

BMV Series hydraulic orbit motor



BMV-Replace with Danfoss OMV SERIES,M+S MV/MLHV SERIES

Parameters

Type		BMV-315	BMV-400	BMV-500	BMV-630	BMV-800	BMV -1000
Displacement		333	419	518	666	801	990
Max. speed (rpm)	cont.	510	500	400	320	250	200
	int.	630	600	480	380	300	240
Max. torque (N•m)	cont.	920	1180	1460	1660	1880	2015
	int.	1110	1410	1760	1940	2110	2280
	peak	1290	1640	2050	2210	2470	2400
Max. output (kW)	cont.	38	47	47	40	33	28.6
	int.	46	56	56	56	44	40
Max.pressure drop (MPa)	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)	cont.	160	200	200	200	200	200
	int.	200	240	240	240	240	240
Weight(kg)		31.8	32.6	33.5	34.9	36.5	38.6

Selection

1	2	3	4
Series	Displacement	Flange	Output shaft
BMV	315	Code 4: 4-Ø18 Square-flange , Ø200 , pilot Ø 160*11 Code W : 4-Ø18 Wheel-flange , Ø224 , pilot Ø 180*10	Code A: Ø50 ,Parallel key 14×9×70 Code B: Ø2.15 inch,Splined key 16-DP8/16 (US version) Code BD: Ø2.15 inch,Splined key 16-DP8/16 (Europe version) Code C: Ø2.25 inch,Parallel key 12.7×12.7×57.15 Code T: Ø 60 Cone shaft 1:10 ,Parallel key 16×10×32 Code T1: Ø 57.2 Cone shaft 1:8,Parallel key 14.308×14.308×50.8(With locknut)
	400		
	500		
	630		
	800		
	1000		
5	6	7	8
Port and drain port	Rotation direction	Paint	Unusually function
Code D: G 1 Manifold mount 4*M12,G1/4 Code M : M33*2 Manifold mount 4*M12,M14*1.5 Code S: 1-5/16-12UN,9/16-18UNF Code S1: 1-5/16-12UN ,7/16-20UNF	Omit: Standard Code R: Opposite	Omit: Blue Code 00: No paint Code B: Black Code S: Silver Grey	Omit: Standard

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Performance Data

BMV 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
20	26	24	23	22	20	17	14
50	153	314	466	636	787	895	1070
75	55	54	53	52	51	48	44
100	149	312	465	654	815	935	1112
125	145	144	142	140	137	133	127
150	143	304	458	642	816	940	1119
175	220	218	215	211	207	202	195
200	136	297	452	636	810	936	1108
240	294	292	290	287	283	278	270
280	123	286	442	626	799	921	1093
320	368	366	364	361	357	352	345
360	114	275	435	615	788	906	1078
400	445	443	441	437	430	422	410
440	107	268	430	608	780	895	1070
480	475	473	470	466	460	452	439
520	82	249	412	593	758	871	1047
560	596	594	590	584	576	565	544

BMV 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	20	19	18	17	16	14
50	196	398	590	815	1010	1152	1346
75	44	44	43	42	40	39	37
100	200	402	603	842	1040	1186	1430
125	114	113	113	112	110	108	103
150	195	394	596	838	1043	1188	1432
175	175	173	170	166	163	1579	152
200	172	385	593	827	1036	1184	1425
240	236	235	233	231	227	223	215
280	167	374	583	816	1021	1177	1413
320	296	294	291	288	282	275	268
360	158	361	559	801	1008	1165	1390
400	355	354	352	349	344	335	324
440	143	346	553	784	989	1145	1377
480	416	414	411	407	403	396	388
520	118	331	536	770	969	1128	1356
560	475	473	469	463	455	448	439
600	82	301	506	740	943	1104	1332
640	571	569	565	548	539	530	520

BMV 500 [518cm³/rev.]

