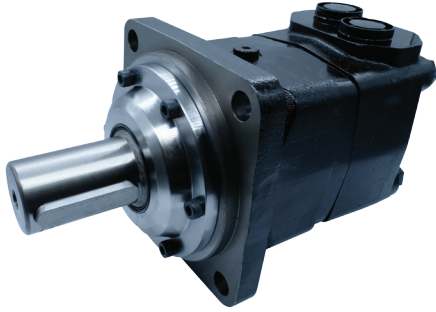


WBMV Serisi Hidrolik Motor / WBMV Series Hydraulic Motor



Karakteristik Özellikler / Characteristic Features

WBMV series motor adapt the advanced Geroler gear set designed with disc distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Sharacteristic features:

*Advanced maufacturing devices for the Gerolor gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.

* The output shaft adapts in tapered roler bearings that permit high axial and raadial forces. The case can offer capacities of high pressure and high efficiency.

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

Main Specification

Type		WBMV WBMVE 315	WBMV WBMVE 400	WBMV WBMVE 500	WBMV WBMVE 630	WBMV WBMVE 800	WBMV WBMVE 1000
Geometric displacement (cm ³ /rev.)		333	419	518	666	801	990
Max. speed (rpm)	rated	335	270	215	170	140	105
	cont.	510	500	400	320	250	200
	int.	630	600	480	380	300	240
Max. torque (N*m)	rated	730	1020	1210	1422	1590	2015
	cont.	920	1180	1460	1660	1880	2015
	int.	1110	1410	1760	1940	2110	2280
	peak	1290	1640	2050	2210	2470	2400
Max. output (Kw)	rated	38	47	47	40	33	28.6
	cont.	46	56	56	56	44	40
Max. pressure drop (MPa)	rated	16	16	16	16	14	14
	cont.	20	20	20	18	16	14
	int.	24	24	24	21	18	16
	peak	28	28	28	24	21	18
Max. flow (L/min)	rated	110	110	110	110	110	110
	cont.	160	200	200	200	200	200
	int.	200	240	240	240	240	240
Max. inlet pressure (L/min)	rated	21	21	21	21	21	21
	cont.	21	21	21	21	21	21
	int.	25	25	25	25	25	25
	peak	30	30	30	30	30	30
	Weight (kg)	31.8	32.6	33.5	34.9	36.5	38.6

*Continuous pressure : Max. value of operating motor continuously.

*Intermittent pressure : Max. value of operating motor in 6 second per minute.

*Peak pressure : Max. value of operating motor in 0.6 second per minute.

WBMV Serisi Hidrolik Motor / WBMV Series Hydraulic Motor
Performance Data
WBMV315[333cm³/rev.]

		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		
	200	82	249	412	593	758	871	1047		
		596	594	590	584	576	565	544		
	Max.int									

WBMV400[419cm³/rev.]

		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	1579	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		
	160	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		
	240	82	301	506	740	943	1104	1332		
		571	569	565	548	539	530	520		

WBMV500[518cm³/rev.]

		Pressure (MPa)							Max.cont	Max.int
		3.5	7	10	14	18	20	24		
Flow (L/min)	10	242	468	696	959	1190	1353	1607		
		17	17	16	16	15	13	11		
	20	245	501	738	1003	1232	1394	1658		
		36	35	35	34	33	32	29		
	50	240	500	758	1025	1270	1449	1743		
		93	92	91	90	88	85	80		
	75	233	498	752	1030	1288	1475	1766		
		140	139	137	135	132	127	120		
	100	228	491	748	1026	1289	1472	1760		
		189	187	185	182	178	173	166		
Max.cont	125	220	483	742	1014	1280	1460	1745		
		237	236	234	231	227	223	216		
	150	201	465	723	1008	1250	1429	1736		
		287	286	284	281	276	270	260		
	160	182	446	711	997	1238	1406	1715		
		335	334	332	329	325	320	310		
	200	161	423	676	974	1218	1385	1697		
		384	383	381	378	374	366	354		
	240	120	378	622	921	1172	1340	1650		
		461	459	457	454	450	444	432		

Torque (N.m)1340
Speed (rpm)444

WBMV630[666cm³/rev.]

		Pressure (MPa)							Max.cont	Max.int
		3.5	6	9	12	15	18	221		
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		
	160	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		
	240	130	416	712	978	1237	1563	1835		
		358	357	355	351	346	340	332		

WBMV Serisi Hidrolik Motor / WBMV Series Hydraulic Motor
Performance Data
WBMV800[801cm³/rev.]

