

Gerotor Motor



Low Speed High Torque Gerotor Motor

Spool Valve type gerotor motor is commonly used when the basic performance and economic solution needed. The spool valve is used to control the oil path. The gerotor is used for producing high torque within small space.

* Spool Valve

The spool valve and housing's oil path hole control the flow of the gerotor. For simpler design and better performance shaft and spool valve are designed as one body. In addition, shaft plays a role of hydraulic journal bearing.

Features

- * Various types of mounting and port size make it possible to apply the motor in many places.
- * Direction and speed can be controlled smoothly and the machine can be connected directly to the shaft.

Application

- * It is applicable when low speed and high torque in small space is required.
- * Application examples: agricultural equipment, car washing brush, food processing, train-repairing

Special features and options

* Reverse Rotation

The direction of the rotation depends on the position of pressure port of the two ports. Normally, therefore, to change the rotational direction, it only needs to change the pressure port. In some cases, you can change the rotation to reverse by changing the assembly process.

* Free turn option

Rotation character can be changed by using the gerotor set, the clearance of which is specially managed.

* Gerotor

Gerotor is composed of fixed internal gear of round-ed shape and spinning rotor of star shape. A simple design with effective orbit principle, this provides low speed and high torque to motor.

* Housing

Pressurized parts within the motor are the inlet, return and housing flow path. By knowing this, we can control the pressure inside the housing. Check valves and drain ports are installed in order to protect the shaft seal and the thrust bearing.

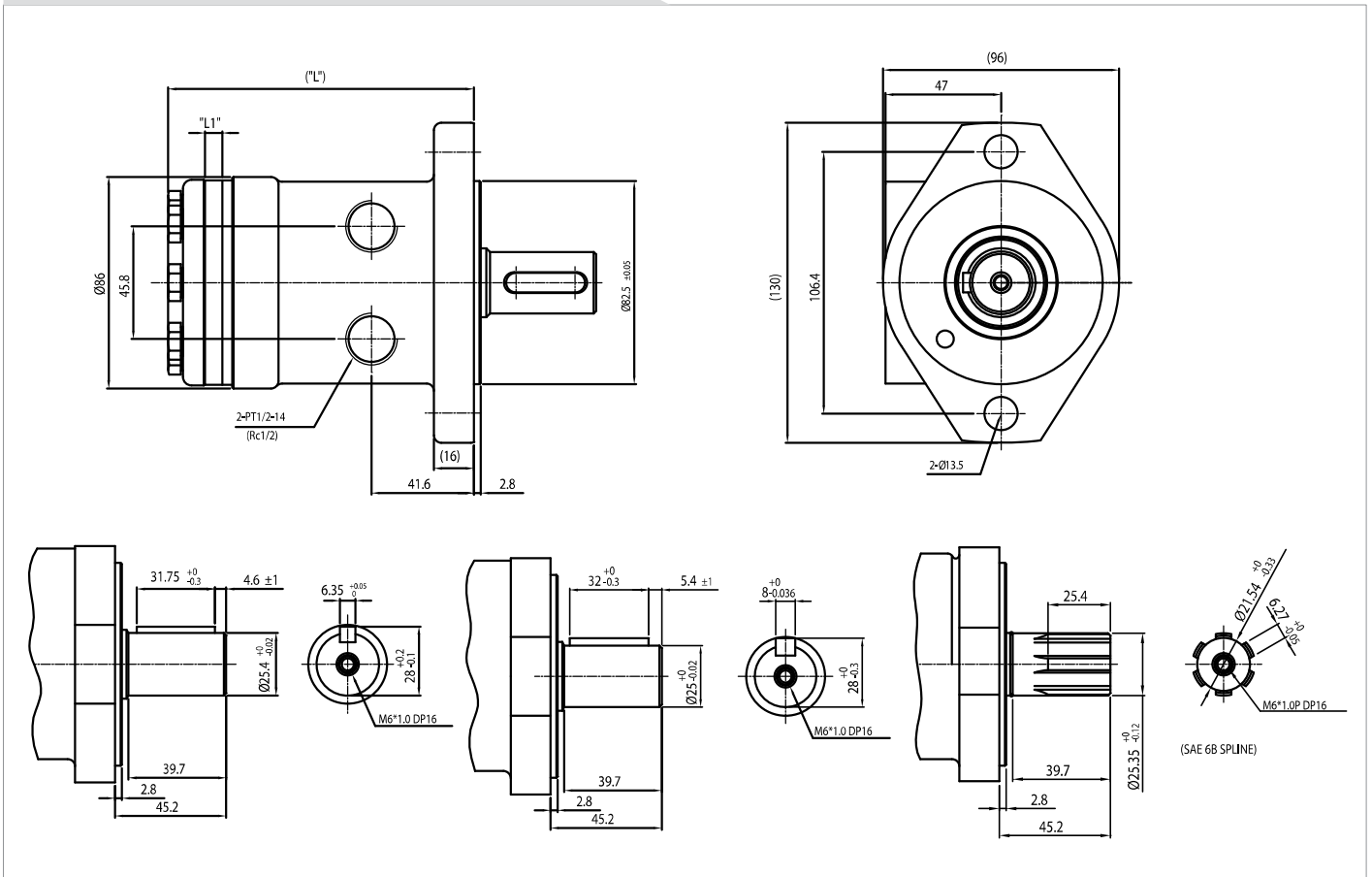
- * Every shaft is grinded in order to keep the accurate clearance. Therefore, it has a high volume efficiency.
- * The size is small and it is durable in high pressure. Hence, it is applicable to currently used high pressure equipment without altering other parts.

