#### **GEAR PUMP**

SWG series Gear Pump can be used at max. 24.5 MPa {250kgf/cm²} continually and designed to be operated at low noise and high efficiency.

#### Structure and Characteristics

- 1. Before and after the high-precision gravity aluminum castings are covered, as the central body portion consists of highstrength extruded harsh operating conditions and environments have the durability to withstand.
- 2. Free movement of the gear side and the pressure balance bushings to maintain proper spacing efficiency (98%) and available capacity "DU" bushing as standard to ensure durability and reliability.
- 3. Special sealing technology
- 4. Durable "DU" bushing teflon line

#### Features of oil use

- 1. Oil Temperature : -15°C~80°C
- 2. Viscosity: Allowed Range 12cSt~800cSt

Recomended Range 20cSt~100cSt

Start up conditions 1600cSt

3. Filtration: Pumps and systems for the durability of ISO 16/13 cleanliness of the fluid is required.

Suction side 60 µm

Pressure side  $10\sim25\mu\text{m}$  Please use the filter below

Equipped with adequate liquidity wear as an incompressible fluid, non-oxidizing, non-corrosive lubricant as it must be good enough. Except in special circumstances, typically oil-based fluids are used.





GEAR PUMP — M-3

# **SEWON** Hydraulics

#### **GEAR PUMP**

#### **Pump Suction Pressure**

Allow the suction side of the low absolute pressure is 0.07MPa {0.7kgf/cm²}

Suction flow rate should not exceed 2 ~ 3 m/sec

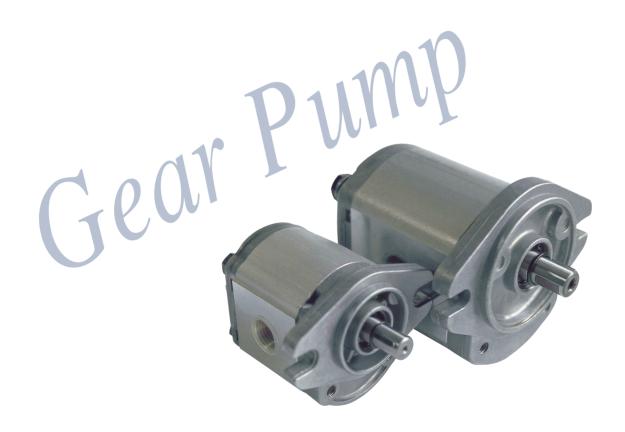
#### Minimum rotation speed

Pump rotation speed of the minimum recommended is as follows

SWG1~2 500rpm SWG3 400rpm

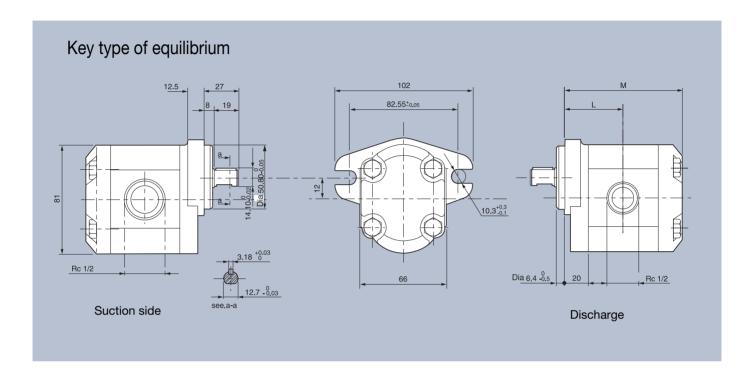
#### Precautions of connecting

Axial thrust load on the shaft and the shaft is not to be affected by the TIR 0.18mm should be within.



## Single Gear Pump

### SWG1



	Direction of rotation		Volume	Discharge	Rated pressure	Max. Press.	Maximum	Specifications	
	O R	O L	cm³/r.	(ℓ /min) 1500r.p.m.	(bar) 1500r.p.m.	(bar) 1500r.p.m.	rotation r.p.m.	L	М
•	SWG1-1.3-R	SWG1-1.3-L	1.3	2.0	250	275	6000	42	82
	SWG1-2-R	SWG1-2-L	2.0	3.1	250	275	6000	43	84
	SWG1-2.7-R	SWG1-2.7-L	2.7	4.1	250	275	5000	44	86
	SWG1-4.1-R	SWG1-4.1-L	4.1	6.1	250	275	4000	46	90
	SWG1-6.1-R	SWG1-6.1-L	6.1	9.1	210	275	4000	49	96
	SWG1-7.4-R	SWG1-7.4-L	7.4	11.1	210	230	3500	51	100
	SWG1-9.1-R	SWG1-9.1-L	9.1	13.6	190	210	3500	53.5	105

## **SEWON** Hydraulics

### Single Gear Pump

#### **Pump Selection**

- 1. RPM and the pump volume and the point of intersection of the discharge (I / min) to confirm.
- 2. Use and discharge pressure and the point of intersection of the axis input (Kw) sought.

Example) 4.1cc volume pump at about 1,750 rpm rotation 7 l/min and a discharge,

24.5MPa {250kgf/cm²} of the 3.7Kw electric motor is required.