		Pressure (MPa)							Max.cont	Max.int
		2.5	5	8	10	13	16	18		
Flow (L/min)	10	278 11	565 10	830 10	1095 9	1405 8	1712 8	1915 7		
	20	282 23	571 22	845 22	1150 21	1456 20	1783 18	1994 16		
	50	288 60	582 59	856 57	1165 56	1463 54	1790 52	2001 48		
	75	269 91	580 90	855 89	1165 87	1465 84	1786 81	1993 77		
	100	251 122	566 121	840 120	1140 118	1448 115	1767 111	1985 105		
	125	242 153	535 152	824 150	1118 147	1427 143	1739 139	1976 133		
	150	236 185	526 183	808 181	1102 178	1401 174	1714 169	1959 163		
	160	215 216	504 214	793 212	1079 209	1377 206	1798 203	1936 196		
	Max.cont 200	197 247	468 245	765 243	1063 240	1362 237	1681 232	1913 225		
	Max.int 240	118 297	388 296	713 295	1020 293	1318 288	1637 283	1838 277		

cont
int

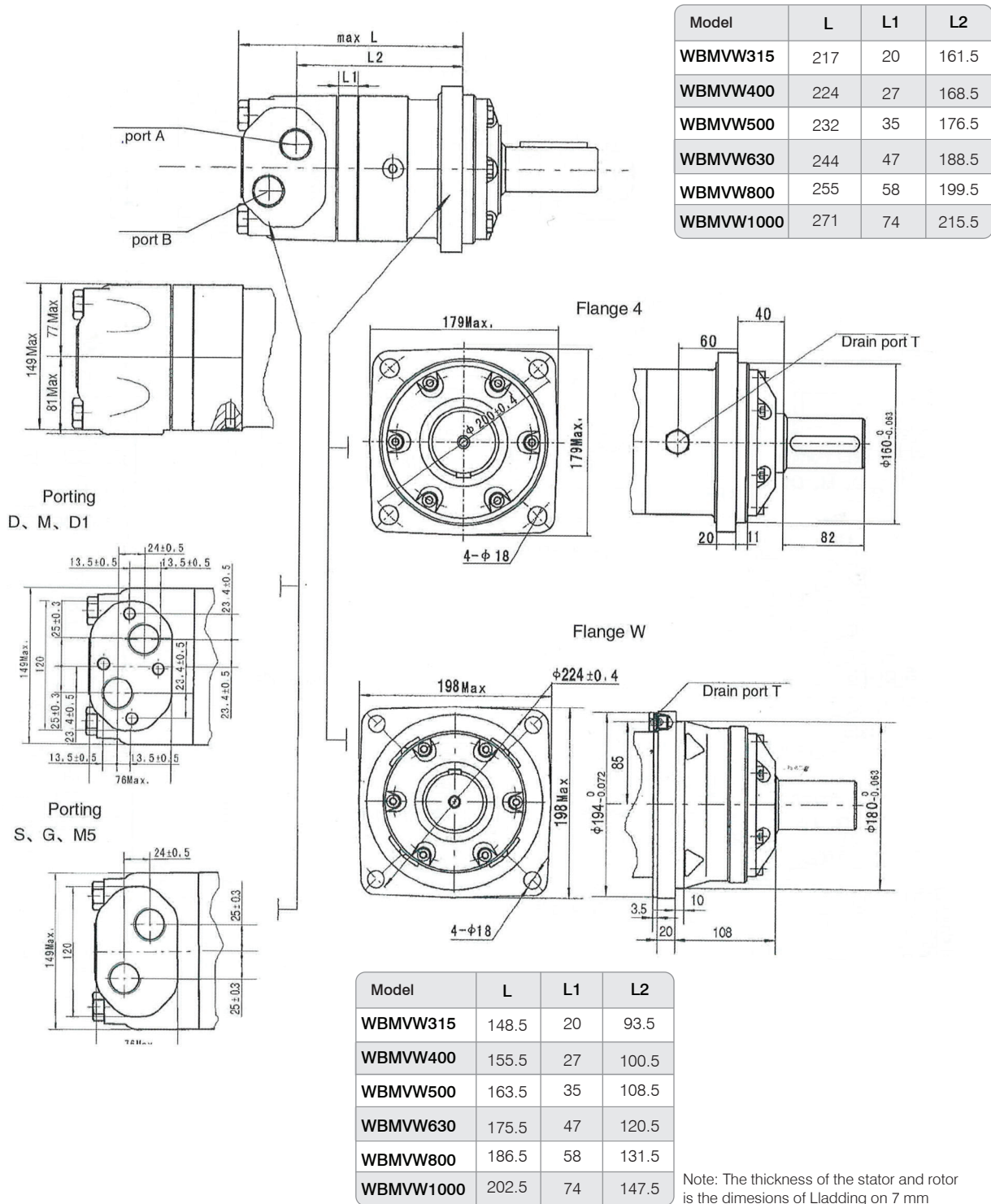
WBMV1000[990cm³/rev.]

