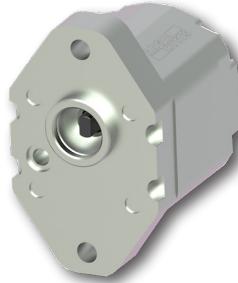


Gear Pump – Lightline Version

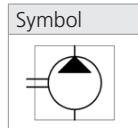
GPOL

Displacement up to 0.88 cm³ (0.05 inch³) • p_{max contin.} 200 bar (2900 PSI) • Speed from 500 to 7000 RPM



Technical Features

- › Operating pressure 200 bar, Peak pressure 250 bar
- › Cost effective design for circuits with a lower operating pressure
- › High quality aluminum alloys pump with axial play compensation
- › Service life for 1 800 operation hours
- › Volumetric efficiency up to 96 %



Technical Data

Nominal Size Parameters		Symbol	Unit	Displacement						
				Code	0,25	0,32	0,40	0,50	0,63	0,80
Actual displacement		V _g	[cm ³]	0.26	0.32	0.38	0.50	0.65	0.88	
			[in ³]	0.0159	0.020	0.023	0.031	0.040	0.054	
Rotation speed	nominal	n _o	[min ⁻¹]	1500						
	minimum	n _{min}	[min ⁻¹]	1000						
	maximum	n _{max}	[min ⁻¹]	7000						
Pressure at inlet	minimum	p _{1min}	[bar]	-0.3 (-4.4 PSI)						
	maximum	p _{1max}	[bar]	0.5 (7.3 PSI)						
Pressure at outlet	max. continuous	p _{2n}	[bar]	200						
			[PSI]	2901						
	maximum	p _{2max}	[bar]	230						
			[PSI]	3336						
	peak	p ₃	[bar]	250						
			[PSI]	3626						
Weight		m	[kg]	0.37	0.38	0.38	0.38	0.39	0.40	
			[lbs]	0.82	0.84	0.84	0.84	0.86	0.88	

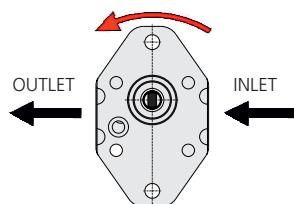
- 1) p_{2n} maximum continuous pressure - maximum working pressure, at which the pump can be operated without time limitation.
- 2) p_{2max} maximum pressure - maximum pressure permissible for a short time, max. 20 s.
- 3) p₃ peak pressure - short-time pressure (fractions of a second) arising in case of a sudden change of the operating mode; any excess of this pressure during operation is impermissible.

