

white drive products

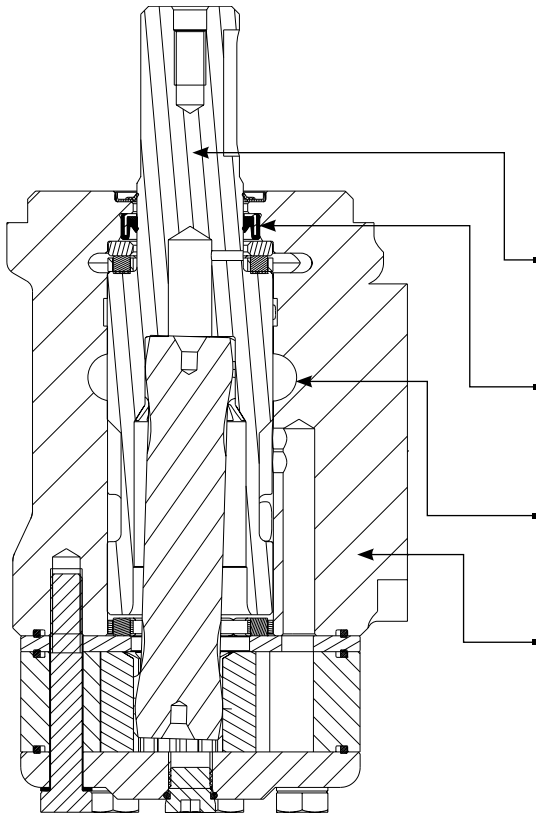


WP

SERIES HYDRAULIC MOTORS

OVERVIEW

The WP motor series is an economical alternative to more complex geroler designs that still provides high efficiency across a wide performance range. These motors are intended for medium-duty applications requiring high torque in a compact package and are suitable for industrial and mobile applications including car wash brushes, food processing equipment, conveyors, machine tools, agricultural equipment, sweepers, skid steer attachments, and more.



KEY FEATURES

Variety of Mounts and Shafts provide flexibility in application design.

High Pressure Shaft Seal offers superior seal life and performance.

Spool Valve Design gives superior performance and smooth operation over a wide speed and torque range.

Built-In Check Valves (not shown) in the housing offers versatility and increased seal life.

SPECIFICATIONS

Intermittent Ratings - 10% of Operation Peak Ratings - 1% of Operation

CODE	Displacement cc [in ³ /rev]	Max. Speed rpm		Max. Flow lpm [gpm]		Max. Torque Nm [lb-in]		Max. Pressure bar [psi]		
		cont.	inter.	cont.	inter.	cont.	inter.	cont.	inter.	peak
025	25 [1.5]	1570	1687	40 [11]	45 [12]	35 [310]	48 [425]	100 [1450]	140 [2030]	225 [3260]
032	32 [2.0]	1550	1674	50 [13]	55 [15]	45 [398]	57 [504]	100 [1450]	140 [2030]	225 [3260]
040	40 [2.5]	1471	1670	60 [16]	70 [19]	65 [575]	74 [655]	100 [1450]	140 [2030]	225 [3260]
050	50 [3.0]	1208	1500	60 [16]	75 [20]	91 [805]	108 [956]	140 [2030]	175 [2540]	240 [3480]
060	59 [3.6]	1185	1271	60 [16]	75 [20]	125 [1106]	136 [1204]	160 [2320]	175 [2540]	240 [3480]
080	78 [4.8]	896	960	60 [16]	75 [20]	164 [1451]	183 [1620]	160 [2320]	175 [2540]	240 [3480]
100	96 [5.9]	728	780	60 [16]	75 [20]	195 [1726]	213 [1885]	160 [2320]	175 [2540]	240 [3480]
125	125 [7.6]	559	599	60 [16]	75 [20]	258 [2285]	278 [2460]	160 [2320]	175 [2540]	240 [3480]
160	154 [9.4]	452	483	60 [16]	75 [20]	321 [2840]	362 [3205]	160 [2320]	175 [2540]	240 [3480]
200	190 [11.6]	367	385	60 [16]	75 [20]	380 [3365]	420 [3720]	150 [2180]	175 [2540]	240 [3480]
250	240 [14.6]	291	312	60 [16]	75 [20]	445 [3940]	557 [4930]	140 [2030]	175 [2540]	240 [3480]
315	303 [18.5]	228	245	60 [16]	75 [20]	460 [4071]	602 [5330]	120 [1740]	160 [2320]	200 [2900]
400	388 [23.7]	155	189	60 [16]	75 [20]	488 [4320]	625 [5532]	95 [1380]	125 [1810]	180 [2610]



025

Pressure - bars [psi] Max. Cont. Max. Inter.

30 [435]	60 [870]	80 [1160]	100 [1450]	120 [1740]	140 [2030]
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25 cc [1.5 in³/rev.]

