

# SGP600 Series

Cast-iron body



C621-E010A

## ◆ Model number

**SGP600** | **B** | **40** | **A** | **1** | **H** | **1** | **-** | **L** | **XXX**

1
2
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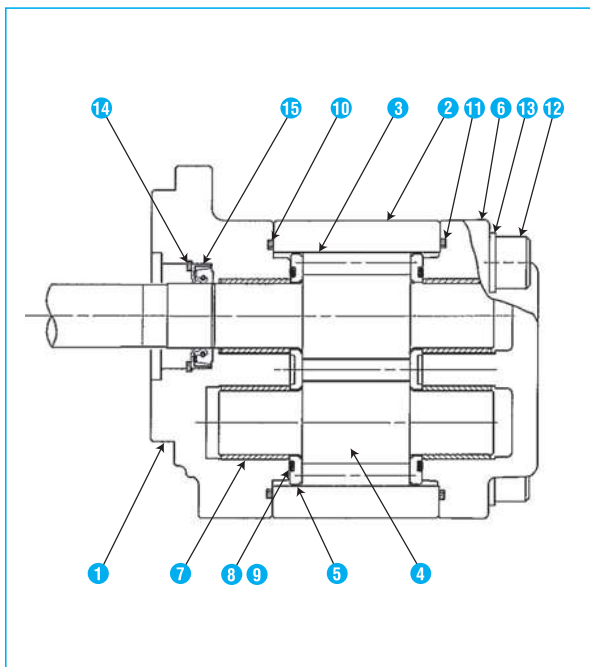
- |  |  |   |   |
|--|--|---|---|
| <p><b>1</b> Series number<br/>SGP600 series</p> <p><b>2</b> Mounting spigot diameter<br/>- : <math>\phi 82_{-0.060}^{-0.036}</math> Z : <math>\phi 102_{-0.060}^{-0.036}</math><br/>A : <math>\phi 82.55_{-0.026}^{-0.016}</math> B : <math>\phi 101.6_{-0.026}^{-0.016}</math></p> <p><b>3</b> Size</p> | <p><b>4</b> Position of ports<br/>A : body side ports<br/>D : rear ports</p> <p><b>5</b> Port configuration<br/>1 : flange port<br/>2 : G screw thread</p> | <p><b>6</b> Mounting<br/>H : horizontal 2 bolts</p> <p><b>7</b> Shaft end<br/>1 : SAE Spline 13 teeth<br/>6 : SAE Spline 15 teeth</p> | <p><b>8</b> Rotation viewing from shaft end<br/>L = counterclockwise<br/>R = clockwise</p> <p><b>9</b> Code number in 3 figures</p> |
|--|--|---|---|

## ◆ Specifications

Size	Displacement		Rated pressure			Max. peak pressure			Speed min <sup>-1</sup>		Inlet pressure	Mass		
	cm <sup>3</sup>	in <sup>3</sup>	MPa	bar	psi	MPa	bar	psi	MIN.	MAX.		kg	lb	
40	40.3	2.458	25.0	250	3625	30.0	300	4350	500	3000	bar -0.20~2.0	7.1	15.62	
44	44.5	2.715										7.3	16.06	
48	48.7	2.971									7.5	16.50		
52	52.2	3.184									7.7	16.94		
56	55.8	3.404	23.0	230	3335	27.6	276	4002			3000 (2700)	MPa -0.02~0.2	7.9	17.38
60	60.0	3.660	21.0	210	3045	25.0	250	3625			3000 (2300)		psi -2.9 ~29	8.2

NOTE : ( ) Inlet port  $\phi 32$

## ◆ Typical assembly



Item No.	Name	QTY	Material
1	Front cover	1	Aluminum alloy
2	Body	1	Cast iron
3	Drive gear	1	Alloy steel
4	Driven gear	1	Alloy steel
5	Side plate	2	Special alloy steel
6	Rear cover	1	Aluminum alloy
7	Bush	4	Special alloy steel
8	Gasket	2	Nitrile rubber
9	Back-up	2	Synthetic resin
10	Gasket	1	Nitrile rubber
11	Gasket	1	Nitrile rubber
12	Bolt	4	Alloy steel
13	Washer	4	Carbon steel
14	Retainer ring	1	Carbon tool steel
15	Oil seal	1	Nitrile rubber

