

ALSG2

Hydraulic motor

ALSG2 Series hydraulic motor

ALSG2 series motor adapt the advanced Gerolor gear set design with shaft distribution flow, which can automatically compensate in operating with high pressure, provide reliable and smooth operation, high efficiency and long life.

Characteristic features:

- *Advanced manufacturing devices for the Gerolor gear set, which use low pressure of start-up, provide smooth, reliable operation and high efficiency.
- *Shaft seal can bear high pressure of back and the motor can be used in parallel or in series.
- *Special design in the driver-linker and prolong operating life
- *Special design for distribution system can meet the requirement of low noise of unit.
- *Compact volume and easy installation

Main specification

Technical data for ALSG2 with 25 and 1 in and 1 in splined and 28.56 tapered shaft

Type		ALSG2 ALSG2S 36	ALSG2 ALSG2S 50	ALSG2 ALSG2S 80	ALSG2 ALSG2S 100	ALSG2 ALSG2S 125	ALSG2 ALSG2S 160	ALSG2 ALSG2S 200	ALSG2 ALSG2S 250	ALSG2 ALSG2S 315	ALSG2 ALSG2S 375
Geometric displacement (cm ³ /rev.)		36	51.7	81.5	102	127.2	157.2	194.5	253.3	317.5	381.4
Max. speed (rpm)	cont.	1085	960	750	600	475	378	310	240	190	155
	int.	1220	1150	940	750	600	475	385	300	240	190
Max. torque (N·m)	cont.	72	100	195	240	300	360	360	390	390	365
	int.	83	126	220	280	340	430	440	490	535	495
	peak	105	165	270	320	370	460	560	640	650	680
Max. output (kW)	cont.	8.5	9.5	12.5	13.0	12.5	12.5	10.0	7.0	6.0	5.0
	int.	9.8	11.2	15.0	15.0	14.5	14.0	13.0	9.5	9.0	8.0
Max. pressure drop (MPa)	cont.	14.0	14	17.5	17.5	17.5	16.5	13	11	9	7
	int.	16.5	17.5	20	20	20	20	17.5	15	13	10
	peak	22.5	22.5	22.5	22.5	22.5	22.5	22.5	20	17.5	15
Max. flow (L/min)	cont.	40	50	60	60	60	60	60	60	60	60
	int.	45	60	75	75	75	75	75	75	75	75
Weight (kg)		6.5	6.7	6.9	7	7.3	7.6	8.0	8.5	9.0	9.5

- * Continuous pressure:Max.value of operating motor continuously.
- * Intermittent pressure:Max.value of operating motor in 6 seconds per minute .
- * Peak pressure:Max.value of operating motor in 0.6 second per minute.

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Technical data for ALSG2 with 31.75 and 32 shaft

Type		ALSG2	ALSG2	ALSG2	ALSG2	ALSG2	ALSG2	ALSG2	ALSG2	ALSG2	ALSG2
		ALSG2S	ALSG2S	ALSG2S	ALSG2S	ALSG2S	ALSG2S	ALSG2S	ALSG2S	ALSG2S	ALSG2S
		36	50	80	100	125	160	200	250	315	375
Geometric displacement (cm³/rev.)		36	51.7	81.5	102	127.2	157.2	194.5	253.3	317.5	381.4
Max. speed (rpm)	cont.	1250	960	750	600	475	378	310	240	190	155
	int.	1520	1150	940	750	600	475	385	300	240	190
Max. torque (N•m)	cont.	72	100	195	240	300	380	450	540	550	580
	int.	83	126	220	280	340	430	500	610	690	690
	peak	105	165	270	320	370	460	560	710	840	830
Max. output (kW)	cont.	8.5	9.5	12.5	13.0	12.5	12.5	11.0	10.0	9.0	7.5
	int.	9.8	11.2	15.0	15.0	14.5	14.0	13.0	12.0	10.0	9.0
Max. pressure drop (MPa)	cont.	14.0	14	17.5	17.5	17.5	17.5	17.5	17.5	13.5	11.5
	int.	16.5	17.5	20	20	20	20	20	20	17.5	15
	peak	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	21	17.5
Max. flow (L/min)	cont.	45	50	60	60	60	60	60	60	60	60
	int.	55	60	75	75	75	75	75	75	75	75
Weight (kg)		6.5	6.7	6.9	7	7.3	7.6	8.0	8.5	9.0	9.5

- * Continuous pressure:Max.value of operating motor continuously.
- * Intermittent pressure:Max.value of operating motor in 6 seconds per minute .
- * Peak pressure:Max.value of operating motor in 0.6 second per minute.

