



## BMK2 SERIES HYDRAULIC MOTOR

BMK2 new 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 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.
- \* The new series motor is suitable for vehicles with greater loads and pressure drop.

### Main Specification

Type		BMK2 65	BMK2 80	BMK2 100	BMK2 125	BMK2 160	BMK2 200	BMK2 250	BMK2 315	BMK2 400	BMK2 475	
Geometric displacement	(cm <sup>3</sup> /rev.)	65	80	100.9	129.8	156.8	193.4	242.5	304.3	390.8	485	
Max.speed	(rpm)	cont.	835	800	742	576	477	385	308	246	191	153
		int.	990	980	924	720	713	577	462	365	287	230
Max.torque	(N•m)	cont.	185	235	295	385	455	540	660	765	775	845
		int.	245	345	445	560	570	665	820	885	925	930
Max.pressure drop	(MPa)	cont.	20.5	21	21	21	20.5	20.5	20.5	21	15.5	12
		int.	27.5	31	31	31	26	26	26	24	17	14
		peak.	31	31	31	31	31	31	31	31	20.5	17
Max.flow	(L/min)	cont.	55	65	75	75	75	75	75	75	75	75
		int.	65	80	95	95	115	115	115	115	115	115
Weight	(kg)	9.2	9.4	9.7	10	10.2	10.5	11	11.5	12	12.4	

- \* 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

BMK2 65 [65 cm³/rev.]  
Pressure (MPa)

		3.5	7	10.5	14	17.5	20.5	24	27.5	31	Max.cont.	Max.int.	Peak	
Flow (L/min)	2	28 22	54 12	80 6										
	4	30 52	58 47	88 43	115 35	146 30	165 24	195						
	8	31 107	60 98	92 92	120 85	150 70	170 55	200	225					
	15	32 214	62 208	94 200	124 193	155 185	175 174	205	230	250				
	22	32 320	65 315	95 308	125 296	157 286	178 275	206	232	254				
	30	30 445	65 440	95 430	128 420	160 408	180 395	210	235	258				
	38	28 565	62 560	95 550	130 540	165 526	185 512	216	240	260				
	45	26 675	60 670	92 660	125 648	160 632	180 615	215	245	265				
	Max.cont.	55	23 835	55 825	88 810	120 790	155 770	175 745	210	235	255			
	Max.int.	65	20 990	50 980	84 965	112 945	150 935	170 910	205	230	250			

BMK2 80 [80 cm³/rev.]  
Pressure (MPa)

		3.5	7	10.5	14	17.5	20.5	24	27.5	31	Max.cont.	Max.int.	Peak	
Flow (L/min)	2	29 18	54 9	86 3										
	4	35 45	75 41	112 38	145 35	172 28	208 22	218 14	236					
	8	35 90	75 85	114 80	148 76	175 72	212 64	230 55	260	280				
	15	38 180	78 175	116 170	152 166	184 160	215 153	245 140	275	300				
	22	36 265	75 260	114 255	150 250	185 242	220 234	250	285	315				
	30	35 363	75 355	115 350	150 342	185 320	225 302	260	295	325				
	38	34 460	72 452	112 442	155 430	190 418	230 405	265	300	335				
	45	32 545	70 535	110 528	150 515	190 505	230	265	305	340				
	Max.cont.	55	30 670	68 660	110 650	150 635	190 620	230	270	305	335			
	Max.int.	65	25 800	65 790	105 778	145 755	180 740	225	260	295	325			
	75	22 910	63 900	102 880	145 860	180 850	225	260	290					
80	20 980	60 970	100 955	140 920	175 900	220	250							

BMK2 100 [100.9 cm³/rev.]  
Pressure (MPa)

		1.75	3.5	7	10.5	14	17.5	20.5	24	27.5	31	Max.cont.	Max.int.	Peak	
Flow (L/min)	2	15 14	32 10	68 5											
	4	18 36	42 34	92 32	130 28	170 22	205 14	230							
	8	20 74	45 73	90 70	135 66	180 60	210 52	240	280	310					
	15	20 142	45 140	90 137	135 134	185 129	220 120	260	305	345	390				
	22	18 210	45 207	90 201	140 195	190 188	230 179	275	315	360	405				
	30	16 290	42 288	88 282	142 276	195 268	240	285	330	375	425				
	38	15 370	40 365	88 360	140 352	190 340	240	285	335	380	430				
	45	15 440	40 435	86 430	140 422	190	240	285	340	385	440				
	Max.cont.	55	12 540	36 534	85 528	135 520	190	240	285	340	385	440			
	Max.int.	65	10 640	35 635	80 630	130 622	185	235	280	335	380	440			
	75	5 738	30 735	75 728	125 715	180	230	275	330	375					
	85	3 838	25 835	75 830	125 820	175	225	270	320	370					
	95		23 925	70 918	120 905	170	220	260	310						

