### HMGP 3035 & 303M

#### **External Control Fixed Quantity Oil Supply Pump**

외부제어용 정량급유 펌프





#### Model

HMGP - - - 01 - T - - / - - - -Blank: Without Manual S/W M: Attach Manual S/W 110: 110V, 220: 220V Blank: Without Pressure S/W P: Attach Pressure S/W Blank: Without Float S/W F: Attach Float S/W 2: Resin Tank (303M) 4: Resin Tank (303S) Option: Steel Tank 303M: 2Liter Type

303S: 4Liter Type

#### Feature

- 1. 신뢰성이 높은 외부제어식 정량급유용 오일 펌프이다.
- 2. 폭넓은 분야에 활용이 되며 특히 고정밀, 대형 공작기계 정량 급유용 펌프로 적합하다.
- 3. Pump의 주요 구동 연결부를 일체형 다이캐스팅 으로 제작하여 내구성이 우수하다.
- 4. 외부제어식으로 자유로운 펌프제어가 가능하다.
- 5. 유면 저하 감지 기능 및 압력 저하 감지 기능이 내장되어 있다.
- 1. A highly reliable externally controlled fixed quantity oil supply pump.
- 2. It is used across a wide range of fields, and is especially suitable as a fixed quantity oil supply pump for high-precision, large machine tools.
- 3. The pump's main drive connection parts are made of single die casting pieces to ensure excellent durability.
- 4. An external control type that allows free pump
- 5. It has a built-in ullage decrease detector and a pressure decrease detector.

#### Pump Spec.

DUMP OPEO					
PUMP SPEC.					
MODEL NAME		HMGP-30	)3S	HM	IGP-303M
PUMP TYPE		GEAR PUMP			
DISCHARGE PRESSURE		17kg/cm²			
PRESSURE GAUGE		0~35kg/cm²			
USING OIL		32~220(cSt)			
FILTER		80 Mesh			
TANK CAPACITY		4Liter			2Liter
DISCHARGE AMOUNT		150cc/min			
FLOAT S/W		Contact type A contact (NO)			
		ON at Low level			
PRESSURE S/W		Contact type A contact (NO)			
		Operation pressure : $12\pm1$ bar ON			
OIL SUPPLY CONTROL DEVICE		External control			
MOTOR SPEC.					
INPUT		80W			
PHASE		<b>1</b> Ø			
VOLTAGE		110V	20	0V	220V
CURRENT		1.8A/1.25A	1.0	)A	1.35A/0.85A
FREQUENCY		50/60Hz			
PACKING SPEC.					
PACKING SIZE(cm)		36(W) x 18(L) x 31(D)		23(W) x 14(L) x 28(D)	
WEIGHT(kg)	PUMP	4		3.5	
	PACKING	4.5		4	

※ Motor-3200r.p.m 기준

#### **Components**





Line Filter





Gauge



**HMLV** 



Pressure Switch





Bushing, Ring



**HMVS** 





Distributor



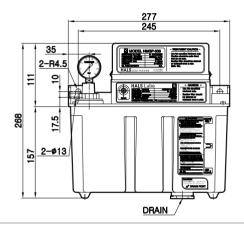
Hose

**HMGP-303M** 

#### **External Figure**

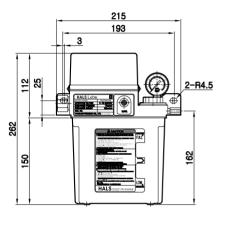
SUCTION PORT

## OUTLET M10X1.0P HALS LUBE



MANUAL S/W

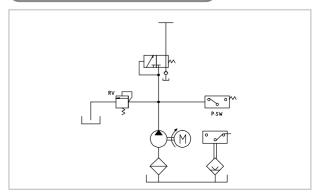
# OUTLET M10X1.0P ANNUAL S/W SUCTION PORT OUTLET M10X1.0P 25.5



#### **Operating Guide**

- 1) 별도의 제어장치가 없고 전원을 연결하고 전기를 공급하면 펌프가 작동 한다. HMGP-303과 동일방법으로 휴지시간과 구동시간을 반복적으로 작동시키면 된다.
- 2) 펌프의 최대구동 시간은 4분이고, 휴지시간은 구동시간의 4배로 설정하여야한다.
  - ※ 정확한 정량밸브 작동을 위해서 시간 준수가 필요하다.
- 3) 시험구동 및 배관내 에어 빼기용으로 Manual Button을 사용할 수 있다.
- 4) Pump는 출고시 17kg/cm²으로 설정되나, 사용유 점도 변화(사용유 점도, 주위온도)에 따라 차이가 있을 수 있다.
- 5) Pressure Switch는 Pump를 구동시켜 일정한 시간내 설정된 압력 도달 여부를 감지하여, 정상 작동 할 경우 접점신호를 기계 제어장치로 보내어 오동작을 확인할 수 있다.
- It does not have a separate control device, and the pump operates automatically once power is connected and electricity is supplied. The pause and operation times can be set in the same way as for HMGP-303.
- 2) Maximum operation time of the pump is 4 minutes, and the pause time needs to be set at 4 times the operation time
- The manual button can be used for test operations and to tale out air from the pipes.
   The pump is set at 17kg/cm² when released from the factory, but this may differ depending on the changes in the viscosities of the oils used (oil viscosity, surrounding temperature).
- 5) The pressure switch can operate the pump and detect whether or not the set pressure has been reached within a given time, and send contact signals to the machine control device during normal operation to check for errors.

#### Hydraulic circuit drawing



#### Wiring Diagram

