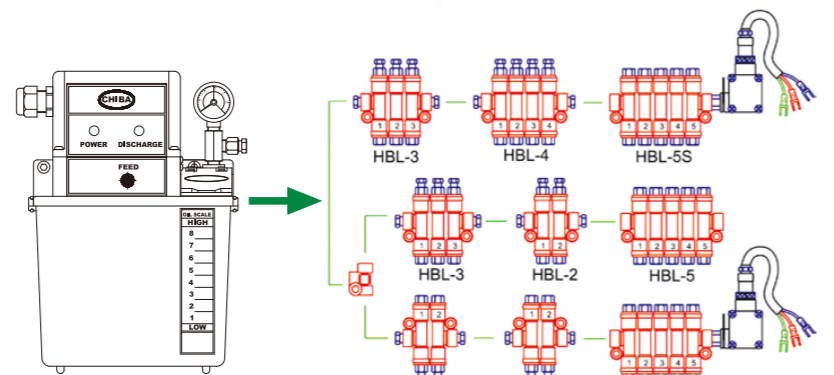
HBL - 1(0.3cc)

吐油量 Discharge volume: 0.1c.c ~ 0.5cc
吐出口數 Vomiting number: 1~7

D. 功能特長 FUNCTION AND FEATURES

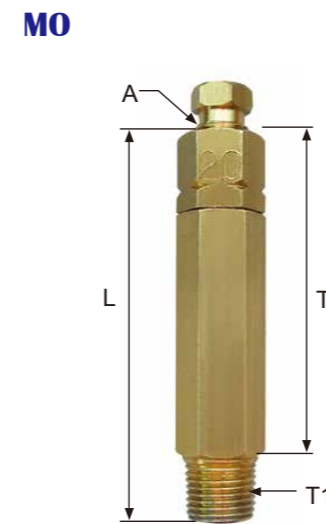
- 分配器吐出量採定量式，可依潤滑面的大小設定油量。
 - 吐出壓力穩定5 kg/cm²。
 - 使用油品廣泛。
 - 不因管路長短、高低、阻力大小，而影響供油，及產生倒流情況。
- The divider spits the output to pick the quota type, may depend on the lubricant size hypothesis oil mass.
 - Puts out pressure stable 5 kg/cm².
 - The use oil quality is widespread.
 - Not because of pipeline length, height, resistance size, but affects supplies the oil, and produces flows backwards the situation.

MFE-2FW; MFE-2CFW
配合定量容積式分配器配置說明
Mating PDI (Positive Displacement
Injector System)distributor



電動系列 — 定量容積式系列 — 加壓式

機油定量閥 Oil-Valve



A. 規格說明 SPECIFICATION

MO - 05

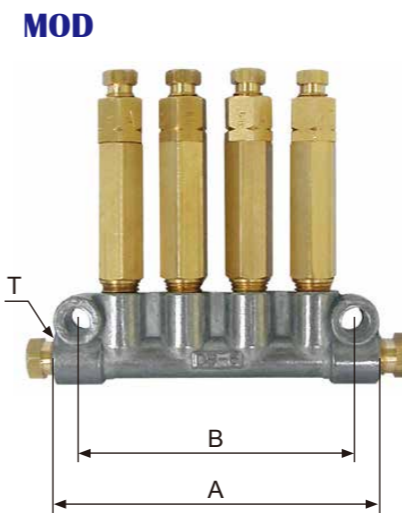
吐油量
Discharge volume: 0.05c.c ~ 0.25cc

B. 規格表 SPECIFICATION

型式 Model	吐油量 Discharged amount	T (m/m)	L (m/m)	A	T1	記號
MO-05	0.05cc	45	54	M8*1.0	PT1/8	05
MO-10	0.10cc	45	54	M8*1.0	PT1/8	10
MO-15	0.15cc	45	54	M8*1.0	PT1/8	15
MO-20	0.20cc	45	54	M8*1.0	PT1/8	20
MO-25	0.25cc	45	54	M8*1.0	PT1/8	25

- 作動壓力：1.0 MPa
- 回復壓力：0.3 MPa

機油定量容積式分配器 Oil Positive Displacement Injector System Distributor



A. 規格說明 SPECIFICATION

MOD - 2-05

吐油量
Discharge volume: 0.05c.c ~ 0.25cc
吐出口數
Vomiting number: 2~10

B. 規格表 SPECIFICATION

型式 Model	吐出口數 Number of port	A (m/m)	B (m/m)	T	吐油量 Discharged amount
MOD-2	2	48	36	M10*1.0	0.05 0.10 0.15 0.20 0.25
MOD-3	3	64	52	M10*1.0	
MOD-4	4	80	68	M10*1.0	
MOD-5	5	96	84	M10*1.0	
MOD-6	6	112	100	M10*1.0	
MOD-7	7	128	116	M10*1.0	
MOD-8	8	144	132	M10*1.0	
MOD-10	10	176	164	M10*1.0	

電動系列 配合之分配器 — 脫壓式 Pressure-relief

FSS定量活門 Quantitative Valve

FSS

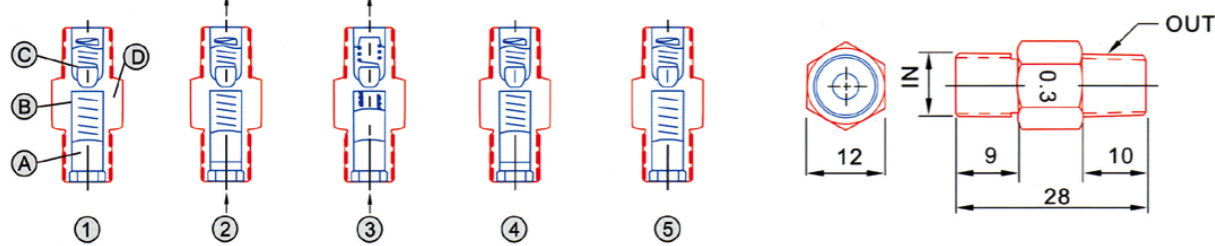


A. 功能特長 FUNCTION AND FEATURES

定量接頭是由油壓幫浦，藉著活塞的活門運作，將油(液)定量準確地送給各個潤滑點的接頭。

A certain joint is activated by piston valve according to the hydraulic pump, and by means of oil quantitative to deliver the each joint of lubricating station.

B. 定量接頭的啟動原理 QUANTITATIVE JOINT STARTING PRINCIPLE



1. 從幫浦運轉開始，壓力上升。
 2. 將活塞(A)往上推，彈簧壓縮，將原本儲存於(B)的油量推上，繼而打開(C)的閥門，將油擠上。
 3. 活塞壓至(D)處，將儲存的油量作定量的釋出工作，完成給油程序。
 4. 幫浦停止時，慢慢就有降壓的動作，配管內壓力一降低，定量活塞(A)及上方的彈簧(B)，會慢慢的下降，同時(A)活塞也會還原，重新作加壓給油的準備。
 5. 活塞在正常率動回覆後，活塞上方的計量給油動作也完成，相對的下一次的給油動作也準備完成。
1. Starts from pump ascending, the pressure is increased.
 2. Push piston (A) move upward, and compress the spring, and then original stored oil volume (B) can be pushed upward. Then, open valve (C) to force oil up.
 3. Press piston to (D), and the oil stored can be output quantitatively to complete the process of oil supply.
 4. When pump stops, gradually the pressure is lower down to make pressure inside pipes decreased. Then, the quantitative piston (A) and upper spring (B) will be slowly descended. At the same time, piston (A) will be returned back again to perform the oil supply under pressurizing.
 5. After piston works to return back normally, the oil metering on upper of the piston also completes the oil supply process. As a result, the next cycle of oil supply is ready to go.

- 量固定型的定量接頭→接頭的種類有0.03、0.06、0.08、0.10四種，可選擇單點使用或組合使用。
Non-fixed type quantitative joint--There are four types: 0.03, 0.06, 0.08 & 0.10 available for optional use or assembly purpose.

		FSS	FST	FTS	FTT
分類番號	Category No.	03	06	08	10
流量比	Flow ratio	0.03	0.06	0.08	0.10
接頭口徑	IN	10 x 1.0	10 x 1.0	PT 1/8	PT 1/8
	OUT	10 x 1.0	PT 1/8	10 x 1.0	PT 1/8
使用壓力	Pressure applied	1.5 ~ 20kg/cm ²			
使用油黏度	Oil viscosity	20 ~ 500cst			

氣動系列 Air System

ASK型空壓式注油機 Air Type Engine Oil



ASK-8FW

脫壓式
Pressure-relief

A. 功能特長 FUNCTION AND FEATURES

1. 可由外部接收信號，快速同步作動噴油。
2. 適合高頻率快速給油。
3. 可配合定量油氣混合分配器DM-A型，作潤滑冷卻。
4. 可作噴點式或噴霧式兩種用途。

1. Receiving sign from exterior, working synchronization and fast
2. Suits in high-frequency and supply oil fast.
3. It's using in lubrication cooling, and cooperate with quantitative oil-gas mix distributor type DM-A.
4. Using for two ways: oil-mist and Injection.

B.

		ASK-8F	ASK-8FW
幫浦壓縮比	Pump compress rate	1 : 5(空氣壓力)	
一次壓縮吐出量	Output volume	8 cc	
最高吐出頻率	Max. output frequency	依油之黏度 (35cSt~2000cSt) 30~12回/每分鐘	
使用油之黏度	Oil viscosity	10~2000 (cSt)	
空氣壓力和空氣消耗量	Air Pressure & consume	4 kgf/cm ² 0.27 NI/g一次吐出	
		5 kgf/cm ² 0.30 NI/g一次吐出	
出油量	Output quantity	總吐出量約 Total output quantity: 6 cc (使用0.5cc閥時可供給12個噴點)(Suply 12 ports for each 0.5cc)	
油箱容量(L)	Oil tank capacity	標準Normal: 2, 選訂Select: 3, 4, 6, 8	
電磁閥規格	Solenoid type	三口兩位電磁閥Three ways solenoid 電壓Voltage : AC110V, AC220V	
浮球開關	Float switch	A, B接點 最大使用電壓AC, DC 200V 接點容量30W, 抵抗負荷0.5A以內	

C. 規格說明 SPECIFICATION

ASK - 8 01 F W - T 2 P

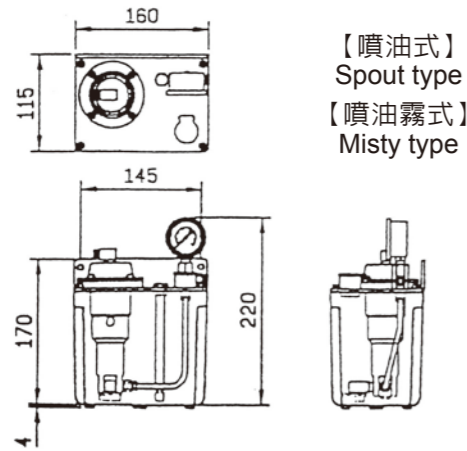
- 透明桶 P: Plastic transparent bucket
- 鋁 桶 A: Aluminum bucket
- 油桶容量 Tank Capacity 2:2L, 3:3L, 4:4L, 6:6L, 8:8L
- 附脫壓裝置 With pressure-relief installation
- 附浮動開關(A, B接點) With float switch (A, B Contact point)
- 電源電壓 Power voltage 01:110V, 02:220V, 24: DC24V
- 一次壓縮吐出量 Discharge volume 8c.c./min

氣動系列 Air System

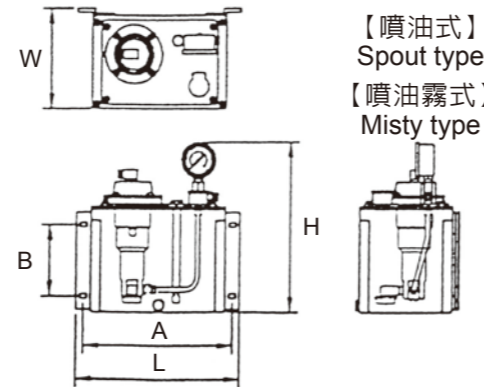
ASK型空壓式注油機 Air Type Engine Oil

D. 尺寸圖 DIMENSION

2L外部相關尺寸圖
2L Outside Specification

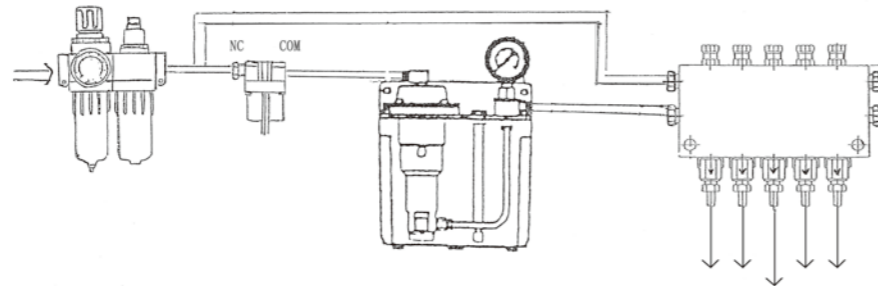


3L, 4L, 6L, 8L外部相關尺寸圖
3L, 4L, 6L, 8L Outside Specification

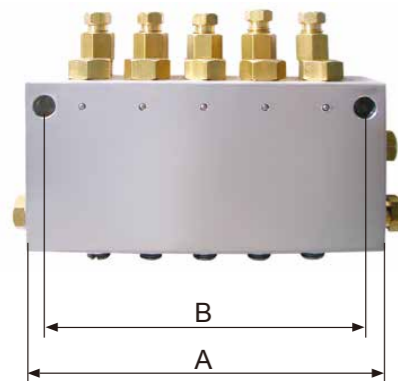


型式 Model	A x B (mm)	長 L(mm)	寬 W(mm)	高 H(mm)	油桶容量 Tank Capacity
T-3L	200 x 95	220	130	230	3.10 (L)
T-4L	240 x 110	260	130	245	4.09 (L)
T-6L	320 x 110	340	145	245	6.09 (L)
T-8L	340 x 110	360	180	245	8.10 (L)

D. 油路配置圖 OIL WAY DISPOSED



DM-A型定量油氣混合分配器 Quota oil gas mix divider



型式 Model	吐出口數 Number of port	吐出量 Discharged amount	尺寸 Size mm	
			A	B
DM-1A	1	0.03 cc	35	24
DM-2A	2		50	39
DM-3A	3	0.06 cc	65	54
DM-4A	4	0.08 cc	80	69
DM-5A	5	0.10 cc	95	84