BMK2 125 [129.8 cm³/rev.]  
Pressure (MPa)

		1.75	3.5	7	10.5	14	17.5	20.5	24	27.5	31	Max.cont.	Max.int.	Peak	
Flow (L/min)	2	25 12	40 7												
	4	28 27	55 26	110 22	175 18	220 14	280 11	325							
	8	28 57	60 56	115 53	175 48	230 42	290 38	330	375	400					
	15	28 113	60 112	120 110	180 105	240 98	295 92	340	390	440	485				
	22	28 165	55 163	120 160	180 155	240 144	305 138	360	415	470	530				
	30	25 228	52 224	120 222	185 210	245 212	310	365	425	480	545				
	38	25 288	50 285	120 282	180 275	245 268	310	365	425	495	550				
	45	22 345	50 343	120 338	180 332	245 325	315	370	430	490	550				
	Max.cont.	55	20 420	46 418	115 414	175 408	245	300	375	430	490				
	Max.int.	65	15 498	43 496	110 492	170 486	240	300	370	425	485				
	75	12 575	42 574	108 568	170 560	235	310	365	425						
	85	8 653	40 652	105 645	165 636	230	310	360	420						
	95		40 722	100 715	160 702	225	290	355	415						

□ cont.  
■ int.

Torque (N·m) 225  
Speed (rpm) 690

BMK2 160 [156.8 cm<sup>3</sup>/rev.]  
Pressure ( MPa)

		Max.cont.								Max.int.		
		1.75	3.5	7	10.5	14	17.5	20.5	24	26		
Flow (L/min)	2	28 9	55 7	110 5	175 3							
	4	32 22	63 21	125 19	170 13	250 13	315 8	370 3				
	8	37 47	68 45	130 42	200 39	260 36	325 34	390 32	450 27	480 22		
	15	35 93	68 92	135 89	210 85	275 80	370 76	420 70	500 60	530 45		
	22	35 138	75 136	140 133	215 128	285 122	370 116	440 110	515 102	550 95		
	30	35 190	75 187	145 184	220 178	290 172	370 167	440 164	520 154	560 142		
	38	37 240	70 237	150 234	225 230	310 225	380 218	450 202	525 193	565 185		
	45	32 285	70 283	150 280	225 275	310 268	380 259	450 247	525 236	565 225		
	55	28 348	66 346	145 242	220 338	305 332	375 324	450 314	525 300			
	65	25 412	63 410	140 406	220 400	300 393	375 383	445 370				
Max.cont.	75	22 476	60 474	135 470	215 464	295 454	370 445	440 435				
	85	18 540	55 536	130 532	210 524	290 514	365 502	435 485				
	95	15 600	50 595	125 590	205 580	285 565	360 555	430 545				
Max.int.	115		40 715	115 705	200 695	280 685	350 670	425 655				

BMK2 200 [193.4 cm<sup>3</sup>/rev.]  
Pressure ( MPa)

		Max.cont.								Max.int.		
		1.75	3.5	7	10.5	14	17.5	20.5	24	26		
Flow (L/min)	2	32 9	68 7	110 5	145 3							
	4	40 18	75 16	150 14	195 11	300 7	360 4					
	8	45 37	80 36	160 34	240 30	315 26	405 21	500 17	570 13	600 11		
	15	48 75	90 74	170 72	255 68	335 64	425 60	510 56	590 50	620 42		
	22	46 112	90 110	175 108	265 105	350 101	440 97	520 91	605 86	645 80		
	30	45 153	90 151	180 148	270 145	360 141	450 135	530 128	615 122	655 116		
	38	45 193	90 191	180 188	275 178	370 178	455 172	540 166	625 158			
	45	40 230	85 228	180 226	275 222	370 218	460 210	545 202				
	55	38 280	82 278	180 275	275 270	375 264	465 255	550 248				
	65	35 332	80 330	175 328	270 322	370 315	465 306	545 295				
Max.cont.	75	30 384	72 382	170 378	265 370	360 365	455 356	540 346				
	85	25 436	70 434	165 430	260 260	355 410	450 400	540 390				
	95	20 488	60 485	155 478	255 470	350 458	445 448	530 438				
Max.int.	115		50 580	140 572	240 562	330 550	440 538	520 520				