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

	3.5	7	10	14	18	20	24
10	242	468	696	959	1190	1353	1607
20	17	17	16	16	15	13	11
50	245	501	738	1003	1232	1394	1658
75	36	35	35	34	33	32	29
100	240	500	758	1025	1270	1449	1743
125	93	92	91	90	88	85	80
150	233	498	752	1030	1288	1475	1766
175	140	139	137	135	132	127	120
200	228	491	748	1026	1289	1472	1760
240	189	187	185	182	178	173	166
280	220	483	742	1014	1280	1460	1745
320	237	236	234	231	227	223	216
360	201	465	723	1008	1250	1429	1736
400	287	286	284	281	276	270	260
440	182	446	711	997	1238	1406	1715
480	335	334	332	329	325	320	310
520	161	423	676	974	1218	1385	1697
560	384	383	381	378	374	366	354
600	120	378	622	921	1172	1340	1650
640	461	459	457	454	450	444	432

BMV 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
20	14	13	13	12	12	11	10
50	288	552	839	1101	1315	1607	1864
75	28	28	27	27	26	24	22
100	289	555	868	1137	1364	1682	1956
125	72	72	71	69	68	66	62
150	270	548	863	1120	1352	1680	1964
175	109	108	106	104	102	99	94
200	264	538	856	1093	1350	1674	1965
240	146	145	143	141	138	135	130
280	251	516	837	1071	1336	1659	1950
320	184	183	181	179	177	173	168
360	240	495	817	1063	1330	1650	1928
400	221	220	219	217	215	212	205
440	210	485	796	1052	1300	1636	1908
480	259	258	257	254	250	246	241
520	182	469	751	1018	1280	1611	1883
560	297	297	295	293	290	284	273
600	130	416	712	978	1237	1563	1835
640	358	357	355	351	346	340	332

BMV 800 [801cm³/rev.]

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

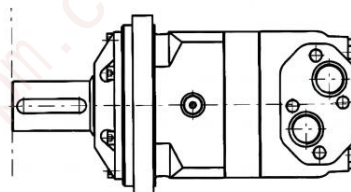
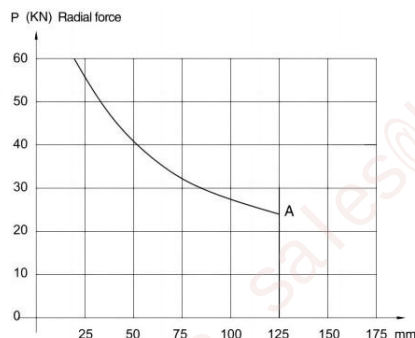
	2.5	5	8	10	13	16	18
10	278	565	830	1095	1405	1712	1915
20	11	10	10	9	8	8	7
50	282	571	845	1150	1456	1783	1994
75	23	22	22	21	20	18	16
100	288	582	856	1162	1463	1790	2001
125	60	59	57	56	54	52	48
150	269	580	855	1165	1465	1786	1993
175	91	90	89	87	84	81	77
200	251	566	840	1140	1448	1767	1985
240	122	121	120	118	115	111	105
280	242	535	824	1118	1427	1739	1976
320	153	152	150	147	143	139	133
360	236	526	808	1102	1401	1714	1959
400	185	183	181	178	174	169	163
440	215	504	793	1079	1377	1698	1936
480	216	214	212	209	206	203	196
520	197	468	765	1063	1362	1681	1913
560	247	245	243	240	237	232	225
600	118	388	713	1020	1318	1637	1838
640	297	296	295	293	288	283	277

BMV 1000 [990cm³/rev.]

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

	2.5	5	7	10	14	16
10	312	640	971	1400	1978	2259
20	9	9	9	8	7	6
50	320	648	978	1410	1980	2270
75	28	27	26	25	23	21
100	326	655	992	1422	2015	2280
125	47	46	45	43	41	38
150	318	642	987	1425	2003	2276
175	72	71	70	68	66	63
200	309	634	983	1418	1994	2243
240	98	97	95	93	90	86
280	303	624	975	1409	1988	2224
320	123	122	120	117	114	110
360	278	602	961	1368	1963	2208
400	149	148	146	144	140	133
440	264	580	946	1338	1925	2159
480	174	172	170	166	162	155
520	230	556	912	1300	1891	2105
560	199	196	193	190	185	178
600	166	513	867	1267	1825	2034
640	240	237	233	229	225	218

