

怀特驱动产品  
white drive products



**WR**

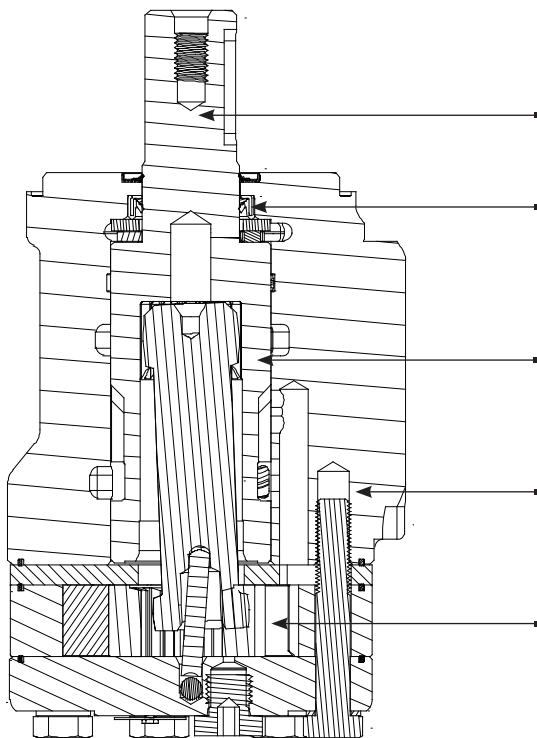
系列液压马达

苏州帕凯德自动化有限公司



## 概述

WR系列马达结合了性能平稳、效率和耐用性方面的最新研究成果，它的突出特点是采用美国White最优良的Roller Stator®的专利设计，带有7个精密滚子，消除滑动摩擦，在转子和定子之间保持滚动接触，从而提高了马达的效率。三段式轴配流，内置单向阀和标准壳体泄油结构减小了内部轴封的压力，提高了产品的寿命。多种安装方式、轴伸、马达排量和油口选项可供选择，适用于所有用途。



## 关键特征

各种安装方式和轴伸选项：可广泛适用于各种工况。

高压轴封：密封寿命长，性能优良。

轴配流设计：性能优良，在很宽的转速和扭矩范围内平稳工作。

内置单向阀：适用于壳体泄油连接，降低壳体压力，延长轴封寿命。

卓越的Roller Stator®专利设计：产品运行高效、平稳。

## 规格

间歇区 - 工作比例最多10% 峰值区 - 工作比例最多1%

代号	排量 cc [in <sup>3</sup> /rev]	最高转速 rpm		最大流量 lpm [gpm]		最大扭矩 Nm [lb-in]		最高压力 bar [psi]		
		连续	间歇	连续	间歇	连续	间歇	连续	间歇	峰值
040	40 [2.5]	1116	1515	45 [12]	61 [16]	93 [823]	123 [1088]	155 [2250]	207 [3000]	224 [3250]
060	59 [3.6]	890	1142	53 [14]	68 [18]	138 [1221]	172 [1522]	155 [2250]	207 [3000]	224 [3250]
070	71 [4.3]	865	1078	61 [16]	76 [20]	176 [1558]	207 [1832]	172 [2500]	207 [3000]	241 [3500]
090	88 [5.4]	691	864	61 [16]	76 [20]	222 [1965]	263 [2327]	172 [2500]	207 [3000]	241 [3500]
100	100 [6.1]	610	760	61 [16]	76 [20]	246 [2177]	289 [2558]	172 [2500]	207 [3000]	241 [3500]
115	113 [6.9]	539	672	61 [16]	76 [20]	284 [2513]	327 [2894]	172 [2500]	207 [3000]	241 [3500]
130	129 [7.9]	472	588	61 [16]	76 [20]	316 [2797]	375 [3319]	172 [2500]	207 [3000]	241 [3500]
160	160 [9.8]	379	469	61 [16]	76 [20]	400 [3540]	454 [4018]	172 [2500]	207 [3000]	241 [3500]
200	198 [12.1]	308	384	61 [16]	76 [20]	462 [4088]	544 [4814]	172 [2500]	207 [3000]	241 [3500]
240	236 [14.4]	249	315	61 [16]	76 [20]	548 [4850]	642 [5682]	172 [2500]	207 [3000]	224 [3250]
320	322 [19.6]	188	235	61 [16]	76 [20]	518 [4584]	690 [6106]	121 [1750]	172 [2500]	190 [2750]
400	400 [24.4]	152	190	61 [16]	76 [20]	551 [4873]	698 [6177]	104 [1500]	138 [2000]	155 [2250]



040

压力 - bars [psi]										最大连续	最大间歇	
17 [250]	35 [500]	52 [750]	69 [1000]	86 [1250]	104 [1500]	121 [1750]	138 [2000]	155 [2250]	172 [2500]	207 [3000]		

40 cc [2.46 in<sup>3</sup>/rev.]

扭矩 - Nm [lb-in], 转速 - rpm 间歇区 - 工作比例最多10%

最大 连续	2 [0.5]	9 [80] 43	20 [177] 40	32 [283] 35	40 [354] 29	37 [327] 24										
	4 [1]	10 [88] 95	21 [186] 91	30 [265] 82	42 [372] 73	52 [460] 62	62 [549] 51									
	8 [2]	9 [80] 188	19 [168] 180	28 [248] 170	41 [363] 160	51 [451] 144	64 [566] 137	72 [637] 126	79 [699] 115	89 [788] 102	99 [876] 88					
	15 [4]	7 [62] 365	18 [159] 355	27 [239] 343	40 [354] 324	49 [434] 312	62 [549] 295	73 [646] 293	83 [735] 275	93 [823] 257	102 [903] 237	121 [1071] 198				
	23 [6]	6 [53] 560	17 [150] 548	26 [230] 532	39 [345] 515	48 [425] 502	61 [540] 485	70 [619] 471	82 [726] 451	90 [796] 432	101 [894] 444	122 [1080] 398				
	30 [8]	6 [53] 728	16 [142] 716	25 [221] 706	37 [327] 684	47 [416] 667	59 [522] 648	68 [602] 634	81 [717] 629	88 [779] 618	99 [876] 601	123 [1088] 545				
	38 [10]	5 [44] 942	14 [124] 936	22 [195] 927	35 [310] 918	45 [398] 904	57 [504] 890	68 [602] 874	78 [690] 852	86 [761] 835	97 [858] 812	118 [1044] 743				
	45 [12]	3 [27] 1116	13 [115] 1113	21 [186] 1100	34 [301] 1082	43 [381] 1056	55 [487] 1028	67 [593] 1004	77 [681] 976	84 [743] 952	95 [841] 916	116 [1027] 870				
	53 [14]		10 [88] 1316	20 [177] 1301	31 [274] 1278	39 [345] 1253	52 [460] 1230	63 [558] 1206	75 [664] 1184	82 [726] 1154	93 [823] 1116	115 [1018] 1078				
	61 [16]		8 [71] 1515	19 [168] 1497	29 [257] 1469	38 [336] 1442	49 [434] 1415	60 [531] 1399	74 [655] 1378	80 [708] 1355	90 [796] 1330	113 [1000] 1298				

50
100
199
373
572
746
945
1119
1318
1517

总效率 - 70 - 100%  40 - 69%  0 - 39%

理论扭矩 - Nm [lb-in]

11 [97]	22 [195]	34 [301]	45 [398]	56 [496]	67 [593]	78 [690]	90 [796]	101 [894]	112 [991]	132 [1167]
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使用 46cSt [213 SUS] 粘度油液在 54°C [129°F] 下试验。

060

压力 - bars [psi]										最大连续	最大间歇	
17 [250]	35 [500]	52 [750]	69 [1000]	86 [1250]	104 [1500]	121 [1750]	138 [2000]	155 [2250]	172 [2500]	207 [3000]		

59 cc [3.6 in<sup>3</sup>/rev.]

扭矩 - Nm [lb-in], 转速 - rpm 间歇区 - 工作比例最多10%

最大 连续	2 [0.5]	12 [106] 28	26 [230] 22	34 [301] 15	45 [398] 12											
	4 [1]	13 [115] 60	29 [257] 56	42 [372] 50	56 [496] 44	62 [549] 33	68 [602] 16									
	8 [2]	14 [124] 134	31 [274] 129	46 [407] 125	58 [513] 118	74 [655] 113	94 [832] 107	110 [974] 97	121 [1071] 87	137 [1212] 73	148 [1310] 58	168 [1487] 50				
	15 [4]	12 [106] 250	30 [266] 245	45 [398] 240	60 [531] 232	75 [664] 225	95 [841] 217	108 [956] 208	122 [1080] 198	138 [1221] 185	150 [1328] 174	170 [1505] 168				
	23 [6]	11 [97] 384	30 [266] 380	44 [389] 376	59 [522] 370	74 [655] 364	93 [823] 356	106 [938] 345	124 [1097] 331	138 [1221] 318	152 [1345] 307	172 [1522] 298				
	30 [8]	10 [89] 502	29 [257] 496	43 [381] 494	58 [513] 490	72 [637] 485	92 [814] 478	104 [920] 468	123 [1089] 460	135 [1195] 450	148 [1310] 438	170 [1505] 431				
	38 [10]	9 [80] 635	28 [248] 632	42 [372] 629	55 [487] 628	70 [620] 619	90 [797] 611	102 [903] 598	121 [1071] 589	133 [1177] 578	146 [1292] 561	168 [1487] 513				
	45 [12]	8 [71] 755	24 [212] 748	39 [345] 745	52 [460] 741	69 [611] 735	87 [770] 729	100 [885] 718	118 [1044] 705	130 [1151] 688	145 [1283] 676	164 [1451] 659				
	53 [14]	6 [53] 890	23 [204] 888	38 [336] 884	48 [425] 880	65 [575] 874	84 [743] 865	98 [867] 852	114 [1009] 840	127 [1124] 831	138 [1221] 820	162 [1434] 802				
	61 [16]		17 [150] 1021	29 [257] 1018	44 [389] 1011	62 [549] 1007	78 [690] 1000	90 [797] 993	106 [938] 984	121 [1071] 974	136 [1204] 962	160 [1416] 956				
68 [18]		10 [89] 1142	26 [230] 1140	40 [354] 1129	57 [504] 1112	73 [646] 1097	86 [761] 1085	102 [903] 1074	115 [1018] 1060	130 [1151] 1044	158 [1398] 1020					

34
67
135
253
387
505
640
758
892
1026
1145

总效率 - 70 - 100%  40 - 69%  0 - 39%

理论扭矩 - Nm [lb-in]

16 [142]	33 [292]	49 [434]	65 [575]	81 [717]	98 [867]	114 [1009]	131 [1150]	147 [1292]	164 [1442]	179 [1584]
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使用 46cSt [213 SUS] 粘度油液在 54°C [129°F] 下试验。



### 070

压力 - bars [psi]										最大连续	最大回歇	
17 [250]	35 [500]	69 [1000]	86 [1250]	104 [1500]	121 [1750]	138 [2000]	155 [2250]	172 [2500]	190 [2750]	207 [3000]		

71 cc [4.3 in<sup>3</sup>/rev.]