		Pressure (MPa)						Max.cont	Max.int
		2.5	5	7	10	14	16		
Flow (L/min)	10	312 9	640 9	971 9	1400 8	1978 7	2259 6		
	20	320 28	648 27	978 26	1410 25	1980 23	2270 21		
	50	326 47	655 46	992 45	1422 43	2015 41	2280 38		
	75	318 72	642 71	987 70	1425 68	2003 66	2276 63		
	100	309 98	634 97	983 95	1418 93	1994 90	2243 86		
	125	303 123	624 122	975 120	1409 117	1988 114	2224 110		
	150	278 149	602 148	961 146	1368 144	1963 140	2208 133		
	160	264 174	580 172	946 170	1338 166	1925 162	2159 155		
	Max.cont 200	230 199	556 196	912 193	1300 190	1891 185	2105 178		
	Max.int 240	166 240	513 237	867 233	1267 229	1825 225	2034 218		

Torque (N.m)1825
Speed (rpm)225

WBMV Serisi Hidrolik Motor / WBMV Series Hydraulic Motor

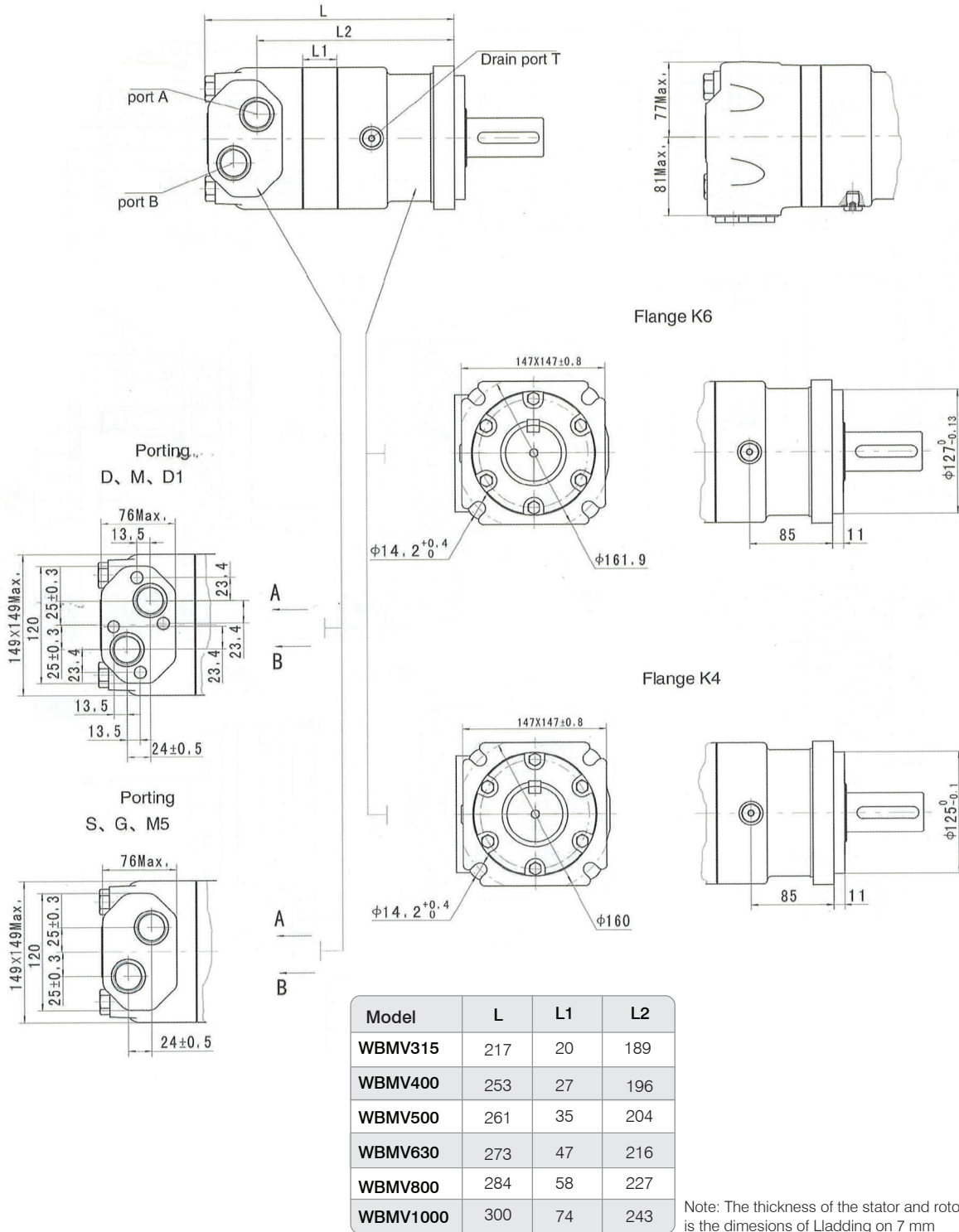
WBMV Dimensions And Mounting Data