BMK2 250 [242.5 cm<sup>3</sup>/rev.]  
Pressure ( MPa)

		Max.cont.								Max.int.		
		1.75	3.5	7	10.5	14	17.5	20.5	24	26		
Flow (L/min)	2	45 4	95 2									
	4	50 14	100 13	210 11	310 9	410 6	510 4	610 3				
	8	55 29	105 28	215 26	320 23	420 20	530 17	620 14	730 11	780 9		
	15	55 59	110 58	220 56	330 53	440 50	550 47	650 45	755 43	810 40		
	22	50 88	115 87	225 85	340 82	455 78	560 74	665 69	770 65			
	30	50 122	115 121	230 118	350 113	465 109	570 104	680 100	785 92			
	38	48 154	112 152	235 149	355 145	475 140	580 135	695 130	795 122			
	45	45 183	110 182	230 180	350 176	475 170	590 165	700 158				
	55	42 224	105 223	230 221	345 218	470 212	580 205					
	65	35 266	100 265	220 263	340 258	460 252	565 242					
Max.cont.	75	32 307	95 306	210 303	330 298	455 290	560 280					
	85	30 348	85 346	200 342	320 336	450 330	555 320					
	95	25 386	70 384	190 378	315 372	440 365	540 355					
Max.int.	115		65 465	180 458	300 450	430 442						

BMK2 315 [304.3 cm<sup>3</sup>/rev.]  
Pressure ( MPa)

		Max.cont.								Max.int.	
		1.75	3.5	7	10.5	14	17.5	20.5	24		
Flow (L/min)	2	45 4	95 2								
	4	65 12	130 11	250 10	380 8	490 6					
	8	70 24	135 23	260 22	390 20	510 18	630 15	760 10	875 6		
	15	75 48	140 48	275 47	410 45	535 42	670 38	800 34	920 30		
	22	70 71	140 70	285 69	425 66	555 62	685 56	810 50	940 42		
	30	70 97	145 97	290 96	430 93	565 88	695 80	820 70			
	38	66 123	140 122	290 120	435 117	570 112	715 102	835 90			
	45	62 147	135 146	290 144	435 142	575 135	720 125	840 118			
	55	58 180	130 179	285 176	430 172	575 165	720 155				
	65	52 213	120 212	275 210	425 205	570 200	715 190				
Max.cont.	75	40 246	110 245	260 242	415 236	560 225	710 212				
	85	30 278	100 277	250 274	405 270	540 260					
	95	20 311	90 310	245 307	380 303	515 296					
Max.int.	115		80 365	225 361	350 355						

□ cont.  
■ int.

Torque (N·m) 225  
Speed (rpm) 361

BMK2 400 [390.8 cm<sup>3</sup>/rev.]  
Pressure ( MPa)

	1.75	3.5	7	10.5	14	15.5	17.5	19
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Flow (L/min)	Max.cont.								Max.int.	
	1.75	3.5	7	10.5	14	15.5	17.5	19		
2	70 4	145 2								
4	80 9	170 9	345 8	500 7	660 6	740 5				
8	85 19	175 18	355 17	520 16	680 14	765 13	830 12	910 10		
15	90 37	185 37	370 36	550 35	720 32	810 30	880 28			
22	95 55	190 55	380 54	565 52	750 48	830 46	900 44			
30	92 76	188 75	385 73	570 71	760 68	835 65	905 62			
38	90 96	185 94	385 92	575 90	765 86	840 84	930 80			
45	85 114	180 113	380 111	570 108	760 102					
55	80 140	175 139	380 137	570 133	760 127					
65	75 165	170 164	370 163	560 160	750 155					
75	68 191	160 190	360 188	555 184	740 178					
85	65 214	150 212	355 210	550 206	730 200					
95	50 242	135 240	340 237	530 233	710 228					
115		125 286	310 282	510 275						

□ cont.  
■ int.