手動系列 Hand System

SK手動黃油注油機 Manual type Engine Grease

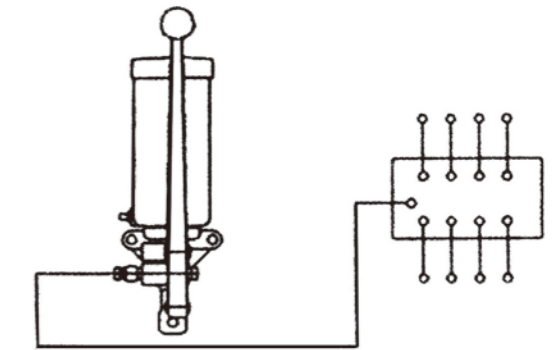
SK-224-T08

SK-224-T04



(可拋式油條)

A. 油路配置圖 OIL WAY DISPOSED



B. 規格表 SPECIFICATION

型式 Model	使用油 Oil	吐出量 Outlet	容量 Capacity	吐出壓力 Output Pressure	分配閥 Grease distributor	最大給油口 Max.	尺寸 Size mm		
							A	B	C
SK-224-T03	黃油 Grease	2CC / STORK	300CC	100 kg/cm ²	SD 黃油分配器	60 口	290	150	70
SK-224-T04			400CC				310	205	90
SK-224-T08			800CC				310	205	90

C. 操作說明 OPERATION INSTRUCTIONS

當拉動操作桿時，油筒活塞會同時下壓，使油缸成負壓狀態，於是由於板墊的氣密壓力，黃油會從吸入口進入油缸。然後再按操作桿，則進入油缸內的黃油受注塞押出，推開吐出口的抑致閥，被導管壓送。內壓到一定壓(100kg/cm²)以上時，降壓活門則啟動，黃油回到油槽。操作桿以彈簧牽拉在機身上，油槽則以固定的圓形存儲器緊緊在機身上，可防止漏油。

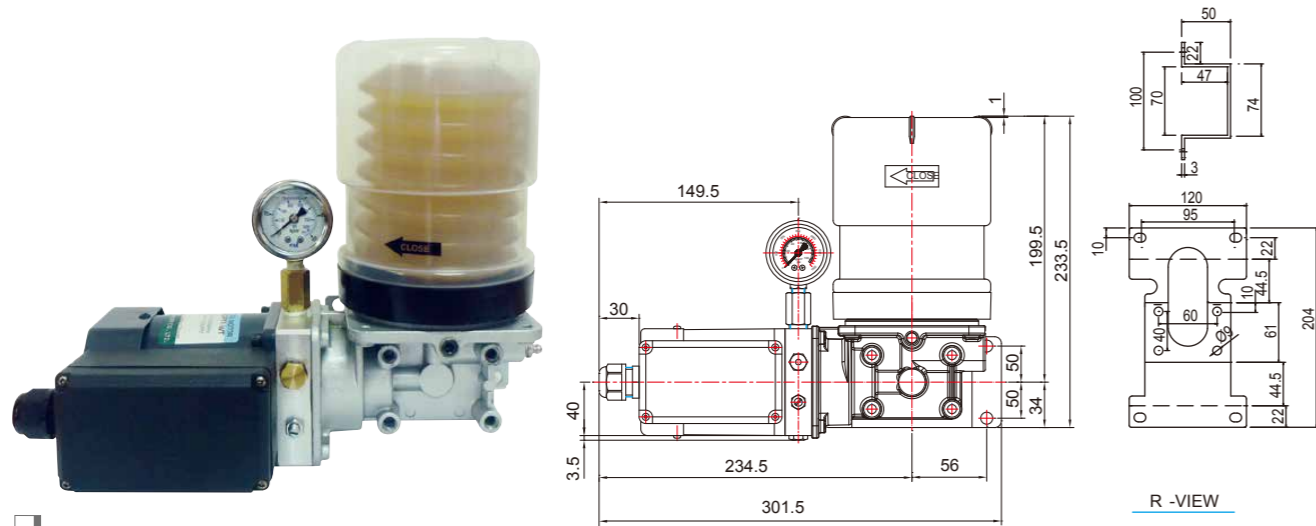
When move the operation rod, the plunger (iron core) will be moved simultaneously so as to make cylinder become under negative pressure . Then , due to closed air pressure of the plank , the grease will get into the cylinder from the suction port . Now , operate the operating rod to extrude out the grease through pipe in the cylinder by principle of the plunger pushing open the specific pressure of 100kg/cm² , down pressure valve will start to return the grease to the oil tank . The operation rod is to use of a spring to link on the injector as a round storage tank to prevent from oil leaking.

D. 優點 ADVANTAGES

1. 為手動式邦浦。採用單管方式，配合SD型單一循環分配器，簡捷的配管，可獲得良好的效果。
 2. 因對潤滑面的緊貼較為圓滑，給油適量，幾乎沒有多餘油的漏出而污染床面。
 3. 排除舊式以黃油槍打油，油口髒物混入所產生的問題。
1. Manual type pump . Use of single pipe , so no need of pipe return device . With simple piping for best effect .
 2. Has smooth stickness to the lubricating surface with proper oiling capacity , so no surplus oil will be leaked out to stain with the surface of bench .
 3. No need to worry about the dirt & impurities entered into the oiling port , so it is more clean than other ways of lubrication.

脫壓式油脂潤滑系統 Pressure Relief Grease Lubrication System

MSK-10 電動脫壓式黃油幫浦 Pressure Relief Grease Pump



B. 規格表 SPECIFICATION

型式 Model	流量 Flow	電壓 Voltage	馬達功率 Power	油箱容量 Oil tank Capacity	最大吐出壓力 Maximum Output Pressure	油脂範圍 Oil viscosity
MSK-101FW	200cc/MIN	110V	60W	700cc	50KG/CM ²	00#, 000#
MSK-102FW	200cc/MIN	220V	60W	700cc	50KG/CM ²	00#, 000#
MSK-124FW	200cc/MIN	DC-24V	60W	700cc	50KG/CM ²	00#, 000#

F. 功能特長 FUNCTION AND FEATURES

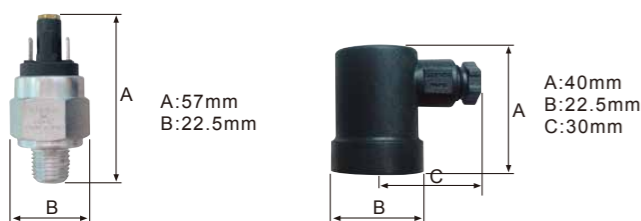
- 由馬達控制齒輪、邦浦油量輸出穩定、無噪音、壓力大
- 可由PLC控制間歇及運轉時間
- 可設壓力檢知檢測管路輸送壓力是否達到所需標準
- 可配合：A. 單一循環分配器 B. 脫壓式分配器 C. 加壓式分配器
使用定時定量給油，減少不必要的流失
- 使用00#.000#油脂，環保潤滑效果好，也不需要常常加油，經濟效率高
- 幫浦設有壓力調整過載閥，以保護馬達及管路正常壓力
- 請以正確方式充填加油以免油箱空氣產生而導致潤滑不良

FS-2 拋棄式油條 Disposable Oil



- 油脂規格 Viscosity : 00#.000#
- 容量 Capacity : 700CC
- 特點說明 Features: 耐高壓、耐磨耗、耐熱不變質、及耐水之潤滑油
Resist high pressure, Wearproof, Resist hot and not go bad, Waterproof lubricate.

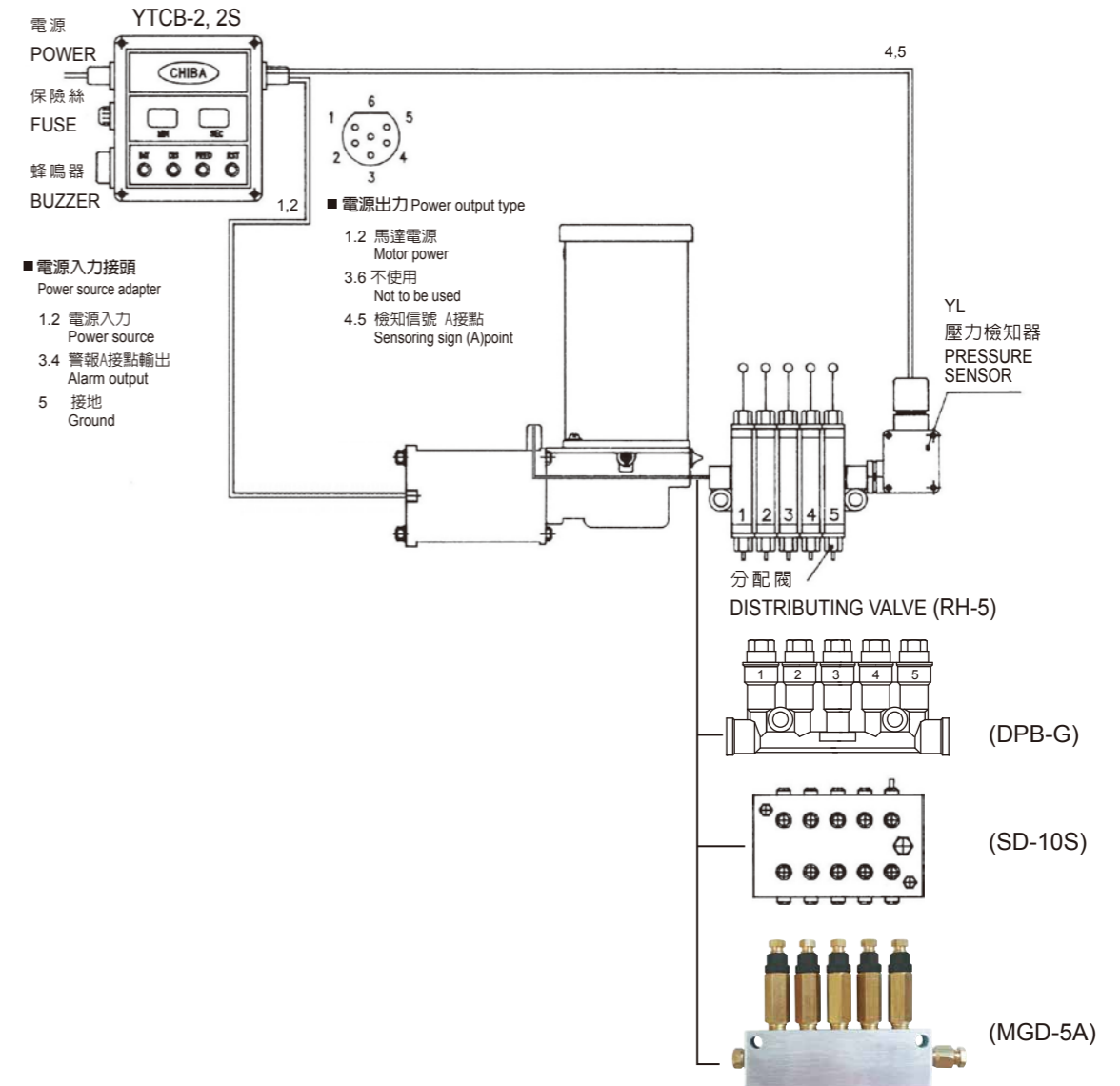
壓力開關 Pressure Switches



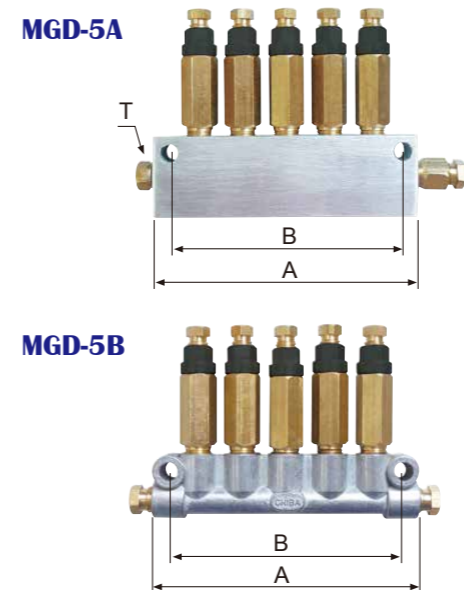
型式 Model	牙規格 Bore type	ON
PME-50A14K	1/4PT	1~50 KG

脫壓式油脂潤滑系統 Pressure Relief Grease Lubrication System

MSK-10 電動脫壓式黃油幫浦 Pressure Relief Grease Pump



MGD 加壓式定量分配器 Positive Displacement Injector Distributor

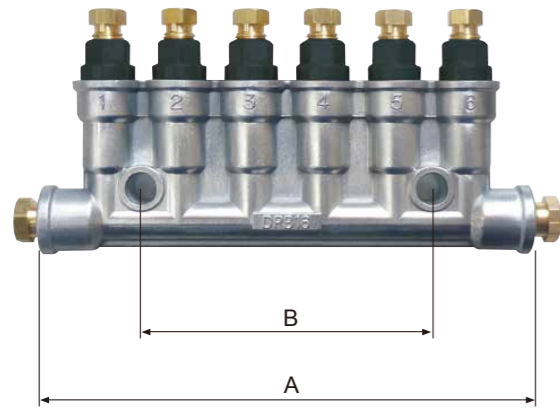


MGD - 2A- 05
吐出量 Discharge volume: 0.03c.c ~ 0.28cc
A: 鋁排 Aluminum, B: 壓鑄 Casting
吐出口數 Vomiting number: 2~10

型式 Model	吐出口數 Number of port	A (m/m)	B (m/m)	T	吐出量 Discharged amount
MGD-2	2	48	36	M10*1.0	0.1cc ↓ 0.5cc
MGD-3	3	64	52	M10*1.0	
MGD-4	4	80	68	M10*1.0	
MGD-5	5	96	84	M10*1.0	
MGD-6	6	112	100	M10*1.0	
MGD-7	7	128	116	M10*1.0	
MGD-8	8	144	132	M10*1.0	
MGD-10	10	176	164	M10*1.0	

定量容積式分配器<先出後補型> Postive Displacement Injector System Distributor <first-out

DPB-1G

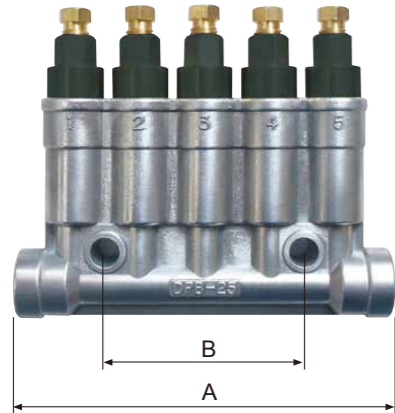


DPB-11G (0.03)

吐出量 Discharge volume:(0.03 ~0.16)
油品: 油脂 Grease
吐出口數 Vomiting number

型式 Model	吐出口數 Vomiting number	吐出量 Discharged amount	A	B
DPB-11G	1	0.03	-	40
DPB-12G	2		-	48
DPB-13G	3	0.06	17	65
DPB-15G	5	0.1	51	99
DPB-16G	6		68	116
DPB-18G	8	0.16	102	150
DPB-110G	10		136	184

