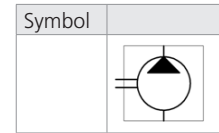




Technical Features

- › 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



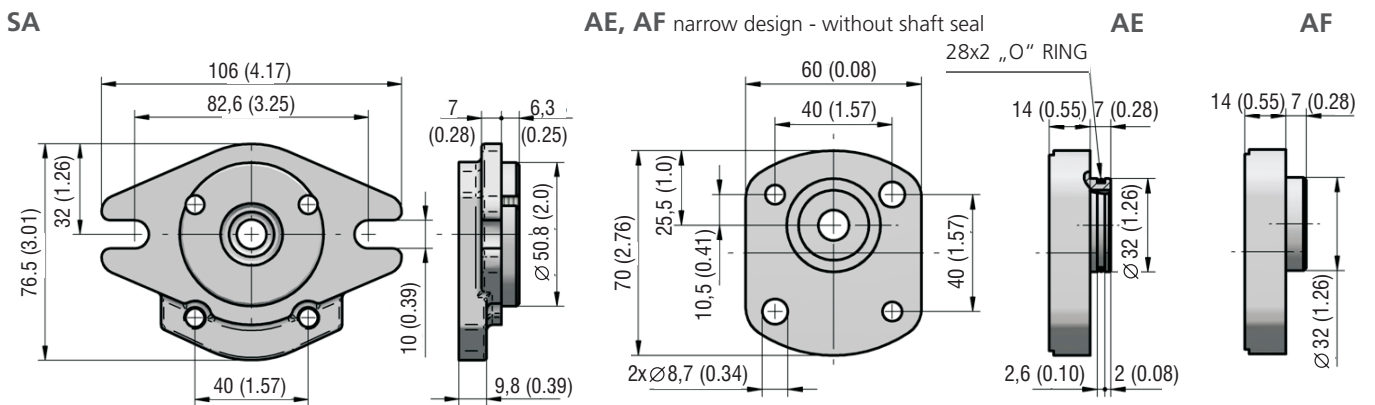
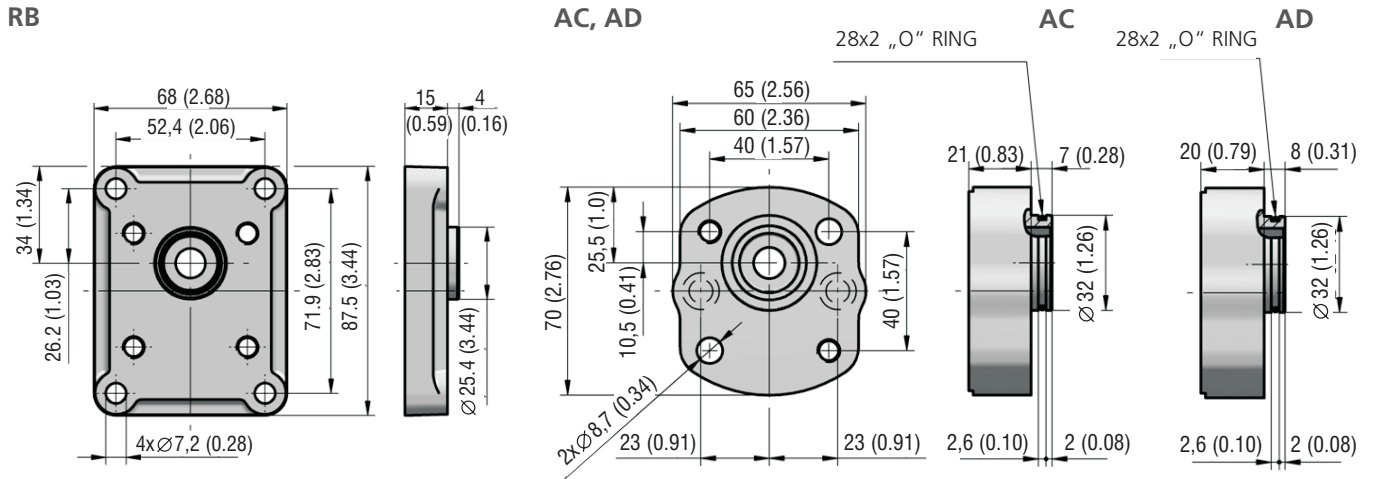
Technical Data

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	1500													
	minimum	n_{min}	1000													
	maximum	n_{max}	3500							3000				2000		
Pressure at inlet	minimum	p_{1min}	-0,3 (-4.4 PSI)													
	maximum	p_{1max}	0,5 (7.3 PSI)													
Pressure at outlet	max. continuous	p_{2n}	230				210				190			160		
		[PSI]	3336				3046				2756			2321		
	maximum	p_{2max}	250				230				210			180		
		[PSI]	3626				3336				3046			2611		
	peak	p_3	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	