Content	Code					
Mounting	D (depth)	M (depth)	S (depth)	G (depth)	M5 (depth)	D1 (depth)
P(A,B)	G1(18)	M33X2(18)	1-5/16-12UN(18)	G1 (18)	M33X2(18)	G3/4(18)
T	G1/4(12)	M14X1.5(12)	9/16-18UNF(12)	G1/4(12)	M14X1.5(12)	G1/4(12)
C	4-M12(12)	4-M12(12)	—	—	—	4-M12(12)

WBMVE Serisi Hidrolik Motor / WBMVE Series Hydraulic Motor

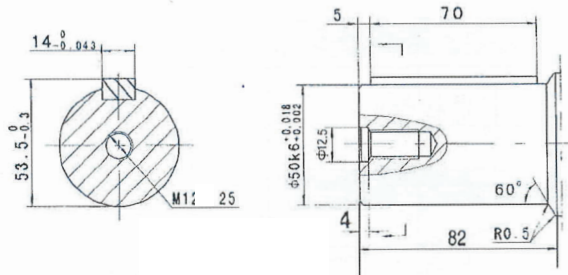
WBMVE Dimensions And Mounting Data



Content	Code					
Mounting	D (depth)	M (depth)	S (depth)	G (depth)	M5 (depth)	D1 (depth)
P(A,B)	G1(18)	M33X2(18)	1-5/16-12UN(18)	G1 (18)	M33X2(18)	G3/4(18)
T	G1/4(12)	M14X1.5(12)	9/16-18UNF(12)	G1/4(12)	M14X1.5(12)	G1/4(12)
C	4-M12(12)	4-M12(12)	—	—	—	4xM12(12)

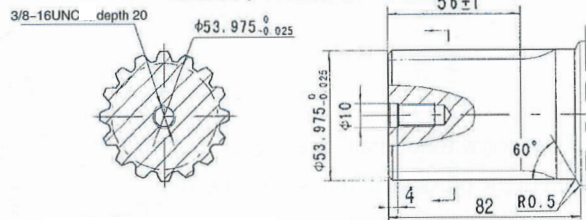
WBMV Serisi Hidrolik Motor /WBMV Series Hydraulic Motor

