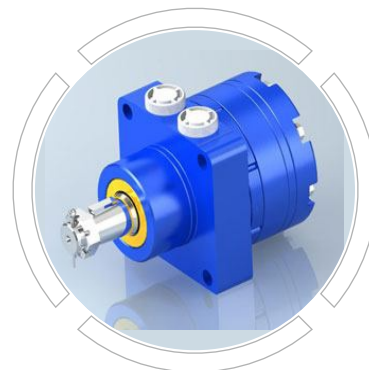


BME Series

Hydraulic Orbital Motor

Displacement: 125 ~750 cc/rev

Maximum Continuous Pressure up to 205 bar



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Introduction

BME series motor has advanced geroler gear set design, they are suited for high pressure high efficiency, low speed applications. It can Keep high volume efficiency, long working life .

Features:

1. Advanced geroler gear set design, low pressure of start-up ,high efficiency.
2. High pressure applications, high torque. has needle bearings design, it can bear high axial and radial forces.
3. Advance high speed distribution flow design, automatically compensate in operating, high volume efficiency, run smoothly at low speed

Technical Specifications:

Type		125	160	200	230	250	300	350	375	475	540	750
Displacement (mL/r)		127	163	200	225	259	295	349	372	473	540	745
Flow (LPM)	Cont.	45	60	70	70	75	80	80	75	75	75	75
	Int.	60	75	85	85	90	95	95	90	90	90	90
Speed (RPM)	Cont.	336	350	330	290	290	250	215	200	150	140	100
	Int.	450	440	425	365	350	315	365	240	180	170	120
Pressure (MPa)	Cont.	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	17.5	14	10.5
	Int.	24	24	24	24	24	24	24	24	19	17.5	12
Torque (Nm)	Cont.	349	470	532	625	700	810	905	990	1110	980	1050
	Int.	408	548	602	710	790	930	1035	1140	1208	1240	1180

Note:

- 1.Continuous data: The Max. Value of operating motor continuously.
- 2.Intermittent Data: The Max. Value of operating motor in 6 seconds per minute.
- 3.A simultaneous max. RPM and max. pressure is not recommended.
- 4.Optimum operating situation should be at the 1/3 ~ 2/3 of the continuous operating situation.



Performance Curve

BME-125 125ml/r

Pressure (MPa)

1.75	3.5	7	10	14	17	20.5	24
------	-----	---	----	----	----	------	----

Flow (LPM)	2	4	8	15	25	34	45	53	60
2	21	51	95	136					
4	14	13	11	7	219				
8	25	54	112	165	219				
15	28	26	24	19	13				
25		56	114	172	224	264	296	338	
34		60	54	50	45	39	35	26	
45		55	116	181	235	277	325	350	
53		115	110	100	96	90	84	76	
60		47	108	165	228	271	322	351	
		194	185	173	168	160	155	149	
			107	164	219	275	313	372	
			276	260	244	232	225	217	
			99	161	213	269	309	368	
			362	350	342	325	322	303	
			89	149	209	264	306		
			123	418	404	399	371		
			80	142	204	259	298		
			488	472	455	442	421		

Torque : 259 N.m
Speed : 442 rpm

BME-160 160ml/r

Pressure (MPa)

1.75	3.5	7	10	14	17	20.5	24
------	-----	---	----	----	----	------	----

Flow (LPM)	2	4	8	15	25	34	45	53	60	68	75
2	36	75	145	216	296						
4	8	4	3	3	2						
8	28	77	155	235	315	369	425				
15	22	19	18	16	14	13	8				
25	35	76	156	235	310	372	450	528			
34	47	44	42	40	37	34	32	27			
45	38	75	155	235	311	367	439	518			
53	93	90	86	84	82	79	75	69			
60		67	151	225	306	365	435	501			
68		155	151	147	142	137	131	124			
75		69	151	225	306	363	435	497			
		214	213	210	204	198	191	184			
		65	145	218	295	359	426	480			
		282	280	275	268	263	256	245			
			134	217	294	356	420	475			
			330	327	322	315	306	296			
			120	205	283	350	418	468			
			379	376	368	362	356	345			
			110	198	271	343	406	468			
			423	419	414	406	395	384			
			103	185	270	336	406	468			
			472	466	460	450	437	424			