Shaft Radial force



Torque: N.m
Speed: rpm

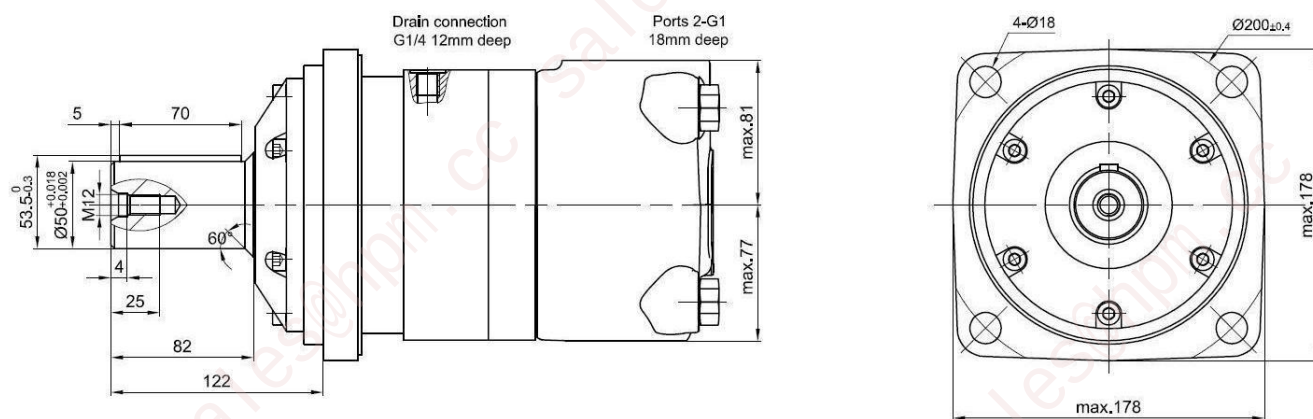
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int.

BMV Series hydraulic orbit motor



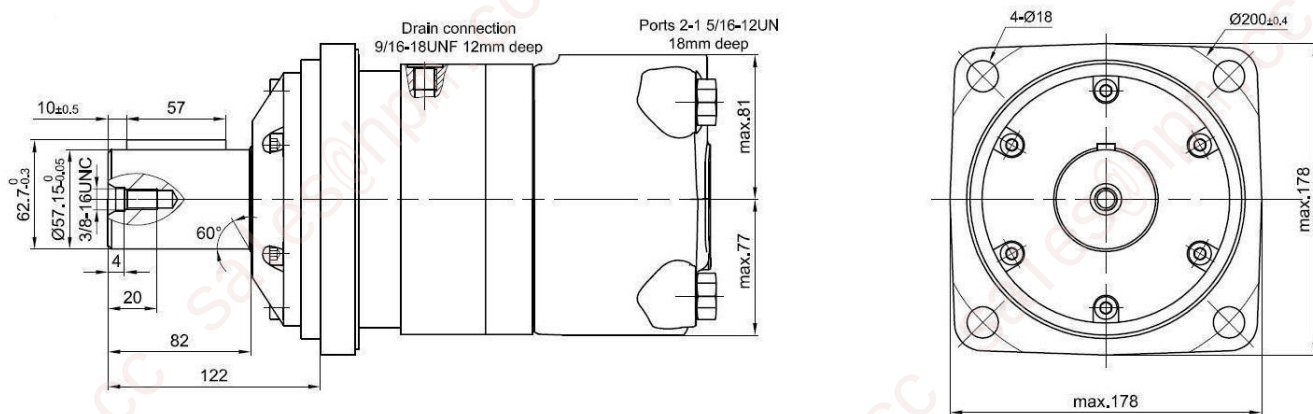
Popular model drawing

BMV-x-4-A-D**



HPM Model	Danfoss Model		M+S Model	L mm	L1 mm	L2 mm
BMV-315-4-A-D	151B-3100	With Drain Port	EPMV-315-C**	217	20	161.5
BMV-400-4-A-D	151B-3101		EPMV-400-C**	224	27	168.5
BMV-500-4-A-D	151B-3102		EPMV-500-C**	232	35	176.5
BMV-630-4-A-D	151B-3103		EPMV-630-C**	244	47	188.5
BMV-800-4-A-D	151B-3104		EPMV-800-C**	255	58	199.5
BMV-1000-4-A-D				271	74	215.5