DPB-2G



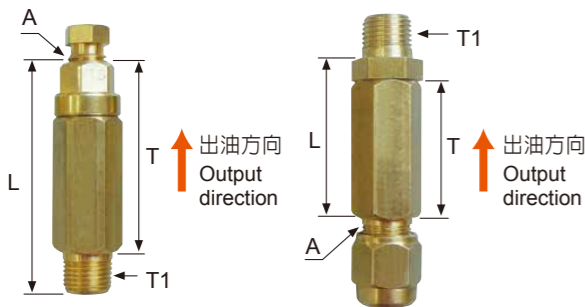
型式 Model	吐出口數 Vomiting number	吐出量 Discharged amount	A	B
DPB-21G	1	0.1	-	40
DPB-22G	2		-	48
DPB-23G	3	0.2	17	65
DPB-25G	5	0.3	51	99
DPB-26G	6	0.4	68	116
DPB-28G	8		102	150
DPB-210G	10	0.5	136	184

MG-1

MGT-1

MG - 003

吐出量 Discharge volume: 0.03c.c ~ 1.6cc



型式 Model	吐出量 Discharged amount	記號	T (m/m)	L (m/m)	A	T1
MG-1	0.03	03	36.5	44	M8*1.0	PT 1/8
	0.06	06				
	0.10	10				
MGT-1	0.16	16	47	55	M10*1.0	PT 1/8
	0.25	25				

- 作動壓力 Performance pressure : 2.5 MPa
- 回復壓力 Restore the pressure : 1.2 MPa

電動系列 Air System

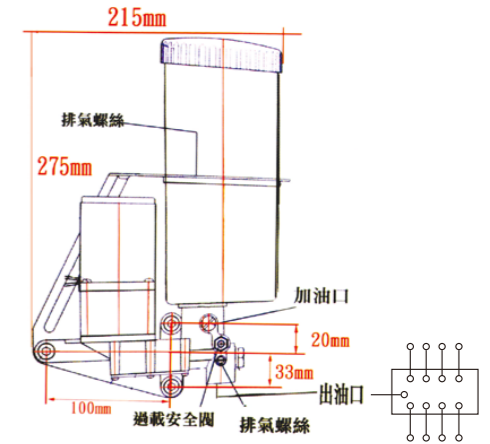
MSK電動黃油幫浦 Auto Grease Pump

MSK-2-T2A

MSK-2-T2P



A. 尺寸圖 DIMENSION



B. 規格說明 SPECIFICATION

MSK - 2 01 - T08 P

塑膠桶 P: Plastic transparent bucket
鐵桶 A: Iron bucket
容量 Capacity 03: 300cc 08: 800cc 2:2000cc
電壓 Voltage 01:110V, 02:220V, 24: DC24V
流量 Flow: 20c.c./min

C. 規格表 SPECIFICATION

型式 Model	流量 Flow	電壓 Valtage	馬達功率 Power	油箱容量 Oil Tank Capacity	最大吐出壓力 Max.Output Pressure	油脂範圍 Oil viscosity
MSK-201	20 cc/min	110	6 W	300 cc 2L	60 kg/cm ²	0# 以下
MSK-202		220 V				
MSK-224		DC24V				

D. 操作說明 OPERATION INSTRUCTIONS

以TIMER或經PLC指令運轉，馬達帶動凸輪及活塞將油吸入吐出，經由單一循環分配器平均等量的將油脂分配到各部位的潤滑點，達到潤滑的效果，產品精巧美觀耐用，故障率低，運用廣泛，適用於各式機械的潤滑。

Motor-driven spur the gear and piston through the time control device or P.L.C to control.

Through the single cycle oil distributor allocate the oil to the every part average and quantitative. To achieve good lubricating effects. The feature of the type is low trouble and can using widely in various machine lubrication.

E. 優點 ADVANTAGES

1. 本機採單管方式進行作動，用電量低(6W)吐出壓力可依需要自行調整，最高吐出量60kg/cm²
2. 油桶加油方便，可由上方將加壓活塞取出由上方加油，或由下方加油口充填。
3. 本機內部設有二處排氣孔，適時的運用可大大的降低油桶內油脂的氣泡及操作上的方便。
4. 配合單一循環分配器SD型，能有效的平均分配油脂到各個潤滑點。
5. 單一循環分配器可加裝檢知器YSA-1型，可有效的檢知確認，了解分配器作動狀況，及供油循環的次數。

1. Use of single pipe to low voltmeter (6W). Also, you can adjust the output pressure according to every machine needs, limitation of 60kg/ cm²
2. More convenience to fill the oil. User can choose fill from up side or down side. In up side to fill, user must take out of the plunger first.
3. There are 2 exhaust points. It can lower the air bubble in the tank and operate more convenient if you use the exhaust points appropriately.
4. To match with single cycle oil distributor SD type. It can allocate the oil average to every point and more efficient.
5. For the single cycle oil distributor, it can add the sensor YSA-1 to check the working situation and the time of cycle. Also, to check up the trouble like :jammed or no oil in tank etc.

電動系列 Air System

MSK電動黃油幫浦 Auto Grease Pump

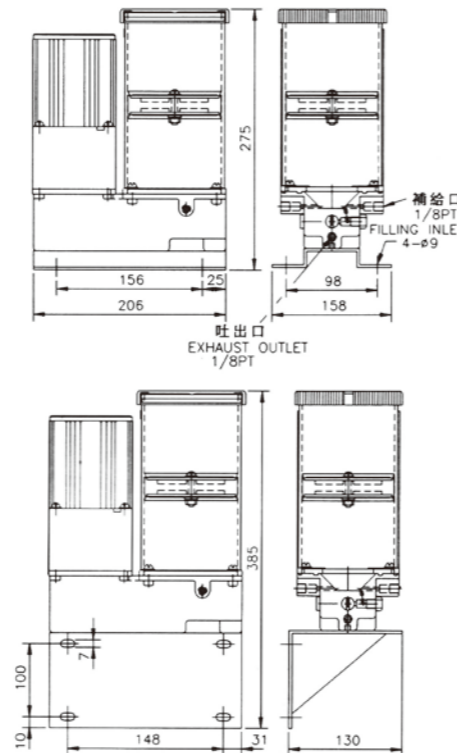
MSK-6-T2P



MSK-6-T2A



A. 尺寸圖 DIMENSION



B. 規格表 SPECIFICATION

型式 Model	流量 Flow	電壓 Voltage	馬達功率 Power	油箱容量 Oil Tank Capacity	最大吐出壓力 Max. Output Pressure
MSK-601	60 cc/min	110 V	40 W	2L, 4L, 6L	80 kg/cm ²
MSK-602		220 V			

D. 使用計時Timer配合檢知器功能 TIMER APPLIED WITH SENSOR

正常 Normal	停止時間 Off-time duration	開始運轉 Start	計次信號 Frequency sign	停止運轉 Stop
異常 Abnormal	停止時間 Off-time duration	開始運轉 Start	30秒後 30 seconds later 無計次信號 No frequency sign	警報 Alarm 停止運轉 Stop

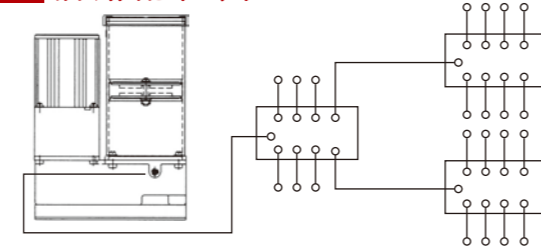
G. 注意事項與保養維護 CAUTIONS & MAINTENANCE SERVICE

1. 本機輸入之電源與本機上標示使用電源相符
 2. 安裝時，請依使用說明內之指示接線，以免損壞控制器。
 3. 請務必接上接地線，以策安全。
 4. 油箱加油時，務必經過加油嘴加油，以免造成油箱內產生真空狀態。
 5. 本機內之控制電路不得浸到油或水，或與其他物體接觸，以免故障。
 6. 油箱內之油量添加時，請依指示表以免溢出。
 7. 本機請避免撞擊。
1. The power to be supplied must be same as specified on machine.
 2. During installation, follow the instructions for wiring to prevent controller from damage.
 3. Earthing is necessary for safety reason..
 4. Always fill oil tank through oil hole to avoid vacuum tank.
 5. Prevent control circuit from contacting oil, water or any other objects for good condition.
 6. Always add oil according to instructions to prevent overflow.
 7. Prevent machine from impact.

C. 規格說明 SPECIFICATION

MSK-6 01-T2 P
 塑膠桶 P: Plastic transparent bucket
 鐵桶 A: Iron bucket
 油箱容量 Oil Tank Capacity 2L, 4L, 6L
 電壓 Voltage 01:110V, 02:220V
 流量 Flow: 60c.c./min

E. 油路配置圖 OIL WAY DISPOSED



F. 功能特長 FUNCTION AND FEATURES

1. 可由PLC或定時TIMER設定供油及休止時間。
 2. 高壓吐出適合高黏度油脂。
 3. 附有過載安全閥，可保護幫浦並降低管路損壞。
1. May or fixed time the TIMER hypothesis and stops the time by PLC for the oil.
 2. The high pressure puts out suits the high viscosity fat.
 3. Attaches the overload safety valve, may protect the pump and reduce the pipeline damage

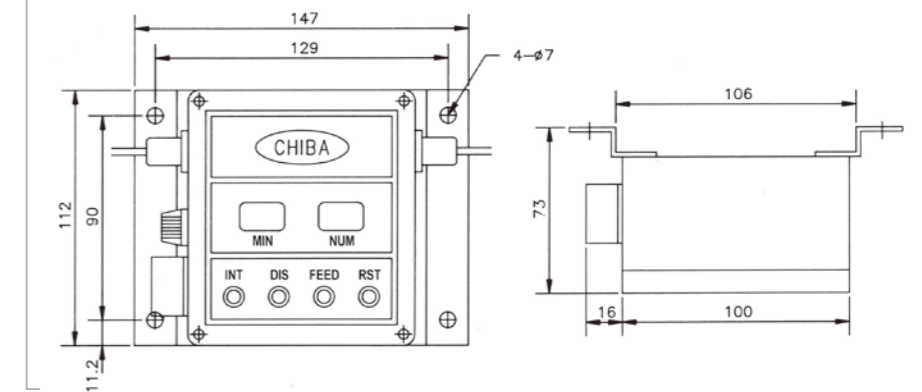
電動系列 Air System 配合之控制盒

YTCB-3S控制盒(計次檢測回饋裝置) Control Box (With counter detector to feedback system)

YTCB-3S



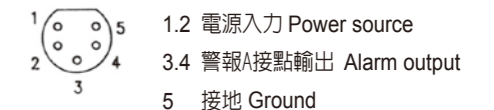
A. 外觀及安裝尺寸 DIMENSION



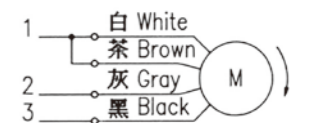
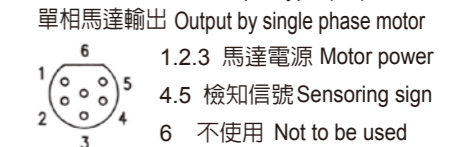
B. 使用說明 USAGE

1. 使用電源: AC1 φ 110V/220V 50/60Hz
 2. 過載保險絲: 3A 安培
 3. 警報輸出最大電流: 1A 安培
 4. 控制碼達出力最大電流: 3A 安培
 5. 用途: 適用於各種機械之潤滑
 6. 使用說明: YTCB-3S型計次控制盒係為MSK型電動幫浦配合SD-S型分配器所設計，能準確控制每一個分配孔的油量及次數分配，保持油路順暢及各項檢測功能，適時傳遞各個潤滑點的供油情況，而讓幫浦達到百分之百的功能，計而維護機械的壽命。
1. Power: AC1 φ 110V/220V 50/60Hz
 2. Overload fuse : 3A amp
 3. Alarm output circuit (max): 1A amp
 4. Motor power (max): 3A amp
 5. Purpose: applicable for various machinery lubrication
 6. Function: YTCB-3S Counter box is for msk grease pump with SD-S distributor used. Can precise control lubricating volume and frequency in each lubrication line, for maintain long machine life.

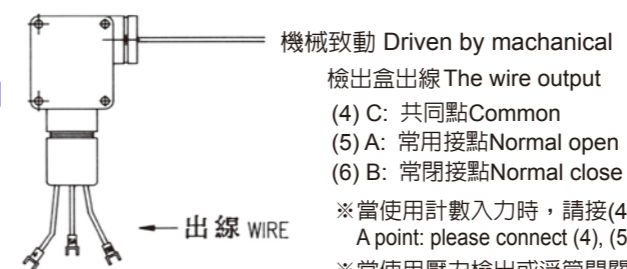
■ 電源入力接頭 Power source adapter (5P)



■ 電源出力 Power output type (6P)



YSA-1檢出盒配線說明
Check box connecting



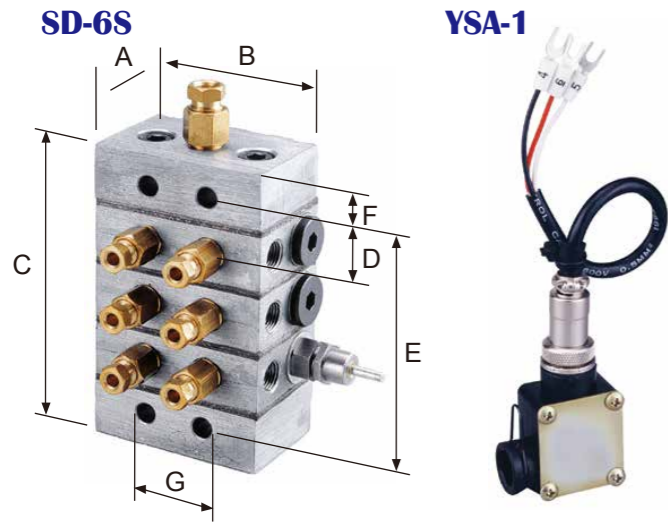
C. 功能鍵操作說明 OPERATION OF TIME CONTROL



- ◎ RST鍵 係依DIS設定之秒數手動注油。 A key for manual oiling according to seconds set by DIS key.
- ◎ FEED鍵 係手動控制注油(鬆手即停)。 A key for manual oiling control (stop upon release).
- ◎ DIS鍵 幫浦每次運轉次數之設定鍵，運轉時間由1-99次為自由設定。 A key for setting motor time of pump running numbers set is available for 1-99 times.
- ◎ INT鍵 每次運轉間隔時間之設定鍵，停止時間由1-99分自由設定。 A key for setting motor interval off-time set is available for 1-99 minutes.