BME-200 200ml/r

Pressure (MPa)

1.75	3.5	7	10	14	17	20.5	24
------	-----	---	----	----	----	------	----

Flow (LPM)	2	4	8	15	25	34	45	53	60	68	75	85
2	40	87	130	288	368							
4	8	4	4	3	2							
8	41	86	185	269	362	425	505					
15	16	14	13	11	10	9	6					
25	44	89	194	290	364	450	530	601				
34	35	32	29	28	27	25	23	19				
45	39	91	197	297	379	461	528	601				
53	74	71	68	64	60	58	55	50				
60		83	190	284	375	455	526	603				
68		124	121	117	113	108	103	92				
75		78	184	270	361	445	513	590				
85		170	169	167	160	154	146	135				
			161	260	350	440	512	592				
			223	218	212	208	199	189				
			151	255	349	442	502	580				
			260	258	254	248	241	230				
			131	249	337	431	499	574				
			299	292	284	276	272	263				
			120	231	329	411	485	572				
			336	332	327	319	310	301				
			109	207	313	402	482					
			375	372	365	358	350					
			185	279	378	459						
			425	420	411	390						

BME-230 230ml/r

Pressure (MPa)

1.75	3.5	7	10	14	17	20.5	24
------	-----	---	----	----	----	------	----

Flow (LPM)	2	4	8	15	25	34	45	53	60	68	75	85
2	45	89	179	290	376							
4	6	4	3	2	1							
8	47	99	214	312	402	485	550					
15	15	13	11	11	9	7	3					
25	49	105	211	319	422	516	602	701				
34	31	29	27	25	23	20	16	10				
45	45	105	209	320	428	527	624	710				
53	63	61	58	55	52	47	41	34				
60		100	211	322	430	531	622	704				
68		103	100	96	92	87	81	71				
75		89	207	315	419	523	621	703				
85		145	143	139	133	126	120	109				
			185	295	420	506	560	687				
			192	187	182	176	170	160				
			173	289	392	497	582	677				
			226	221	215	208	203	194				
			153	268	391	484	570	662				
			256	253	248	242	235	222				
			138	264	354	480	564	643				
			292	288	283	278	273	256				
			125	237	345	445	550					
			324	321	344	308	300					
			205	334	446	545						
			366	360	351	338						

□ cont.
■ Int.



Performance Curve

BME-250 250ml/r

Flow (LPM)	Pressure (Mpa)							
	1.75	3.5	7	10	14	17	20.5	24
2	49 5	113 2						
4	55 12	112 11	235 10	360 9	469 8	571 6	463 3	
8	53 27	116 26	242 24	367 22	483 20	585 18	690 14	
15	48 57	110 56	257 54	365 51	488 48	589 45	691 43	796 37
25	44 95	113 93	242 90	362 86	486 82	592 77	701 72	780 63
34		93 129	225 125	350 121	480 116	589 111	688 106	775 96
45		76 174	217 173	347 170	466 166	570 161	675 155	782 143
53		65 203	202 200	323 196	451 190	562 184	659 175	753 175
60			181 232	294 229	440 225	549 220	641 215	739 202
68			159 262	296 261	417 257	549 250	635 241	731 228
75			136 290	273 289	390 388	521 280	615 273	724 260
85			129 328	263 326	372 322	508 316	606 307	
90			84 348	226 347	356 344	488 336		