WBMV Dimensions And Mounting Data

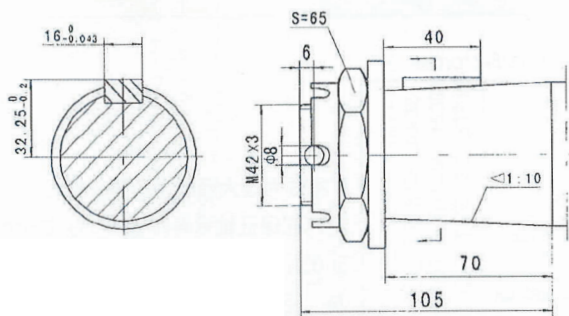


Shaft A: Cylindrical shaft Ø50

Parallel key 14x9x70



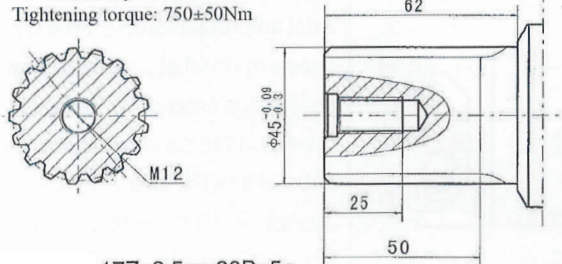
Shaft B: Splined key 16-DP8/16



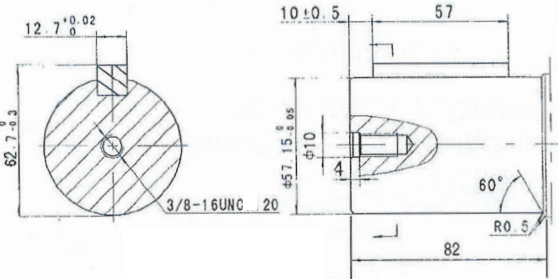
Shaft T: Cone-shaft Ø60

Parallel key 16x10x32

Tightening torque: 750±50Nm

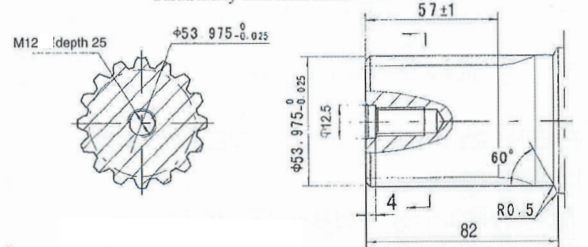


G : 17Zx2.5m×30P×5e

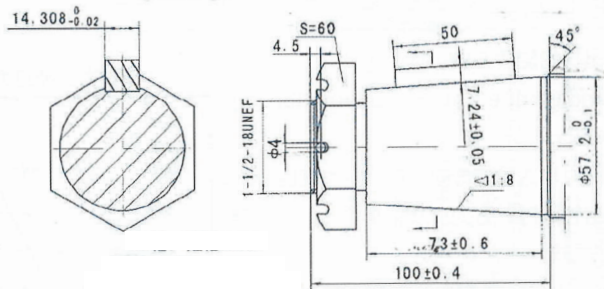


Shaft C: Cylindrical shaft Ø57.15

Parallel key 12.7x12.7x57



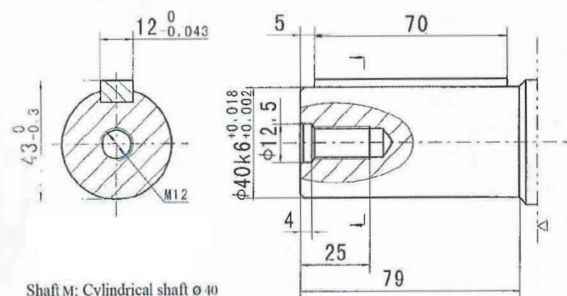
Shaft BD: Splined key 16-DP8/16



Shaft T1: Cone-shaft Ø57.2

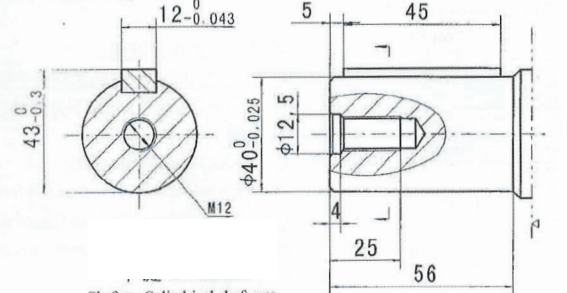
Parallel key 14.308x14.308x50

Tightening torque: 750±50Nm



Shaft M: Cylindrical shaft Ø40

Parallel key 12x8x7

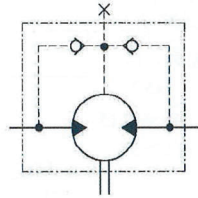


Shaft Y: Cylindrical shaft Ø40

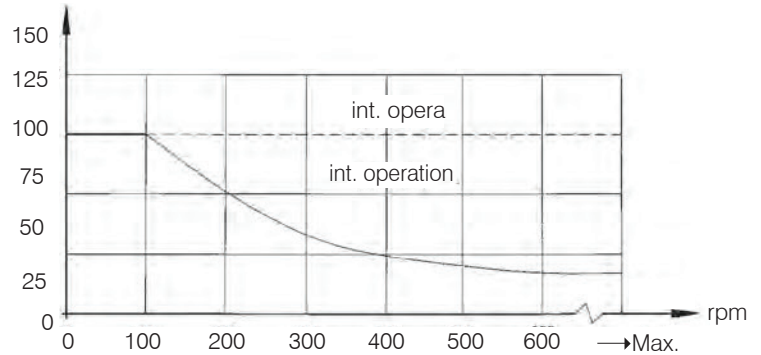
Parallel key 12x8x50

WBMV Serisi Hidrolik Motor / WBMV Series Hydraulic Motor

Permissible Shaft Seal Pressure



motor illustrative diagram

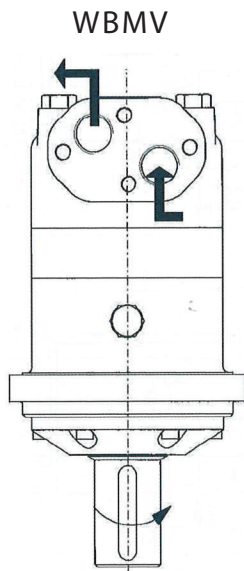


In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

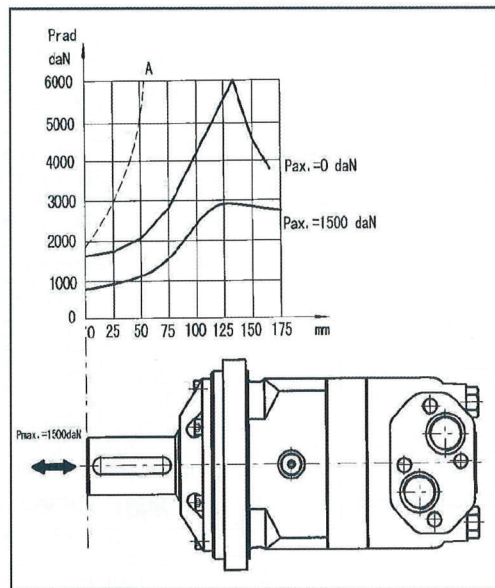
Direction of shaft rotation: Standard

Standard 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.



Axial and Radial forces



The output shaft runs in tapered bearings that permit high axial and radial forces. Curve "A" shows max radial shaft load. Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage. The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.

