

RW Hydraulic orbit motor



Technical data for RW									
Type		RW 80	RW 100	RW 125	RW 160	RW 200	RW 250	RW 315	RW 400
Geometric displacement (cm ³ /rev.)		81.5	102	127.2	157.2	194.5	253.3	317.5	381.4
Max. speed (rpm)	cont.	750	600	475	378	310	240	190	155
	int.	940	750	600	475	385	300	240	190
Max. torque (Nm)	cont.	195	240	300	380	450	540	550	580
	int.	220	280	340	430	500	610	690	690
	peak	270	320	370	460	560	710	840	830
Max. output (KW)	cont.	12.5	13	12.5	12.5	11	10	9	7.5
	int.	15	15	14.5	14	13	12	10	90
Max. pressure drop (Bar)	cont.	175	175	175	175	175	175	135	115
	int.	200	200	200	200	200	200	175	150
	peak	225	225	225	225	225	225	210	175
Max flow (L/min)	cont.	60	60	60	60	60	60	60	60
	int.	75	75	75	75	75	75	75	75
Weight (kg)		6.9	7	7.3	7.6	8	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

RW series motor adapt the advanced Geroler 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.

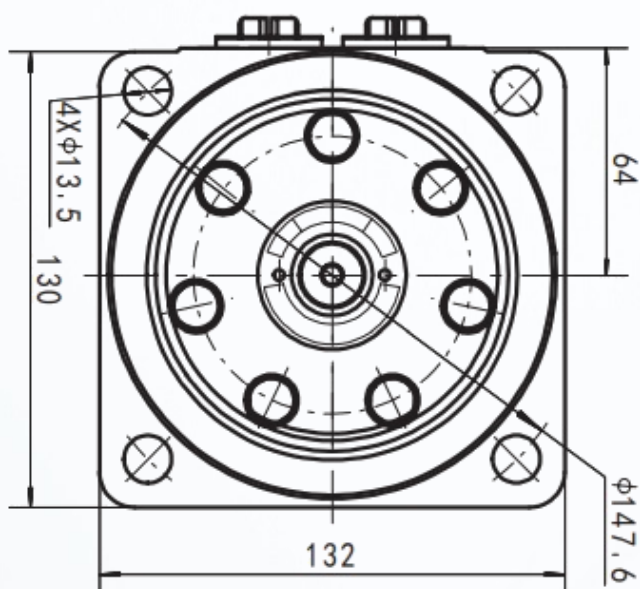
Characteristic features:

- 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
- Compact volume and easy installation.

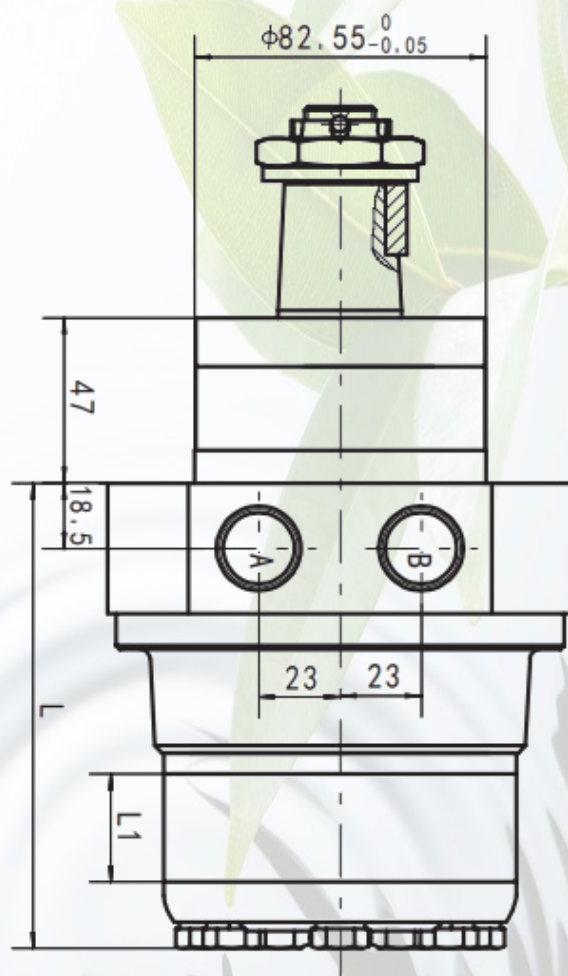
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Overview drawing