BME-300 300ml/r

Flow (LPM)	Pressure (Mpa)							
	1.75	3.5	7	10	14	17	20.5	24
2	52 3	92 1						
4	60 11	139 10	265 9	427 8	501 7	615 4		
8	62 22	145 21	295 20	433 19	566 16	670 13	759 9	816 5
15	65 48	142 47	304 45	428 43	571 39	669 33	808 28	895 20
25	61 82	140 81	288 80	419 76	550 71	678 64	788 56	930 44
34	47 113	132 112	299 110	394 107	560 102	688 96	802 86	929 73
45		94 150	267 149	383 148	528 143	635 135	750 127	878 112
53		78 177	240 176	382 175	527 173	630 165	756 152	898 138
60		65 200	223 199	365 198	505 193	629 186	750 174	891 162
68			198 225	330 224	471 222	632 212	751 201	879 194
75			175 251	320 250	465 464	613 240	738 232	871 215
85			138 285	315 284	452 278	569 270	726 257	
95			107 316	258 314	428 311	550 307	702 292	

BME-350 350ml/r

Flow (LPM)	Pressure (Mpa)							
	1.75	3.5	7	10	14	17	20.5	24
2	61 4	134 4						
4	65 10	137 9	289 8	438 7				
8	69 21	145 20	308 20	455 19	390 18	737 16	845 12	
15	74 42	179 41	315 40	470 39	624 37	765 35	878 32	985 26
25	62 70	151 69	312 68	471 66	630 63	763 60	890 55	1017 46
34	54 97	135 96	303 95	456 93	621 89	759 85	902 78	1032 68
45		101 129	263 128	445 127	581 125	734 118	888 112	1029 101
53		87 152	249 150	420 148	567 145	714 139	883 132	1026 118
60		64 171	230 170	407 169	548 167	710 162	840 155	995 143
68			219 195	389 194	544 190	695 185	824 175	978 162
75			208 215	370 214	512 515	677 206	819 197	964 183
85			179 243	356 242	513 239	681 234	809 227	
95				351 272	508 269	647 265		

BME-375 375ml/r

Flow (LPM)	Pressure (Mpa)							
	1.75	3.5	7	10	14	17	20.5	24
2	77 3							
4	82 8	162 8	332 7	486 6	638 5	764 3		
8	81 18	171 17	354 17	526 16	681 14	820 12	946 9	1061 5
15	75 39	160 38	358 37	535 35	685 32	843 29	979 25	1104 18
25	69 65	157 64	349 62	525 59	679 55	854 48	996 44	1135 35
34	57 90	145 89	337 87	509 83	688 77	842 71	991 63	1147 53
45		120 120	304 119	479 117	652 113	811 108	970 100	1136 90
53		93 141	281 140	465 138	627 134	786 128	931 120	1102 105
60		74 161	267 161	426 160	595 158	768 155	923 151	1074 141
68			230 182	424 180	581 176	753 169	904 161	1065 148
75			205 201	378 200	557 556	739 190	866 181	1013 165
85			176 228	371 226	523 221	398 216	835 206	
90			147 242	319 240	502 237	655 226		

□ cont.
■ Int.



Performance Curve

BME-475 475ml/r

		Pressure (MPa)						
		1.75	3.5	7	10	14	17	20.5
Flow (LPM)	2	95 2	184 1					
	4	97 7	203 6	406 5	607 5	805 4		
	8	99 15	208 14	428 13	655 13	846 12	1003 10	1183 8
	15	96 31	204 30	443 28	653 28	876 26	1052 23	1235 20
	25	93 52	203 51	442 48	656 45	874 43	1054 39	1236 35
	34	74 72	183 71	418 68	661 65	848 61	1087 55	1265 44
	45		141 96	381 95	625 93	832 90	1065 84	1264 73
	53		118 113	345 112	574 111	791 107	1006 102	1214 90
	60		81 128	316 128	541 127	788 124	974 119	1184 110
	68		59 146	274 145	519 144	743 141	955 136	1157 125
	75			227 161	482 160	701 702	923 153	1112 140
	85			198 182	456 180	665 177	875 168	
	90			151 194	374 193	614 190	842 182	

