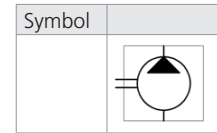



Technical Features

- › Operating pressure 230 bar, Peak pressure 270 bar
- › Cost effective design for circuits with a lower operating pressure
- › High quality aluminum alloys pump with axial play compensation
- › Service life for 1800 operation hours
- › Volumetric efficiency up to 96 %
- › International standard flanges acc.to SAE, ISO, DIN

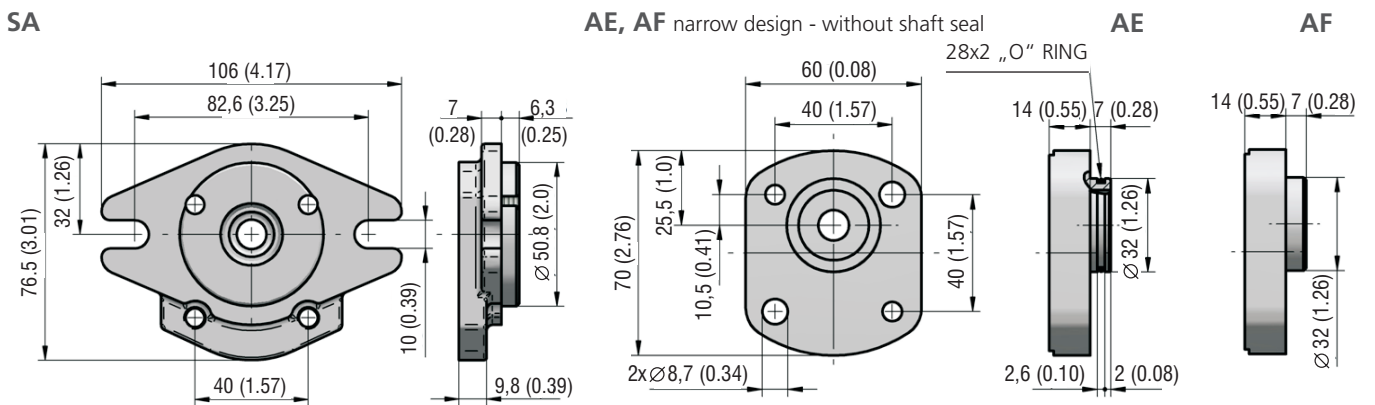
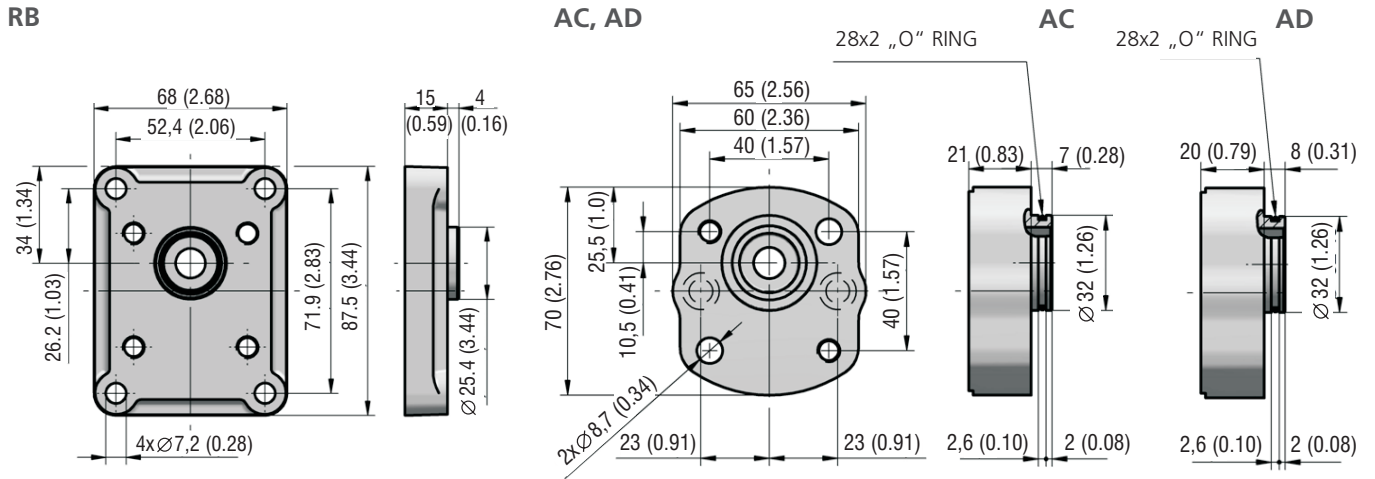

