



MOMM SERIES HYDRAULIC MOTOR

MOMM Series compact design providing high torque capacity from a small package giving a high power to weight ratio.

Characteristic Features:

- Advanced manufacturing design of the Gerotor gear set, which provide hydraulic circuits, high efficiency and long life
- High pressure shaft seals allow for use in both Parallel & Series circuits
- Advanced design giving both high power and low weight

Main Specifications

Type		MOMM					
		8	12	20	32	40	50
Geometric Displacement (cm ³ /rev.)		8.2	12.9	19.9	31.6	39.8	50.3
Max. Speed (rpm)	Rated.	1537	1256	814	513	452	358
	Cont.	1950	1550	1000	630	500	400
	Int.	2450	1940	1250	800	630	500
Max. Torque (Nm)	Rated.	8	13	19	31	37	33
	Cont.	11	16	25	40	45	46
	Int.	15	23	35	57	70	88
	Peak	21	33	51	64	82	100
Max. Output (kW)	Rated.	1.3	1.7	1.7	1.7	1.7	1.2
	Cont.	1.8	2.4	2.4	2.4	2.2	1.8
	Int.	2.6	3.2	3.2	3.2	3.2	3.2
Max. Pressure Drop (Bar)	Rated.	90	90	90	90	8.5	60
	Cont.	100	100	100	100	90	70
	Int.	140	140	140	140	140	140
	Peak	200	200	200	160	160	160
Max. Flow (L/min)	Rated.	14	18	18	18	20	20
	Cont.	16	20	20	20	20	20
	Int.	20	25	25	25	25	25
Weight (kg)		1.9	2	2.1	2.2	2.3	2.4

Type		Max. Inlet Pressure
MOMM 8-50	Cont.	175
	Int.	225

- Rated Speed and Rated Torque: Output value of speed and torque under rated flow and rated pressure
- 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 seconds per minute



PERFORMANCE DATA

MOMM8 [8.2cm³/rev.]

Pressure (Bar)	Max.Cont				Max.Int.	
	35	50	70	100	120	140

Flow (L/min)	2	3	5	8	10	12	14
		228	218	206	156	111	58
	4	3	5	7	11	13	15
		474	471	463	426	391	331
8		3	5	7	11	13	15
		953	946	926	884	855	816
12		2	5	7	10	13	15
		1444	1426	1402	1360	1324	1288
Max. Cont.	15		4	7	10	12	14
			1912	1900	1861	1833	1780
Max. Int.	20		0	6	10	11	14
			2432	2395	2350	2328	2281

MOMM12.5 [12.9cm³/rev.]

Pressure (Bar)	Max. Cont.				Max.Int.	
	35	50	70	100	120	140

Flow (L/min)	2	6	8	11	16	19	
		140	136	119	68	35	
	4	6	8	12	17	19	23
		296	289	274	229	200	145
8		5	8	12	17	20	24
		605	596	583	543	514	469
12		5	8	11	16	20	24
		912	905	895	859	834	784
15		5	7	11	16	19	23
		1152	1144	1136	1102	1078	1036
Max. Cont.	20	3	7	10	15	19	22
		1542	1532	1521	1500	1482	1437
Max. Int.	25	2	6	9	14	18	22
		1910	1891	1878	1848	1828	1788

MOMM20 [19.9cm³/rev.]

Pressure (Bar)	Max.Cont					Max.Int.	
	17	35	50	70	100	120	140

Flow (L/min)	2	3	9	14	19	26	30	
		99	96	89	74	42	21	
	4	4	9	14	19	26	31	36
		197	191	182	178	134	112	74
8		4	9	13	19	27	31	36
		398	395	391	377	340	319	288
12		3	8	13	18	26	31	37
		596	594	588	579	545	523	493
15		3	8	12	17	25	30	36
		745	741	738	728	695	684	660
Max. Cont.	20	1	6	11	19	24	29	35
		998	995	991	985	962	1916	1885
Max. Int.	25		4	9	14	23	28	33
			1247	1245	1242	1189	1180	1176

MOMM32 [31.6cm³/rev.]

Pressure (Bar)	Max. Cont.					Max.Int.	
	17	35	50	70	100	120	140

Flow (L/min)	2	7	24	34	45	63		
		61	57	52	46	16		
	4	7	24	34	46	65	77	91
		125	240	227	211	162	133	97
8		7	23	33	46	65	78	92
		248	242	238	229	205	193	166
12		6	21	31	45	65	77	92
		376	372	366	360	336	320	295
15		4	20	30	43	63	76	91
		472	469	465	459	438	426	403
Max. Cont.	20	3	16	27	40	60	73	87
		629	626	623	615	597	582	563
Max. Int.	25	1	13	24	37	57	69	83
		786	784	782	778	761	748	727

Cont
Int.



PERFORMANCE DATA

MOMM40 [39.8cm³/rev.]

Pressure (Bar)	Max.Cont				Max.Int.	
	35	50	70	85	100	120

Flow (L/min)	2	16	27	36	44	51	
		45	40	34	28	17	
	4	16	27	37	44	52	62
		96	93	85	79	65	52
	8	15	26	36	44	52	63
		197	195	182	176	166	154
	12	14	25	35	43	51	62
		293	287	282	277	268	257
	15	13	24	34	42	50	62
		371	365	360	355	347	338
Max. Cont.	20	10	21	31	39	48	59
		497	492	487	480	472	1463
Max. Int.	25	7	19	29	37	44	56
		622	617	612	607	600	591

MOMM50 [50.3cm³/rev.]

Pressure (Bar)	Max. Cont.				Max.Int.
	15	30	50	70	100

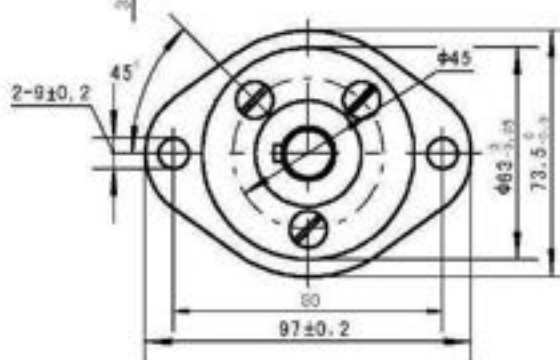
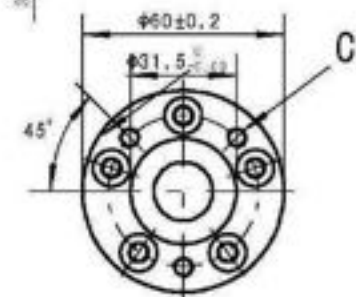
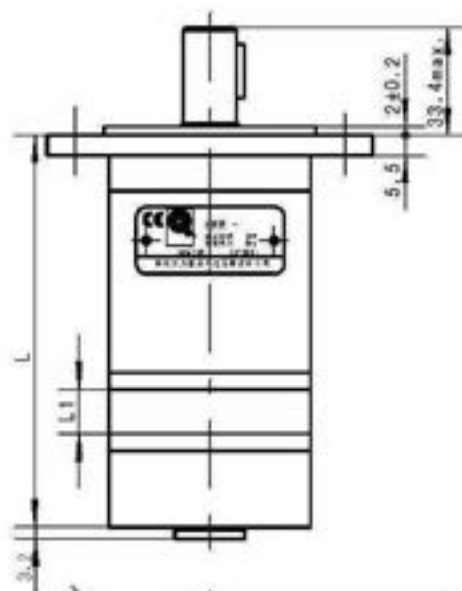
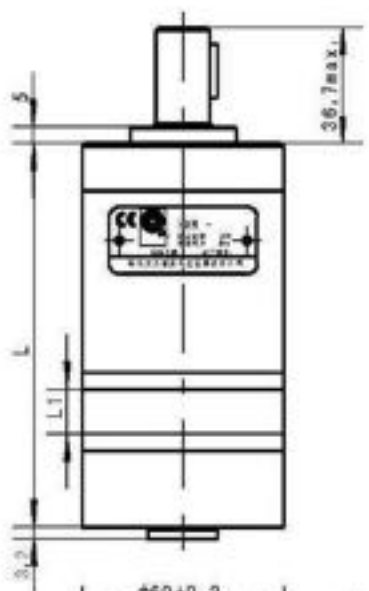
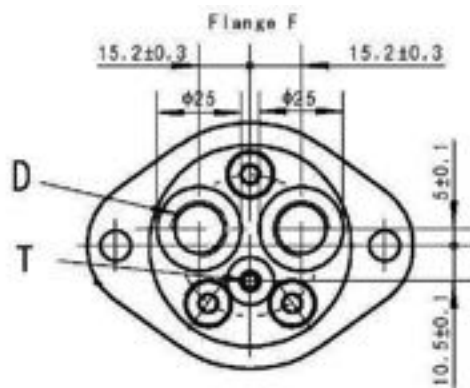
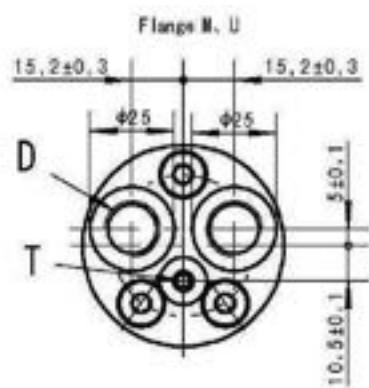
Flow (L/min)	2	11	23	36	50	
		37	33	27	22	
	4	11	22	36	50	70
		76	73	68	63	55
	8	11	21	35	50	71
		157	154	149	145	137
	12	11	20	33	49	71
		237	234	231	226	218
	15	10	18	32	47	69
		296	295	294	288	282
Max. Cont.	20	8	14	29	44	64
		395	395	393	390	381
Max. Int.	25	4	10	25	40	59
		498	496	494	490	484

Cont
Int.

Torque (Nm) 37
Speed (rpm) 607



MOMM END PORT DIMENSIONS & MOUNTING DATA

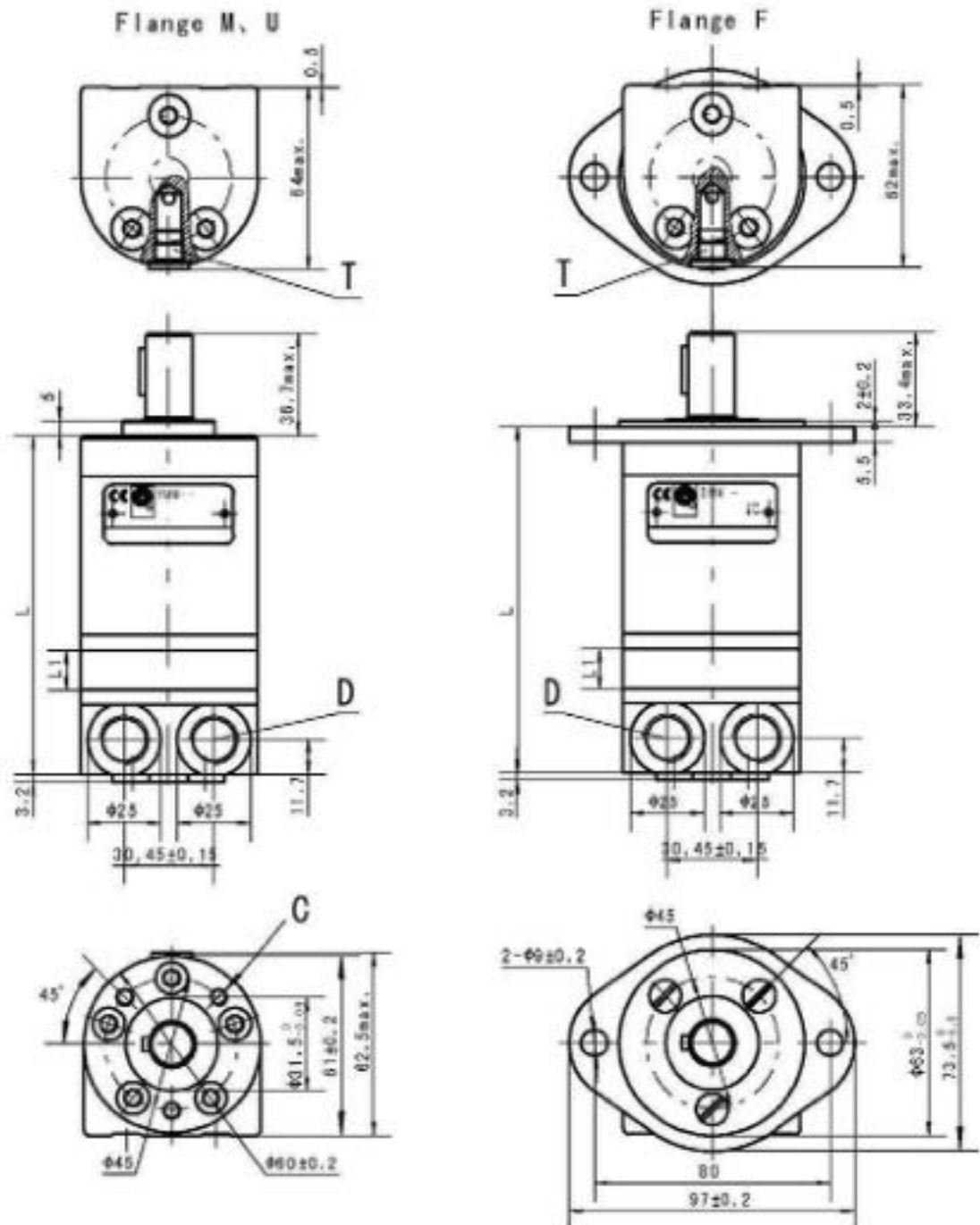


	M, U		F	
MODEL	L	L1	L	L1
MOMM8	104	3.5	107	3.5
MOMM12.5	106	5.5	109	5.5
MOMM20	109	8.5	112	8.5
MOMM32	114	13.5	117	13.5
MOMM40	118	17	118	17
MOMM50	122	21.5	125	21.5

Mounting Code	M, U				F			
	1E	(Depth)	1U	(Depth)	1E	(Depth)	1U	(Depth)
C	M6	(10)	¼-28UNF-2B	(10)	-	-	-	-
D	G3/8	(12)	9/16-18UNF	(12)	G3/8	(12)	9/16-18UNF	(12)
T	G1/8	(8)	3/8-24UNF	(8)	G1/8	(8)	3/8-24UNF	(8)



MOMM SIDE PORT DIMENSIONS & MOUNTING DATA



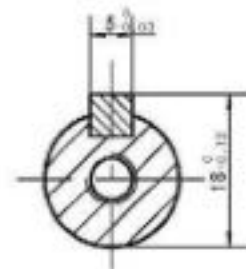
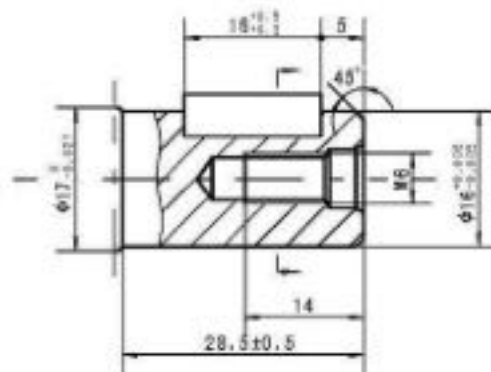
	M, U		F	
MODEL	L	L1	L	L1
MOMM8	105	3.5	109	3.5
MOMM12.5	107	5.5	111	5.5
MOMM20	110	8.5	114	8.5
MOMM32	115	13.5	119	13.5
MOMM40	118	17	118	17
MOMM50	123	21.5	127	21.5

Mounting Code	M, U				F			
	E	(Depth)	U	(Depth)	E	(Depth)	U	(Depth)
C	M6	(10)	¼-28UNF-2B	(10)	-	-	-	-
D	G3/8	(12)	9/16-18UNF	(12)	G3/8	(12)	9/16-18UNF	(12)
T	G1/8	(8)	3/8-24UNF	(8)	G1/8	(8)	3/8-24UNF	(8)

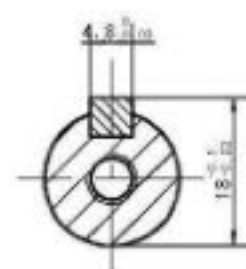
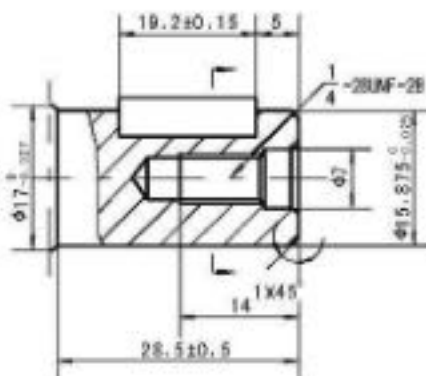


SHAFT EXTENSIONS FOR MOMM MOTORS

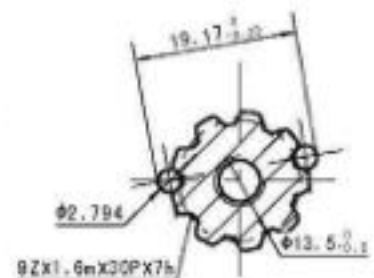
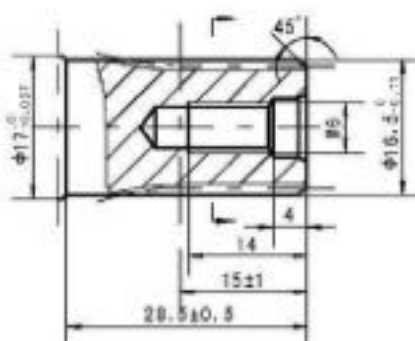
Shaft A: Cylindrical shaft $\phi 16$
Parallel key 5x5x16



Shaft B: Cylindrical shaft $\phi 15.875$
Parallel key 4,8x4,8x19,35



Shaft C: Involute splined shaft
817x14



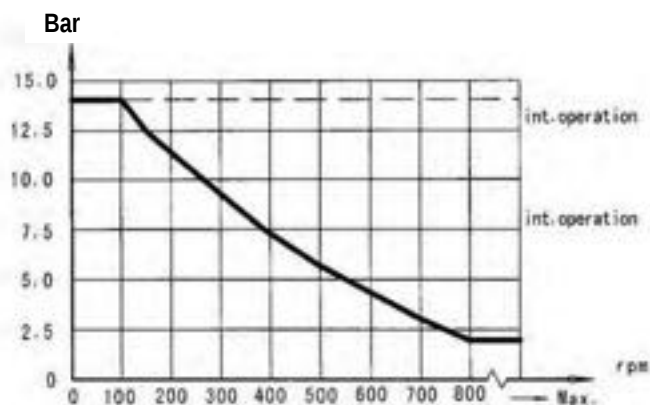
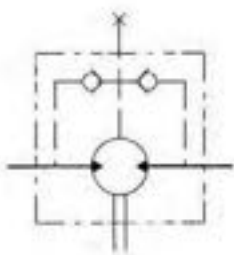
▷ Motor Mounting Surface



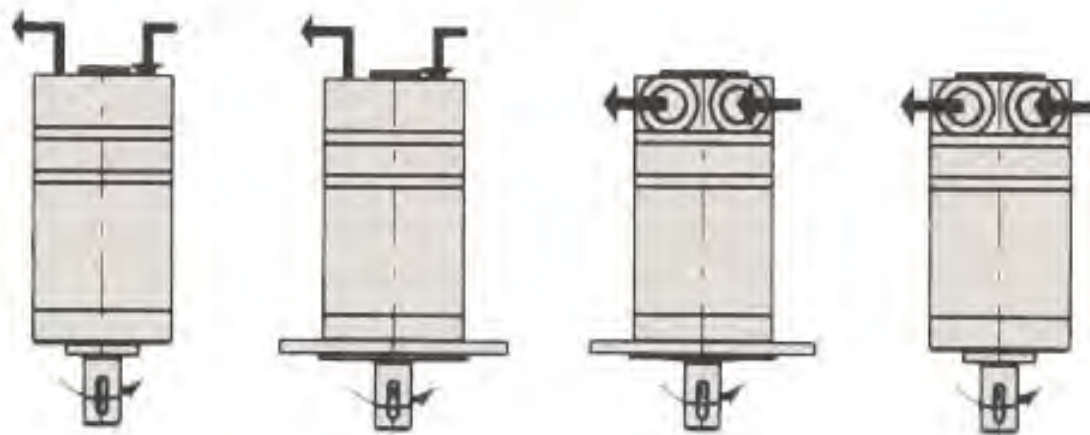
MOMM SERIES HYDRAULIC MOTOR

PERMISSIBLE SHAFT SEAL PRESSURE

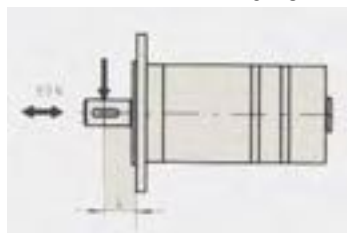
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line.
When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.



DIRECTION OF SHAFT ROTATION



STATUS OF THE SHAFT'S RADIAL FORCE $F_r = \frac{130400}{61.5+N}$ N



F_r = Radial Force (N)
 L = Distance (mm)
 N = Speed (rpm)
 Rhomb-Flange $L = 15\text{mm}$
 Square-Flange $L = 20\text{mm}$

1		2		3		4	
Code	Displacement	Code	Output Flange	Code	Shaft	Code	Port
8	8	M U F	3-M6 Circle-Flange, Pilot 31.5x5 3-1/4-28UNF Circle Flange, Pilot 31.5x5 2-9 Rhomb-Flange, Pilot 63x2	A B C	Shaft Ø16, Parallel Key 5x5x16 Shaft Ø15.875, Parallel Key 4.8x4.8x19.35 3/8" Shaft Ø16.5, Involute B17x14, DIN5482	E U 1E 1U	G 3/8, G 1/8 9/16-18UNF, 3/8-24UNF Rear Port G 3/8, G 1/8 Rear Port 9/16-18UNF, 3/8-24UNF
12.5	12.5						
16	16						
20	20						
32	32						
40	40						
50	50						



MOMP SERIES HYDRAULIC MOTOR

MOMP series motors are medium speed, high torque motors designed on an internal gear design consisting of a rotor and stator. These motors are suitable for long operating periods at moderate pressures.

Characteristic Features:

- Advanced manufacturing design for the Gerotor gear set, which provide high starting torque, high efficiency and long life
- Motors have high pressure shaft seals which can be used in Parallel or Series
- Smooth running over the entire speed range

Main Specifications

Technical data for MOMP with 25 and 1 in and 1 in splined and 28.56 tapered shaft

TYPE		MOMP, MOMP H & MOMP W										
		36	50	80	100	125	160	200	250	315	400	500
Geometric Displacement (cm³/rev.)		36	51.7	77.7	96.2	120.2	157.2	194.5	240.3	314.5	389.5	486.5
Max. Speed (rpm)	Cont.	1500	1150	770	615	490	383	310	250	192	155	120
	Int.	1650	1450	960	770	615	475	385	310	240	190	150
Max. Torque (Nm)	Cont.	55	100	146	182	236	302	360	380	375	360	385
	Int.	76	128	186	227	290	370	440	460	555	525	560
	Peak	96	148	218	264	360	434	540	550	650	680	680
Max. Output (kW)	Cont.	8.0	10.0	10.0	11.0	10.0	10.0	10.0	8.5	7.0	6.0	5.0
	Int.	11.5	12.0	12.0	13.0	12.0	12.0	12.0	10.5	8.5	7.0	6.0
Max. Pressure Drop (Bar)	Cont.	125	140	140	140	140	140	140	110	90	70	60
	Int.	165	175	175	175	175	175	175	140	140	105	90
	Peak	225	225	225	225	225	225	225	180	160	140	120
Max. Flow (L/min)	Cont.	55	60	60	60	60	60	60	60	60	60	60
	Int.	60	75	75	75	75	75	75	75	75	75	75
Weight (kg)		5.6	5.6	5.7	5.9	6.0	6.2	6.4	6.7	6.9	7.4	8

Technical data for BMP with 31.75 and 32 shaft

TYPE		MOMP, MOMP H & MOMP W										
		36	50	80	100	125	160	200	250	315	400	500
Geometric Displacement (cm³/rev.)		36	51.7	77.7	96.2	120.2	157.2	194.5	240.3	314.5	389.5	486.5
Max. Speed (rpm)	Cont.	1500	1150	770	615	490	383	310	250	192	155	120
	Int.	1650	1450	960	770	615	475	385	310	240	190	150
Max. Torque (Nm)	Cont.	55	100	146	182	236	302	360	460	475	490	430
	Int.	76	128	186	227	290	370	440	570	555	580	560
	Peak	96	148	218	264	360	434	540	670	840	840	780
Max. Output (kW)	Cont.	8.0	10.0	10.0	11.0	10.0	10.0	10.0	8.5	7.0	6.0	6.0
	Int.	11.5	12.0	12.0	13.0	12.0	12.0	12.0	10.5	8.5	7.0	7.0
Max. Pressure Drop (Bar)	Cont.	125	140	140	140	140	140	140	140	120	95	70
	Int.	165	175	175	175	175	175	175	175	140	115	90
	Peak	225	225	225	225	225	225	225	225	225	180	130
Max. Flow (L/min)	Cont.	55	60	60	60	60	60	60	60	60	60	60
	Int.	60	75	75	75	75	75	75	75	75	75	75
Weight (kg)		5.6	5.6	5.7	5.9	6.0	6.2	6.4	6.7	6.9	7.4	8.0

- 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 seconds per minute



PERFORMANCE DATA

MOMP36 [36cm³/rev.]

Pressure (Bar)

Max.Cont. Max.Int.

		30	60	70	80	100	110	125	165
Flow (L/Min)	8	13 214	25 205	29 200	34 194	43 187	48 179		
	15	13 406	25 398	29 391	34 383	43 374	48 366	56 353	75 324
	20	13 541	24 534	29 528	34 521	43 513	48 500	56 486	76 458
	30	12 814	24 804	29 792	34 778	43 763	48 749	56 726	76 701
	35	12 952	23 944	28 930	34 913	43 897	48 879	56 858	76 833
Max Cont.	40	12 1090	23 1078	28 1064	32 1048	41 1024	47 998	55 977	75 943
	45	11 1232	22 1218	26 1196	32 1175	41 1149	46 1118	54 1080	74 1044
	55	6 1505	15 1494	22 1480	28 1466	37 1438	44 1406	52 1367	71 1309
	60	3 1650	11 1640	18 1626	20 1603	30 1571	38 1536	49 1502	67 1446

MOMP50 [51.7cm³/rev.]

Pressure (Bar)

Max.Cont. Max.Int.

		30	60	80	100	125	140	160	175
Flow (L/Min)	8	20 151	41 134	56 115	69 90	89 56	95 42		
	15	19 286	40 274	56 261	71 243	91 204	100 182	112 139	120 102
	20	18 382	39 373	55 361	71 348	92 318	101 309	117 287	128 251
	30	17 573	38 568	55 558	71 535	91 503	98 488	116 462	124 440
	35	17 670	38 661	54 652	69 640	89 606	98 589	117 562	124 548
Max Cont.	45	14 863	36 858	53 849	67 837	88 807	98 788	114 764	123 746
	55	12 1055	33 1042	50 1028	65 1010	85 979	96 963	111 947	121 920
	60	10 1150	32 1143	47 1126	64 1111	83 1079	94 1065	108 1043	119 1015
	75	6 1440	25 1430	42 1416	56 1395	76 1367	87 1351	101 1335	112 1312

MOMP80 [77.7cm³/rev.]

Pressure (Bar)

Max.Cont. Max.Int.

		30	60	80	100	125	140	160	175
Flow (L/Min)	8	32 97	62 87	85 74	104 55	129 33	144 22		
	15	32 186	63 181	84 170	107 154	126 132	144 118	165 86	
	20	31 251	63 243	84 236	107 225	132 207	146 196	168 178	185 155
	30	31 381	62 379	83 368	106 355	131 332	146 316	168 285	186 263
	35	30 443	59 435	81 426	102 415	130 397	144 383	167 361	185 342
Max Cont.	45	25 570	58 564	79 554	100 543	126 526	142 509	165 483	182 458
	55	23 696	57 685	78 672	97 656	124 643	140 630	161 602	179 579
	60	20 761	53 753	75 744	94 736	120 720	137 706	160 681	177 660
	75	14 948	44 940	67 931	87 920	112 906	151 890	169 871	169 854

MOMP100 [96.2cm³/rev.]

Pressure (Bar)

Max.Cont. Max.Int.

		30	60	80	100	125	140	160	175
Flow (L/Min)	8	40 81	77 75	105 69	130 57	161 36	180 24		
	15	39 152	77 149	106 145	130 140	160 122	180 103	208 81	
	20	36 204	74 200	104 195	128 190	161 177	179 166	205 148	227 133
	30	33 308	72 304	103 298	125 290	160 280	177 268	203 255	225 231
	35	30 360	70 352	98 343	122 331	159 320	176 306	202 294	224 275
Max Cont.	45	29 462	67 458	95 451	118 443	155 433	174 419	200 402	220 383
	55	25 566	64 558	93 549	116 540	152 529	170 515	198 498	217 478
	60	22 618	60 611	91 601	114 589	149 580	167 570	194 558	213 540
	75	15 771	54 763	83 755	106 744	141 735	160 724	186 708	205 693

MOMP125 [120.2cm³/rev.]

Pressure (Bar)

Max.Cont. Max.Int.

		30	60	80	100	125	140	160	175
Flow (L/Min)	8	51 63	98 60	137 55	168 47	208 28	236 15		
	15	51 121	101 116	138 110	168 102	209 89	236 73	267 48	
	20	48 162	98 158	135 153	167 148	211 137	237 128	269 109	290 94
	30	46 243	96 239	132 234	164 227	209 216	232 202	264 189	287 176
	35	42 284	92 279	130 274	160 269	206 259	229 247	260 231	284 222
Max Cont.	45	37 370	89 362	125 355	157 348	201 340	224 327	261 310	281 296
	55	33 452	84 446	122 438	152 431	196 420	218 412	252 402	275 384
	60	29 490	78 482	117 475	146 468	191 459	215 448	248 439	272 427
	75	18 615	66 606	107 598	133 586	179 575	202 563	236 549	260 528

MOMP160 [157.2cm³/rev.]

Pressure (Bar)

Max.Cont. Max.Int.