Torque - Nm [lb-in], Speed rpm Intermittent Ratings - 10% of Operation

5 [1.3]
10 [2.6]
15 [4.0]
20 [5.3]
25 [6.6]
30 [7.9]
35 [9.2]
40 [10.6]
45 [11.9]

Max. Max. Inter. Cont.

9 [80] 186	18 [159] 160	25 [221] 134	32 [283] 101	35 [310] 106	
10 [88] 386	18 [159] 352	26 [230] 323	34 [301] 280	37 [327] 255	48 [425] 210
9 [80] 568	19 [168] 537	26 [230] 505	35 [310] 467	38 [336] 431	44 [389] 390
8 [71] 777	19 [168] 736	25 [221] 692	33 [292] 660	39 [345] 608	45 [398] 566
7 [62] 972	18 [159] 920	26 [230] 870	32 [283] 840	39 [345] 803	45 [398] 756
6 [53] 1167	17 [150] 1122	25 [221] 1088	32 [283] 1055	39 [345] 998	44 [389] 976
5 [44] 1360	16 [142] 1318	24 [212] 1282	31 [274] 1258	37 [327] 1216	43 [381] 1160
5 [44] 1570	15 [133] 1503	22 [195] 1476	31 [274] 1432	36 [319] 1394	41 [363] 1359
	13 [115] 1687	20 [177] 1636	28 [248] 1600	34 [301] 1558	39 [345] 1516

200
400
600
800
1000
1200
1400
1600
1800

Theoretical rpm

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]

12 [106]	24 [211]	32 [282]	40 [352]	48 [423]	56 [493]
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Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]

032

Pressure - bars [psi] Max. Cont. Max. Inter.

30 [435]	60 [870]	80 [1160]	100 [1450]	120 [1740]	140 [2030]
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32 cc [2.0 in³/rev.]

Torque - Nm [lb-in], Speed rpm Intermittent Ratings - 10% of Operation

5 [1.3]
10 [2.6]
15 [4.0]
20 [5.3]
25 [6.6]
30 [7.9]
35 [9.2]
40 [10.6]
45 [11.9]
50 [13.2]
55 [14.5]

Max. Max. Inter. Cont.

11 [97] 149	24 [212] 135	35 [310] 114	37 [327] 94		
12 [106] 308	27 [239] 284	37 [327] 270	43 [381] 250	46 [407] 240	56 [496] 211
11 [97] 465	26 [230] 444	36 [319] 429	45 [398] 398	48 [425] 378	57 [504] 355
10 [88] 624	25 [221] 589	35 [310] 575	44 [389] 557	46 [407] 544	56 [496] 524
9 [80] 780	24 [212] 771	34 [301] 751	42 [372] 735	45 [398] 719	54 [478] 695
8 [71] 931	23 [204] 908	32 [283] 895	40 [354] 876	45 [398] 857	52 [460] 822
7 [62] 1086	20 [177] 1066	29 [257] 1051	39 [345] 1030	43 [381] 1012	51 [451] 981
7 [62] 1240	19 [168] 1212	27 [239] 1190	38 [336] 1178	43 [381] 1145	50 [442] 1121
6 [53] 1400	18 [159] 1382	26 [230] 1366	35 [310] 1340	42 [372] 1314	48 [425] 1280
5 [44] 1550	16 [142] 1526	24 [212] 1500	31 [274] 1478	40 [354] 1452	46 [407] 1418
	12 [106] 1674	20 [177] 1641	28 [248] 1617	34 [301] 1584	39 [345] 1555

156
313
469
625
781
938
1094
1250
1406
1563
1719

Theoretical rpm

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]

15 [135]	31 [271]	41 [361]	51 [451]	61 [541]	71 [631]
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Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]



PERFORMANCE

040

Pressure - bars [psi]				Max. Cont.	Max. Inter.
30 [435]	60 [870]	80 [1160]	100 [1450]	120 [1740]	140 [2030]

40 cc [2.5 in³/rev.]

Max. Max. Inter. Cont.	Flow - lpm [gpm]	5 [1.3]
		10 [2.6]
20 [5.3]	30 [7.9]	40 [10.6]
		50 [13.2]
60 [15.8]	70 [18.5]	

Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation	
15 [133]	31 [274]	38 [336]	48 [425]	56 [496]		125	Theoretical rpm
113	98	83	60	48			
14 [124]	31 [274]	41 [363]	54 [478]	62 [549]	70 [619]	250	
238	222	204	182	161	114	500	
13 [115]	32 [283]	41 [363]	53 [469]	65 [575]	74 [655]	750	
482	458	442	423	402	381	1000	
12 [106]	30 [265]	39 [345]	51 [451]	63 [558]	74 [655]	1250	
730	704	687	668	646	624	1500	
10 [88]	27 [239]	39 [345]	51 [451]	61 [540]	72 [637]	2000	
968	949	928	908	892	870		
7 [62]	25 [221]	37 [327]	49 [434]	59 [522]	71 [628]		
1219	1191	1173	1150	1127	1107		
4 [35]	23 [204]	34 [301]	46 [407]	56 [496]	68 [602]		
1471	1428	1411	1387	1369	1341		
	16 [142]	30 [265]	41 [363]	52 [460]	64 [566]		
	1670	1653	1627	1612	1598		

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]					
19 [168]	38 [336]	50 [442]	64 [566]	76 [673]	89 [788]

Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]

050

Pressure - bars [psi]							Max. Cont.	Max. Inter.
30 [435]	60 [870]	80 [1160]	100 [1450]	120 [1740]	140 [2030]	160 [2320]	175 [2540]	

50 cc [3.0 in³/rev.]