BME-540 540ml/r

		Pressure (MPa)					
		1.75	3.5	7	10	14	17
Flow (LPM)	2	106 2	199 2				
	4	127 6	234 5	472 5	685 4	933 4	1135 3
	8	135 13	236 13	495 12	746 11	965 11	1174 8
	15	121 27	231 26	502 26	751 25	979 24	1216 21
	25	102 44	228 43	501 42	776 41	984 39	1218 35
	34	79 62	214 61	483 60	747 58	975 54	1245 49
	45		174 82	435 82	716 81	935 79	1192 75
	53		144 97	419 97	676 96	935 94	1167 89
	60		105 110	378 110	665 109	894 108	1159 106
	68		87 125	356 124	614 124	869 123	1105 120
	75			316 138	601 137	825 826	1102 132
	85			294 154	539 153	782 152	
	90			215 169	485 168	757 168	

BME-750 750ml/r

		Pressure (Mpa)					
		1.75	3.5	7	10	12	14
Flow (LPM)	2	147 2	281 1				
	4	161 4	322 4	656 4	959 3	1113 3	1310 2
	8	163 9	336 9	687 9	1024 8	1157 8	1348 7
	15	155 19	328 19	695 18	1046 18	1186 17	1374 16
	25	143 32	317 31	686 30	1045 30	1180 29	1375 27
	34	112 44	286 44	655 42	1023 41	1167 40	1363 37
	45	70 60	245 59	619 59	985 58	1146 58	1346 55
	53		203 70	564 69	940 68	1102 67	1305 66
	60		141 79	526 78	896 77	1087 76	1287 74
	68		101 90	485 90	853 89	1036 88	1252 87
	75		64 99	423 99	814 98	982 97	1181 96
	83			396 110	744 109	905 108	
	90			295 120	662 119	801 117	

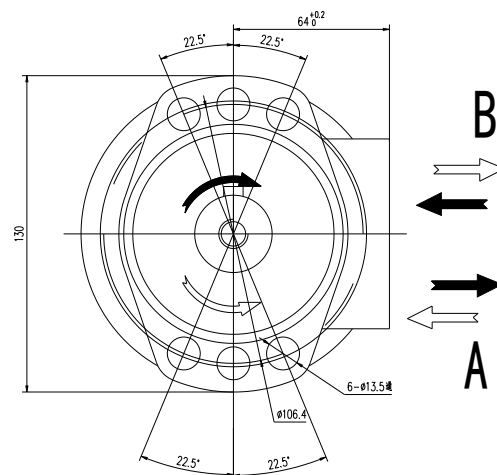
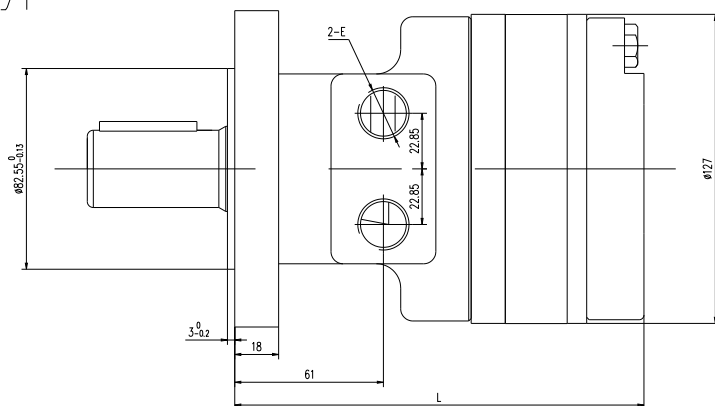
All the datas were tested at 50°C with anti wear hydraulic oil, actual data may vary slightly from unit to unit production.

□ cont.
■ Int.