		30	60	80	100	125	140	160	175
Flow (L/Min)	8	62 49	120 48	170 46	212 42	263 26	290 14		
	15	60 93	122 91	172 88	215 85	264 76	294 68	340 48	
	20	57 125	120 123	170 120	214 117	262 110	290 106	340 92	371 81
	30	53 187	115 184	164 181	206 178	259 175	288 168	335 155	368 139
	35	49 220	110 216	160 213	202 209	255 205	284 202	328 192	362 176
Max Cont.	45	44 283	102 280	154 276	196 272	248 267	278 260	321 250	358 238
	55	40 345	99 342	148 340	191 336	243 331	272 328	316 320	351 303
	60	33 377	94 374	144 371	188 367	236 363	267 359	308 353	345 342
	75	19 473	80 469	124 465	170 459	216 453	252 447	296 440	325 424



Torque (Nm) 124 Speed (rpm) 465



PERFORMANCE DATA

MOMP200 [194.5cm³ /rev.]

Pressure (Bar)

Max.Cont.

Max.Int.

		30	60	80	100	125	140	160	175
Flow (L/Min)	8	79 40	164 39	207 38	250 35	320 28	360 22		
	15	78 76	162 75	205 74	250 71	322 66	361 61	410 51	
	20	76 100	158 98	203 97	247 95	320 92	358 89	403 73	422 57
	30	70 151	153 149	200 147	245 145	315 142	350 139	398 131	417 120
	35	66 177	149 175	194 173	232 171	297 168	343 166	386 160	415 149
	45	63 228	146 226	190 224	230 221	294 218	340 215	383 210	410 198
	55	54 280	140 278	181 276	224 274	286 271	334 269	371 263	400 250
Max Cont.	60	38 304	127 302	164 300	212 297	270 294	325 291	356 286	395 272
	75	22 382	96 378	145 374	192 371	235 368	293 364	321 360	367 350

MOMP250 [240.3cm³ /rev.]

Pressure (Bar)

Max.Cont.

Max.Int.

		30	60	80	100	125	140	160	175
Flow (L/Min)	8	96 30	190 28	268 24	326 21	403 11			
	15	98 60	194 58	270 54	327 50	405 40	450 30	510 12	
	20	92 82	188 80	267 77	325 76	405 69	456 64	514 52	565 38
	30	85 123	180 120	259 118	320 114	400 106	448 98	513 87	561 76
	35	77 143	176 141	252 139	311 135	389 128	436 122	504 112	557 101
	45	70 185	168 182	243 178	300 174	377 168	428 161	495 152	543 139
	55	63 226	159 223	237 218	290 213	369 209	417 202	483 193	531 185
Max Cont.	60	60 248	150 246	228 243	280 239	358 233	407 226	473 215	520 207
	75	34 309	128 306	202 302	264 297	342 292	387 286	448 278	488 264

MOMP315 [314.5cm³ / rev.]

Pressure (Bar)

Max.Cont.

Max.Int.

		30	50	70	90	100	125	140
Flow (L/Min)	8	123 25	215 23	292 21	368 17	405 11		
	15	118 47	211 46	287 44	367 40	404 28	495 21	568 10
	20	110 62	205 61	278 60	360 57	395 46	494 40	566 36
	30	101 94	196 93	271 91	349 88	388 76	490 68	565 65
	35	96 109	188 107	264 106	341 104	382 96	478 89	557 84
	45	89 141	180 140	254 138	337 135	372 127	468 120	553 115
	55	76 173	166 172	239 170	325 167	362 160	457 152	548 143
Max Cont.	60	65 188	154 186	227 184	308 182	348 178	443 172	529 163
	75	40 236	120 234	201 232	279 228	323 226	418 223	497 214

MOMP400 [389.5cm³ /rev.]

Pressure (Bar)

Max.Cont.

Max.Int.

		30	45	55	65	80	100	125
Flow (L/Min)	8	166 20	232 19	287 18	340 16	418 12		
	15	165 38	228 36	277 35	337 33	417 31	496 27	612 21
	20	162 50	223 49	273 49	331 48	413 45	495 41	608 35
	30	154 76	216 75	266 74	318 73	405 71	486 67	600 60
	35	146 88	210 87	256 87	312 86	395 83	480 80	588 75
	45	132 114	197 113	243 112	300 110	383 108	464 106	576 99
	55	117 139	184 137	227 136	283 135	363 135	450 132	552 123
Max Cont.	60	102 153	163 152	215 150	272 148	347 146	436 143	532 138
	75	53 191	128 189	182 187	234 185	318 183	391 180	484 176

Torque (Nm) 234 Speed (rpm) 185

MOMP500 [486.5cm³ /rev.]

Pressure (Bar)

Max.Cont.

Max.Int.

		15	30	45	60	70	80	90
Flow (L/Min)	4	96 7	194 6	285 4				
	8	98 15	201 15	304 14	391 14	443 12	512 9	574 7
	15	96 30	192 30	284 29	380 28	421 26	496 23	550 22
	20	96 40	191 40	280 40	372 39	418 37	493 33	546 31
	30	91 61	185 60	272 60	360 58	412 56	486 53	541 50
	40	86 81	172 80	261 80	343 79	408 76	480 73	538 70
	50	78 102	160 101	241 100	332 98	391 96	466 93	528 90
Max Cont.	60	66 122	134 121	213 120	305 119	371 117	438 114	496 110
	70	52 143	111 142	189 141	292 139	344 137	418 135	475 131
Max Int.	75	35 153	83 152	154 151	241 150	312 149	389 147	447 144

Cont.

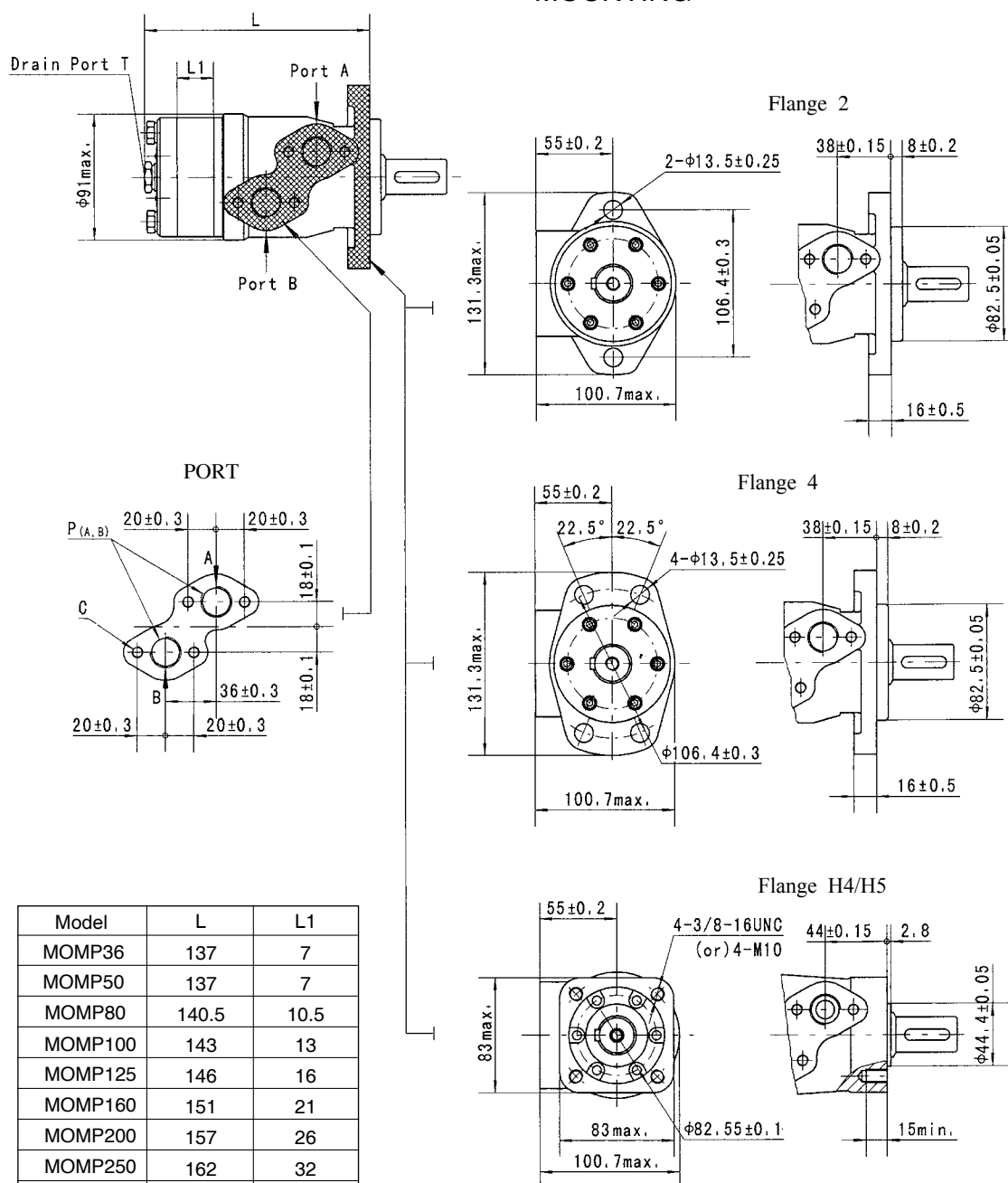
Int.

Torque (Nm) 312 Speed (rpm) 149



MOMP DIMENSIONS AND MOUNTING DATA

MOUNTING

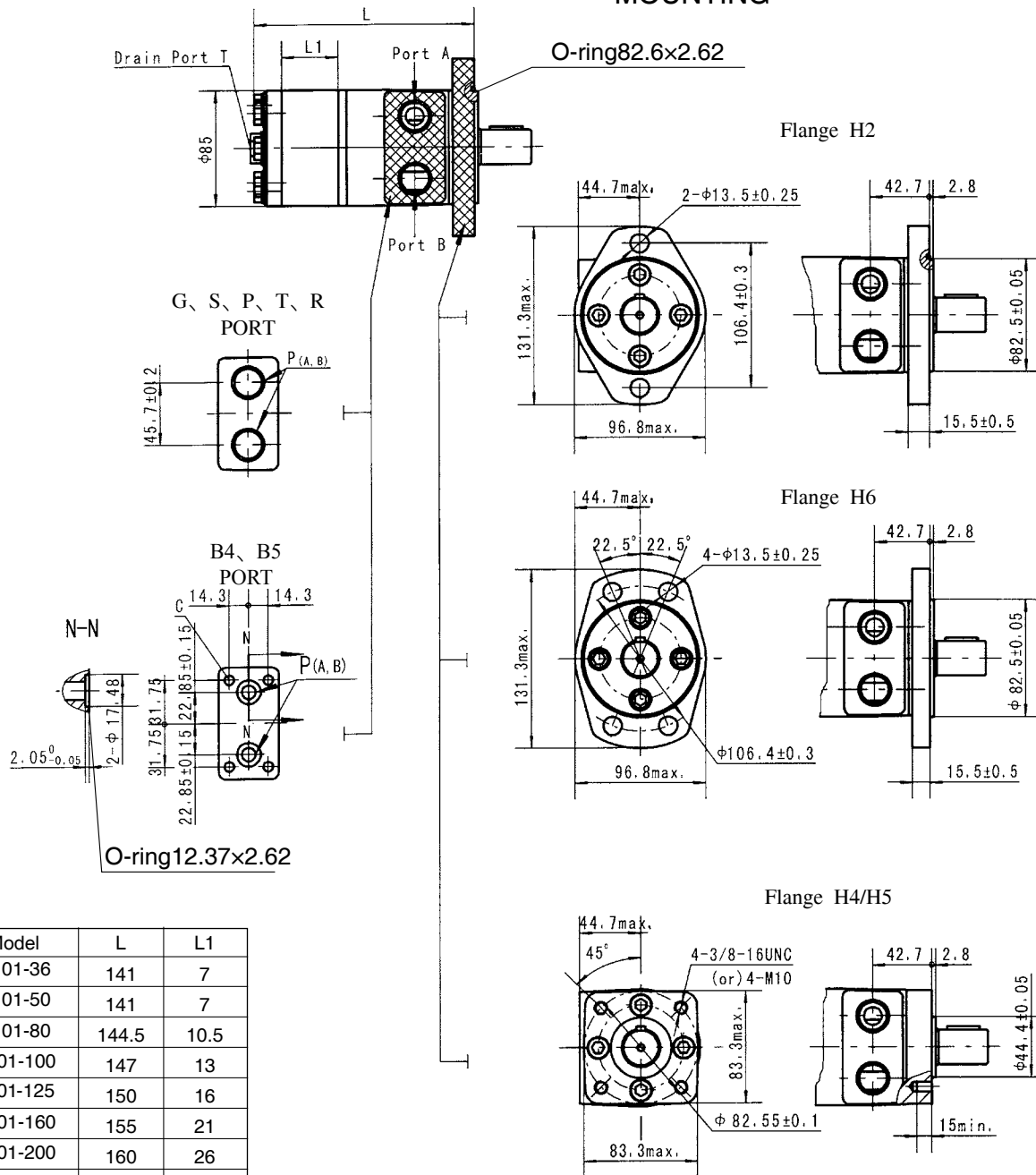


Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC(13)	4-5/16-18UNC(13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)



M101- DIMENSIONS AND MOUNTING DATA

MOUNTING

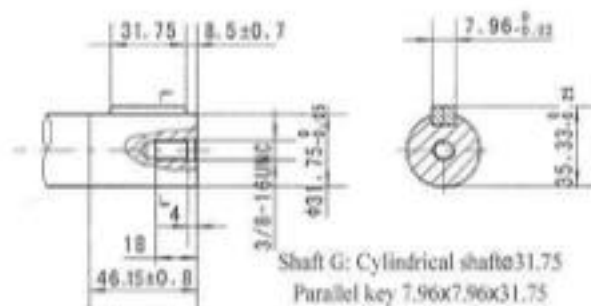
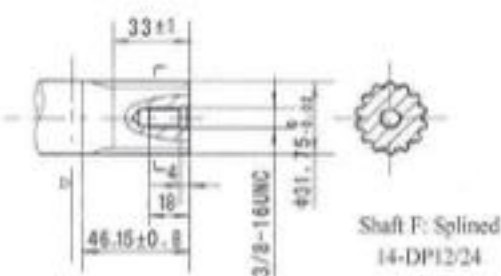
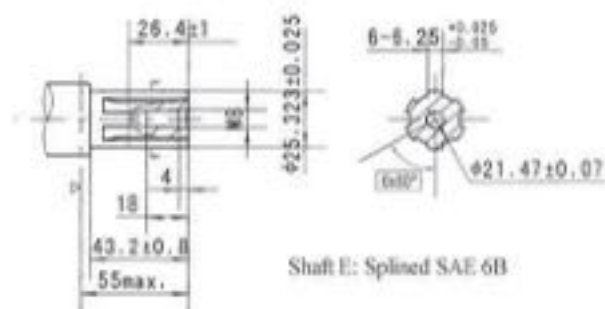
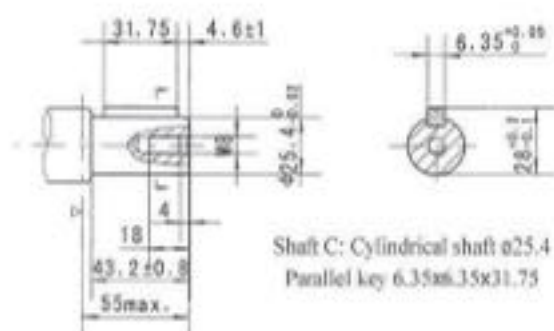
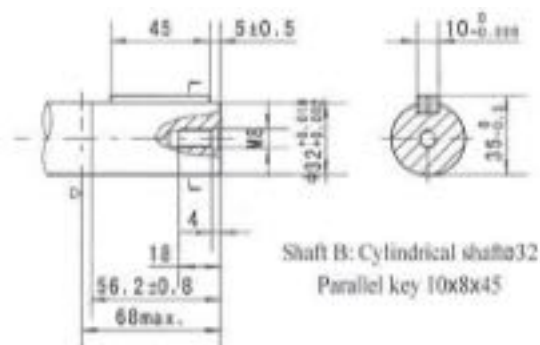
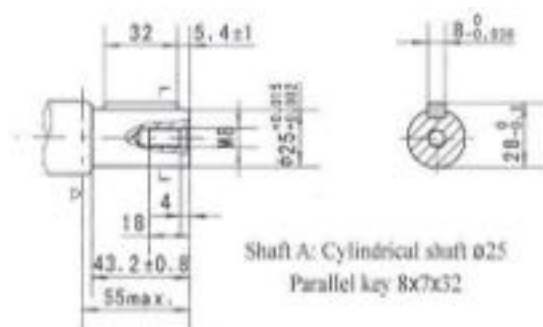


Model	L	L1
M101-36	141	7
M101-50	141	7
M101-80	144.5	10.5
M101-100	147	13
M101-125	150	16
M101-160	155	21
M101-200	160	26
M101-250	166	32
M101-315	176	42
M101-400	186	52

Code	G (depth)	S (depth)	P (depth)	T (depth)	R (depth)	B4 (depth)	B5 (depth)
P(A,B)	G1/2 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	3/4-16 O-ring (15)	PT(RC)1/2 (15)	$\phi 10$	$\phi 10$
T	G1/4 (12)	7/16-20UNF (12)	7/16-20UNF (12)	7/16-20UNF(12)	PT(RC)1/4 (9.7)	7/16-20UNF(12)	G1/4(12)
C	-	-	-	-	-	4-5/16-18UNC(13)	4-M8(13)



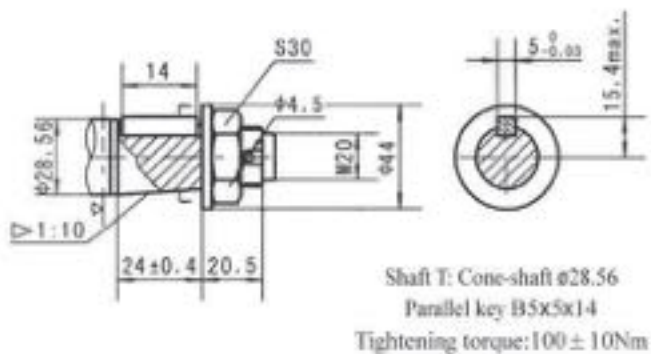
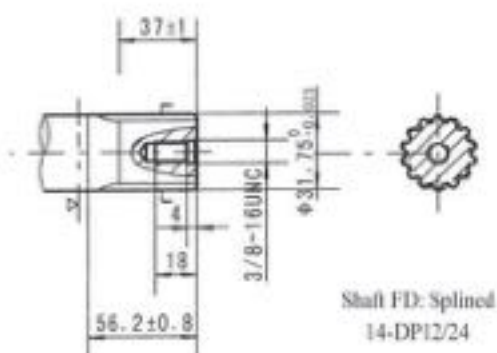
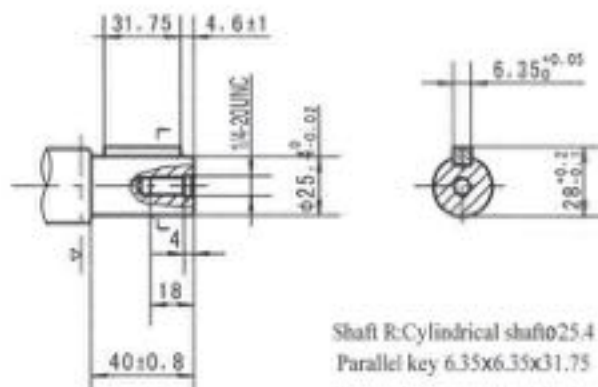
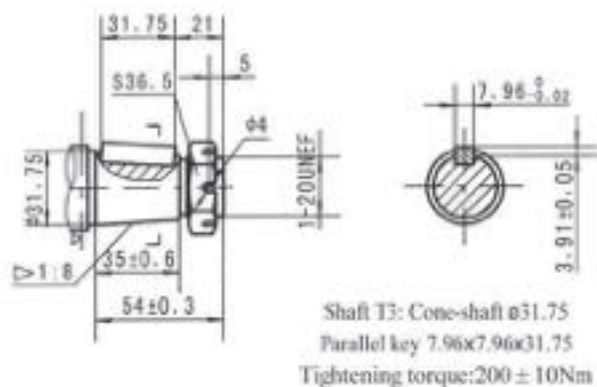
MOMP SHAFT EXTENSIONS DIMENSIONS DATA



▷ Motor Mounting Surface



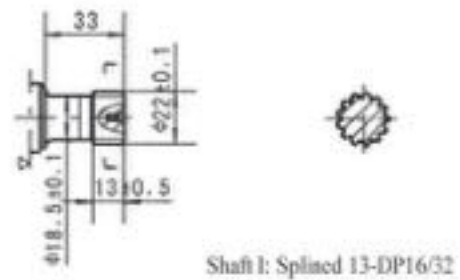
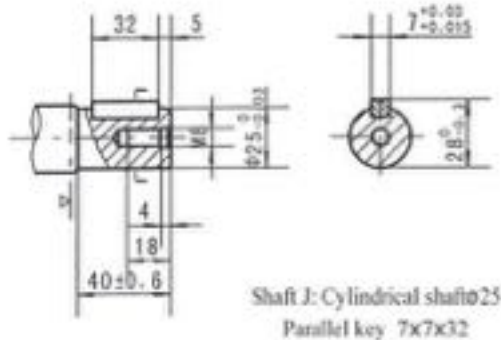
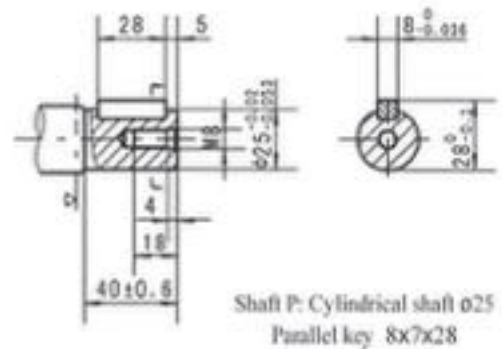
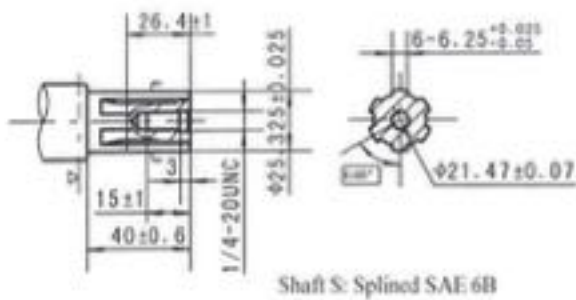
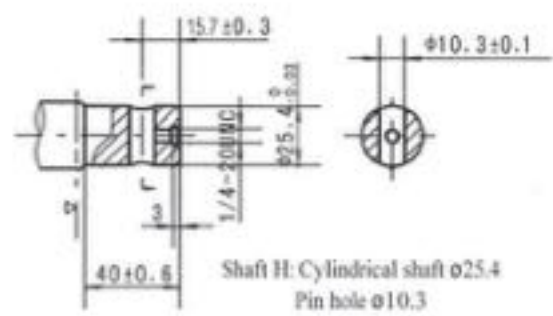
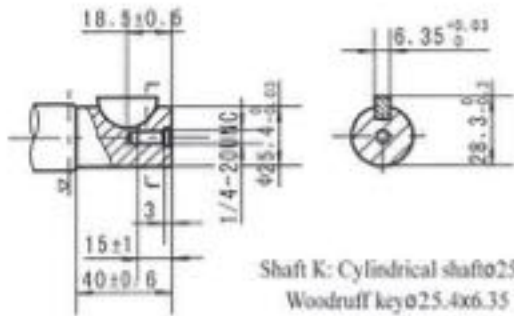
MOMP SHAFT EXTENSIONS DIMENSIONS DATA



▷ Motor Mounting Surface



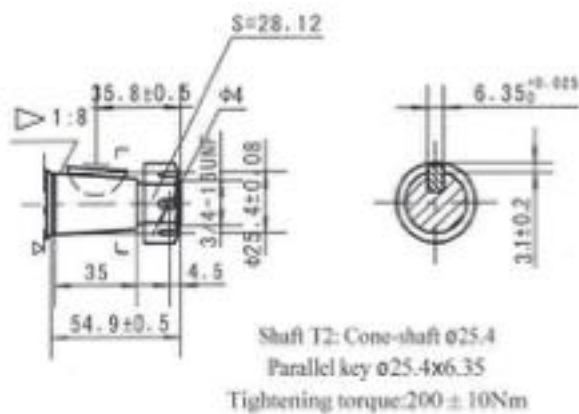
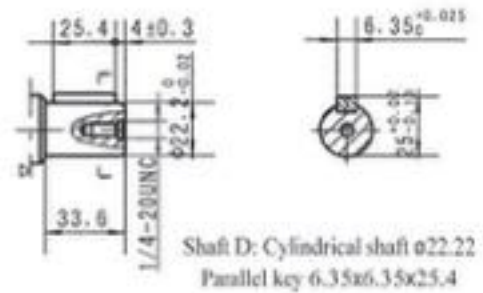
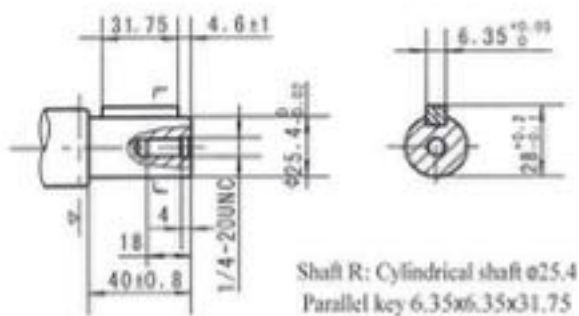
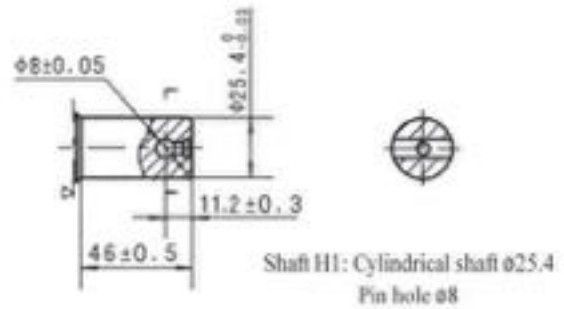
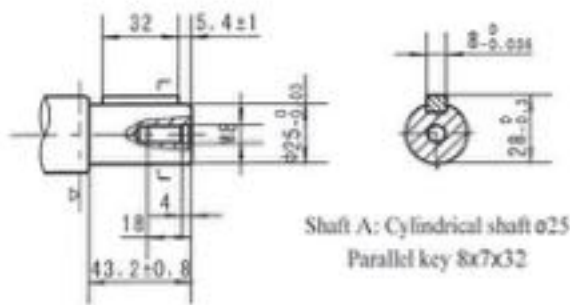
M101- SHAFT EXTENSIONS DIMENSIONS DATA



▷ Motor Mounting Surface

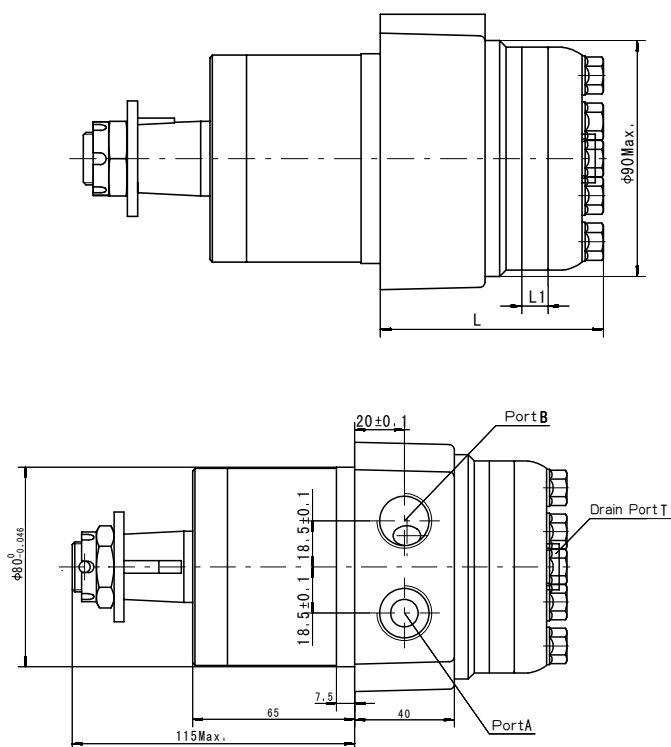


M101- SHAFT EXTENSIONS DIMENSIONS DATA



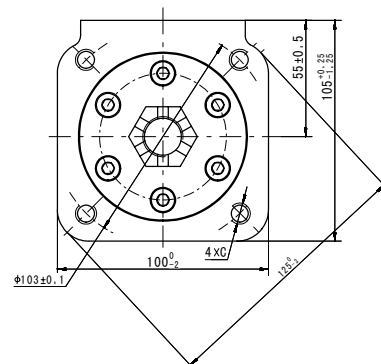
▷ Motor Mounting Surface

MOMPW DIMENSIONS & MOUNTING DATA



Model	L	L1
MOMPW50	81	7
MOMPW80	84.5	10.5
MOMPW100	87	13
MOMPW125	90	16
MOMPW160	95	21
MOMPW200	100	26
MOMPW250	106	32
MOMPW315	116	42
MOMPW400	126	52

Mounting	Code	G (depth)	S (depth)	M (depth)
P(A,B)		G1/2 (15)	7/8-14 O-ring (17)	M22x1.5 (15)
T		G1/4 (12)	7/16-20UNF (12)	M14x1.5 (12)
C		4xM10(20)	4x3/8-16UNC(20)	4xM10(20)



Order Information

1 2 3 4 5 6 7 8

BMPW

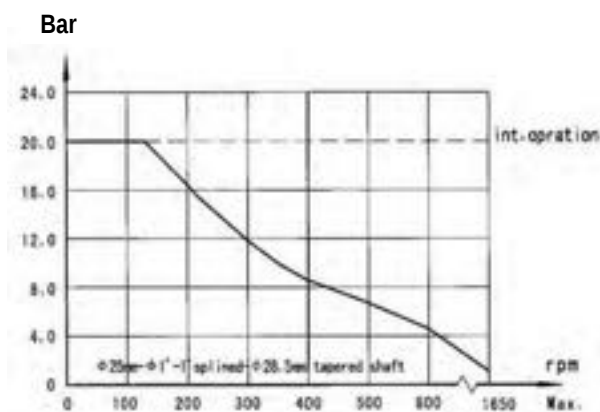
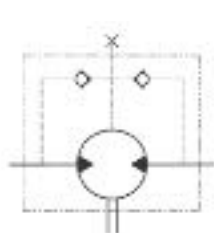
Pos.1	2	3	4	5	6	7	8
Code		Flange	Output shaft	Port and drain port	Rotation direction	Paint	Unusually function
BMPW	50 80 100 125 160 200 250 315 400	Wheel-flange pilat Ø80 × 7.5 Omit	A Shaft Ø25x6 ,Parallel key 8 × 7 × 32 C Shaft Ø25.4 ,Parallel key 6.35 × 6.35 × 31.75 E Shaft Ø25.4 ,Splined key SAE 6B T Cone shaft Ø28.56 ,Parallel key B5 × 5 × 14	G G1/2, G1/4 S 7/8-14 O-ring, 7/16-20UNF M M22x1.5,M14x1.5	Omit Standard Opposite R	00 Omit B S	Omit Standard Big radial force No case drain N O

Note:When the table is used, please fill the code of left rows in the table 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.



