



## ◆ Model number

**SGP1 - 36 D 2 H 1 - L XXX**

①      ②      ③      ④      ⑤      ⑥      ⑦      ⑧      ⑨

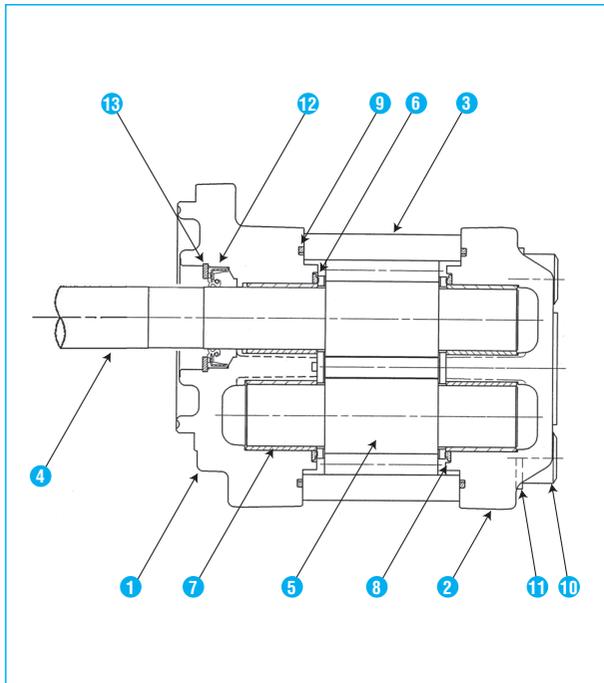
- |  |   |   |  |
|--|---|---|--|
| <p>① Series number<br/>SGP 1 series (Cast Iron body)</p> <p>② Mounting spigot diameter<br/>- : <math>\phi 82_{-0.036}^{0.036}</math><br/>A : <math>\phi 82.55_{-0.05}^0</math></p> <p>③ Size</p> | <p>④ Position of ports<br/>F : rear cover side ports<br/>D : rear ports</p> <p>⑤ Port configuration<br/>1 : flange port (sides only)<br/>2 : G screw thread</p> | <p>⑥ Mounting<br/>H : horizontal 2 bolts</p> <p>⑦ Shaft end<br/>1 : SAE Spline 13 teeth<br/>5 : SAE Spline 10 teeth</p> | <p>⑧ Rotation viewing from shaft end<br/>L = counter clockwise<br/>R = clockwise</p> <p>⑨ 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					
SGP1-16	16.2	0.988	20.6	206	2987	24.5	245	3553	500	4000	bar -0.20~2.0	3.3	7.26					
-18	18.3	1.116										3.4	7.48					
-20	20.4	1.244										3.5	7.70					
-23	23.7	1.446										3.7	8.14					
-25	24.9	1.519									4.0	8.80						
-27	27.8	1.696									4.0	8.80						
-30	29.9	1.824									4.1	9.02						
-32	33.2	2.025									4.2	9.24						
-34	34.1	2.080									20.6(18.6)	206(186)	2987(2697)	400	3000	MPa -0.02~0.2	4.3	9.46
-36	36.6	2.233									20.6(17.2)	206(172)	2987(2494)				4.5	9.90