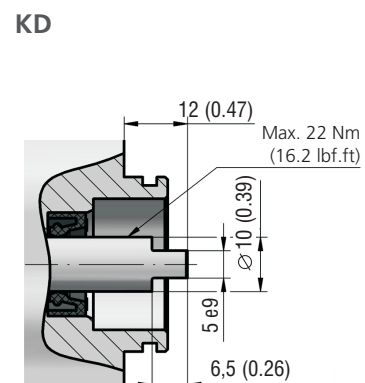
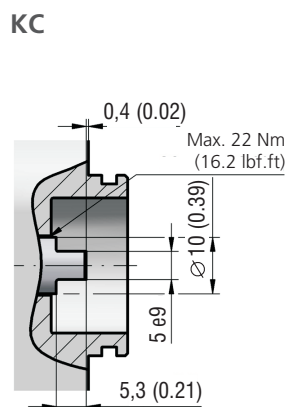
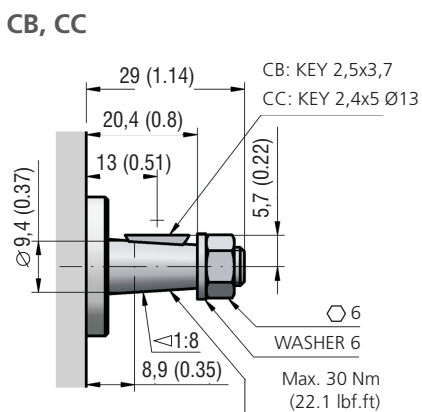
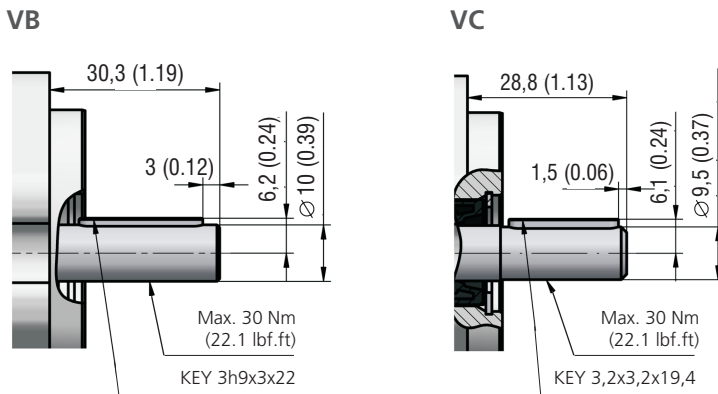
- 1) p_{2n} maximum continuous pressure - maximum working pressure, at which the pump can be operated without time limitation.
- 2) p_{2max} maximum pressure - maximum pressure permissible for a short time, max. 20 s.
- 3) p_3 peak pressure - short-time pressure (fractions of a second) arising in case 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 ÷ 96
Mechanical efficiency	%	83
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 $p_2 \leq 200$ 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

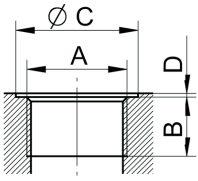
Flange design in millimeters (inches)



Shaft design in millimeters (inches)

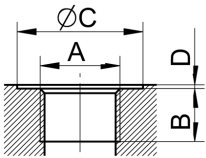


Metric thread according to ISO 6149



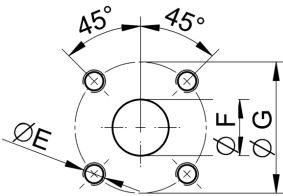
Displacement [cm ³ (in ³)]	Inlet Code	Dimension				Outlet Code	Displacement [cm ³ (in ³)]
		A	B	C	D		
ALL	xx	M14x1,5	13 (0.51)	26 (1.02)	1 (0.04)	MC	ALL
ALL	ME	M18x1,5	13 (0.51)	30 (1.18)		xx	ALL

BSPP pipe thread according to 228-1



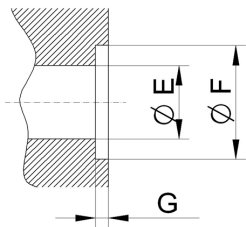
Displacement [cm ³ (in ³)]	Inlet Code	Dimension				Outlet Code
		A	B	C	D	
ALL	GA	G1/4	13 (0.51)	26 (1.02)	1 (0.04)	GA
	GB	G3/8		24 (0.94)		GB