MOMP, M101, MOMPW SERIES HYDRAULIC MOTOR

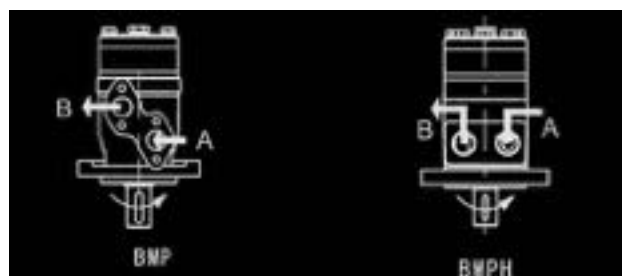
PERMISSIBLE SHAFT SEAL PRESSURE



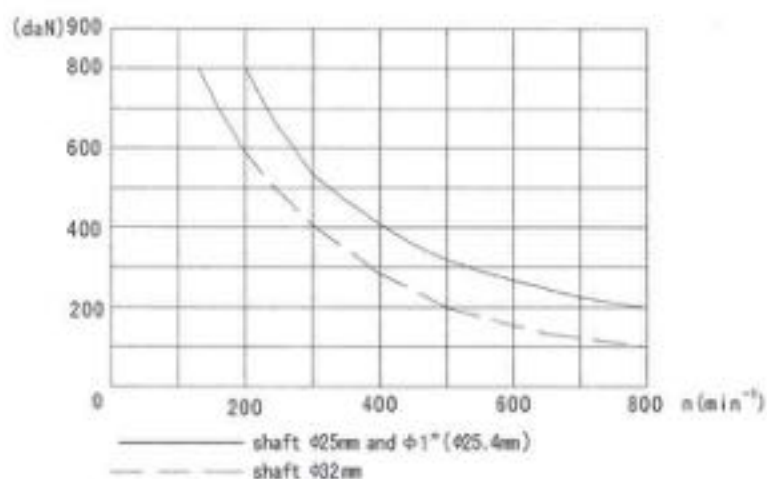
In applications without drain line, the shaft seal pressure is equal to the pressure in the return line.
When applications use the drain line, the pressure behind the output shaft seal equals the pressure in drain line.

DIRECTION OF SHAFT ROTATION

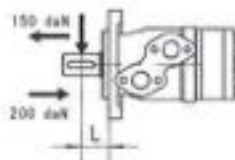
When facing shaft end of motor, shaft to rotate:
Clockwise when Port "A" is pressurised
Counter-clockwise Port "B" is pressurised



STATUS OF THE SHAFT'S RADIAL FORCE



$$F_r = \frac{800 \cdot 25000}{n \cdot 95 + L} \text{ daN}$$



F_r =Radial Force (daN)
L =Distance (mm)
n =Speed (rpm)
Rhomb-flange L=30mm
Square-flange L=24mm



ORDER INFORMATION

1	2		3		4		5		6		7		8
Code	Disp.		Flange		Output Shaft		Port & Drain Port		Rotation Direction		Paint		Unusual Function
MOMP	36			A	Shaft Ø25, Parallel Key 8x7x32	D	G1/2 Manifold Mount 4xM8, G1/4						
	50			B	Shaft Ø32, Parallel Key 10x8x45	M	M22x1.5 Manifold Mount 4xM8, M14x1.5						
	80			C	Shaft Ø25.4, Parallel Key 6.35x6.35x31.75								
	100	2	2-Ø13.5 Rhomb-Flange, Pilot Ø82.5x8	E	Shaft Ø25, Splined Tooth SEA 6B								
	125	4	4-Ø13.5 Rhomb-Flange, Pilot Ø82.5x8	R	Short shaft Ø25.4, Parallel Key 6.35x6.35x31.75	S	7/8-14 O-Ring Manifold 4x5/16-18UNC, 7/16-20UNF	Omit R	Standard Opposite	00 Omit B S	No Paint Blue Black Silver Grey	Omit N AX O F LS	Standard Large Radial Force Large Axial Force No Case Drain Free Running Low Speed
	160	H4	4-3/8-16 Square-Flange, Pilot Ø44.4x2.8	F	Shaft Ø31.75, Splined Tooth 14-DP12/24								
	200	H5	4-M10 Square-Flange, Pilot Ø44.4x2.8	FD	Long Shaft Ø31.75, Splined Tooth 14-DP12/24								
	250			G	Shaft Ø31.75, Parallel Key 7.96x7.96x31.75	P	1/2-14 NPFT Manifold 4x5/16-18UNC, 7/16-20UNF						
	315			T	Cone Shaft Ø28.56, Parallel Key B5x5x14								
	400			T3	Cone Shaft Ø31.75, Parallel Key 7.96x7.96x25.4	R	PT(Rc)1/2 Manifold 4xM8,PT(Rc)1/4						
	500												

1	2		3		4		5		6		7		8
Code	Disp.		Flange		Output Shaft		Port & Drain Port		Rotation Direction		Paint		Unusual Function
M101	36			K	Shaft Ø25.4, Woodruff Key Ø25.4x6.35								
	50			S	Shaft Ø25.4, Splined Tooth SEA 6B	G	G1/2 G1/4						
	80			A	Shaft Ø25, Parallel Key 8x7x32	S	7/8-14 O-Ring 7/16-20UNF (G1/4)						
	100			R	Shaft Ø25.4, Parallel Key 6.35x6.35x31.75	P	1/2-14 NPTF, 7/16-20UNF (G1/4)						
	125	H2	2-Ø13.5 Rhomb-Flange, Pilot Ø82.5x2.8	H	Shaft Ø25.4, Pin Hold Ø10.3	T	3/4-16 O-Ring, 7/16-20UNF						
	160	H4	4-Ø13.5 Rhomb-Flange, Pilot Ø82.5x2.8	H1	Shaft Ø25.4, Pin Hole Ø8	R	PT(Rc)1/2 PT(Rc)1/4	Omit R	Standard Opposite	00 Omit B S	No Paint Blue Black Silver Grey	Omit N AX O F LS	Standard Large Radial Force Large Axial Force No Case Drain Free Running Low Speed
	200	H5	4-3/8-16 Square-Flange, Pilot Ø44.4x2.8	D	Shaft Ø22.22, Parallel Key 6.35x6.35x25.4	B4	Ø10 O-Ring Manifold 4x5/16-18UNC, 7/16-20UNF(G1/4)						
	250		4-M10 Square-Flange, Pilot Ø44.4x2.8	I	Shaft Ø22.22, Splined Tooth 13-DP16/32	B5	Ø10 O-Ring Manifold 4xM8 7/16-20UNF(G1/4)						
	315			T2	Cone Shaft Ø25.4, Woodruff Key Ø25.4x6.35								
	400			P	Shaft Ø25, Parallel Key 8x7x28								
	500			J	Shaft Ø25, Parallel Key 7x7x32								



MOMR SERIES HYDRAULIC MOTOR

MOMR Series motors are medium speed high torque motors designed on an internal gear design consisting of a rotor and stator. These motors are suitable for long operating periods at moderate pressures.

Characteristic Features:

- Advanced manufacturing design for the Geroler gear set, which provide high starting torque, high efficiency and long life
- Motors have high pressure shaft seals which can be used in Parallel or Series
- Smooth running over the entire speed range

Main Specifications

Type		MOMR & MOMRS									
		36	50	80	100	125	160	200	250	315	375
Geometric Displacement (cm³/rev.)		36	51.3	80.6	100.8	124.9	157.2	199.2	252	314.5	370
Max. Speed (rpm)	Cont.	1085	755	750	600	475	375	300	240	190	160
	Int.	1220	970	940	750	600	470	375	300	240	200
Max. Torque (Nm)	Rated	69	100	160	200	250	320	330	352	360	420
	Cont.	69	100	190	240	292	363	358	352	360	420
	Int.	88	126	220	280	340	430	448	470	470	548
Max. Output (kW)	Rated	7.5	7.7	12.3	12.3	12.0	12.3	10	9	7	6.5
	Cont.	7.5	7.7	15	15	14	14	11	9	7	8.6
	Int.	9.4	9.7	17	17	16	16	14	12	9	12
Max. Pressure Drop (Bar)	Rated	140	140	140	140	140	140	120	110	85	85
	Cont.	140	140	175	175	175	165	130	110	85	85
	Int.	175	175	200	200	200	200	175	140	115	115
Max. Flow (L/min)	Cont.	40	40	60	60	60	60	60	60	60	60
	Int.	50	50	75	75	75	75	75	75	75	75
Weight (kg)		6.7	6.7	6.9	6.9	7.2	7.5	8.0	8.5	9	9.3

- Rated Speed & Rated Torque: Output value of speed and torque under rated flow and rated pressure
- 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 seconds per minute



PERFORMANCE DATA

MOMR50 [51.3cm³/rev.]

Pressure (Bar)

Pressure (Bar)		Max.Cont.					Max.Int.		
		50	70	90	100	120	140	160	175
Flow (L/min)	5	35 95	45 84	61 76	67 73	77 69	88 46		
	10	36 184	46 176	62 165	69 162	80 150	95 130	108 111	120 84
	15	35 283	49 277	63 269	73 261	88 250	100 230	109 211	123 185
	20	34.5 377	47 375	61 365	69 361	83 346	96 330	109 308	126 276
	25	34 476	45 468	61 460	69 453	81 438	96 423	109 395	126 361
	30	33 576	44 569	60 561	67 554	80 542	95 531	108 500	126 465
	35	31 669	42 665	59 657	66 654	80 638	93 623	107 598	124 561
	40	30 760	41 758	58 753	66 750	79 738	92 724	106 700	122 670
	Max. Cont.								
	Max. Int.	45	29.5 856	40 856	57 850	65 845	78 835	90 815	105 799

MOMR80 [80.6cm³/rev.]

Pressure (Bar)

Pressure (Bar)					Max.Cont.		Max.Int.		
	50	70	90	100	120	140	160	175	
Flow (L/min)	10	55	77	98	107	130	149	170	180
		115	109	106	101	91	75	53	45
	20	50	81.6	105	118	132	160	178	189
		239	235	227	224	209	196	172	160
	30	48	74	97	114	131	150	179	190
		364	360	357	345	332	321	300	284
	40	45	71	95	105	128	149	177	188
		488	483	475	472	460	447	420	408
	50	42	70	90	98	125	147	171	187
		619	615	607	598	593	568	547	535
60	38	63	85	95	118	142	169	185	
	740	725	721	715	707	688	667	657	
Max. Cont.	70	36	58	80	89	112	139	164	179
		860	853	839	837	823	811	790	776
Max. Int.	75	29	56	77	85	110	133	161	177
		925	915	910	899	888	871	853	837

MOMR100 [100.8cm³/rev.]

Pressure (Bar)

Pressure (Bar)		Max.Cont.					Max.Int.		
		50	70	90	100	120	140	160	175
Flow (L/min)	10	70	100	122	138	159	182	210	222
		99	95	87	84	74	63	52	44
	20	68	95	123	143	165	200	221	238
		199	194	188	182	175	162	150	138
	30	62	94	121	140	164	194	220	240
		299	294	288	284	278	263	249	236
	40	59	88	119	134	161	192	218	238
		400	398	387	385	380	366	350	336
	50	55	83	117	125	157	185	217	235
		498	496	488	484	475	464	450	436
	60	48	79	110	119	152	180	214	233
		599	595	587	585	579	569	552	538
Max. Cont.	70	43	70	100	112	142	170	201	229
		699	693	687	683	679	668	648	636
Max. Int.	75	39	63	97	105	140	167	197	227
		748	741	737	735	720	713	697	686

MOMR125 [124.9cm³/rev.]

Pressure (Bar)

Pressure (Bar)					Max.Cont.		Max.Int.		
	50	70	90	100	120	140	160	175	
Flow (L/min)	10	90	122	160	173	205	237	258	270
		73	71	66	63	55	42	23	14
	20	85	118	159	172	208	250	278	292
		154	152	150	145	138	123	109	91
	30	82	107	158	164	206	241	277	291
		237	236	233	226	219	207	192	170
	40	79	105	150	161	204	238	275	289
		315	313	309	307	302	297	272	254
	50	75	96	145	160	198	236	262	282
		398	397	395	391	381	368	353	337
60	62	95	139	158	183	222	254	279	
	475	473	471	470	463	450	427	416	
Max. Cont.	70	59	83	125	150	178	212	250	262
		554	553	551	550	546	538	514	500
Max. Int.	75	56	80	122	145	172	205	245	261
		598	597	593	590	586	577	551	537

Cont
Int.

Torque (Nm) 167
Speed (rpm) 713



PERFORMANCE

MOMR160 [157.2cm³/rev.]

Pressure (Bar)

Pressure (Bar)		Max.Cont.					Max.Int.		
		50	70	90	100	120	140	160	175
Flow (L/min)	10	115	160	203	220	260	300	340	362
		58	55	52	50	44	38	34	26
	20	114	160	205	230	265	320	355	380
		119	115	111	108	103	95	84	76
	30	105	158	202	221	261	305	344	378
		184	181	177	172	165	153	134	130
	40	100	145	196	218	257	299	340	374
		246	244	239	237	230	218	199	184
50	90	140	190	209	250	295	336	366	
	307	305	302	300	292	280	262	244	
60	84	136	180	199	240	286	330	360	
	370	368	364	362	355	342	334	304	
Max. Cont.	70	65	120	164	180	223	280	320	350
		435	434	430	427	416	405	335	366
Max. Int.	75	59	116	158	175	220	272	314	342
		465	462	458	456	447	433	416	395

MOMR200 [199.2cm³/rev.]

Pressure (Bar)

Pressure (Bar)				Max.Cont.		Max.Int.	
	50	70	90	105	120	140	175
10	148	205	255	290	327	370	442
	49	47	45	43	40	30	24
20	140	202	250	323	330	411	448
	99	97	93	90	86	78	65
30	130	193	241	307	325	377	445
	149	146	140	136	131	122	105
40	125	186	232	305	313	390	436
	200	197	192	188	181	170	149
50	120	177	225	295	305	382	427
	250	247	242	238	231	218	193
60	110	166	221	285	292	372	419
	300	298	291	287	282	268	236
70	98	150	205	244	278	331	410
	350	347	342	338	331	318	282
75	85	141	199	235	268	323	400
	375	372	366	362	357	343	310

MOMR250 [252cm³/rev.]

Pressure (Bar)

Pressure (Bar)		Max.Cont.					Max.Int.		
		30	50	70	80	100	110	140	175
Flow (L/min)	10	115 40	180 38	251 37	295 35	350 32	380 30	470 22	535 16
	20	110 79	178 78	252 75	294 74	352 70	385 68	470 57	548 48
	30	100 120	170 119	248 117	285 116	348 110	381 107	469 95	545 79
	40	91 158	159 157	232 156	268 154	332 151	366 148	460 130	530 110
	50	81 200	148 198	216 196	252 195	320 163	352 160	453 152	521 147
	60	75 241	132 240	201 239	235 237	305 232	340 228	433 210	505 180
	70	50 280	117 279	189 277	220 276	290 271	320 268	412 250	495 215
	75	42 300	105 299	180 298	211 297	281 295	310 289	405 272	486 239

MOMR315 [314.5cm³/rev.]

Pressure (Bar)

Pressure (Bar)				Max.Cont.		Max.Int.	
	30	50	65	80	90	130	135
10	135	215	279	343	383	515	550
	31	29	28	27	27	24	22
20	133	216	289	349	380	508	552
	62	61	60	58	57	52	50
30	125	205	275	341	375	494	543
	95	92	91	90	88	81	79
40	113	195	267	335	367	485	526
	123	121	120	118	117	106	104
50	92	170	253	321	352	474	511
	155	154	152	149	147	137	133
60	80	160	231	305	334	458	492
	190	187	193	179	176	163	157
70	57	136	215	285	320	444	480
	222	220	217	212	208	192	185
75	55	124	205	269	308	427	469
	235	234	231	227	225	408	201

Cont
Int.

Torque (Nm) 205
Speed (rpm) 231



PERFORMANCE

MOMR375 [370cm³/rev.]

Pressure (Bar)

Max.Cont.

Max.Int.

30	50	65	80	90	130	135
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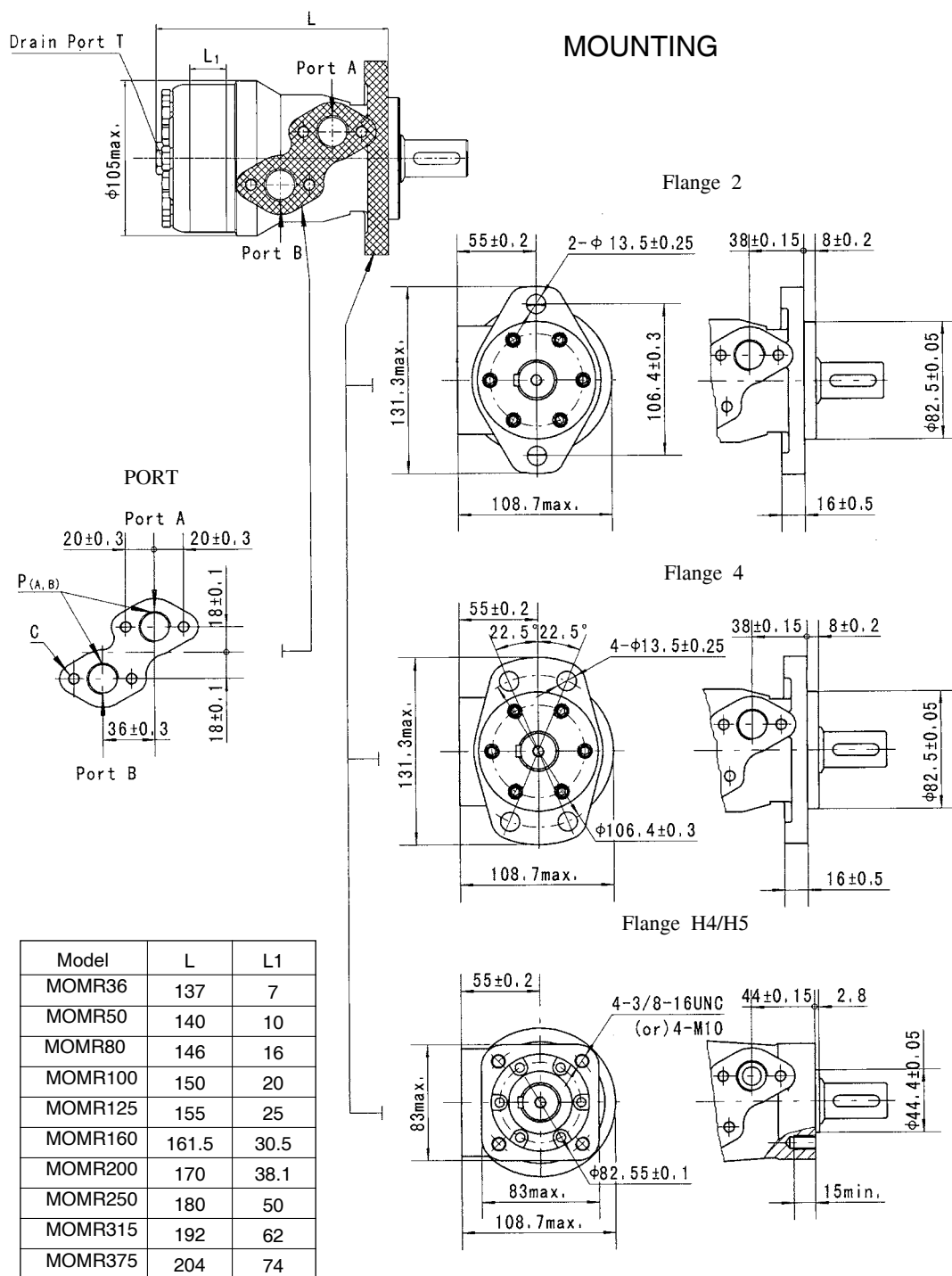
Flow (L/min)	10	160 26	270 25	340 24	420 22	470 21	550 19	610 17
	20	159 53	260 52	340 51	410 49	470 47	540 42	605 37
	30	150 79	255 78	330 77	400 75	450 73	530 67	600 60
	40	135 106	240 105	310 104	375 102	430 99	520 93	590 85
	50	120 134	230 132	295 131	360 129	420 126	505 120	570 110
	60	98 159	210 158	275 157	340 155	390 153	490 147	550 135
Max. Cont.	70	75 187	175 186	250 185	320 183	370 180	465 175	530 160
Max. Int.	75	65 200	160 199	230 198	310 195	360 192	450 187	515 178

Cont
Int.

Torque (Nm) 230
Speed (rpm) 198



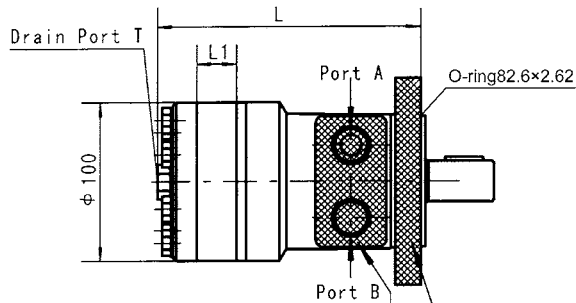
MOMR DIMENSIONS AND MOUNTING DATA



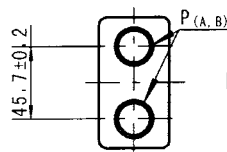
Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC(13)	4-5/16-18UNC(13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)



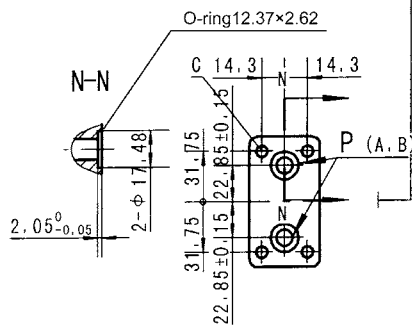
M103- DIMENSIONS AND MOUNTING DATA



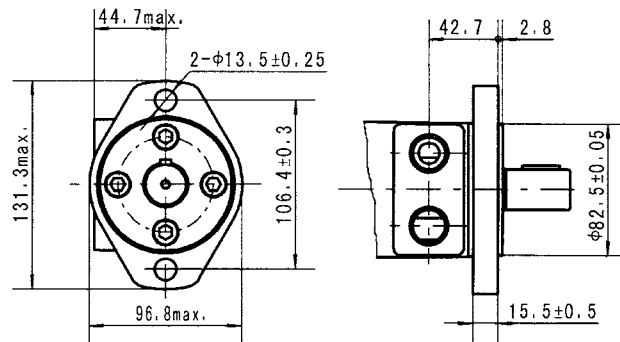
PORT: G, S, P, R, M1, M2, M3



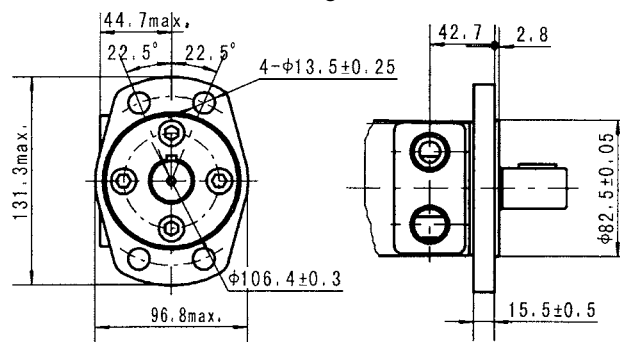
PORT: B4, B5



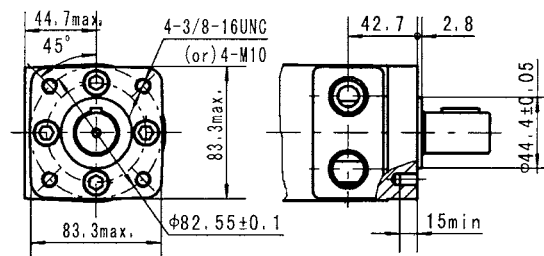
Flange H2



Flange H6



Flange H4/H5

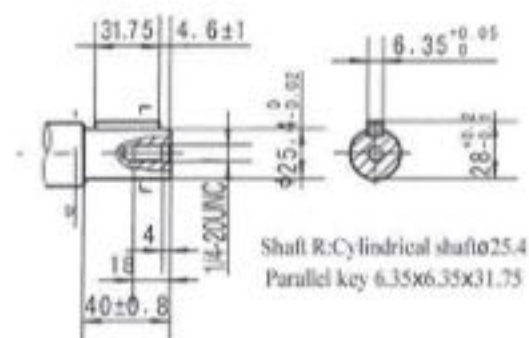
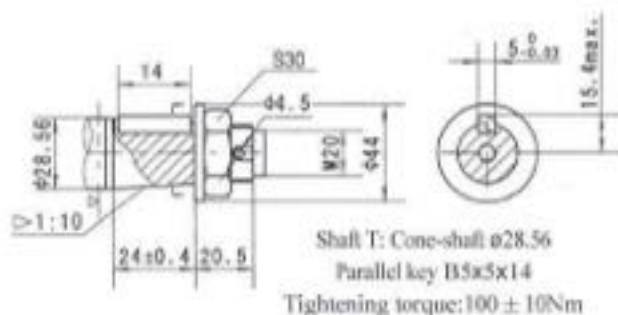
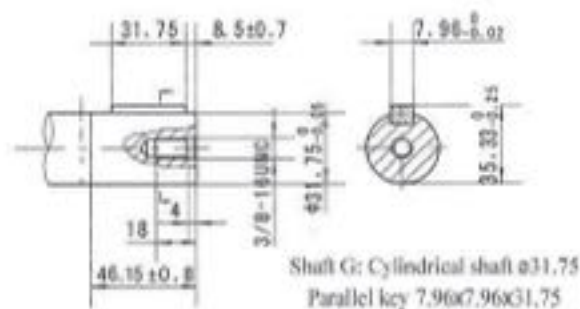
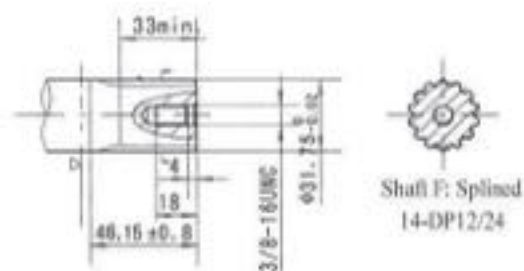
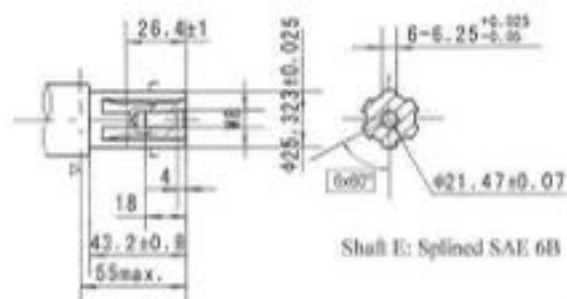
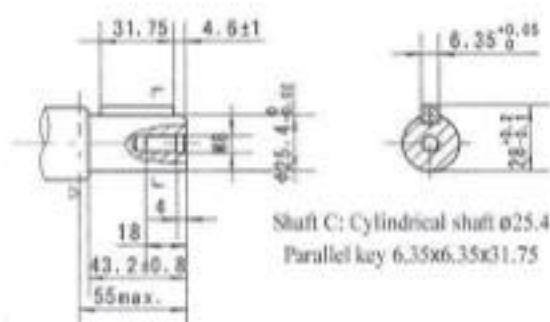
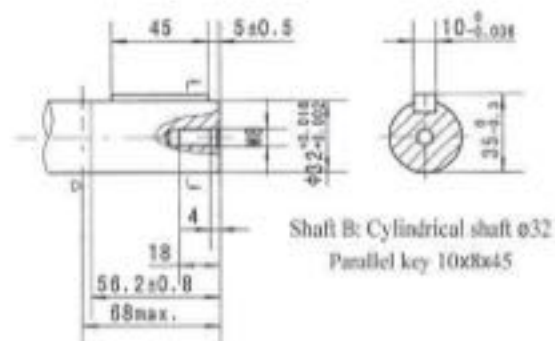
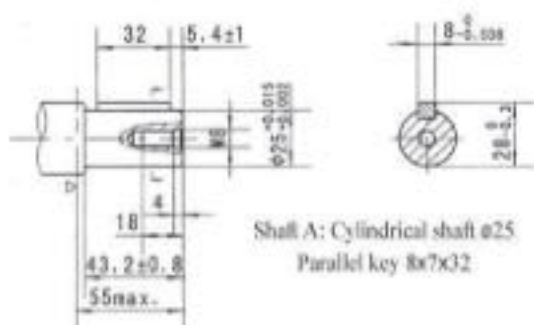


Model	L	L1
M103-36	141	7
M103-50	144	10
M103-80	150	16
M103-100	154	20
M103-125	159	25
M103-160	165.5	30.5
M103-200	174	38.1
M103-250	184	50
M103-315	196	62
M103-375	208	74

Code Mounting	G (depth)	S (depth)	P (depth)	R (depth)	M1 (depth)	M2 (depth)	M3 (depth)	B4 (depth)	B5 (depth)
P(A,B)	G1/2 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT(RC)1/2 (15)	M18 x 1.5 (15)	M20 x 1.5 (15)	M22 x 1.5 (15)	ø10	ø10
T	G1/4 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)	M10 x 1 (12)	M10 x 1 (12)	M10 x 1 (12)	7/16-20UNF(12)	G1/4(12)
C	-	-	-	-	-	-	-	4-5/16-18UNC(13)	4-M8(13)