equipment, machine tools, conveyor, industrial washing vehicle, industrial sewing tool, lawn mower, paving equipment, road roller, excavator, sprayer, winch, ladder equipments etc.

Mechanical friction is reduced. Rotation of the axle became smoother by decreasing the pressure fluctuation while volume efficiency has been decreased. This is suitable for quick starting and stopping machines.

SH Series

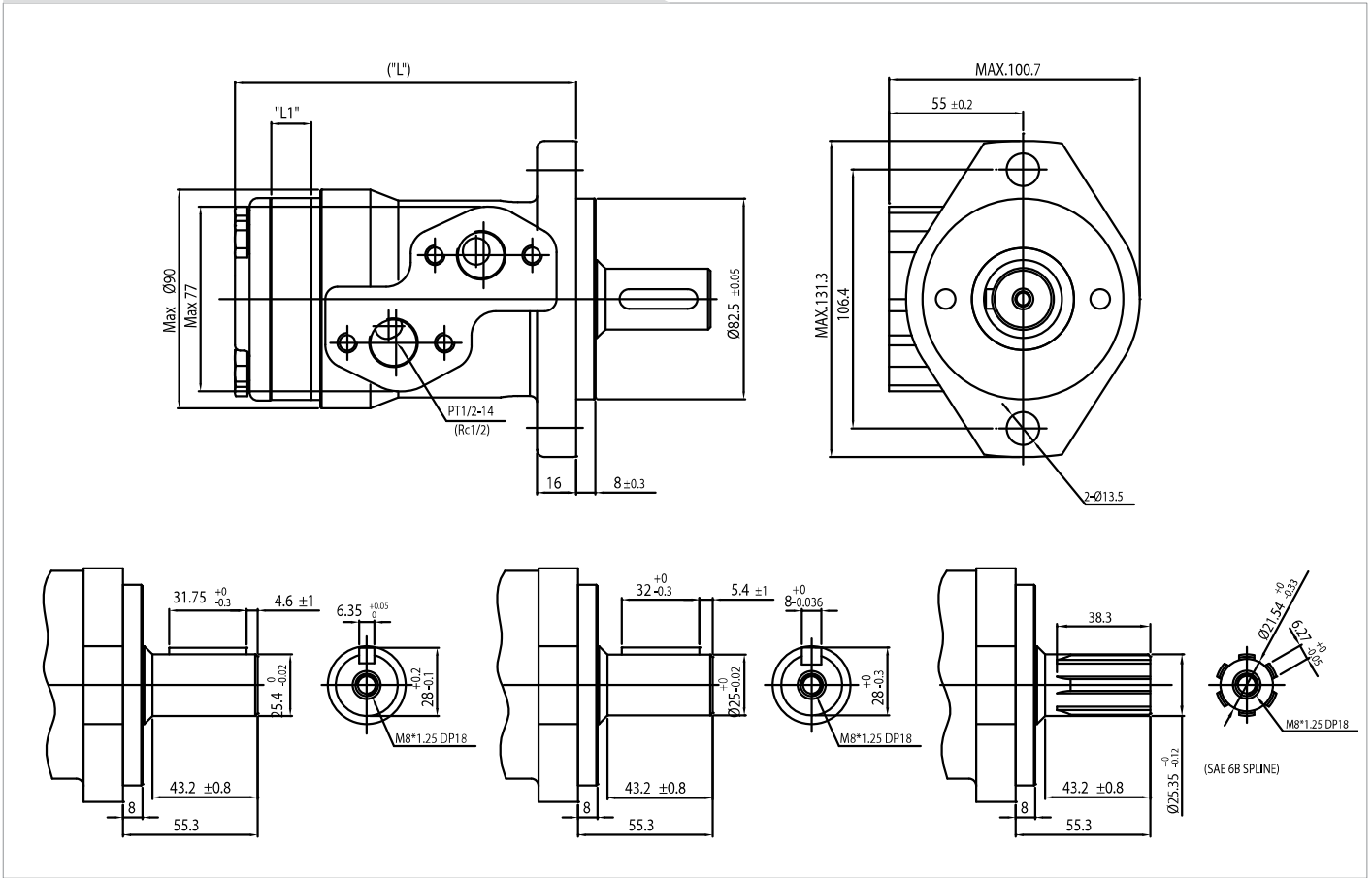
Dimensions



Model	Displacement(cm^3/rev)	L1(mm)	L(mm)
SH H050	51	7.0	124.2
SH H080	80	9.6	127.1
SH H100	100	13.8	131.0
SH H125	125	16.4	133.5
SH H160	160	22.5	139.7
SH H200	200	26.1	143.4
SH H240	240	32.6	148.2
SH H315	315	41.2	158.4
SH H400	400	54.0	170.4

OP Series

Dimensions



Model	Displacement(cm ³ /rev)	L1(mm)	L(mm)
OP H050	51	7.0	131.0
OP H080	80	9.6	133.6
OP H100	100	13.8	137.8
OP H125	125	16.4	140.4
OP H160	160	22.5	146.5
OP H200	200	26.1	150.0
OP H240	240	32.6	156.6
OP H315	315	41.2	165.2
OP H400	400	54.0	178.0

Code and specification

SH-H050-P-A-A-F

SH	H050	P	A	A	F
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① Series

SH: SH Series
 NS: NS Series
 OP: OP Series

② Displacement

H050: 51 cm³/rev
 H080: 80 cm³/rev
 H100: 100 cm³/rev
 H125: 125 cm³/rev
 H160: 160 cm³/rev
 H200: 200 cm³/rev
 H240: 240 cm³/rev
 H315: 315 cm³/rev
 H400: 400 cm³/rev

③ Port

P: PT 1/2
 G: G 1/2
 M: M22

④ Mounting Flange

A: SAE A

⑤ Shaft

A: Shaft Φ 25, Key 8*7*32
 B: Shaft Φ 25, Key 7*7*32
 C: Shaft Φ 25.4, Key 6.35*6.35*32
 S: SAE 6B Spline Shaft

⑥ Special Option

O: No Option
 A: Reverse Rotation
 F: Free Turn