

# MVW Hydraulic Orbit Motor



Type / data	MVW 315	MVW 400	MVW 630	MVW 800
Geometric displacement	315	400	630	800
Max spd. (rpm) *	510	400	320	250
Max Torque (Nm) *	920	1180	1660	1880
Max output (kW) *	38	47	40	33
Max pressure drop (bar)	200	200	180	160
Max flow (l/min) *	160	200	200	200
Weight (kg)	31,8	32,6	34,9	36,5

\* continuous max

MW series motor use the advanced Geroler gear set, designed with disc distribution flow and high pressure.

The unit can be supplied as individual variant in operating multifunction, in accordance with requirement of applications.

## CHARACTERISTICS FEATURES

\* Advanced manufacturing devices for the Geroler gear set, which use low pressure of startup, provide smooth and reliable operation and high efficiency.

\* The output shaft adapts in tapered roller bearings that permit high axial and radial forces. The case can offer capacities of high pressure and high torque in the wide of applications.

\* Advanced design in disc distribution flow, which can automatically compensate in operating with high volume efficiency and long life, provide smooth and reliable operation.

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## PERFORMANCE DATA

### MVW 315

		Pressure (MPa)						Max.cont.	Max.int.
		3.5	7	10	14	18	20	24	
Flow (L/min)	10	140	294	440	610	742	845	1000	
		26	24	23	22	20	17	14	
	20	153	314	466	636	787	895	1070	
		55	54	53	52	51	48	44	
	50	149	312	465	654	815	935	1112	
		145	144	142	140	137	133	127	
	75	143	304	458	642	816	940	1119	
		220	218	215	211	207	202	195	
	100	136	297	452	636	810	936	1108	
		294	292	290	287	283	278	270	
Max.cont.	125	123	286	442	626	799	921	1093	
		368	366	364	361	357	352	345	
	150	114	275	435	615	788	906	1078	
		445	443	441	437	430	422	410	
	160	107	268	430	608	780	895	1070	
		475	473	470	466	460	452	439	
	Max.int.	82	249	412	593	758	871	1047	
		596	594	590	584	576	565	544	

### MVW 400

		Pressure (MPa)						Max.cont.	Max.int.
		3.5	7	10	14	18	20	24	
Flow (L/min)	10	183	385	568	776	968	1101	1292	
		20	20	19	18	17	16	14	
	20	196	398	590	815	1010	1152	1346	
		44	44	43	42	40	39	37	
	50	200	402	603	842	1040	1186	1430	
		114	113	113	112	110	108	103	
	75	195	394	596	838	1043	1188	1432	
		175	173	170	166	163	157	152	
	100	172	385	593	827	1036	1184	1425	
		236	235	233	231	227	223	215	
Max.cont.	125	167	374	583	816	1021	1177	1413	
		296	294	291	288	282	275	268	
	150	158	361	559	801	1008	1165	1390	
		355	354	352	349	344	335	324	
	175	143	346	553	784	989	1145	1377	
		416	414	411	407	403	396	388	
	200	118	331	536	770	969	1128	1356	
		475	473	469	463	455	448	439	
	Max.int.	82	301	506	740	943	1104	1332	
		571	569	565	548	539	530	520	

### MVW 630

		Pressure (MPa)						Max.cont.	Max.int.
		3.5	6	9	12	15	18	21	
Flow (L/min)	10	280	522	812	1100	1268	1549	1784	
		14	13	13	12	12	11	10	
	20	288	552	839	1101	1315	1607	1864	
		28	28	27	27	26	24	22	
	50	289	555	868	1137	1364	1682	1956	
		72	72	71	69	68	66	62	
	75	270	548	863	1120	1352	1680	1964	
		109	108	106	104	102	99	94	
	100	264	538	856	1093	1350	1674	1965	
		146	145	143	141	138	135	130	
Max.cont.	125	251	516	837	1071	1336	1659	1950	
		184	183	181	179	177	173	168	
	150	240	495	817	1063	1330	1650	1928	
		221	220	219	217	215	212	205	
	175	210	485	796	1052	1300	1636	1908	
		259	258	257	254	250	246	241	
	200	182	469	751	1018	1280	1611	1883	
		297	297	295	293	290	284	273	
	Max.int.	130	416	712	978	1237	1563	1835	
		358	357	355	351	346	340	332	

