



### **GEAR PUMP**

SWG series Gear Pump can be used at max. 24.5 MPa {250kgf/cm<sup>2</sup>} 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  $60 \mu m$ 

Pressure side  $10 \sim 25 \mu m$  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.



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# **SEWON** Hydraulics

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#### **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

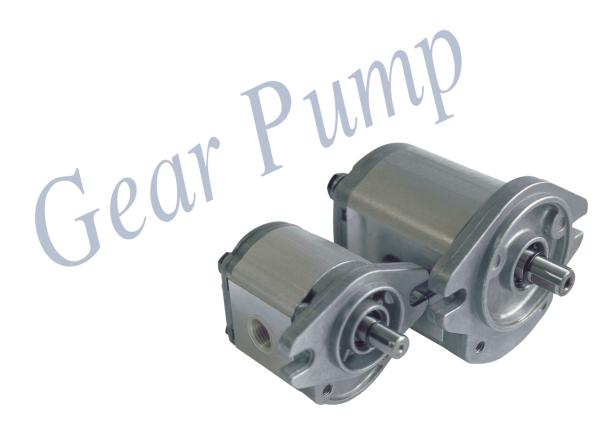
#### Minimum rotation speed

Pump rotation speed of the minimum recommended is as follows

SWG1~2 500rpm SWG3 400rpm

#### Precautions of connecting

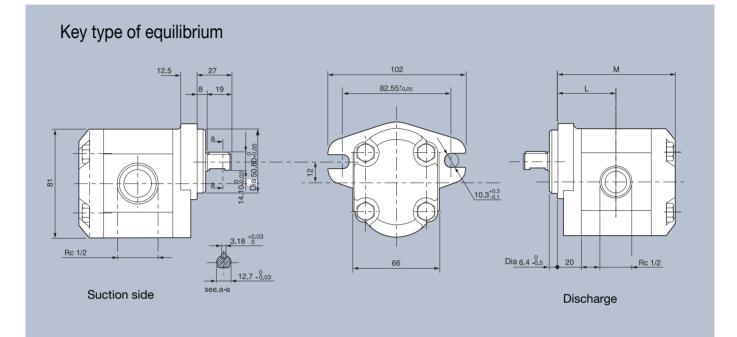
Axial thrust load on the shaft and the shaft is not to be affected by the TIR 0.18mm should be within.



# **GEAR PUMP**

## Single Gear Pump

## SWG1



Direction of rotation		Volume	Discharge	Rated pressure	Max. Press.	Maximum	Specifications	
R	L Ó	cm <sup>3</sup> /r.	(≬ /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

GEAR PUMP

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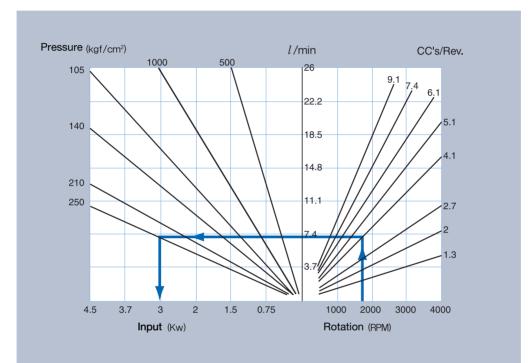
## Single Gear Pump

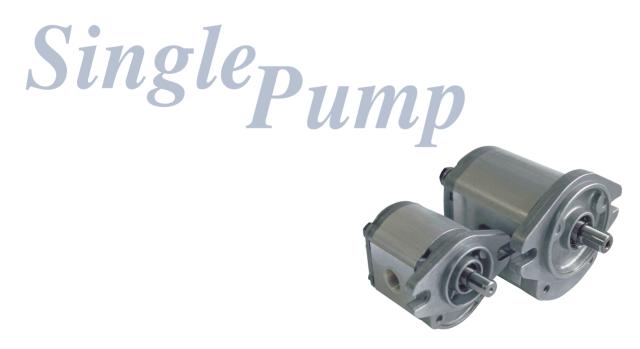
#### **Pump Selection**

- 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/cm<sup>2</sup>} of the 3.7Kw electric motor is required.

