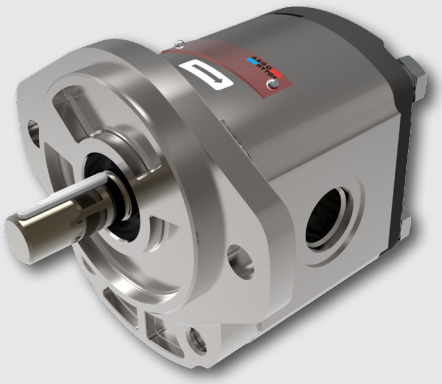
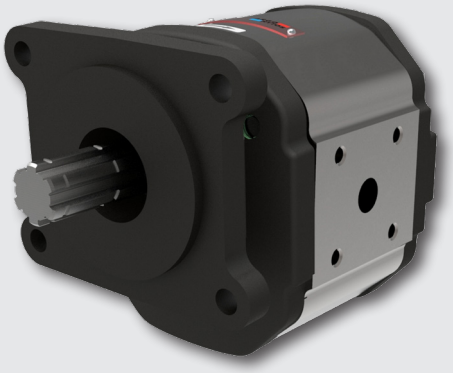
We produce fluid power **solutions**

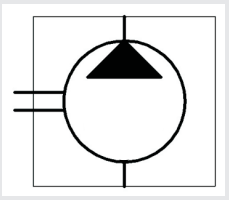
ARGO HYTOS



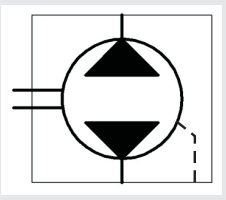


Clockwise
Counterclockwise
Bidirectional

R, L



B

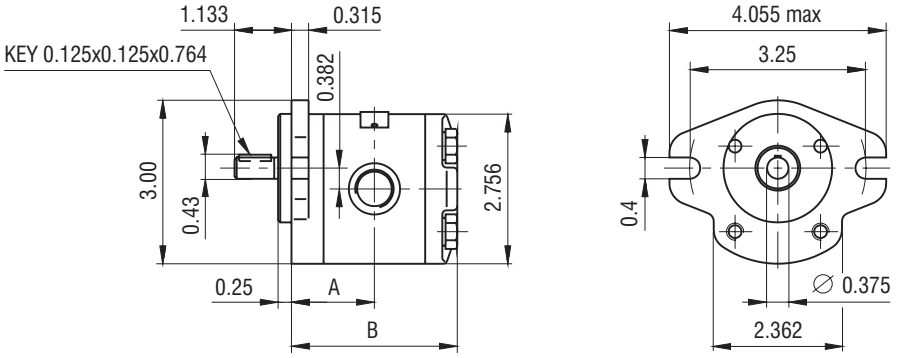


Hydraulic Gear Pumps

High Performance Version

GP1 Pumps - basic design dimensions in inches

GP1-*R-SAVC-SU*U*-N
L
B

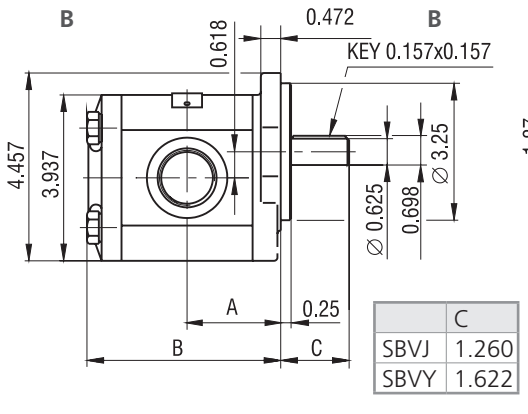


Displacement		Speed [rpm]		Dimens. [in]		Displacement		Speed [rpm]		Dimens. [in]		Displacement		Speed [rpm]		Dimens. [in]	
[in³/rev]	**code**	MIN	MAX	A	B	[in³/rev]	**code**	MIN	MAX	A	B	[in³/rev]	**code**	MIN	MAX	A	B
0.052	**0,8**	800	5000	1.28	2.73	0.202	**3,3**	500	4000	1.46	3.09	0.379	**6,2**	500	3500	1.68	3.53
0.077	**1,2**	800	5000	1.31	2.79	0.220	**3,6**	500	4000	1.49	3.13	0.428	**7**	500	3000	1.73	3.65
0.103	**1,6**	600	4500	1.34	2.85	0.268	**4,4**	500	4000	1.54	3.25	0.481	**7,9**	500	3000	1.80	3.76
0.127	**2,1**	600	4500	1.37	2.91	0.292	**4,8**	500	3800	1.57	3.31	0.610	**10**	500	1800	1.95	4.07
0.153	**2,5**	500	4000	1.41	2.97	0.354	**5,8**	500	3800	1.65	3.46	0.720	**11,8**	500	1800	2.09	4.32