Technical Data

Nominal Size Parameters	Symbol	Unit	Displacement														
			Code	0,8	1,3	1,6	1,8	2,1	2,7	3,2	3,7	4,2	4,8	5,8	7,0	8,0	
Actual displacement	V_g	[cm ³]	0.8	1.3	1.6	1.8	2.1	2.7	3.2	3.7	4.2	4.8	5.8	7.0	8.0		
		[in ³]	0.049	0.079	0.098	0.110	0.128	0.165	0.195	0.226	0.256	0.293	0.354	0.427	0.488		
Rotation speed	nominal	n_n	[min ⁻¹]	1500													
	minimum	n_{min}	[min ⁻¹]	1000				800				600					
	maximum	n_{max}	[min ⁻¹]	6000					5000	4500	4000	3500	3000	2500	2100		
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]	230				210				190		160			
			[PSI]	3336				3046				2756		2321			
	maximum	p_{2max}	[bar]	250				230				210		180			
			[PSI]	3626				3336				3046		2611			
	peak	p_3	[bar]	270				250				230		200			
			[PSI]	3916				3626				3336		2901			
Weight	m	[kg]	0,82	0,85	0,87	0,89	0,92	0,93	0,96	0,98	1,02	1,04	1,08	1,10	1,20		
		[lbs]	1.81	1.87	1.92	1.96	2.03	2.05	2.12	2.16	2.25	2.29	2.38	2.43	2.65		

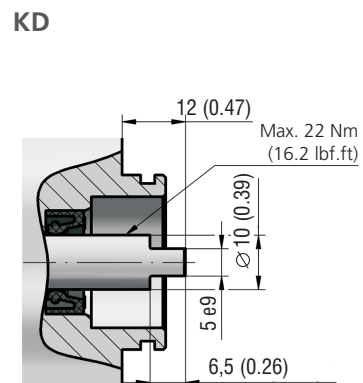
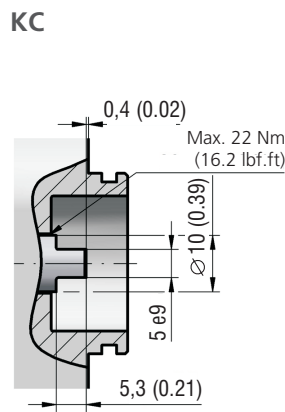
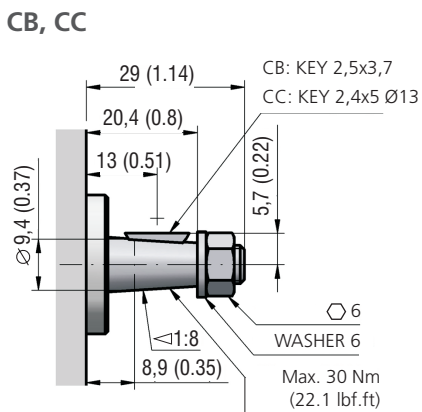
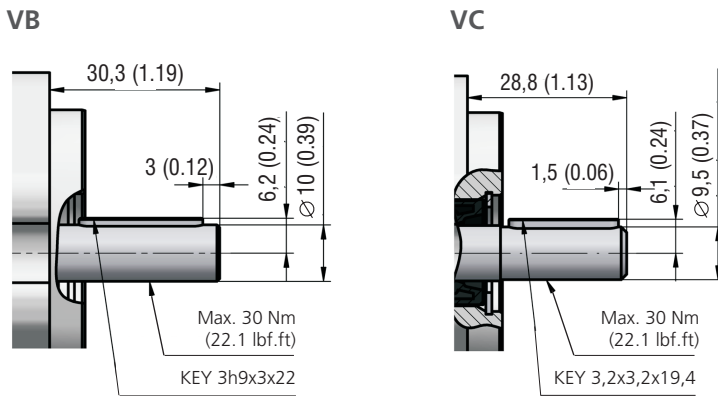
- 1) p_{2n} maximum continuous pressure - maximum working pressure, at which the pump can be operated without time limitation.
- 2) p_{2max} maximum pressure - maximum pressure permissible for a short time, max. 20 s.
- 3) p_3 peak pressure - short-time pressure (fractions of a second) arising in case of a sudden change of the operating mode; any excess of this pressure during operation is impermissible.