扭矩 - Nm [lb-in], 转速 - rpm 间歇区 - 工作比例最多10%

流量 - lpm [gpm]	2 [0.5]	13 [115] 26	30 [266] 23																	28
	4 [1]	14 [124] 55	32 [283] 50	66 [584] 40	73 [646] 34															57
	8 [2]	16 [142] 112	34 [301] 106	70 [620] 94	88 [779] 89	104 [920] 81	120 [1062] 73	134 [1186] 66	149 [1319] 51											113
	15 [4]	15 [133] 211	33 [292] 206	71 [628] 194	87 [770] 186	107 [947] 178	123 [1089] 172	139 [1230] 163	158 [1398] 152	171 [1513] 143	196 [1735] 125	211 [1867] 110								213
	23 [6]	14 [124] 324	31 [274] 319	66 [584] 306	83 [735] 298	104 [920] 288	124 [1097] 280	138 [1221] 270	157 [1389] 260	176 [1558] 248	192 [1699] 232	207 [1832] 221								326
	30 [8]	13 [115] 425	30 [266] 418	67 [593] 403	84 [743] 394	104 [920] 386	123 [1089] 376	137 [1212] 364	159 [1407] 350	174 [1540] 339	193 [1708] 326	203 [1797] 312								426
	38 [10]	10 [89] 539	29 [257] 537	65 [575] 529	82 [726] 520	103 [903] 508	115 [1018] 500	135 [1195] 486	152 [1345] 474	172 [1522] 458	186 [1646] 440	204 [1805] 425								539
	45 [12]	7 [62] 638	25 [221] 634	63 [558] 614	82 [726] 614	98 [867] 604	117 [1035] 594	132 [1168] 578	152 [1345] 566	169 [1496] 552	189 [1673] 538	199 [1761] 522								638
	53 [14]	5 [44] 752	21 [186] 751	58 [513] 743	75 [664] 736	94 [832] 728	115 [1018] 718	131 [1159] 705	147 [1301] 690	167 [1478] 675	187 [1655] 650	204 [1805] 630								752
	61 [16]		17 [150] 865	54 [478] 854	73 [646] 843	91 [805] 831	107 [947] 818	128 [1133] 807	143 [1266] 795	160 [1416] 782	177 [1566] 766	194 [1717] 750								865
68 [18]		16 [142] 965	48 [425] 960	70 [620] 956	88 [779] 945	106 [938] 932	122 [1080] 920	139 [1230] 902	156 [1381] 888	173 [1531] 876	191 [1690] 850								965	
76 [20]		12 [106] 1078	47 [416] 1070	65 [575] 1062	81 [717] 1048	100 [885] 1036	118 [1044] 1014	138 [1221] 1000	152 [1345] 988	173 [1531] 960	189 [1673] 944								1078	

总效率 - 70 - 100%  40 - 69%  0 - 39%

理论扭矩 - Nm [lb-in]

19 [169]	39 [348]	77 [685]	97 [854]	117 [1033]	136 [1202]	155 [1371]	174 [1540]	194 [1719]	213 [1888]	232 [2056]
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使用 46cSt [213 SUS] 粘度油液在 54°C [129°F] 下试验。

### 090

压力 - bars [psi]										最大连续	最大回歇	
17 [250]	35 [500]	69 [1000]	86 [1250]	104 [1500]	121 [1750]	138 [2000]	155 [2250]	172 [2500]	190 [2750]	207 [3000]		

88 cc [5.4 in<sup>3</sup>/rev.]

扭矩 - Nm [lb-in], 转速 - rpm 间歇区 - 工作比例最多10%

流量 - lpm [gpm]	2 [0.5]	18 [159] 23	40 [354] 22	75 [664] 17																23
	4 [1]	20 [177] 45	44 [389] 42	88 [779] 35	112 [991] 31	118 [1044] 27	128 [1133] 21													45
	8 [2]	22 [195] 91	44 [389] 88	87 [770] 81	114 [1009] 77	134 [1186] 72	158 [1398] 68	175 [1549] 60	198 [1752] 52	216 [1912] 42										91
	15 [4]	20 [177] 169	44 [389] 166	88 [779] 160	112 [991] 156	134 [1186] 152	154 [1363] 146	182 [1611] 140	204 [1805] 130	222 [1965] 122	242 [2142] 110	262 [2319] 96								170
	23 [6]	19 [168] 260	40 [354] 257	86 [761] 250	110 [974] 245	131 [1159] 238	152 [1345] 232	176 [1558] 225	196 [1735] 215	218 [1929] 205	242 [2142] 193	263 [2327] 186								260
	30 [8]	17 [150] 339	38 [336] 336	83 [735] 328	108 [956] 324	126 [1115] 318	150 [1327] 308	173 [1531] 300	194 [1717] 292	216 [1912] 280	238 [2106] 270	258 [2283] 258								340
	38 [10]	14 [124] 430	33 [292] 429	77 [681] 426	106 [938] 424	122 [1080] 417	146 [1292] 411	170 [1504] 402	188 [1664] 393	210 [1858] 380	232 [2053] 366	253 [2239] 354								430
	45 [12]	9 [80] 510	30 [265] 508	73 [646] 504	103 [912] 500	120 [1062] 496	145 [1283] 488	164 [1451] 480	184 [1628] 472	206 [1823] 462	228 [2018] 448	246 [2177] 434								510
	53 [14]	5 [44] 601	25 [221] 600	69 [611] 596	97 [856] 594	114 [1009] 591	140 [1239] 586	160 [1416] 578	178 [1575] 566	202 [1788] 552	226 [2000] 540	244 [2159] 528								601
	61 [16]		20 [177] 691	66 [584] 688	90 [797] 684	109 [965] 678	134 [1186] 670	156 [1381] 664	173 [1531] 654	200 [1770] 642	220 [1947] 630	242 [2142] 610								692
68 [18]		16 [142] 772	63 [558] 770	84 [743] 768	105 [929] 766	128 [1133] 764	152 [1345] 754	168 [1487] 742	193 [1708] 722	214 [1894] 712	236 [2088] 700								772	
76 [20]		10 [88] 864	58 [513] 863	79 [699] 858	100 [885] 848	121 [1071] 844	148 [1310] 835	163 [1442] 825	186 [1646] 812	205 [1814] 800	226 [2000] 778								864	

总效率 - 70 - 100%  40 - 69%  0 - 39%

理论扭矩 - Nm [lb-in]

24 [215]	49 [429]	97 [859]	121 [1073]	146 [1288]	170 [1502]	194 [1717]	218 [1932]	243 [2146]	267 [2361]	291 [2576]
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使用 46cSt [213 SUS] 粘度油液在 54°C [129°F] 下试验。



100

压力 - bars [psi]										最大连续	最大间歇	
17 [250]	35 [500]	69 [1000]	86 [1250]	104 [1500]	121 [1750]	138 [2000]	155 [2250]	172 [2500]	190 [2750]	207 [3000]		

100 cc [6.1 in<sup>3</sup>/rev.]

扭矩 - Nm [lb-in], 转速 - rpm 间歇区 - 工作比例最多10%

流量 - lpm [gpm]	2 [0.5]	4 [1]	8 [2]	15 [4]	23 [6]	30 [8]	38 [10]	45 [12]	53 [14]	61 [16]	68 [18]	76 [20]
最大连续												
最大间歇												

18 [159] 17	37 [327] 13	77 [681] 12	91 [805] 11									
26 [230] 38	49 [434] 37	84 [743] 33	106 [938] 31	120 [1062] 29	140 [1239] 15	160 [1416] 7						
25 [221] 80	50 [442] 78	98 [867] 75	125 [1106] 70	150 [1327] 68	175 [1549] 65	199 [1761] 61	189 [1673] 20					
26 [230] 150	46 [407] 148	97 [858] 142	124 [1097] 139	148 [1310] 136	175 [1549] 131	198 [1752] 128	224 [1982] 122	245 [2168] 118	267 [2363] 111	289 [2558] 85		
23 [203] 229	48 [425] 226	96 [850] 210	123 [1088] 218	148 [1310] 215	173 [1531] 212	200 [1770] 208	223 [1973] 201	246 [2177] 197	269 [2381] 189	286 [2531] 162		
21 [186] 296	45 [398] 292	93 [823] 285	121 [1071] 282	146 [1292] 280	168 [1487] 280	195 [1726] 274	221 [1956] 270	244 [2159] 265	265 [2345] 255	284 [2513] 208		
17 [150] 378	41 [363] 375	91 [805] 367	115 [1018] 370	141 [1248] 367	165 [1460] 364	189 [1673] 363	215 [1903] 361	238 [2106] 353	264 [2336] 338	282 [2496] 310		
14 [123] 450	36 [319] 448	89 [788] 442	116 [1027] 438	140 [1239] 433	162 [1434] 426	188 [1664] 420	210 [1858] 412	234 [2071] 404	258 [2283] 390	280 [2478] 355		
12 [106] 528	34 [301] 526	83 [735] 520	109 [965] 518	134 [1186] 514	158 [1389] 508	181 [1602] 500	205 [1814] 490	228 [2017] 480	256 [2265] 468	278 [2460] 440		
10 [88] 610	28 [248] 608	79 [699] 600	103 [912] 596	129 [1142] 590	152 [1345] 582	172 [1522] 576	198 [1752] 568	223 [1973] 556	254 [2248] 542	276 [2443] 525		
6 [53] 680	21 [186] 677	71 [628] 666	94 [832] 660	121 [1071] 653	146 [1292] 645	169 [1496] 635	192 [1699] 624	215 [1903] 610	251 [2221] 610	272 [2407] 574		
	15 [133] 760	63 [558] 754	85 [752] 750	112 [991] 742	133 [1177] 730	160 [1416] 715	185 [1637] 702	202 [1788] 688	248 [2195] 666	267 [2363] 636		

20
40
80
150
230
300
380
450
530
610
680
760

总效率 - 70 - 100%  40 - 69%  0 - 39%

理论扭矩 - Nm [lb-in]

27 [239]	56 [496]	110 [974]	137 [1212]	166 [1469]	193 [1708]	220 [1947]	247 [2186]	275 [2434]	303 [2682]	330 [2921]
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使用 46cSt [213 SUS] 粘度油液在 54°C [129°F] 下试验。

115

压力 - bars [psi]										最大连续	最大间歇	
17 [250]	35 [500]	69 [1000]	86 [1250]	104 [1500]	121 [1750]	138 [2000]	155 [2250]	172 [2500]	190 [2750]	207 [3000]		

113 cc [6.9 in<sup>3</sup>/rev.]

扭矩 - Nm [lb-in], 转速 - rpm 间歇区 - 工作比例最多10%

流量 - lpm [gpm]	2 [0.5]	4 [1]	8 [2]	15 [4]	23 [6]	30 [8]	38 [10]	45 [12]	53 [14]	61 [16]	68 [18]	76 [20]
最大连续												
最大间歇												

23 [204] 17	53 [469] 12											
25 [221] 35	56 [496] 34	95 [841] 30	118 [1044] 19									
25 [221] 70	59 [522] 69	117 [1035] 65	144 [1274] 62	172 [1522] 60	202 [1788] 56							
24 [212] 130	58 [513] 129	112 [991] 127	144 [1274] 125	173 [1531] 122	202 [1788] 117	225 [1991] 114	251 [2221] 108					
22 [195] 200	51 [451] 199	111 [982] 197	140 [1239] 194	171 [1513] 191	201 [1779] 186	224 [1982] 183	251 [2221] 176	284 [2513] 170	307 [2717] 153			
21 [186] 264	53 [469] 262	108 [956] 258	134 [1186] 256	167 [1478] 254	196 [1735] 251	222 [1965] 248	251 [2221] 240	278 [2460] 232	305 [2699] 226	327 [2894] 210		
16 [142] 336	46 [407] 334	105 [929] 330	131 [1159] 326	164 [1451] 323	191 [1690] 318	217 [1920] 312	247 [2186] 306	271 [2398] 300	299 [2646] 292	327 [2894] 281		
12 [106] 397	43 [381] 396	101 [894] 390	132 [1168] 387	161 [1425] 382	187 [1655] 379	218 [1929] 371	239 [2115] 363	269 [2381] 355	290 [2566] 344	319 [2823] 339		
6 [53] 468	35 [310] 464	97 [858] 456	125 [1106] 452	157 [1389] 448	179 [1584] 444	207 [1832] 442	237 [2097] 436	259 [2292] 430	289 [2558] 422	315 [2788] 415		
	34 [301] 539	90 [796] 534	118 [1044] 531	149 [1319] 524	174 [1540] 521	200 [1770] 518	233 [2062] 506	254 [2248] 498	285 [2522] 495	314 [2779] 479		
	29 [257] 601	84 [743] 596	114 [1009] 594	140 [1239] 589	172 [1522] 583	202 [1788] 572	221 [1956] 566	253 [2239] 557	282 [2496] 547	299 [2646] 544		
	17 [150] 672	73 [646] 668	103 [912] 664	132 [1168] 658	161 [1425] 655	186 [1646] 648	214 [1894] 638	240 [2124] 627	266 [2354] 621	293 [2593] 607		