Model	L	L1
RW -80	119	16
RW -100	123	20
RW -125	128	25
RW -160	133.5	30.5
RW -200	141	38.1
RW -250	153	50
RW -315	165	62



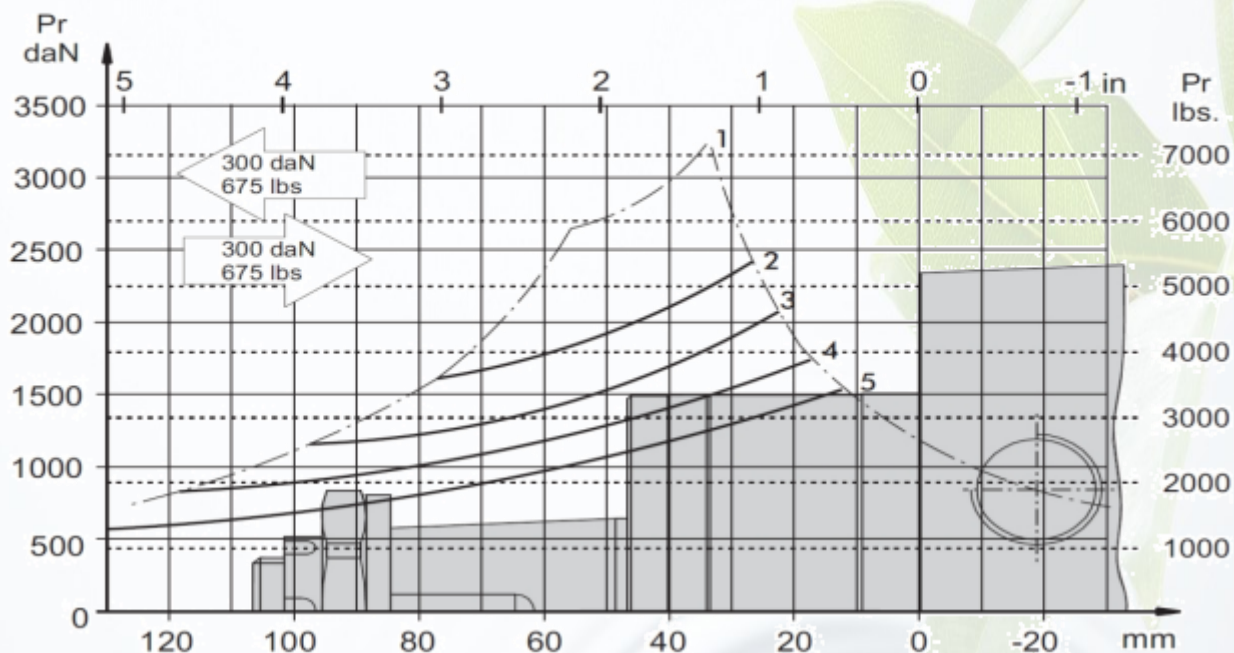
Code Mounting	G(depth)	M(depth)	S(depth)	P(depth)
P(A,B)	G1/2(15)	M22x1.5(15)	7/8-14O-ring(17)	1/2-14NPTF(15)
C	G1/4(12)	M14x1.5(12)	7/16-20UNF(12)	7/16-20UNF(12)

RW Hydraulic orbit motor



Performance data

PERMISSIBLE SHAFT LOADS



The curve applies to a B10 bearing life of 2000 hours. 1. Permissible radial shaft load 2. Drawing by $n = 50$ rpm 3. Drawing by $n = 100$ 4. Drawing by $n = 200$ 5. Drawing by $n = 400$

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RW Hydraulic orbit motor



Performance data

RW 80 [81.5cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	Max.cont.	17.5	Max.int.	20
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Flow (L/min)	5	50	64	88	108	133				
	5	59	56	50	44	38				
10	10	54	77	99	108	129	150	173		
		118	113	106	97	86	79	56		
20	20	57	78.0	102	111	134	155	177	196	225
		238	234	227	216	203	190	178	154	135
30	30	54	75	100	108	131	152	176	195	223
		360	352	340	332	316	302	290	274	250
40	40	48	73	96	105	127	148	172	190	220
		480	470	458	445	430	418	403	388	359
50	50	42	70	93	102	124	147	170	188	218
		604	595	582	570	556	540	521	504	487
Max.cont.	60	37	66	89	98	121	144	166	184	213
		726	715	704	692	678	663	647	622	594
70	70	32	60	83	95	116	140	160	177	208
		845	834	820	802	789	767	754	730	705
Max.int.	75	21	50	78	90	111	135	154	171	200
		910	895	881	867	852	830	806	787	756