Max. Max. Inter. Cont.	Flow - lpm [gpm]	5 [1.3]
		10 [2.6]
20 [5.3]	30 [7.9]	40 [10.6]
		50 [13.2]
60 [15.8]	75 [19.8]	

Torque - Nm [lb-in], Speed rpm								Intermittent Ratings - 10% of Operation	
19 [168]	39 [345]	48 [425]	62 [549]	75 [664]				101	Theoretical rpm
100	85	75	64	48					
20 [177]	38 [336]	50 [442]	63 [558]	78 [690]	92 [814]	102 [903]	107 [947]	202	
197	196	174	159	146	127	101	97	404	
18 [159]	38 [336]	52 [460]	64 [566]	78 [690]	90 [796]	104 [920]	108 [956]	606	
400	386	371	355	341	314	292	290	808	
15 [133]	37 [327]	50 [442]	64 [566]	77 [681]	89 [788]	103 [912]	107 [947]	1010	
600	585	571	560	540	516	499	495	1212	
12 [106]	31 [274]	45 [398]	59 [522]	73 [646]	87 [770]	99 [876]	106 [938]	1414	
808	800	790	770	766	733	703	697	1515	
9 [80]	27 [239]	41 [363]	55 [487]	68 [602]	84 [743]	98 [867]	105 [929]		
1009	1006	986	982	964	956	930	872		
6 [53]	24 [212]	37 [327]	53 [469]	64 [566]	82 [726]	95 [841]	102 [903]		
1208	1200	1196	1188	1176	1160	1140	963		
3 [27]	17 [150]	32 [283]	44 [389]	58 [513]	80 [708]	93 [823]	98 [867]		
1410	1396	1382	1370	1358	1347	1334	1315		
	15 [133]	30 [265]	40 [354]	56 [496]	77 [681]	88 [779]	93 [823]		
	1500	1488	1473	1457	1439	1412	1388		

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]							
24 [212]	47 [416]	63 [558]	79 [699]	95 [841]	110 [973]	126 [1115]	138 [1221]

Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]



060

Pressure - bars [psi]						Max. Cont.	Max. Inter.
30 [435]	60 [870]	80 [1160]	100 [1450]	120 [1740]	140 [2030]	160 [2320]	175 [2540]

59 cc [3.6 in³/rev.]

Torque - Nm [lb-in], **Speed rpm** Intermittent Ratings - 10% of Operation

Max. Cont.	Flow - lpm [gpm]	5 [1.3]	20 [177] 83	46 [407] 79	65 [575] 72	80 [708] 64	95 [841] 51	112 [991] 38			Theoretical rpm
	10 [2.6]	22 [195] 169	47 [416] 164	66 [584] 155	81 [717] 142	96 [850] 135	113 [1000] 124	125 [1106] 108	136 [1204] 88	85	
	20 [5.3]	20 [177] 338	45 [398] 332	64 [566] 320	80 [708] 309	93 [823] 290	111 [982] 276	123 [1088] 245	134 [1186] 222	170	
	30 [7.9]	17 [150] 507	43 [381] 502	62 [549] 493	76 [673] 482	89 [788] 468	109 [965] 454	121 [1071] 424	131 [1159] 400	339	
	40 [10.6]	14 [124] 678	41 [363] 669	58 [513] 660	73 [646] 645	87 [770] 630	105 [929] 616	117 [1035] 594	127 [1124] 582	509	
	50 [13.2]	10 [88] 845	37 [327] 841	55 [487] 833	70 [619] 818	84 [743] 805	102 [903] 792	113 [1000] 770	122 [1080] 754	678	
	60 [15.8]	7 [62] 1014	34 [301] 1005	52 [460] 999	66 [584] 992	82 [726] 982	99 [876] 968	109 [965] 956	118 [1044] 933	848	
	70 [18.5]	4 [35] 1185	27 [239] 1182	47 [416] 1180	62 [549] 1175	76 [673] 1158	93 [823] 1144	104 [920] 1128	114 [1009] 1112	1017	
	75 [19.8]		22 [195] 1271	43 [381] 1265	58 [513] 1256	73 [646] 1241	86 [761] 1228	100 [885] 1212	110 [973] 1196	1186	
										1271	

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]

28 [249]	56 [499]	75 [665]	94 [831]	113 [998]	132 [1164]	150 [1330]	164 [1455]
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Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]

080

Pressure - bars [psi]						Max. Cont.	Max. Inter.
30 [435]	60 [870]	80 [1160]	100 [1450]	120 [1740]	140 [2030]	160 [2320]	175 [2540]

78 cc [4.8 in³/rev.]