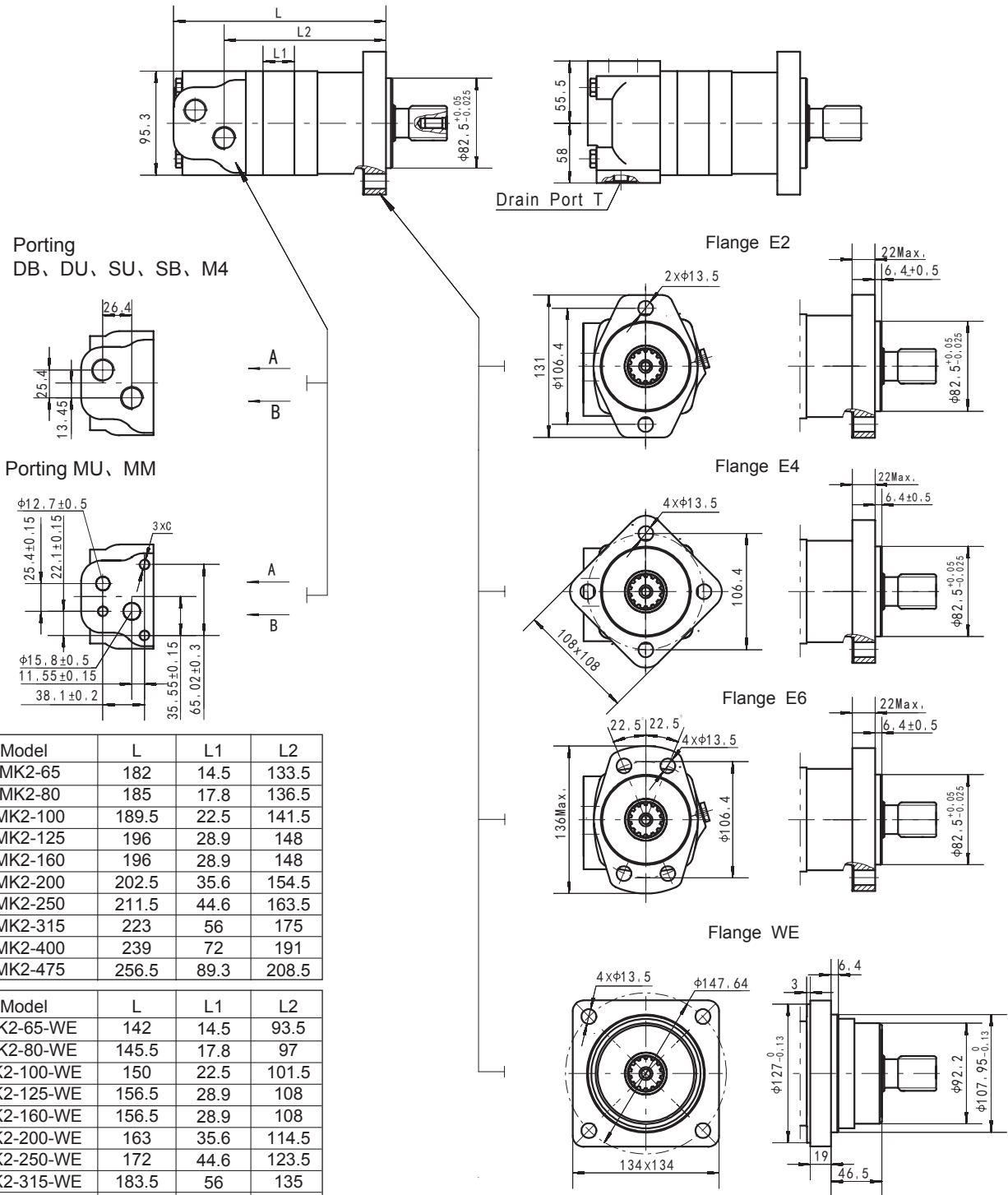
BMK2 475 [485 cm<sup>3</sup>/rev.]  
Pressure ( MPa)