18
35
71
133
204
265
336
398
469
540
602
673

总效率 - 70 - 100%  40 - 69%  0 - 39%

理论扭矩 - Nm [lb-in]

31 [274]	62 [549]	124 [1097]	155 [1372]	186 [1646]	217 [1920]	248 [2195]	279 [2469]	310 [2743]	341 [3018]	372 [3292]
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使用 46cSt [213 SUS] 粘度油液在 54°C [129°F] 下试验。





## 性能

<b>130</b>	压力 - bars [psi]										最大连续	最大间歇	
	17 [250]	35 [500]	69 [1000]	86 [1250]	104 [1500]	121 [1750]	138 [2000]	155 [2250]	172 [2500]	190 [2750]	207 [3000]		
129 cc [7.9 in <sup>3</sup> /rev.]													
流量 - lpm [gpm]	扭矩 - Nm [lb-in], 转速 - rpm										间歇区 - 工作比例最多10%		
	2 [0.5]	34 [301] 15	60 [531] 6										15
	4 [1]	32 [283] 30	64 [566] 29	124 [1097] 18	140 [1239] 10	185 [1637] 6							30
	8 [2]	31 [274] 59	65 [575] 58	126 [1115] 51	144 [1274] 46	198 [1752] 38	223 [1974] 24	248 [2195] 10					59
	15 [4]	31 [274] 115	66 [584] 112	130 [1151] 106	164 [1451] 102	195 [1726] 97	221 [1956] 92	255 [2257] 86	285 [2522] 80	312 [2761] 74	345 [3053] 66		118
	23 [6]	30 [266] 177	65 [575] 175	130 [1151] 167	162 [1434] 163	196 [1735] 157	230 [2036] 152	265 [2345] 142	289 [2558] 138	316 [2797] 132	352 [3115] 121	375 [3319] 114	177
	30 [8]	28 [248] 232	64 [566] 227	128 [1133] 218	157 [1389] 213	192 [1699] 208	223 [1974] 200	259 [2292] 189	284 [2513] 184	313 [2770] 176	343 [3036] 168	374 [3310] 162	235
	38 [10]	20 [177] 294	60 [531] 289	125 [1106] 280	157 [1389] 275	188 [1664] 268	222 [1965] 260	254 [2248] 251	282 [2496] 243	313 [2770] 234	349 [3089] 221	370 [3275] 214	294
	45 [12]	15 [133] 353	55 [487] 351	120 [1062] 343	152 [1345] 338	186 [1646] 331	216 [1912] 321	244 [2159] 311	281 [2487] 299	307 [2717] 289	341 [3018] 277	369 [3266] 264	353
	53 [14]	13 [115] 411	47 [416] 408	117 [1035] 398	150 [1328] 392	181 [1602] 386	212 [1876] 378	247 [2186] 366	273 [2416] 357	310 [2744] 347	335 [2965] 335	363 [3213] 325	411
	61 [16]	7 [62] 472	42 [372] 470	106 [938] 465	140 [1239] 462	170 [1505] 456	207 [1832] 447	239 [2115] 435	265 [2345] 426	296 [2620] 409	328 [2903] 396	361 [3195] 388	472
	68 [18]		36 [319] 529	102 [903] 522	132 [1168] 517	166 [1469] 507	198 [1752] 500	224 [1982] 489	262 [2319] 482	292 [2584] 468	323 [2859] 445	351 [3106] 430	529
76 [20]		32 [283] 588	94 [832] 585	123 [1089] 580	158 [1398] 570	190 [1682] 562	219 [1938] 550	254 [2248] 535	282 [2496] 520	308 [2726] 510	347 [3071] 490	588	
总效率 - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/>													
理论扭矩 - Nm [lb-in]													
	35 [310]	71 [628]	142 [1257]	177 [1566]	212 [1876]	248 [2195]	283 [2504]	318 [2814]	354 [3133]	389 [3442]	425 [3761]		

使用 46cSt [213 SUS]粘度油液在 54°C [129°F]下试验。

<b>160</b>	压力 - bars [psi]										最大连续	最大间歇	
	17 [250]	35 [500]	69 [1000]	86 [1250]	104 [1500]	121 [1750]	138 [2000]	155 [2250]	172 [2500]	190 [2750]	207 [3000]		
160 cc [9.8 in <sup>3</sup> /rev.]													
流量 - lpm [gpm]	扭矩 - Nm [lb-in], 转速 - rpm										间歇区 - 工作比例最多10%		
	2 [0.5]	30 [266] 12	66 [584] 11	109 [965] 5									13
	4 [1]	32 [283] 24	70 [620] 23	136 [1204] 21	164 [1451] 20	182 [1611] 14	250 [2213] 6						25
	8 [2]	38 [336] 48	76 [673] 47	157 [1389] 42	181 [1602] 38	202 [1788] 34	265 [2345] 28	290 [2567] 22					50
	15 [4]	39 [345] 92	78 [690] 89	166 [1469] 84	205 [1814] 82	242 [2142] 77	275 [2434] 73	317 [2805] 70	358 [3169] 67	400 [3540] 62			94
	23 [6]	40 [354] 140	79 [699] 137	160 [1416] 132	203 [1797] 128	246 [2177] 123	290 [2567] 118	320 [2832] 114	354 [3133] 110	396 [3505] 106	404 [3575] 100	440 [3894] 94	144
	30 [8]	34 [301] 184	73 [646] 178	164 [1451] 172	200 [1770] 170	245 [2168] 164	288 [2549] 160	316 [2797] 152	350 [3098] 147	388 [3434] 142	428 [3788] 134	448 [3965] 129	188
	38 [10]	32 [283] 235	72 [637] 230	156 [1381] 222	196 [1735] 218	240 [2124] 212	282 [2496] 208	312 [2761] 200	347 [3071] 192	389 [3443] 184	422 [3735] 178	454 [4018] 172	238
	45 [12]	24 [212] 278	70 [620] 272	151 [1336] 264	192 [1699] 259	236 [2089] 253	278 [2460] 247	310 [2744] 242	344 [3044] 235	382 [3381] 227	419 [3708] 216	450 [3983] 210	281
	53 [14]	20 [177] 327	60 [531] 322	144 [1274] 312	186 [1646] 306	232 [2053] 300	266 [2354] 295	306 [2708] 289	338 [2991] 281	374 [3310] 276	420 [3717] 267	448 [3965] 258	331
	61 [16]	12 [106] 379	52 [460] 374	134 [1186] 360	178 [1575] 355	218 [1929] 350	254 [2248] 342	297 [2628] 338	334 [2956] 333	371 [3283] 323	401 [3549] 316	442 [3912] 308	381
	68 [18]		46 [407] 420	130 [1151] 409	171 [1513] 400	215 [1903] 394	248 [2195] 387	291 [2575] 380	326 [2885] 374	361 [3195] 368	393 [3478] 358	428 [3788] 346	425
76 [20]		38 [336] 469	120 [1062] 453	162 [1434] 448	199 [1760] 442	240 [2124] 435	278 [2460] 428	324 [2867] 421	357 [3159] 412	390 [3452] 401	425 [3761] 392	475	
总效率 - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/>													
理论扭矩 - Nm [lb-in]													
	43 [383]	89 [789]	176 [1556]	219 [1939]	265 [2345]	308 [2728]	352 [3111]	395 [3495]	441 [3901]	484 [4284]	527 [4667]		

使用 46cSt [213 SUS]粘度油液在 54°C [129°F]下试验。



200

压力 - bars [psi]										最大连续	最大间歇	
17 [250]	35 [500]	69 [1000]	86 [1250]	104 [1500]	121 [1750]	138 [2000]	155 [2250]	172 [2500]	190 [2750]	207 [3000]		

198 cc [12.1 in<sup>3</sup>/rev.]

扭矩 - Nm [lb-in], 转速 - rpm 间歇区 - 工作比例最多10%

流量 - lpm [gpm]	2 [0.5]	4 [1]	8 [2]	15 [4]	23 [6]	30 [8]	38 [10]	45 [12]	53 [14]	61 [16]	68 [18]	76 [20]	10	20	40	76	116	152	192	227	268	308	343	384
最大连续	38 [336] 10	87 [770] 8	172 [1522] 6	201 [1779] 5	244 [2159] 9	295 [2611] 6	328 [2903] 3	417 [3690] 22	428 [3788] 17	498 [4407] 50	544 [4814] 40	544 [4814] 78	10	20	40	76	116	152	192	227	268	308	343	384
最大间歇	47 [416] 20	103 [912] 19	164 [1451] 14	201 [1779] 12	286 [2531] 34	330 [2920] 28	372 [3292] 25	417 [3690] 22	428 [3788] 17	461 [4080] 52	498 [4407] 50	544 [4814] 40	10	20	40	76	116	152	192	227	268	308	343	384
2 [0.5]	47 [416] 20	103 [912] 19	164 [1451] 14	201 [1779] 12	286 [2531] 34	330 [2920] 28	372 [3292] 25	417 [3690] 22	428 [3788] 17	461 [4080] 52	498 [4407] 50	544 [4814] 40	10	20	40	76	116	152	192	227	268	308	343	384
4 [1]	46 [407] 39	96 [850] 38	192 [1699] 36	241 [2133] 35	286 [2531] 34	330 [2920] 28	372 [3292] 25	417 [3690] 22	428 [3788] 17	461 [4080] 52	498 [4407] 50	544 [4814] 40	10	20	40	76	116	152	192	227	268	308	343	384
8 [2]	44 [389] 75	95 [841] 73	194 [1717] 70	241 [2133] 68	286 [2531] 65	333 [2947] 63	376 [3319] 59	419 [3708] 57	461 [4080] 52	498 [4407] 50	544 [4814] 40	544 [4814] 78	10	20	40	76	116	152	192	227	268	308	343	384
15 [4]	40 [354] 113	92 [814] 111	192 [1699] 109	240 [2124] 106	288 [2549] 103	333 [2947] 99	375 [3319] 96	421 [3726] 94	461 [4080] 89	505 [4469] 84	544 [4814] 78	544 [4814] 78	10	20	40	76	116	152	192	227	268	308	343	384
23 [6]	33 [292] 150	87 [770] 147	187 [1655] 142	236 [2088] 140	284 [2513] 135	330 [2920] 131	374 [3327] 126	421 [3726] 124	462 [4088] 117	504 [4460] 112	542 [4796] 106	542 [4796] 106	10	20	40	76	116	152	192	227	268	308	343	384
30 [8]	23 [204] 192	80 [708] 190	180 [1593] 185	230 [2035] 182	278 [2460] 177	325 [2876] 172	371 [3283] 167	415 [3673] 160	459 [4062] 154	498 [4407] 146	540 [4779] 140	540 [4779] 140	10	20	40	76	116	152	192	227	268	308	343	384
38 [10]	21 [186] 227	73 [646] 226	173 [1531] 221	223 [1973] 219	271 [2398] 212	318 [2814] 207	364 [3221] 201	409 [3619] 194	453 [4009] 186	491 [4345] 179	533 [4717] 174	533 [4717] 174	10	20	40	76	116	152	192	227	268	308	343	384
45 [12]	10 [88] 268	64 [566] 266	165 [1460] 260	214 [1894] 256	262 [2319] 251	309 [2735] 245	356 [3150] 240	400 [3540] 233	444 [3929] 227	483 [4274] 217	525 [4646] 210	525 [4646] 210	10	20	40	76	116	152	192	227	268	308	343	384
53 [14]	55 [487] 308	155 [1372] 300	204 [1805] 298	253 [2239] 291	300 [2655] 286	346 [3062] 279	391 [3460] 271	434 [3841] 264	472 [4177] 255	514 [4549] 248	514 [4549] 248	514 [4549] 248	10	20	40	76	116	152	192	227	268	308	343	384
61 [16]	46 [407] 343	143 [1265] 332	191 [1690] 330	240 [2124] 322	287 [2540] 316	332 [2938] 310	377 [3336] 302	420 [3717] 302	457 [4044] 296	484 [4283] 286	484 [4283] 286	484 [4283] 286	10	20	40	76	116	152	192	227	268	308	343	384
68 [18]	30 [265] 384	130 [1150] 374	179 [1584] 367	227 [2009] 363	275 [2434] 355	321 [2841] 349	365 [3230] 343	409 [3619] 333	430 [3805] 324	468 [4142] 314	468 [4142] 314	468 [4142] 314	10	20	40	76	116	152	192	227	268	308	343	384
76 [20]	30 [265] 384	130 [1150] 374	179 [1584] 367	227 [2009] 363	275 [2434] 355	321 [2841] 349	365 [3230] 343	409 [3619] 333	430 [3805] 324	468 [4142] 314	468 [4142] 314	468 [4142] 314	10	20	40	76	116	152	192	227	268	308	343	384