Torque - Nm [lb-in], **Speed rpm** Intermittent Ratings - 10% of Operation

Max. Cont.	Flow - lpm [gpm]	5 [1.3]	32 [283] 60	62 [549] 56	80 [708] 50	106 [938] 42	125 [1106] 30				Theoretical rpm
	10 [2.6]	31 [274] 125	64 [566] 118	84 [743] 112	104 [920] 104	120 [1062] 98	142 [1257] 82	162 [1434] 67	175 [1549] 50	64	
	20 [5.3]	26 [230] 254	60 [531] 245	84 [743] 236	102 [903] 228	125 [1106] 215	144 [1274] 204	164 [1451] 190	183 [1619] 175	128	
	30 [7.9]	24 [212] 384	56 [496] 374	81 [717] 366	100 [885] 358	122 [1080] 346	142 [1257] 335	160 [1416] 318	175 [1549] 305	256	
	40 [10.6]	19 [168] 512	53 [469] 505	75 [664] 494	96 [850] 483	118 [1044] 473	140 [1239] 462	158 [1398] 450	170 [1504] 438	385	
	50 [13.2]	14 [124] 638	46 [407] 630	70 [619] 625	92 [814] 615	110 [973] 606	135 [1195] 593	156 [1381] 580	168 [1487] 568	513	
	60 [15.8]	10 [88] 768	42 [372] 762	66 [584] 756	86 [761] 748	106 [938] 738	128 [1133] 728	150 [1327] 717	164 [1451] 694	641	
	70 [18.5]	6 [53] 896	36 [319] 890	56 [496] 882	78 [690] 872	98 [867] 860	118 [1044] 846	140 [1239] 830	160 [1416] 816	769	
	75 [19.8]	3 [27] 960	27 [239] 955	50 [442] 948	74 [655] 938	92 [814] 926	113 [1000] 916	133 [1177] 896	148 [1310] 802	897	
										962	

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]

37 [327]	75 [664]	100 [885]	125 [1106]	149 [1319]	174 [1540]	199 [1761]	218 [1929]
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Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]



PERFORMANCE

100

Pressure - bars [psi]						Max. Cont.	Max. Inter.
30 [435]	60 [870]	80 [1160]	100 [1450]	120 [1740]	140 [2030]	160 [2320]	175 [2540]

96 cc [5.9 in³/rev.]

5 [1.3]
10 [2.6]
20 [5.3]
30 [7.9]
40 [10.6]
50 [13.2]
60 [15.8]
70 [18.5]
75 [19.8]

Torque - Nm [lb-in], Speed rpm								Intermittent Ratings - 10% of Operation	
43 [381] 51	82 [726] 42	109 [965] 35	131 [1159] 25						
43 [381] 99	84 [743] 93	108 [956] 84	133 [1177] 72	152 [1345] 62	180 [1593] 48	197 [1743] 24			
41 [363] 205	79 [699] 202	107 [947] 197	127 [1124] 192	154 [1363] 182	178 [1575] 172	200 [1770] 140	212 [1876] 118		
39 [345] 311	74 [655] 307	101 [894] 301	126 [1115] 294	152 [1345] 283	176 [1558] 271	198 [1752] 258	213 [1885] 240		
29 [257] 413	63 [558] 410	93 [823] 406	121 [1071] 399	150 [1327] 388	172 [1522] 379	195 [1726] 368	208 [1841] 347		
20 [177] 519	52 [460] 515	85 [752] 510	115 [1018] 503	148 [1310] 492	169 [1496] 480	193 [1708] 464	203 [1796] 446		
17 [150] 624	53 [469] 620	83 [735] 615	111 [982] 608	138 [1221] 600	165 [1460] 582	183 [1619] 565	193 [1708] 548		
11 [97] 728	42 [372] 726	73 [646] 723	93 [823] 714	126 [1115] 706	159 [1407] 684	172 [1522] 668	183 [1619] 646		
6 [53] 780	35 [310] 771	61 [540] 764	89 [788] 755	118 [1044] 736	145 [1283] 724	156 [1381] 712	176 [1558] 699		

52
104
208
313
417
521
625
729
781

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]							
46 [407]	92 [814]	122 [1080]	153 [1354]	183 [1623]	214 [1894]	245 [2168]	268 [2372]

Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]

125

Pressure - bars [psi]						Max. Cont.	Max. Inter.
30 [435]	60 [870]	80 [1160]	100 [1450]	120 [1740]	140 [2030]	160 [2320]	175 [2540]

125 cc [7.6 in³/rev.]