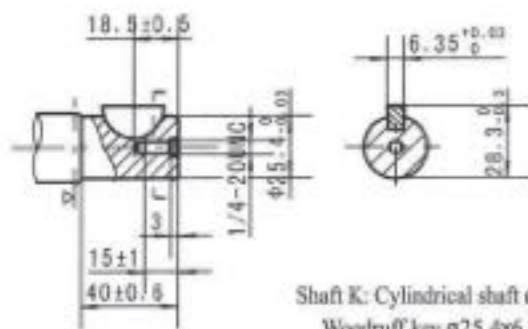
MOMR SHAFT EXTENSIONS DIMENSIONS DATA



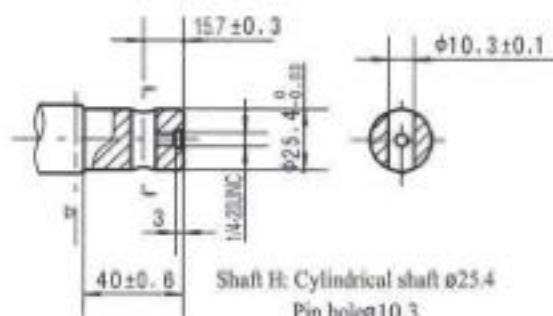
▷ Motor Mounting Surface



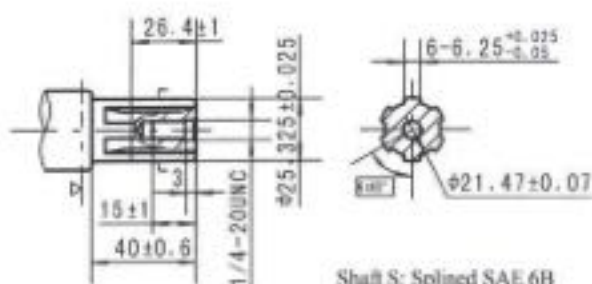
M103- SHAFT EXTENSIONS DIMENSIONS DATA



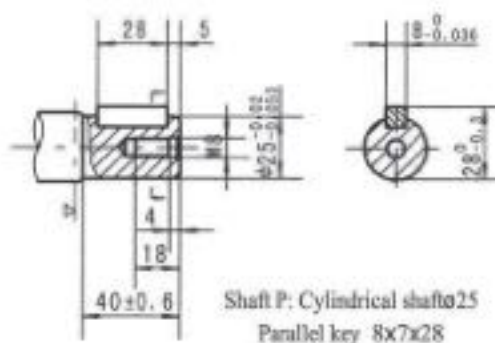
Shaft K: Cylindrical shaft ø25.4
Woodruff key ø25.4x6.35



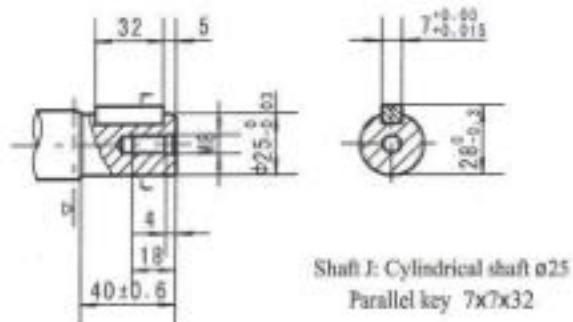
Shaft H: Cylindrical shaft ø25.4
Pin hole ø10.3



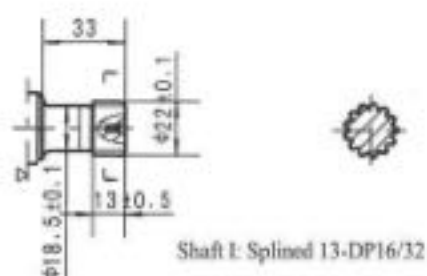
Shaft S: Splined SAE 6B



Shaft P: Cylindrical shaft ø25
Parallel key 8x7x28



Shaft J: Cylindrical shaft ø25
Parallel key 7x7x32

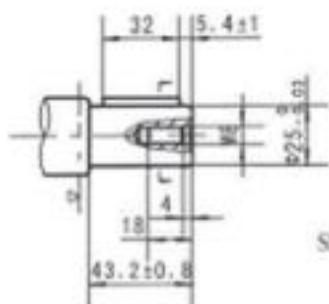


Shaft I: Splined 13-DP16/32

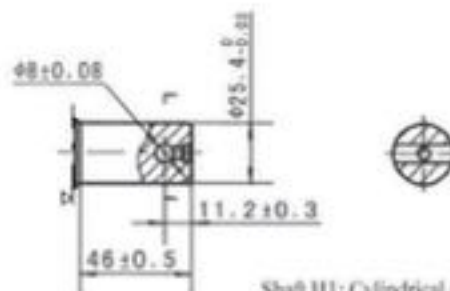
▷ Motor Mounting Surface



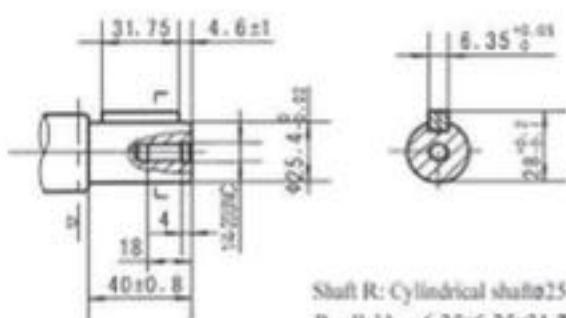
M103- SHAFT EXTENSIONS DIMENSIONS DATA



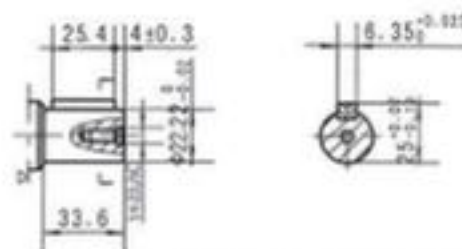
Shaft A: Cylindrical shaft ø25
Parallel key 8x7x32



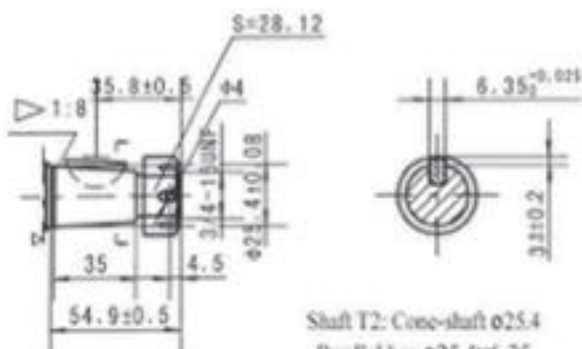
Shaft H1: Cylindrical shaft ø25.4
Pin hole ø8



Shaft R: Cylindrical shaft ø25.4
Parallel key 6.35x6.35x31.75



Shaft D: Cylindrical shaft ø22.22
Parallel key 6.35x6.35x25.4



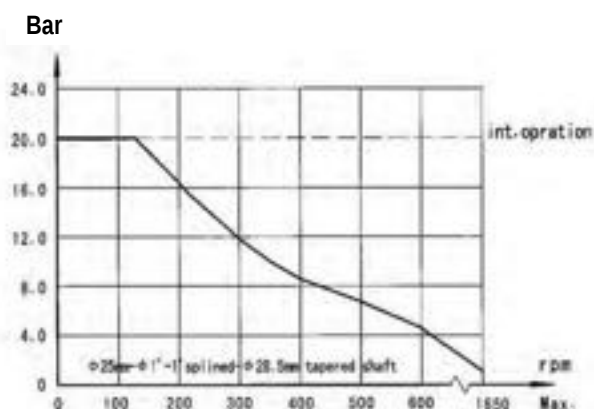
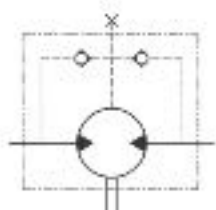
Shaft T2: Cone-shaft ø25.4
Parallel key ø25.4x6.35
Tightening torque: 200 ± 10Nm

▷ Motor Mounting Surface



MOMR, M103- SERIES HYDRAULIC MOTOR

PERMISSIBLE SHAFT SEAL PRESSURE



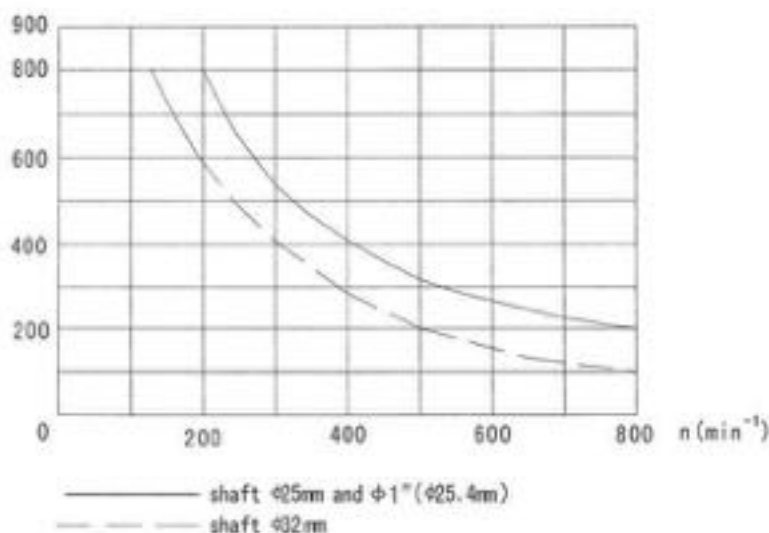
In applications without drain line, the shaft seal pressure is equal to the pressure in the return line.
When applications use the drain line, the pressure behind the output shaft seal equals the pressure in drain line.

DIRECTION OF SHAFT ROTATION

When facing shaft end of motor, shaft to rotate:
Clockwise when Port "A" is pressurised
Counter-clockwise Port "B" is pressurised



STATUS OF THE SHAFT'S RADIAL FORCE



$$F_r = \frac{300 \cdot 25000}{n \cdot 95 + L} \text{ daN}$$

150 daN
200 daN
L

F_r =Radial Force (daN)
 L =Distance (mm)
 n =Speed (rpm)
Rhomb-flange $L=30\text{mm}$
Square-flange $L=24\text{mm}$



ORDER INFORMATION

1	2		3		4		5		6		7		8
Code	Disp.		Flange		Output Shaft		Port & Drain Port		Rotation Direction		Paint		Unusual Function
MOMR	36			A	Shaft Ø25, Parallel Key 8x7x32	D	G1/2 Manifold Mount 4xM8, G1/4						
	50			B	Shaft Ø32, Parallel Key 10x8x45								
	80			C	Shaft Ø25.4, Parallel Key 6.35x6.35x31.75	M	M22x1.5 Manifold Mount 4xM8, M14x1.5						
	100	2	2-Ø13.5 Rhomb-Flange, Pilot Ø82.5x8	E	Shaft Ø25, Splined Tooth SEA 6B								
	125	4	4-Ø13.5 Rhomb-Flange, Pilot Ø82.5x8	R	Short shaft Ø25.4, Parallel Key 6.35x6.35x31.75	S	7/8-14 O-Ring Manifold 4-5/16-18UNC, 7/16-20UNF	Omit R	Standard Opposite	00 Omit B S	No Paint Blue Black Silver Grey	Omit N AX O F LS	Standard Large Radial Force Large Axial Force No Case Drain Free Running Low Speed
	160	H4	4-3/8-16 Square-Flange, Pilot Ø44.4x2.8	F	Shaft Ø31.75, Splined Tooth 14-DP12/24								
	200	H5	4-M10 Square-Flange, Pilot Ø44.4x2.8	FD	Long Shaft Ø31.75, Splined Tooth 14-DP12/24	P	1/2-14 NPFT Manifold 4-5/16-18UNC, 7/16-20UNF						
	250			G	Shaft Ø31.75, Parallel Key 7.96x7.96x31.75								
	315			T	Cone Shaft Ø28.56, Parallel Key B5x5x14								
	400			T3	Cone Shaft Ø31.75, Parallel Key 7.96x7.96x25.4	R	PT(Rc)1/2 Manifold 4-M8,PT(Rc)1/4						

1	2		3		4		5		6		7		8
Code	Disp.		Flange		Output Shaft		Port & Drain Port		Rotation Direction		Paint		Unusual Function
M103	36			K	Shaft Ø25.4, Woodruff Key Ø25.4x6.35	D	G1/2 Manifold Mount 4-M8, G1/4						
	50			S	Sub-Shaft Ø25.4, Splined Tooth SAE 6B								
	80			A	Shaft Ø25, Parallel Key 6.35x6.35x31.75	M	M22x1.5 Manifold Mount 4-M8,M14x1.5						
	100			R	Shaft Ø25.4, Splined Tooth SAE 6B								
	125	H2	2-Ø13.5 Rhomb-Flange, Pilot Ø82.5x2.8	H	Short Shaft Ø25.4, Parallel Key 6.35x6.35x31.75	S	7/8-14 O-Ring Manifold 4-5/16-18UNC, 7/16-20UNF	Omit R	Standard Opposite	00 Omit B S	No Paint Blue Black Silver Grey	Omit N AX O F LS	Standard Large Radial Force Large Axial Force No Case Drain Free Running Low Speed
	160	H6	4-Ø13.5 Rhomb-Flange, Pilot Ø82.5x2.8										
	200	H4	4-3/8-16 Square-Flange, Pilot Ø44.4x2.8	H1	Shaft Ø31.75, Splined Tooth 14-DP12/24	P	1/2-14 NPTF Manifold 4-5/16-16-18UNC, 7/16-20UNF						
	250	H5	4-M10 Square-Flange, Pilot Ø44.4x2.8	D	Long Shaft Ø31.75, Splined Tooth 14-DP12/24								
	315			I	Shaft Ø31.75, Parallel Key 7.96x7.96x31.75								
	375			T2	Cone Shaft Ø28.56, Parallel Key B5x5x14	R	PT(Rc)1/2 Manifold 4-M8, PT(Rc)1/4						



MOMS SERIES HYDRAULIC MOTOR

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

Characteristic feautures:

- * Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, 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 offers 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.

Main Specificaion

Type		MOMS MOMSE 80	MOMS MOMSE 100	MOMS MOMSE 125	MOMS MOMSE 160	MOMS MOMSE 200	MOMS MOMSE 250	MOMS MOMSE 315	MOMS MOMSE 375
Geometric displacement (cm ³ /rev.)		80.6	100.8	125	157.2	200	252	314.5	370
Max. speed (rpm)	cont.	800	748	600	470	375	300	240	200
	int.	988	900	720	560	450	360	280	240
Max. torque (N•m)	cont.	190	240	310	316	400	450	560	536
	int.	240	300	370	430	466	540	658	645
	peak	260	320	400	472	650	690	740	751
Max. output (kW)	cont.	15.9	18.8	19.5	15.6	15.7	14.1	14.1	11.8
	int.	20.1	23.5	23.2	21.2	18.3	17.0	18.9	17
Max. pressure drop (MPa)	cont.	17.5	17.5	17.5	15	14	12.5	12	10
	int.	21	21	21	21	16	16	14	12
	peak	22.5	22.5	22.5	22.5	22.5	20	18.5	14
Max. flow (L/min)	cont.	65	75	75	75	75	75	75	75
	int.	80	90	90	90	90	90	90	90
Max. inlet pressure (MPa)	cont.	25	25	25	25	25	25	25	25
	int.	30	30	30	30	30	30	30	30
Weight (kg)		9.8	10	10.3	10.7	11.1	11.6	12.3	12.6

- * 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.



Performance Data

MOMS 80 [80.6cm³/rev.]

		Pressure (MPa)						
		3.5	7	10.5	14	17.5	21	22.5
Flow (L/min)	15	35	80	120	158	195	235	249
		180	174	168	164	158	151	143
30		35	80	120	158	195	240	260
		362	352	346	338	330	322	310
40		35	79	119	155	193	234	250
		482	473	464	453	444	434	415
50		30	77	117	153	192	232	248
		602	594	587	569	560	551	522
Max.cont.	60	28	77	117	153	192	232	247
		724	713	707	683	673	664	629
65		25	75	114	152	190	230	245
		790	785	770	760	742	720	704
Max.int.	80	22	70	110	140	170	200	220
		980	965	950	920	891	860	830

MOMS 100 [100.8cm³/rev.]

		Pressure (MPa)						
		3.5	7	10.5	14	17.5	21	22.5
Flow (L/min)	15	48	95	150	200	250	289	310
		146	144	139	135	130	120	105
30		45	94	146	198	250	295	317
		291	289	278	274	269	258	242
40		43	89	142	196	248	293	316
		387	384	374	359	350	335	320
50		40	88	135	194	247	292	315
		486	483	473	462	450	430	420
Max.cont.	60	37	88	132	185	244	289	312
		588	584	574	562	550	538	520
75		35	80	130	180	240	286	310
		740	735	720	705	696	676	653
Max.int.	90	30	75	124	170	236	277	303
		850	840	810	787	770	750	747

MOMS 125 [125cm³/rev.]

		Pressure (MPa)						
		3.5	7	10.5	14	17.5	21	22.5
Flow (L/min)	15	55	120	176	245	309	349	375
		112	110	103	96	93	90	84
30		55	120	175	250	324	375	408
		222	220	217	208	200	199	190
40		55	120	175	250	324	370	408
		302	298	292	284	276	268	260
50		50	115	176	248	320	370	406
		379	373	368	363	350	339	328
60		45	113	171	245	324	368	406
		456	448	443	439	425	406	393
Max.cont.	75	45	110	167	240	314	370	401
		570	563	555	546	533	515	503
Max.int.	90	40	105	162	237	309	365	398
		685	676	670	659	644	625	610

MOMS 160 [157.2cm³/rev.]

		Pressure (MPa)						
		3.5	7	10.5	14	17.5	21	22.5
Flow (L/min)	15	70	140	205	305	371	430	473
		91	88	84	78	76	74	58
30		75	150	214	321	380	427	490
		185	182	176	168	164	162	152
40		70	150	215	320	378	425	488
		248	244	239	229	224	217	204
50		65	145	215	316	378	425	482
		312	308	304	294	288	280	270
60		65	145	214	315	375	424	482
		375	371	365	357	346	336	323
Max.cont.	75	60	138	208	311	375	420	
		470	465	458	447	436	426	
Max.int.	90	56	130	200	308	370	414	
		564	559	551	541	526	517	

Torque (N•m) 309
Speed (rpm) 644

cont.
int.



Performance Data

MOMS 200 [200cm³/rev.]

		Pressure (MPa)					
		Max.cont.			Max.int.		
		3.5	7	10.5	14	17.5	22.5
Flow (L/min)	15	89	190	295	400	484	608
		73	71	68	64	60	52
	30	87	190	294	399	485	600
		148	146	143	140	135	127
	40	86	188	292	397	483	594
		193	191	189	186	181	172
Flow (L/min)	50	80	184	290	395	480	590
		247	245	243	240	235	226
	60	74	178	286	390	475	582
		298	295	293	290	284	273
	Max.cont.	75	58	160	275	375	460
		372	369	365	362	358	346
Max.int.	90	49	148	260	355	445	555
		440	435	430	422	411	401

MOMS 250 [252cm³/rev.]

		Pressure (MPa)					
		Max.cont.			Max.int.		
		3.5	7	10.5	14	17.5	22.5
Flow (L/min)	15	117	230	355	52	450	554
		58	55	350	51	47	46
	30	117	225	112	446	560	657
		118	117	348	109	107	106
	40	115	225	152	442	552	650
		160	156	345	150	146	142
Flow (L/min)	50	110	220	198	438	546	645
		202	200	340	196	195	192
	60	105	220	237	435	542	642
		242	239	338	234	231	229
	Max.cont.	75	95	215	293	430	537
		300	296	332	286	282	278
Max.int.	90	90	205	348	420	530	632
		360	354		340	332	326

MOMS 315 [314.5cm³/rev.]

		Pressure (MPa)					
		Max.cont.			Max.int.		
		3.5	7	10.5	12	14	18.5
Flow (L/min)	15	160	320	465	555	650	748
		48	47	45	43	40	38
	30	165	322	468	560	658	752
		94	92	90	89	86	85
	40	160	310	457	546	642	741
		125	123	120	118	116	115
Flow (L/min)	50	155	305	450	538	637	736
		158	156	153	150	147	145
	60	152	302	442	532	632	732
		175	174	170	164	162	159
	Max.cont.	75	145	295	436	525	628
		236	234	230	227	225	222
Max.int.	90	132	280	430	520	622	723
		285	282	280	276	273	270

MOMS 375 [370cm³/rev.]

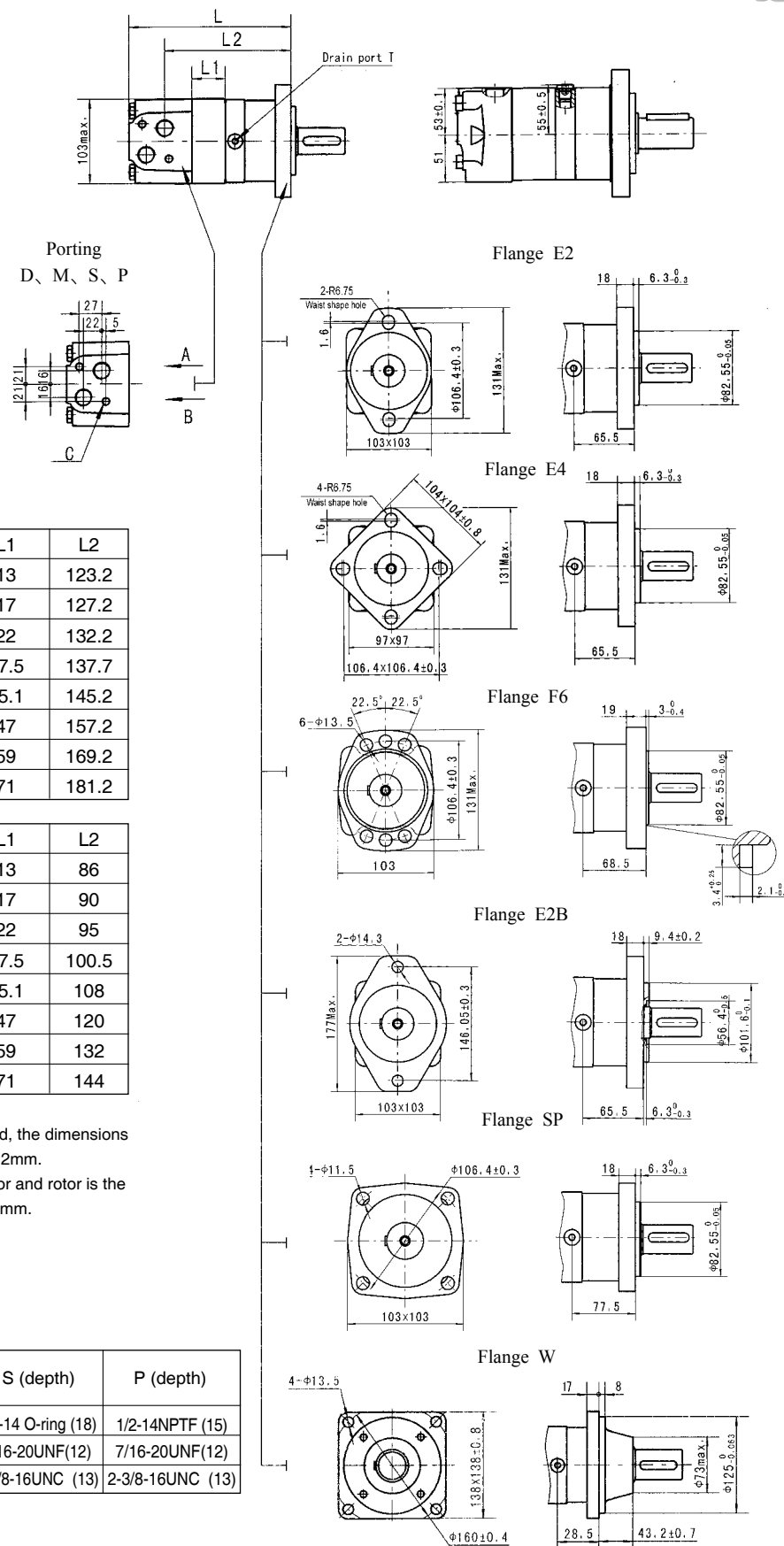
		Pressure (MPa)					
		Max.cont.			Max.int.		
		3.5	7	9	10	12	14
Flow (L/min)	15	185	362	474	512	588	660
		40	39	38	37	35	33
	30	184	364	475	514	590	661
		80	78	77	76	74	72
	40	180	362	473	513	588	659
		106	104	103	102	100	97
Flow (L/min)	50	160	360	472	511	586	658
		133	131	130	129	128	125
	60	150	359	471	510	585	657
		157	156	155	154	152	150
	Max.cont.	75	130	353	465	504	584
		200	198	196	195	194	193
Max.int.	90	105	350	462	500	580	647
		238	235	234	232	230	227

Torque (N•m) 520
Speed (rpm) 276

cont.
int.



MOMS DIMENSIONS AND MOUNTING DATA



Model	L	L1	L2
MOMS-80	167	13	123.2
MOMS-100	171	17	127.2
MOMS-125	176	22	132.2
MOMS-160	181.5	27.5	137.7
MOMS-200	189	35.1	145.2
MOMS-250	201	47	157.2
MOMS-315	213	59	169.2
MOMS-375	225	71	181.2

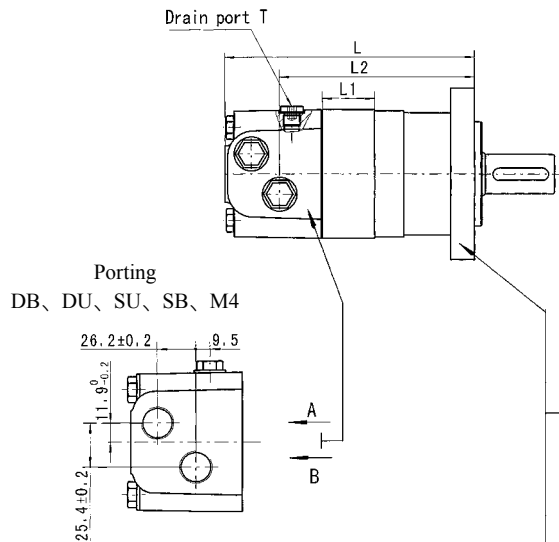
Model	L	L1	L2
MOMS-80-W	129.4	13	86
MOMS-100-W	133.4	17	90
MOMS-125-W	138.4	22	95
MOMS-160-W	143.9	27.5	100.5
MOMS-200-W	151.4	35.1	108
MOMS-250-W	163.4	47	120
MOMS-315-W	175.4	59	132
MOMS-375-W	187.4	71	144

Note:1) If the mounting SP is used, the dimensions of L and L2 should plus 12mm.

2) The thickness of the stator and rotor is the dimension of L1 plused 3mm.

Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)
P(A,B)	G1/2(18)	M22x1.5(18)	7/8-14 O-ring (18)	1/2-14NPTF (15)
T	G1/4(12)	M14x1.5(12)	7/16-20UNF(12)	7/16-20UNF(12)
C	2-M10(13)	2-M10 (13)	2-3/8-16UNC (13)	2-3/8-16UNC (13)

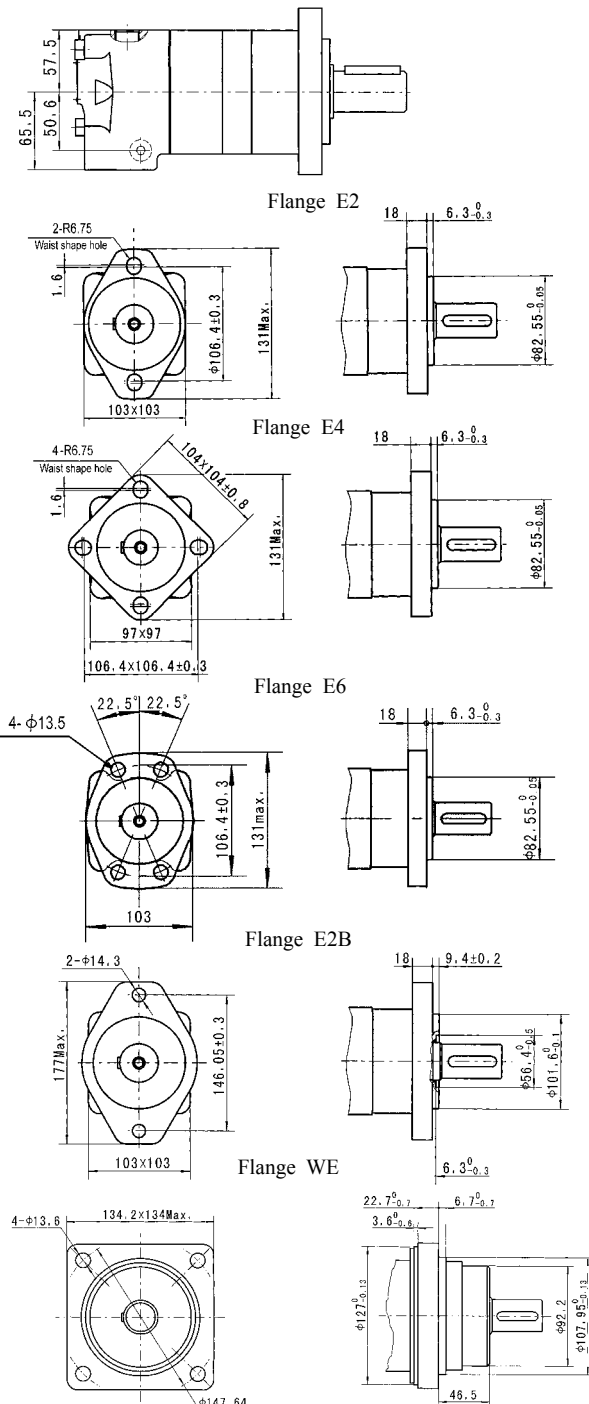
MOMSE DIMENSIONS AND MOUNTING DATA



Model	L	L1	L2
MOMSE-80	171	13	123.2
MOMSE-100	175	17	127.2
MOMSE-125	180	22	132.2
MOMSE-160	185.5	27.5	137.7
MOMSE-200	193	35.1	145.2
MOMSE-250	205	47	157.2
MOMSE-315	217	59	169.2
MOMSE-375	229	71	181.2

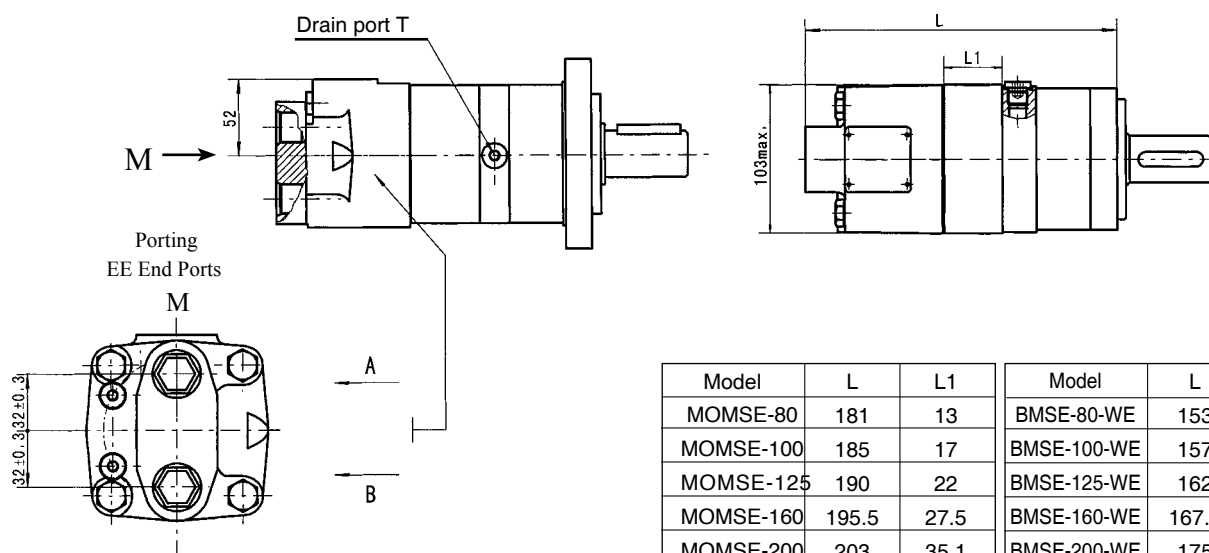
Model	L	L1	L2
MOMSE-80-WE 143	143	13	95
MOMSE-100-WE 147	147	17	99
MOMSE-125-WE 152	152	22	104
MOMSE-160-WE 157.5	157.5	27.5	109.5
MOMSE-200-WE 165	165	35.1	117
MOMSE-250-WE 177	177	47	129
MOMSE-315-WE 189	189	59	141
MOMSE-375-WE 201	201	71	153

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.