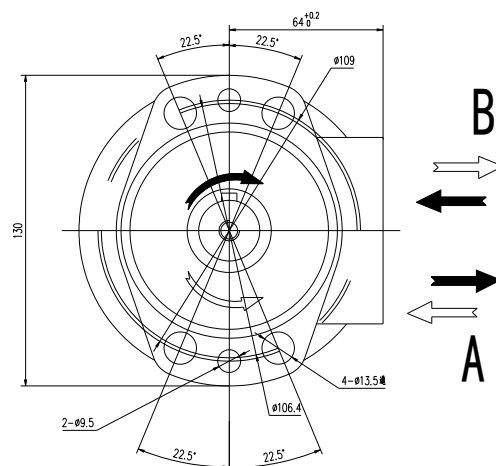
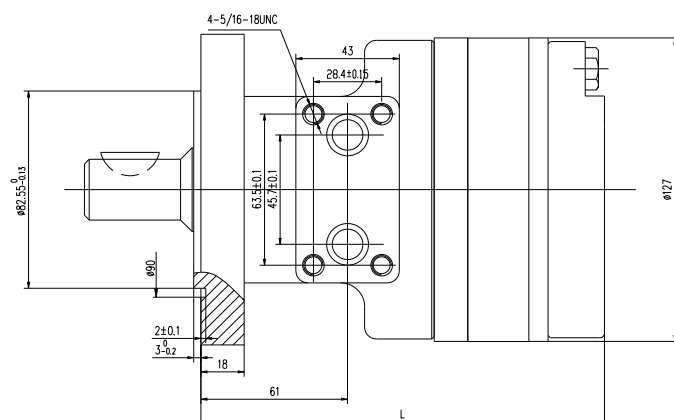


BME Dimension and Mounting Data

Type A



Type B

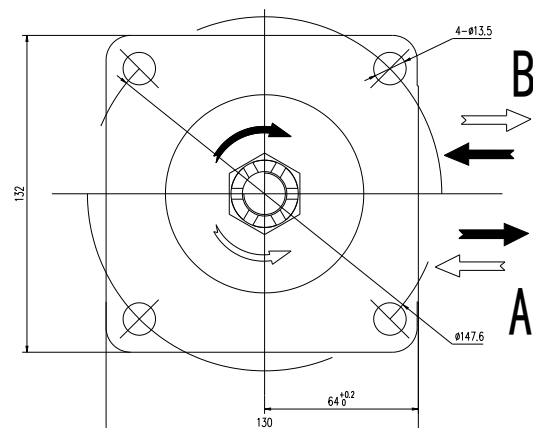
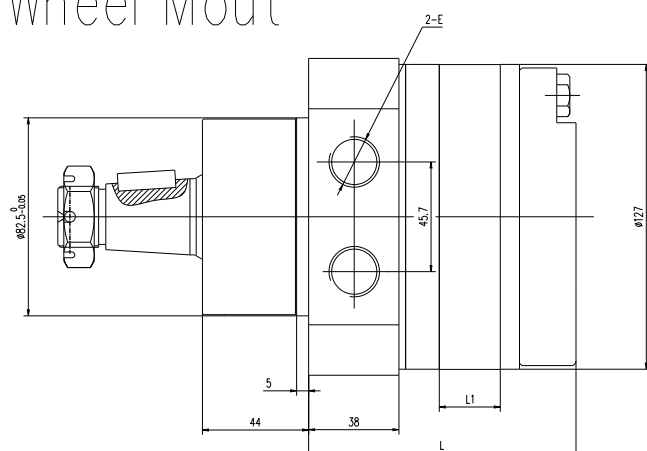


Sizes	125	160	200	230	250	300	350	375	475	540	750
L	154	158	161	163	166	170	174	176	185	191	209



BMEW Dimension and Mounting Data

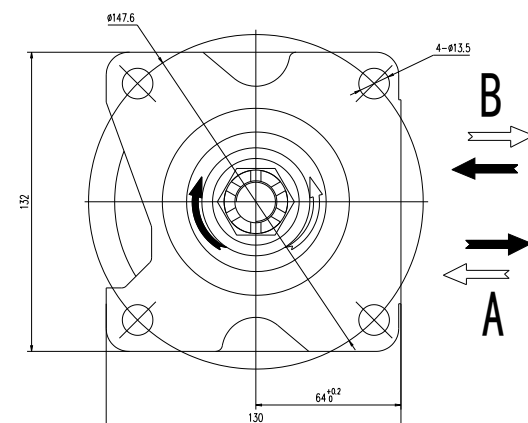
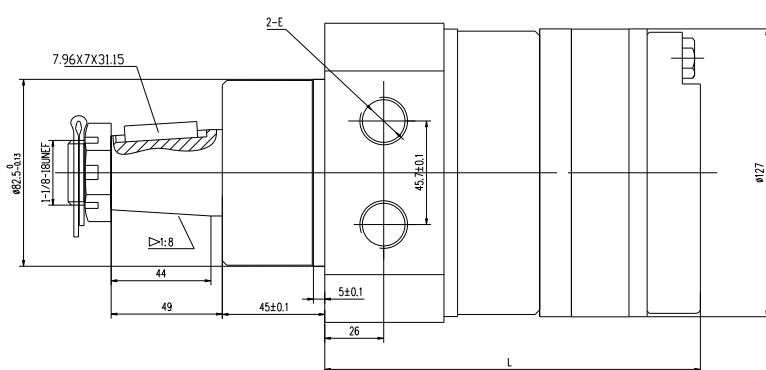
Wheel Mout