5 [1.3]
10 [2.6]
20 [5.3]
30 [7.9]
40 [10.6]
50 [13.2]
60 [15.8]
70 [18.5]
75 [19.8]

Torque - Nm [lb-in], Speed rpm								Intermittent Ratings - 10% of Operation	
52 [460] 38	95 [841] 35	135 [1195] 32	168 [1487] 27						
50 [442] 78	98 [867] 74	138 [1221] 69	172 [1522] 62	190 [1681] 54	234 [2071] 45	258 [2283] 35			
50 [442] 158	96 [850] 152	132 [1168] 144	168 [1487] 135	202 [1788] 124	236 [2088] 110	256 [2265] 94	278 [2460] 78		
44 [389] 238	92 [814] 232	126 [1115] 225	164 [1451] 215	198 [1752] 210	232 [2053] 198	262 [2319] 168	268 [2372] 155		
35 [310] 319	82 [726] 316	118 [1044] 312	160 [1416] 308	193 [1708] 300	226 [2000] 288	252 [2230] 262	266 [2354] 238		
31 [274] 399	77 [681] 396	108 [956] 392	155 [1372] 383	182 [1611] 368	220 [1947] 354	238 [2106] 338	262 [2319] 326		
15 [133] 479	64 [566] 478	97 [858] 475	146 [1292] 470	166 [1469] 463	210 [1858] 454	224 [1982] 443	256 [2265] 434		
8 [71] 559	50 [442] 555	90 [796] 548	140 [1239] 538	162 [1434] 524	204 [1805] 516	209 [1850] 500	236 [2088] 488		
	40 [354] 599	71 [628] 594	128 [1133] 588	158 [1398] 576	192 [1699] 565	199 [1761] 536	224 [1982] 524		

40
80
160
240
320
400
480
560
600

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]							
60 [531]	119 [1053]	159 [1407]	199 [1761]	239 [2115]	279 [2469]	318 [2814]	348 [3080]

Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]



160

Pressure - bars [psi]							Max. Cont.	Max. Inter.
30 [435]	60 [870]	80 [1160]	100 [1450]	120 [1740]	140 [2030]	160 [2320]	175 [2540]	

160 cc [9.4 in³/rev.]

Torque - Nm [lb-in], Speed rpm Intermittent Ratings - 10% of Operation

Max. Cont.	Flow - lpm [gpm]	5 [1.3]	10 [2.6]	20 [5.3]	30 [7.9]	40 [10.6]	50 [13.2]	60 [15.8]	70 [18.5]	75 [19.8]	Theoretical rpm	
	Max. Inter.	56 [496]	112 [991]	154 [1363]	201 [1779]							32
		30	25	18	10							65
		58 [513]	115 [1018]	156 [1381]	205 [1814]	245 [2168]	285 [2522]					130
		63	60	56	52	48	37					194
		60 [532]	123 [1089]	162 [1434]	202 [1788]	242 [2142]	282 [2496]	327 [2894]	360 [3186]			258
		128	125	121	116	110	100	86	78			323
		50 [443]	117 [1035]	157 [1389]	197 [1743]	238 [2106]	278 [2460]	322 [2850]	358 [3168]			387
		193	190	187	183	179	173	160	144			453
		48 [425]	113 [1000]	155 [1372]	195 [1726]	236 [2089]	273 [2416]	318 [2814]	355 [3142]			485
257		255	248	244	239	239	224	211				
32 [283]	106 [938]	149 [1319]	188 [1664]	235 [2080]	267 [2363]	313 [2770]	352 [3115]					
323	320	316	312	306	299	288	275					
23 [204]	88 [779]	133 [1177]	178 [1575]	212 [1876]	260 [2301]	308 [2726]	342 [3027]					
387	384	380	375	371	366	358	346					
16 [142]	82 [726]	128 [1133]	170 [1505]	206 [1823]	255 [2257]	302 [2673]	331 [2929]					
452	451	448	444	436	430	423	412					
10 [89]	79 [699]	124 [1097]	164 [1451]	201 [1779]	248 [2195]	296 [2620]	319 [2823]					
483	481	477	472	466	460	450	436					

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]

74 [651]	147 [1302]	196 [1736]	245 [2170]	282 [2496]	343 [3038]	392 [3472]	429 [3798]
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Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]

200

Pressure - bars [psi]							Max. Cont.	Max. Inter.
30 [435]	60 [870]	80 [1160]	100 [1450]	115 [1670]	140 [2030]	150 [2180]	175 [2540]	

190 cc [11.6 in³/rev.]