### MVW 800

		Pressure (MPa)						Max.cont.	Max.int.
		2.5	5	8	10	13	16	18	
Flow (L/min)	10	278	565	830	1095	1405	1712	1915	
		11	10	10	9	8	8	7	
	20	282	571	845	1150	1456	1783	1994	
		23	22	22	21	20	18	16	
	50	288	582	856	1162	1463	1790	2001	
		60	59	57	56	54	52	48	
	75	269	580	855	1165	1465	1786	1993	
		91	90	89	87	84	81	77	
	100	251	566	840	1140	1448	1767	1985	
		122	121	120	118	115	111	105	
Max.cont.	125	242	535	824	1118	1427	1739	1976	
		153	152	150	147	143	139	133	
	150	236	526	808	1102	1401	1714	1959	
		185	183	181	178	174	169	163	
	175	215	504	793	1079	1377	1698	1936	
		216	214	212	209	206	203	196	
	200	197	468	765	1063	1362	1681	1913	
		247	245	243	240	237	232	225	
	Max.int.	118	388	713	1020	1318	1637	1838	
		297	296	295	293	288	283	277	

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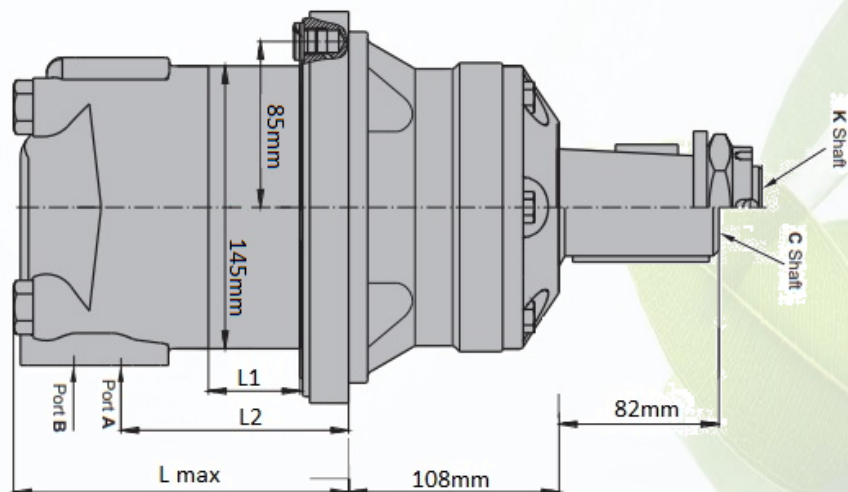
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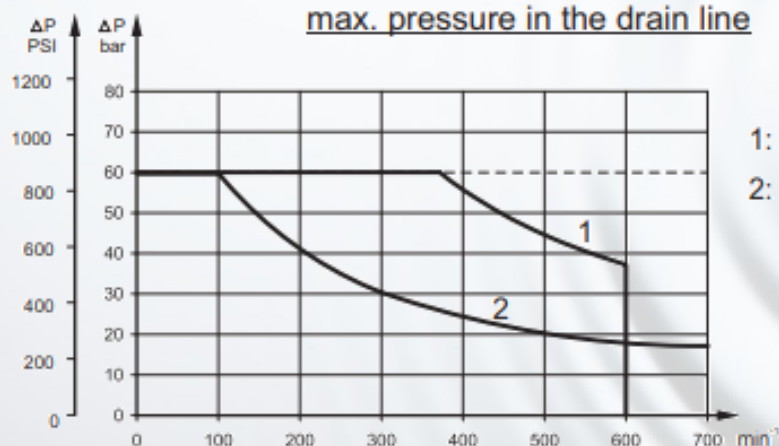
## OVERWIEW DRAWING



MODEL	L	L1	L2
MVW315	148,5	20	93,5
MVW400	155,5	27	100,5
MVW630	175,5	47	120,5
MVW800	186,5	58	131,5

## PERMISSIBLE SHAFT SEAL PRESSURE

Max. return pressure without drain line or  
max. pressure in the drain line



- 1: Drawing for High Pressure Seal ("U" Seal)
- 2: Drawing for Standard Shaft Seal

— - continuous operations  
- - - - - intermittent operations

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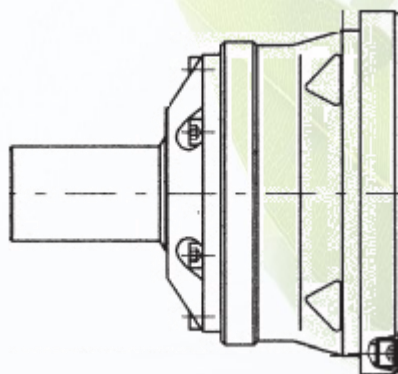
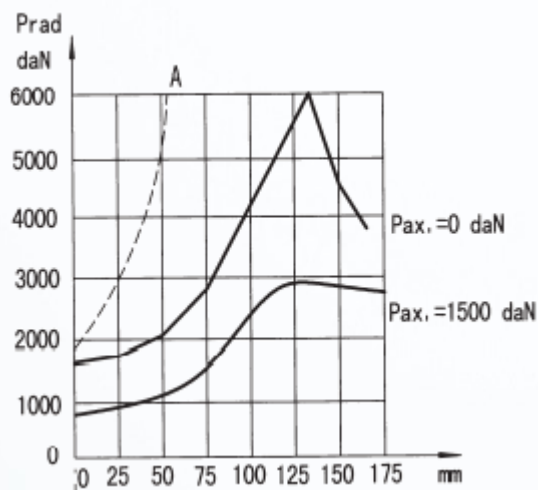
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## AXIAL AND RADIAL FORCES

