

REI10039/08.2002

Replaces: 06.2001

# Rexroth

Bosch Group

## Gear pump

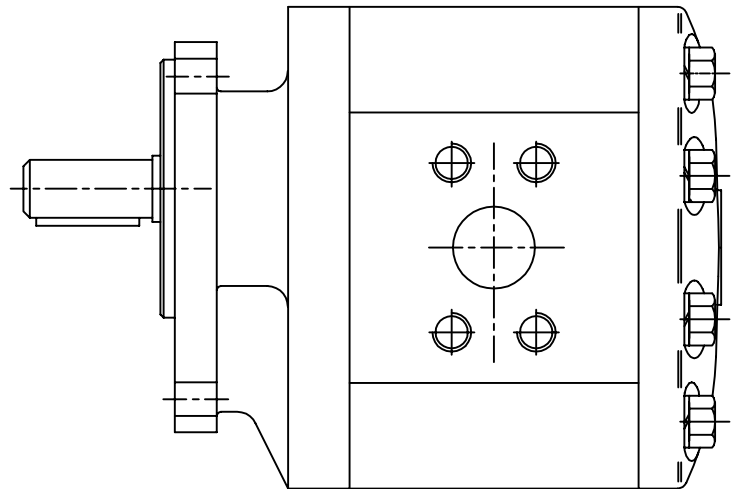
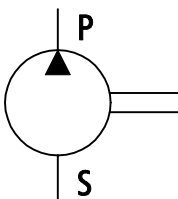
### Type G3

Nominal sizes 26 to 40

Series 3X.. IN001

Maximum operating pressure 200 bar

#### Symbol



1 PF2 G3-3X/..-IN001

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## Features

- \* New principle of sealing the pump body therefore long service life
- \* Long seal life, even at maximum temperature
- \* Plain bearings for high loading
- \* Simple and robust construction
- \* Pressure balanced Bushings result in increased speed, wear reduction, high volumetric efficiency.
- \* Induced flow lubrication system of bearing results in effective lubrication and heat reduction.
- \* Open ended Pump housing gives precise bearing alignment, lower internal leakage due to close machining tolerances, elimination of high stress concentration found in the closed ended design.

Ordering details

<b>1PF2G3</b>		<b>3X7</b>						<b>-IN001</b>	<b>*</b>	
Series 30 to 39		<b>3X</b>							Further details in clear text	
(Theo. displacement)	Size							Modification number		
25.9 cc/rev	26	<b>026</b>								
28.7 cc/rev	29	<b>029</b>								
32.6 cc/rev	32	<b>032</b>								
37.8 cc/rev	38	<b>038</b>								
45.4 cc/rev	40	<b>040</b>								
Clockwise		<b>R</b>								
Anticlockwise		<b>L</b>								
Cylindrical shaft ISO Ø18mm		<b>A</b>								
Tapered shaft 1:5, Ø20mm		<b>C</b>								
Splined shaft SAE-B, 7/8", 13 teeth		<b>D</b>								
		<b>M</b>		NBR seals (Other seals on request)						
		<b>07</b>		For SAE flange connections on suction and pressure side						
		<b>S</b>		Rectangular flange Ø80mm spigot						
		<b>B</b>		SAE-B-2-hole flange Ø101.6mm spigot						
		<b>No code</b>		Single pump						

**Preferred models**

**Technical Data** (For operation outside these parameters, please consult us!)

Fluid: SAE 20 W  
 For use with other fluids pl. consult us.  
 Fluid temperature range: 0° to +80°c ( operating )  
 -20° to +100°c ( intermittent )  
 Please enquire about higher temperatures

Viscosity range:  
 8 cSt to 1000 cSt ( Recommended range )  
 20 cSt to 100 cSt ( Optimum performance range )