Torque - Nm [lb-in], Speed rpm Intermittent Ratings - 10% of Operation

Max. Cont.	Flow - lpm [gpm]	5 [1.3]	10 [2.6]	20 [5.3]	30 [7.9]	40 [10.6]	50 [13.2]	60 [15.8]	70 [18.5]	75 [19.8]	Theoretical rpm	
	Max. Inter.	75 [664]	158 [1398]	200 [1770]	241 [2133]							26
		25	22	20	10							53
		78 [690]	160 [1416]	204 [1805]	252 [2230]	291 [2575]	348 [3080]	377 [3336]				105
		51	49	45	39	35	29	22				158
		74 [655]	156 [1381]	200 [1770]	246 [2177]	293 [2593]	354 [3133]	380 [3363]	416 [3681]			211
		104	102	99	95	89	83	76	65			263
		70 [619]	152 [1345]	196 [1735]	240 [2124]	290 [2566]	352 [3115]	378 [3345]	420 [3717]			316
		157	155	152	148	143	137	130	118			368
		65 [575]	147 [1301]	190 [1681]	228 [2018]	286 [2531]	340 [3009]	376 [3327]	418 [3699]			395
210		208	205	200	193	186	178	168				
54 [478]	142 [1257]	180 [1593]	222 [1965]	277 [2451]	333 [2947]	356 [3150]	402 [3558]					
262	260	258	254	249	243	235	223					
36 [319]	128 [1133]	166 [1469]	210 [1858]	266 [2354]	322 [2850]	350 [3097]	400 [3540]					
315	313	309	305	299	293	284	268					
15 [133]	102 [903]	158 [1398]	202 [1788]	254 [2248]	302 [2673]	327 [2894]	376 [3327]					
367	365	362	358	352	336	330	316					
	94 [832]	146 [1292]	194 [1717]	230 [2035]	290 [2566]	317 [2805]	364 [3221]					
	394	390	385	380	374	365	352					

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]

91 [803]	182 [1611]	242 [2142]	303 [2677]	348 [3079]	424 [3748]	454 [4016]	529 [4685]
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Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]



PERFORMANCE

250

Pressure - bars [psi]				Max. Cont.		Max. Inter.	
30 [435]	60 [870]	85 [1230]	100 [1450]	125 [1810]	140 [2030]	160 [2320]	175 [2540]

240 cc [14.6 in³/rev.]

5 [1.3]
10 [2.6]
20 [5.3]
30 [7.9]
40 [10.6]
50 [13.2]
60 [15.8]
70 [18.5]
75 [19.8]

Torque - Nm [lb-in], Speed rpm	Intermittent Ratings - 10% of Operation							
89 [788] 19	194 [1717] 16	264 [2336] 10	326 [2885] 6					
92 [814] 40	196 [1735] 36	268 [2372] 32	329 [2912] 21	394 [3487] 10				
90 [796] 81	192 [1699] 77	264 [2336] 72	321 [2841] 65	397 [3513] 50	445 [3938] 42	510 [4513] 36	554 [4903] 23	
86 [761] 124	185 [1637] 121	256 [2265] 115	314 [2779] 106	392 [3469] 94	439 [3855] 84	502 [4442] 76	557 [4929] 61	
82 [726] 165	179 [1584] 162	248 [2195] 158	305 [2699] 153	384 [3398] 144	431 [3814] 135	486 [4301] 125	545 [4823] 113	
69 [611] 207	169 [1496] 203	243 [2150] 195	293 [2593] 189	378 [3345] 183	421 [3726] 170	475 [4204] 157	526 [4655] 138	
48 [425] 250	152 [1345] 247	230 [2035] 243	282 [2496] 236	364 [3221] 222	407 [3602] 216	456 [4035] 205	508 [4496] 188	
37 [327] 291	139 [1230] 285	219 [1938] 278	263 [2327] 271	343 [3035] 256	386 [3416] 249	441 [3903] 234	496 [4389] 221	
26 [230] 312	128 [1133] 310	205 [1814] 307	245 [2168] 302	328 [2903] 294	374 [3310] 270	428 [3788] 254	481 [4257] 242	

21
42
83
125
167
208
250
292
313

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]							
115 [1018]	229 [2027]	325 [2875]	382 [3381]	478 [4230]	535 [4735]	611 [5407]	669 [5920]

Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]

315

Pressure - bars [psi]				Max. Cont.		Max. Inter.	
30 [435]	50 [725]	70 [1015]	85 [1230]	100 [1450]	120 [1740]	140 [2030]	160 [2320]

303 cc [18.5 in³/rev.]

5 [1.3]
10 [2.6]
20 [5.3]
30 [7.9]
40 [10.6]
50 [13.2]
60 [15.8]
70 [18.5]
75 [19.8]

Torque - Nm [lb-in], Speed rpm	Intermittent Ratings - 10% of Operation							
123 [1089] 16	200 [1770] 13	282 [2496] 10	344 [3044] 6					
117 [1035] 31	194 [1717] 29	277 [2451] 25	342 [3027] 21	399 [3531] 17				
112 [991] 64	196 [1735] 62	275 [2434] 58	340 [3009] 54	397 [3513] 49	460 [4071] 43	526 [4655] 32	605 [5354] 23	
104 [920] 98	183 [1620] 94	267 [2363] 90	322 [2850] 85	390 [3452] 79	448 [3965] 70	520 [4602] 62	602 [5328] 56	
86 [761] 129	168 [1487] 126	252 [2230] 122	304 [2690] 118	365 [3230] 113	440 [3894] 106	515 [4558] 99	588 [5204] 76	
73 [646] 164	156 [1381] 160	238 [2106] 155	288 [2549] 150	350 [3098] 144	424 [3752] 136	500 [4425] 127	571 [5053] 119	
60 [531] 195	140 [1239] 192	223 [1974] 188	270 [2390] 183	325 [2876] 176	396 [3505] 170	480 [4248] 164	546 [4832] 157	
37 [327] 228	122 [1080] 226	186 [1646] 223	254 [2248] 218	309 [2735] 212	368 [3257] 206	455 [4027] 196	527 [4664] 188	
23 [204] 245	100 [885] 242	174 [1540] 238	237 [2097] 233	293 [2593] 228	359 [3177] 222	444 [3929] 215	516 [4567] 206	

