

MV Hydraulic Orbit Motor



	Type	MV315	MV400	MV630	MV800
Geometric displacement (cm ³ /rev)	---	333	419	666	801
Max speed (rpm)	Cont.	510	500	320	250
	Int.	630	600	380	300
Max torque (Nm)	Cont.	920	1180	1660	1880
	Int.	1110	1410	1940	2110
	Peak	1290	1640	2210	2470
Max output (kW)	Cont.	38	47	40	33
	Int.	46	56	56	44
Max pressure drop (Bar)	Cont.	200	200	180	160
	Int.	240	240	210	180
	Peak	280	280	240	210
Max flow /L/min)	Cont.	160	200	200	200
	Int.	200	240	240	240
Weight (kg)	--	31,8	32,6	34,9	38,6

MV 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



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PERFORMANCE DATA

MV 315 [333cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

	3.5	7	10	14	18	20	24
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
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
Max.cont. 160	107	268	430	608	780	895	1070
	475	473	470	466	460	452	439
Max.int. 200	82	249	412	593	758	871	1047
	596	594	590	584	576	565	544

MV 400 [419cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

	3.5	7	10	14	18	20	24
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
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
Max.cont. 200	118	331	536	770	969	1128	1356
	475	473	469	463	455	448	439
Max.int. 240	82	301	506	740	943	1104	1332
	571	569	565	548	539	530	520

MV 630 [666cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

	3.5	6	9	12	15	18	21
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
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
Max.cont. 200	182	469	751	1018	1280	1611	1883
	297	297	295	293	290	284	273
Max.int. 240	130	416	712	978	1237	1563	1835
	358	357	355	351	346	340	332

MV 800 [801cm³/rev.]

Pressure (MPa) Max.cont. Max.int.

	2.5	5	8	10	13	16	18
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
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
Max.cont. 200	197	468	765	1063	1362	1681	1913
	247	245	243	240	237	232	225
Max.int. 240	118	388	713	1020	1318	1637	1838
	297	296	295	293	288	283	277

□ cont.
 ■ int.

Torque (N*m) 1020
 Speed (rpm) 293

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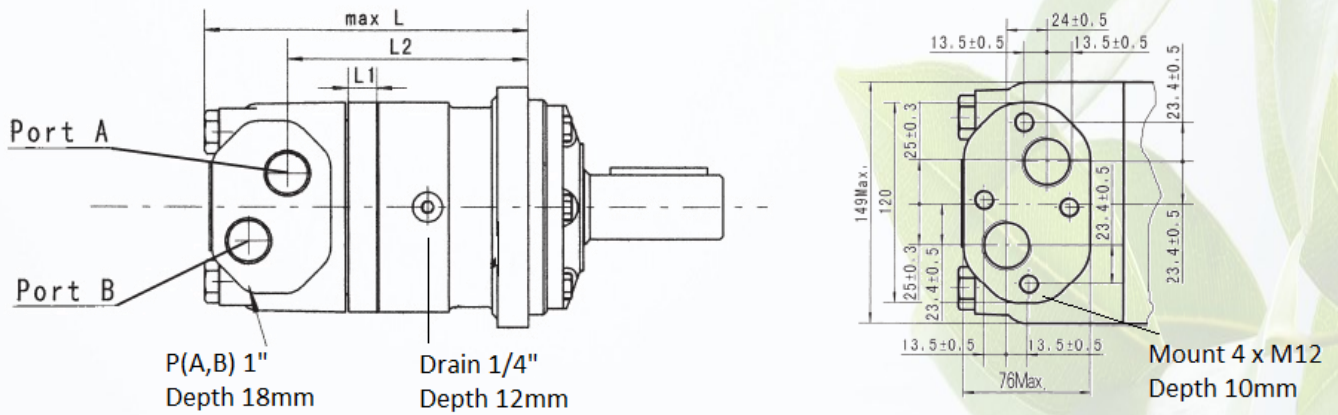
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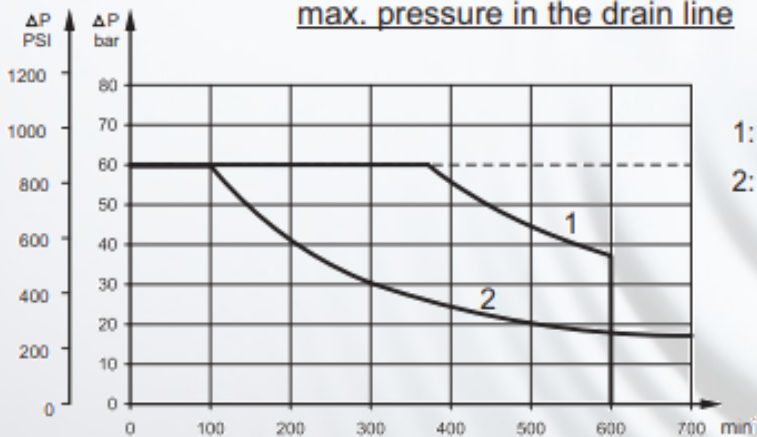
OVERVIEW DRAWING



