



Technical Features

- › Nominal pressure 270 bar, peak pressure 300 bar
- › High quality aluminum alloys pump with axial play compensation
- › Low noise level in whole operating range
- › High operational reliability and long service life
- › High volumetric efficiency up to 96%
- › International standards flanges as per SAE, ISO, DIN, GHOST

Symbol	R, L	B

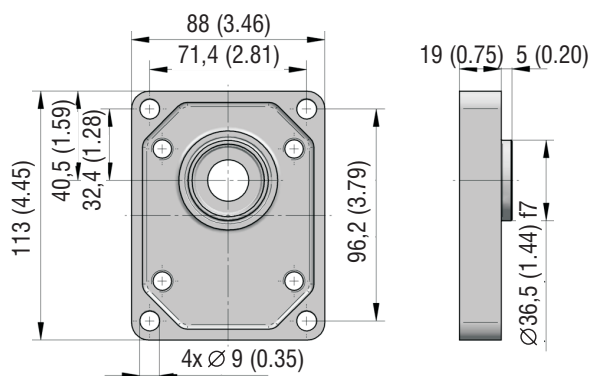
Technical Data

Nominal Size Parameters		Symbol	Unit	Displacement													
			[cm³]	3	4	6	8	10	12	14	16	18	20	22	25	28	30
Actual displacement		V _g	[in³]	0.183	0.244	0.366	0.488	0.610	0.732	0.854	0.976	1.098	1.220	1.343	1.526	1.709	1.831
Rotation speed	nominal	n _n	[min ⁻¹]	1500													
	minimum	n _{min}	[min ⁻¹]	800	600		500				400						
	maximum	n _{max}	[min ⁻¹]	4000			3500	3000		4000		3600	3200	3000		2500	
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]	270						250			220		200	180	160
			[PSI]	3916						3626			3191		2901	2611	2321
	maximum	p _{2max}	[bar]	285						265			235		215	190	170
			[PSI]	4134						3844			3408		3118	2756	2466
	peak	p ₃	[bar]	300						280			250		230	200	180
			[PSI]	4351						4061			3626		3336	2901	2611
Weight		m	[kg]	2,6	2,63	2,65	2,75	2,8	2,95	3,03	3,1	3,22	3,35	3,4	3,5	3,8	3,97
			[lbs]	5.73	5.80	5.84	6.06	6.17	6.50	6.68	6.83	7.10	7.39	7.50	7.72	8.38	8.75

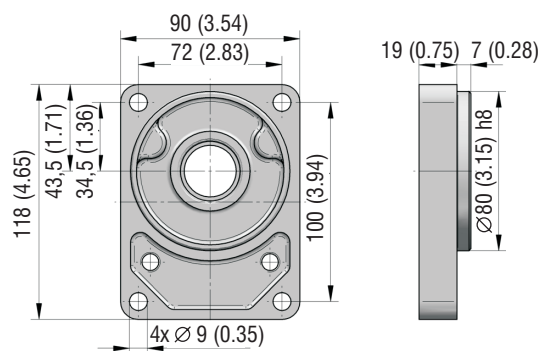
- 1) *Inlet pressure in the reversible design can be up to $p_1 = p_{2n} - 70$ bar max. External drainage must be used in case of the reversible design.
- 2) **Outlet pressure in the reversible design is 10% lower than shown in the table (depending on operating conditions).
- 3) p_{2n} maximum continuous pressure - maximum working pressure, at which the pump can be operated without time limitation.
- 4) p_{2max} maximum pressure - maximum pressure permissible for a short time, max. 20 s.
- 5) 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		GP2L - 3 ...30 ccm
Volumetric efficiency	%	89 ÷ 96
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