总效率 - 70 - 100% 40 - 69% 0 - 39%

理论扭矩 - Nm [lb-in]

54 [481]	109 [963]	218 [1929]	272 [2407]	326 [2888]	381 [3369]	435 [3850]	489 [4332]	544 [4813]	598 [5294]	653 [5776]
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使用 46cSt [213 SUS] 粘度油液在 54°C [129°F] 下试验。

240

压力 - bars [psi]										最大连续	最大间歇	
17 [250]	35 [500]	69 [1000]	86 [1250]	104 [1500]	121 [1750]	138 [2000]	155 [2250]	172 [2500]	190 [2750]	207 [3000]		

236 cc [14.4 in<sup>3</sup>/rev.]

扭矩 - Nm [lb-in], 转速 - rpm 间歇区 - 工作比例最多10%

流量 - lpm [gpm]	2 [0.5]	4 [1]	8 [2]	15 [4]	23 [6]	30 [8]	38 [10]	45 [12]	53 [14]	61 [16]	68 [18]	76 [20]	8	16	32	63	95	126	158	189	220	252	283	315
最大连续	47 [416] 7	98 [867] 6	197 [1743] 3	247 [2186] 3	310 [2717] 7	354 [3133] 4	404 [3575] 4	469 [4151] 11	511 [4522] 8	582 [5151] 8	638 [5646] 28	638 [5646] 28	8	16	32	63	95	126	158	189	220	252	283	315
最大间歇	50 [443] 14	105 [929] 13	210 [1859] 11	260 [2301] 9	310 [2717] 7	354 [3133] 4	404 [3575] 4	469 [4151] 11	511 [4522] 8	582 [5151] 8	638 [5646] 28	638 [5646] 28	8	16	32	63	95	126	158	189	220	252	283	315
2 [0.5]	50 [443] 14	105 [929] 13	210 [1859] 11	260 [2301] 9	310 [2717] 7	354 [3133] 4	404 [3575] 4	469 [4151] 11	511 [4522] 8	582 [5151] 8	638 [5646] 28	638 [5646] 28	8	16	32	63	95	126	158	189	220	252	283	315
4 [1]	53 [469] 29	111 [982] 26	224 [1982] 26	277 [2451] 24	329 [2894] 21	377 [3336] 19	424 [3752] 16	469 [4151] 11	511 [4522] 8	582 [5151] 8	638 [5646] 28	638 [5646] 28	8	16	32	63	95	126	158	189	220	252	283	315
8 [2]	52 [460] 60	114 [1000] 59	236 [2062] 56	290 [2575] 53	346 [3062] 50	399 [3531] 47	449 [3974] 44	496 [4390] 40	541 [4788] 36	598 [5292] 33	638 [5646] 28	638 [5646] 28	8	16	32	63	95	126	158	189	220	252	283	315
15 [4]	47 [416] 93	109 [956] 91	227 [2009] 88	285 [2522] 85	342 [3027] 81	397 [3513] 77	449 [3974] 71	500 [4425] 66	548 [4850] 60	595 [5266] 55	642 [5682] 52	642 [5682] 52	8	16	32	63	95	126	158	189	220	252	283	315
23 [6]	42 [372] 125	104 [903] 123	221 [1956] 119	280 [2469] 116	336 [2974] 111	391 [3460] 106	445 [3938] 100	497 [4398] 93	547 [4841] 87	592 [5248] 79	640 [5664] 73	640 [5664] 73	8	16	32	63	95	126	158	189	220	252	283	315
30 [8]	35 [310] 158	95 [832] 155	213 [1885] 150	272 [2398] 147	328 [2903] 142	384 [3398] 137	437 [3867] 131	489 [4328] 123	541 [4788] 115	587 [5195] 106	635 [5620] 99	635 [5620] 99	8	16	32	63	95	126	158	189	220	252	283	315
38 [10]	23 [204] 189	85 [752] 186	203 [1797] 182	262 [2319] 178	319 [2823] 174	375 [3319] 168	428 [3788] 160	480 [4248] 153	531 [4699] 145	575 [5089] 134	623 [5514] 125	623 [5514] 125	8	16	32	63	95	126	158	189	220	252	283	315
45 [12]	75 [655] 218	192 [1699] 214	250 [2213] 210	308 [2726] 205	365 [3310] 201	418 [3699] 191	470 [4160] 183	520 [4602] 174	564 [4991] 164	611 [5407] 154	611 [5407] 154	611 [5407] 154	8	16	32	63	95	126	158	189	220	252	283	315
53 [14]	68 [593] 249	180 [1593] 245	238 [2106] 242	295 [2611] 236	350 [3106] 230	405 [3584] 222	458 [4053] 215	510 [4496] 205	551 [4876] 195	600 [5310] 184	600 [5310] 184	600 [5310] 184	8	16	32	63	95	126	158	189	220	252	283	315
61 [16]	56 [487] 279	165 [1460] 273	221 [1956] 270	281 [2469] 267	335 [2965] 260	388 [3434] 251	440 [3894] 241	490 [4337] 231	545 [4797] 221	590 [5222] 208	590 [5222] 208	590 [5222] 208	8	16	32	63	95	126	158	189	220	252	283	315
68 [18]	40 [354] 315	154 [1345] 307	210 [1841] 303	264 [2336] 295	320 [2832] 290	376 [3310] 282	428 [3770] 272	480 [4221] 261	530 [4691] 250	580 [5133] 238	580 [5133] 238	580 [5133] 238	8	16	32	63	95	126	158	189	220	252	283	315
76 [20]	40 [354] 315	154 [1345] 307	210 [1841] 303	264 [2336] 295	320 [2832] 290	376 [3310] 282	428 [3770] 272	480 [4221] 261	530 [4691] 250	580 [5133] 238	580 [5133] 238	580 [5133] 238	8	16	32	63	95	126	158	189	220	252	283	315

总效率 - 70 - 100% 40 - 69% 0 - 39%

理论扭矩 - Nm [lb-in]

66 [584]	132 [1168]	265 [2345]	331 [2929]	397 [3513]	463 [4097]	529 [4681]	595 [5265]	661 [5850]	728 [6442]	794 [7027]
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使用 46cSt [213 SUS] 粘度油液在 54°C [129°F] 下试验。



### 320

压力 - bars [psi]		最大连续					最大间歇		
17 [250]	35 [500]	52 [750]	69 [1000]	86 [1250]	104 [1500]	121 [1750]	138 [2000]	155 [2250]	172 [2500]

322 cc [19.6 in<sup>3</sup>/rev.]

扭矩 - Nm [lb-in], 转速 - rpm 间歇区 - 工作比例最多10%

流量 - lpm [gpm]	2 [0.5]
	4 [1]
	8 [2]
	15 [4]
	23 [6]
	30 [8]
	38 [10]
	45 [12]
	53 [14]
最大连续	61 [16]
	68 [18]
最大间歇	76 [20]

60 [531]	134 [1186]	189 [1673]	238 [2106]						
6	5	5	4						
70 [619]	140 [1239]	239 [2115]	276 [2442]	324 [2867]	393 [3478]	403 [3566]			
12	11	10	9	6	4	2			
73 [646]	154 [1363]	233 [2062]	291 [2575]	333 [2947]	425 [3761]	487 [4310]	545 [4823]	621 [5496]	659 [5832]
24	22	20	19	17	16	13	11	6	2
79 [699]	152 [1345]	235 [2080]	311 [2752]	385 [3407]	452 [4000]	518 [4584]	555 [4912]	641 [5673]	690 [6106]
46	45	44	43	41	38	35	32	28	24
68 [602]	150 [1328]	227 [2009]	295 [2611]	378 [3345]	443 [3920]	512 [4531]	578 [5115]	621 [5496]	686 [6071]
70	69	68	66	63	58	53	49	47	43
56 [496]	145 [1283]	218 [1929]	286 [2531]	356 [3150]	436 [3858]	506 [4478]	560 [4956]	614 [5434]	665 [5885]
93	92	89	86	82	77	73	67	63	59
54 [478]	140 [1239]	202 [1788]	273 [2416]	348 [3080]	427 [3779]	501 [4434]	557 [4929]	604 [5345]	664 [5876]
118	117	115	113	110	104	98	91	85	77
38 [336]	134 [1186]	192 [1681]	260 [2301]	336 [2973]	409 [3619]	476 [4212]	542 [4796]	601 [5319]	642 [5681]
140	138	136	134	130	124	117	110	103	97
22 [195]	122 [1080]	173 [1531]	255 [2257]	323 [2858]	391 [3460]	451 [3991]	521 [4611]	582 [5150]	630 [5575]
165	163	161	158	154	147	141	134	126	118
11 [97]	105 [930]	157 [1389]	229 [2027]	298 [2637]	376 [3327]	440 [3894]	503 [4451]	557 [4929]	618 [5469]
188	186	184	182	177	170	162	155	147	138
	88 [779]	144 [1274]	220 [1947]	285 [2522]	356 [3150]	424 [3752]	487 [4310]	549 [4858]	602 [5327]
	210	208	204	197	190	181	173	165	156
	70 [620]	126 [1062]	190 [1681]	262 [2319]	335 [2965]	410 [3628]	463 [4097]	528 [4673]	586 [5186]
	235	233	230	226	218	209	202	193	185

理论转速 - rpm	6
	12
	25
	47
	71
	93
	118
	140
	165
	189
	211
	236

总效率 - 70 - 100%  40 - 69%  0 - 39%

理论扭矩 - Nm [lb-in]

87 [770]	177 [1566]	267 [2362]	354 [3132]	441 [3903]	533 [4717]	620 [5487]	708 [6265]	795 [7035]	887 [7850]
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使用 46cSt [213 SUS]粘度油液在 54°C [129°F]下试验。

### 400

压力 - bars [psi]		最大连续					最大间歇	
17 [250]	35 [500]	52 [750]	69 [1000]	86 [1250]	104 [1500]	121 [1750]	138 [2000]	

400 cc [24.4 in<sup>3</sup>/rev.]