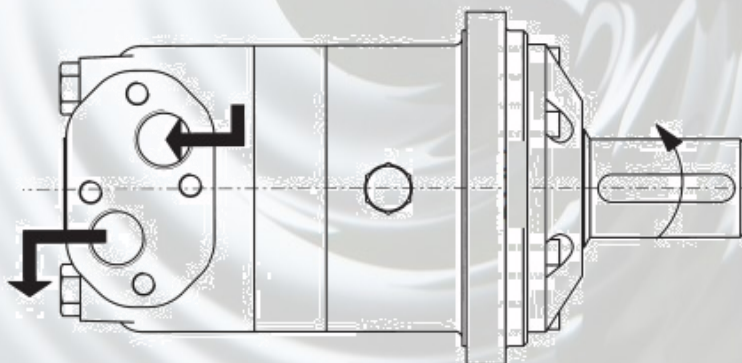


## OIL FLOW IN DRAIN LINE

Pressure drop (bar)	Viscosity (mm <sup>2</sup> /s)	Oil flow in drain line (L/min.)
140	20	3
	35	2
210	20	6
	35	4

## STANDARD DIRECTION OF SHAFT ROTATION

Clockwise when port "A" is pressurized.  
Counter-clockwise port "B" is pressurized.



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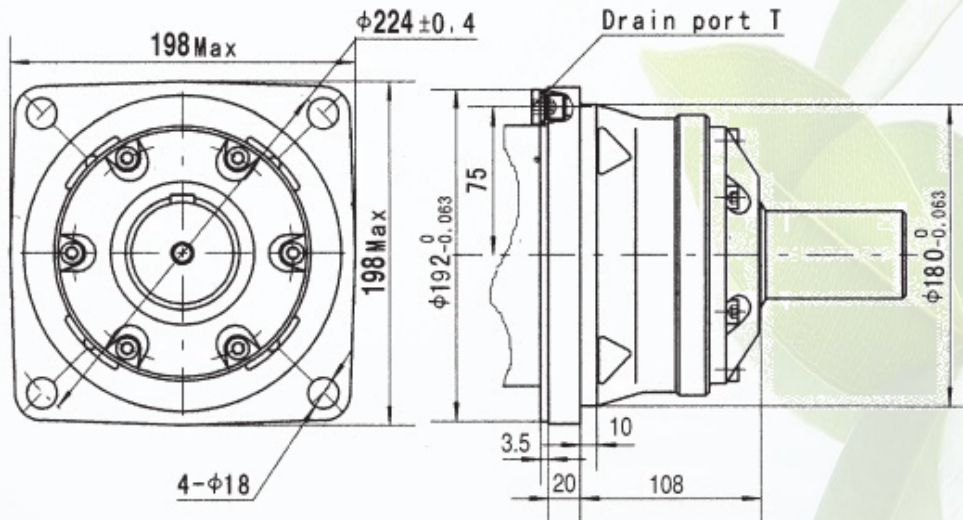
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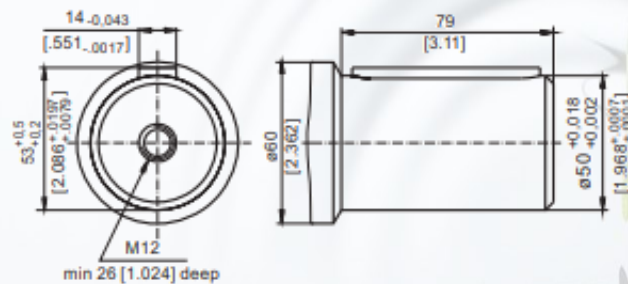


## Mounting

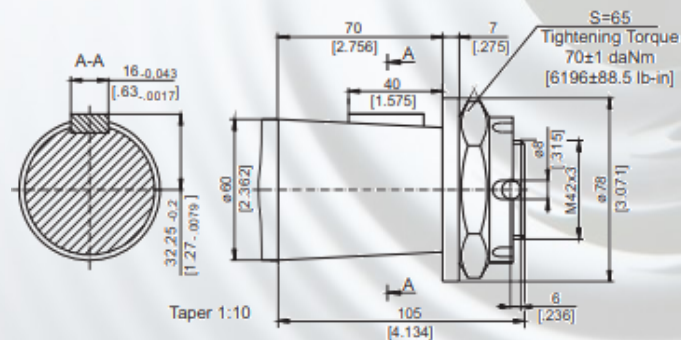


## Shafts

### C - $\phi 50$ straight, Parallel key A14x9x70 DIN 6885



### K - tapered 1:10, Parallel key B16x10x32 DIN 6885



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