NOTES : "QTY" shows the amount per one

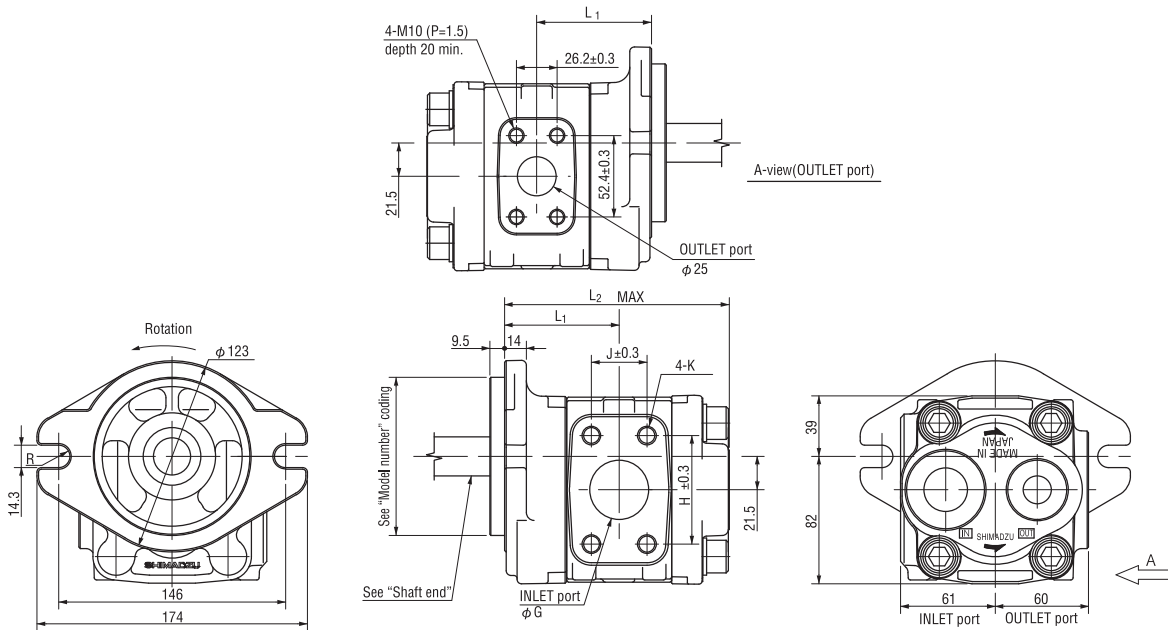
## ◆ Outline dimensions

dimensions in mm

### SGP600<sup>Z</sup>□A1H□-LXXX (Body side ports)

#### INLET PORT

Size	φ G	H	J	K	L/min
1-1/4	φ 32	58.7	30.2	M10 (P=1.5) depth 20	143
1-1/2	φ 38	69.9	35.7	M12 (P=1.75) depth 15	205



NOTE 1. Figure shown indicated counterclockwise rotation "L" viewing from shaft end. Clockwise rotation "R" is mirror image of this.

2. Unless otherwise specified, tolerance on dimension are ±1.0 mm.

Size	L <sub>1</sub>	L <sub>2</sub>
40	68.8	137
44	70.6	140
48	72.3	144
52	73.8	147
56	75.3	150
60	77.1	153