GP2 Pumps - basic design dimensions in inches

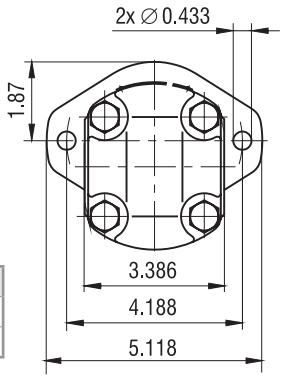
GP2-*R-SBVJ-SU*U*-N
L
B

GP2-*R-SBVY-SU*U*-N
L
B



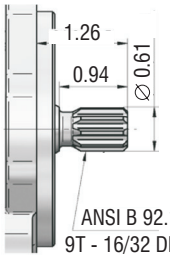
	C
SBVJ	1.260
SBVY	1.622

GP2-*R-SBDD-SU*U*-N
L
B

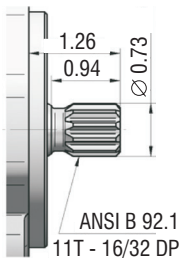


GP2-*R-SBDF-SU*U*-N
L
B

SBDD



SBDF

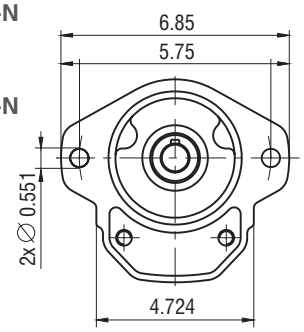


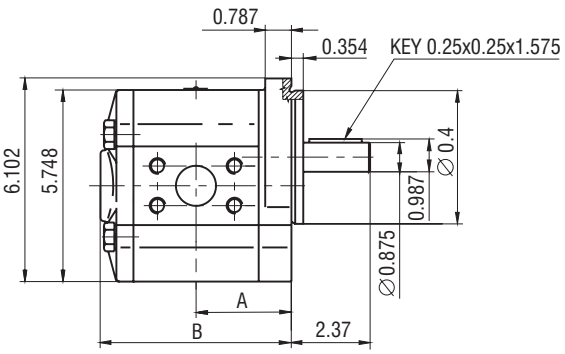
Displacement		Speed [rpm]		Dimens. [in]		Displacement		Speed [rpm]		Dimens. [in]		Displacement		Speed [rpm]		Dimens. [in]	
[in³/rev]	**code**	MIN	MAX	A	B	[in³/rev]	**code**	MIN	MAX	A	B	[in³/rev]	**code**	MIN	MAX	A	B
0.246	**4**	500	4000	1.67	3.39	0.610	**10**	500	3600	1.86	3.75	1.344	**22**	500	3000	2.23	4.50
0.305	**5**	500	4000	1.70	3.45	0.737	**12**	500	3600	1.92	3.88	1.535	**25**	500	2800	2.32	4.69
0.367	**6**	500	4000	1.73	3.51	0.982	**16**	500	3200	2.04	4.13	1.905	**31**	500	2200	2.51	5.06
0.491	**8**	500	3600	1.80	3.63	1.228	**20**	500	3200	2.17	4.38						

GP3 Pumps - basic design dimensions in inches

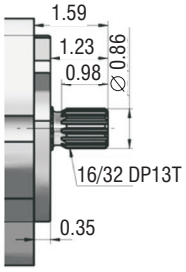
GP3-*R-SCVO-SU*U*-N
L
B

GP3-*R-SCDN-SU*U*-N
L
B





SCDN



Displacement		Speed [rpm]		Dimens. [in]		Displacement		Speed [rpm]		Dimens. [in]		Displacement		Speed [rpm]		Dimens. [in]	
[in³/rev]	**code**	MIN	MAX	A	B	[in³/rev]	**code**	MIN	MAX	A	B	[in³/rev]	**code**	MIN	MAX	A	B
0.62	**10**	400	3200	2.17	4.35	1.68	**27**	350	3200	2.41	4.82	3.76	**61**	350	2000	2.87	5.75
0.84	**13,5**	400	3200	2.22	4.45	2.08	**34**	350	3000	2.50	5.00	4.34	**71**	350	1800	3.00	6.00
1.06	**17**	350	3200	2.27	4.55	2.65	**43**	350	2500	2.63	5.26	5.00	**82**	350	1800	3.15	6.29
1.37	**22,5**	350	3200	2.35	4.71	3.14	**51**	350	2500	2.74	5.47	6.10	**100**	350	1800	3.40	6.77