NOTE : ( ) SAE spline 10 teeth

## ◆ Typical assembly



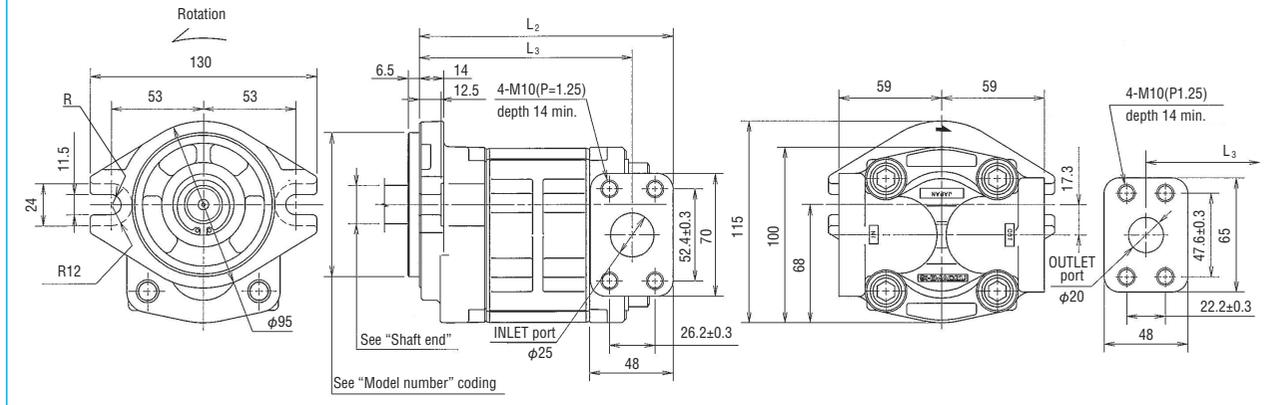
Item No.	Name	QTY	Material
①	Front cover	1	Aluminum alloy
②	Rear cover	1	Aluminum alloy
③	Body	1	Cast iron
④	Drive gear	1	Alloy steel
⑤	Driven gear	1	Alloy steel
⑥	Side plate	2	Special alloy steel
⑦	Bush	4	Special alloy steel
⑧	Gasket	2	Nitril rubber
⑨	Gasket	2	Nitril rubber
⑩	Bolt	4	Alloy steel
⑪	Washer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

NOTES : "QTY" shows the amount per one

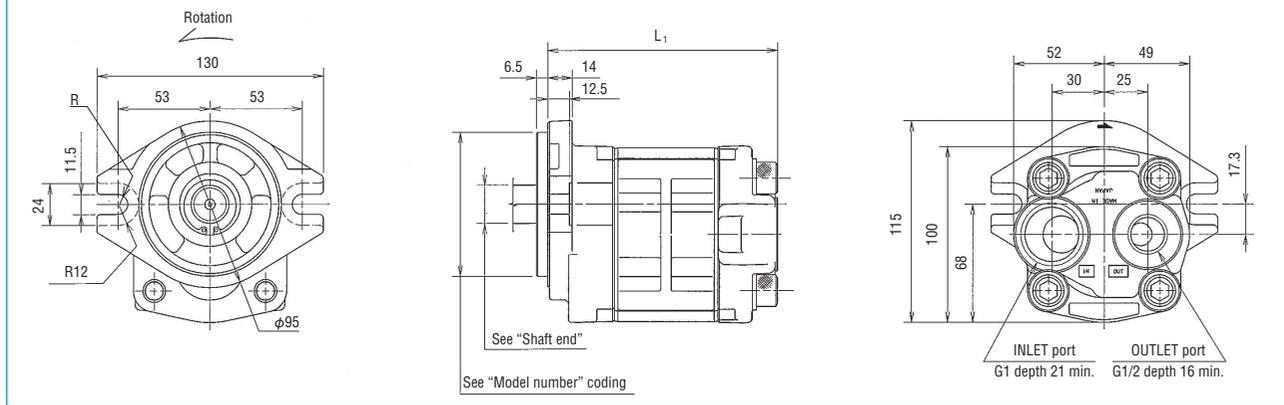
## ◆ Outline dimensions

dimensions in mm

### SGP1-□F1H□-LXXX (Side ports)



### SGP1-□D2H□-LXXX (Rear ports)



NOTE 1. Figure shown indicated counter clockwise 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.