Code Mounting	DB (depth)	DU (depth)	SU (depth)	SB (depth)	M4 (depth)
P(A,B)	G1/2 (18)	G1/2 (18)	7/8-14 O-ring (18)	7/8-14 O-ring (18)	M22 x 1.5 (18)
T	G1/4 (12)	7/16-20UNF(12)	7/16-20UNF(12)	G1/4 (12)	M14 x 1.5 (12)

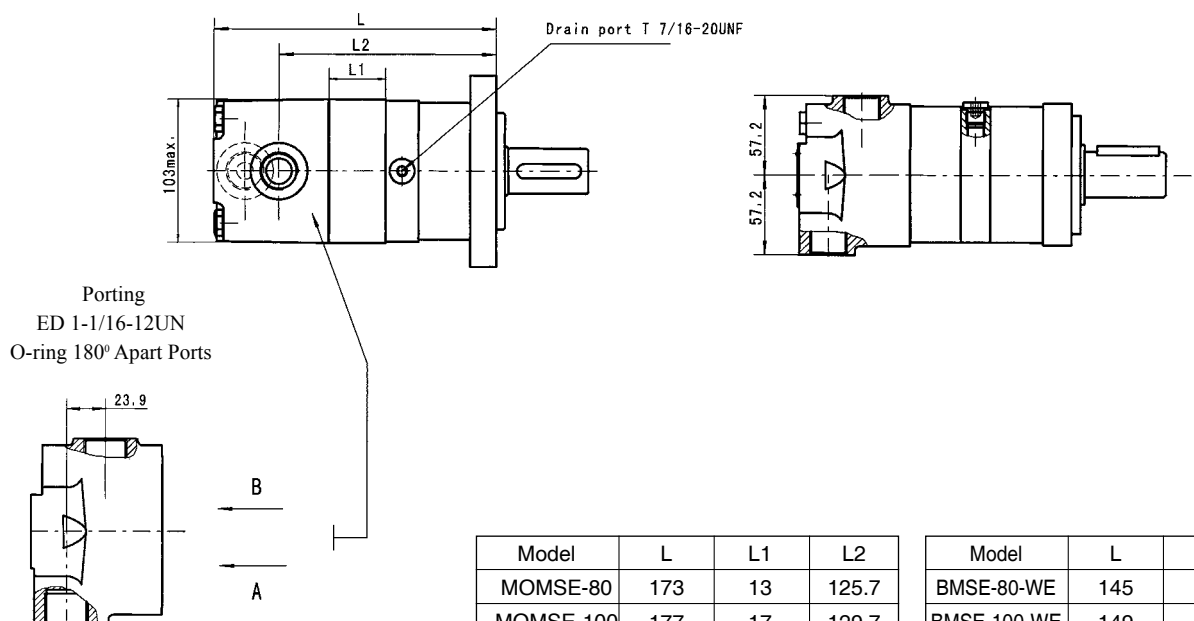
MOMSE DIMENSIONS AND MOUNTING DATA



Code Mounting	EE-D (depth)	EE-M2 (depth)	EE-S2 (depth)
P(A,B)	G1/2 (18)	M22 x 1.5 (18)	7/8-14 O-ring (18)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)

Model	L	L1	Model	L	L1
MOMSE-80	181	13	BMSE-80-WE	153	13
MOMSE-100	185	17	BMSE-100-WE	157	17
MOMSE-125	190	22	BMSE-125-WE	162	22
MOMSE-160	195.5	27.5	BMSE-160-WE	167.5	27.5
MOMSE-200	203	35.1	BMSE-200-WE	175	35.1
MOMSE-250	215	47	BMSE-250-WE	187	47
MOMSE-315	227	59	BMSE-315-WE	199	59
MOMSE-375	239	71	BMSE-375-WE	211	71

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.



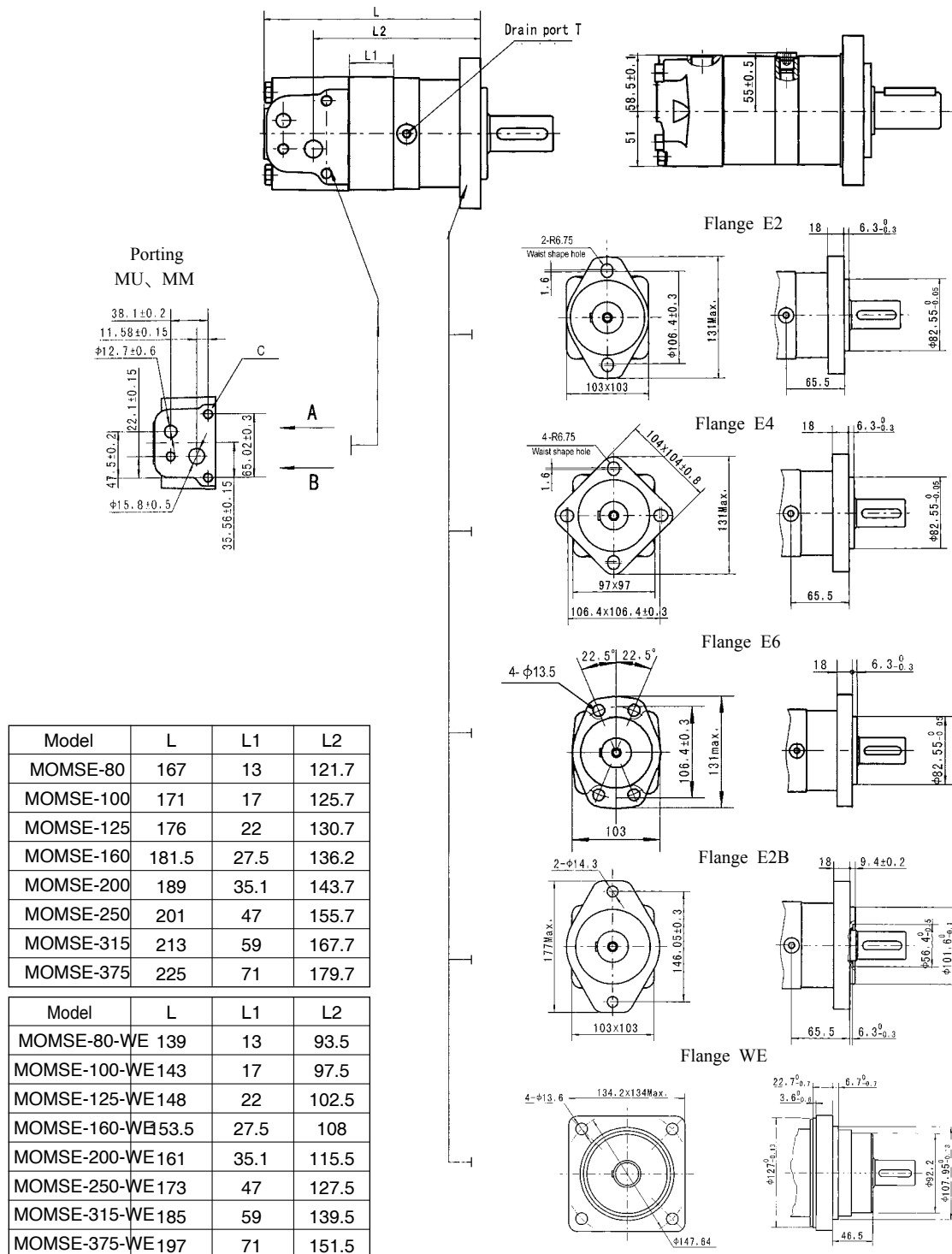
Code Mounting	ED (depth)
P(A,B)	1-1/16-12UN O-ring (18)
T	7/16-20UNF(12)

Model	L	L1	L2
MOMSE-80	173	13	125.7
MOMSE-100	177	17	129.7
MOMSE-125	182	22	134.7
MOMSE-160	187.5	27.5	140.2
MOMSE-200	195	35.1	147.7
MOMSE-250	207	47	159.7
MOMSE-315	219	59	171.7
MOMSE-375	231	71	183.7

Model	L	L1	L2
BMSE-80-WE	145	13	97.5
BMSE-100-WE	149	17	101.5
BMSE-125-WE	153	22	106.5
BMSE-160-WE	158.5	27.5	112
BMSE-200-WE	166	35.1	119.5
BMSE-250-WE	179	47	131.5
BMSE-315-WE	191	59	143.5
BMSE-375-WE	203	71	155.5

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.

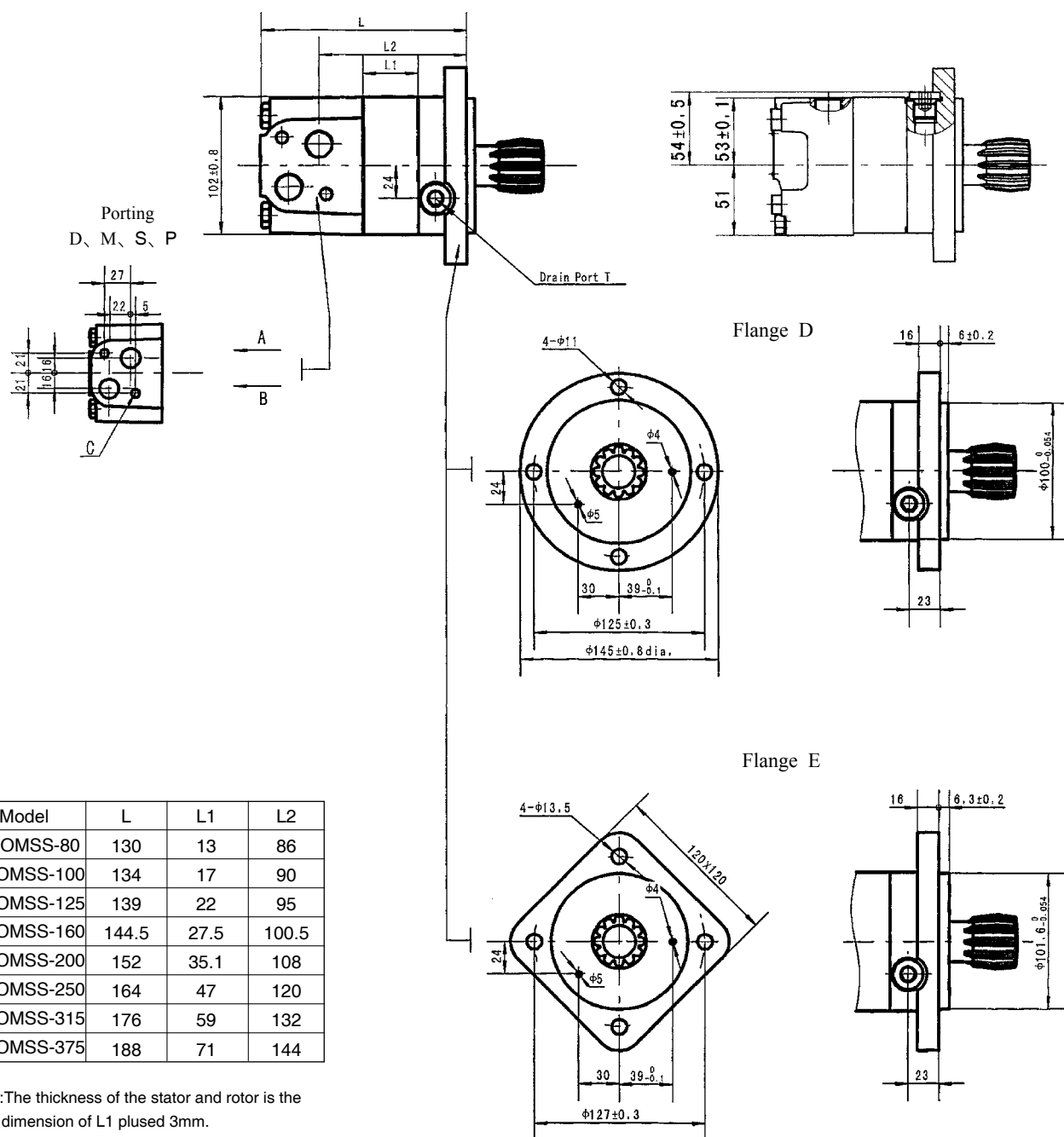
MOMSE DIMENSIONS AND MOUNTING DATA



Note:1) If the porting G, M2, S2 is used, the dimensions of L2 should plus 1.5mm.
2) The thickness of the stator and rotor is the dimension of L1 plus 3mm.

Code	MU	MM
Mounting		
P(A,B)	ø12.7, ø15.8	ø12.7, ø15.8
T	7/16-20UNF(12)	G1/4 (12)
C	3 x 3/8-16UNC	3 x M10

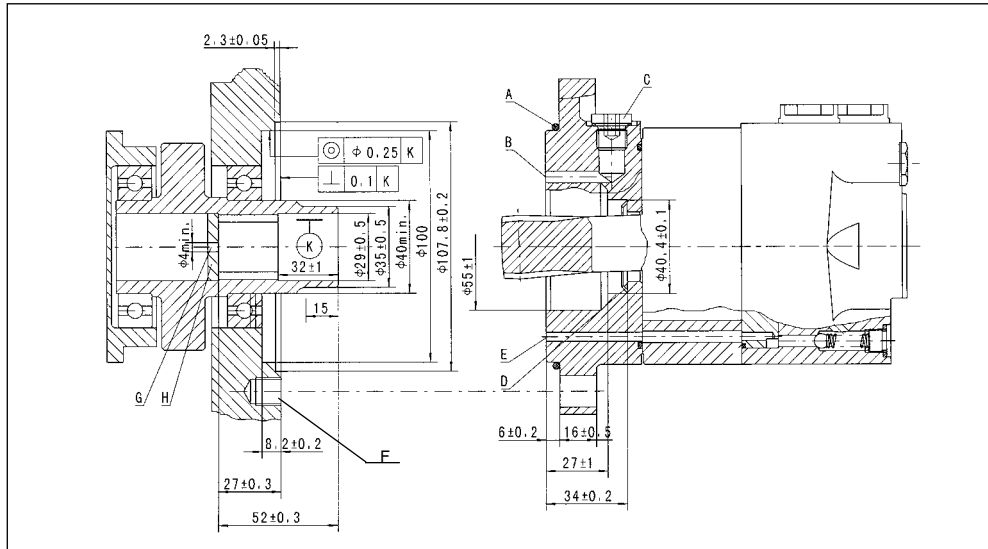
MOMSS DIMENSIONS AND MOUNTING DATA



Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)
P(A,B)	G1/2 (18)	M22 x 1.5 (18)	7/8-14 O-ring (18)	1/2-14NPTF (15)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)	7/16-20UNF(12)
C	2-M10 (13)	2-M10 (13)	2-3/8-16UNC (13)	2-3/8-16UNC (13)



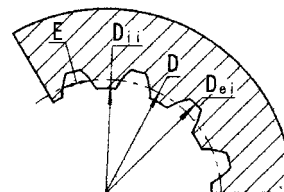
MOMSS DIMENSIONS AND MOUNTING DATA



- A: O-ring:100x3
- B: External drain channel
- C: Drain connection G 1/4;12 mm deep
- D: Conical seal ring
- E: Internal drain channel
- F: M10;min. 15mm deep
- G: Oil circulation hole
- H: Hardened stop plate

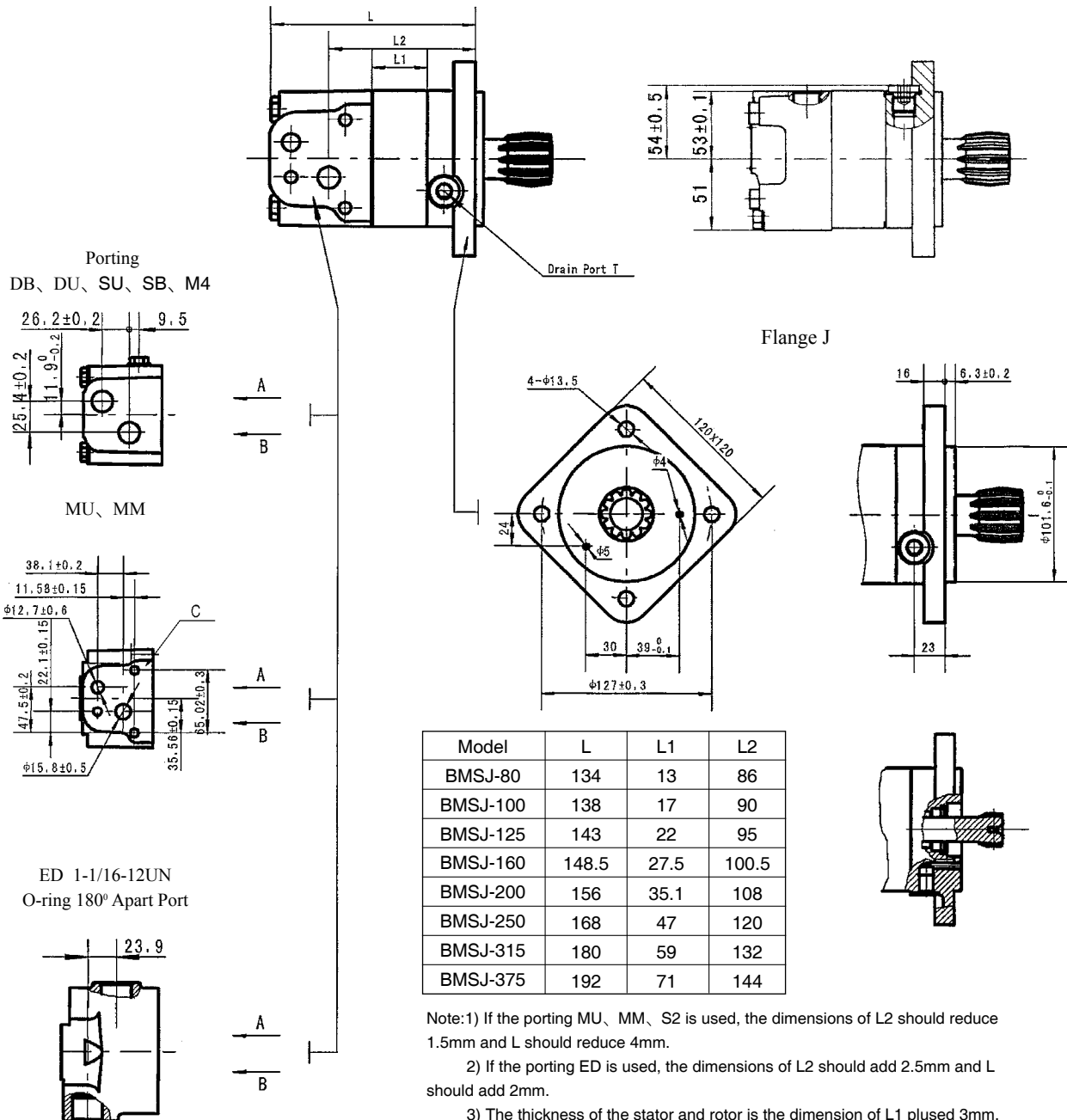
INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	12/24
Pressure Angle	α_D	30°
Pitch Dia.	D	ø25.4
Major Dia.	D_{ei}	ø28 ⁰ _{-0.1}
Minor Dia.	D_{ii}	ø23 ^{+0.033} ₀
Space Width [Circular]	E	4.308 ± 0.02



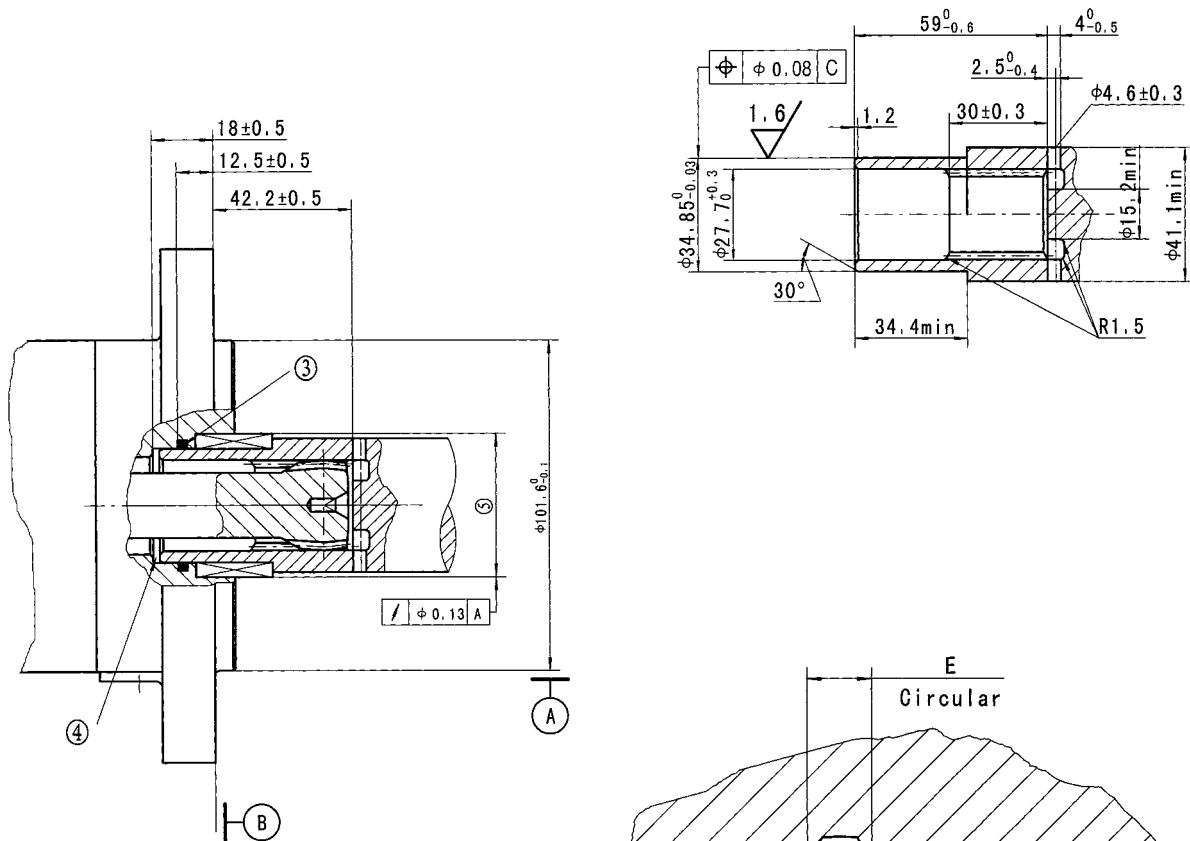
Hardening Specification: HRC 62 ± 2
Effective case depth 0.7 ± 0.2

MOMSJ DIMENSIONS AND MOUNTING DATA



Code Mounting	DB (depth)	DU (depth)	SU (depth)	SB (1depth)	M4 (depth)	MU	MM	ED (depth)
P(A,B)	G1/2 (18)	G1/2 (18)	7/8-14 O-ring (18)	7/8-14 O-ring (18)	M22 x 1.5 (18)	φ12.7, φ15.8	φ12.7, φ15.8	1-1/16-12UN (18)
T	G1/4 (12)	7/16-20UNF(12)	7/16-20UNF(12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)	G1/4 (12)	7/16-20UNF(12)
C			--			3 x 3/8-16UNC	3 x M10	--

MOMSJ DIMENSIONS AND MOUNTING DATA



INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	12/24
Pressure Angle	α_D	30°
Pitch Dia.	D	25.4
Major Dia.	D_{ei}	$27.6^{+0.14}_0$
Minor Dia.	D_i	$23.1^{+0.12}_0$
Space Width [Circular]	E	4.282 ± 0.036
Dimension between two pins (3.38)	M_e	19.02-19.19

① Internal spline in mating part to be per data. Specification material to be ASTM A304, 8620H. Vacuum degassed alloy steel carburize to a hardness of 58-62HRC with case depth (to 50HRC) of 0.75-1 [.030-.040] (dimensions apply after heat treat).

② Mating part to have critical dimensions as shown, Oil holes must be provided and open for proper oil circulation.

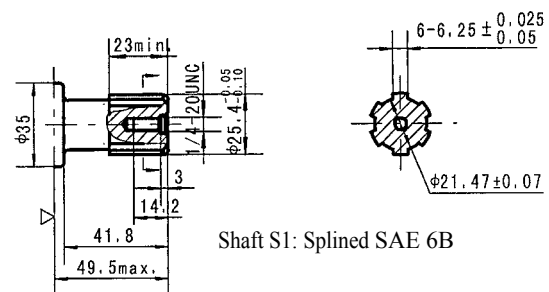
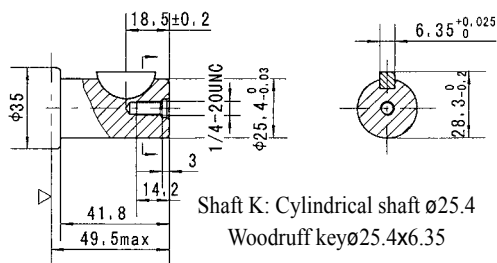
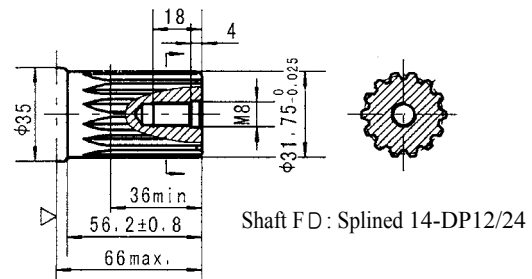
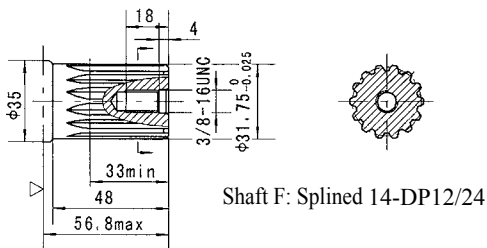
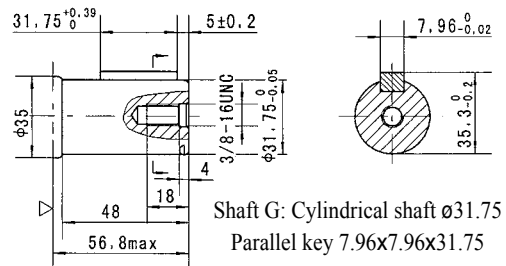
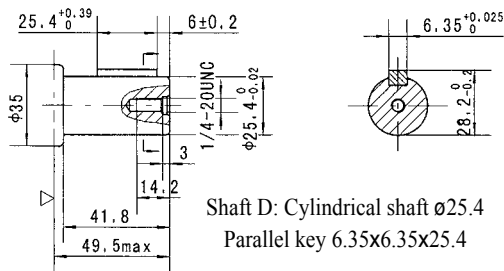
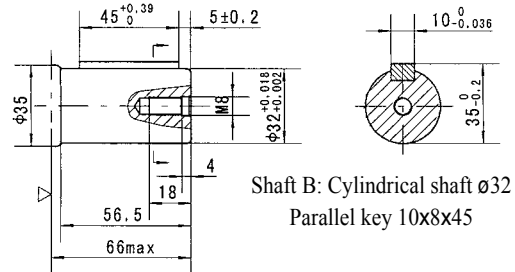
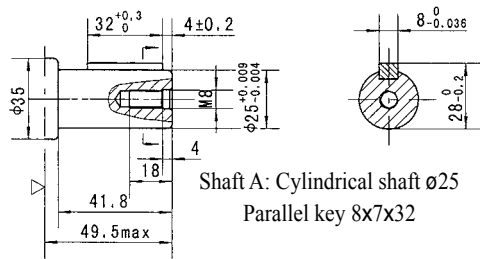
③ Some means of maintaining clearance between shaft and mounting flange must be provided.

④ Seal to be furnished with motor for proper oil circulation thru splines.

⑤ Counterbore designed to adapt to a standard sleeve bearing 35.010-35.040 [1.3784-1.3795] ID by 44.040-44.070 [1.7339-1.7350] O.D. (Oilite Bronze Sleeve Bearing AAM3544-22).