BMV-x-4-C-S**



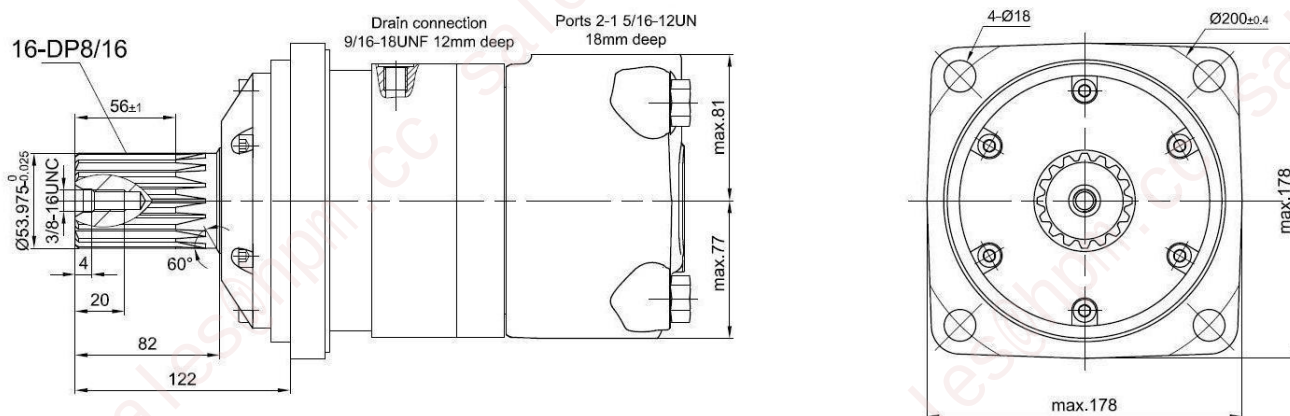
HPM Model	Danfoss Model		M+S Model	L mm	L1 mm	L2 mm
BMV-315-4-C-S	151B-2150	With Drain Port	MLHV-315-C**	217	20	161.5
BMV-400-4-C-S	151B-2151		MLHV-400-C**	224	27	168.5
BMV-500-4-C-S	151B-2152		MLHV-500-C**	232	35	176.5
BMV-630-4-C-S	151B-2153		MLHV-630-C**	244	47	188.5
BMV-800-4-C-S	151B-2154		MLHV-800-C**	255	58	199.5
BMV-1000-4-C-S				271	74	215.5