	1.75	3.5	7	10.5	12	14
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Flow (L/min)	Max.cont.						Max.int.	
	1.75	3.5	7	10.5	12	14		
2	75 2	175 1						
4	110 7	220 6	430 4	540 1				
8	110 14	225 13	450 11	700 7				
15	105 29	235 28	470 26	710 24	825 22	895 19		
22	105 44	240 43	480 42	720 40	835 37	915 34		
30	110 61	240 60	485 58	725 55	840 52	935 48		
38	110 77	235 75	480 73	720 70	840 68	930 65		
45	100 91	220 91	470 89	715 85	825 83			
55	95 112	210 110	460 108	710 104	820 100			
65	85 132	200 131	445 128	700 125	810 120			
75	70 153	185 152	440 149	690 145	800 140			
85	60 173	175 172	430 169	680 165	785 160			
95	40 195	150 193	405 190	655 185				
115		130 230	380 226	625 220				

Torque (N·m) 130  
Speed (rpm) 230

**BMK2 DIMENSIONS AND MOUNTING DATA**

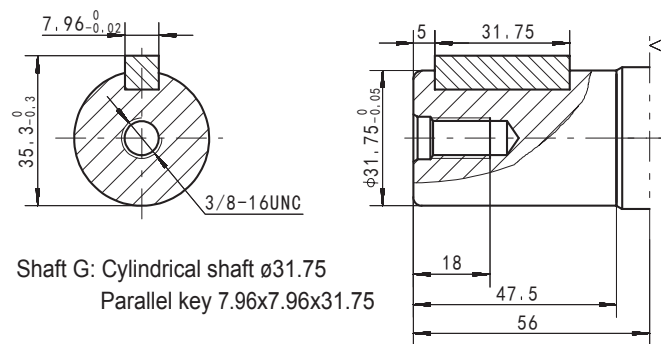
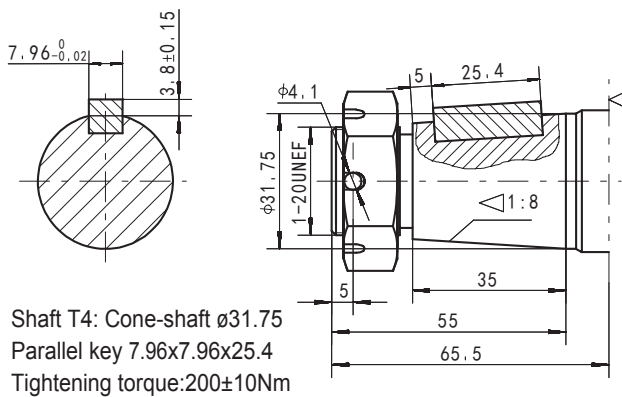
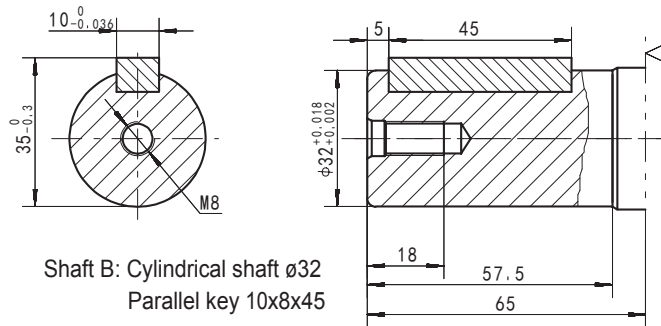
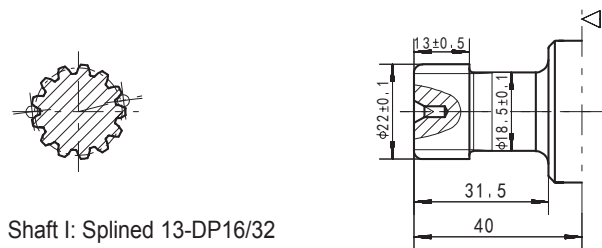
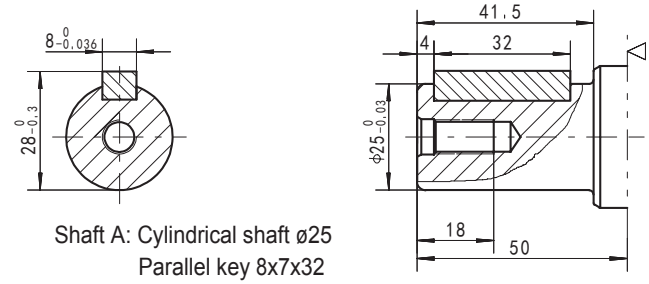
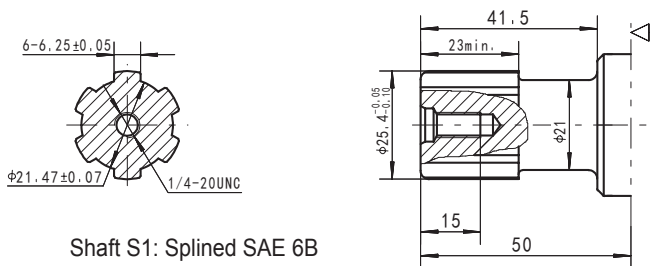
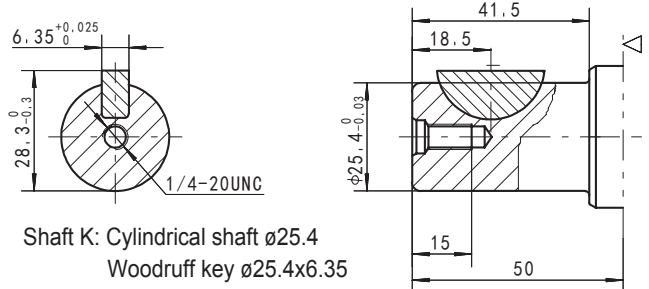
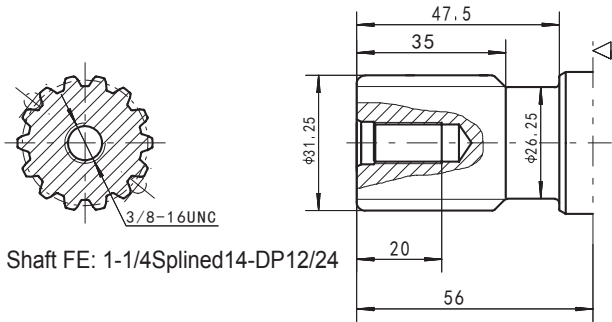