電動系列 Air System 配合之控制盒

SD單一循環式分配器 Single Cycle Oil Distributor



A. 功能特長 FUNCTION AND FEATURES

採單管方式進行的定量循環分配器，吐出量的大小可依規格變換，吐出快的連結數增減自如，而且每個吐出口的狀況即代表全部吐出口的狀況，所以一旦有任何的問題產生并能馬上確定出來。換句話說，只要有任何一個出油口被堵塞住了，則全盤油路都會因此而停滯不通。

The features of single cycle quantitative oil distributor are as the following: Discharged amount could be varied as the specifications. The numbers of port could be increased or decreased as your needs. Be easy to identify what problems there are I.E.the condition of each port represents those of all ports, in other words, if there is any clogged port, the oil flow would be retarded even stopped.

B. 規格表 SPECIFICATION

型式 Model	使用壓力 Operating pressure	適用黃油 Recommended grease	吐出量 Discharged amount (cc/st)	最小吐出連結數 Min. number of ports	最大吐出連結數 Max. number of ports
SD	50kg/cm ²	NLG1 No. 00~1	0.1, 0.14, 0.18, 0.24, 0.3	3	16

型式 Model	A	B	C	D	E	F	G
SD- 2, 3, 4, 5, 6 (S)	35	54	85	16	65	10.5	19
SD- 7, 8 (S)	35	54	102	16	82	10.5	19
SD- 9,10 (S)	35	54	120	16	100	10.5	19
SD-11, 12 (S)	35	54	136	16	116	10.5	19
SD-13, 14 (S)	35	54	153	16	133	10.5	19
SD-15, 16 (S)	35	54	170	16	150	10.5	19

C. 作動圖 STEP

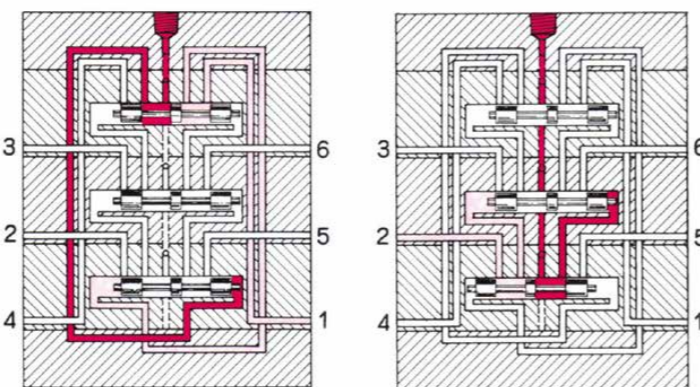
潤滑油自管道輸出的順序是從1-6號

在圖(一)當中，三隻活塞桿原先是在它們的右邊經過油量流入後，第三支活塞桿首先移動到左邊，而潤滑油會在活塞桿的移動下從1號口輸出。

圖(二)，在第三支活塞桿終了後，第二支活塞桿便開始移動，同樣的，這支活塞桿會到達左邊，迫使油量從2號管道輸出。

Fig.1 Three piston rods are at right sides originally before the flow pressured into the oil distributor, and then the third move first to the left side so as to guide oil to flow out of the 1st port.

Fig.2 The 2nd piston rod starts to move after the 3rd piston rod has moved to the left end, simultaneously, it will arrive the end so as to guide the oil the flow out of the 2nd port.



圖(一) Fig.1

圖(二) Fig.2

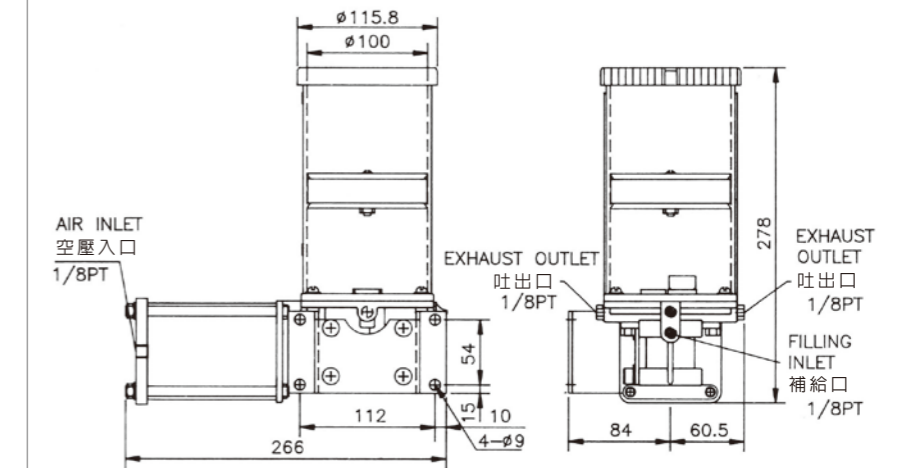
氣動系列 Air System

ASK氣動脫壓式注油機 機油 / 黃油 Air Type Engine Oil / Grease

ASK-16W-T2



A. 外觀及安裝尺寸 DIMENSION



B. 規格說明 SPECIFICATION

ASK - 16 F W - T2 P

- 透明桶 P: Plastic transparent bucket(2L) 鐵桶 A: Iron bucket
- 油桶容量 Tank Capacity 2L, 4L
- 脫壓裝置 With pressure-relief installation
- 浮球裝置 With float switch
- 吐出量 Discharge volume 8c.c./min

C. 規格表 SPECIFICATION

型式 Model	流量 Outlet	電壓 Voltage	風壓壓力 Air Pressure	脫壓閥 Release valve	油箱容量 Oil tank capacity	最大吐出壓力 Max. output pressure	油粘度 Oil viscosity (cst)
ASK-16W	10	24V, 110V, 220V	5-7kg/cm ²	O	2L 4L	40-50kg/cm ²	0#以下

D. 操作說明 OPERATION INSTRUCTIONS

氣動脫壓式油桶操作說明：

此氣動黃油泵是利用風源加壓增壓缸產生出壓，推擠由油桶內充填下來的油脂，一一補進定量分配器中(RH)，蓄壓完成後由末端壓力檢知回饋訊息至PLC，確認完成後關閉風源，由電磁閥做卸壓排氣的動作，增壓缸內活塞會因沒有壓力而退回原位，等待下一次加壓時再重複此一動作。

- 適用油品：#0以下油脂
- 吐出壓力：40-50 KG/CM²

Pneumatic De-compression Pump Operating Instructions:

This pneumatic yellow grease pump adopts air supply pressure booster cylinder to produce pressure, and to push down the filling oil from the fuel tank into quantitative distributor (RH). After the completion of pressure accumulation, the feedback message of end pressure detector will be send to PLC and the wind source will be turned off after the confirmation. Followed by the action of pressure and exhaust release by a solenoid valve, the pressurized cylinder piston will return to the original position due to the release of pressure and wait for next pressurizing action to repeat this actuation.

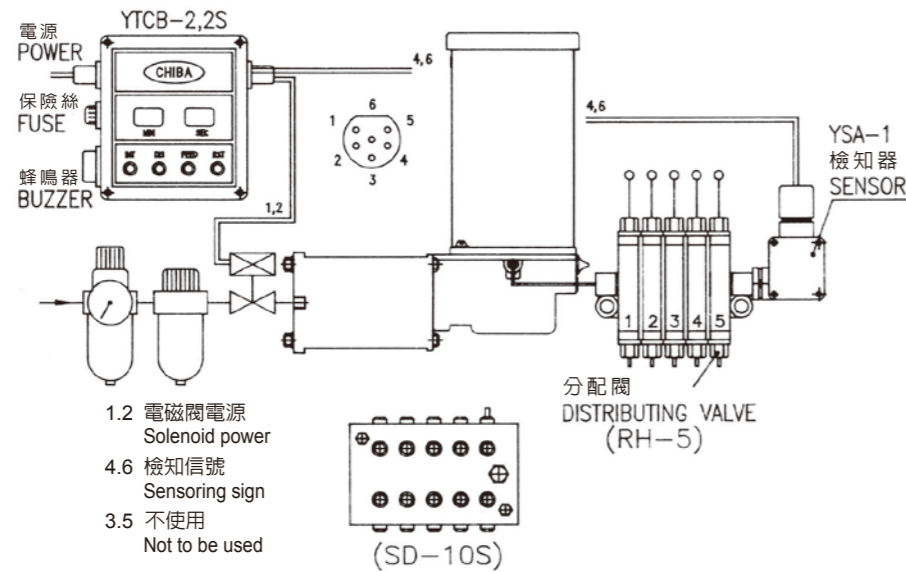
- Applicable oils: grease below grade #0
- Spit-out pressure: 40-50 KG/CM²

D. 功能特長 FUNCTION AND FEATURES

1. 壓力輸出方式為可調式的輸出結構，符合各種機器的需求，可做出相對壓力的匹配調整。
2. 立即卸時需求按鍵裝置，可使機器在剛開始使用時，便立即得到應有隻油量可順暢啟動，減少不必要摩擦。
3. 附有定時控制裝置，能使供油時間及間歇時間可做雙段式調整。
4. 配有油壓檢知裝置，可偵測反應下列漏失：
 - ★(一) 管路破裂：測知管內壓力不足。
 - ★(二) 風壓不足：測知風壓壓力不足。
 - ★(三) 油壓不足：測知零件汰舊，輸出功率不良等致使壓力不足的情況。
 - ★(四) 油桶無油：測知油料不足的情況。
5. 附有蜂鳴器裝置，得適時反應回報。

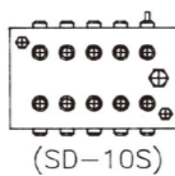
氣動系列 Air System

ASK氣動脫壓式注油機 機油 / 黃油 Air Type Engine Oil / Grease



- 1.2 電磁閥電源
Solenoid power
- 4.6 檢知信號
Sensing sign
- 3.5 不使用
Not to be used

分配閥
DISTRIBUTING VALVE
(RH-5)

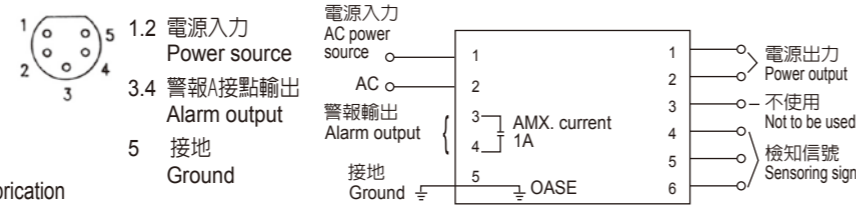


A. 使用說明 INSTRUCTION

1. 使用電源: AC1 ϕ 110V/220V 50/60HZ
2. 過載保險絲: 3A 安培
3. 用途: 適用於各種機械之潤滑

1. Power: AC1 ϕ 110V/220V 50/60Hz
2. Overload fuse : 3A
3. Purpose: applicable for various machinery lubrication

■ 有時間控制器 (五插) 電源接線圖 Layout of the power with timer controller (Five pins)



B. 使用計時Timer配合檢知器功能 TIMER APPLIED WITH SENSOR

此檢知系統須配合容積式分配器RH型 Only use this sensor system together with RH type distributor

正常 Normal	停止時間 Off-time duration	送風 Air output	壓力回饋 Pressure feedback	停止送風 Stop
異常 Abnormal	停止時間 Off-time duration	送風 Air output	60秒後 60 seconds later	警報 Alarm
			無壓力回饋 No pressure feedback	(停止送風) Stop

C. 注意事項與保養維護 CAUTIONS & MAINTENANCE SERVICE

1. 本機輸入之電源需與本機上標示之使用電源相符。
2. 安裝時, 請一使用說明內之指示接線, 以免損壞控制器。
3. 請務必接上接地線, 以策安全。
4. 油箱加油時, 務必經過加油嘴加油, 以免造成油箱內產生真空狀態。
5. 本機內之控制電路不得浸到油或水, 或與其他物體接觸, 以免故障。
6. 油箱內之油量添加時, 請依指示表, 以免溢出。
7. 本機請避免撞擊。

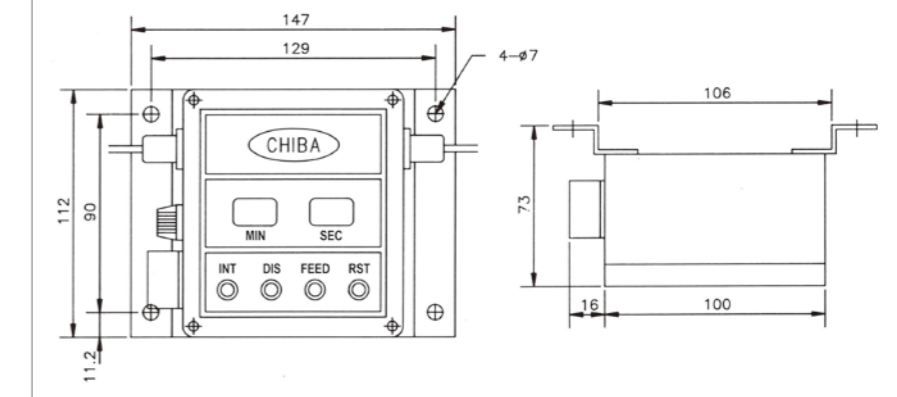
1. The power source input into the machine must comply with the specification and power required shown on the machine.
2. During installation, follow the instructions for wiring to prevent controller from damage.
3. Earthing is necessary for saffy reason.
4. Always fill oil tank through oil hole to avoid vacuum tank.
5. Prevent control circuit from contacting oil, water or any other objects for good condition.
6. Always add oil according to instructions to prevent overflow.
7. Prevent machine from impact.