BMV Series hydraulic orbit motor



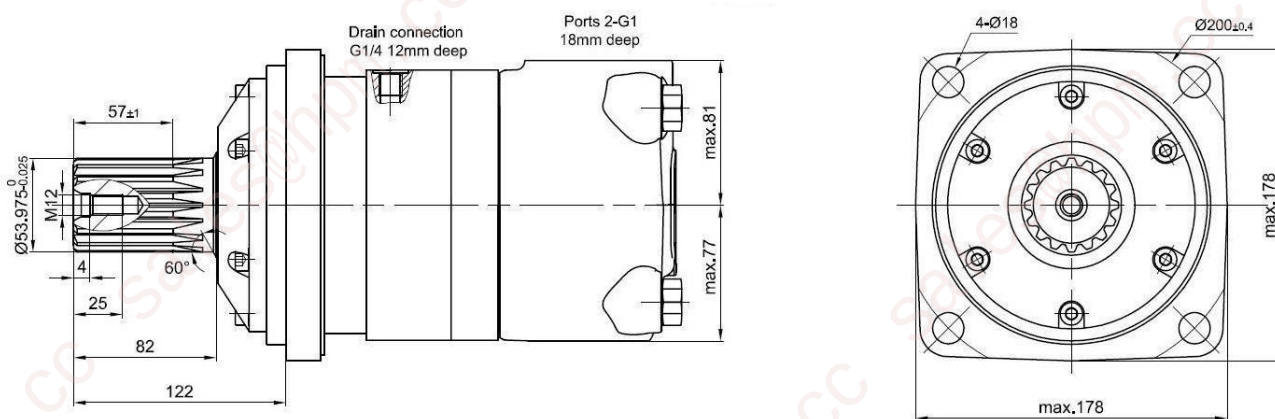
Popular model drawing

BMV-x-4-B-S**



HPM Model	Danfoss Model		M+S Model	L mm	L1 mm	L2 mm
BMV-315-4-B-S	151B-2155	With Drain Port	MLHV-315-G**	217	20	161.5
BMV-400-4-B-S	151B-2156		MLHV-400-G**	224	27	168.5
BMV-500-4-B-S	151B-2157		MLHV-500-G**	232	35	176.5
BMV-630-4-B-S	151B-2158		MLHV-630-G**	244	47	188.5
BMV-800-4-B-S	151B-2159		MLHV-800-G**	255	58	199.5
BMV-1000-4-B-S				271	74	215.5

BMV-x-4-BD-D**



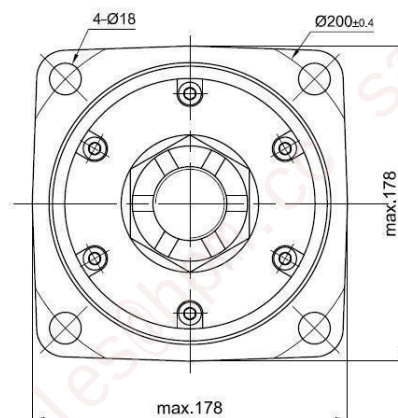
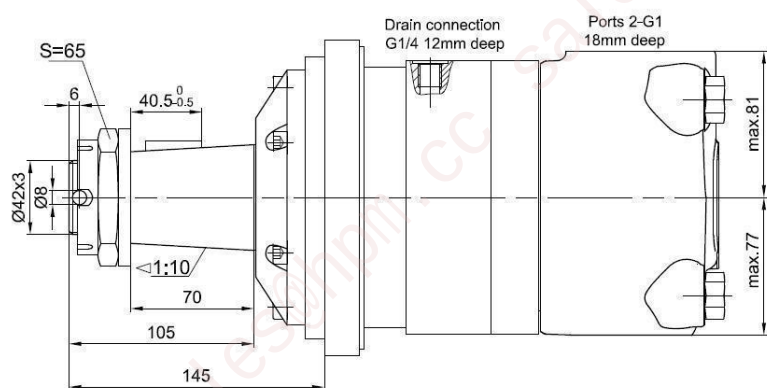
HPM Model	Danfoss Model		M+S Model	L mm	L1 mm	L2 mm
BMV-315-4-BD-D	151B-3105	With Drain Port	EPMV-315-SH**	217	20	161.5
BMV-400-4-BD-D	151B-3106		EPMV-400-SH**	224	27	168.5
BMV-500-4-BD-D	151B-3107		EPMV-500-SH**	232	35	176.5
BMV-630-4-BD-D	151B-3108		EPMV-630-SH**	244	47	188.5
BMV-800-4-BD-D	151B-3109		EPMV-800-SH**	255	58	199.5
BMV-1000-4-BD-D				271	74	215.5