MODEL	L	L1	L2
MV315	217	20	161,5
MV400	224	27	168,5
MV630	244	47	188,5
MV800	255	58	199,5

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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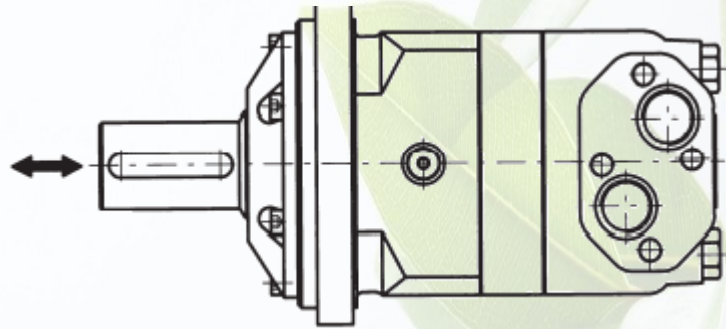
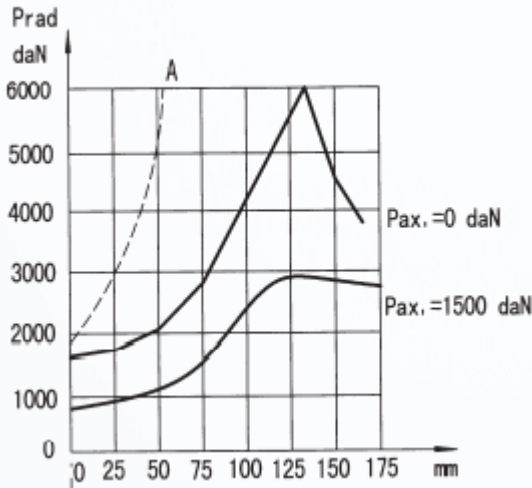
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AXIAL AND RADIAL FORCES

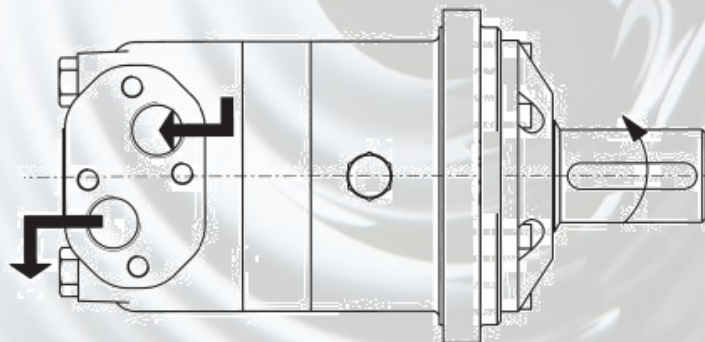


OIL FLOW IN DRAIN LINE

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

STANDARD DIRECTION OF SHAFT ROTATION

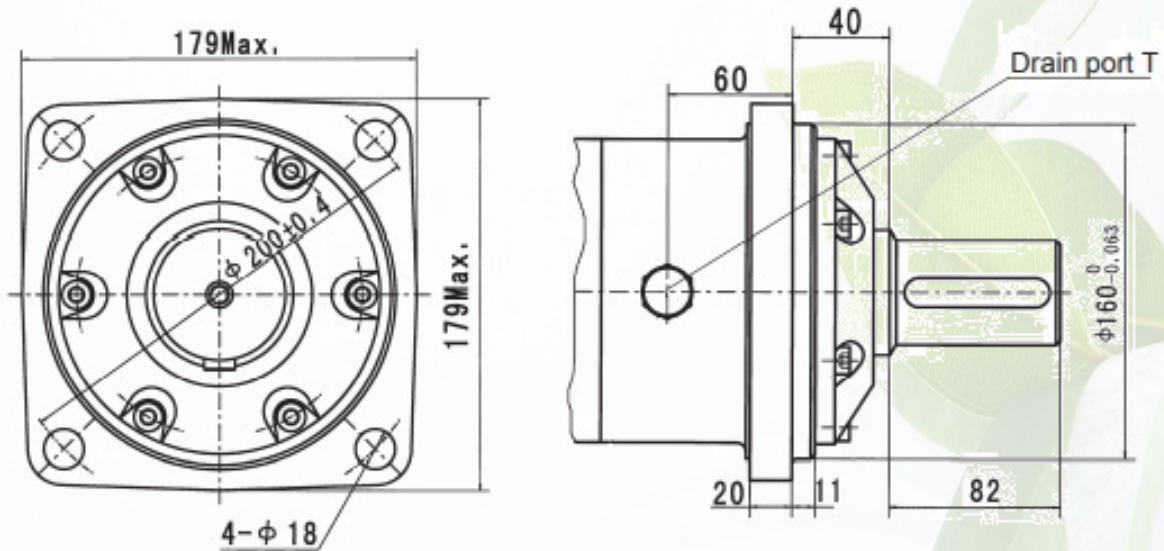
Clockwise when port "A" is pressurized. Counter-clockwise port "B" is pressurized.



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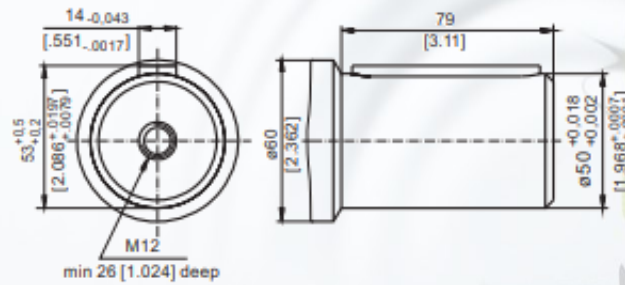


Mounting



Shafts

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



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