氣動系列 Air System 配合之控制盒

YTCB-2, 2S
(適用ASK-16W機型)



A. 外觀及安裝尺寸 DIMENSION



B. 使用說明 INSTRUCTION

1. 使用電源: AC1 ϕ 110V/220V 50/60HZ
2. 過載保險絲: 3A 安培
3. 警報輸出最大電流: 1A 安培
4. 控制碼達出力最大電流: 3A 安培
5. 用途: 適用於各種機械之潤滑

1. Power: AC1 ϕ 110V/220V 50/60Hz
2. Overload fuse : 3A
3. Alarm output circuit (max): 1A
4. Motor power (max): 3A
5. Purpose: applicable for various machinery lubrication

■ 電源入力接頭 Power source adapter (5P)

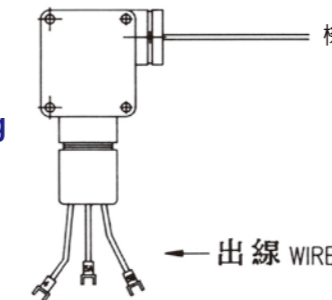


- 1.2 電源入力
Power source
- 3.4 警報A接點輸出
Alarm output
- 5 接地
Ground

■ 電源出力 Power output type (6P)

- 1.2 電磁閥電源
Solenoid power
- 3 不使用
Not to be used
- 4.5 檢知信號 A接點
Sensing sign (A)point
- 4.6 檢知信號 B接點
Sensing sign (B)point

YSA-1檢出盒配線說明
Check box connecting



機械致動 Driven by machanical

檢出盒出線 The wire output

- (4) C: 共同點 Common
- (5) A: 常用接點 Normal open
- (6) B: 常閉接點 Normal close

- ※ 當使用計數入力時, 請接 (4), (5) 兩條線 (A接點)
A point: please connect (4), (5) lines when use input counter
- ※ 當使用壓力檢出或浮筒開關時, 請接 (4), (6) 兩條線 (B接點)
B point: please connect (4), (6) lines when use the pressure limiter or oil level switch

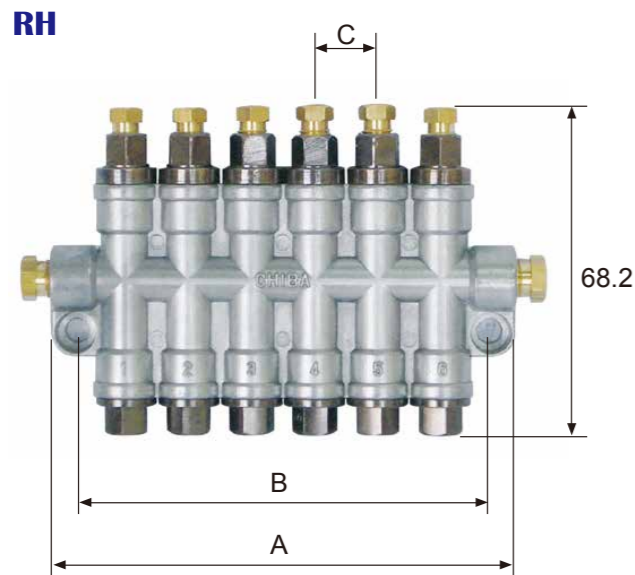
C. 功能鍵操作說明 OPERATION OF TIME CONTROL



- ◎ RST 鍵 係依DIS設定之秒數手動注油。 A key for manual oiling according to seconds set by DIS key.
- ◎ FEED 鍵 係手動控制注油 (鬆手即停)。 A key for manual oiling control (stop upon release).
- ◎ DIS 鍵 幫浦每次運轉時間之設定鍵, 運轉時間由1-99秒自由設定。 A key for setting motor time of pump off-time set is available for 1-99 seconds.
- ◎ INT 鍵 每次運轉間隔時間之設定鍵, 停止時間由1-99分自由設定。 A key for setting motor interval off-time set is available for 1-99 minutes.

氣動系列 Air System 配合之分配器

RH定量黃油容積式分配器 Quantitative Oil Distributor



A. 規格說明 SPECIFICATION

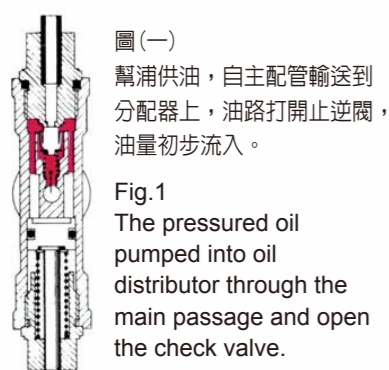
RH - 1 (0.3 cc)

吐出量
Discharge volume: 0.1c.c ~ 0.5cc
吐出口數
Vomiting number: 1~7

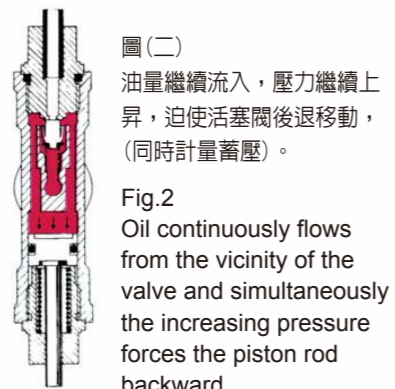
B. 規格表 SPECIFICATION

型式 Model	吐出口數 Vomiting number	吐出量 Vomiting number	最低作動壓力 Minimum performance pressure	尺寸 Size mm		
				A	B	C
RH	1	0.1, 0.2, 0.3, 0.4, 0.5	35 kg/cm ²	35	24	15
	2			50	39	15
	3			65	54	15
	4			80	69	15
	5			95	84	15
	6			110	99	15
	7			111~118	130	15

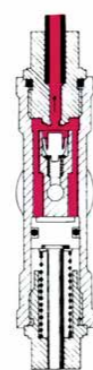
C. 作動圖 STEP 1~3



圖(一)
幫浦供油，自主配管輸送到分配器上，油路打開止逆閥，油量初步流入。
Fig.1
The pressured oil pumped into oil distributor through the main passage and open the check valve.



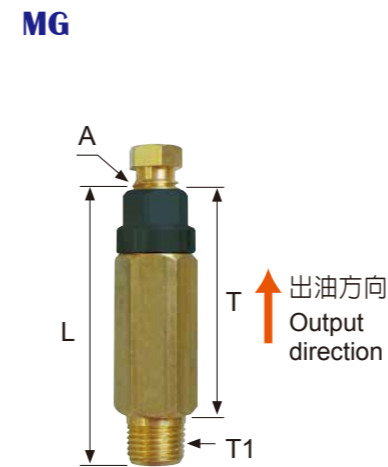
圖(二)
油量繼續流入，壓力繼續上昇，迫使活塞閥後退移動，(同時計量蓄壓)。
Fig.2
Oil continuously flows from the vicinity of the valve and simultaneously the increasing pressure forces the piston rod backward.



圖(三)
幫浦暫停，幫浦內的脫壓機構促使管內的壓力下降，蓄壓的油路便自內回流壓縮，流路的方向恰使止逆閥開閉堵住回流口，蓄壓閥的流量便自出油口吐出。
Fig.3
When the pump is stopped, pressure in the main pipe is released due to the function of the relief valve, and the check valve is urged to close the return passage and open the port. Consequently, the accumulated-pressure oil is jetted through the port.

氣動系列 Air System 配合之分配器

黃油定量閥 Grease-Valve



A. 規格說明 SPECIFICATION

MG - 05

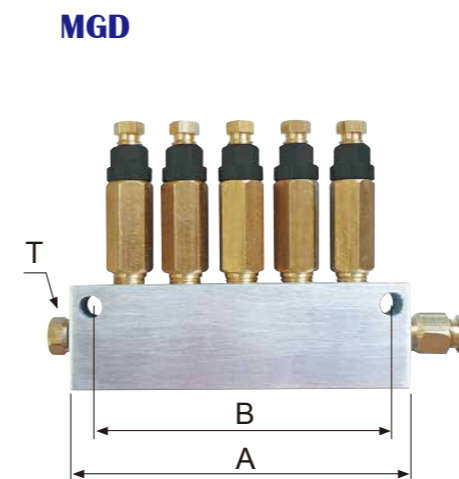
吐出量
Discharge volume: 0.05c.c ~ 0.25cc

B. SPECIFICATION

型式 Model	吐出量 Discharged amount	T (m/m)	L (m/m)	A	T1	記號
MG-05	0.05cc	45	54	M8*1.0	PT1/8	05
MG-10	0.10cc	45	54	M8*1.0	PT1/8	10
MG-15	0.15cc	45	54	M8*1.0	PT1/8	15
MG-20	0.20cc	45	54	M8*1.0	PT1/8	20
MG-25	0.25cc	45	54	M8*1.0	PT1/8	25

- 作動壓力：2.5 MPa
- 回復壓力：1.4 MPa

黃油定量容積式分配器 Grease Positive Displacement Injector System Distributor



A. 規格說明 SPECIFICATION

MGD - 2-05

吐出量
Discharge volume: 0.05c.c ~ 0.25cc
吐出口數
Vomiting number: 2~10

B. 規格表 SPECIFICATION

型式 Model	吐出口數 Number of port	A (m/m)	B (m/m)	T	吐出量 Discharged amount
MGD-2	2	48	36	M10*1.0	0.05 0.10 0.15 0.20 0.25
MGD-3	3	64	52	M10*1.0	
MGD-4	4	80	68	M10*1.0	
MGD-5	5	96	84	M10*1.0	
MGD-6	6	112	100	M10*1.0	
MGD-7	7	128	116	M10*1.0	
MGD-8	8	144	132	M10*1.0	
MGD-10	10	176	164	M10*1.0	

YEM-25型電磁式幫浦 Solenoid Pump

YEM-25

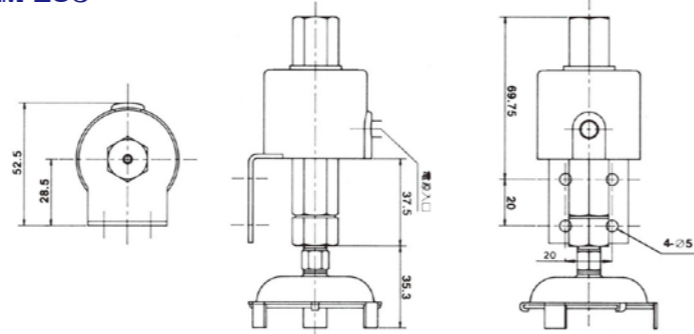


YEM-25-T2P

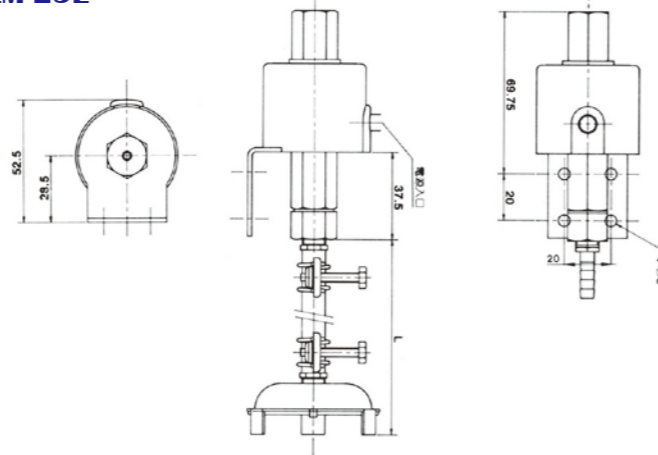


A. 外觀及安裝尺寸 DIMENSION

YEM-25S



YEM-25L



B. 規格表 SPECIFICATION

型式 Model	輸出功率 Output power	電源 Power	吐出量 Outlet volume	吐出壓力 Output pressure	出油口孔徑 Output bore	吸力 Suction	油箱容量 Oil tank capacity
YEM-25S	25W	110/220V	0.1 L/min	1 kg/cm ²	ø4 or ø6	1-1.5 meter	X
YEM-25L							2L
YEM-25-T2P							2L

C. 功能特長 FUNCTION AND FEATURES

- 節省電力的損耗。
- 體積小不佔空間。
- 控制機動性高，可快速索引調節控制流量。
- 可作間歇或連續使用。

- Saves the electric power consuming.
- The volume is small does not occupy the space.
- The mobility is high, but fast index, regulating control current capacity.
- May make the intermittence or the long-term usage.

D. 用途 APPLICATION

本產品使用於各類小型工作母機(車床、銑床、磨床、鉗床...)等加工機械，作為一潤滑循環系統，其效果更為顯著。

The product can be used as cyclic lubrication system for all kinds of machines such as , lathe, milling machine , grinding machine, drilling machine and other processing machine.

MS 型循環幫浦 Pressure Release Rated Volume

MS-3W



MS-12W

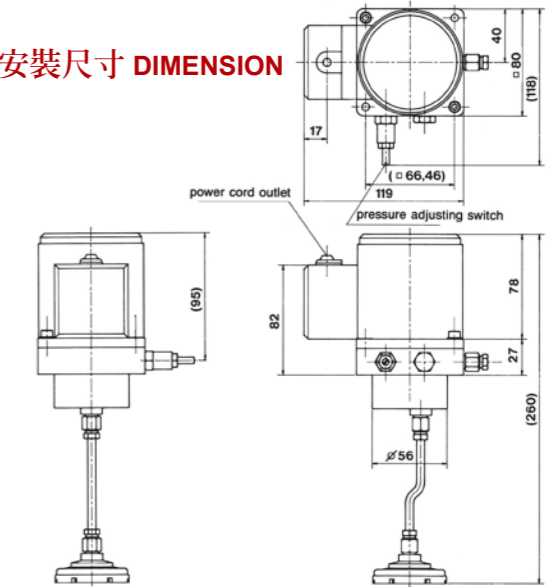


C. 功能特長 FUNCTION AND FEATURES

- 馬達直接傳動齒輪幫浦，流量穩定，外觀輕巧、美觀、實用。
- 可作間歇或連續運轉潤滑冷卻用。
- 幫浦可作橫、立式兩用，吸入油管長短可依須要配合。
- 附有壓力及流量調節鈕及脫壓裝置。

- Motor direct drive gear pump, current capacity stable, the outward appearance dexterous, artistic, is practical.
- May make intermittent or continuous working lubrication cooling uses.
- The pump may make, the vertical dual purpose horizontally, the inspiration drill tubing length may depend on must have to coordinate.
- Attaches the pressure and flow control Niu and escapes presses the installment.

A. 外觀及安裝尺寸 DIMENSION



B. 規格表 SPECIFICATION

型式 Model	吐出量 Discharged capacity	吐出壓力 Discharged pressure	使用粘度範圍 Oil Viscosity (cst)	馬達樣式 Motor type
MS-12W	1 / 1.2L	1-15 kg/cm ² 可調 adjustable	20~2000	110V, 220V, 220V 3 phase
MS-5W	0.5L			
MS-3W	0.3L			

ME型循環幫浦 Pressure Release Rated Volume

ME-12W

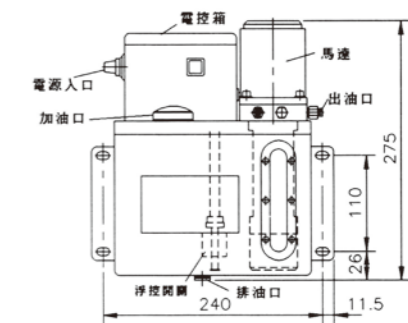


A. 規格說明 SPECIFICATION

ME - 1201W - T4A

- 鐵桶 Iron bucket
- 油桶容量 Tank Capacity
4:4L, 6:6L, 8:8L, 10:10L, 20:20L
- 電源電壓 Power voltage 01:110V, 02:220V

C. 外觀及安裝尺寸 DIMENSION



C. 功能特長 FUNCTION AND FEATURES

- 壓力輸出方式為可調整式的輸出結構，符合各種機器的需求，可做出相對壓力的匹配調整。
- 附油位裝置，測知儲油箱內供油的存量，適時反應回報連接應變動作。
- 立即鈕即時需求按鍵裝置，可使機器在開始啟動時，便立即得到應有的油量順暢啟動，減少不必要的摩擦。
- 深入底部吸油應用巴斯卡(Pascal)原理，使得輸出功率大為提高，並清除油管中空氣間隔的缺失。

- Pressure output is adjustable which can meet various machines' needs and make a matching adjustment to relative pressure.
- The oil level device can detect oil quantity in the oil tank and timely make a response to connect the adjustment actions.
- The instant button is a push-push for instant demand which can instantly supply machine with suitable oil quantity to let machine start smoothly to reduce frictions while machine just starts.
- Can absorb oil from the bottom by application of Pascal principle to greatly increase the efficiency of oil feeding and avoid the faulty of air interval in oil pipe.
- ME-1W, ME-2W, ME-5W, ME-8W can be input into computer to do intermittent or continuous action.