BMV Series hydraulic orbit motor



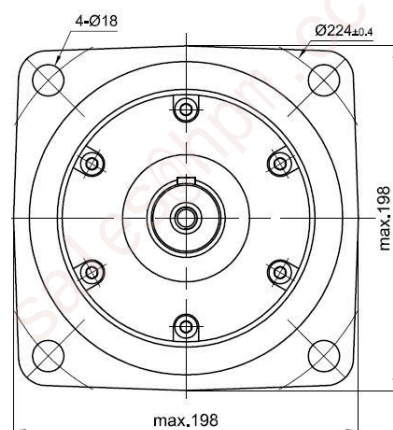
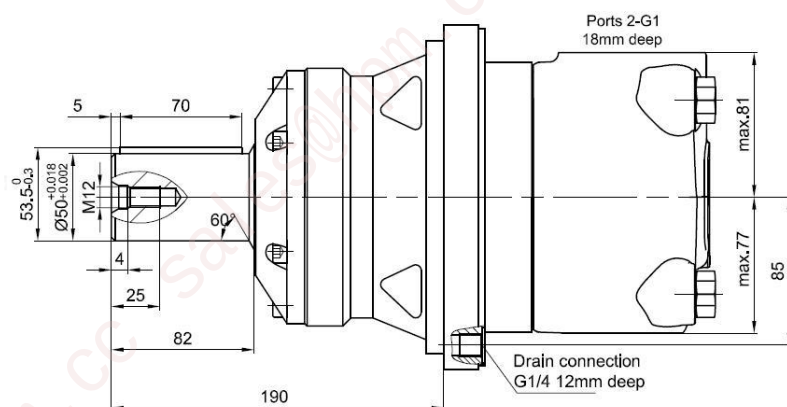
Popular model drawing

BMV-x-4-T-D**



HPM Model	Danfoss Model		M+S Model	L mm	L1 mm	L2 mm
BMV-315-4-T-D	151B-3110	With Drain Port	EPMV-315-K**	217	20	161.5
BMV-400-4-T-D	151B-3111		EPMV-400-K**	224	27	168.5
BMV-500-4-T-D	151B-3112		EPMV-500-K**	232	35	176.5
BMV-630-4-T-D	151B-3113		EPMV-630-K**	244	47	188.5
BMV-800-4-T-D	151B-3114		EPMV-800-K**	255	58	199.5
BMV-1000-4-T-D				271	74	215.5

BMV-x-W-A-D**



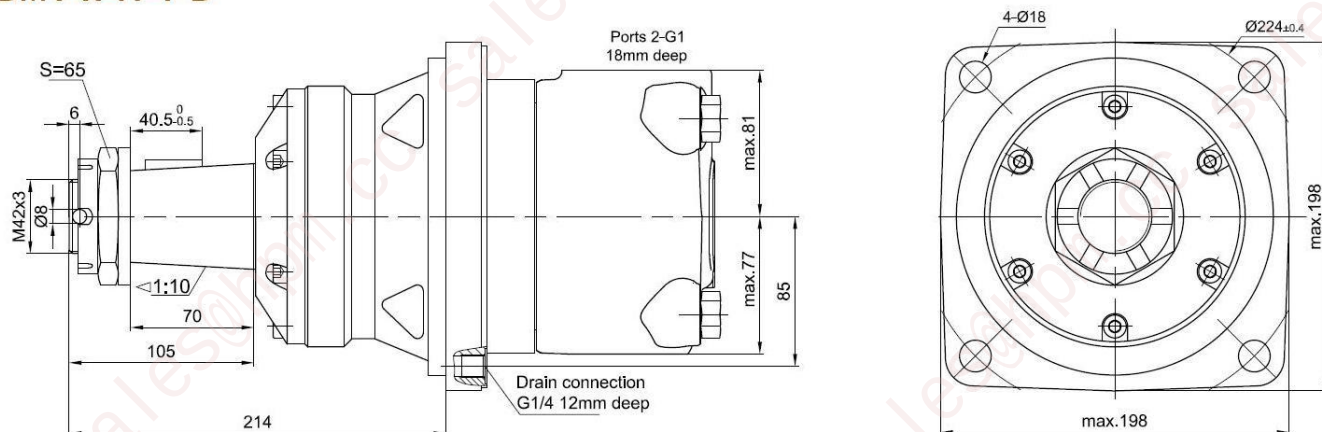
HPM Model	Danfoss Model		M+S Model	L mm	L1 mm	L2 mm
BMV-315-W-A-D	151B-3115	With Drain Port	EPMV-W315-C**	148.5	20	93.5
BMV-400-W-A-D	151B-3116		EPMV-W400-C**	155.5	27	100.5
BMV-500-W-A-D	151B-3117		EPMV-W500-C**	163.5	35	108.5
BMV-630-W-A-D	151B-3118		EPMV-W630-C**	175.5	47	120.5
BMV-800-W-A-D	151B-3119		EPMV-W800-C**	186.5	58	131.5
BMV-1000-W-A-D				202.5	74	147.5