RW 100 [102cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	Max.cont.	16	17.5	Max.int.	20
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Flow (L/min)	5	66	92	120	135	156					
	5	45	42	38	34	27					
10	10	68	96	125	138	159	188	212			
		93	90	86	81	74	57	42			
20	20	65	94.0	123	137	155	186	210	238	274	
		189	185	180	173	165	158	150	139	118	
30	30	63	92	120	133	153	185	209	235	270	
		286	281	275	266	257	246	237	225	207	
40	40	57	88	117	130	152	185	208	233	267	
		385	378	365	355	345	332	320	314	297	
50	50	48	79	110	123	150	183	204	228	260	
		482	477	470	460	448	435	420	405	389	
Max.cont.	60	38	70	105	120	144	178	200	220	252	
		580	572	560	548	535	523	510	500	478	
70	70	32	65	100	118	141	176	197	215	246	
		678	670	660	648	638	626	615	606	580	
Max.int.	75	23	59	93	111	136	170	192	210	240	
		728	720	710	695	681	667	650	634	618	

RW 125 [127.2cm³/rev.]

Pressure (MPa)

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

RW 160 [157.2cm³/rev.]

Pressure (MPa)

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

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RW Hydraulic orbit motor



Performance data

RW 200 [194.5cm³/rev.]

Pressure (MPa)

5 7 9 10 12 14 16 17.5 20

Flow (L/min)	Pressure (MPa)								
	5	7	9	10	12	14	16	17.5	20
5	132	181	238	262	310				
10	135	186	240	264	315	356	403		
20	131	183	238	260	314	358	404	438	498
30	126	178	233	254	311	355	402	431	486
40	112	169	228	250	307	352	400	426	477
50	95	156	221	246	300	350	398	421	470
60	78	145	213	238	289	342	386	412	459
70	67	135	206	228	277	336	375	408	453
75	58	125	197	220	270	321	360	398	442

RW 250 [253.5cm³/rev.]

Pressure (MPa)

5 7 9 10 12 14 16 17.5 20

Flow (L/min)	Pressure (MPa)								
	5	7	9	10	12	14	16	17.5	20
5	175	243	304	342	407				
10	178	246	310	344	409	465	525		
20	175	244	308	340	408	463	520	558	636
30	162	235	304	332	400	455	516	550	621
40	143	223	300	329	396	447	512	546	617
50	124	208	289	323	384	440	503	535	600
60	103	192	280	314	371	426	489	514	578
70	88	178	264	301	356	418	479	498	560
75	62	165	256	288	347	412	474	486	542

RW 315 [317.5cm³/rev.]

Pressure (MPa)

5 7 9 10 12 14 16 17.5

Flow (L/min)	Pressure (MPa)							
	5	7	9	10	12	14	16	17.5
5	215	302						
10	218	305	383	422	488	551	622	
20	215	303	380	418	485	549	620	660
30	204	296	375	413	480	542	613	654
40	196	287	368	410	477	539	609	650
50	176	270	356	393	461	526	597	645
60	162	246	339	374	446	511	586	628
70	143	235	324	358	430	493	562	614
75	125	212	303	339	417	481	543	582

RW 400 [381.4cm³/rev.]

Pressure (MPa)

3 4.5 5.5 6.5 8 10 12.5 14

Flow (L/min)	Pressure (MPa)							
	3	4.5	5.5	6.5	8	10	12.5	14
5	153	232						
10	157	236	284	337	406	497	612	668
20	150	232	280	332	401	490	606	660
30	142	215	274	327	398	483	603	652
40	126	212	268	320	393	477	593	635
50	105	187	242	302	376	455	583	608
60	90	167	229	281	362	444	566	600
70	90	149	200	258	341	425	546	580
75	56	125	182	241	320	408	524	565