GEAR PUMPS - Ordering Code

GP2 - 12 R - SBVJ - S UE UD - N

Gear pump
Frame Size

GP1
GP2
GP3

Displacement

GP1		GP2		GP3	
in³/rev	**code**	in³/rev	**code**	in³/rev	**code**
0.052	**0,8**	0.246	**4**	0.62	**10**
0.077	**1,2**	0.305	**5**	0.84	**13,5**
0.103	**1,6**	0.367	**6**	1.06	**17**
0.127	**2,1**	0.491	**8**	1.37	**22,5**
0.153	**2,5**	0.610	**10**	1.68	**27**
0.202	**3,3**	0.737	**12**	2.08	**34**
0.220	**3,6**	0.982	**16**	2.65	**43**
0.268	**4,4**	1.228	**20**	3.14	**51**
0.292	**4,8**	1.344	**22**	3.76	**61**
0.354	**5,8**	1.535	**25**	4.34	**71**
0.379	**6,2**	1.905	**31**	4.00	**82**
0.428	**7**			6.10	**100**
0.481	**7,9**				
0.610	**10**				
0.720	**11,8**				

Seals*
N NBR

Pressure port*
- see Table Ports

Suction port*
- see Table Ports

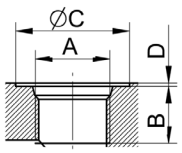
Ports orientation*
S Ports in the hausing

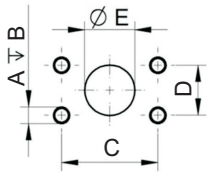
Flange - Shaft*
SAVC
SBVJ SBVY SBDD SBDF
SCVO SCDN
GP1
GP2
GP3

Direction of rotation
L Counterclockwise
R Clockwise
B Bidirectional

*Other options in the complete catalogue

Ports

PORTS of the pumps S ⇒ suction port P ⇒ pressure port								A	B	C	D	E	Dimensions A, B, C, D, E [in]
					GP1 P	Ports type U*	**UB**	9/16-18 UNF	0.51	0.97	0.04		
				GP1 S	GP1 P		**UC**	3/4-16 UNF	0.51	0.97	0.04		
	GP3 P<17	GP2 S<10	GP2 P	GP1 S			**UD**	7/8-14 UNF	0.63	1.34	0.04		
GP3 S<17	GP3 P17-27	GP2 S>11					**UE**	1-1/16-12 UNF	0.75	1.61	0.04		
GP3 S17-39	GP3 P>27						**UH**	1-5/16-12 UNF	0.91	1.93	0.04		
GP3 S>39							**UI**	1-5/8-12 UNF	0.91	2.28	0.04		

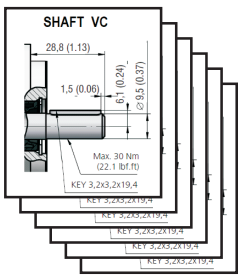
	GP3 P<71					Ports type A*	**AB**	3/8-16-UNC	0.87	1.87	0.87	0.75	
GP3 S<71	GP3 P>61						**AC**	3/8-16-UNC	0.87	2.06	1.03	1.00	
GP3 S>61	GP3 P>61						**AD**	7/16-14-UNC	1.14	2.31	1.19	1.20	
GP3 S>61							**AE**	1/2-13-UNC	1.06	2.75	1.41	1.55	
Description "< 17" means: for pumps with code of displacement under 17													

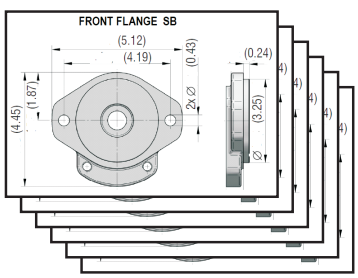
Complete Catalogue

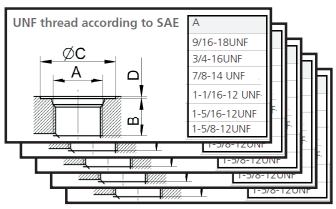
Many different Shafts - Flanges - Ports options are available - see complete catalogue.

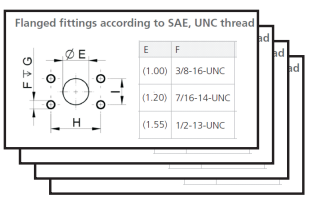
Find there also other technical details as temperature range, suitable viscosity, …