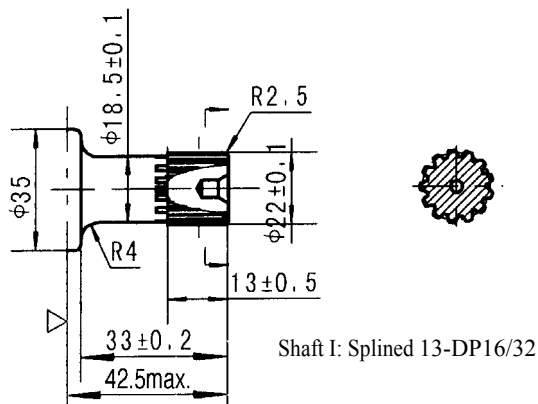
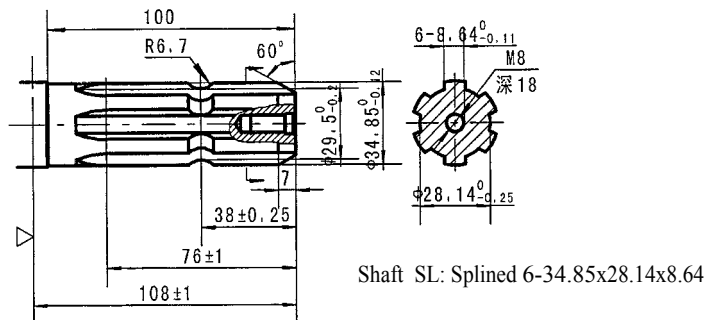
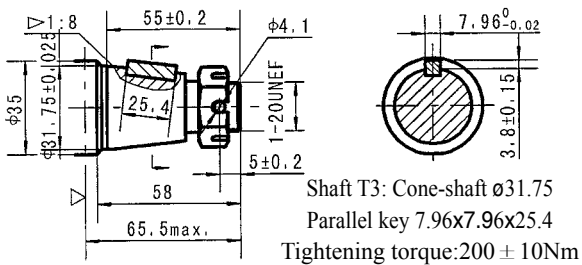
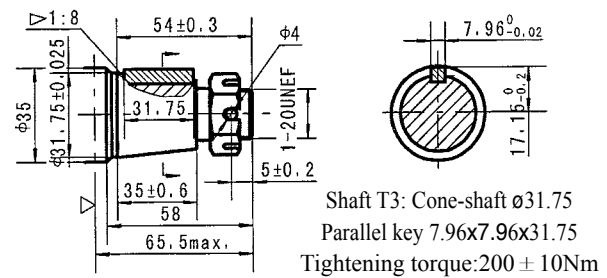
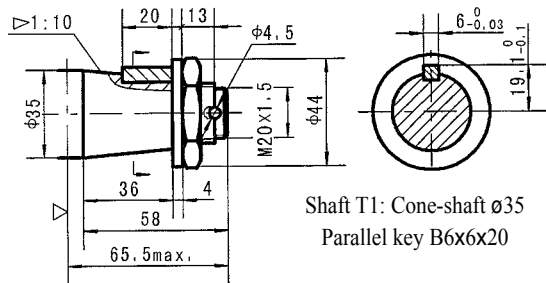
C This surface to be diameter of output shaft.

SHAFT EXTENSIONS FOR MOMS(E) MOTORS



► Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)

SHAFT EXTENSIONS FOR MOMS(E) MOTORS

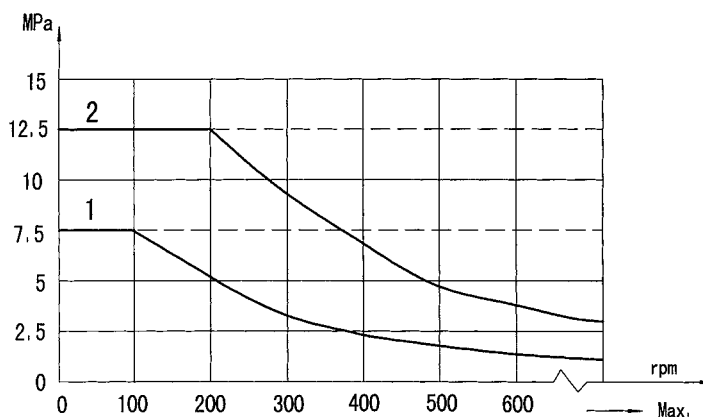
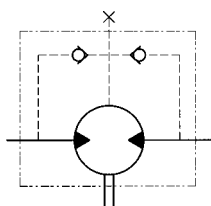


- ▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)
Note: Mounting SP is the same with shaft mode T1、D、B、F and G.



MOMS(E) Series Hydraulic Motor

Permissible shaft seal pressure

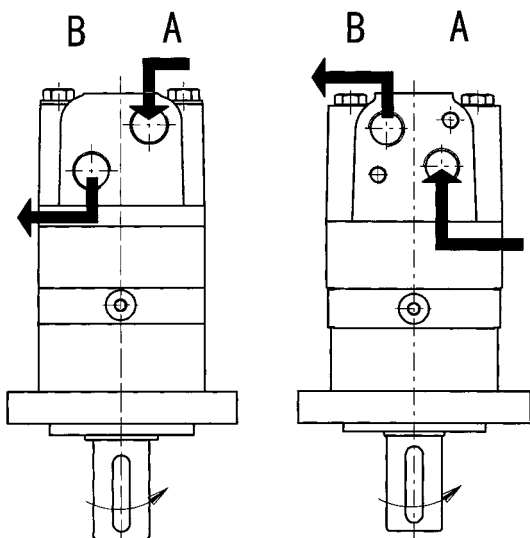


Note: 1. Chart for standard shaft seal;
2. Chart for high pressure shaft seal.

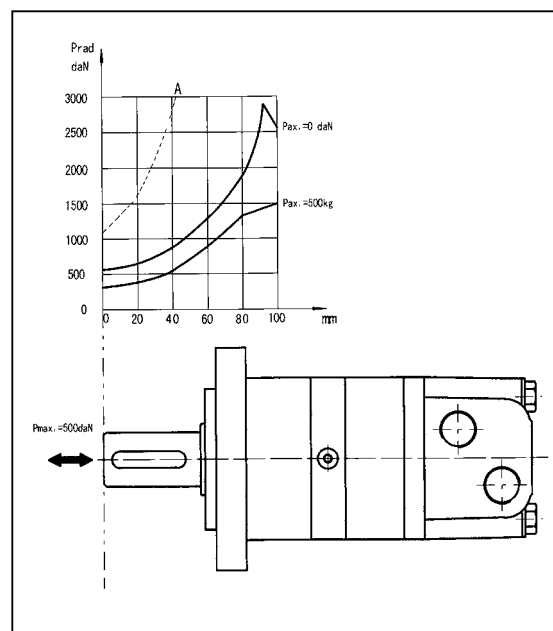
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Standard direction of shaft rotation: Standard

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.

Order Information

1	2	3	4	5	6	7	8
MOMS							

1	2	3	4	5	6	7	8
MOMSS							

Pos.1	2	3		4		5		6		7		8	
Code	Disp.	Flange		Output Shaft		Port and Drain Port		Rotation Direction		Paint		Unusually Function	
MOMS	80	E2	2-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	A	Shaft Ø25 , parllel key 8 × 7 × 32	D	G1/2 Manifold Mount 2-M10 , G1/4	Omit	Standard Opposite	00	No paint	Omit	Standard
	B			Shaft Ø32 , parllel key 10 × 8 × 45									
	D			Shaft Ø25.4 , parllel key6.35 × 6.35 × 25.4									
	G			Shaft Ø31.75 , parllel key 7.96 × 7.96 × 31.75									
	F			Shaft Ø31.75 , splined tooth 14-DP12/24									
	FD			Long Shaft Ø31.75 , splined tooth 14-DP12/24									
	100			E4	4-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3								
125	F6	6-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 2.6	T1	Cone-shaft Ø35 ,parllel key B6 × 6 × 20	P	1/2-14NPTF manifold 2-3/8-16UNC , 7/16-20UNF	S	Silver grey	F	Free Running			
160	W	4-Ø13.5 Wheel-flange Ø160 , pilot Ø125 × 8	T3	Cone-shaftØ31.75 , parllel key 7.96 × 7.96 × 31.75					LS	Low Speed			
200	E2B	2-Ø14.3 Rhomb-flange Ø146.05, pilot Ø101.6 × 9.4	S1	Shaft Ø25.4 ,splined tooth SAE 6B									
250	SP	4-Ø11.5 Square-flange Ø106.4, pilot Ø82.5 × 6.3	I	Sub-shaft Ø22, splined tooth 13-DP16/32									
315													
MOMSS	375	D	4-Ø11 Circle-flange Ø125 , pilot Ø100 × 6	Omit	Short shaft 12-DP12/24								
		E	4-Ø13.5 Square-flange Ø127 , pilot Ø101.6 × 6.3										

Note: When the table is used, please fill the code of left rows in the table and give us, which the code information 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. SP for T1、D、B、F、G.

Order Information



MOMT SERIES HYDRAULIC MOTOR

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

Characteristic features:

- * Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.
- * The output shaft adapts in tapered roller bearings that permit high axial and radial forces. 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.

Main Specificaion

Type		MOMT 160	MOMT 200	MOMT 230	MOMT 250	MOMT 315	MOMT 400	MOMT 500	MOMT 630	MOMT 800
Geometric displacement (cm ³ /rev.)		161.1	201.4	232.5	251.8	326.3	410.9	523.6	629.1	801.8
Max. speed (rpm)	cont.	625	625	536	500	380	305	240	196	154
	int.	780	750	643	600	460	365	285	233	185
Max. torque (N•m)	cont.	470	590	670	730	950	1080	1220	1318	1464
	int.	560	710	821	880	1140	1260	1370	1498	1520
	peak	669	838	958	1036	1346.3	1450.3	1643.8	1618.8	1665
Max. output (kW)	cont.	27.7	34.9	34.7	34.5	34.9	31.2	28.8	25.3	22.2
	int.	32	40	40	40	40	35	35	27.5	26.8
Max. pressure drop (MPa)	cont.	20	20	20	20	20	18	16	14	12.5
	int.	24	24	24	24	24	21	18	16	13
	peak	28	28	28	28	28	24	21	19	16
Max. flow (L/min)	rated	80	100	100	100	100	100	100	100	100
	cont.	100	125	125	125	125	125	125	125	125
	int.	125	150	150	150	150	150	150	150	150
Max. inlet pressure (MPa)	cont.	21	21	21	21	21	21	21	21	21
	int.	25	25	25	25	25	25	25	25	25
	peak	30	30	30	30	30	30	30	30	30
Weight (kg)		19.5	20	20.4	20.5	21	22	23	24	25

- * 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.



Performance Data

MOMT 160 [161.1cm³/rev.]

		Pressure (MPa)						
		Max.cont.						Max.int.
		4	8	10	12	16	20	24
Flow (L/min)	10	88	176	228	275	361	447	535
		60	59	58	56	54	50	44
	20	89	181	234	277	372	459	557
		121	120	117	114	109	103	95
	40	91	180	235	277	381	471	573
		249	246	243	236	230	223	212
Max.cont.	60	82	178	235	277	381	470	572
		371	367	362	356	349	340	330
	80	78	173	229	276	379	466	567
		492	489	485	478	470	462	447
	100	70	160	218	269	370	455	558
		614	611	606	598	590	582	570
Max.int.	125	58	148	211	261	359	448	552
		770	764	758	750	741	731	715

MOMT 200 [201.4cm³/rev.]

		Pressure (MPa)						
		Max.cont.						Max.int.
		4	8	10	12	16	20	24
Flow (L/min)	10	124	233	289	340	454	560	669
		47	46	45	42	39	37	33
	20	125	239	298	347	468	576	696
		95	94	92	90	87	84	75
	40	120	241	296	352	475	589	716
		195	193	191	187	183	178	167
Max.cont.	60	116	237	295	352	478	589	718
		297	295	292	287	282	276	263
	80	108	231	289	350	474	586	716
		395	393	389	384	377	370	359
	100	99	227	286	344	471	580	712
		493	490	486	482	475	467	460
Max.int.	125	84	208	276	333	459	566	697
		615	611	607	602	595	588	572
	150	70	194	260	324	447	554	682
		743	740	735	727	717	706	682

MOMT 250 [251.8cm³/rev.]

		Pressure (MPa)						
		Max.cont.						Max.int.
		4	8	10	12	16	20	24
Flow (L/min)	10	138	286	355	419	559	689	824
		38	38	37	36	34	32	31
	20	143	296	364	432	580	708	853
		76	75	74	72	70	67	62
	40	139	301	372	440	593	723	884
		156	154	152	149	146	142	134
Max.cont.	60	132	294	372	441	592	727	888
		237	236	233	229	224	219	207
	80	128	283	364	433	587	721	887
		317	316	314	308	303	299	284
	100	126	282	355	427	582	716	879
		396	394	391	387	381	373	359
Max.int.	125	116	260	340	414	568	703	864
		495	492	488	483	476	469	454
	150	88	242	320	397	552	686	847
		592	589	585	580	572	565	545

MOMT 315 [326.3cm³/rev.]

		Pressure (MPa)						
		Max.cont.						Max.int.
		4	8	10	12	16	20	24
Flow (L/min)	10	184	363	453	545	734	891	1062
		30	29	28	27	26	25	23
	20	189	380	472	562	757	917	1109
		60	59	58	56	54	52	50
	40	191	381	484	570	774	954	1149
		121	120	118	115	112	109	104
Max.cont.	60	189	376	493	573	772	962	1154
		183	181	179	175	172	168	158
	80	179	369	479	565	768	954	1153
		244	242	239	236	231	227	217
	100	169	357	467	562	758	942	1143
		305	304	301	298	294	289	276
Max.int.	125	147	336	447	544	745	920	1127
		380	378	375	371	367	362	349
	150	119	318	432	526	713	894	1097
		458	456	453	449	444	431	425

Torque (N•m) 552
Speed (rpm) 572



Performance Data

MOMT 400 [410.9cm³/rev.]

Pressure (MPa)

		Max.cont.				Max.int.		
		3	6	9	12	15	18	21
Flow (L/min)	10	176 24	367 23	560 22	715 21	885 20	1050 19	1209 18
	20	179 49	370 48	565 47	726 44	899 42	1071 40	1236 38
	40	176 96	370 95	567 93	733 90	919 87	1091 83	1263 79
	60	174 145	361 143	563 139	729 135	920 131	1095 127	1269 121
	80	166 193	353 191	553 188	719 184	912 180	1084 176	1263 170
	100	150 242	339 240	538 238	708 234	896 228	1067 224	1252 218
	Max.cont. 125	135 302	309 300	524 298	688 294	873 289	1045 285	1221 278
	Max.int. 150	126 364	292 362	508 358	666 354	852 350	1020 346	1197 339

MOMT 500 [523.6cm³/rev.]

Pressure (MPa)

		Pressure (MPa)				Max.cont.		Max.int.		
		3	6	9	12	14	16	18		
Flow (L/min)	10	222 18	451 18	692 18	892 17	1050 16	1193 15	1340 13		
	20	231 37	464 36	714 35	918 34	1070 33	1220 32	1377 30		
	40	230 75	466 74	727 73	941 72	1094 70	1244 68	1422 64		
	60	225 113	457 112	714 111	941 109	1088 107	1245 105	1409 101		
	80	213 151	431 150	696 149	927 147	1076 145	1244 143	1401 138		
	100	194 189	420 188	680 187	901 185	1063 183	1224 181	1383 177		
	Max.cont.	125	182 237	398 236	641 235	877 233	1024 231	1199 229	1352 225	
	Max.int.	150	147 284	369 283	618 282	853 280	1004 278	1167 276	1325 272	

MOMT 630 [629.1cm³/rev.]

Pressure (MPa)

		Pressure (MPa)				Max.cont.		Max.int.	
		3	6	9	10.5	12	14	16	
Flow (L/min)	10	233	520	795	902	1074	1194	1363	
		14	14	13	13	13	11	11	
	20	237	554	837	953	1117	1239	1407	
		28	27	27	26	26	24	22	
	40	239	553	860	987	1171	1308	1483	
		62	62	61	60	59	56	54	
	60	223	544	863	978	1172	1318	1498	
		94	94	92	91	90	86	82	
	80	220	537	854	965	1172	1314	1497	
		123	122	121	119	118	114	110	
Max.cont.	100	208	522	832	945	1156	1303	1488	
		156	155	153	152	150	147	142	
	125	201	499	810	931	1137	1292	1472	
Max.int.	150	196	196	194	192	191	187	183	
		174	492	785	921	1121	1277	1454	
		233	232	231	230	227	223	217	

MOMT 800 [801.8cm³/rev.]

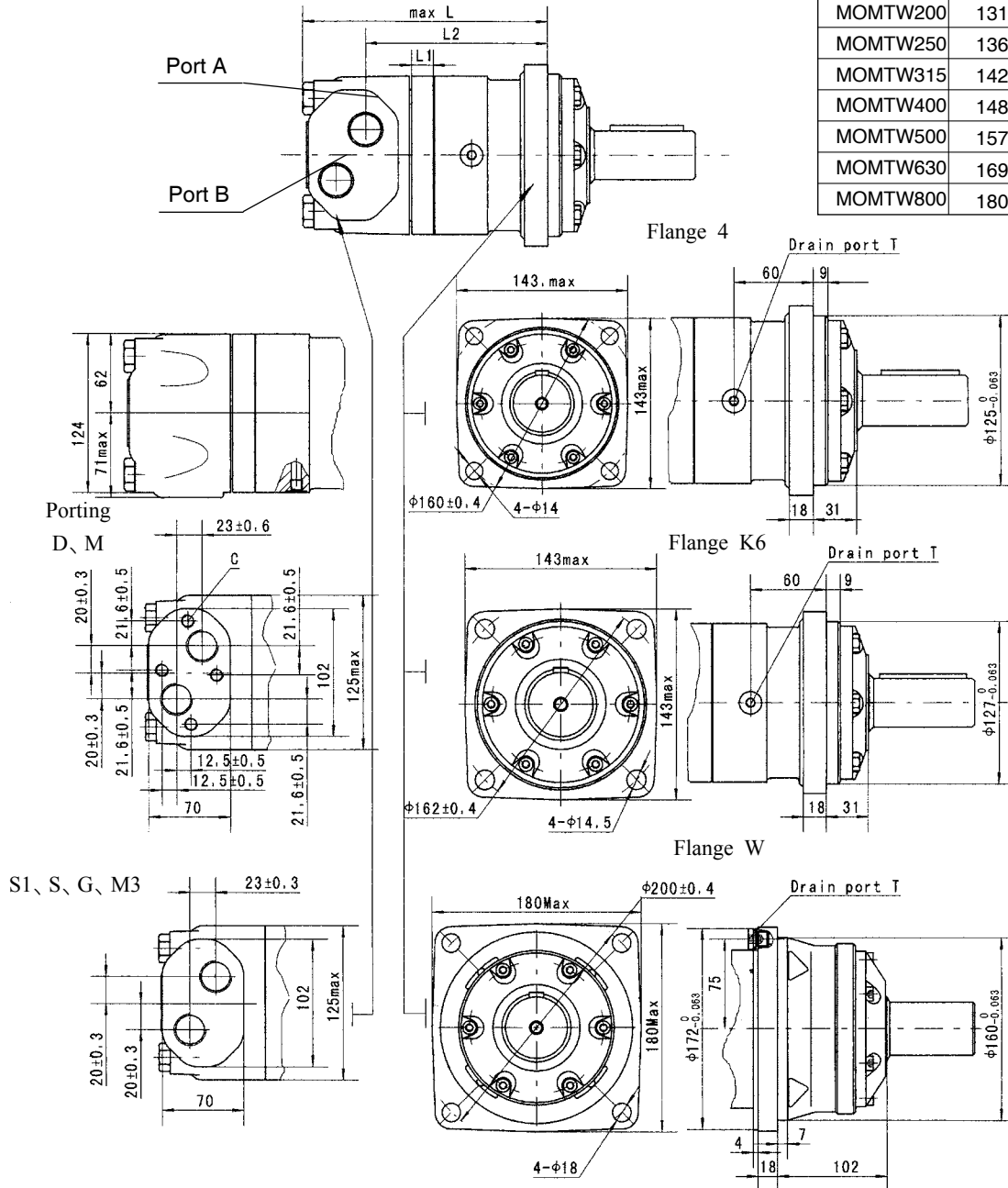
Pressure (MPa)

		Max.cont.				Max.int.	
		3	6	9	10.5	12.5	13
Flow (L/min)	10	346	677	1003	1159	1365	1390
		12	12	11	11	11	10
	20	356	692	1034	1183	1404	1458
		24	24	24	23	22	18
	40	365	703	1066	1236	1459	1516
		50	50	49	48	46	40
Max.cont.	60	354	703	1060	1237	1464	1520
		74	73	71	71	68	63
	80	332	686	1050	1226	1464	1514
		99	98	98	96	93	86
Max.int.	100	305	654	1025	1207	1445	1506
		125	123	123	121	118	110
	125	280	622	989	1181	1422	1487
		154	153	153	150	149	140
	150	247	590	953	1156	1406	1476
		185	184	183	181	179	172

Torque (N•m) 1121
Speed (rpm) 227

MOMT DIMENSIONS AND MOUNTING DATA

Model	L	L1	L2
MOMTW160	127	17	77
MOMTW200	131	21	81
MOMTW250	136	14	86
MOMTW315	142	20	91
MOMTW400	148	27	98
MOMTW500	157	35	106
MOMTW630	169	47	118
MOMTW800	180	58	129

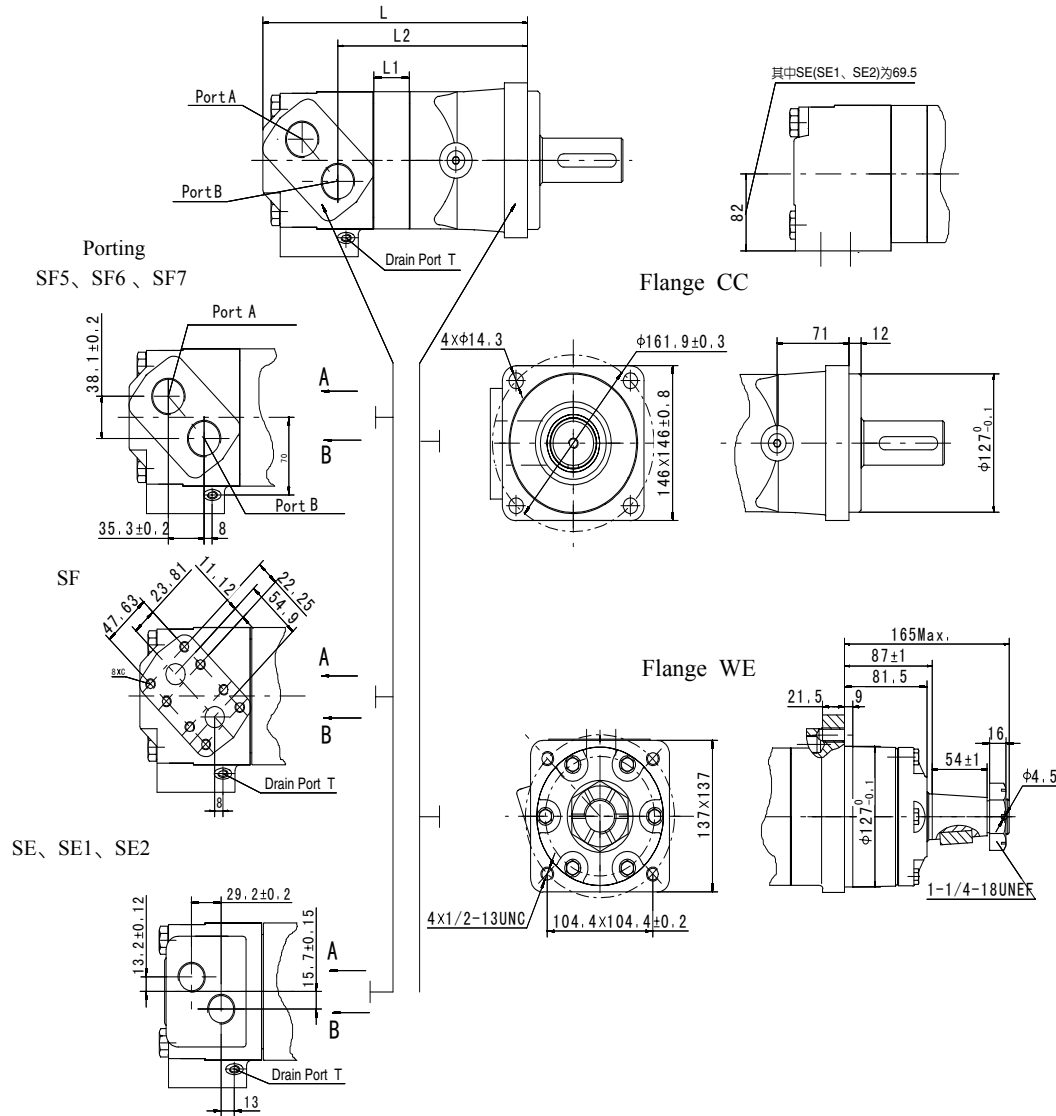


Model	L	L1	L2
MOMT160	193	17	142.5
MOMT200	197	21	146.5
MOMT250	204	14	152.5
MOMT315	210	20	158.5
MOMT400	217	27	165.5
MOMT500	225	35	173.5
MOMT630	237	47	185.5
MOMT800	248	58	196.5

Content	Code					
	D (depth)	M (depth)	S (depth)	G (depth)	M3 (depth)	S1 (depth)
P(A,B)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)
T	G1/4 (12)	M14 x 1.5 (12)	9/16-18UNF (12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)
C	4-M10(10)	4-M10(10)	--	--	--	--

Note:1)The thickness of the stator and rotor for disp. from 160 to 200 is the dimension of L1 adding on 3mm.
2)The thickness of the stator and rotor for disp. from 250 to 800 is the dimension of L1 adding on 7mm.

MOMTE DIMENSIONS AND MOUNTING DATA

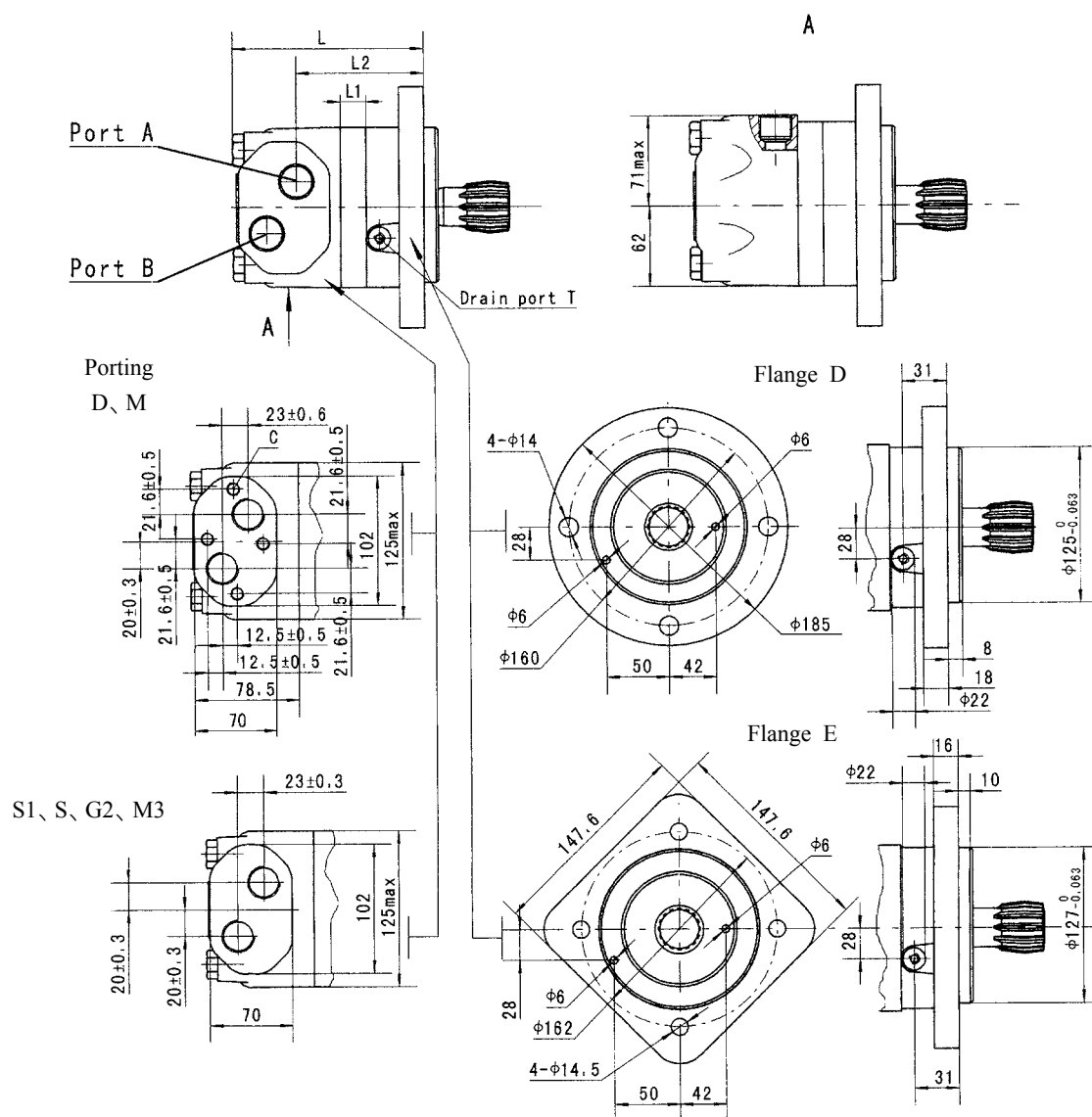


Model	L	L1	L2
MOMTE230	238.5	12	164.5
MOMTE250	240.5	14	166.5
MOMTE315	246.5	20	172.5
MOMTE400	253.5	27	179.5
MOMTE500	261.5	35	187.5
MOMTE630	273.5	47	199.5
MOMTE800	284.5	58	210.5

Note:1)The data for the port of SF (SF5 and SF6and sf7)
 2)The data for the port of SE (SE1 and SE2) and flange WE:L-70 and L2-59.
 3)The thickness of the stator and rotor for disp,from 315 to 800 is the dimension of L1 adding on 7mm.