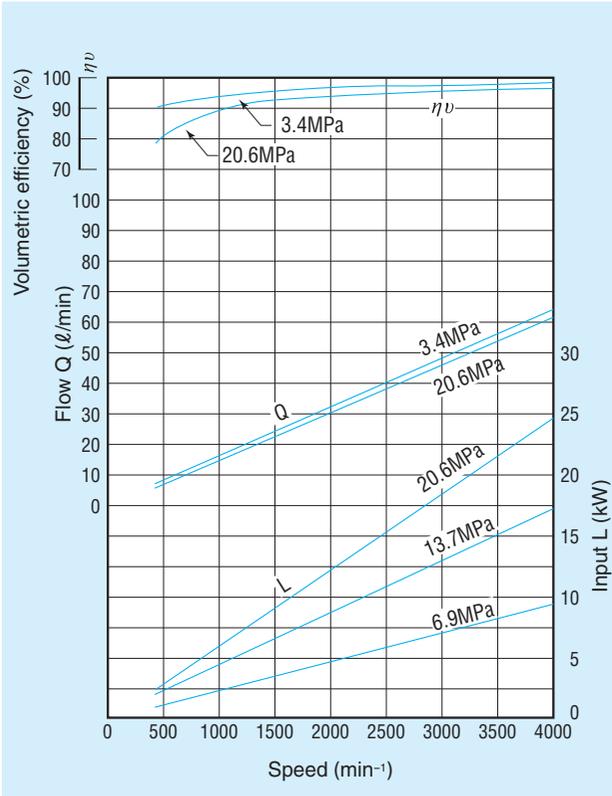
Size	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>
SGP1-16	108.0	121.5	98.0
-18	110.5	124.0	100.5
-20	113.0	126.5	103.0
-23	117.0	130.5	107.0
-25	118.5	132.0	108.5
-27	122.0	135.5	112.0
-30	124.5	138.0	114.5
-32	128.5	142.0	118.5
-34	129.5	143.0	119.5
-36	132.5	146.0	122.5

## ● Shaft end

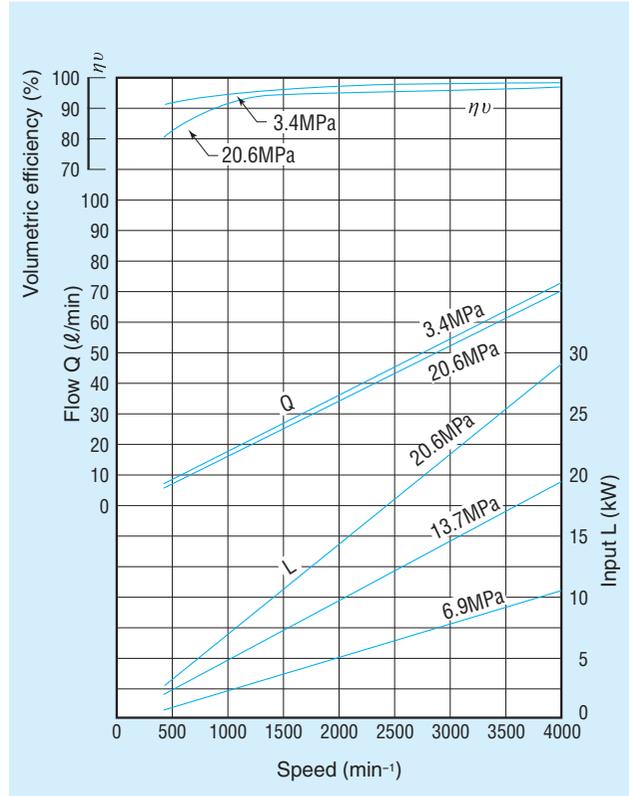
SAE Spline (Some dimensions are different form SAE standard.)

