

BMK10 Series hydraulic orbit motor



BMK10-Replace with Danfoss Char-Lynn 1000 Series

Parameters

Type		BMK10-345	BMK10-480	BMK10-665	BMK10-940
Displacement		348	479	641	933
Max. speed (Rpm)	cont.	487	354	253	178
	int.	758	553	400	277
Max. torque (N•m)	cont.	1026	1427	1938	2480
	int.	1427	1961	2529	3410
Max.pressure drop (Mpa)	cont.	20	20	20	17.5
	int.	27.5	27.5	26.0	24.0
	peak.	27.5	27.5	27.5	26.0
Max.flow(L/min)	cont.	170	170	170	170
	int.	265	265	265	265
Standard Weight(kg)		43.4	45.9	46.1	47.2

Selection

1	2	3	4
Series	Displacement	Flange	Output shaft
BMK10	345	Code CC: 4- Φ 16.5 Square flange Φ 161.9; PilotΦ127*13.8	Code C: Φ57.15 Straight Shaft Parallel key 12.7*12.7*57 (hole 1/2-20UN)
	480		Code C1: Φ57.15 Straight Shaft Parallel key 12.7*12.7*5 (hole M12)
	665		Code BD: Φ53.975 Splined Shaft Splined 16-DP8/16
	940		
5	6	7	8
Port and drain port	Rotation direction	Paint	Unusually function
SF5: A 1-5/16-12UNF; B 1-5/16-12UNF T1 7/8-14UNF ;T2 9/16-18UNF SF7: A G1 ;B G1; T1 G1/2 ;T2 G1/4 ; SF: A&B Φ29.4 Manifold mount 8×7/16-14UNC ; T1 7/8-14UNF; T2 9/16-18UNF	Omit: Standard Code R: Opposite	Omit: Blue Code 00: No paint Code B: Black Code S: Silver Grey	Omit: Standard

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Performance Data

345 cm³/r (Pressure Mpa)

	1.75	3.5	7	10.5	14	17.5	20	24	27.5
4	70	153							
8	87	177	357	538	718	898			
15	87	177	357	538	718	898	1027	1233	1413
30	84	174	354	535	716	897	1025	1231	1412
45	82	172	353	533	713	894	1023	1230	1410
60	80	170	351	531	711	892	1021	1228	1408
75	77	167	347	528	708	889	1019	1224	1404
90	74	164	345	525	705	886	1015	1221	1402
105	70	160	341	521	701	883	1012	1219	1399
120	67	157	338	518	698	879	1009	1215	1395
135	63	153	333	514	694	875	1005	1211	1392
150	58	148	330	510	691	871	1001	1207	
170	54	143	323	503	683	863	992	1197	
225	482	481	480	479	475	470	463	457	
265	126	306	486	668	848	980			
	637	636	635	632	625	619			
	112	293	473	654	835	966			
	752	750	747	746	739	731			

480 cm³/r (Pressure Mpa)

	1.75	3.5	7	10.5	14	17.5	20	24	27.5
4	87	176	357	531					
8	119	24	404	743	994	1243			
15	119	244	493	742	993	1242	1421	1706	1956
30	117	241	491	741	990	1240	1419	1704	1953
45	113	238	488	738	987	1237	1416	1700	1951
60	110	236	485	734	983	1234	1413	1697	1947
75	106	231	480	731	980	1229	1409	1694	1943
90	102	228	477	728	975	1226	1405	1689	
105	97	222	472	722	971	1221	1401	1685	
120	93	218	215	213	209	206	202	199	
135	87	212	462	711	961	1211	1391		
150	81	206	456	706	955	1205	1385		
170	74	199	448	699	948	1197	1379		
225	469	468	467	464	459	455	451		
265	156	405	655	905	1155	1337			
	552	551	547	542	537	533			

665 cm³/r (Pressure Mpa)

	1.75	3.5	7	10.5	14	17.5	20	24	26
4	162	331	671						
8	163	332	672	1011	1350	1689			
15	162	331	671	1010	1349	1688	1931	2319	2513
30	158	328	667	1007	1347	1685	1928	2316	2509
45	154	324	664	1002	1342	1682	1924	2312	2506
60	149	320	658	998	1338	1677	1920	2304	
75	144	314	653	993	1332	1672	1916		
90	138	308	647	987	1327	1665	1909		
105	132	302	642	980	1320	1660			
120	125	296	634	974	1314	1653			
135	119	288	628	967	1306	1645			
150	111	280	620	960	1298	1638			
170	101	270	610	949	1288	1628			
225	67	236	576	916	1255				
265	410	407	404	400					

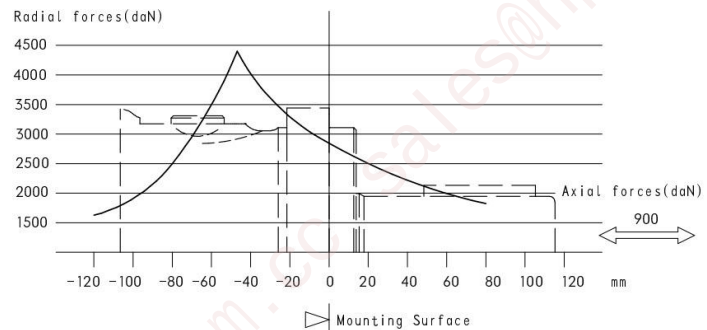
Torque 扭矩 (Nm) 212
Speed 转速 (rpm) 410

cont.
int.

940 cm³/r (Pressure Mpa)

	1.75	3.5	7	10.5	14	17.5	20	24
4	236	484						
8	238	485	982	1478	1975			
15	236	484	980	1477	1974	2469	2824	3393
30	232	480	977	1472	1969	2466		
45	226	474	971	1467	1964	2460		
60	219	467	964	1460	1957			
75	211	459	956	1452	1949			
90	202	451	947	1444	1941			
105	193	442	938	1435	1932			
120	184	432	928	1425				
135	173	422	918	1414				
150	161	410	906	1403				
170	147	396	891	1388				
225	98	346	842	1339				
265	281	280	277	275				

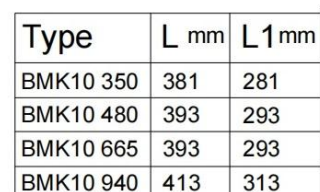
BMK10 Shaft Radial&Axial Forces of CC Mounting



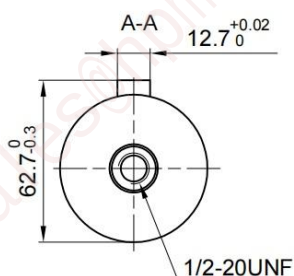
Notice:

The curve on the top means the outputshaft permits radial load in different position.
The table as follow means the speed of motor influence the radial force.

BMK10-X-CC-C-SF7



BMK10-X-CC-BD-SF



Type	L mm	L1 mm
BMK10 350	381	281
BMK10 480	393	293
BMK10 665	393	293
BMK10 940	413	313

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HPM
GROUP

Popular model drawing

BMK10-X-CC-C-SF5