Content	Code						
Mounting	SF5(depth)	SF6 (depth)	SF7 (depth)	SF (depth)	SE (depth)	SE1 (depth)	SE2(depth)
P(A,B)	1-5/16-12UN (18)	M33 x 2 (18)	G1 (18)	3/4" (18)	1-1/16-12UN (18)	1-1/16-12UN (18)	G3/4 (18)
T	7/16-20UNF (12)	M14 x 1.5 (12)	G1/4 (12)	7/16-20UNF (12)	9/16-18UNF (12)	7/16-20UNF (12)	G1/4 (12)
C	--	--	--	8 x 3/8-16UNC	--	--	--

MOMTS DIMENSIONS AND MOUNTING DATA

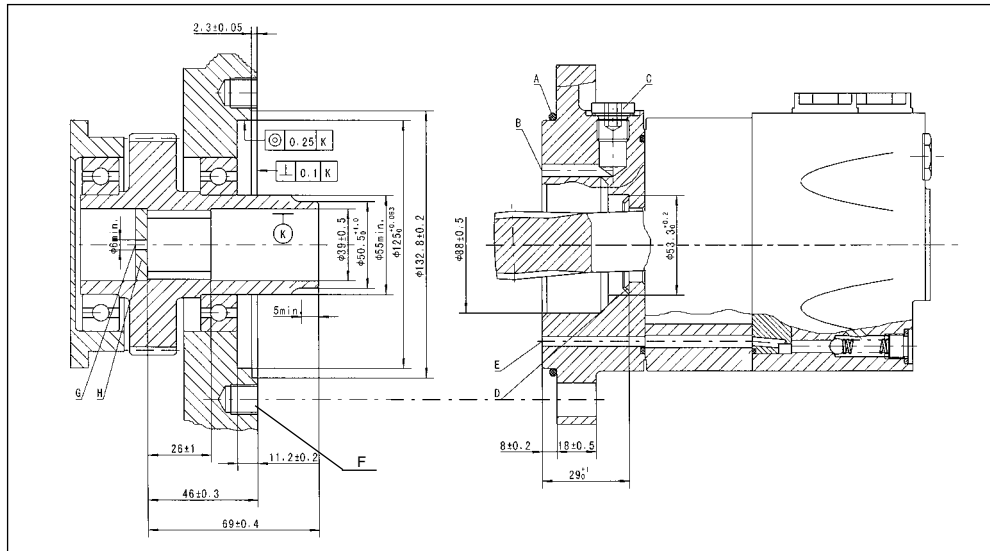


Model	L	L1	L2
MOMT160	148	17	96.5
MOMT200	152	21	100.5
MOMT250	157	14	109
MOMT315	163	20	115
MOMT400	170	27	122
MOMT500	178	35	130
MOMT630	190	47	142
MOMT800	201	58	153

Content	Code					
	D (depth)	M (depth)	S (depth)	G (depth)	M3 (depth)	S1 (depth)
P(A,B)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)
T	G1/4 (12)	M14 x 1.5 (12)	9/16-18UNF (12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)
C	4-M10(10)	4-M10(10)	--	--	--	--

Note: 1) The thickness of the stator and rotor for disp. from 160 to 200 is the dimension of L1 adding on 3mm.
2) The thickness of the stator and rotor for disp. from 250 to 800 is the dimension of L1 adding on 7mm.

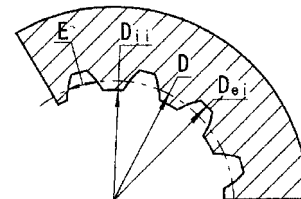
MOMTS MOUNTING DATA



- A: O-ring:125x3
- B: External drain channel
- C: Drain connection G 1/4;12 mm deep
- D: Conical seal ring
- E: Internal drain channel
- F: M12;min. 18mm deep
- G: Oil circulation hole
- H: Hardened stop plate

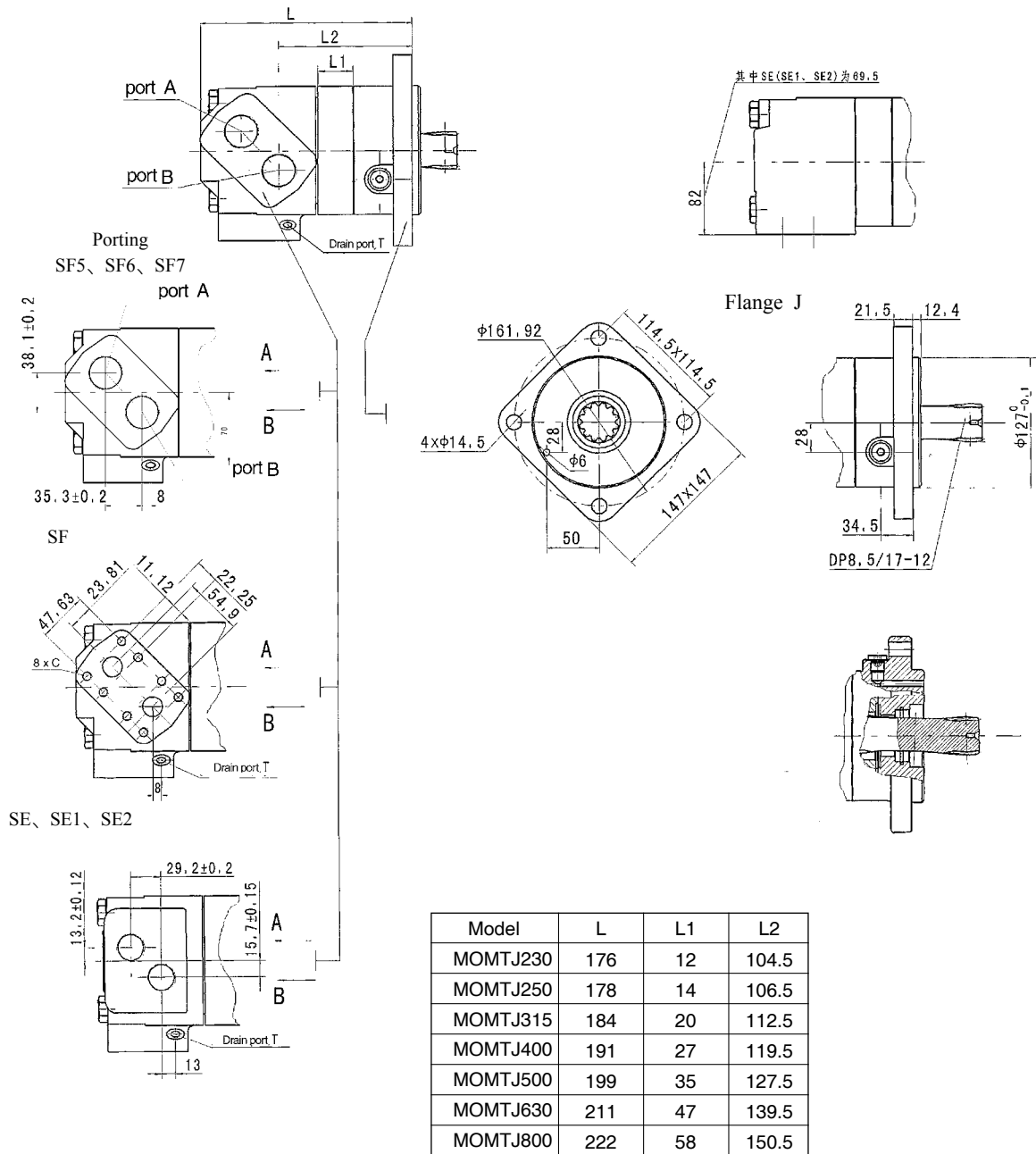
INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Fillet Root Side Fit		mm
Number of Teeth	Z	16
Diametral Pitch	DP	12/24
Pressure Angle	α_D	30°
Pitch Dia.	D	ø33.8656
Major Dia.	D_{ei}	ø38.4 ^{+0.25} ₀
Minor Dia.	D_i	ø32.15 ^{+0.04} ₀
Space Width [Circular]	E	4.516 ± 0.037



Hardening Specification: HRC 62 ± 2
Effective case depth 0.7 ± 0.2

MOMTJ DIMENSIONS AND MOUNTING DATA



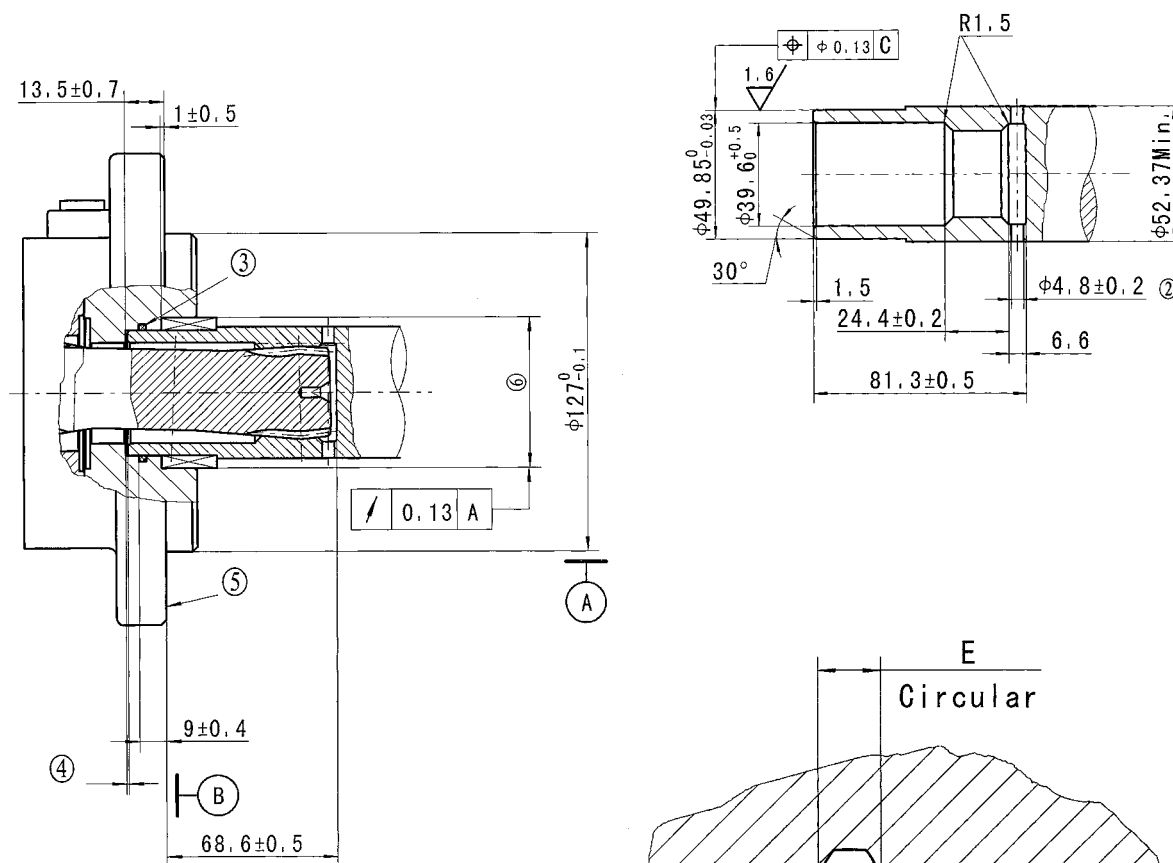
Note:1)The data for the port of SF (SF5 and SF6 and SF7).

2)The data for the port of SE (SE1 and SE2) and flange WE:L-70 and L2-59.

3)The thickness of the stator and rotor is the dimension of L1 adding on 7mm.

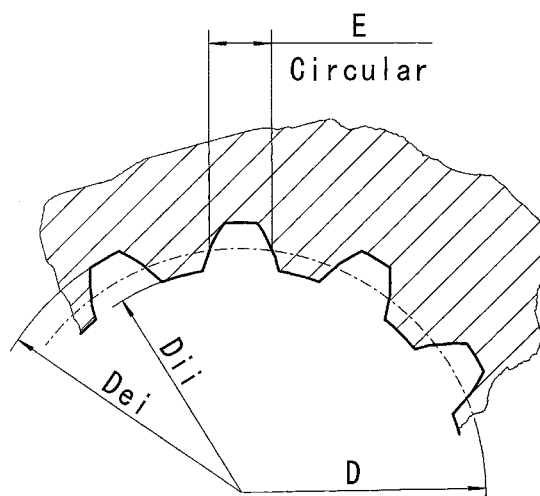
Content	Code						
Mounting	SF5 (depth)	SF6 (depth)	SF7 (depth)	SF (depth)	SE (depth)	SE1 (depth)	SE2 (depth)
P(A,B)	1-5/16-12UN (18)	M33 x 2 (18)	G1 (18)	3/4" (18)	1-1/16-12UN (18)	1-1/16-12UN (18)	G3/4 (18)
T	7/16-20UNF (12)	M14 x 1.5 (12)	G1/4 (12)	7/16-20UNF (12)	9/16-18UNF (12)	7/16-20UNF (12)	G1/4 (12)
C	--	--	--	8 x 3/8-16UNC	--	--	--

MOMTJ DIMENSIONS AND MOUNTING DATA



INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	8.5/17
Pressure Angle	D	30°
Pitch Dia.	α_D	$\phi 35.858823$
Major Dia.	D_{ei}	$\phi 38.97^{+0.20}_{-0}$
Minor Dia.	D_{ii}	$\phi 33.3^{+0.18}_{-0}$
Space Width [Circular]	E	5.866 ± 0.032
Dimension between two pins($\phi 4$)	M_e	$26.929-27.084$



① Internal spline in mating part to be as follows: Material to be ASTM A304, 8620H. Carborize to a hardness of 60-64HRC with case depth (to 50HRC) of 0.75-1 [0.030-0.040] (dimensions apply after heat treat).

② Mating part to have critical dimensions as shown, Oil holes must be provided and open for proper oil circulation.

③ Some means of maintaining clearance between shaft and mounting flange must be provided.

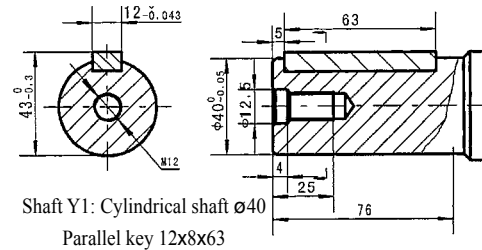
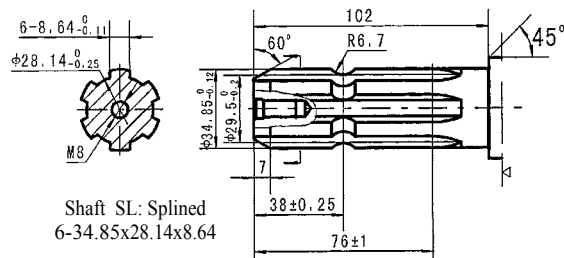
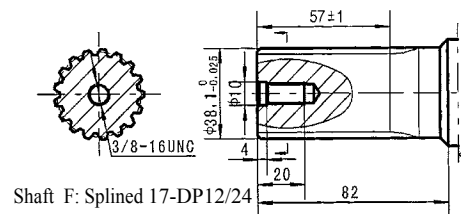
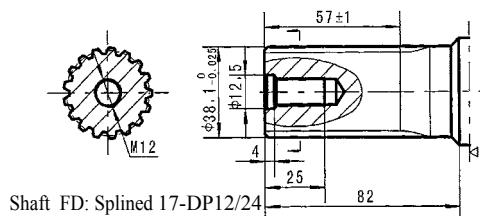
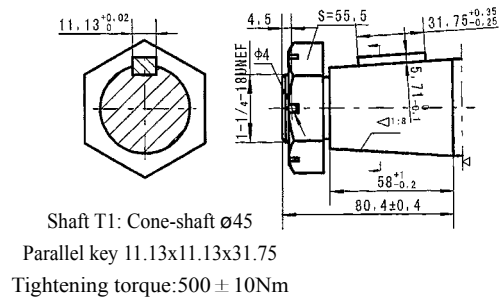
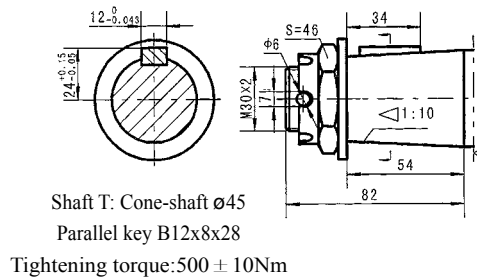
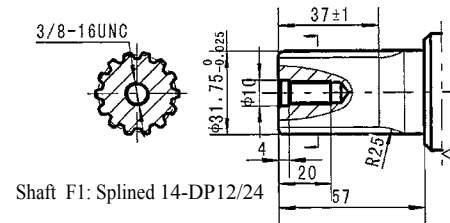
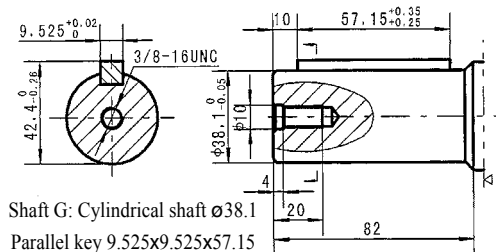
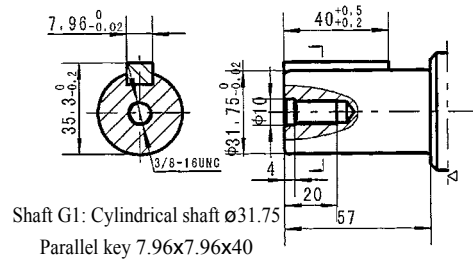
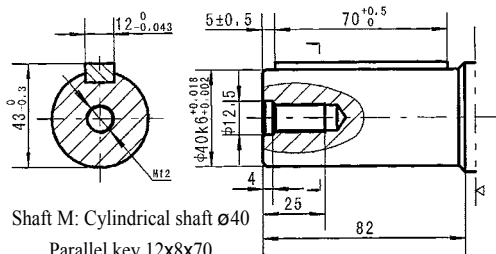
④ Seal to be furnished with motor for proper oil circulation thru splines.

⑤ Similar to SAE "C" Four Bolt Flange

⑥ Counterbore designed to adapt to a standard sleeve bearing 50.010-50.038 [1.9689-1.9700] ID by 60.51-60.079 [2.3642-2.3653] O.D. (Oilite bronze sleeve bearing).

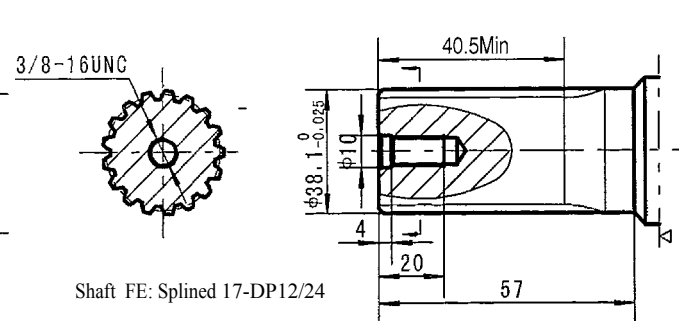
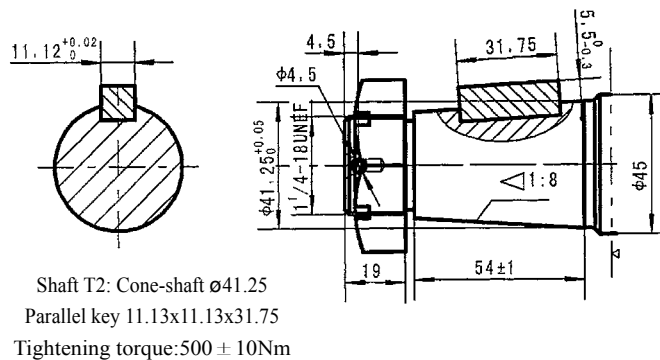
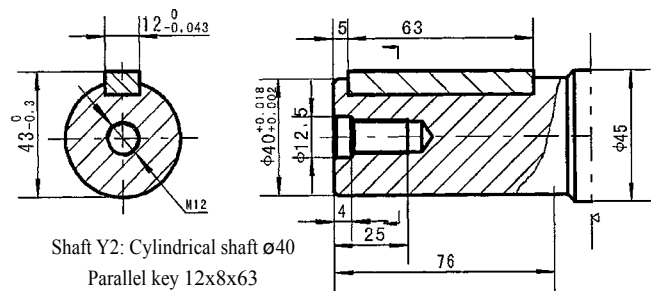
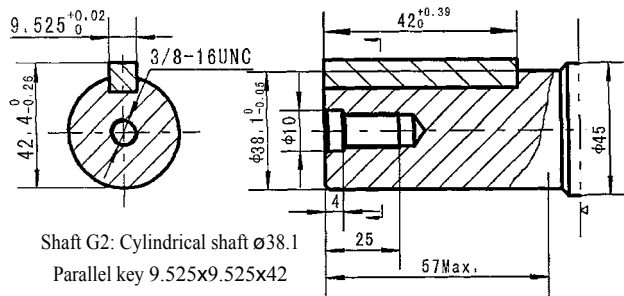
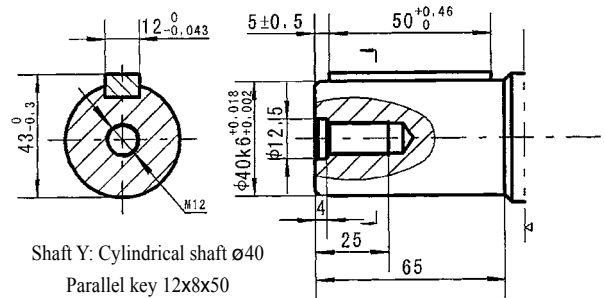
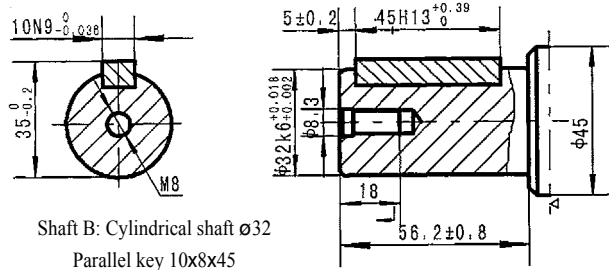
C This surface to be diameter of output shaft.

SHAFT EXTENSIONS FOR MOMT(E) MOTORS



► Motor Mounting Surface

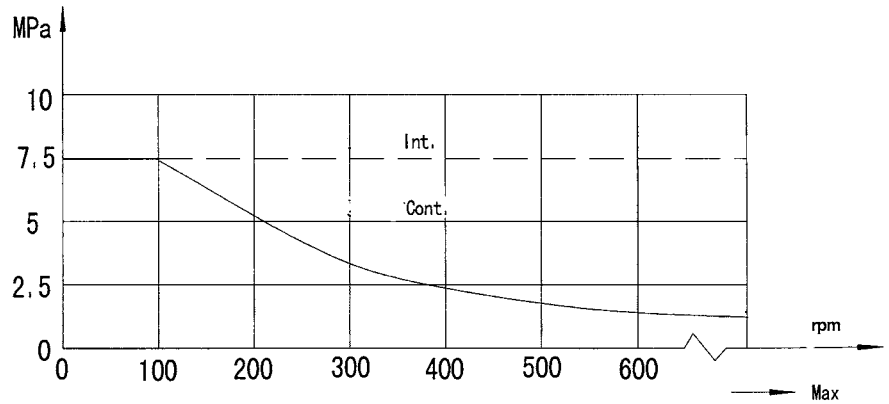
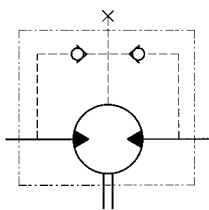
SHAFT EXTENSIONS FOR MOMT(E) MOTORS



▷ Motor Mounting Surface

MOMT Series Hydraulic Motor

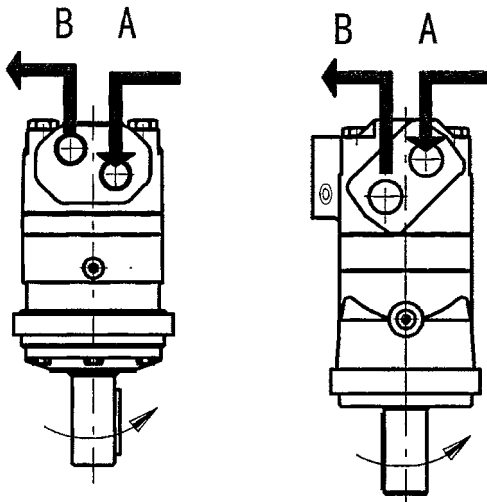
Permissible shaft seal pressure



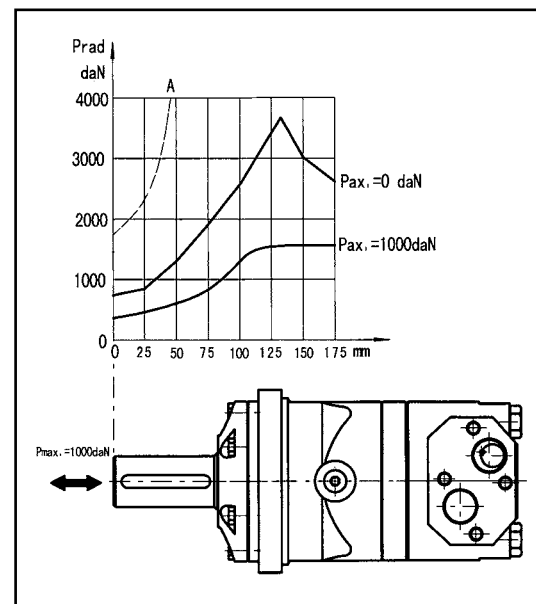
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Standard direction of shaft rotation: Standard

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.

Pos.1	2	3		4		5		6		7		8			
Code	Disp.	Flange		Output Shaft		Port and Drain Port		Rotation Direction		Paint		Unusually Function			
MOMT	160 200 250 315 400 500 630 800	4 K6 W	4-Ø14 Square-flangeØ160, pilotØ125 × 9 4-Ø14.5Square-flangeØ162, pilotØ127 × 9 4-Ø18 Wheel-flangeØ200, pilotØ160 × 7	M	Shaft Ø40 , parllel key 12 × 8 × 70	D	G3/4 Manifold Mount,4-M10 , G1/4	Omit	Standard	00 Omit	No paint Blue Black Silver grey	Omit	Standard		
				G	Shaft Ø38.1 ,parllel key 9.52 × 9.52 × 57.15									M	M27 × 2 Manifold Mount,4-M10, M14 × 1.5
				F	Shaft Ø38.1 ,splined tooth 17-DP12/24									S	1-1/16-12UN O-ring, 9/16-18UNF
				FD	Shaft Ø38.1 ,splined tooth 17-DP12/24									S1	1-1/16-12UN O-ring, 7/16-20UNF
				T	Cone-shaft 1:10 Ø45 ,parllel key B12 × 8 × 28									G	G3/4,G1/4
				T1	Cone-shaft 1:8 Ø45 , parllel key 11.13 × 11.13 × 31.75									M3	M27 × 2,M14 × 1.5
				SL	shaft Ø34.85,Splined key Splined key 6-34.85 × 28.14 × 8.64										
				G1	shaftØ31.75 , parllel key 7.96 × 7.96 × 40										
MOMTS		D E	4-Ø14 Circle-flange Ø160, pilot Ø125 × 8 4-Ø14.5 Square-flange Ø162, pilot Ø127 × 10	F1	Shaft Ø31.75,splined tooth 14-DP12/24										
				Omit	Short shaft 16-DP12/24										

Order Information

1	2	3	4	5	6	7	8
MOMTE							

1	2	3	4	5	6	7	8
MOMTJ							

Pos.1	2	3		4		5		6		7		8	
Code	Disp.	Flange		Output Shaft		Port and Drain Port		Rotation Direction		Paint		Unusually Function	
MOMTE	230	CC	4-Ø14.3 Square-flange Ø161.9, pilotØ127 × 12	G2 FE Y1 Y2 T2	Shaft Ø38.1 ,parallel key 9.52 × 9.52 × 42 Shaft Ø38.1 ,splined tooth 17-DP12/24 ShaftØ40,parallel key 12 × 8 × 63 ShaftØ40,parallel key 12 × 8 × 63 Cone-shaft 1:8 Ø41.25 , parallel key 11.13 × 11.13 × 31.75	SF	3/4" , Manifold Mount,8-3/8-16UNC, 7/16-20UNF	Omit	Standard	00 Omit	No paint Blue Black Silver grey	Omit	Standard
	250												
	315												
	400												
	500												
MOMTJ	630	WE	4-1/2-13UNC Wheel- flangeØ147.6, pilotØ127 × 9	T3	Cone-shaft 1:8 Ø41.25 , parallel key 11.13 × 11.13 × 31.75	SE SE1 SE2	1-1/16-12UN O-ring,9/16-18UNF 1-1/16-12UN O-ring,7/16-20 UNF G3/4,G1/4	R	Opposite	B S		F LS	Free Running Low Speed
	800												

Note:When the table is used, please fill the code of left rows in the table 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 .



MOMV SERIES HYDRAULIC MOTOR

MOMV 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.

Characteristic features:

- * Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, 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.

Main Specificaion

Type		MOMV 315	MOMV 400	MOMV 500	MOMV 630	MOMV 800	MOMV 1000
Geometric displacement (cm ³ /rev.)		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.	38.0	47.0	47.0	40.0	33.0	28.6
	int.	46.0	56.0	56.0	56.0	44.0	40.0
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

- * 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.



Performance Data

MOMV 315 [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
125	123	286	442	626	799	921	1093
	368	366	364	361	357	352	345
Max.cont. 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. 200	82	249	412	593	758	871	1047
	596	594	590	584	576	565	544

MOMV 400 [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
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. 240	82	301	506	740	943	1104	1332
	571	569	565	548	539	530	520

MOMV 500 [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
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
175	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
Max.int. 240	120	378	622	921	1172	1340	1650
	461	459	457	454	450	444	432

MOMV 630 [666cm³/rev.]

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
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. 240	130	416	712	978	1237	1563	1835
	358	357	355	351	346	340	332

Torque (N•m) 1340
Speed (rpm) 444

cont.
int.