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Performance data

ALSG2 36 [36cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

	2	3	5	7	9	10	12.5	14.0	16.5
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Flow (L/min)	4	10	16	25	37	46	50		
		105	100	92	80	71	58		
	8	9	15	25	37	47	50	63	71
		208	200	188	175	158	149	134	120
	15	8	14	23	36	45	51	64	72
		403	392	380	365	348	328	318	302
	20	6	13	22	35	44	50	64	72
		540	531	518	500	483	462	450	435
	30	6	12	21	32	42	47	63	70
		810	798	780	763	742	722	705	694
Max.cont.	40	5	11	19	30	41	45	61	68
		1092	1080	1069	1056	1042	1028	1011	984
Max.int.	45	4	10	17	29	40	44	59	66
		1230	1215	1194	1170	1150	1128	1100	1070

ALSG2 50 [51.7cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

	5	7	9	10	12	14	16	17.5
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Flow (L/min)	5	35	45	61	67	77	88		
		93	84	76	73	69	46		
	10	36	46	62	69	80	95	108	120
		186	178	166	162	153	136	118	97
	15	35	49	63	73	88	100	109	123
		283	277	269	261	250	230	211	185
	20	34.5	47	61	69	83	96	109	126
		377	375	365	361	346	330	302	270
	30	33	44	60	67	80	95	108	126
		576	569	561	554	542	531	500	465
Max.cont.	40	30	41	58	66	79	92	106	122
		760	758	753	750	738	724	700	670
Max.int.	45	29.5	40	57	65	78	90	105	121
		856	853	849	845	835	815	796	770
	50	26	37	53	60	73	85	99	114
		950	940	925	906	880	852	832	801
Max.int.	60	20	33	48	56	69	81	95	109
		1138	1124	1100	1075	1056	1028	1006	970

ALSG2 80 [81.5cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

	5	7	9	10	12	14	16	17.5	20
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Flow (L/min)	5	50	64	88	108	133			
		59	56	50	44	38			
	10	54	77	99	108	129	150	173	
		118	113	108	97	86	79	56	
	20	57	78.0	102	111	134	155	177	196
		238	234	227	216	203	190	178	154
	30	54	75	100	108	131	152	176	195
		380	352	340	332	316	302	290	274
	40	48	73	96	105	127	148	172	190
		480	470	458	445	430	418	403	388
	50	42	70	93	102	124	147	170	188
		604	595	582	570	556	540	521	504
Max.cont.	60	37	66	89	98	121	144	166	184
		726	715	704	692	678	663	647	622
Max.int.	70	32	60	83	95	116	140	160	177
		845	834	820	802	789	767	754	730
	75	21	50	78	90	111	135	154	171
		910	895	881	867	852	830	806	787

ALSG2 100 [102cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

	5	7	9	10	12	14	16	17.5	20
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Flow (L/min)	5	66	92	120	135	156			
		45	42	38	34	27			
	10	68	96	125	138	159	188	212	
		93	90	86	81	74	57	42	
	20	65	94.0	123	137	155	186	210	238
		189	185	180	173	165	158	150	139
	30	63	92	120	133	153	185	209	235
		286	281	275	266	257	246	237	225
	40	57	88	117	130	152	185	208	233
		385	378	365	355	345	332	320	314
	50	48	79	110	123	150	183	204	228
		482	477	470	460	448	435	420	405
Max.cont.	60	38	70	105	120	144	178	200	220
		580	572	560	548	535	523	510	500
Max.int.	70	32	65	100	118	141	176	197	215
		678	670	660	648	638	626	615	606
	75	23	59	93	111	136	170	192	210
		728	720	710	695	681	667	650	634

Torque (N·m) 135
Speed (rpm) 830

cont.
int.

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Performance data

ALSG2 125 [127.2cm³/rev.]

		Pressure (MPa)								Max.cont.	Max.int.
		5	7	9	10	12	14	16	17.5	20	
Flow (L/min)	5	76 36	110 31	145 25	167 19	189 13					
	10	84 73	118 70	155 60	176 48	202 36	228 25	253 19			
	20	82 153	117 151	153 148	174 144	200 138	230 128	259 117	294 104	332 73	
	30	79 231	116 228	151 224	171 218	198 210	228 201	257 183	292 168	329 137	
	40	72 309	114 307	148 303	168 298	196 292	226 280	256 270	290 252	327 218	
Max.cont.	50	62 389	105 386	143 382	165 378	195 370	223 360	254 344	287 328	323 292	
	60	52 467	98 463	136 459	160 456	191 448	220 427	250 410	282 399	319 352	
	70	41 545	90 542	130 538	156 534	187 529	215 520	242 508	278 486	313 430	
	Max.int.	32 586	79 583	126 578	148 570	180 560	208 546	234 532	262 520	300 480	
	75										

ALSG2 160 [157.2cm³/rev.]