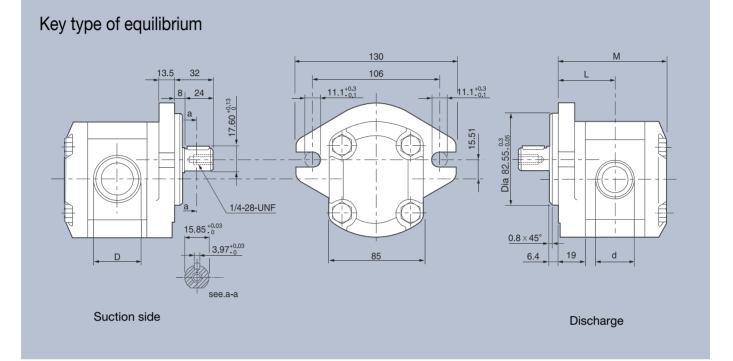




# **GEAR PUMP**

## Single Gear Pump

## SWG2



Direction of rotation		Volume		Rated pressure	Max. Press.	Max. rotation	Specifications			
O R	L O	cm³/r.	(≬ /min) 1500r.p.m.	(bar) 1500r.p.m.	(bar) 1500r.p.m.	r.p.m.	L	М	d	D
SWG2-4.4-R	SWG2-4.4-L	4.4	6.6	250	270	4000	47.5	95	Rc1/2	Rc1/2
SWG2-7-R	SWG2-7-L	7.0	10.4	250	270	4000	47.5	99	Rc1/2	Rc1/2
SWG2-9.5-R	SWG2-9.5-L	9.5	14.2	250	270	4000	49.5	103	Rc1/2	Rc1/2
SWG2-11.3-R	SWG2-11.3-L	11.3	16.9	250	270	4000	51	106	Rc1/2	Rc1/2
SWG2-14-R	SWG2-14-L	14.0	21.1	250	270	4000	53	110	Rc1/2	Rc3/4
SWG2-17.8-R	SWG2-17.8-L	17.8	26.7	230	260	3300	56	116	Rc1/2	Rc3/4
SWG2-20.8-R	SWG2-20.8-L	20.8	31.2	210	230	2800	58.5	121	Rc1/2	Rc3/4
SWG2-27.9-R	SWG2-27.9-L	27.9	41.8	180	200	2100	64	132	Rc1/2	Rc3/4
SWG2-34.4-R	SWG2-34.4-L	34.4	51.7	140	160	2000	69.5	143	Rc1/2	Rc3/4

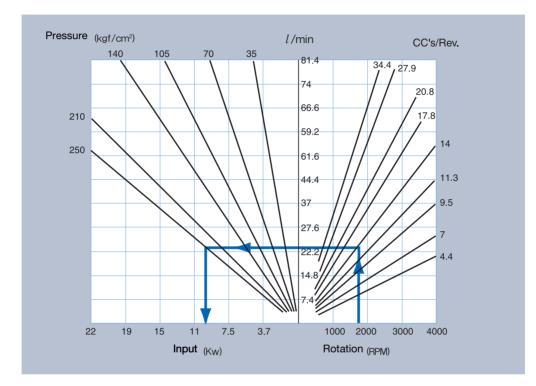
GEAR PUMP

# **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) 14.0 cc volume pump at about 1,750 rpm rotation 24.5 l / min and a discharge,
  24.5 MPa {250kgf/cm<sup>2</sup>} of the 11Kw electric motor is required.





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### Single Gear Pump

### SWG Series Gear Pump How to replace the left and right turn

#### SINGLE PUMPS

The direction of rotation of the pump shaft is determined by seeing the side, the front side is shown in Flange.

In order to change the direction of rotation of the pump in the direction you want the front Flange is required, follow the instructions below in order to enforce.

- 1) Divide the front Flange (1) and rear Cover(4) from pump.
- 2) Divide the Bushing (2) from the front Flange.
- 3) Drive shaft (3) rotates 180 degrees.
- 4) Bushing (2) mounted to the previous position.
- 5) Flange for the direction you want the front of the rear of the old location Assembles Cover.
- 6) Locate rear Cover (④) rotate 180 degrees on the location of the previous Assembly Front Flange.

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