Performance Data

		MOMV 800 [801cm ³ /rev.]						
		Pressure (MPa)						
		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
	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

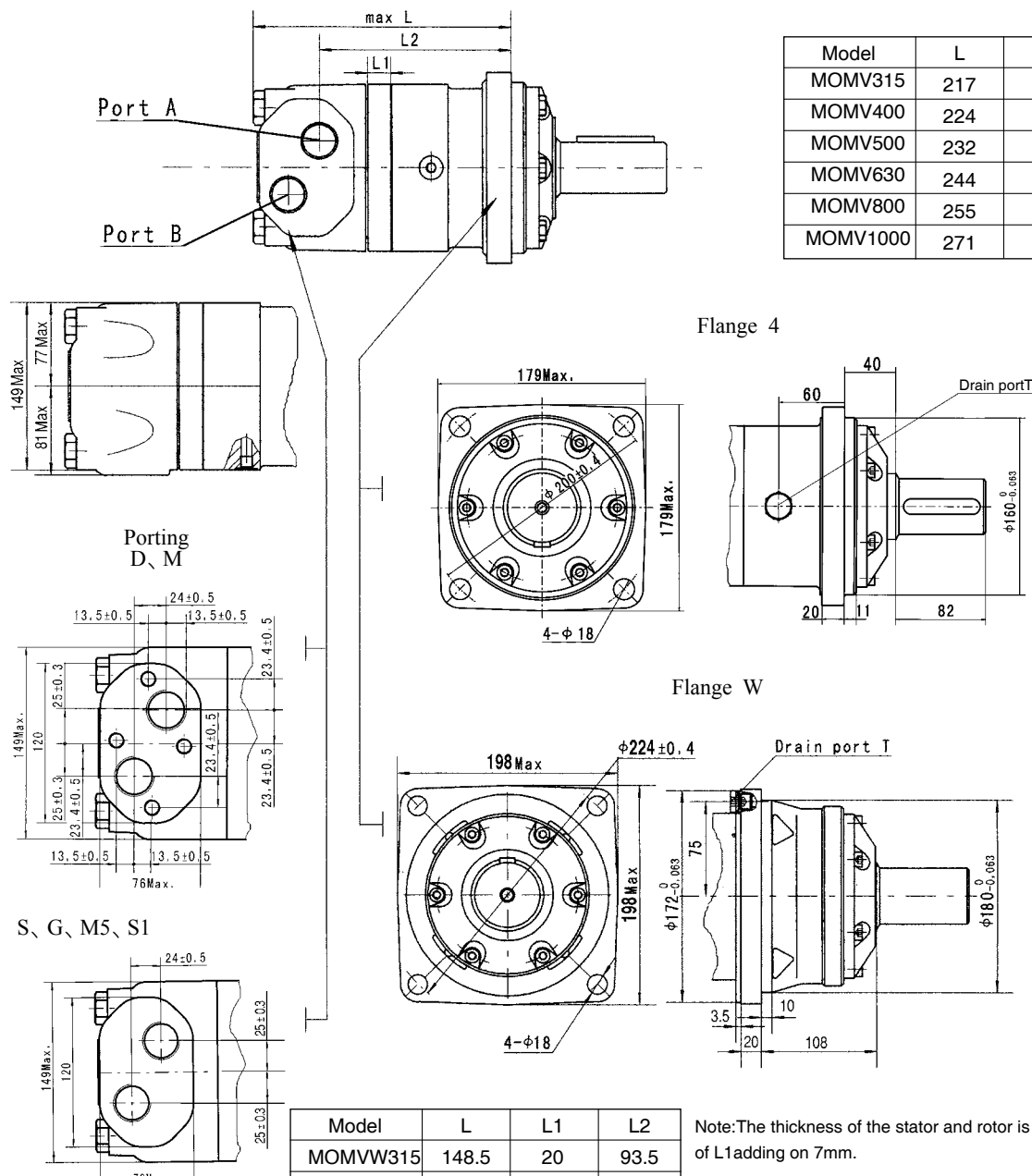
☐ cont.
☐ int.

		MOMV 1000 [990cm ³ /rev.]					
		Pressure (MPa)					
		2.5	5	7	10	14	16
Flow (L/min)	10	312	640	971	1400	1978	2259
		9	9	9	8	7	6
	20	320	648	978	1410	1980	2270
		28	27	26	25	23	21
	50	326	655	992	1422	2015	2280
		47	46	45	43	41	38
	75	318	642	987	1425	2003	2276
		72	71	70	68	66	63
	100	309	634	983	1418	1994	2243
		98	97	95	93	90	86
	125	303	624	975	1409	1988	2224
		123	122	120	117	114	110
	150	278	602	961	1368	1963	2208
		149	148	146	144	140	133
	175	264	580	946	1338	1925	2159
		174	172	170	166	162	155
Max.cont.	200	230	556	912	1300	1891	2105
		199	196	193	190	185	178
Max.int.	240	166	513	867	1267	1825	2034
		240	237	233	229	225	218

Torque (N•m) 1825
 Speed (rpm) 225



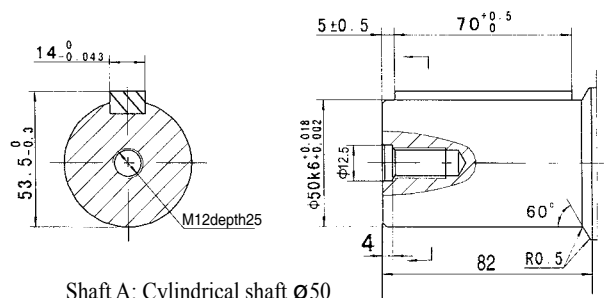
MOMV DIMINSIONS AND MOUNTING DATA



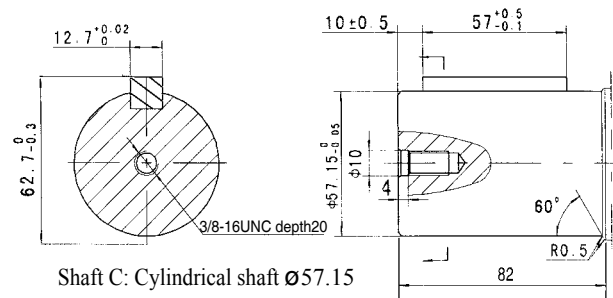
Content	Code					
	D (depth)	M (depth)	S (depth)	G (depth)	M5 (depth)	S1 (depth)
P(A,B)	G1 (18)	M33 x 2 (18)	1-5/16-12UN(18)	G1 (18)	M33 x 2 (18)	1-5/16-12UN(18)
T	G1/4 (12)	M14 x 1.5 (12)	9/16-18UNF(12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)
C	4-M12 (10)	4-M12 (10)	--	--	--	--



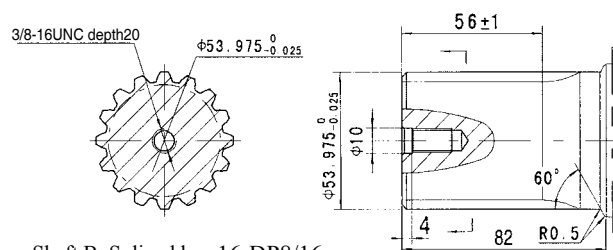
MOMV SHAFT EXTENSIONS DIMENSIONS DATA



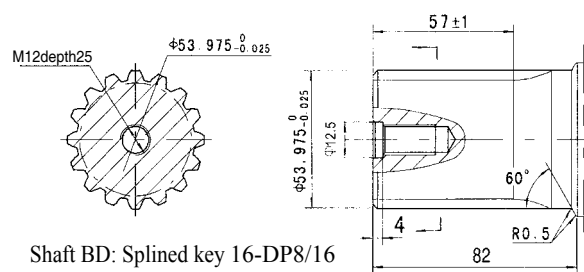
Shaft A: Cylindrical shaft Ø50
Parallel key 14x9x70



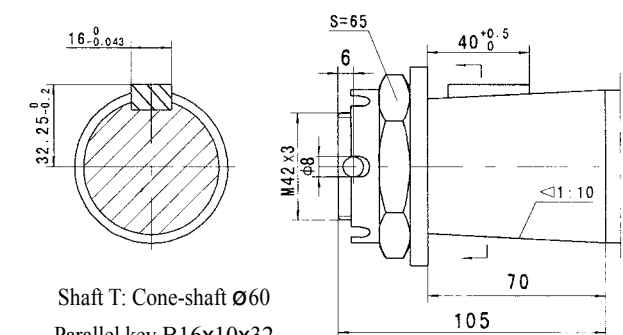
Shaft C: Cylindrical shaft Ø57.15
Parallel key 12.7x12.7x57



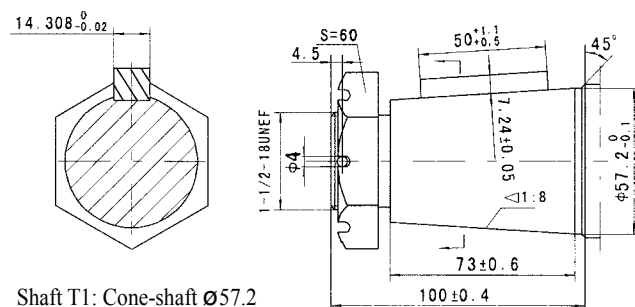
Shaft B: Splined key 16-DP8/16



Shaft BD: Splined key 16-DP8/16



Shaft T: Cone-shaft Ø60
Parallel key B16x10x32
Tightening torque: 750 ± 50Nm

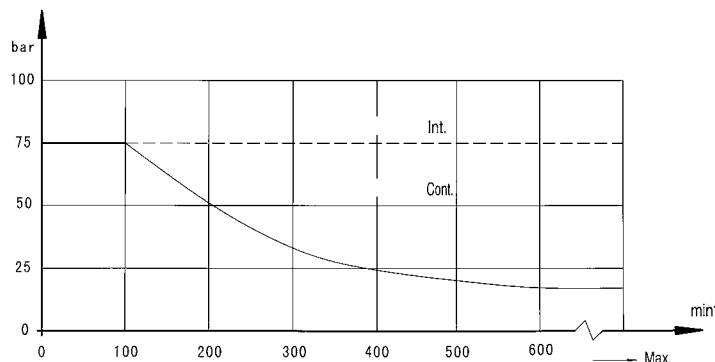
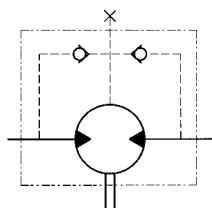


Shaft T1: Cone-shaft Ø57.2
Parallel key 14.308x14.308x50
Tightening torque: 750 ± 50Nm



MOMV Series Hydraulic Motor

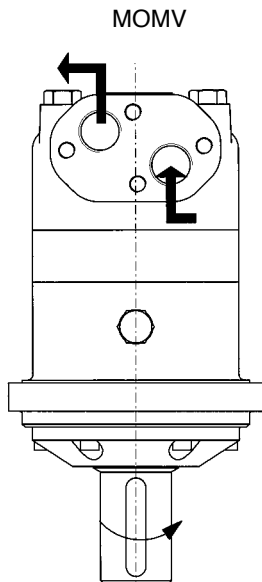
Permissible shaft seal pressure



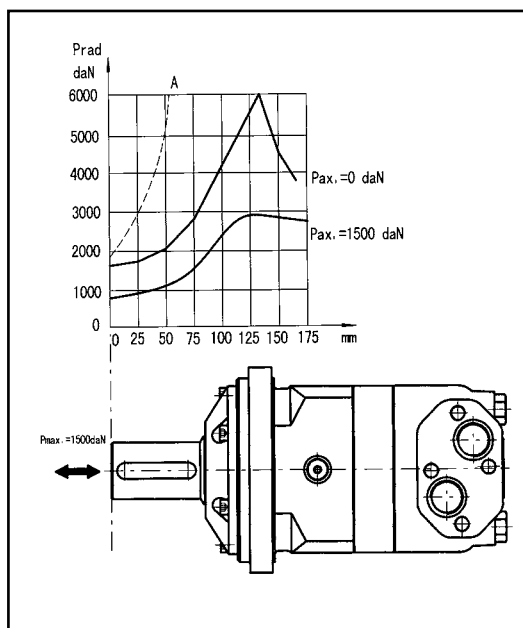
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Standard direction of shaft rotation: Standard

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.

Order Information

	1	2	3	4	5	6	7	8
MOMV								

Pos.1	2	3		4		5		6		7		8	
Code	Displacement	Flange		Output shaft		Port and drain port		Rotation direction		Paint		Unusually function	
Omit	315	4	4-Ø18 Square-flangeØ200, pilot Ø160 × 11	A	Shaft Ø50 , parall key 14 × 9 × 70	D	G1 Manifold 4 × M12, G1/4	Omit	Standard	00	No paint	Omit	Standard
	400			BD	Shaft Ø53.975, splined key 16-DP8/16	M	M33 × 2 Manifold 4 × M12, M14 × 1.5						
	500			B	Shaft Ø53.975, splined key 16-DP8/16	S	1-5/16-12UN, 9/16-18UNF						
	630			C	Shaft Ø57.15, parall key 12.7 × 12.7 × 57.15	G	G1,G1/4						
	800			T	Cone shaft Ø60, parall key B16 × 10 × 32	M5	M33 × 2, M14 × 1.5						
	1000			T1	Cone shaft Ø60, parall key 14.308 × 14.308 × 50.8	S1	1-5/16-12UN(18), 7/16-20UNF(12)						

Note: When the table is used, please fill the code of left rows in dash area and give us, which the code information 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.



MOMH SERIES HYDRAULIC MOTOR

MOMH Series motors are medium speed, high torque motors designed on an internal gear design consisting of a rotor and stator. These motors are suitable for long operating periods at moderate pressures.

Characteristic Features:

- Advanced manufacturing design of the Geroler gear set, which provide high starting torque, high efficiency and long life
- Motors have high pressure shaft seals which can be used in Parallel or Series
- Smooth running over the entire speed range

Main Specifications

Type		MOMH				
		200	250	315	400	500
Geometric Displacement (cm ³ /rev.)		203.2	255.9	316.1	406.4	489.2
Max. Speed (rpm)	Cont.	366	290	236	183	155
	Int.	439	348	282	220	166
Max. Torque (Nm)	Cont.	510	621	740	850	830
	Int.	579	702	827	990	1040
	Peak	651	790	930	1092	1170
Max. Output (kW)	Cont.	16	16	14	12.5	11
	Int.	18.5	18.5	15.5	15	14
Max. Pressure Drop (Bar)	Cont.	175	175	175	155	125
	Int.	200	200	200	190	160
	Peak	225	225	225	210	180
Max. Flow (L/min)	Cont.	75	75	75	75	75
	Int.	90	90	90	90	90
Weight (kg)		10.5	11	11.5	12.3	13

Type		Max. Inlet Pressure	Max. Return Pressure with Drain Line
MOMH 200-500	Cont.	175	175
	Int.	200	200
	Peak	225	225

- 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 seconds per minute
- Technical data MOMH with 35mm cylindrical, 1 ¼ in splined and 35mm tapered shaft



PERFORMANCE DATA

MOMH200 [203.2cm³/rev.]

Pressure (Bar) Max.Cont. Max.Int.

35	70	105	140	175	200
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Flow (L/min)	5	98 25	194 25	284 22				
	10	101 43	204 41	301 36	391 29	482 14		
	20	99 100	201 97	304 93	402 85	509 69	576 56	
	30	97 145	197 143	300 139	402 130	510 114	579 101	
	40	90 200	190 200	292 200	399 188	507 168	578 153	
	50	82 248	183 246	284 244	392 235	500 213	571 199	
	60	73 292	174 290	274 287	384 279	493 260	563 244	
	70	63 352	163 350	264 349	374 338	481 318	554 301	
	Max. Cont.	75	59 366	157 365	259 363	366 355	475 335	547 319
		80	53 381	150 381	253 380	358 371	466 352	538 338
Max. Int.	90	39	140	241	348	456	526	
		443	437	434	426	407	392	

MOMH250 [255.9cm³/rev.]

Pressure (Bar) Max. Cont. Max.Int.

35	70	90	120	145	175	200
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Flow (L/min)	5	121 19	246 19	318 18	398 14				
	10	130 34	258 33	331 31	425 29	515 23	595 12		
	20	130 78	258 77	332 76	432 73	520 65	621 53	702 42	
	30	122 115	251 113	327 111	429 105	520 96	621 84	700 75	
	40	115 157	240 157	323 156	422 150	513 139	616 127	698 114	
	50	105 196	232 195	314 192	411 185	505 173	606 159	687 147	
	60	94 232	220 230	302 226	401 218	496 206	596 192	676 180	
	70	81.4 274	209 274	288 274	389 266	484 252	582 238	666 222	
	Max. Cont.	75	72 290	203 289	280 287	381 279	475 266	574 251	659 236
		80	66 303	194 302	273 298	371 290	467 279	566 264	651 249
Max. Int.	90	49 348	178 347	256 345	355 337	453 325	552 309	634 292	



PERFORMANCE DATA

MOMH315 [316.1cm³/rev.]

Pressure (Bar) Max.Cont Max.Int.

35	75	100	135	155	175	200
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Flow (L/min)	5	155 16	325 13				
	10	163 27	342 24	454 18	556 14		
	20	169 63	349 61	469 55	582 48	664 40	733 32
	30	165 93	344 89	470 82	580 77	669 67	740 59
	40	154 126	337 126	465 119	577 111	663 99	737 88
	50	141 159	325 155	455 148	568 139	656 126	728 115
	60	121 187	312 186	440 179	555 169	643 154	715 143
	70	103 222	298 222	425 215	541 205	631 187	703 176
	Max. Cont.	75	94 236	287 233	417 224	529 215	623 196
Max. Int.	80	82 246	277 244	406 236	518 228	611 210	688 197
	90	62 282	256 280	386 275	496 266	593 248	669 234

MOMH400 [406.4cm³/rev.]

Pressure (Bar) Max. Cont. Max.Int.

35	60	105	125	155	190
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Flow (L/min)	5	196 13	348 13	516 10			
	10	205 22	363 21	546 21	702 17	859 11	
	20	209 50	366 49	543 46	708 41	874 36	988 31
	30	201 73	357 72	542 70	706 63	864 56	984 51
	40	195 99	346 98	532 96	701 86	858 77	973 71
	50	173 123	332 122	518 118	687 107	848 97	958 90
	60	154 146	319 144	501 141	688 128	833 115	944 106
	70	138 174	305 173	480 169	649 156	814 141	925 130
	Max. Cont.	75	128 183	294 181	466 177	637 163	802 149
Max. Int.	80	113 192	277 191	451 188	621 174	786 158	899 144
	90	90 220	256 220	433 215	595 202	767 183	881 165

Cont
Int.

Torque (Nm) 593
Speed (rpm) 248



PERFORMANCE DATA

MOMH500 [500cm³/rev.]

Pressure (Bar) Max.Cont Max.Int.

25	50	85	100	125	160
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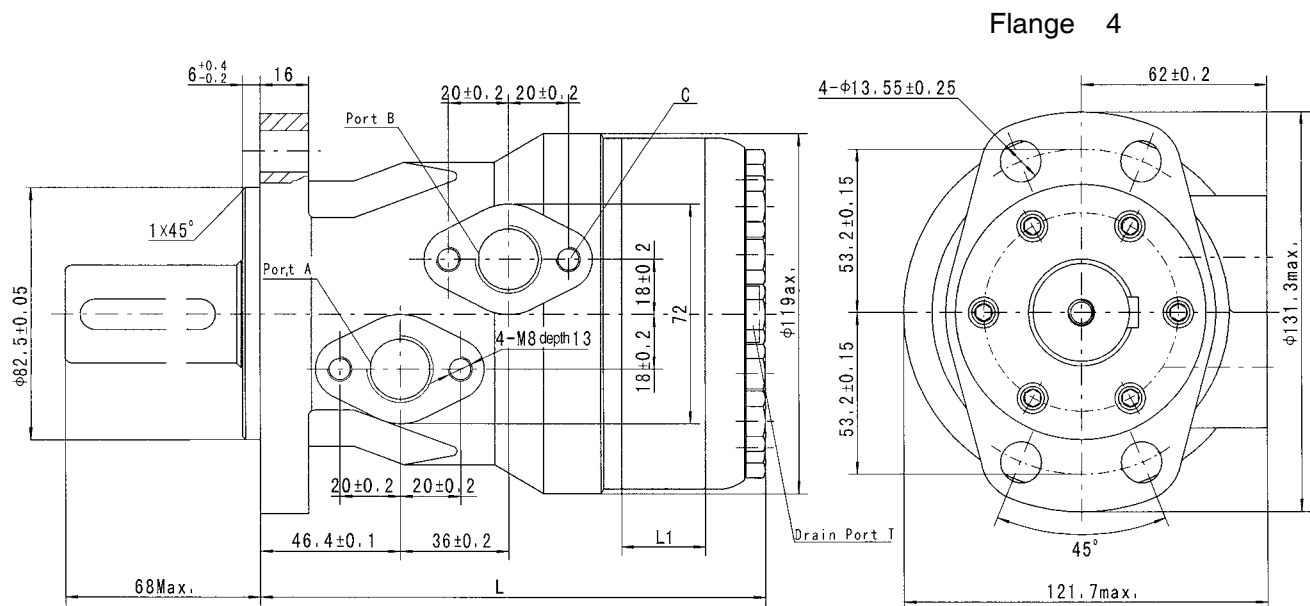
Flow (L/min)	5	165 11	317 11	516 8			
	10	178 20	335 19	555 17	669 15	791 13	969 9
	20	177 42	331 42	559 41	673 38	799 36	988 29
	30	172 64	320 63	553 61	663 57	792 53	983 47
	40	163 85	309 85	541 83	654 79	783 75	971 67
	50	146 103	296 103	523 103	635 97	768 93	954 85
	60	121 124	275 124	502 123	614 117	747 113	934 103
	70	97 148	256 148	482 148	597 140	729 134	917 122
	75	79 155	240 155	469 155	582 152	714 144	902 130
	80	60 166	226 166	453 166	570 159	701 153	884 139
Max. Cont.							
Max. Int.	90	34 166	201 165	421 164	550 157	673 156	869 155

Cont
Int.

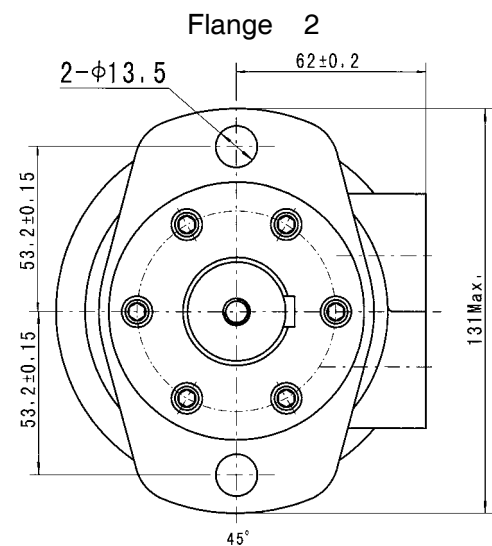
Torque (Nm) 673
Speed (rpm) 156



MOMH DIMENSIONS AND MOUNTING DATA



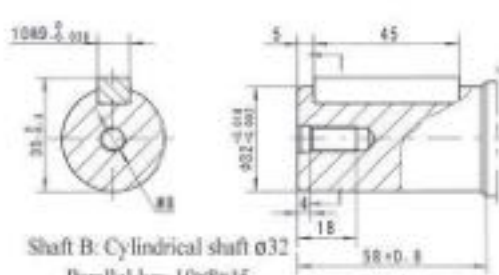
Model	L	L1
MOMH-200	168	27
MOMH-250	175	34
MOMH-315	184	42
MOMH-400	195	54
MOMH-500	206	65



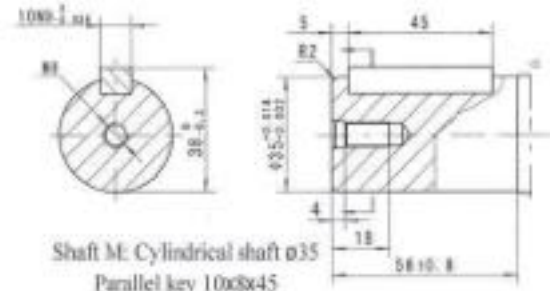
Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (15)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-M8 (13)	4-M8 (13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 1/4



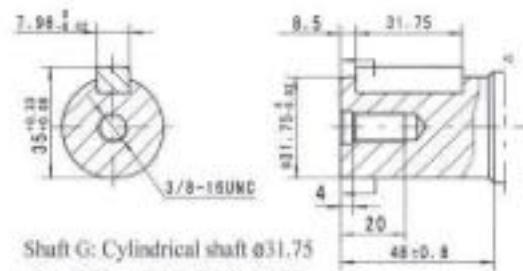
MOMH SHAFT EXTENSIONS DIMENSIONS DATA



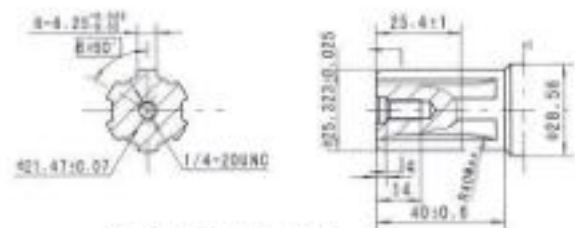
Shaft B: Cylindrical shaft ø32
Parallel key 10x8x45



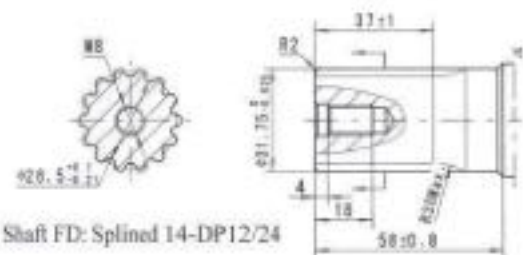
Shaft M: Cylindrical shaft ø35
Parallel key 10x8x45



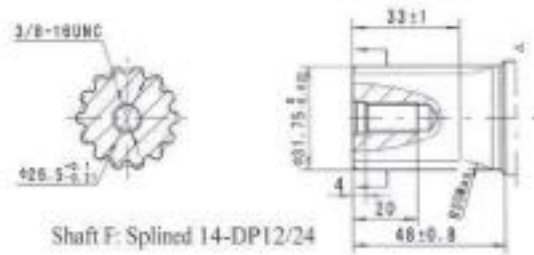
Shaft G: Cylindrical shaft ø31.75
Parallel key 7.96x7.96x31.75



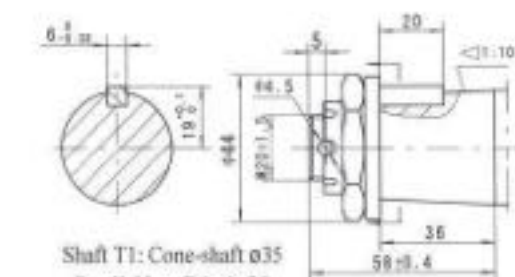
Shaft S: Splined SAE 6B



Shaft FD: Splined 14-DP12/24



Shaft F: Splined 14-DP12/24



Shaft T1: Cone-shaft ø35
Parallel key B6x6x20
Tightening torque: 200 ± 10 Nm

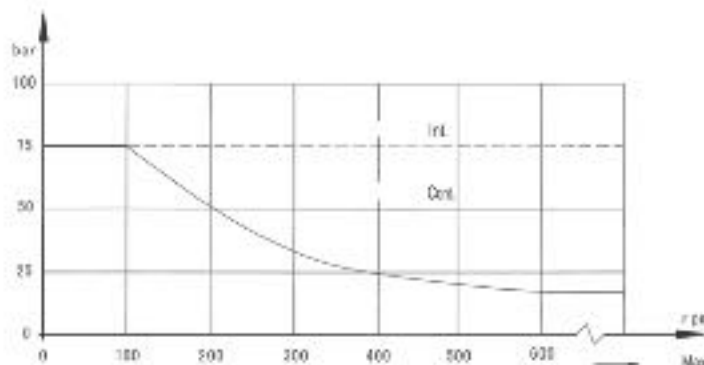
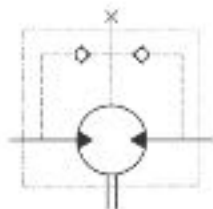


MOMH SERIES HYDRAULIC MOTOR

PERMISSIBLE SHAFT SEAL PRESSURE

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.

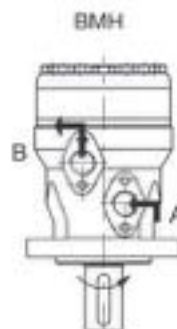


DIRECTION OF SHAFT ROTATION: STANDARD

When facing shaft end of motor, shaft to rotate:

Clockwise when Port "A" is pressurised

Counter-clockwise Port "B" is pressurised

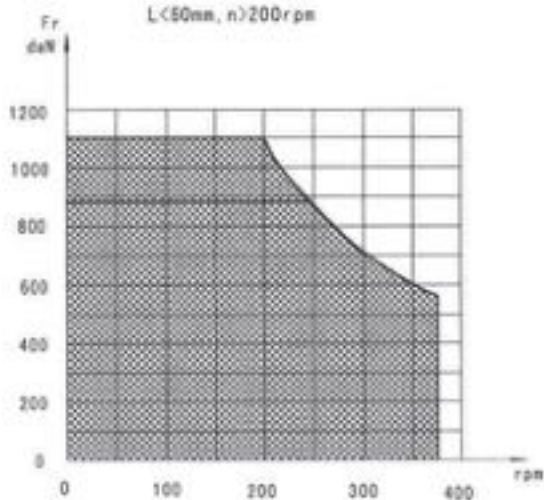


STATUS OF THE SHAFT'S RADIAL FORCE

Status of the shaft's radial force

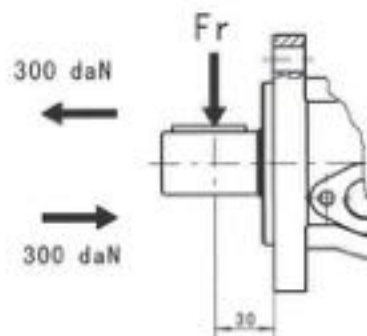
$$F_r = \frac{1100}{n} \pm \frac{25000}{103.5 \pm 1} \text{ daN}$$

$L < 50\text{mm}, n > 200\text{rpm}$



— shaft 3/4" (RES-4mm) and shaft SAE 3/4"

The drawing is the Possible load when L=30mm.



F_r =Radial Force (daN)

L =Distance (mm)

n =Speed (rpm)

[illegible]