Sizes	125	160	200	230	250	300	350	375	475	540	750
L	97	101	104	106	109	112	117	119	128	134	152

BMER Dimension and Mounting Data

Enhanced Wheel Mout

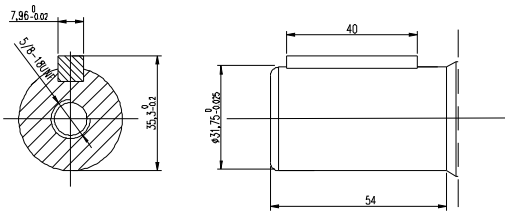


Sizes	125	160	200	230	250	300	350	375	475	540	750
L	151	155	158	160	163	166	171	173	182	188	197



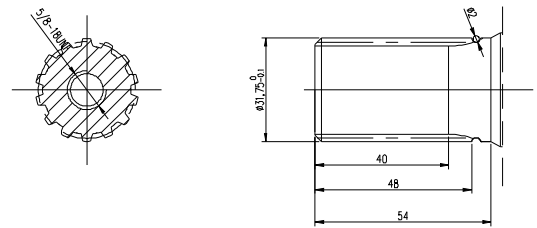
BME dimensions-Shaft

shaft A



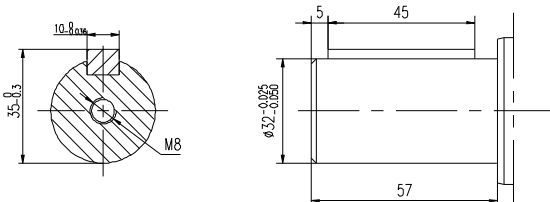
cylinder shaft : $\phi 31.75 \times 54$
parallel key : 7.96X7.96X40
link thread : 5/8-18UNF

shaft B



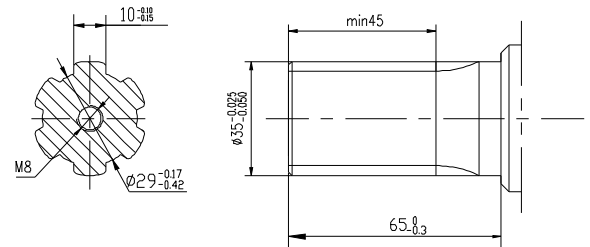
involute spline shaft: $\phi 31.75 \times 54$,
14 teeth, DP12/24 ,
link thread : 5/8-18UNF

shaft C



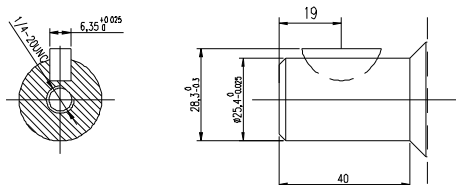
cylinder shaft : $\phi 32 \times 57$
parallel key : 10X8X45
link thread : M8

shaft D



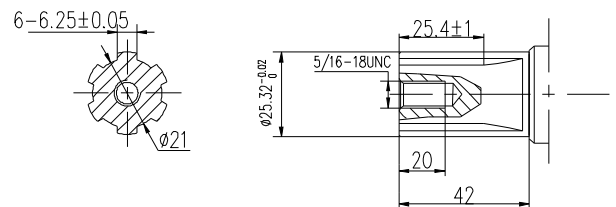
rectangle spline shaft:
 $\phi 35 \times 65$, 6-35X29X10 ,
link thread : M8