SAE Spline 13 teeth	SAE Spline 10 teeth
<p>No. of tooth : 13 D.P. : 16/32 Pressure angle : 30° Over pin dia. : φ24.891 ~ φ24.819 Pin dia. : φ3.048</p>	<p>No. of tooth : 10 D.P. : 16/32 Pressure angle : 30° Over pin dia. : φ20.263 ~ φ20.193 Pin dia. : φ3.048</p>

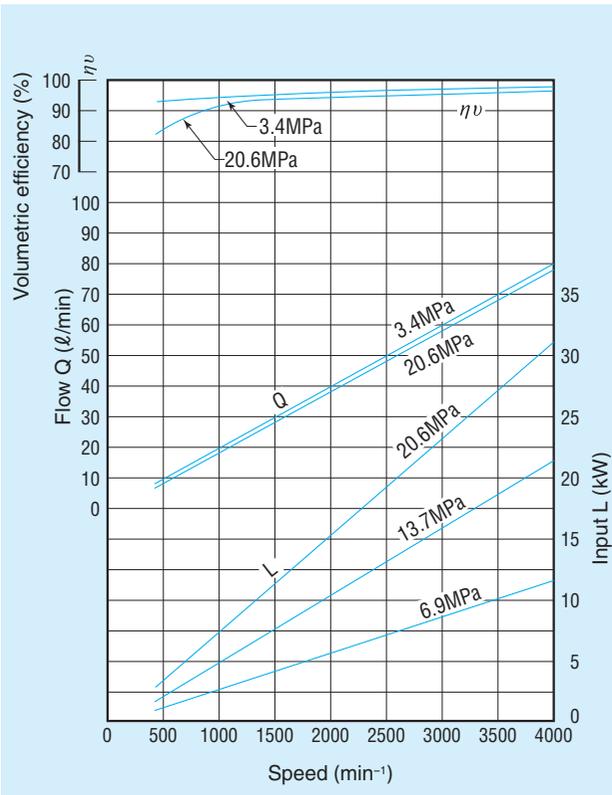
## SGP1-16



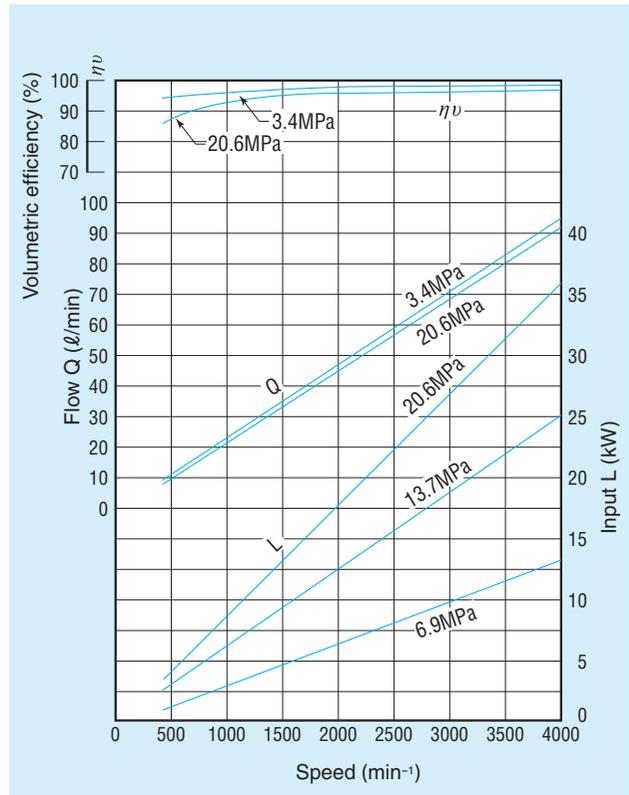