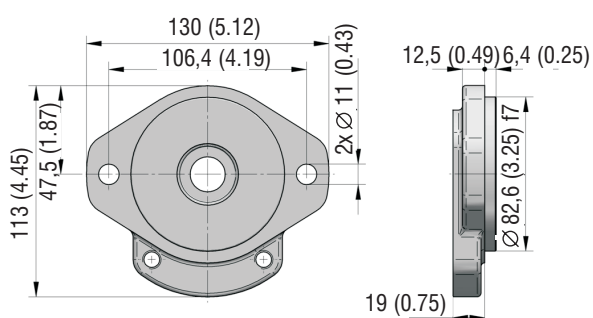
RE



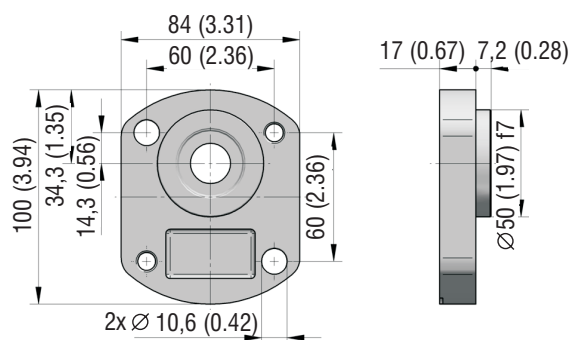
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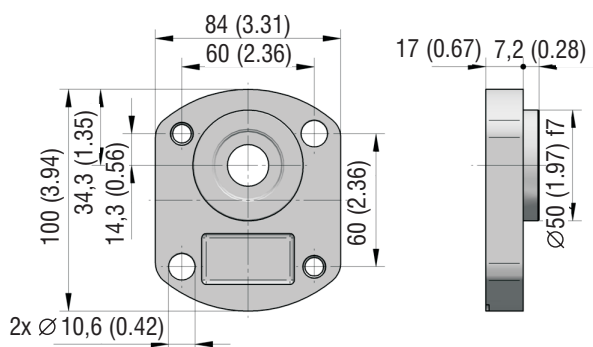
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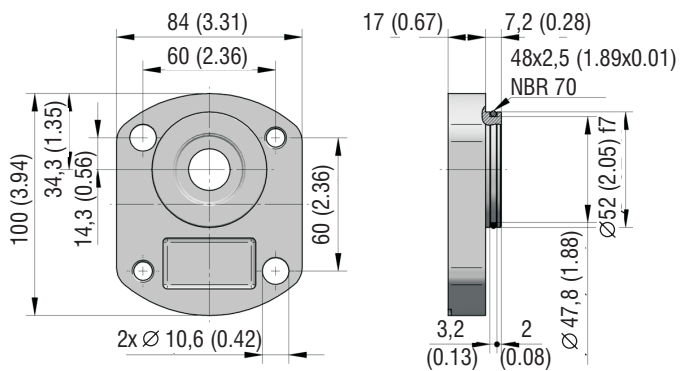
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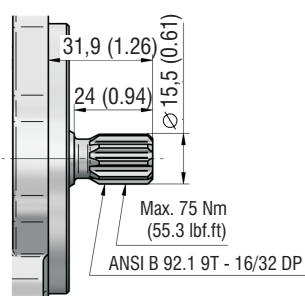
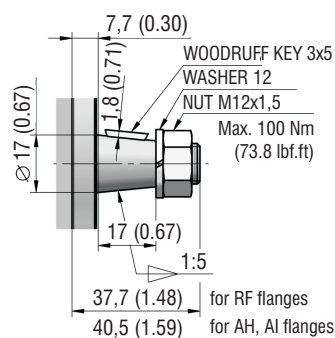
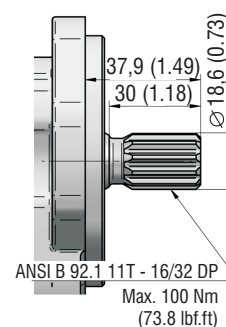
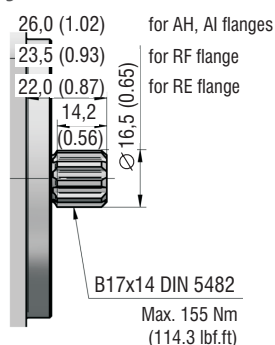
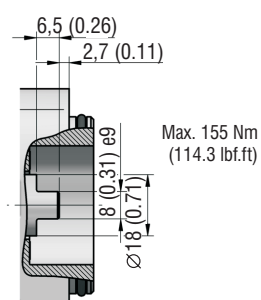
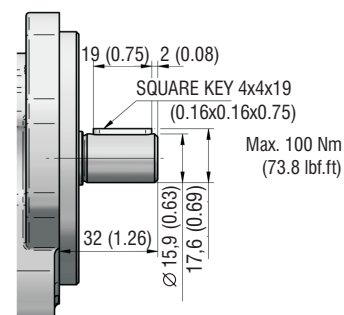
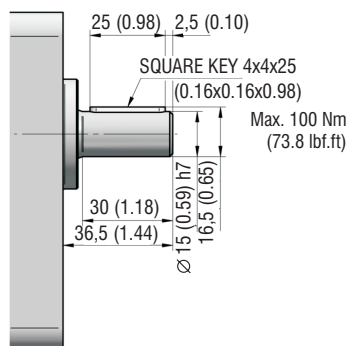
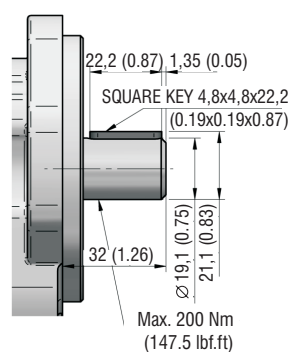