Oil leakage flow of drain port
The table below shows the Standard configured motor's maximum oil leakage flow of drain port when the drain return line pressure is lower than 0.5 to 1mpa.

Operating pressure difference (MPa)	Oil movement viscosity (mm ² /S)	Leakage flow of drain port (l./min.)
10	20	2.5
	35	1.5
14	20	5
	35	3

WBMV Serisi Hidrolik Motor / WBMV Series Hydraulic Motor
Order Information

1 - 2 - 3 - 4 - 5 - 6 - 7 - 8

Pos.1	2	3	4	5	6	7	8
Code	Displacement	Flange	Output shaft	Ports and drain port	Rotation direction	Paint	Unusually function
Omit	315	4-Ø18 Square-flange Ø200, pilot Ø160x11	A Shaft Ø50, parallel key 14X9X70	D G1 Manifold 4xm12,g1/4	Omit Standard Opposite R	00 No paint	Omit Standard
	400		BD Shaft Ø53.975, splined key 16-DP8/16	M M33X2 Manifold 4xm12,M14X1.5			
	500		B Shaft Ø53.975, splined key 16-DP8/16	S 1-5/16-12UN, 9/16-18UNF			
	630		C Shaft Ø7.15, parallel key 12.7x12.7x57.15	G G1, G1/4			
	800	4-Ø18 Wheel-flange Ø224, pilot Ø180x10	T Cone shaft Ø60, parallel key 16x10x32	M5 M33X2,M14X1.5	B S	Blue Black Silver grey	Omit
	1000		T1 Cone shaft Ø57,2 parallel key 14.308X14.308x50.8	D1 G3/4 manifold 4*M12, G1/4			
			Q shaft Ø45, splined key 17Z*2.5*30P*5e				

Note: When the table is used, please fill the code of left rows in dash area and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.