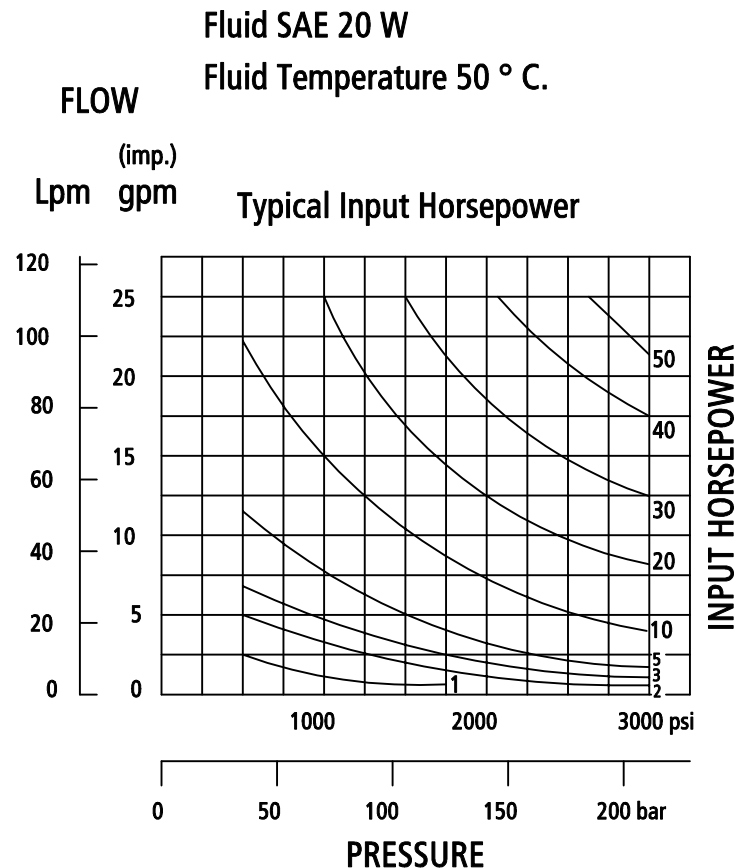
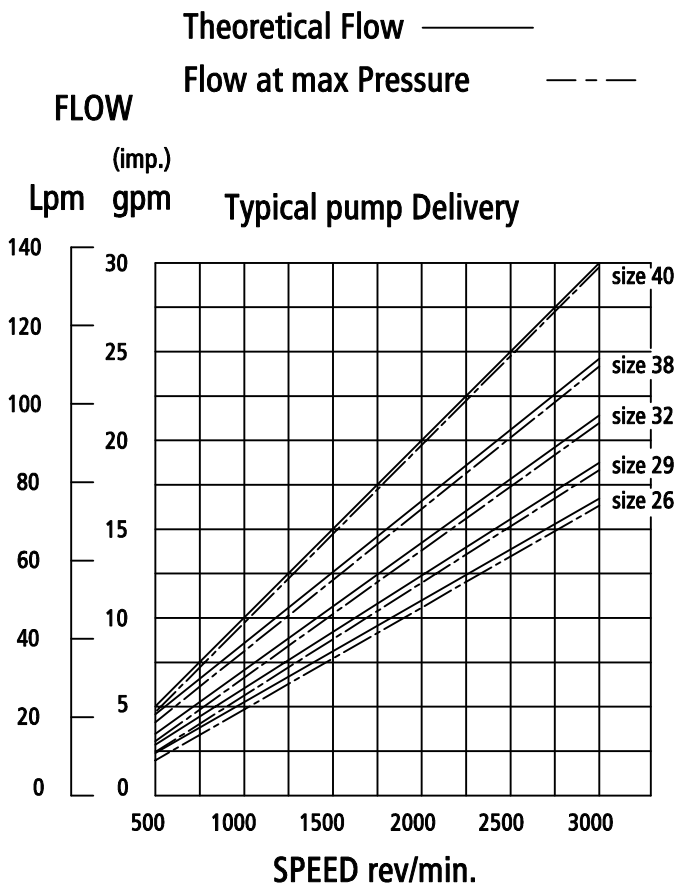
Min. cleanliness level : ISO 17/14  
 Drive: via a flexible coupling,  
 Please enquire if any other type of drive is proposed.  
 Installation position: optional.  
 Direction of rotation: the pump may only be driven in the given direction of rotation.  
 Weights: see table for the individual pump types.

Size		26	29	32	38	40		
Displacement	cc/rev	25.9	28.7	32.6	37.6	45.4		
Operating pressure, inlet: absolute pressure	bar	Pabs min. 0.24 Pabs max. 3.00						
max. continuous pressure	bar	200	200	200	200	200		
max. speed at continuous pressure	rpm	3000	3000	3000	3000	3000		
min. speed at max. continuous pre.	rpm	600	650	650	650	650		

Characteristic curves & Performance Data

Fluid SAE 20 W  
 Fluid Temperature 50 ° C.