AI

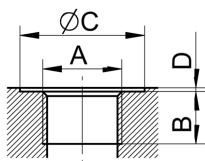


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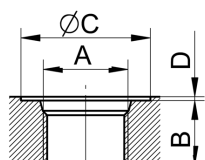
DD

CK

DH

DJ

KH

VJ

VL

VM


BSPP pipe thread according to ISO 228 -1



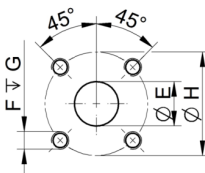
Displacement cm ³ (in ³)	Inlet Code	Dimension				Outlet Code	Dimension			
		A	B	C	D		A	B	C	D
3-6 (0.18-0.34)	GC	G1/2	14 (0.55)	33 (1.30)	1 (0.04)	GC	G1/2	14 (0.55)	33 (1.30)	1 (0.04)
8-30 (0.49-1.83)	GD	G3/4	16 (0.63)	39 (1.53)		GD	G3/4	16 (0.63)	39 (1.53)	
16-30 (0.98-1.83)	GE	G1	18 (0.71)	45 (1.77)		GD	G3/4	16 (0.63)	39 (1.53)	

UNF thread according to SAE



Displacement cm ³ (in ³)	Inlet Code	Dimension				Outlet Code	Dimension			
		A	B	C	D		A	B	C	D
ALL	UD	7/8-14 UNF-2B	17 (0.67)	34 (1.34)	1 (0.04)	UD	7/8-14 UNF-2B	17 (1.04)	33 (1.30)	1 (0.04)
	UE	1-1/16-12 UNF-2B	19 (0.75)	41 (1.61)						
	UH	1-5/16 UNF-2B	23 (0.91)	49 (1.93)						

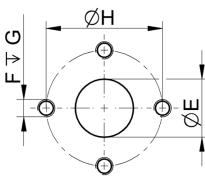
Flanged fittings according to DIN 8901/8902



Displacement cm ³ (in ³)	Inlet Code	Dimension				Outlet Code	Dimension			
		E	F	G	H		E	F	G	H
ALL	HF	20 (0.79)	M6	13 (0.51)	40 (1.57)	HE	15 (0.59)	M6	13 (0.51)	35 (1.38)
16-30 (0.98-1.83)	HK	25 (0.98)	M8	13 (0.51)	55 (2.17)					

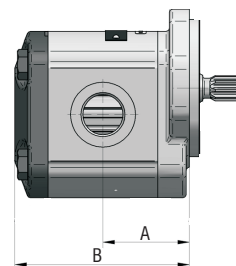
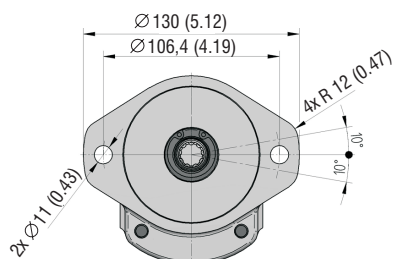
Note: H10H05 - for multiple version - for with one common inlet