B. 規格表 SPECIFICATION

型式 Model	吐出量 Discharged capacity	吐出壓力 Discharged pressure	使用粘度範圍 Oil Viscosity (cst)	儲油箱容量 Oil Capacity
ME-12W	1L / 1.2L	1-15 kg/cm ² 可調 adjustable	20~2000	4L, 6L, 8L, 10L, 20L
ME-5W	0.5L			
ME-3W	0.3L			

給油幫浦 Oil Pump

單位Unit: mm

單轉向式 Change direction singly



可加裝VB型調壓閥

型式 Model	理論吐出量			最高壓力 Max. pressure kgf/cm ²	最高回轉數 Max. revolution rpm	重量 Weight kg
	c.c./rev	1500rpm	1800rpm			
TOP-11A	1.5	2.2	2.7	5.0	2000	0.55
TOP-12A	2.5	3.7	4.5	5.0	1800	0.6
TOP-13A	4.5	6.7	7.5	5.0	1800	0.6

可逆轉式 Reversible



型式 Model	理論吐出量			最高壓力 kgf/cm ²	最高回轉數 rpm	重量 Weight kg
	c.c./rev	1500rpm	1800rpm			
IRA-1FS	1.16	1.74	2.08	5.0	2000	1.0
IRA-2FS	1.80	2.70	3.24	5.0	2000	1.1
IRA-3FS	2.50	3.75	4.50	5.0	2000	1.2

調壓閥 Top Adjusting Valve



型式 Model	壓力範圍 Pressure Range
VB	0~5kg/cm ²

NOP 型直結幫浦 Tri-way Pump

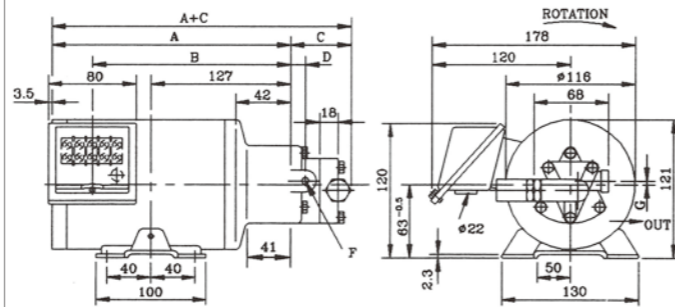
NOP



B. SPECIFICATION

型式 Model	吐出量 Discharged capacity		吐出壓力 Discharged pressure	馬達出力 Motor	口徑 Caliber
	50Hz	60Hz			
NOP-11AVB	2.1	2.5	3-10 kg/cm ² 可調 adjustable	1/4 HP	1/8"
NOP-12AVB	3.5	4.3			1/4"
NOP-13AVB	6.4	7.7			3/8"

A. 外觀及安裝尺寸 DIMENSION



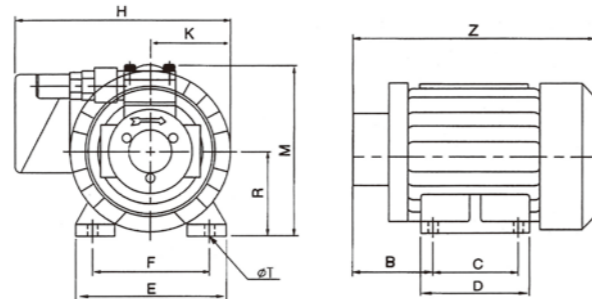
NOP-15A



B. 規格表 SPECIFICATION

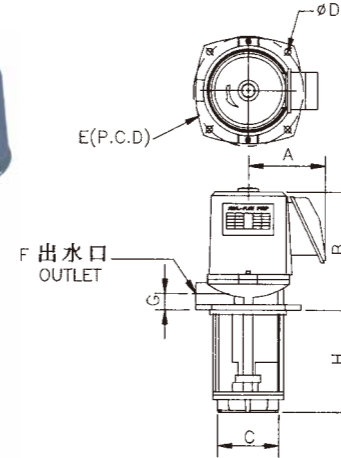
型式 Model	吐出量 Discharged capacity			最高壓力 Max. pressure	最高迴轉數 Max RPM	口徑 Caliber
	cc/rec	1500rpm/mm	1800rpm/mm			
NOP-15A	15	22.5	27	25 kg/cm ²	2000	1"
NOP-20A	20	30	36			
NOP-30A	30	45	54			
NOP-40A	40	60	72			

A. 外觀及安裝尺寸 DIMENSION



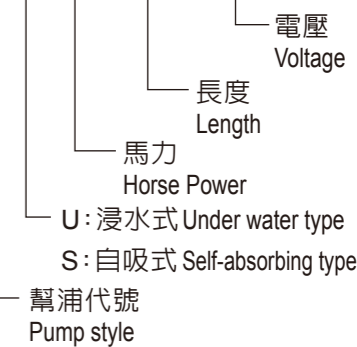
馬達型式 Motor Model	B	C	D	E	F	H	K	M	R	T	Z
1HP	73	100	121	156	125	225	86	172	80	10	252
2HP	75	125	157	175	140	248	100	188	90	12	284
3HP	82	125	157	176	140	248	100	188	90	12	298

YC-U 浸水式幫浦 Under Water Collant Pump



A. 規格說明 SPECIFICATION

YC-U-18-180-110



B. 規格表 SPECIFICATION

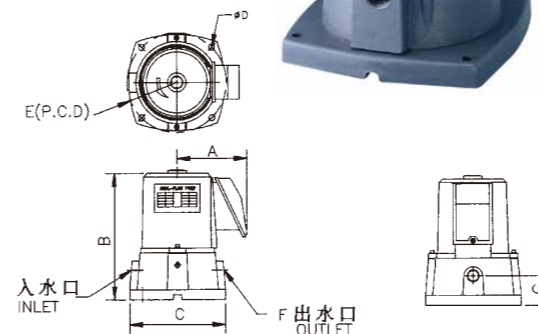
型式 Model	馬力 HP	A	B	C	D	E	F	G	H	I
YC-U-18	1/8	110	150	90	7	128	PT 3/8"	18	100	130
YC-U-16	1/6	110	150	100	7	128	PT 1/2"	18	-	150
YC-U-14	1/4	125	180	120	7	158	PT 1/2"	24	180	200
YC-U-12	1/2	135	225	135	9	170	PT 3/4"	28	175	240
YC-U-34	3/4	135	225	150	9	185	PT 1"	28	-	240
YC-U-10	1HP	135	225	150	9	185	PT 1"	28	-	240

型式 Model	出水口螺紋 Outlet thread	工作位差 Working difference	2米出水孔量/PM 2m outlet volume
YC-U-浸水式	1/8HP	PT 1/2"	5.3
	1/6HP	PT 1/2"	8.5
YC-U-SELF-ABSORBIN G TYPE	1/4HP	PT 1/2"	10.5
	1/2HP	PT 3/4"	15
	3/4HP	PT 1"	18
	1HP	PT 1"	20

C. 功能特長 FUNCTION AND FEATURES

1. 浸水式：本邦浦產品精良，合理的設計，優良的性能。
 2. 自吸式：本邦浦係用同軸轉動軸封，防水效果佳，故障少。
 3. 整體各部，材料經防鏽處理，經久耐用，電機特性採用CNC檢驗方法，經五次嚴格檢驗出廠。本邦浦為方便機械業者選購，構造尺寸皆採用MCS標準化手冊製造，使用本邦浦更能突顯機械特性。
1. Water Dipping Type : This pump is high quality , resonable design , and excellent performance.
 2. Self-Absorbing Type : This pump is run by the same shaft seal with excellent water-proof , low rate of malfunction.
 3. Every part of the pump is treated under anti-rust treatment for durability . Its electrical specification is inspected with CNS testing method and strict control will be done before leaving the factory . In order to be convenient for the machinery buyers , the size of this pump is manufactured according to MCS standard . So , use of this pump it will make your machine remarkable on the performance.

YC-S 自吸式幫浦 Self-Absorbing Collant Pump



A. SPECIFICATION

型式 Model	馬力 HP	A	B	C	D	E	F	G
YC-S-18	1/8	110	180	140	7	140	PT 3/8"	45
YC-S-16	1/6	110	180	140	7	140	PT 1/2"	45
YC-S-14	1/4	125	240	185	7	185	PT 1/2"	65
YC-S-12	1/2	135	280	195	9	215	PT 3/4"	85
YC-S-34	3/4	135	300	200	9	220	PT 1"	85
YC-S-10	1HP	135	300	200	9	220	PT 1"	85

型式 Model	出水口螺紋 Outlet thread	工作位差 Working difference	2米出水孔量/PM 2m outlet volume
YC-S-自吸式	1/8HP	PT 3/8"	4.5
	1/6HP	PT 1/2"	8
YC-S-SELF-ABSORBIN G TYPE	1/4HP	PT 1/2"	11.5
	1/2HP	PT 3/4"	15
	3/4HP	PT 1"	18
	1HP	PT 1"	20

AMP油氣混合噴霧式潤滑冷卻切削幫浦 Oil Mist Lubricating Pump

AMP-3F

無時間控制
Without time controller

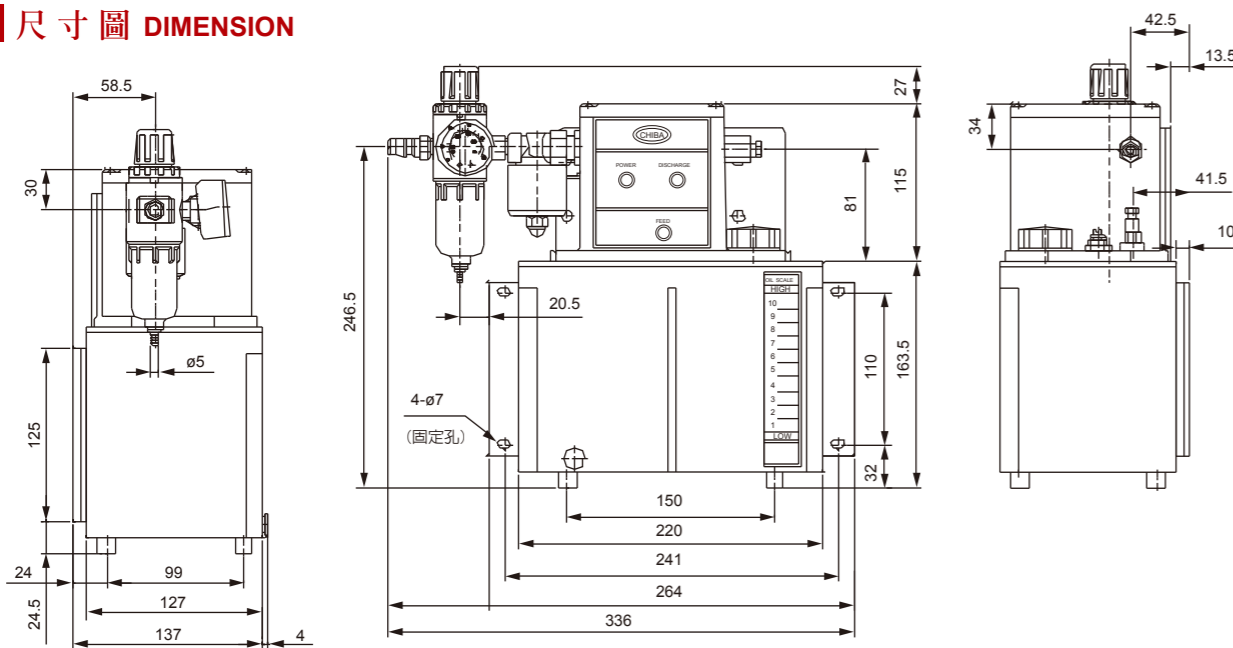


AMP-3CF

有時間控制
With time controller



A. 尺寸圖 DIMENSION



B. 規格說明 SPECIFICATION

AMP - 3 01 C F - T 4 P

- 透明桶 P: Plastic transparent bucket, 鋁桶 A: Aluminum bucket
- 油桶容量 Tank Capacity 4:4L
- 附浮動開關 With float switch
- 時間控制 With timer controller
- 電源電壓 Power voltage 01:110V, 02:220V
- 每分鐘吐出量 Discharge volume 300c.c./min

C. 規格表 SPECIFICATION

型式 Model	流量 Outlet	電壓 Voltage	浮動開關 Float switch	脫壓裝置 Pressure release unit	使用風壓 Pressure applied	休止時間 Release time	運轉時間 Running time
AMP-301F	0.3 / 0.36 L / min	110 V	O	X	3-7 kg/cm ²	PLC 控制	PLC 控制
AMP-302F		220 V	O	X			
AMP-301CF		110 V	O	X		1-99 min.	1-99 sec.
AMP-302CF		220 V	O	X			

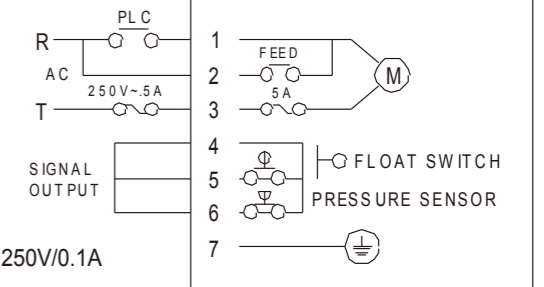
AMP油氣混合噴霧式潤滑冷卻切削幫浦 Oil Mist Lubricating Pump

D. 配電控制說明 DIRECTION OF POWER DISTRIBUTION CONTROL



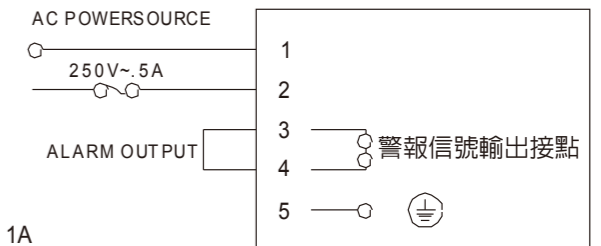
AMP-3F 電源接線圖

- 1.3 電源接點
- 2.3 手動注油接點
- 4.5 浮動開關接點AorB, 最大電流250V/0.1A
- 4.6 壓力檢知接點
- 7 接地



AMP-3CF 電源接線圖

- 1.2 電源接點
- 3.4 異常狀態下警報輸出接點, 最大電流1A
- 5 接地

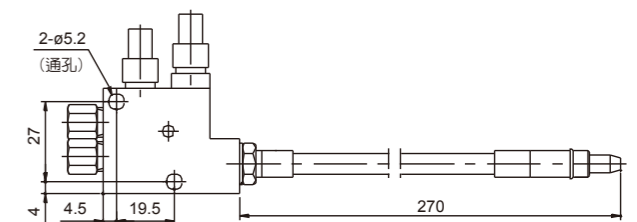


有時間控制型面板操作說明 Operation Direction for Model with time controller

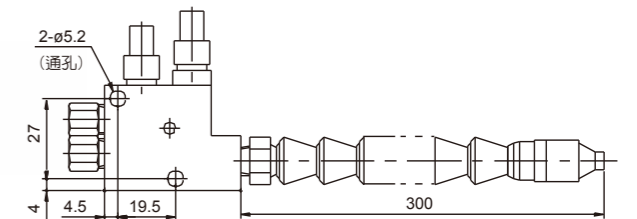
- RST鍵 — 係依DIS設定之秒數手動注油。 RST Button — DIS preset by second for manual oil filling.
- FEED鍵 — 係手動控制注油(鬆手即停)。 FEED Button — Manual control oil filling (Stop when hand is released.)
- DIS鍵 — 作動時間設定鍵, 1-99秒自由設定。 DIS Button — Running time touch button, 1-99 seconds free setting.
- INT鍵 — 作動間歇時間觸控鍵, 1-99分自由設定。 INT Button — Interval time touch button, 1-99 minutes free setting.