http://www.argo-hytos.com/products/hydraulic-drives.html





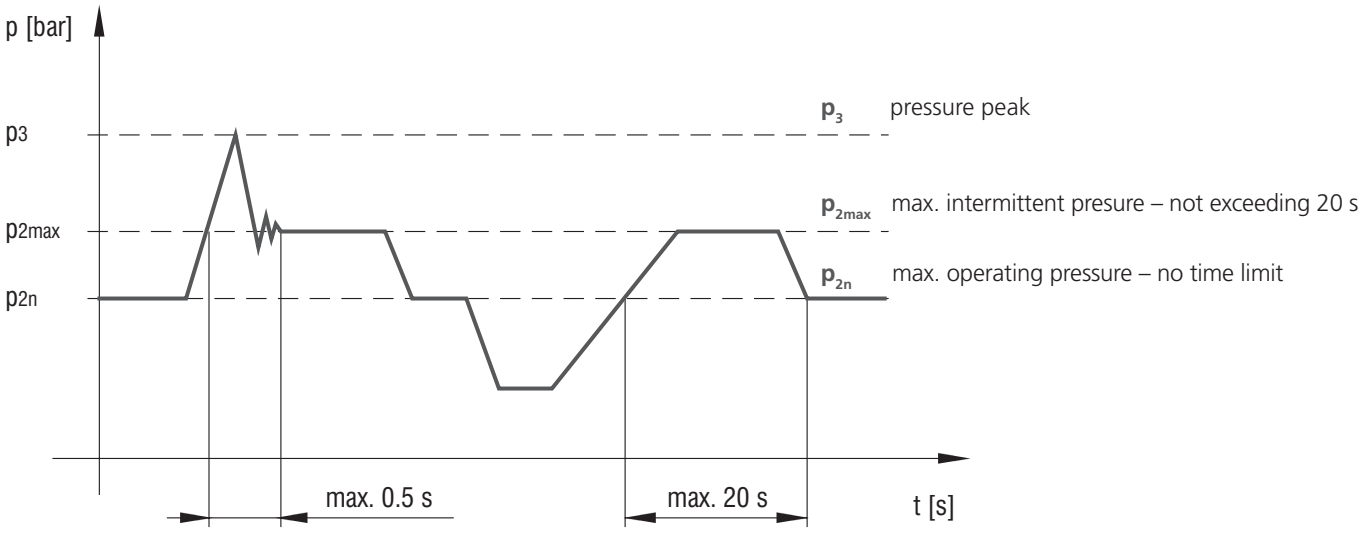




GEAR PUMPS - overview

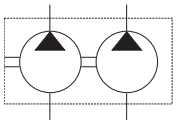
Maximal operating pressure $p2_n$																
GP1	Displacement [in³/rev]	0.052	0.077	0.103	0.127	0.153	0.202	0.220	0.268	0.292	0.354	0.379	0.428	0.481	0.610	0.720
	Pressure [PSI]	4060						3770	3625	3335	2900	2610	2465	2320	1450	
GP2	Displacement [in³/rev]	0.246	0.305	0.367	0.491	0.610	0.737	0.982	1.228	1.344	1.535	1.905				
	Pressure [PSI]	4060				3770			3480	3335	2900	2175				
GP3	Displacement [in³/rev]	0.62	0.84	1.06	1.37	1.68	2.08	2.65	3.14	3.76	4.34	5.00	6.10			
	Pressure [PSI]	3915	4205					4060	3915	3625	3335	2900	2610			

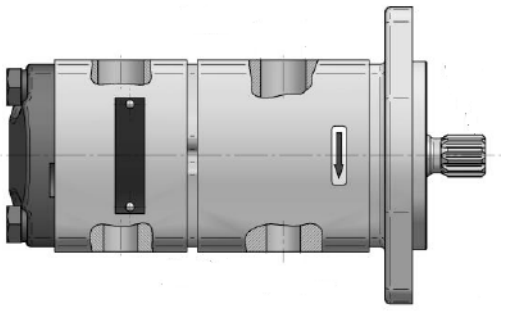
Pressure load



Multiple Pumps

Gear pumps are suitable for multiple setups, whereby the drive shaft for the 1st pump is extended to a second and even a 3rd pump. A coupling is fitted between each pair of pumps. In most cases each pump is isolated from its neighbor, i.e. the suction ports are separate from one another. A common suction port is also possible as an option.
Caution: Basically, the specifications for the single pumps apply, but with certain restrictions:
Max. / Min. speed
– the limit of any pump must not be exceeded.
Torque
– the shaft load of the first pump corresponds to the sum of the torques of all the pumps.





Examples of Multiple Pumps

Double pump	Triple pumps
GP1-0,8/0,8R-SAVC-SHDHD/HDHD-N	GP2-12/4/4R-SBVJ-SGDGC/GCGC/GCGC-N GP2-12/4/GP1-2,5R-SBVJ-SGDGC/GCGC/GBGB-N

Special Versions

Customized version	Low speed pumps GP1
Customized versions with special flanges, shafts and ports can be developed for reasonable quantity.	The lowest speed of our special version „Low speed pumps GP1“ is 50 rpm. Ask our office for this pump version.