		Pressure (MPa)								Max.cont.	Max.int.
		5	7	9	10	12	14	16	17.5	20	
Flow (L/min)	5	104 26	146 23	190 20	210 16	245 10					
	10	107 59	150 56	195 50	216 45	250 37	290 30	335 22			
	20	102 121	151 118	198 115	220 113	257 108	298 102	342 97	370 90	420 78	
	30	97 184	146 178	190 173	217 170	256 164	295 155	340 143	368 128	416 103	
	40	89 246	140 241	185 235	210 228	252 220	290 210	335 194	363 177	412 150	
Max.cont.	50	72 310	128 307	179 300	202 295	244 287	284 278	327 262	358 247	409 210	
	60	60 374	116 367	170 359	198 354	240 346	279 338	321 323	352 306	400 265	
	70	49 437	107 430	164 421	193 415	233 403	271 393	309 381	344 365	390 318	
	Max.int.	36 472	98 463	152 450	185 441	226 431	265 420	300 405	334 389	379 365	
	75										

ALSG2 200 [194.5cm³/rev.]

		Pressure (MPa)								Max.cont.	Max.int.
		5	7	9	10	12	14	16	17.5	20	
Flow (L/min)	5	132 24	181 22	238 18	262 13	310 10					
	10	135 49	186 47	240 45	264 43	315 38	356 33	403 24			
	20	131 99	183 97	238 94	260 92	314 88	358 83	404 74	438 64	498 56	
	30	126 149	178 147	233 144	254 141	311 135	355 126	402 113	431 105	486 91	
	40	112 200	169 197	228 194	250 191	307 185	352 174	400 160	426 151	477 127	
Max.cont.	50	95 252	156 249	221 246	246 243	300 238	350 228	398 212	421 194	470 161	
	60	78 304	145 301	213 298	238 294	289 286	342 276	386 262	412 243	459 218	
	70	67 355	135 353	206 349	228 340	277 329	336 316	375 300	408 288	453 257	
	Max.int.	58 382	125 379	197 373	220 382	270 360	321 337	360 322	398 312	442 278	
	75										

ALSG2 250 [253.5cm³/rev.]

		Pressure (MPa)								Max.cont.	Max.int.
		5	7	9	10	12	14	16	17.5	20	
Flow (L/min)	5	175 17	243 16	304 14	342 12	407 10					
	10	178 37	246 35	310 31	344 28	409 23	485 18	525 11			
	20	175 75	244 73	308 72	340 70	408 66	483 58	520 53	558 50	636 42	
	30	162 114	235 111	304 108	332 106	400 100	455 92	516 83	550 77	621 65	
	40	143 154	223 152	300 150	329 147	396 143	447 132	512 120	546 110	617 90	
Max.cont.	50	124 193	208 190	289 187	323 174	384 168	440 160	503 149	535 140	600 116	
	60	103 233	192 230	280 227	314 224	371 218	426 205	489 190	514 181	578 155	
	70	88 273	178 270	264 267	301 263	356 252	418 242	479 226	498 209	560 173	
	Max.int.	62 294	165 291	256 287	288 283	347 274	412 263	474 249	486 236	542 211	
	75										

cont.
int.

Torque (N·m) 250
Speed (rpm) 287

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Performance data

ALSG2 315 [317.5cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5
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Flow (L/min)	5	215 13	302 11					
	10	218 28	305 27	383 25	422 24	488 21	551 18	622 13
	20	215 60	303 59	380 57	418 55	485 52	549 49	620 45
	30	204 91	296 89	375 86	413 84	480 81	542 78	613 72
	40	196 122	287 120	368 117	410 112	477 106	539 100	609 94
	50	176 154	270 151	356 147	393 140	461 131	526 120	597 109
Max.cont.	60	162 185	246 182	339 177	374 172	446 163	511 152	586 140
	70	143 217	235 213	324 208	358 201	430 190	493 178	562 166
Max.int.	75	125 232	212 228	303 222	339 216	417 208	481 200	543 183

Torque (N•m) 481
Speed (rpm) 200

ALSG2 375 [381.4cm³/rev.]