17
33
66
99
132
165
198
231
248

Overall Efficiency - 60 - 100% 40 - 59% 0 - 39%

Theoretical Torque - Nm [lb-in]							
145 [1283]	241 [2133]	338 [2991]	410 [3628]	482 [4265]	579 [5124]	675 [5973]	772 [6832]

Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]



400

Pressure - bars [psi]				Max. Cont.		Max. Inter.	
30 [435]	45 [650]	55 [800]	65 [940]	80 [1160]	95 [1380]	110 [1595]	125 [1810]

388 cc [23.7 in³/rev.]

Torque - Nm [lb-in], Speed rpm Intermittent Ratings - 10% of Operation

Flow - lpm [gpm]	5 [1.3]	144 [1274] 11	220 [1947] 10	270 [2389] 7	338 [2991] 5					Theoretical rpm
	10 [2.6]	146 [1292] 25	223 [1973] 23	272 [2407] 20	340 [3009] 16	412 [3646] 10	488 [4319] 6			
Max. Cont.	20 [5.3]	145 [1283] 51	219 [1938] 50	269 [2381] 48	333 [2347] 45	408 [3611] 40	484 [4283] 35	548 [4850] 27		13
	30 [7.9]	138 [1221] 76	215 [1903] 75	262 [2319] 73	322 [2850] 70	402 [3558] 67	472 [4177] 59	546 [4832] 47	625 [5531] 36	26
Max. Inter.	40 [10.6]	120 [1062] 103	204 [1805] 102	250 [2212] 100	310 [2743] 96	393 [3478] 89	458 [4053] 82	535 [4735] 73	618 [5469] 62	52
	50 [13.2]	100 [885] 129	186 [1646] 128	238 [2106] 125	295 [2611] 123	374 [3310] 119	446 [3947] 112	520 [4602] 102	600 [5310] 91	77
	60 [15.8]	76 [673] 155	166 [1469] 153	222 [1965] 150	282 [2496] 148	358 [3168] 143	427 [3779] 139	496 [4389] 130	576 [5097] 121	103
	70 [18.5]	50 [442] 179	145 [1283] 177	194 [1717] 174	250 [2212] 170	334 [2956] 165	402 [3558] 158	472 [4177] 152	540 [4779] 144	129
	75 [19.8]	42 [372] 189	135 [1195] 187	176 [1558] 184	226 [2000] 180	306 [2708] 175	373 [3301] 167	445 [3938] 160	520 [4602] 150	155

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]

185 [1640]	278 [2460]	340 [3007]	402 [3554]	494 [4374]	587 [5194]	680 [6014]	772 [6834]
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Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]

NOTE: Dimensions shown are without paint. Paint thickness can be up to 0,13 [.005]

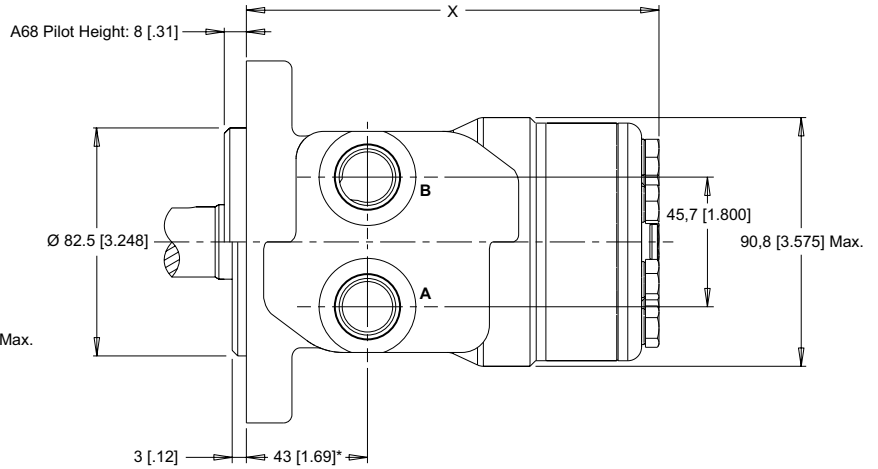
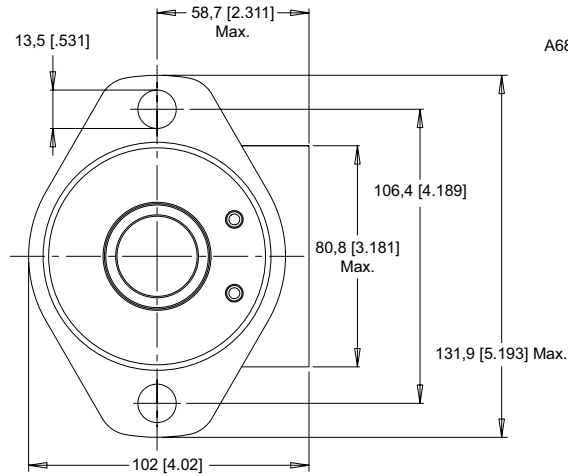
155 & 156 SERIES HOUSINGS (SAE A & MAGNETO MOUNTS)