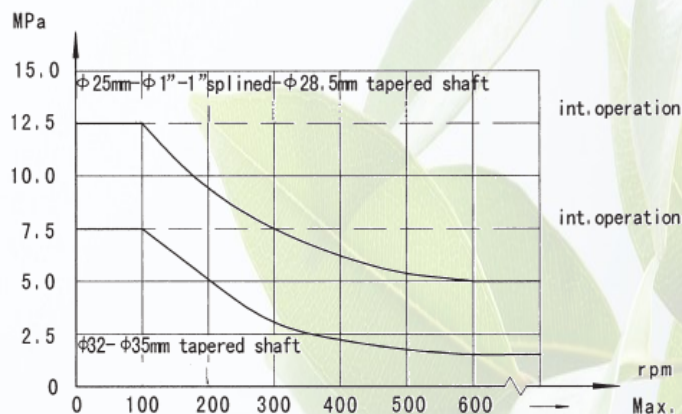
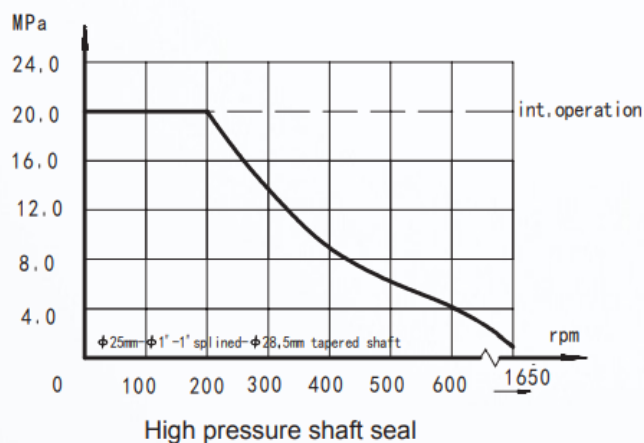
Torque (N·m) 481
Speed (rpm) 200

cont.
int.

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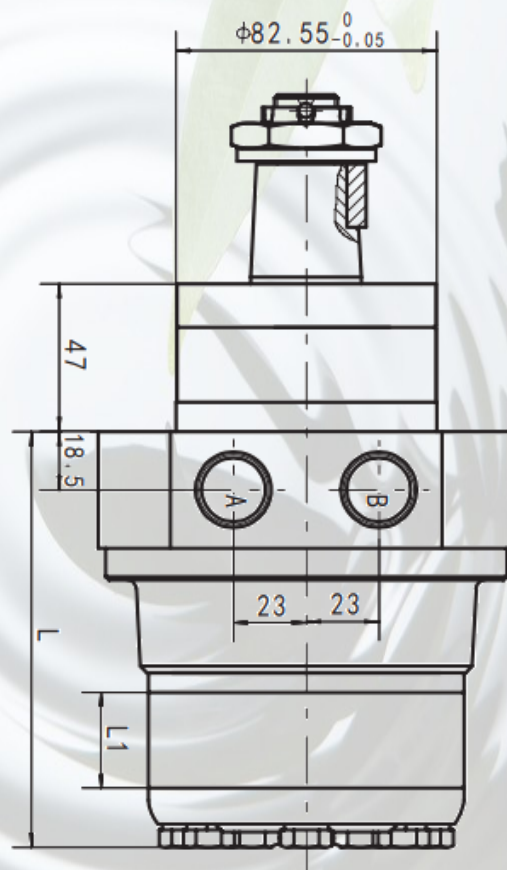


Permissible shaft seal pressure



Direction of shaft rotation

When facing shaft end of motor, shaft to rotate:
Clockwise when port "A" is pressurized.
Counter-clockwise port "B" is pressurized.



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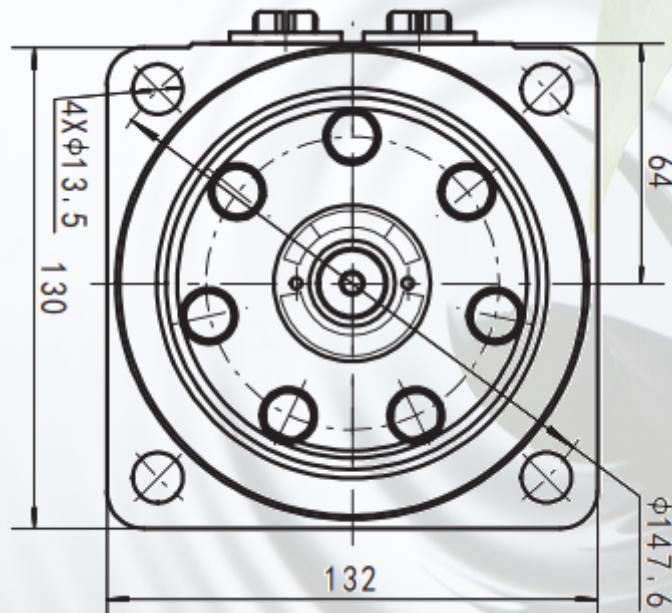
Oilflow drainline