扭矩 - Nm [lb-in], 转速 - rpm 间歇区 - 工作比例最多10%

流量 - lpm [gpm]	2 [0.5]
	4 [1]
	8 [2]
	15 [4]
	23 [6]
	30 [8]
	38 [10]
	45 [12]
	53 [14]
最大连续	61 [16]
	68 [18]
最大间歇	76 [20]

82 [723]	165 [1459]	250 [2213]	329 [2912]	418 [3699]					
5	4	3	2	2					
86 [761]	175 [1549]	262 [2317]	345 [3053]	427 [3779]	497 [4398]	577 [5106]	660 [5841]		
10	9	8	7	6	4	3	2		
89 [791]	191 [1690]	284 [2513]	364 [3219]	448 [3962]	502 [4443]	606 [5363]	682 [6036]		
20	19	18	17	15	13	11	8		
87 [771]	189 [1673]	277 [2451]	378 [3346]	467 [4135]	529 [4679]	629 [5569]	698 [6177]		
38	37	36	34	33	32	28	25		
79 [703]	185 [1637]	271 [2398]	373 [3305]	464 [4110]	551 [4873]	631 [5584]	696 [6159]		
58	56	55	53	50	49	46	44		
70 [620]	176 [1558]	260 [2301]	364 [3217]	455 [4025]	550 [4868]	623 [5515]	676 [5982]		
75	73	71	69	66	63	60	58		
59 [523]	159 [1407]	239 [2115]	351 [3106]	442 [3913]	541 [4787]	611 [5410]	663 [5864]		
95	93	92	87	84	81	78	75		
52 [460]	145 [1283]	233 [2062]	335 [2968]	430 [3806]	529 [4684]	595 [5269]	645 [5705]		
113	111	108	105	103	96	91	88		
46 [404]	138 [1221]	215 [1903]	318 [2813]	409 [3622]	513 [4543]	578 [5115]	624 [5522]		
133	131	127	126	121	114	109	104		
	113 [1000]	191 [1690]	298 [2641]	390 [3448]	496 [4393]	560 [4959]	606 [5364]		
	152	147	145	139	130	127	121		
	96 [850]	178 [1575]	263 [2328]	365 [3230]	478 [4228]	517 [4572]	580 [5133]		
	170	164	163	156	146	142	137		
	74 [655]	150 [1327]	240 [2122]	342 [3027]	436 [3855]	493 [4365]	560 [4956]		
	190	185	180	174	165	160	156		

理论转速 - rpm	5
	10
	20
	38
	58
	75
	95
	113
	133
	153
	170
	190

总效率 - 70 - 100%  40 - 69%  0 - 39%

理论扭矩 - Nm [lb-in]

112 [992]	224 [1984]	336 [2976]	448 [3968]	560 [4960]	673 [5952]	785 [6944]	897 [7935]
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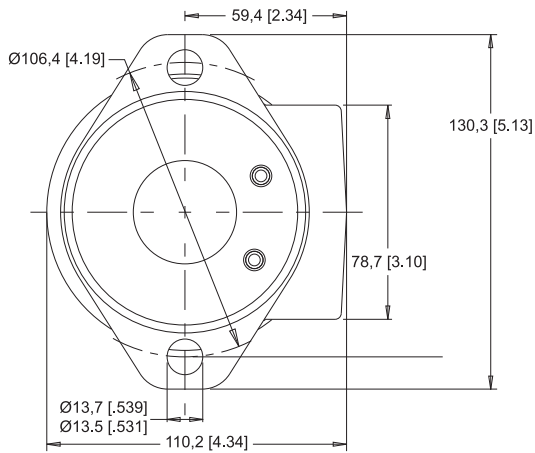
使用 46cSt [213 SUS]粘度油液在 54°C [129°F]下试验。



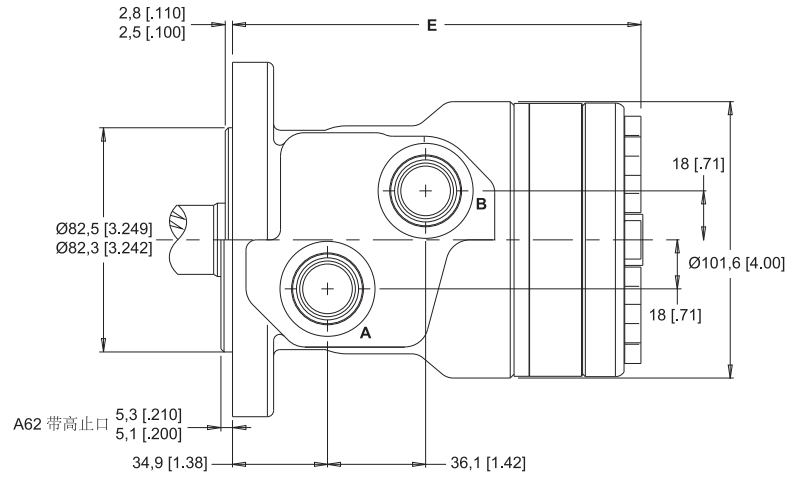


255 & 256 系列壳体 (SAE A 法兰)

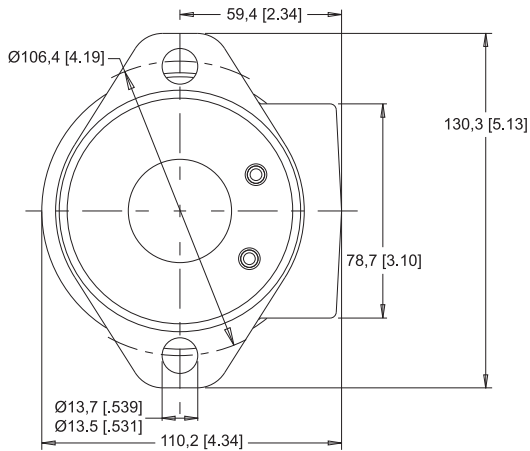
**A12** 2-孔法兰, 偏置油口 1/2"



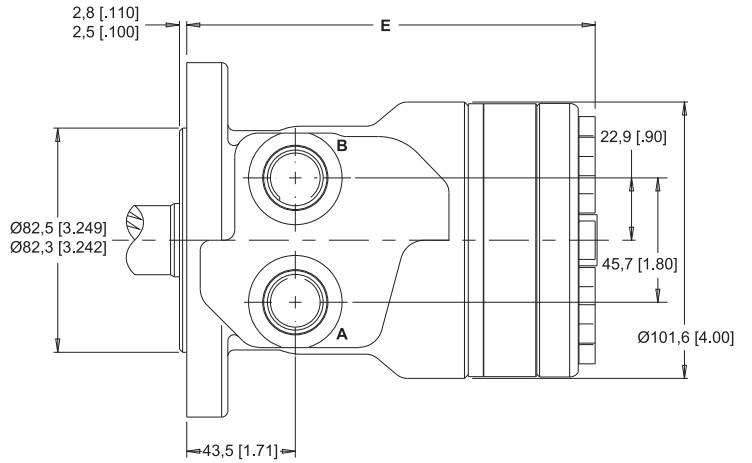
**A62** 2-孔法兰, 偏置油口 1/2" BSP.F



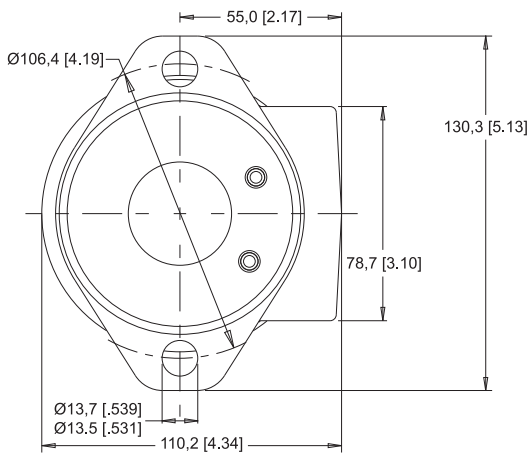
**A10** 2-孔法兰, 平行油口 1/2" NPT



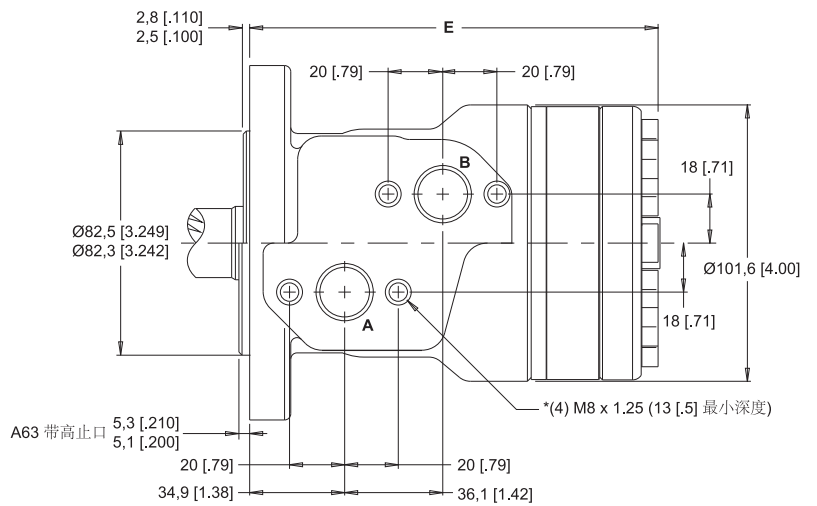
**A11** 2-孔法兰, 平行油口 7/8" O-形圈



**A13** 2-孔法兰, 偏置油口 1/2" BSP.F



**A1D** 2-孔法兰, 偏置油口 7/8" O-形圈



**A63** 2-孔法兰, 偏置油口 1/2" BSP.F

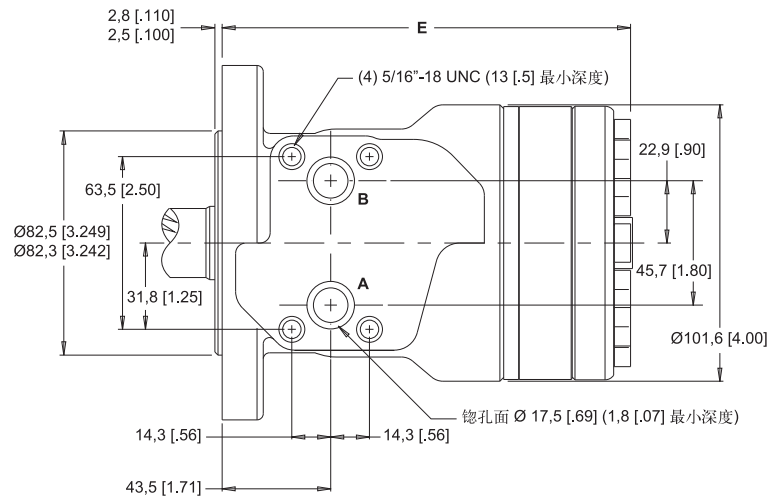
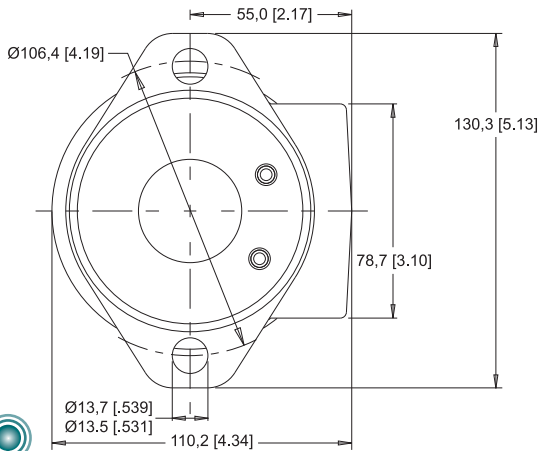