E. 配件 ACCESSORIES

LMV-2-270L 金屬軟管噴槍



LMV-3-300L 塑膠軟管噴槍



規格說明 SPECIFICATION

LMV- 2 - 300L

- 管長度 Length (mm) 200L, 300L
- 1: 銅管Brass 2: 金屬管Metal 3: 塑膠管Plastic

AMLS精密微量潤滑冷卻切削泵 Micro Lubricating & Cooling Oil-mist System

AMLS-2



A. 規格說明 SPECIFICATION

AMLS - 2 02 - T1P

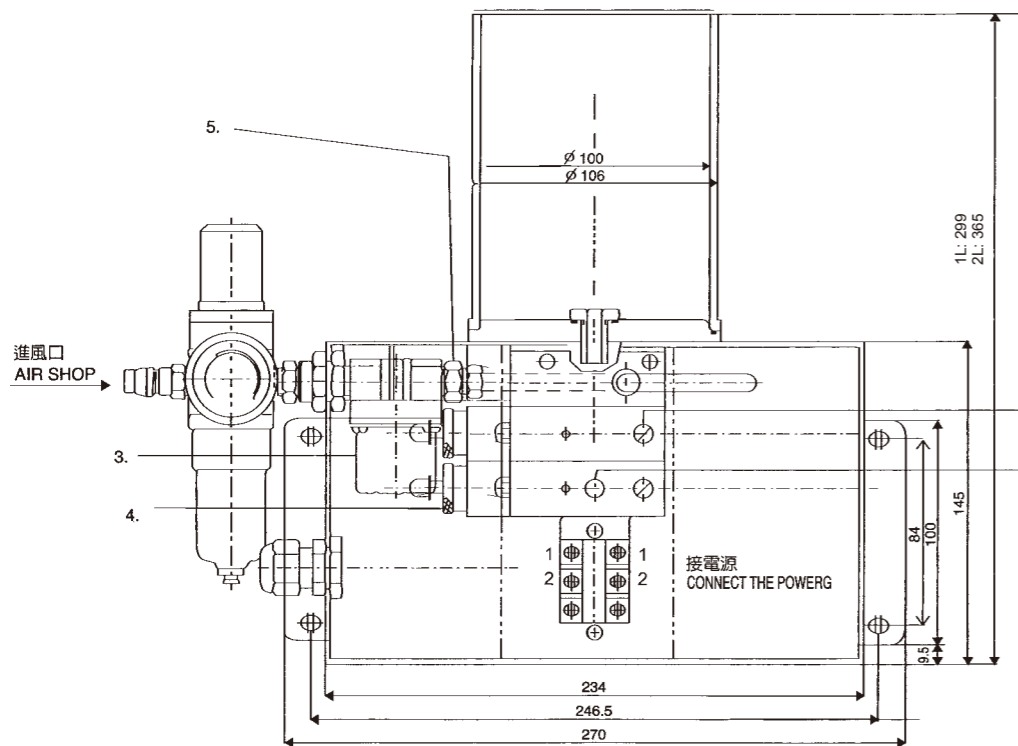
- 油箱 Oil tank
1: 1L, plastic tank, 2: 2L
- 電壓 Voltage
01:110V, 02:220V, 24: DC24
- 噴管數
1, 2, 3

B. 油管規格 SPECIFICATION

SPT - 100L

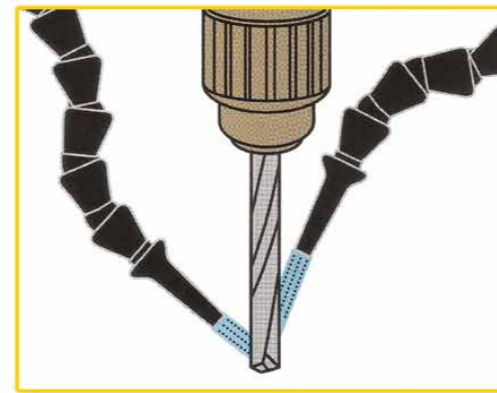
- 長度 Length(mm)
300 / 200 / 100
- 塑膠 SPT: Plastic
- 鐵 SIT: Iron
- 銅 SCT: Copper
- 鋁 SAT: Alumi

C. 尺寸圖 DIMENSION



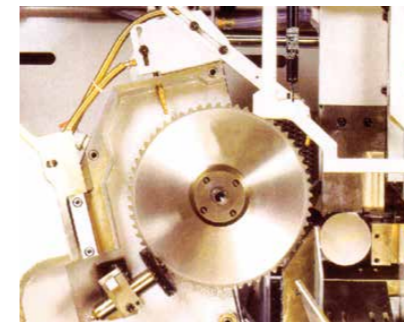
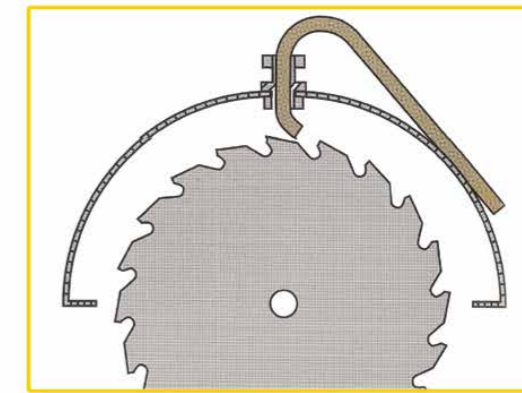
1. 空壓計量調整螺絲
Knurled air metering screw
2. 排氣孔螺絲
Drain Plug
3. 電磁閥
Air pilot valve location
4. 油量調整鈕
Brass adjustment knob
5. 脈波產生器調整處
Pulse generator adjustment

AMLS精密微量潤滑冷卻切削泵 Micro Lubricating & Cooling Oil-mist System



Nozzle positioning for Drilling / Tapping

Lubricate the drilling tip and down into the flutes.



適用：鋸床、車床、銑床、鑽床、
專用機、加工中心機、雕刻機

Use to lathe sawing machine,
Milling machine, Drilling machine,
Carving machine, Machine centre.



推薦油品：生化合成植物性切削液
Bescut 173

Recommend: Biochemical synthetic
plant cutting oil Bescut 173

D. 功能特長 FUNCTION AND FEATURES

1. 延長工具壽命。
 2. 提高進刀量。
 3. 加工精度提昇。
 4. 面粗度提昇。
 5. 減少甚至免加工物洗淨工程。
 6. 提昇工廠作業環境。
 7. 降低人體與環境的污染。
 8. 設有液位開關，立即反應異常訊號。
1. Extend machine life.
 2. Increase the knife speed.
 3. Increase the working piece precision.
 4. Working piece surface brighter.
 5. Reduce, even no cleaning of working piece.
 6. Improve the environment of factory.
 7. Reduce the human body bums and environment pollution.
 8. Option with liquid switch which reflect the abnormal signal.

E. 建議噴嘴安裝數 RECOMMENDED NUMBER OF NOZZLES

1. 帶鋸切斷加工 Band saw cutting		2. 銑床加工 Milling machine processing	
刀幅 Saw breadth	噴嘴數 Number of nozzles	進刀方向 Direction of cutter	噴嘴數 Number of nozzles
~40mm	2組 2 sets	1方向 one way	1組 1 sets
40mm以上 over 40mm	3組 3 sets	2方向 two ways	2組 2 sets
		多方向 Several ways	3組 3 sets
3. 鑽孔、攻牙、絞刀加工 Drilling, tapping & reamer processing		4. 圓鋸片加工 Circular saw processing	
切深 Cutting Depth	噴嘴數 Number of nozzles	刀徑 Saw diameter	噴嘴數 Number of nozzles
20mm以下 under 20mm	1組 1 sets	0~250mm	1組 1 sets
20~50mm	2組 2 sets	250~700mm	2組 2 sets
50mm以上 over 50mm	3組 3 sets	700~1400mm	3組 3 sets
		50mm以上 over 50mm	5組 5 sets

油霧回收機 Oil Mist Collector

OMC 6050
1/2HP



OMC 12050
1/2HP



環保淨化 Environmental protection and purification:

葉片旋轉時採用離心力原理，壓力高，噪音低，風量大，可迅速將加工機內的油霧吸出，免於對人體健康的影響。

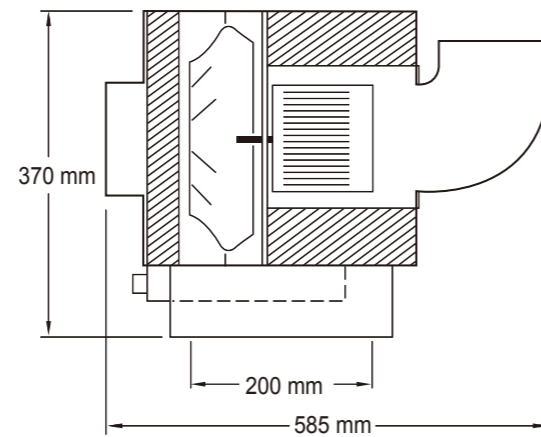
Blade rotation applies the principle of centrifugal force to produce high pressure, low noise and large wind amount. That will quickly suck out the oil mist in the processing machine and be free from the impact on human health.

節能減碳 Carbon reduction:

在設有中央空調的加工生產廠內，在加裝油霧回收機後可避免冷氣外洩，加強冷房效果也降低電源的耗費。對於機台的壽命及效率也大幅提高。

Processing factory equipped with central air conditioning will avoid cold air leakage, enhance the effects of cold room and reduce the power consumption with the installation of oil mist recycling machine as well as extend the machine life and improve the efficiency significantly.

A. 尺寸圖 DIMENSION



B. 產品特性 FEATURES

本產品採用分級淨化模式。首先當油霧被吸入到淨化主機後，先通過第一道過濾器將大顆粒油滴過濾下來。然後小分子的油霧顆粒和油霧氣體進入到第二級的淨化單元，為厚層的空氣濾綿。中小油霧分子在此處即被隔離濾除。經過前兩段，有99%以上的油霧已被分離，另可選購外掛之第三道活性炭濾紙桶，可連同空氣中油氣味一併濾除，提高廠間的空氣品質，大大降低油氣對工作者的健康危害。

This product adopts the classified purification mode. First, when the oil mist is sucked into the purification machine, the large particles of oil-drops will be filtered by passing through the first filter. Then, small molecules of oil mist particles and gas will enter the second filter packed with thick layer air filters. Small and medium-sized oil mist molecules will be filtered in this step. More than 99% oil mist has been separate after the two filtration steps. In addition, an optional third plug-in activated carbon filter drum can remove the petroleum odor in the air in the meantime, improve the air quality of the plants and significantly reduce the health hazards of workers resulted from the oil gas.

C. 適用範圍 SCOPE OF APPLICATION

車床、CNC綜合切削加工機、加工中心機、放電加工機、滾齒機、磨床等具密閉式空間作業之油霧回收處理。

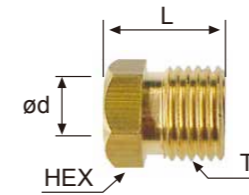
Applications: the oil mist recycling of lathes, CNC cutting machines, machine centers, electrical discharge machines, hobbing machines and grinders with operations in confined spaces.