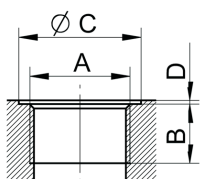
Gear Pump / Size		GP1L - 0,8 ...8 ccm
Volumetric efficiency	%	89 ÷ 98
Mechanical efficiency	%	85
Fluid temperature range (NBR)	°C (°F)	-20...80 (-4...176)
Fluid temperature range (FPM)	°C (°F)	-20...120 (-4...248)
Viscosity range	mm ² /s (SUS)	20 ...80 (97 ...390), 1200 (5849) for cold start
Hydraulic fluid		Hydraulic oils of power classes (HL, HLP) to DIN 51524
Max. degree of fluid contamination for $p_2 \leq 200$ bar		Class 21/18/15 acc. to ISO 4406
Max. degree of fluid contamination for $p_2 \geq 200$ bar		Class 20/17/14 acc. to ISO 4406

Flange design in millimeters (inches)

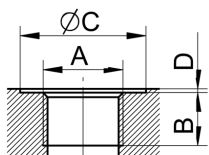


Shaft design in millimeters (inches)

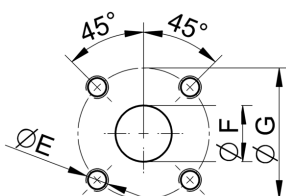


Metric thread according to ISO 6149


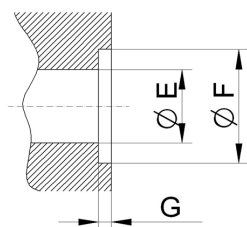
Displacement [cm ³ (in ³)]	Inlet Code	Dimension				Outlet Code	Displacement [cm ³ (in ³)]
		A	B	C	D		
ALL	xx	M14x1,5	13 (0.51)	26 (1.02)	1 (0.04)	MC	ALL
ALL	ME	M18x1,5	13 (0.51)	30 (1.18)		xx	ALL

BSPP pipe thread according to 228-1


Displacement [cm ³ (in ³)]	Inlet Code	Dimension				Outlet Code
		A	B	C	D	
ALL	GA	G1/4	13 (0.51)	26 (1.02)	1 (0.04)	GA
	GB	G3/8		24 (0.94)		GB

Flanged fittings according to DIN 8901/8902


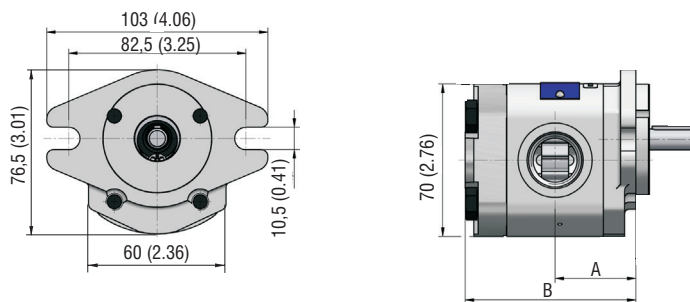
Displacement [cm ³ (in ³)]	Inlet Code	Dimension			Outlet Code
		E	F	G	
ALL	HD	M6 depth 12	12 (0.47)	30 (1.18)	HD