注: 尺寸 E 参见第13页 \* 指 A1D 四个螺纹孔为 5/16" -18 UNC 且深度相同。



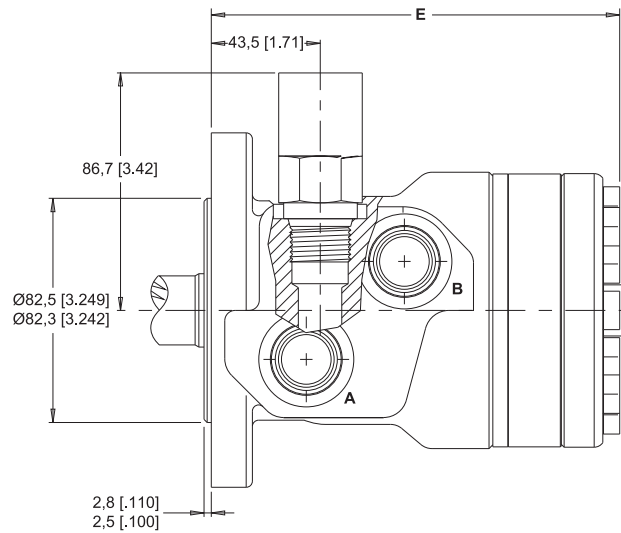
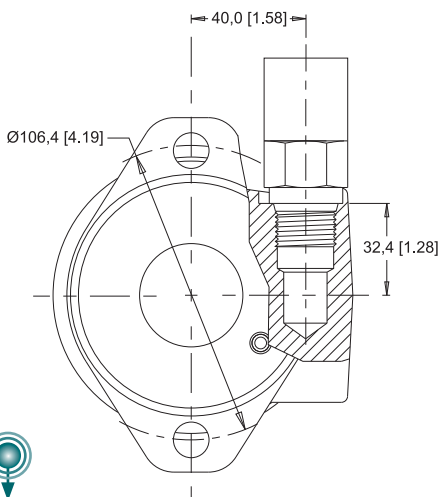
## 255 & 256 系列壳体 (SAE A 法兰)

**A17** 2-孔法兰, 板式油口 1/2" 钻孔



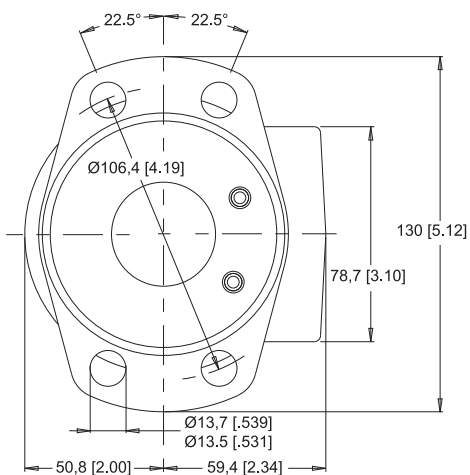
注: 尺寸 E 参照13页。

**A19** 2-孔法兰, 偏置油口 7/8" O-形圈

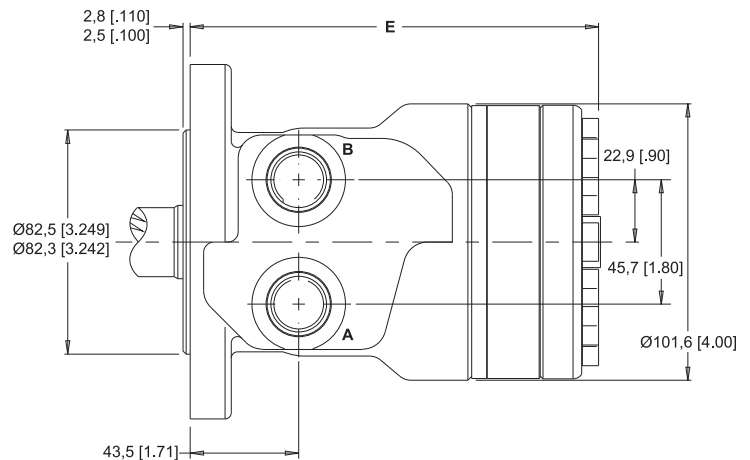


注: A19壳体上其它尺寸数据参照壳体 A12

**A30** 4-孔法兰, 平行油口 1/2" NPT



**A31** 4-孔法兰, 平行油口 7/8" O-形圈



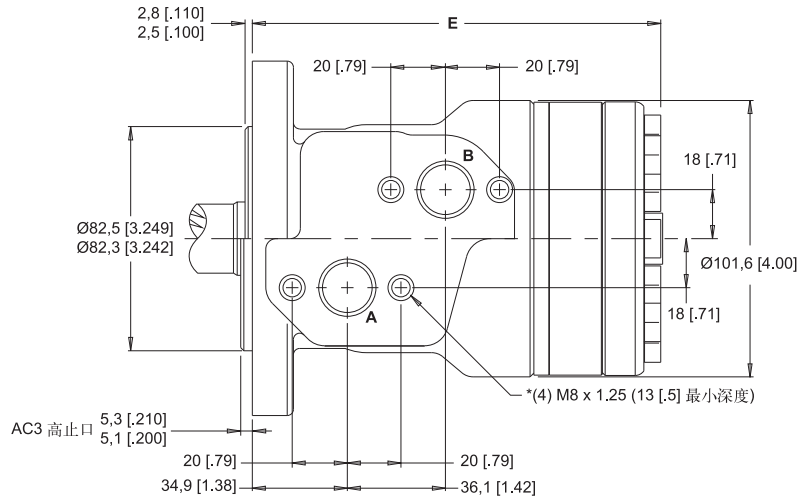
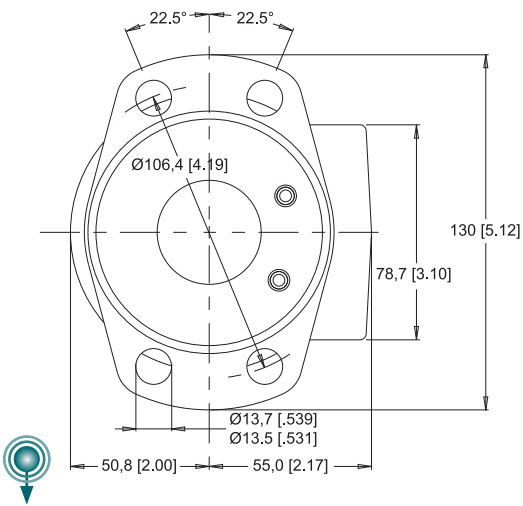


255 & 256 系列壳体 (SAE A, SAE B, & 4-孔法兰)

**AC3** 4-孔法兰, 偏置油口 1/2" BSP.F

**A33** 4-孔法兰, 偏置油口 1/2" BSP.F

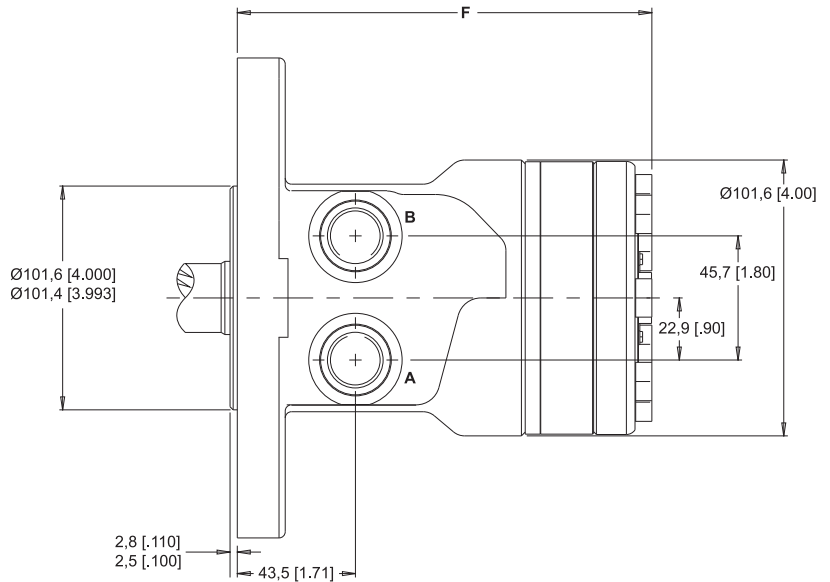
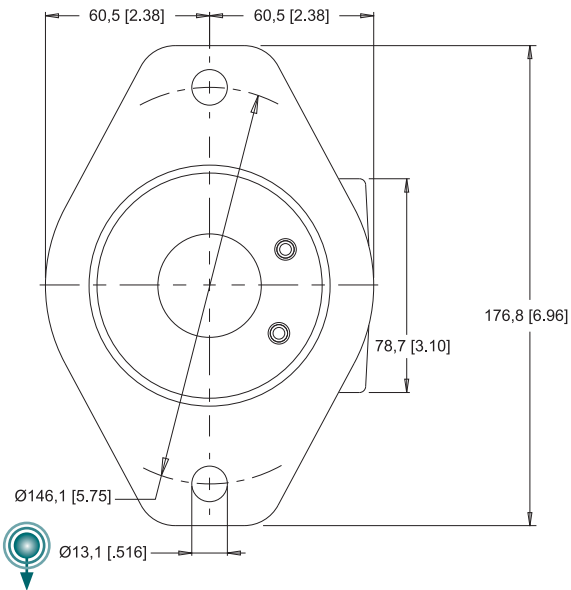
**A3D** 4-孔法兰, 偏置油口 7/8" O-形圈



注: 尺寸 E 参照13页 \* 指 A3D 四个螺孔为 5/16" -18 UNC 且深度相同

**B11** 2-孔法兰, 平行油口 7/8" O-形圈

**B18** 2-孔法兰, 平行油口 1/2" BSP.F



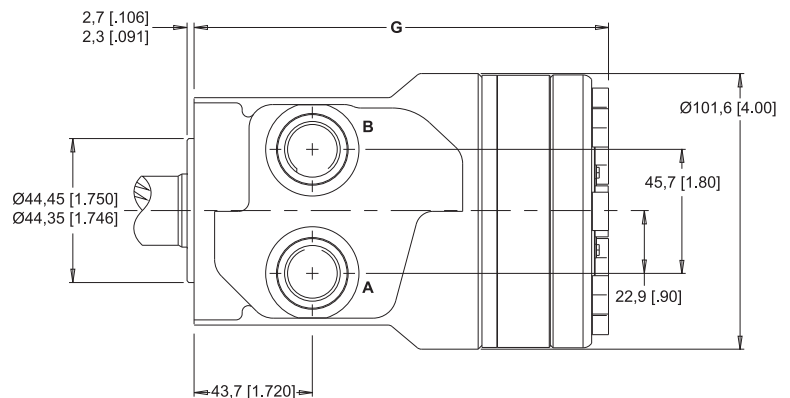
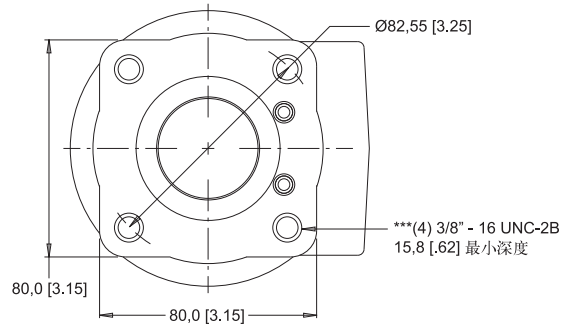
注: 尺寸 F 参照13页