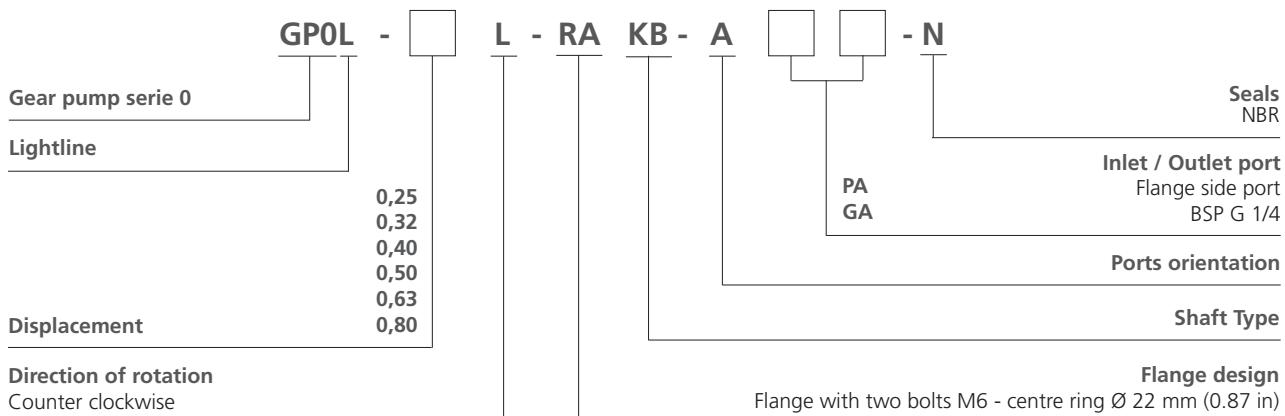
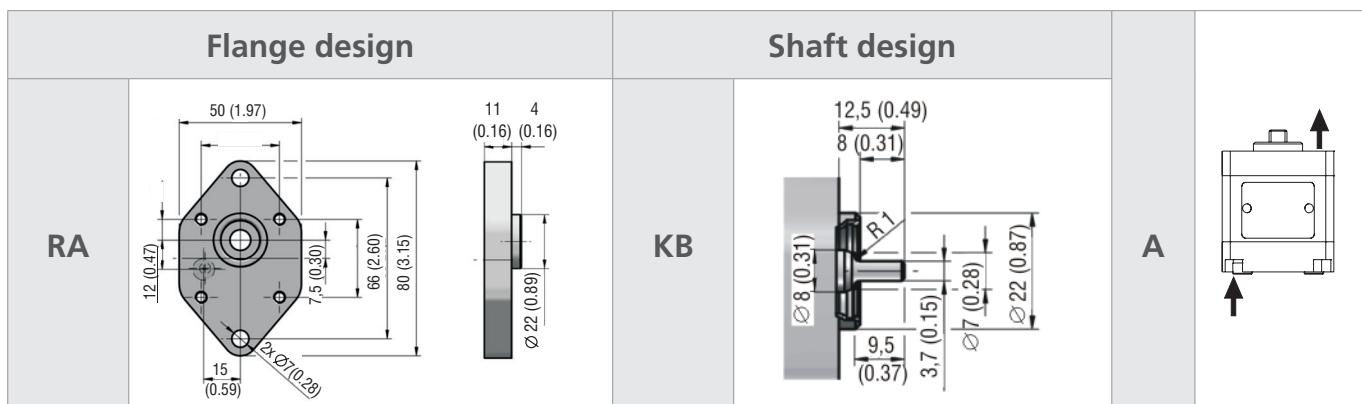
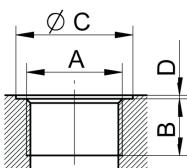
Gear Pump / Size		GPOL - 0.26 ... 0.88 ccm
Volumetric efficiency	%	89 ÷ 96
Mechanical efficiency	%	85
Fluid temperature range (NBR)	°C (°F)	-20...80 (-4...176)
Viscosity range	mm ² /s (SUS)	20 ...80 (97 ...390), 1200 (5849) for cold start
Hydraulic fluid		Hydraulic oils of power classes (HL, HLP) to DIN 51524
Max. degree of fluid contamination for p ₂ ≤200 bar		Class 21/18/15 acc. to ISO 4406
Max. degree of fluid contamination for p ₂ ≥200 bar		Class 20/17/14 acc. to ISO 4406

Direction of rotation

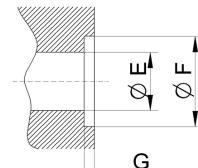
The pump can be used only in the specified direction of rotation.

COUNTER-CLOCKWISE "L"

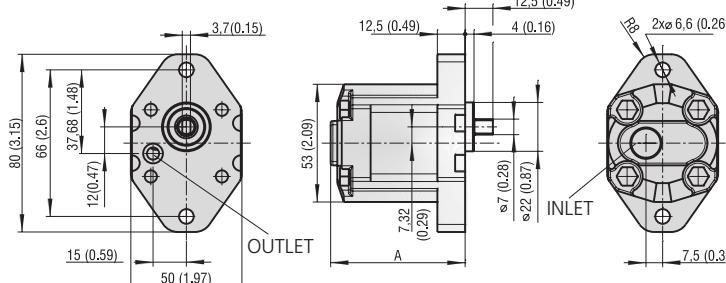


Ordering Code

Combination of Flange and Shafts and Port orientation in millimeters (inches)

Ports design in millimeters (inches)
Dimensions of thread


Displacement [cm³(in³)]	Code	Inlet / Outlet		
		A	B	C
All	GA	G1/4	12 (0.47)	26 (1.02)

Inlet / outlet


Displacement [cm³(in³)]	Code	Inlet / Outlet		
		E	F	G
All	PA	5.5 (0.22)	8.9 (0.35)	1.1 (0.04)

Pump design in millimeters (inches)
GPOL-*L-RAKB-AGAPA-N


Ordering Code	Displacement [cm³(in³)/rev]	A
GPOL-0,25L-RAKB-AGAPA-N	0.26 (0.016)	60.7
GPOL-0,32L-RAKB-AGAPA-N	0.32 (0.020)	61.1
GPOL-0,40L-RAKB-AGAPA-N	0.38 (0.023)	61.5
GPOL-0,50L-RAKB-AGAPA-N	0.50 (0.031)	62.5
GPOL-0,63L-RAKB-AGAPA-N	0.65 (0.040)	63.5
GPOL-0,80L-RAKB-AGAPA-N	0.88 (0.054)	65.5