Pump Type	Theoretical Displacement	Nominal Delivery at 1500 RPM	Maximum Pressure	Max. Speed at max. Pressure rev./min.	Max. Speed at max. continuous Pressure rev./min.
	cm <sup>3</sup> /rev	l/min	bar		
026	25.9	37.0	200	3000	550
029	28.7	41.0	200	3000	650
032	32.6	46.2	200	3000	600
038	37.6	54.2	200	3000	650
040	45.4	66.5	200	3000	650

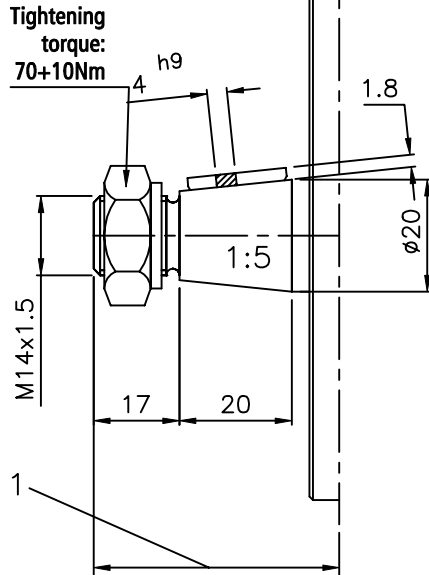


Shaft ends

(Dimensions in mm)

C

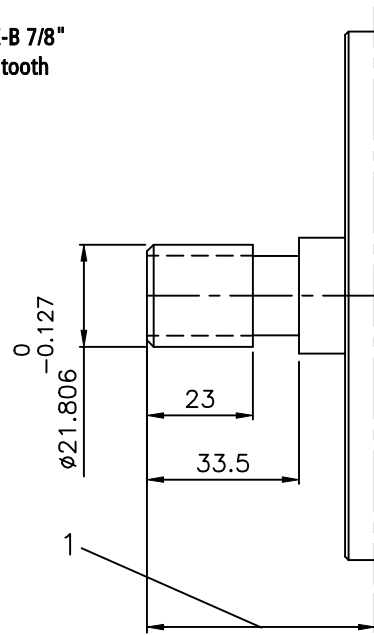
Tapered shaft 1:5,  $\varnothing 20\text{mm}$



1 This dimension is dependent upon the flange type. (see page 5)

D

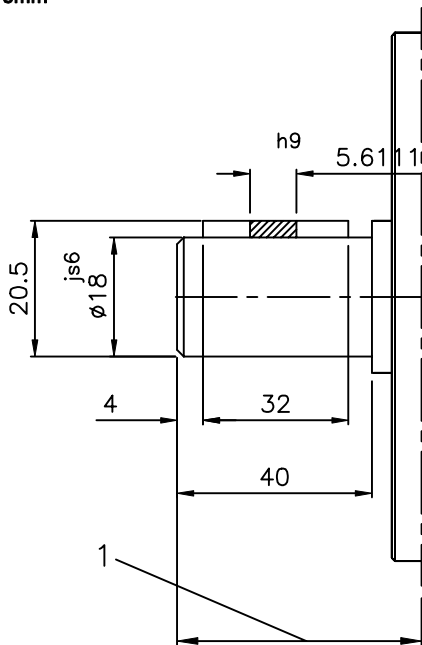
splined shaft, SAE-B 7/8" 13T, 16/32 DP and tooth thickness  $t = 2.261$



1 This dimension is dependent upon the flange type. (see page 6)

A

Cylindrical shaft  $\varnothing 18\text{mm}$



1 This dimension is dependent upon the flange type. (see page 5)

Unit dimensions and ordering code:

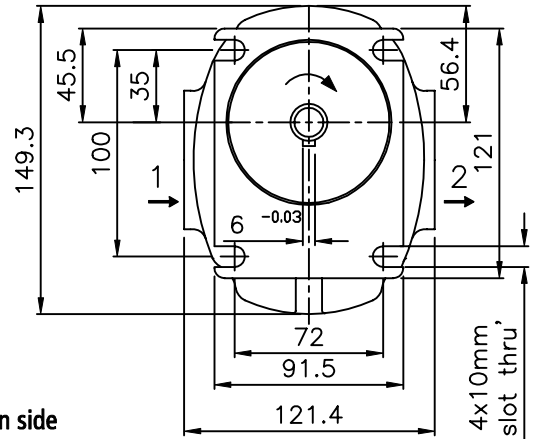
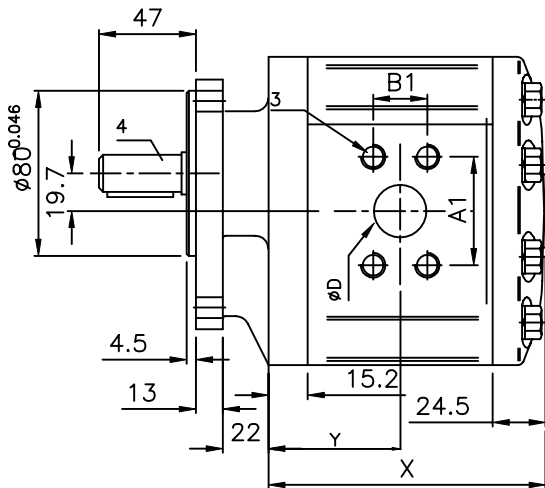
(Dimensions in mm)

**1PF2G3-3X/...**      **R**  
**L**      **A07MS-IN001**

Size (see table)      **Shaft end cylindrical shaft Ø18 mm**

Direction of rotation:  
 Clockwise      =R  
 Anticlockwise      =L

SIZE	DIMENSION-X -1.27(TOL)	DIMENSION-Y -1.0(TOL)	A1	B1	ØD	SAE PORT SIZE	WEIGHT IN Kgs.
026	112.3	51.5	52.5	26.2	25.4	1"	8.7
029	114.8	52.7	58.8	30.2	31.75	1 1/4"	9.0
032	132.3	61.5	58.8	30.2	31.75	1 1/4"	9.5
038	136.0	63.3	58.8	30.2	31.75	1 1/4"	9.7
040	142.1	66.4	58.8	30.2	31.75	1 1/4"	10.0



Direction of rotation:  
 Clockwise (model "R") viewed on the shaft end.  
 With anti-clockwise rotation (model "L")  
 the suction and pressure ports are  
 interchanged !

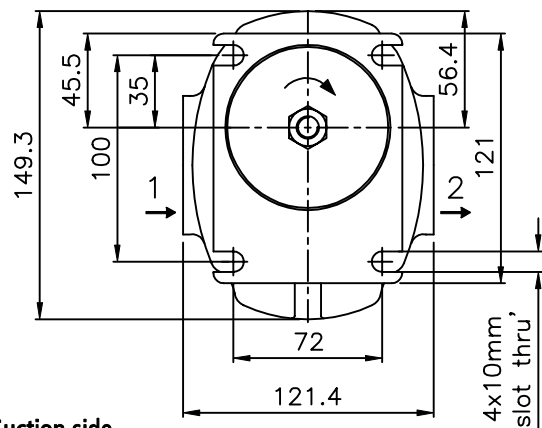
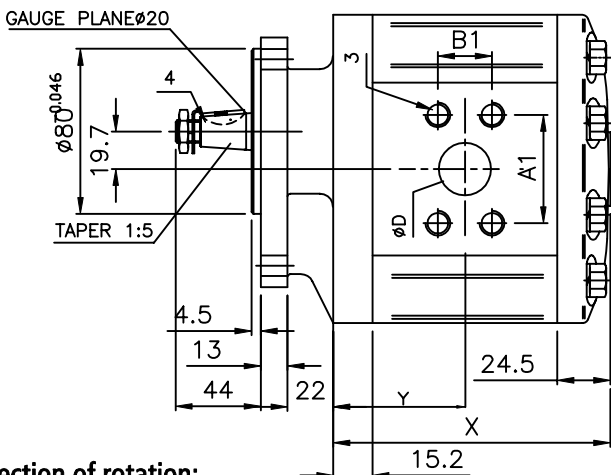
- 1 Suction side
- 2 Pressure side
- 3 2 x 4 fixing holes M10x16 DEEP for SAE connection flange, suction and pressure ports are the same.
- 4 Cylindrical shaft end Ø18mm