Model	L	L1	L2
BMK2-65	182	14.5	133.5
BMK2-80	185	17.8	136.5
BMK2-100	189.5	22.5	141.5
BMK2-125	196	28.9	148
BMK2-160	196	28.9	148
BMK2-200	202.5	35.6	154.5
BMK2-250	211.5	44.6	163.5
BMK2-315	223	56	175
BMK2-400	239	72	191
BMK2-475	256.5	89.3	208.5

Model	L	L1	L2
BMK2-65-WE	142	14.5	93.5
BMK2-80-WE	145.5	17.8	97
BMK2-100-WE	150	22.5	101.5
BMK2-125-WE	156.5	28.9	108
BMK2-160-WE	156.5	28.9	108
BMK2-200-WE	163	35.6	114.5
BMK2-250-WE	172	44.6	123.5
BMK2-315-WE	183.5	56	135
BMK2-400-WE	199.5	72	151
BMK2-475-WE	217	89.3	168.5

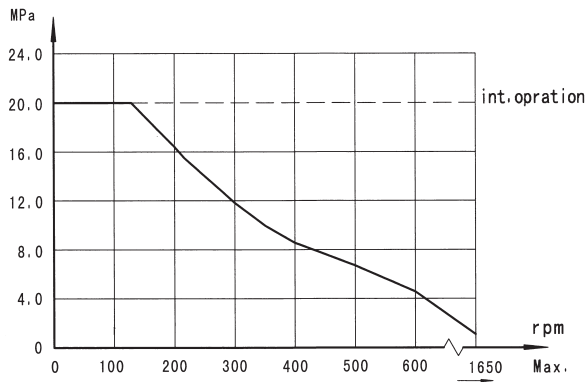
Code Mounting	DB (Depth)	DU (Depth)	SU (Depth)	SB (Depth)	M4 (Depth)	MU	MM
	P(A,B)	G1/2 (15)	G1/2 (15)	7/8-14 O-ring (17)	7/8-14 O-ring (17)	M22 x 1.5 (15)	φ12.7, φ15.8
T	G1/4 (12)	7/16-20UNF(12)	7/16-20UNF(12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)	G1/4 (12)
C			--			3/8-16UNC(15)	M10(15)