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

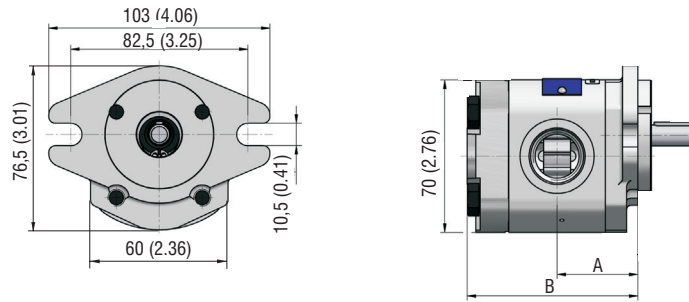
Inlet / Outlet in flange



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

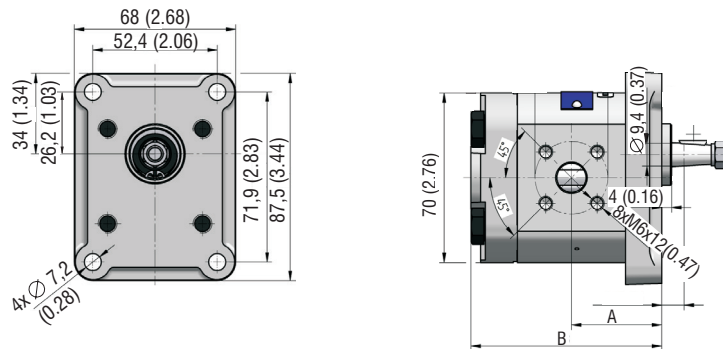
GP1L Pumps - basic design in millimeters (inches)

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



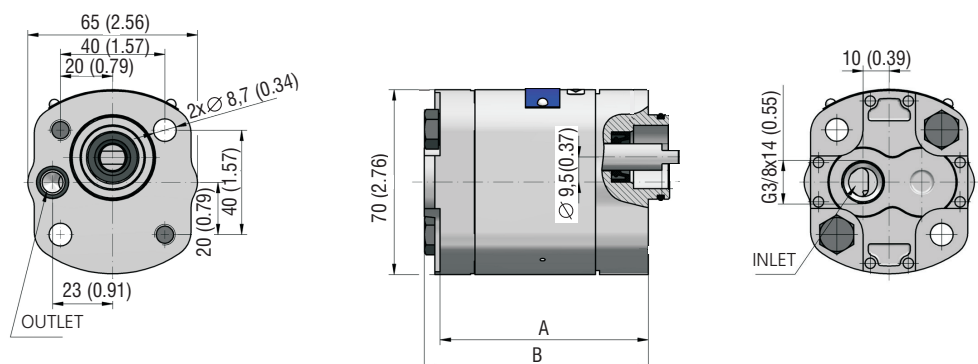
Displacement [cm ³ (in ³)/rev]	A	B	Displacement [cm ³ (in ³)/rev]	A	B
0,8 (0.049)	32,6 (1.28)	69,0 (2.73)	3,7 (0.226)	37,8 (1.49)	79,6 (3.13)
1,3 (0.079)	33,4 (1.31)	70,5 (2.78)	4,2 (0.256)	38,5 (1.52)	81,0 (3.19)
1,6 (0.098)	34,0 (1.34)	72,0 (2.83)	4,8 (0.293)	40,0 (1.65)	84,0 (3.31)
1,8 (0.110)	34,5 (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



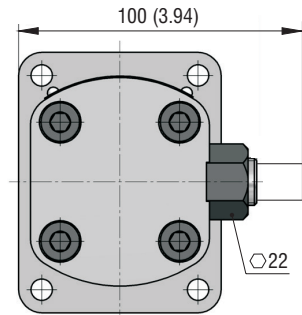
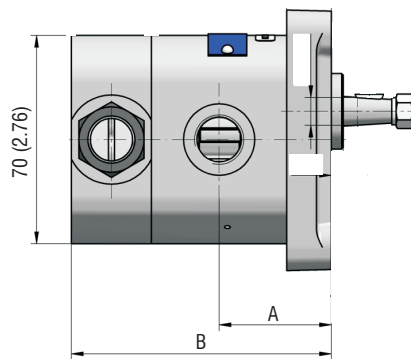
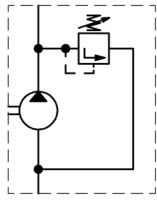
Displacement [cm ³ (in ³)/rev]	A	B	Displacement [cm ³ (in ³)/rev]	A	B
0,8 (0.049)	32,8 (1.29)	73,5 (2.89)	3,7 (0.226)	38,0 (1.50)	84,0 (3.31)
1,3 (0.079)	33,5 (1.32)	75,0 (2.95)	4,2 (0.256)	39,0 (1.54)	86,0 (3.39)
1,6 (0.098)	34,0 (1.34)	76,0 (2.99)	4,8 (0.293)	40,0 (1.57)	88,0 (3.46)
1,8 (0.110)	34,5 (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)			