Inlet / Outlet in flange


Code	Dimension		
	E	F	G
PA	9 (0.35)	12,7 (0.50)	1,4 (0.06)

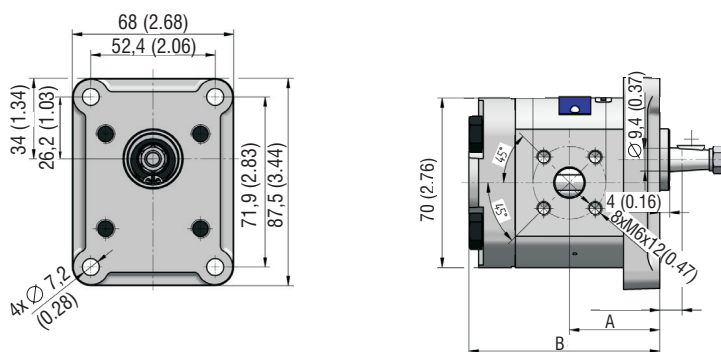
GP1L Pumps - basic design in millimeters (inches)

GP1L-*R(L)-SAVC-SUDUD-N



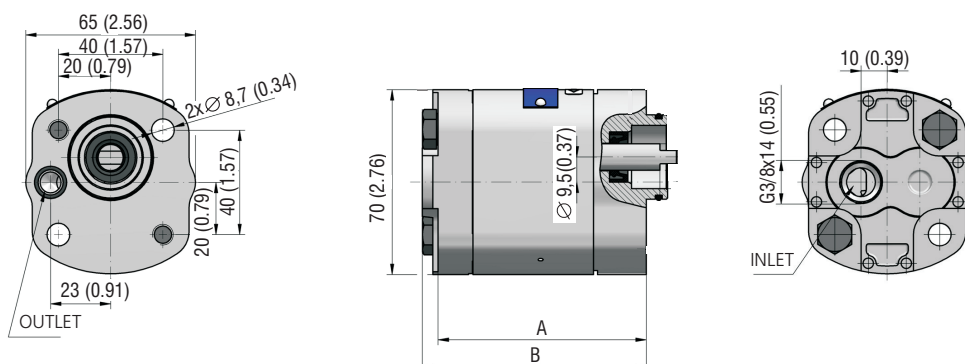
Displacement [cm ³ (in ³)/rev]	A	B	Displacement [cm ³ (in ³)/rev]	A	B
0,8 (0.049)	32,6 (1.28)	69,0 (2.73)	3,7 (0.226)	37,8 (1.49)	79,6 (3.13)
1,3 (0.079)	33,4 (1.31)	70,5 (2.78)	4,2 (0.256)	38,5 (1.52)	81,0 (3.19)
1,6 (0.098)	34,0 (1.34)	72,0 (2.83)	4,8 (0.293)	40,0 (1.65)	84,0 (3.31)
1,8 (0.110)	34,5 (1.36)	73,0 (2.87)	5,8 (0.354)	41,9 (1.65)	87,8 (3.46)
2,1 (0.128)	34,9 (1.37)	74,0 (2.91)	7,0 (0.427)	44,0 (1.73)	92,0 (3.62)
2,7 (0.165)	35,7 (1.41)	76,0 (2.99)	8,0 (0.488)	45,8 (1.80)	95,6 (3.76)
3,2 (0.195)	37,0 (1.46)	78,0 (3.07)			