**F30** 4-孔法兰, 平行油口 1/2" NPT

**F31** 4-孔法兰, 平行油口 7/8" O-形圈

**F38** 4-孔法兰, 平行油口 1/2" BSP.F

**G38** 4-孔法兰, 平行油口 1/2" BSP.F \*\*\*

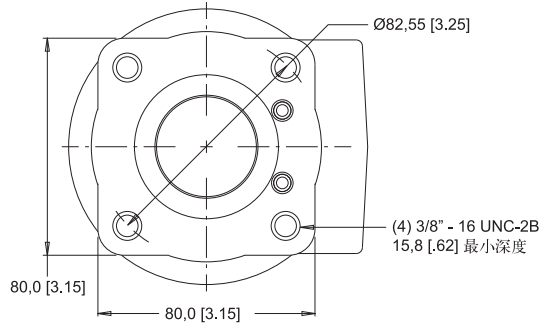


注: 尺寸 G 参照13页。\*\*\*- 指 G38 四个螺孔为M10 x 1.5 且深度相同

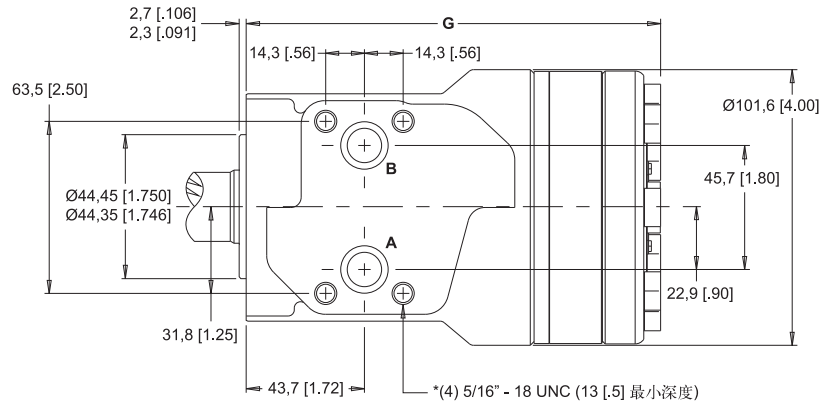


## 255 & 256 S系列壳体 (4-孔方形法兰)

**F37** 4-孔法兰, 油口(附带螺孔)

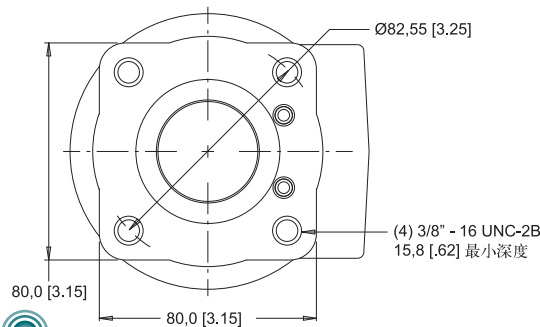


**G37** 4孔法兰, 油口(附带螺孔)

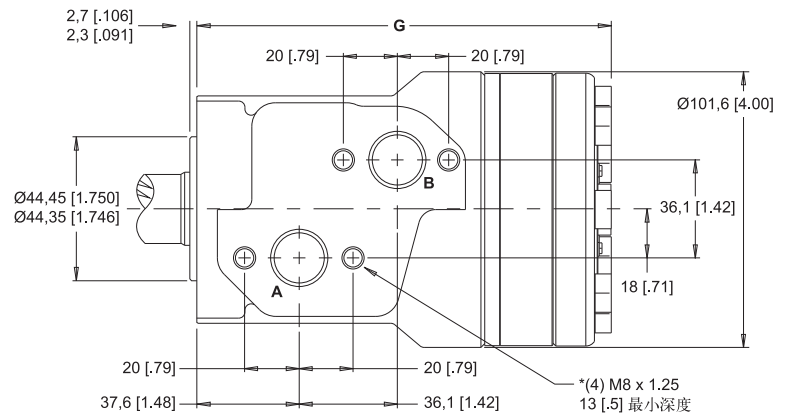


注: 尺寸 G 参照13页 \*指G37四个螺孔为 M8 x 1.25 且深度相同

**F33** 4-孔法兰, 偏置油口1/2" BSP.F

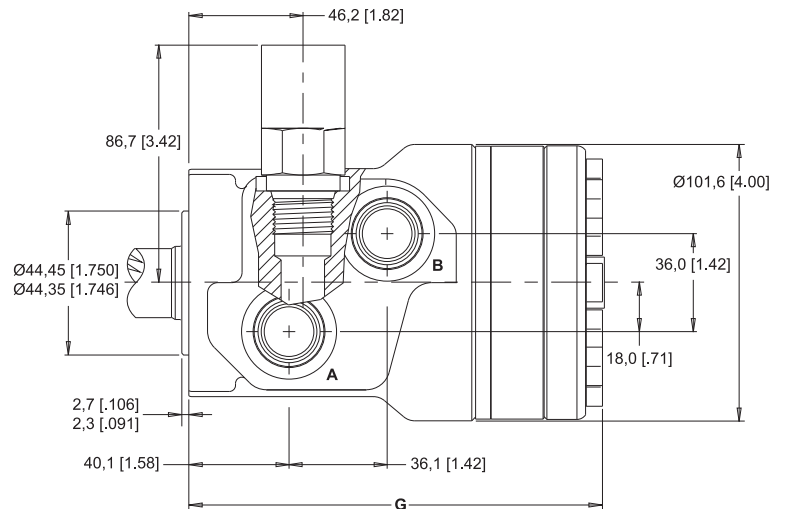
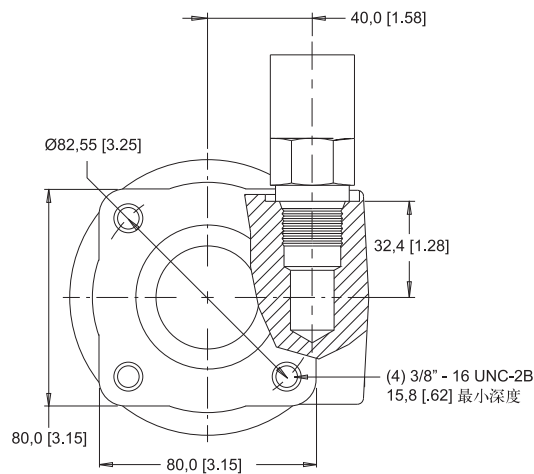


**F3D** 4-孔法兰, 偏置油口7/8" O-形圈



注: \*指F3D四个螺孔为5/16" -18 UNC 且深度相同

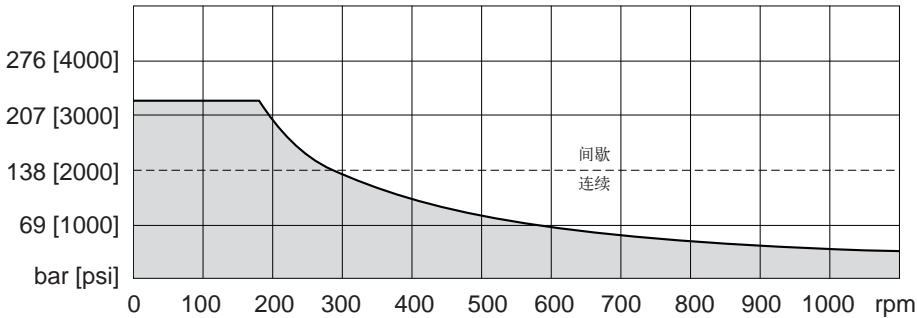
**F39** 2-孔法兰, 偏置油口7/8" O-形圈





### 允许的轴封压力

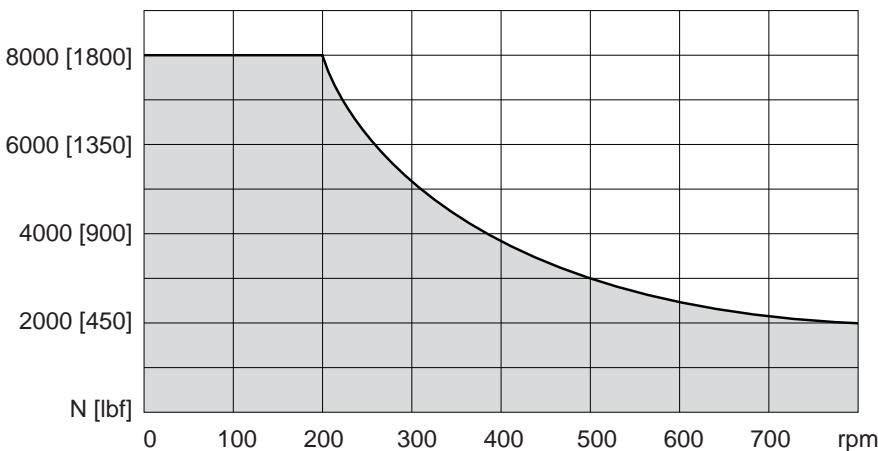
曲线代表在不同转速下允许的轴封压力。  
阴影区域内为轴封的额定使用寿命。  
实际轴封压力依靠马达的结构而定（如图所示）



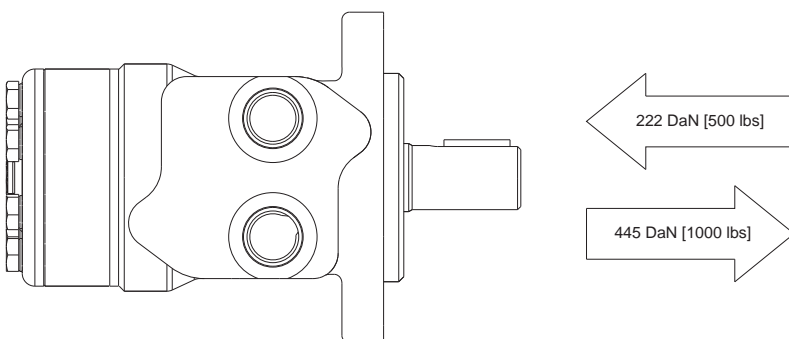
有单向阀和泄油口时，轴封处压力等于泄油口压力。有单向阀无泄油口，轴封处的压力与输出压力相同。没有单向阀和泄油口，轴封处压力为输入输出压力的平均值。

### 允许轴载荷和轴承曲线

下面的轴承曲线描述了键中心线处不同转速情况下马达承受径向负载的能力。工作在阴影区域内用推荐的流体可以保证较好的油膜润滑。阴影区域以外的工矿，会由于缺油或发热过多易引起马达失效。使用润滑性差或者低黏度油液时，若要保证马达达到客户满意的寿命和性能，可以适当降低最大负载与速度的额定值。



### 轴向载荷



长度和重量表 SAE A 法兰 - 尺寸 E		
代号	mm [in]	kg [lb]
040	142 [5.60]	6,6 [14.5]
060	146 [5.74]	6,7 [14.7]
070	147 [5.80]	6,7 [14.7]
090	151 [5.96]	6,8 [15.0]
100	154 [6.06]	6,9 [15.2]
115	156 [6.15]	7,1 [16.1]
130	160 [6.28]	7,3 [16.5]
160	166 [6.53]	7,5 [14.5]
200	173 [6.83]	8,0 [17.6]
240	182 [7.15]	8,5 [18.7]
320	198 [7.78]	9,0 [19.8]
400	213 [8.39]	9,8 [21.6]

注：  
根据马达配置，WR马达重量可能会变化  
± 0,5 kg [1 lb]

长度和重量表 SAE B 法兰 - 尺寸 F		
代号	mm [in]	kg [lb]
040	142 [5.60]	7,8 [17.2]
060	146 [5.74]	7,9 [17.4]
070	147 [5.80]	7,9 [17.4]
090	151 [5.96]	8,0 [17.6]
100	154 [6.06]	8,1 [17.8]
115	156 [6.15]	8,3 [18.3]
130	160 [6.28]	8,5 [18.7]
160	166 [6.53]	8,7 [19.1]
200	173 [6.83]	9,2 [20.2]
240	182 [7.15]	9,7 [21.3]
320	198 [7.78]	10,2 [22.4]
400	213 [8.39]	11,0 [24.2]

注：  
根据马达配置，WR马达重量可能会变化  
± 0,5 kg [1 lb]