SHAFT EXTENSIONS FOR BMK2 MOTORS

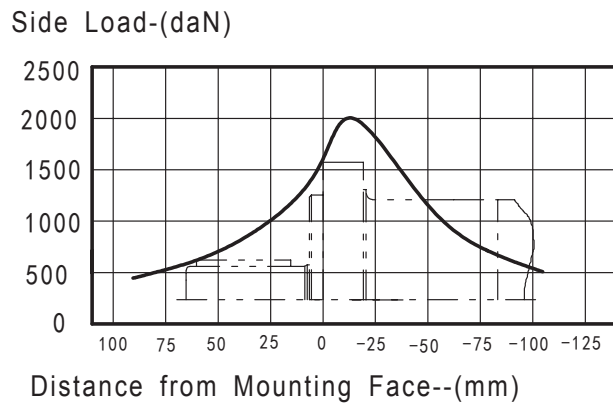


◁ Motor Mounting Surface E2 Flange

Permissible shaft seal pressure



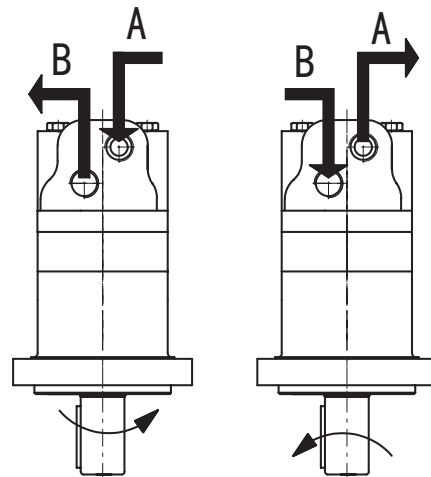
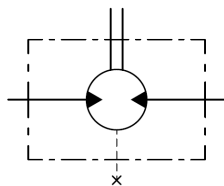
BMK2 Standard Mounting Flange[E2]Radial Forces



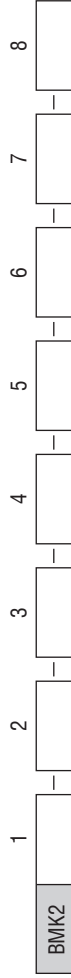
The bearing curve represents allowable bearing loads for an  $B_{10}$  bearing life (2000 hours or  $12 \times 10^6$  revolutions at 100rpm) at rated output torque.

Direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate:  
Clockwise when port "A" is pressurized.  
Counter-clockwise when port "B" is pressurized.



### Order Information



Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Port and Drain Port	Rotation Direction	Paint	Unusually Function
65	E2	2×φ13.5 Rhomb-flange φ106.4, pilot φ82.5×6.4	A Shaft φ25 , parallel key 8×7×32 B Shaft φ32 , parallel key 10×8×45 K Shaft φ25.4 , Woodruff key φ25.4×6.35	DB G1/2, G1/4 DU G1/2, 7/16-20 UNF	Omit Standard	No paint	Omit Standard
80	E4	4×φ13.5 Rhomb-flange φ106.4, pilot φ82.5×6.4	G Shaft φ31.75 , parallel key 7.96×7.96×31.75	SB 7/8-14UNF O-ring, G1/4 SU 7/8-14UNF O-ring, 7/16-20 UNF	Opposite R	Blue	F Free Running
100	E6	4×φ13.5 Rhomb-flange φ106.4, pilot φ82.5×6.4	FE Shaft φ31.75 , splined 14-DP12/24	M4 M22×1.5, M14×1.5 MU 1/2", 5/8" Crosshole Manifold 3×3/8-		Black	
125	WE	4×φ13.6 Wheel-flange φ147.6, pilot φ107.95×6.4	S1 Shaft φ25.4 , splined SAE 6B I Sub-shaft φ22 , splined 13-DP16/32 T4 Cone-shaft φ31.75 , parallel key 7.96×7.96×25.4	MM 16UNC, 7/16-20UNF 1/2", 5/8" Crosshole Manifold 3×M10, G1/4		Silver grey	

Note: When the table is used , please fill the code of right 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 .



# 专业做液压-专注做精品

PROFESSIONAL ON HYDRAULIC- FOCUS ON HIGH QUALITY



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