Pressure (MPa)

	3	4.5	5.5	6.5	8	10	12.5	14
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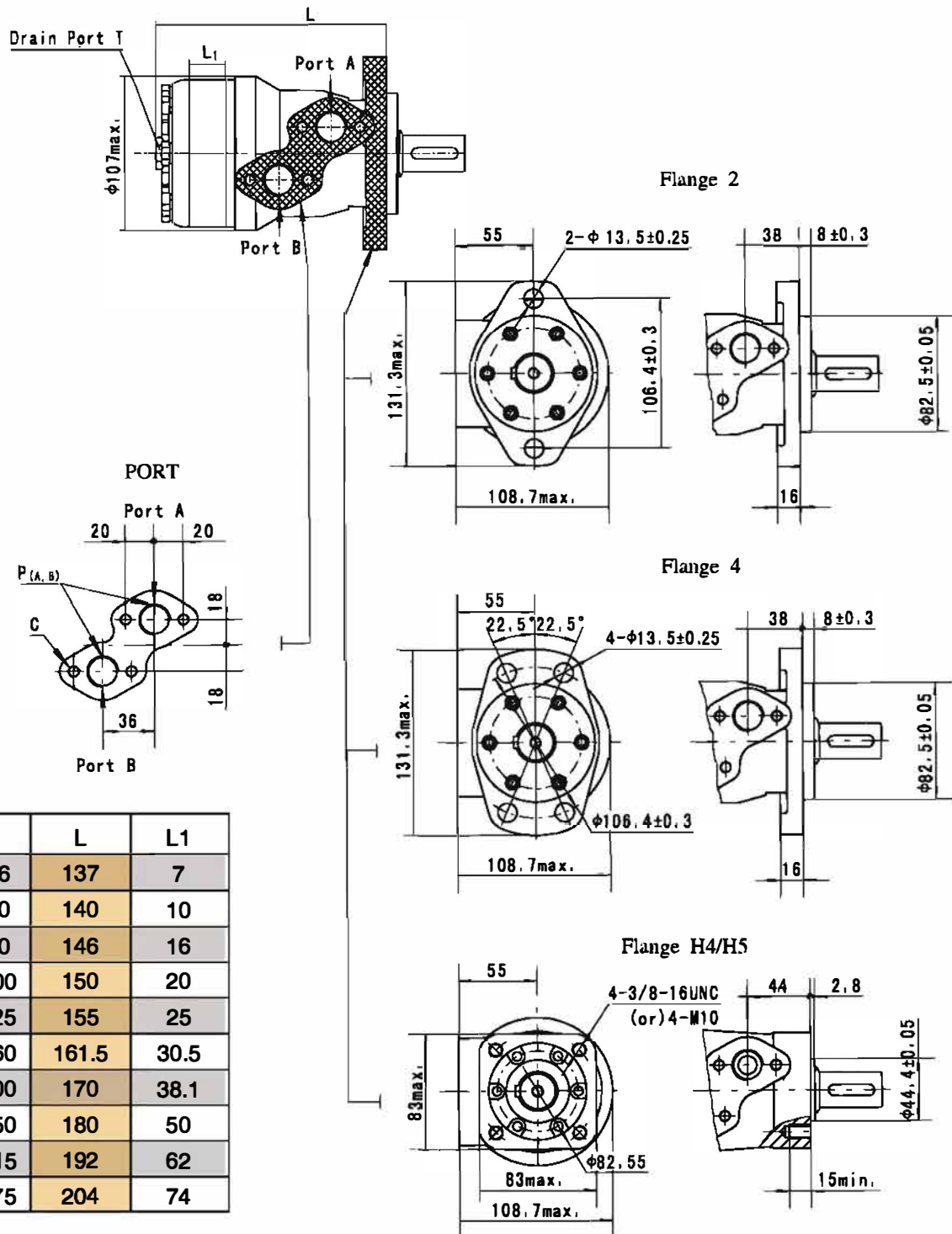
Flow (L/min)	5	153 12	232 10					
	10	157 24	236 23	284 22	337 21	406 19	497 17	612 15
	20	150 49	232 48	280 47	332 46	401 44	490 41	606 38
	30	142 76	215 75	274 74	327 73	398 71	483 67	603 63
	40	126 103	212 101	268 99	320 97	393 95	477 92	593 88
	50	105 128	187 126	242 124	302 121	376 118	455 115	583 111
Max.cont.	60	90 154	167 152	229 150	281 148	362 145	444 138	566 130
	70	90 180	149 179	200 178	258 176	341 173	425 168	546 160
Max.int.	75	56 195	125 194	182 193	241 191	320 189	408 185	524 178

cont.
int.

ALSG2

Hydraulic motor

Dimensions and mounting data



Model	L	L1
ALSG2 36	137	7
ALSG2 50	140	10
ALSG2 80	146	16
ALSG2 100	150	20
ALSG2 125	155	25
ALSG2 160	161.5	30.5
ALSG2 200	170	38.1
ALSG2 250	180	50
ALSG2 315	192	62
ALSG2 375	204	74

Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC(13)	4-5/16-18UNC(13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)