长度和重量表 4-孔法兰 - 尺寸 G		
代号	mm [in]	kg [lb]
040	142 [5.60]	5,3 [11.8]
060	146 [5.74]	5,4 [11.9]
070	147 [5.80]	5,4 [11.9]
090	151 [5.96]	5,5 [12.1]
100	154 [6.06]	5,6 [12.3]
115	156 [6.15]	5,8 [12.8]
130	160 [6.28]	6,0 [13.2]
160	166 [6.53]	6,2 [13.7]
200	173 [6.83]	6,7 [14.8]
240	182 [7.15]	7,2 [15.9]
320	198 [7.78]	7,7 [17.0]
400	213 [8.39]	8,5 [18.7]

注：  
根据马达配置，WR马达重量可能会变化  
± 0,5 kg [1 lb]

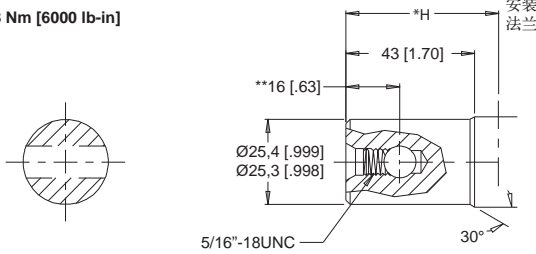




## 255 & 256系列轴

- 05** 1" 销孔 9,5 [.375] 通孔
- 53** 1" 销孔 10,3 [.406] 通孔
- 66** 1" 销孔 8,0 [.315] 通孔

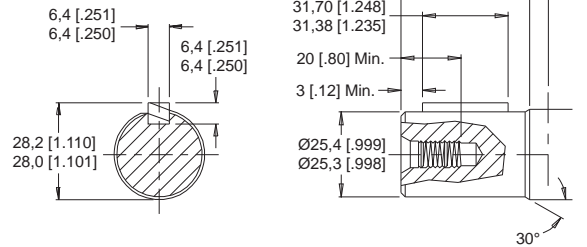
最大扭矩: 678 Nm [6000 lb-in]



注: 轴选项05和53对应的尺寸H为48[1.88], 轴选项66对应的尺寸H为51[2.00].  
\*\*指66轴尺寸减4,7[.19]

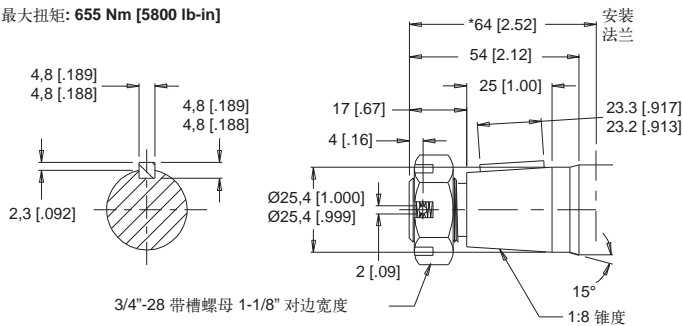
- 10** 1" 直轴 5/16" - 18 UNC 锥
- 11** 1" 直轴 M8x1.25 锥

最大扭矩: 655 Nm [5800 lb-in]



- 13** 1" 锥轴

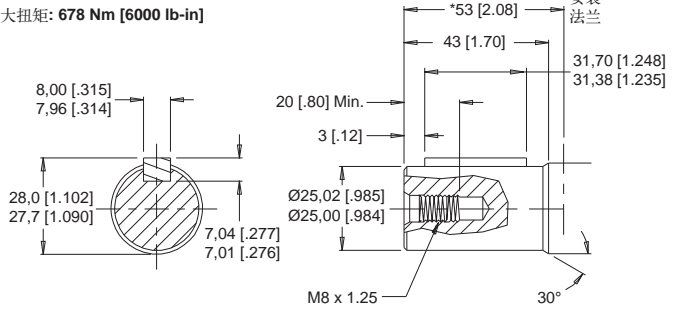
最大扭矩: 655 Nm [5800 lb-in]



注: 在这种轴上带槽螺母是标准型

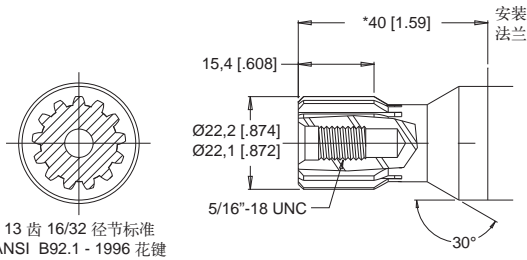
- 12** 25mm 直轴

最大扭矩: 678 Nm [6000 lb-in]



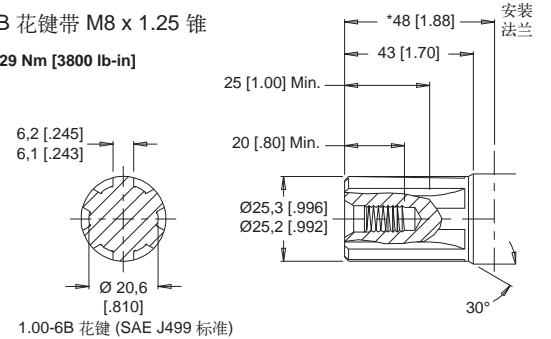
- 01** 13 齿 花键

最大扭矩: 170 Nm [1500 lb-in]



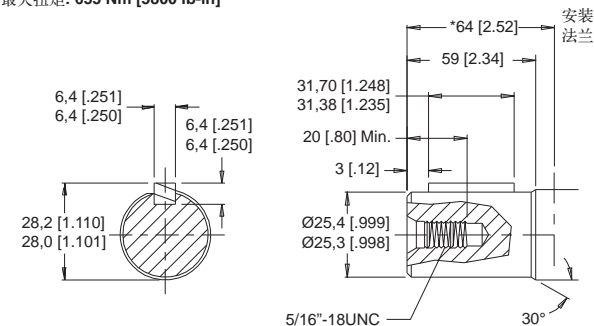
- 02** 6B 花键带 5/16" - 18 UNC 锥

最大扭矩: 429 Nm [3800 lb-in]



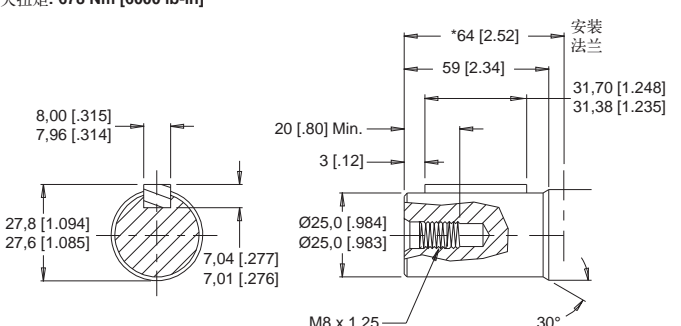
- 15** 1" 直轴加长

最大扭矩: 655 Nm [5800 lb-in]



- 16** 25mm 直轴加长

最大扭矩: 678 Nm [6000 lb-in]



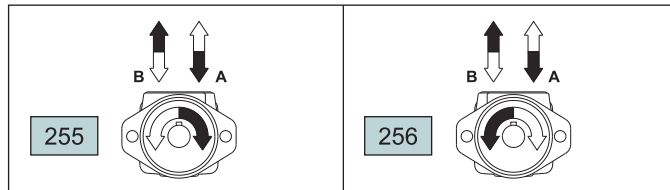
注: \*对高止口壳体尺寸加2.5 [.10]



系列	排量	壳体	轴	油漆	腔孔	添加项	其他
第1步	第2步	第3步	第4步	第5步	第6步	第7步	第8步

第1步 - 系列选项

255	顺时针旋转
256	逆时针旋转



注：轴的旋转方向参照上图的马达代号。

第2步 - 排量选项

040	40 cc	[2.5 in <sup>3</sup> /rev]	130	129 cc	[7.9 in <sup>3</sup> /rev]
060	59 cc	[3.6 in <sup>3</sup> /rev]	160	160 cc	[9.8 in <sup>3</sup> /rev]
070	71 cc	[4.3 in <sup>3</sup> /rev]	200	198 cc	[12.1 in <sup>3</sup> /rev]
090	88 cc	[5.4 in <sup>3</sup> /rev]	240	236 cc	[14.4 in <sup>3</sup> /rev]
100	100 cc	[6.1 in <sup>3</sup> /rev]	320	322 cc	[19.6 in <sup>3</sup> /rev]
115	113 cc	[6.9 in <sup>3</sup> /rev]	400	400 cc	[24.4 in <sup>3</sup> /rev]

第3步 - 壳体选项

A10	2-孔法兰, 1/2" NPT 平行油口(S)
A11	2-孔法兰, 7/8" O-形圈 平行油口(S)
A12	2-孔法兰, 1/2" BSP.F 偏置油口(S)
A13	2-孔法兰, 1/2" BSP.F 偏置油口(附带螺孔)(S)
A17	2-孔法兰, 1/2" 集成油口(附带螺孔) (S)
A1D	2-孔法兰, 7/8" O-形圈 偏置油口(附带螺孔) (S)
A19	2-孔法兰, 7/8" O-形圈 偏置带阀腔孔 (S)
A62	2-孔法兰, 1/2" BSP.F 偏置带高止口
A63	2-孔法兰, 1/2" BSP.F 偏置带高止口(附带螺孔)
AC3	4-孔法兰, 1/2" BSP.F 偏置带高止口(附带螺孔)
A30	4-孔法兰, 1/2" NPT 平行油口
A31	4-孔法兰, 7/8" O-形圈 平行油口
A33	4-孔法兰, 1/2" BSP.F 偏置油口(附带螺孔)
A3D	4-孔法兰, 7/8" O-形圈 偏置油口(附带螺孔)
B11	2-孔法兰, 7/8" O-形圈 平行油口
B18	2-孔法兰, 1/2" BSP.F 平行油口
F30	4-孔法兰, 1/2" NPT 平行油口 (S)
F31	4-孔法兰, 7/8" O-形圈 平行油口(S)
F33	4-孔法兰, 1/2" BSP.F 偏置油口(附带螺孔) (S)
F37	4-孔法兰, 油口(附带螺孔) (S)
F38	4-孔法兰, 1/2" BSP.F 平行油口 (S)

第3步 (续) - 壳体选项

F39	4-孔法兰, 7/8" O-形圈偏置带阀腔孔(附带螺孔)
F3D	4-孔法兰, 7/8" O-形圈 偏置油口(附带螺孔)
G37	4-孔法兰, 平行油口(附带螺孔)
G38	4-孔法兰, 1/2" BSP.F 平行油口

第4步 - 轴选项

01	7/8" 13 齿	12	25mm 直轴
02	1" 6-B 花键 5/16"-18 锥	13	1" 锥轴
04	1" 6-B 花键 M8×1.5 锥	15	1" 直轴加长 (S)
05	1" 销孔 (9,5 [.375])	16	25mm 直轴加长(S)
10	1" 直销 5/16"-18 锥	53	1" 销孔 (10,3 [.406])
11	1" 直轴 M8×1.5 锥	66	1" 销孔 (8,0 [.315])

第5步 - 喷漆选项

A	黑色
B	黑色 (法兰面不喷漆)

第6步 - 阀腔选项和安装阀

A	无	F	121 bar [1750 psi]
B	溢流阀腔孔	G	138 bar [2000 psi]
C	69 bar [1000 psi]	J	173 bar [2500 psi]
D	86 bar [1250 psi]	L	207 bar [3000 psi]
E	104 bar [1500 psi]		

注：阀腔选项只适用于A19和A39壳体，B选项不带插装阀。

第7步 - 添加项

A	标准
B	锁紧螺母
C	本体六角螺母
W	4-销钉双头连接 (S)
X	4-销钉 M12 双头连接 (S)
Y	3-销钉单头连接 (S)
Z	4-销钉 M12 单头连接 (S)

注：(S) - 第 3 步为壳体可用于与传感器的选项。第 4 步为轴可用于与传感器的选项。第 7 步为传感器连接方式选项。

第8步 - 其他选项

AA	无
EG	Viton 轴封

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