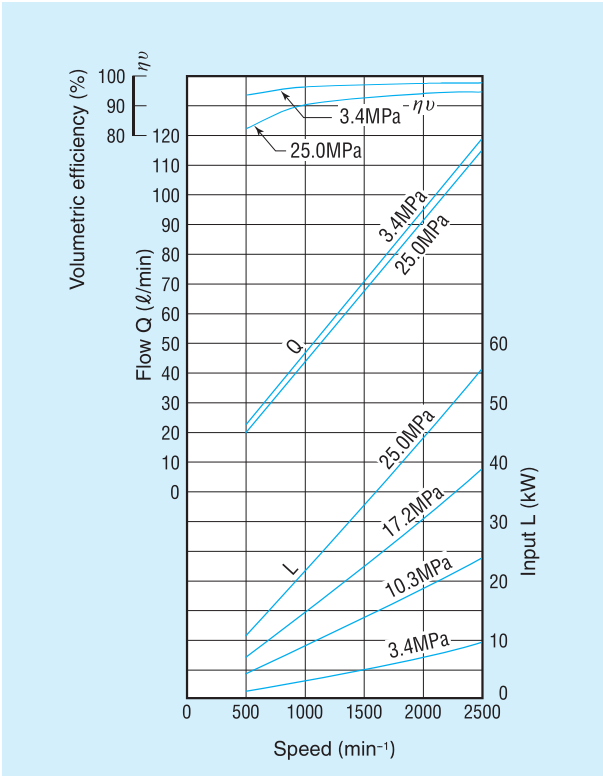
## ● Shaft end

SAE Spline (Some dimensions are different form SAE standard.)	
SAE Spline 13 teeth	SAE Spline 15 teeth
<p>No. of teeth : 13 D.P. : 16/32 Pressure angle : 30° Over pin dia. : 24.891~ 24.819 Pin dia. : φ3.048</p>	<p>No. of teeth : 15 D.P. : 16/32 Pressure angle : 30° Over pin dia. : 28.097~ 28.025 Pin dia. : φ3.048</p>

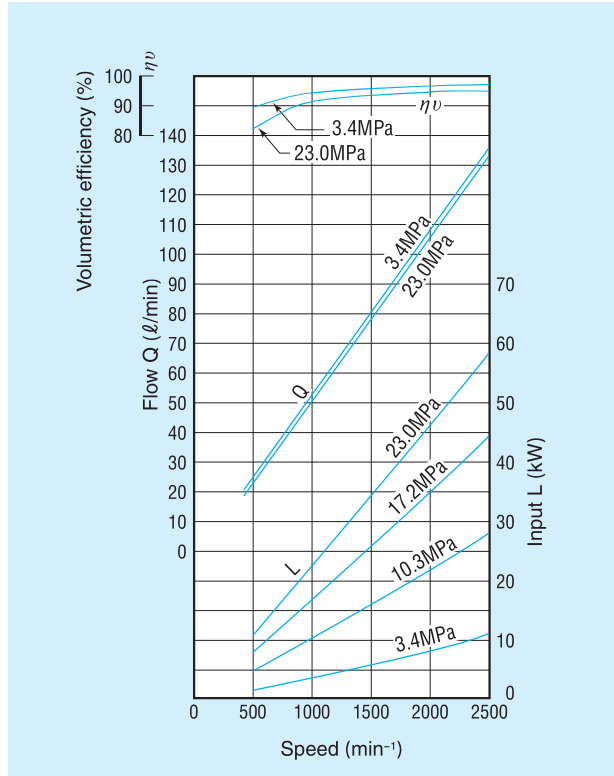
# SGP600 Series Performance curves

OIL: ISO VG32 Hydraulic Fluid at 40°C

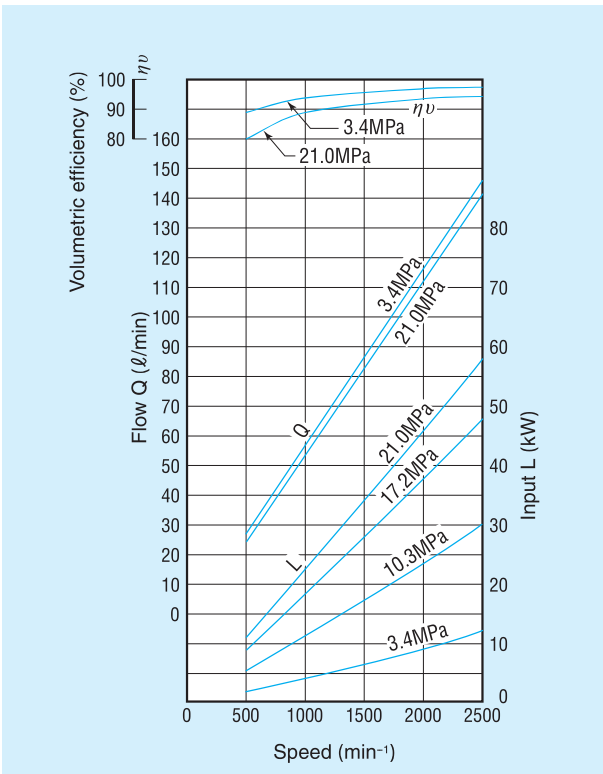
## SGP600-48



## SGP600-56



## SGP600-60



**Shimadzu Corporation Fluidics Systems Division**

The appearances and specifications are subject to change for reasons of improvement without notice.