Oil flow in drain line

The table shows the Max. oil flow in the drain line at a return pressure less than 0.5-1MPa.

Pressure drop (MPa)	Viscosity (mm ² /s)	Oil flow in the drain line (L/min.)
10	20	2.5
	35	1.8
14	20	3.5
	35	2.8

Mounting

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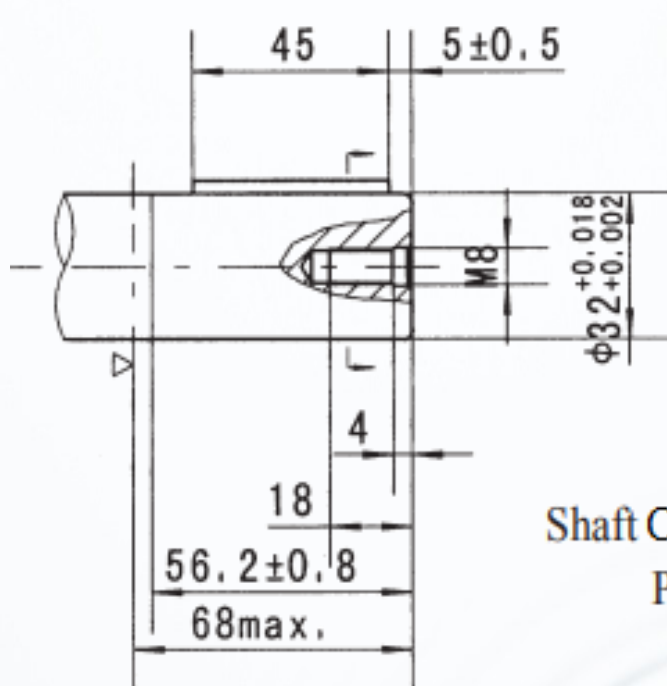
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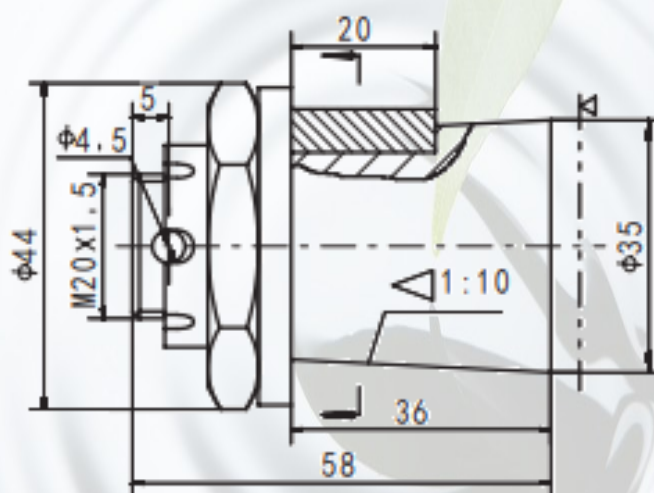
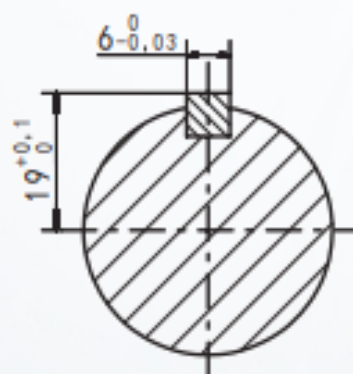
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Shaft extensions



Shaft CB: Cylindrical shaft $\varnothing 32$
Parallel key 10x8x45



Shaft KB: Cone-shaft $\varnothing 35$
Parallel key 6x6x20
Tightening torque: $200 \pm 10 \text{ Nm}$

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