Flanged fittings - „cross“

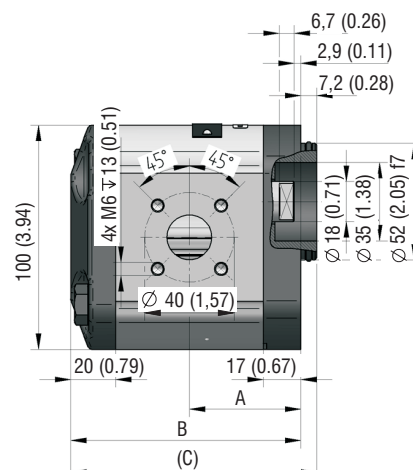
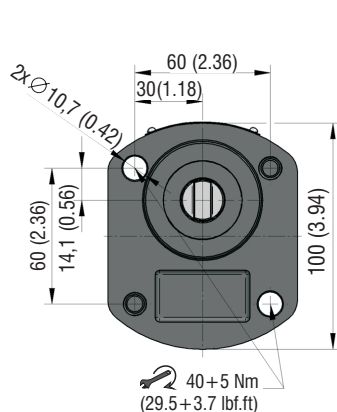


Displacement cm³(in³)]	Inlet Code	Dimension				Outlet Code	Dimension			
		E	F	G	H		E	F	G	H
ALL	KB	20 (0.79)	M8	13 (0.51)	40 (1.57)	KA	13,5 (0.53)	M6	13 (0.51)	30 (1.18)
	KH	14 (0.55)			38 (1.50)	KH	14 (0.55)	M8		38 (1.50)
	KI	19 (0.75)								

GP2 Pumps - basic design in millimeters (inches)

GP2L-*R-SBDD-SG*G*-N


Displacement [cm ³ (in ³)/rev]	A	B	Displacement [cm ³ (in ³)/rev]	A	B
3 (0.18)	43,6 (1.72)	91,1 (3.59)	16 (0.98)	54,4 (2.14)	112,7 (4.44)
4 (0.24)	44,4 (1.75)	92,7 (3.65)	18 (1.10)	56,0 (2.20)	116,0 (4.57)
6 (0.37)	46,0 (1.81)	96,0 (3.78)	20 (1.22)	57,7 (2.27)	119,3 (4.70)
8 (0.49)	47,7 (1.88)	99,3 (3.91)	22 (1.34)	59,3 (2.33)	122,6 (4.83)
10 (0.61)	49,3 (1.94)	102,6 (4.04)	25 (1.53)	61,8 (2.43)	127,6 (5.02)
12 (0.73)	51,0 (2.01)	105,9 (4.17)	28 (1.71)	64,3 (2.53)	132,6 (5.22)
14 (0.85)	52,7 (2.07)	109,3 (4.30)	30 (1.83)	66,0 (2.60)	135,9 (5.35)

GP2L-*R-AJKH-SH*H*-N


Displacement [cm ³ (in ³)/rev]	A	B	C	Displacement [cm ³ (in ³)/rev]	A	B	C
3 (0.18)	37,4 (1.47)	88,6 (3.49)	95,8 (3.77)	16 (0.98)	45,0 (1.77)	110,2 (4.34)	117,4 (4.62)
4 (0.24)	37,4 (1.47)	90,2 (3.55)	97,4 (3.83)	18 (1.10)	45,0 (1.77)	113,5 (4.47)	120,7 (4.75)
6 (0.37)	38,6 (1.52)	93,5 (3.68)	100,7 (3.96)	20 (1.22)	45,0 (1.77)	116,8 (4.60)	124,0 (4.88)
8 (0.49)	40,7 (1.60)	96,8 (3.81)	104,0 (4.09)	22 (1.34)	52,6 (2.07)	120,1 (4.73)	127,3 (5.01)
10 (0.61)	41,2 (1.62)	100,1 (3.94)	107,3 (4.22)	25 (1.53)	59,3 (2.33)	125,1 (4.93)	132,3 (5.21)
12 (0.73)	45,0 (1.77)	103,4 (4.07)	110,6 (4.35)	28 (1.71)	61,8 (2.43)	130,1 (5.12)	137,3 (5.41)
14 (0.85)	45,0 (1.77)	106,8 (4.20)	114,0 (4.49)	30 (1.83)	63,5 (2.50)	133,4 (5.25)	140,6 (5.54)