GP1L-*R-RBCC-SHDUD-N



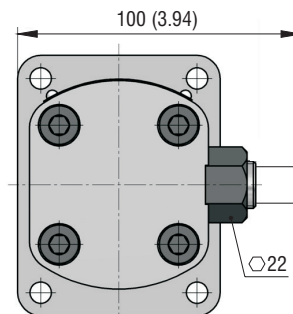
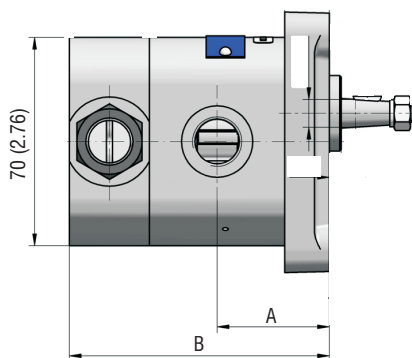
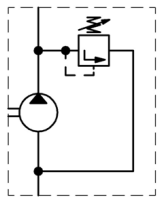
Displacement [cm ³ (in ³)/rev]	A	B	Displacement [cm ³ (in ³)/rev]	A	B
0,8 (0.049)	32,8 (1.29)	73,5 (2.89)	3,7 (0.226)	38,0 (1.50)	84,0 (3.31)
1,3 (0.079)	33,5 (1.32)	75,0 (2.95)	4,2 (0.256)	39,0 (1.54)	86,0 (3.39)
1,6 (0.098)	34,0 (1.34)	76,0 (2.99)	4,8 (0.293)	40,0 (1.57)	88,0 (3.46)
1,8 (0.110)	34,5 (1.36)	77,0 (3.03)	5,8 (0.354)	42,0 (1.65)	92,0 (3.62)
2,1 (0.128)	35,0 (1.38)	78,0 (3.07)	7,0 (0.427)	44,0 (1.73)	96,0 (3.78)
2,7 (0.165)	36,0 (1.42)	80,0 (3.15)	8,0 (0.488)	46,0 (1.81)	100,0 (3.94)
3,2 (0.195)	37,0 (1.46)	82,0 (3.23)			

GP1L-*L-ADKD-AGBPA-N



Displacement [cm ³ (in ³)/rev]	A	B	Displacement [cm ³ (in ³)/rev]	A	B
0,8 (0.049)	61,5 (2.42)	73,5 (2.89)	3,7 (0.226)	72,0 (2.83)	84,0 (3.31)
1,3 (0.079)	63,0 (2.48)	75,0 (2.95)	4,2 (0.256)	74,0 (2.91)	86,0 (3.39)
1,6 (0.098)	64,0 (2.52)	76,0 (2.99)	4,8 (0.293)	76,0 (2.99)	88,0 (3.46)
1,8 (0.110)	65,0 (2.56)	77,0 (3.03)	5,8 (0.354)	80,0 (3.15)	92,0 (3.62)
2,1 (0.128)	66,0 (2.60)	78,0 (3.07)	7,0 (0.427)	84,0 (3.31)	96,0 (3.78)
2,7 (0.165)	68,0 (2.68)	80,0 (3.15)	8,0 (0.488)	88,0 (3.46)	100,0 (3.94)
3,2 (0.195)	70,0 (2.76)	82,0 (3.23)			

GP1L-*R-RBCB-SGBGB-N.002



Displacement [cm ³ (in ³)/rev]	A	B	Displacement [cm ³ (in ³)/rev]	A	B
0,8 (0.049)	32,8 (1.29)	82,5 (3.25)	3,7 (0.226)	38,0 (1.50)	93,0 (3.66)
1,3 (0.079)	33,5 (1.32)	84,0 (3.31)	4,2 (0.256)	39,0 (1.54)	95,0 (3.74)
1,6 (0.098)	34,0 (1.34)	85,0 (3.35)	4,8 (0.293)	40,0 (1.57)	97,0 (3.82)
1,8 (0.110)	34,5 (1.36)	86,0 (3.39)	5,8 (0.354)	42,0 (1.65)	101,0 (3.98)
2,1 (0.128)	35,0 (1.38)	87,0 (3.43)	7,0 (0.427)	44,0 (1.73)	105,0 (4.13)
2,7 (0.165)	36,0 (1.42)	89,0 (3.50)	8,0 (0.488)	46,0 (1.81)	109,0 (4.29)
3,2 (0.195)	37,0 (1.46)	91,0 (3.58)			