D. 規格表 SPECIFICATION

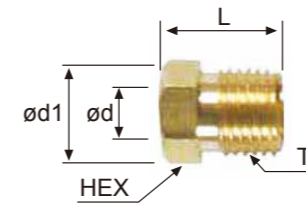
型號 Model	馬力 Motor	安裝尺寸 Dimensions	外觀尺寸 Outward size	入風口徑 Enters caliber	電源 Power	風量 Amount of wind
OMC6050	1/2HP	200 x 230	285 x L585 x H370	5"	220 V	9m ³ /min
OMC12050	1/2HP	200 x 230	330 x L585 x H420	5"	220 V	18m ³ /min

套管帽 Sleeve Unit

單位Unit: mm



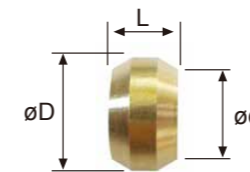
型式 Model	管徑 DIA	ød	L	T	HEX
PA-4	ø4	4.1	12	M8x1.0	8
PA-6	ø6	6.1	12.5	M10x1.0	10
PA-8	ø8	8.2	14	M14x1.5	14
PA-10	ø10	10.2	15	M16x1.5	17
PA-12	ø12	12.2	16	M18x1.5	19



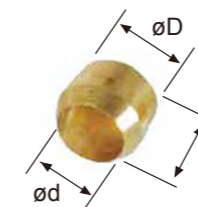
型式 Model	管徑 DIA	ød	ød1	L	T	HEX
PA-4-01	ø4	4.1	5.5	12	M8x1.0	8
PA-6-01	ø6	6.1	7.5	12.5	M10x1.0	10
PA-8-01	ø8	8.1	9.5	14	M12x1.0	14

套管 Sleeve

單位Unit: mm



型式 Model	管徑 DIA	ød	øD	L
PB-4	ø4	4.1	6	4.5
PB-6	ø6	6.1	8	4.5
PB-8	ø8	8.1	10	7
PB-10	ø10	10.1	12	8
PB-12	ø12	12.1	14	9



型式 Model	管徑 DIA	ød	ød1	øD	L
PB-4-01	ø4	4.1	5.4	6	5.5
PB-6-01	ø6	6.1	7.4	8	6
PB-8-01	ø8	8.1	9.4	10	7

快速接頭 Quick Joint



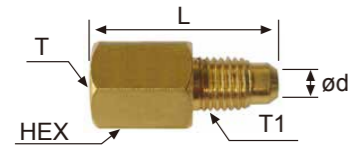
型式 Model	管徑 DIA	ød	L	T1	HEX
APC-401	4	3	23	PT1/8	13
APC-402	4	3	23	PT1/4	13
APC-601	6	5	25	PT1/8	16
APC-602	6	5	25	PT1/4	16
APC-801	8	7	27	PT1/8	18
APC-802	8	7	27	PT1/4	18



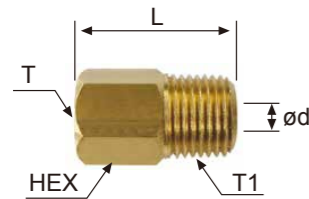
型式 Model	管徑 DIA	ød	T1(外牙)
APL-401	4	3	PT1/8
APL-402	4	3	PT1/4
APL-601	6	5	PT1/8
APL-602	6	5	PT1/4
APL-801	8	7	PT1/8
APL-802	8	7	PT1/4

銅接頭 Connector

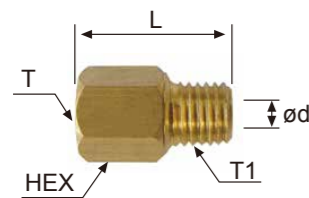
單位Unit: mm



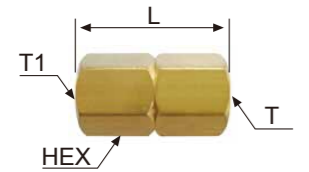
型式 Model	管徑 DIA	ød	L	T	T1	HEX
PD-101	ø4	3	23	PT 1/8	M8x1.0	12
PD-110	ø6	3	23	M10x1.0	M8x1.0	12



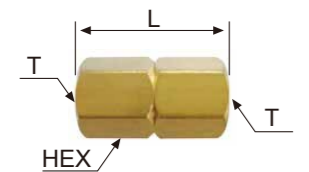
型式 Model	管徑 DIA	ød	L	T	T1	HEX
PD-401	ø4	3	18	M8x1.0	PT 1/8	10
PD-402	ø4	5	18	M8x1.0	PT 1/4	14
PD-601	ø6	4	18	M10x1.0	PT 1/8	12
PD-602	ø6	5	18	M10x1.0	PT 1/4	14
PD-802	8	6	26	M14x1.5	PT 1/4	17
PD-803	8	8	26	M14x1.5	PT 3/8	17
PD-1002	10	7	29	M16x1.5	PT 1/4	19
PD-1003	10	8	29	M16x1.5	PT 3/8	19
PD-1202	12	10	32	M18x1.5	PT 1/4	21
PD-1203	12	10	32	M18x1.5	PT 3/8	21



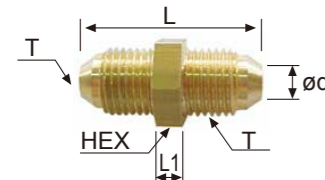
型式 Model	管徑 DIA	ød	L	T	T1	HEX
PD-406	ø4	3	20	M8x1.0	M6x1.0	12
PD-408	ø4	3	20	M8x1.0	M8x1.0	14
PD-410	ø4	3	23	M8x1.0	M10x1.0	14
PD-610	ø6	4	24	M10x1.0	M10x1.0	17
PD-612	ø6	4	24	M10x1.0	M12x1.0	17
PD-812	ø8	6	30	M14x1.5	M12x1.0	19



型式 Model	管徑 DIA	L	T	T1	HEX
PN-4	ø4	23	M8x1.0	PT 1/8	12
PN-6	ø6	23	M10x1.0	PT 1/8	12
PN-8	ø8	23	M14x1.5	PT 1/4	17
PN-10	ø10	23	M16x1.5	PT 1/4	19
PN-12	ø12	23	M18x1.5	PT 3/8	21



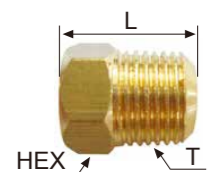
型式 Model	管徑 DIA	L	T	HEX
PM-4	ø4	23	M8x1.0	10
PM-6	ø6	23	M10x1.0	12
PM-8	ø8	33	M14x1.5	17
PM-10	ø10	36	M16x1.5	19
PM-12	ø12	39	M18x1.5	21



型式 Model	管徑 DIA	ød	L	L1	T	HEX
PQ-8	-	3	26	4	M8x1.0	10
PQ-10	-	4	26	4	M10x1.0	12
PQ-14	-	6	29	5	M14x1.5	17
PQ-16	-	8	29	5	M16x1.5	19
PQ-18	-	10	32	6	M18x1.5	21

密封塞頭 Seal Plug

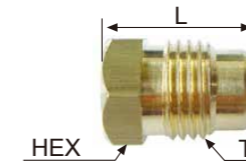
單位Unit: mm



型式 Model	管徑 DIA	L	T	HEX
PG-1	-	13	PT 1/8	10
PG-2	-	15	PT 1/4	14
PG-3	-	21	PT 3/8	17
PG-4	-	25	PT 1/2	21

塞頭 Plug

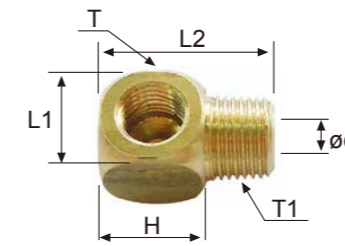
單位Unit: mm



型式 Model	管徑 DIA	L	T	HEX
PG-004	-	14.5	M8x1.0	8
PG-006	-	15	M10x1.0	10
PG-008	-	23	M14x1.5	14
PG-010	-	26	M16x1.5	17

平面直角接頭 Connector

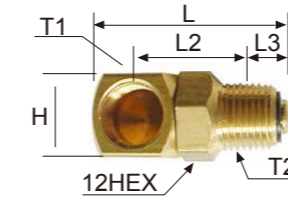
單位Unit: mm



型式 Model	管徑 DIA	ød	L1	L2	T	T1	H
PH1-1	-	2.5	12	20	1/8 PT	PT 1/8	12
PH1-8	-	2	12	20	1/8 PT	M8x1.0	12
PH4-1	ø4	2	12	20	M8x1.0	PT 1/8	12
PH4-2	ø4	2	14	22	M8x1.0	PT 1/4	14
PH4-8	ø4	2	12	20	M8x1.0	M6x1	12
PH4-6	ø4	2	12	20	M8x1.0	M8x1	12
PH6-1	ø6	3	14	22	M10x1.0	PT 1/8	14
PH6-2	ø6	3	14	24	M10x1.0	PT 1/4	14

活動接頭 Connector

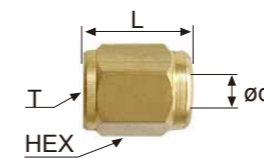
單位Unit: mm



型式 Model	L1	L2	L3	T1	T2	H
SJO101	25	21.5	7	PT1/8	PT1/8	14

螺帽 Nut

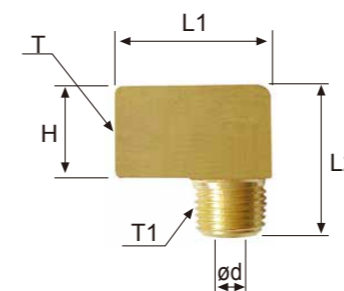
單位Unit: mm



型式 Model	管徑 DIA	ød	L	T	HEX
PAN-4	ø4	4.2	12	M8x1.0	10
PAN-6	ø6	6.2	12.5	M10x1.0	12

直角接頭 Right Angle Connector

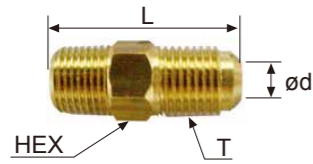
單位Unit: mm



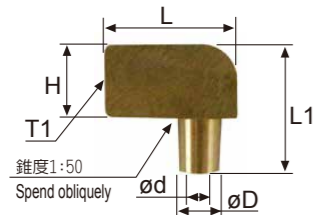
型式 Model	管徑 DIA	ød	L1	L2	T	T1	H
PH-401	4	3	18	18	M8x1.0	PT 1/8	10
PH-402	4	3	18	18	M8x1.0	PT 1/4	14
PH-406	4	2	18	18	M8x1.0	M6x1.0	10
PH-408	4	2	18	18	M8x1.0	M8x1.0	10
PH-410	4	3	18	18	M8x1.0	M10x1.0	10
PH-601	6	4	20	20	M10x1.0	PT 1/8	12
PH-602	6	4	20	20	M10x1.0	PT 1/4	14
PH-802	8	6	27	27	M14x1.5	PT 1/4	17
PH-803	8	6	27	27	M14x1.5	PT 3/8	17
PH-1002	10	8	30	30	M16x1.5	PT 1/4	19
PH-1003	10	8	30	30	M16x1.5	PT 3/8	19
PH-1202	12	10	33	34	M18x1.5	PT 1/4	21
PH-1203	12	10	33	34	M18x1.5	PT 3/8	21

銅接頭 Connector

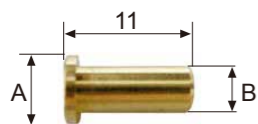
單位Unit: mm



型式 Model	管徑 DIA	ød	L	T	HEX
PQ-8T	-	3	19	M8x1.0	10
PQ-10	-	4	19	M10x1.0	12
PQ-12T	-	6	24	M12x1.0	14
PQ-101	-	6	20	PT1/8	10



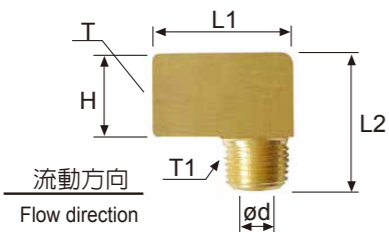
型式 Model	管徑 DIA	ød	øD	L1	L	T1	H
PEF-4	ø4	3	6	18	18	M8x1.0	10
PEF-6	ø6	5	7	24	18.5	M10x1.0	12



型式 Model	A m/m	B m/m
PI-4	3.8	2
PI-6	5.8	4

直角止逆接頭 Right Angle Antireverse Connector

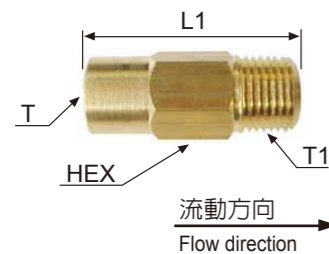
單位Unit: mm



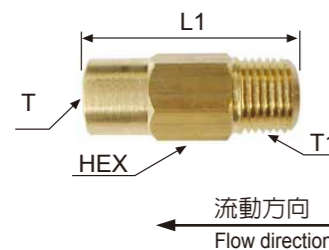
型式 Model	管徑 DIA	L1	L2	T	T1	H
PHV4-1	ø4	18	18	M8x1.0	PT1/8	10
PHV4-2	ø4	18	18	M8x1.0	PT1/4	10
PHV6-1	ø6	20	20	M10x1.0	PT1/8	12
PHV6-2	ø6	20	20	M10x1.0	PT1/4	12

逆止閥 Anti-reverse Valve

單位Unit: mm



型式 Model	管徑 DIA	L1	T	T1	HEX
PV4-1	ø4	23.5	M8x1.0	PT1/8	10
PV4-2	ø4	23.5	M8x1.0	PT1/4	10
PV6-1	ø6	23.5	M10x1.0	PT1/8	12
PV6-2	ø6	23.5	M10x1.0	PT1/4	12



型式 Model	管徑 DIA	L1	T	T1	HEX
PC4-1	ø4	22.5	M8x1.0	PT1/8	10
PC4-2	ø4	22.5	M8x1.0	PT1/4	10
PC6-1	ø6	22.5	M10x1.0	PT1/8	12
PC6-2	ø6	22.5	M10x1.0	PT1/4	12

管類 Pipe

單位Unit: mm



種類 Item	記號 Model	管徑 Pipe dia
銅管 Copper pipe	PC	4, 6, 8, 10, 12
鋁管 Aluminum pipe	PA	4, 6, 8, 10, 12
尼龍管 Nylon pipe	PN	4, 6, 8, 10, 12

膠管 · 龍管保護鋼絲 Nylon Pipe Spring

單位Unit: mm



型式 Model	管徑 Pipe dia	長度 Length
FC-405	4	500
FC-410	4	1000
FC-415	4	1500
FC-605	6	500
FC-610	6	1000
FC-615	6	1500

壓力開關 Pressure Switches

單位Unit: mm



型式 Model	牙規格 Bore type	ON	OFF
YL-2117	3/8 ~ 24	15.5kg/cm ²	10.5kg/cm ²
YL-2118	3/8 ~ 24	20kg/cm ²	15.5kg/cm ²



型式 Model	電流 Electric current	最大流體溫度 Max. fluid temperature	可設定範圍 Adjustable range
YL-105	250VAC	80~120°C	1 ~ 5 bar

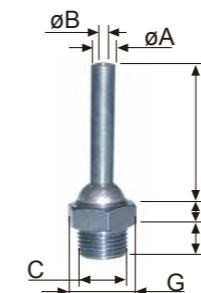
浮球開關 Floating Switch



- ▲輸出接點 Output contact point :10W / SPST
- ▲耐電壓 Overload : 125 VAC
- ▲最大切換電流 Max. output circuit : 0.5A
- ▲最大通電電流 Max. motor power : 1A
- ▲操作壓力 Operation pressure : V61PF: 4kg/cm²
- ▲操作溫度 Temperature : -40~80°C
- ▲外牙 FS-8102: M8 x 1.25
- ▲外牙 FS-6102: M10 x 1.5

萬向噴嘴 Adjustable Nozzle

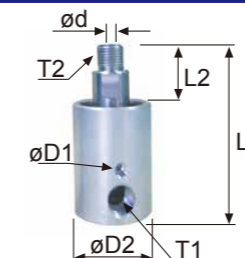
單位Unit: mm



型式 Model	A mm	B mm	C mm	D mm	E mm	F mm	G mm
SP-14-33L	5	3	M14 x P1.0	7	4	33	14
SP-1/4-33L	5	3	1/4 PT	7	4	33	14
SP-3-8-33L	8	5	3/8 PT	10	7	44	21
SP-1-2-33L	10	7	1/2 PT	12	10	53	27

迴轉接頭 Mobile Connector

單位Unit: mm



型式 Model	管 Dia.	ø	ø D1	ø D2	L1	L2	T1	T2
SO102S	-	5.5	8.5	35	88	30	PT1/8	PT1/8
SO103S	-	9	-	44	93	29	PT3/8	PT3/8
SO104S	-	12	-	50	98	30	PT1/2	PT1/2