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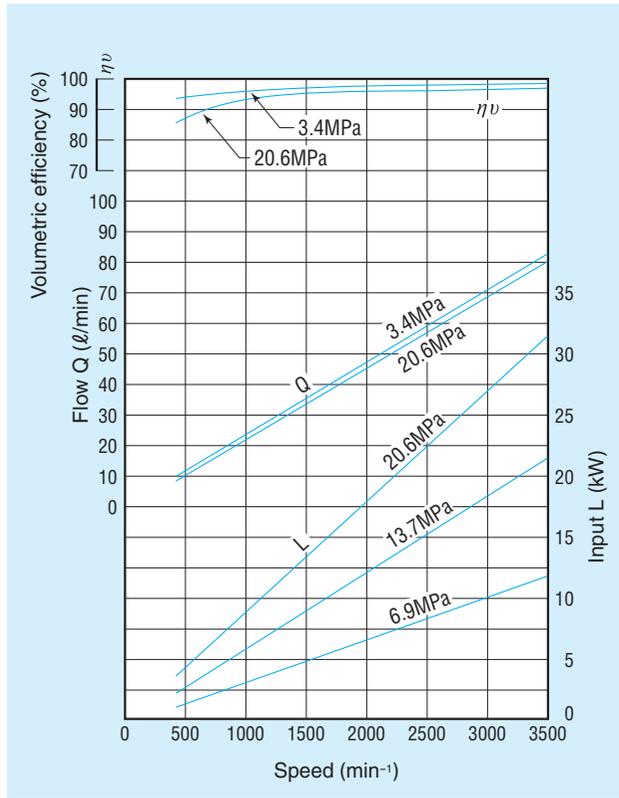
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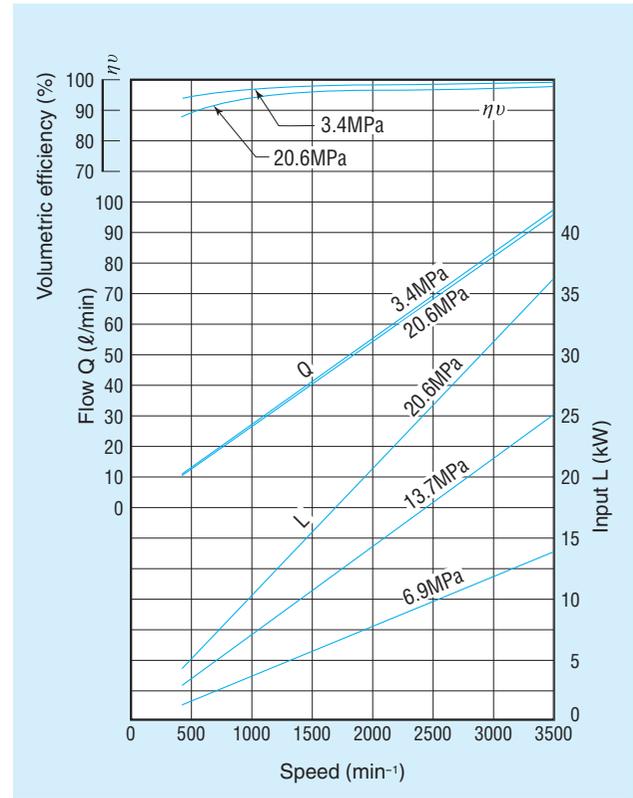
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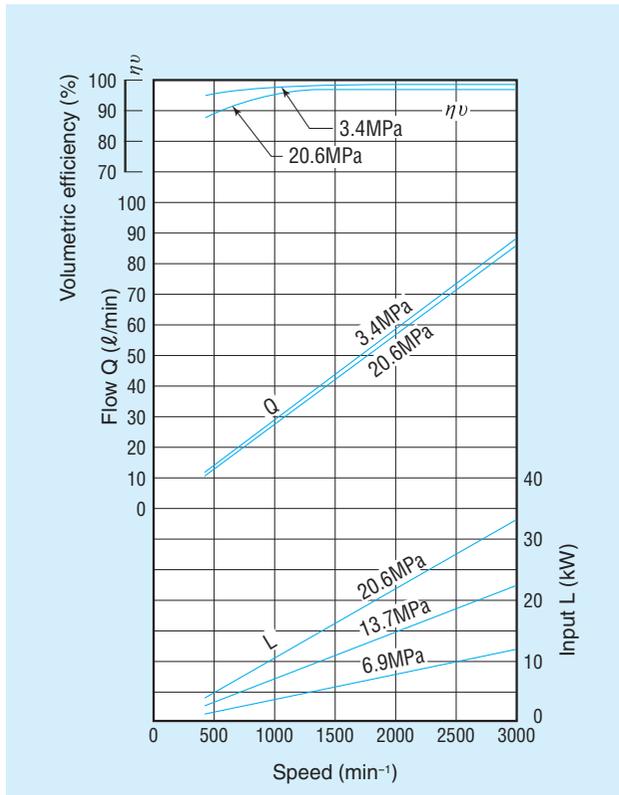
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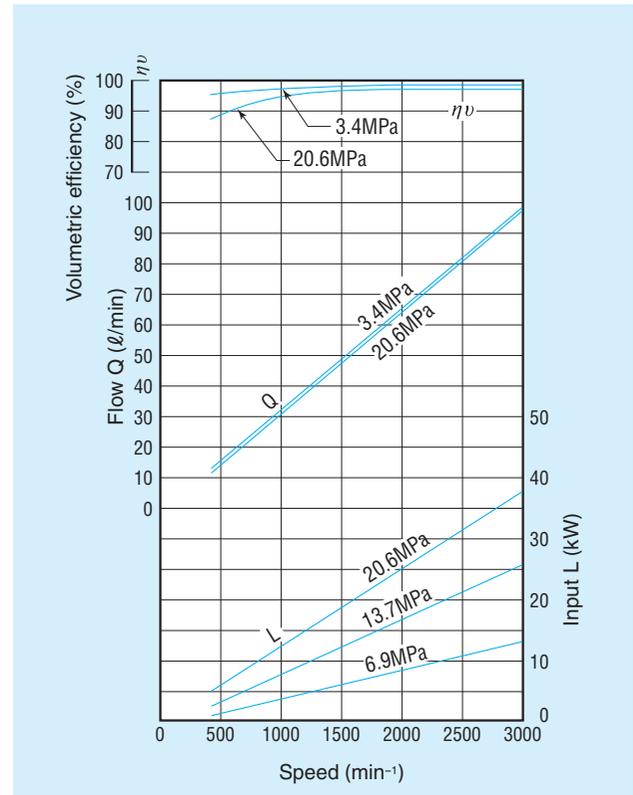
## SGP1-27