BMV Series hydraulic orbit motor



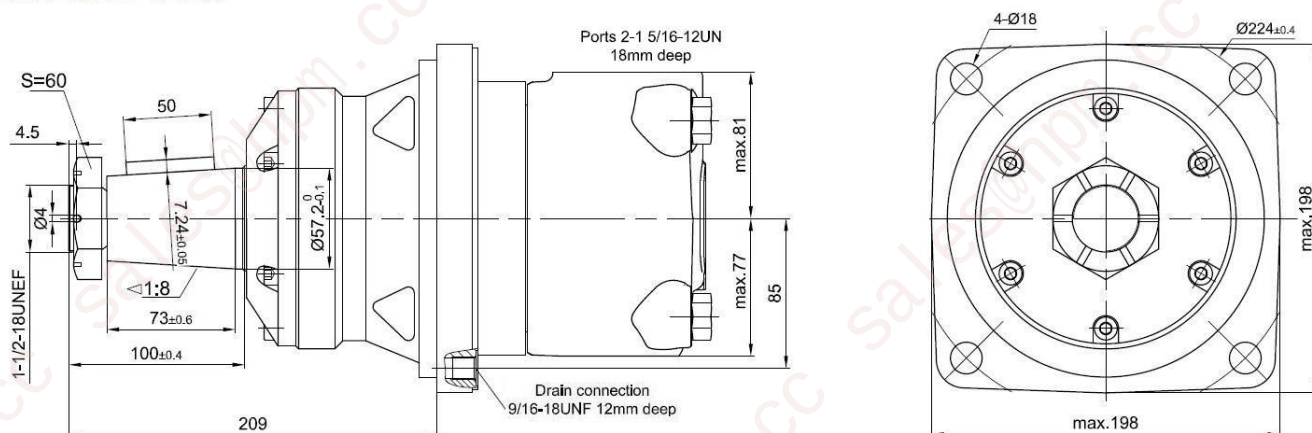
Popular model drawing

BMV-x-W-T-D**



HPM Model	Danfoss Model	M+S Model	L mm	L1 mm	L2 mm
BMV-315-W-T-D**	151B-3120	EPMV-W315-K**	148.5	20	93.5
BMV-400-W-T-D**	151B-3121	EPMV-W400-K**	155.5	27	100.5
BMV-500-W-T-D**	151B-3122	EPMV-W500-K**	163.5	35	108.5
BMV-630-W-T-D**	151B-3123	EPMV-W630-K**	175.5	47	120.5
BMV-800-W-T-D**	151B-3124	EPMV-W800-K**	186.5	58	131.5
BMV-1000-W-T-D**			202.5	74	147.5

BMV-x-W-T1-S**



HPM Model	Danfoss Model	M+S Model	L mm	L1 mm	L2 mm
BMV-315-W-T1-S**	151B-2170	MLHV-W*315-T**	148.5	20	93.5
BMV-400-W-T1-S**	151B-2171	MLHV-W*400-T**	155.5	27	100.5
BMV-500-W-T1-S**	151B-2172	MLHV-W*500-T**	163.5	35	108.5
BMV-630-W-T1-S**	151B-2173	MLHV-W*630-T**	175.5	47	120.5
BMV-800-W-T1-S**	151B-2174	MLHV-W*800-T**	186.5	58	131.5
BMV-1000-W-T1-S**			202.5	74	147.5