shaft E



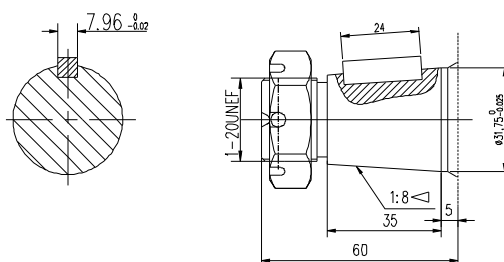
cylinder shaft : $\phi 25.4 \times 39$
woodruff key : $\phi 25.4 \times 6.35$,
link thread : 1/4-20UNC

shaft F



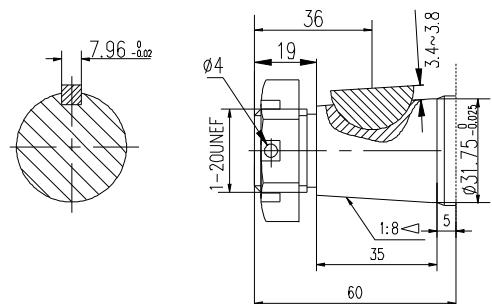
rectangle spline shaft:
 $\phi 25.3 \times 42$, 6-25.3X21X6.25 ,
link thread : 5/16-18UNC

shaft G



cone shaft: $\phi 31.75$,
parallel key : 7.96X7.96X24 ,
link thread : 1-20UNEF
,taper1:8

shaft H



cone shaft: $\phi 31.75$,
woodruff key : $\phi 25.4 \times 7.96$,
link thread : 1-20UNEF
,taper1:8



Ordering code details

pos 1		2		3		4		5		6		7	
Figuration		Displacement (ml/r)		Flange & Pilot (mm)		Shaft & key (mm)		back housing		Oil port		Link thread on port surface	
A	BME	A	125	A	magneto flange, 4-Ø13.5 bolt center space 106.4, pilot Ø82.5X2.8	A	cylinder shaft: Ø31.75X54, parallel key: 7.96X7.96X40, link thread : 5/8 - 18UNF	A	refer to drawing page	A	2- G1/2	A	NONE
		B	160	B	magneto flange, 6-Ø13.5 bolt center space 106.4, pilot Ø82.5X2.8	B	involute spline shaft: Ø 31.75X54, 14teeth, DP12/24, link thread : 5/8 - 18UNF			B	2- 7/8 - 14UNF	B	4- 5/16 - 18UNC
		C	200			C	cylinder shaft: Ø32X57, parallel key: 10X8X45, link thread : M8			C	2- M22X1.5		
B	BMEW	D	230	W	square flange, 4 - Ø13.5 bolt distributing circle Ø147.6 , pilot Ø82.55x5	D	rectangle spline shaft : Ø35X65.2, 6 - 35X29X10 , link thread : M8			D	2- Ø13		
C	BMER	E	250			E	cylinder shaft: Ø25.4X39, woodruffkey: Ø25.4X6.3 5, link thread : 1/4 - 20UNC						
		F	300	R		F	rectangle spline shaft: Ø 25.3X42, 6- 25.3X21X6.25 , link thread : 5/16 - 18UNC						
		G	350			G	cone shaft: Ø 31.75, link thread : 1- 20UNEF , parallel key: 7.96X7.96X24 , taper 1:8						
		H	375			H	cone shaft: Ø 31.75, link thread : 1- 20UNEF , woodruffkey: Ø25.4X7.9 6, taper 1:8						
		I	475										
		J	540										
		K	750										

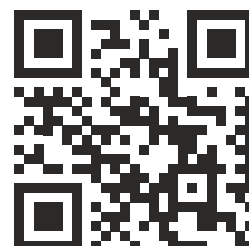


The specified data is for product description purposes only and may not be deemed to be guaranteed unless expressly confirmed in the contract.



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