**1PF2G3-3X/...**      **R**  
**L**      **C07MS-IN001**

Size (see table)      **Shaft end Tapered shaft 1:5 ; Ø20mm**

Direction of rotation:  
 Clockwise      =R  
 Anticlockwise      =L

SIZE	DIMENSION-X -1.27(TOL)	DIMENSION-Y -1.0(TOL)	A1	B1	ØD	SAE PORT SIZE	WEIGHT IN Kgs.
026	112.3	51.5	52.5	26.2	25.4	1"	8.7
029	114.8	52.7	58.8	30.2	31.75	1 1/4"	9.0
032	132.3	61.5	58.8	30.2	31.75	1 1/4"	9.5
038	136.0	63.3	58.8	30.2	31.75	1 1/4"	9.7
040	142.1	66.4	58.8	30.2	31.75	1 1/4"	10.0



Direction of rotation:  
 Clockwise (model "R") viewed on the shaft end.  
 With anti-clockwise rotation (model "L")  
 the suction and pressure ports are  
 interchanged !

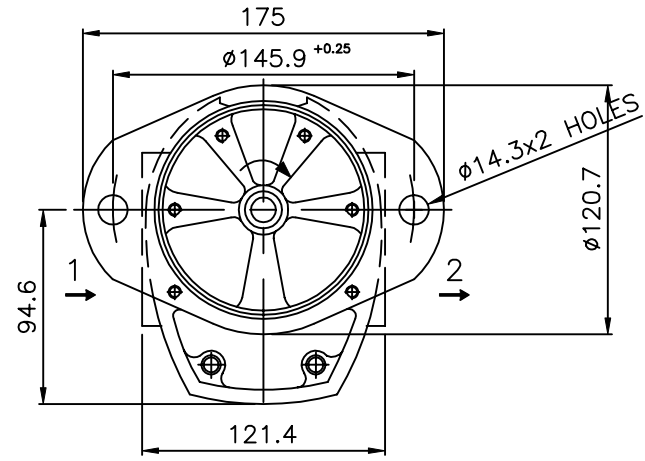
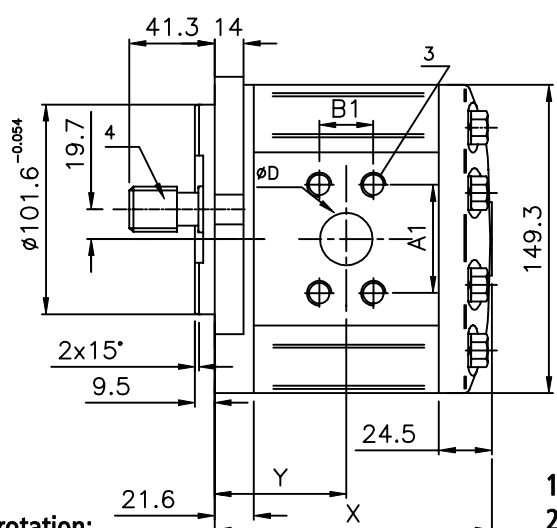
- 1 Suction side
- 2 Pressure side
- 3 2 x 4 fixing holes M10x16 DEEP for SAE connection flange, suction and pressure ports are the same.
- 4 Tapered shaft 1:5, Ø20mm

Unit dimensions and ordering code:

(Dimensions in mm)

SIZE	DIMENSION-X -1.27(TOL)	DIMENSION-Y -1.0(TOL)	A1	B1	ØD	SAE PORT SIZE	WEIGHT IN Kgs.
026	118.7	57.9	52.5	26.2	25.4	1"	8.5
029	121.2	59.1	58.8	30.2	31.75	1 1/4"	8.7
032	138.7	67.9	58.8	30.2	31.75	1 1/4"	9.0
038	142.4	69.7	58.8	30.2	31.75	1 1/4"	9.5
040	148.5	72.8	58.8	30.2	31.75	1 1/4"	9.7

<b>1PF2G3-3X/026</b>	<b>R</b>	<b>L</b>	<b>D07MB-IN001</b>
Size (see table)			Shaft end splined shaft
Direction of rotation: Clockwise =R Anticlockwise =L			SAE-B 7/8" 13 teeth



**Direction of rotation:**  
 Clockwise (model "R") viewed on the shaft end.  
 With anti-clockwise rotation (model "L")  
 the suction and pressure ports are  
 interchanged !

- 1 Suction side
- 2 Pressure side
- 3 2 x 4 fixing holes M10x16 DEEP for SAE connection flange, suction and pressure ports are the same.
- 4 Splined shaft SAE-B 7/8" 13 teeth

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