## SGP1-30



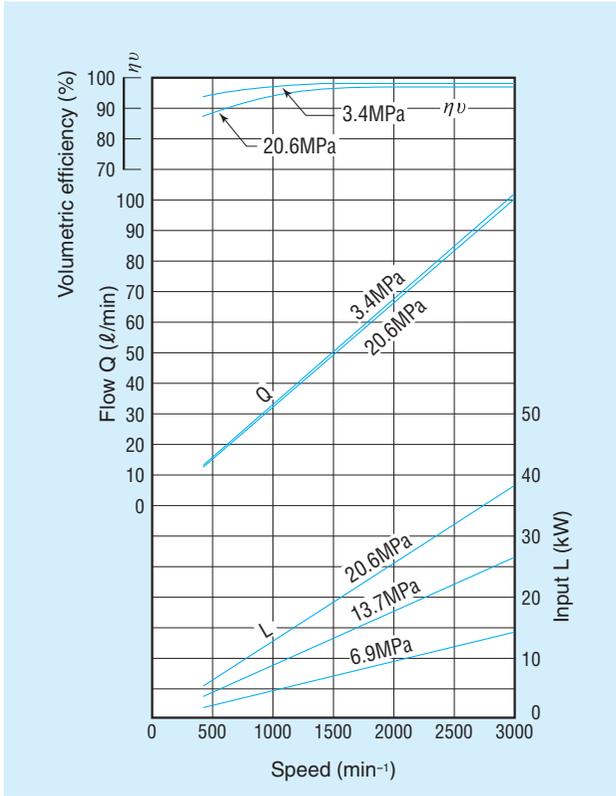
## SGP1-32



# SGP1 Series Performance curves

OIL: ISO VG32 Hydraulic Fluid at 40°C

## SGP1-34



## SGP1-36