A10 2-Hole 1/2" NPT Aligned Ports

A11 2-Hole 7/8" O-Ring Aligned Ports

A18 2-Hole 1/2" BSP.F Aligned Ports

A68 2-Hole 1/2" BSP.F Aligned Ports*

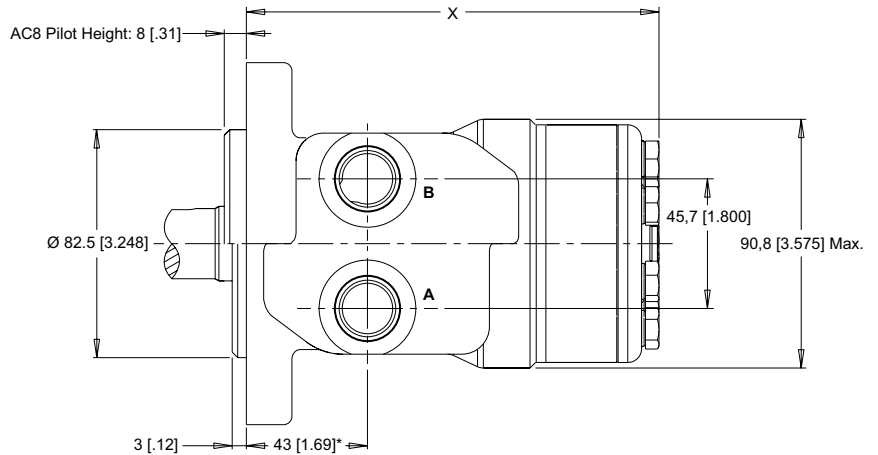
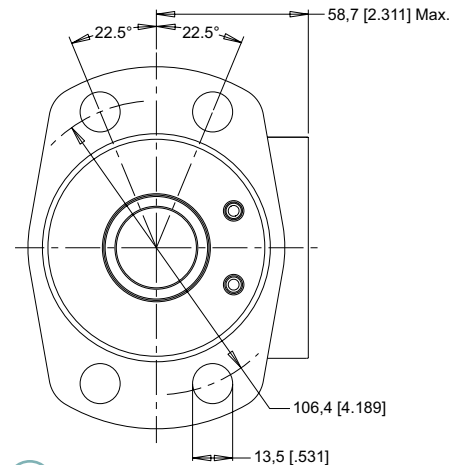


NOTE: Dimension X is found on page 16. * Add 5 [.20] to dimension for the A10, A11, & A18 housings.

A30 4-Hole 1/2" NPT Aligned Ports

A31 4-Hole 7/8" O-Ring Aligned Ports

AC8 4-Hole 1/2" BSP.F Aligned Ports

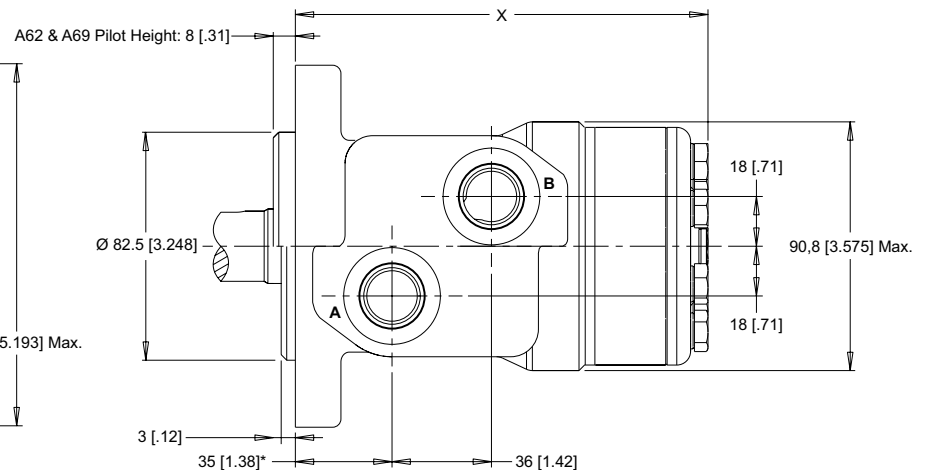
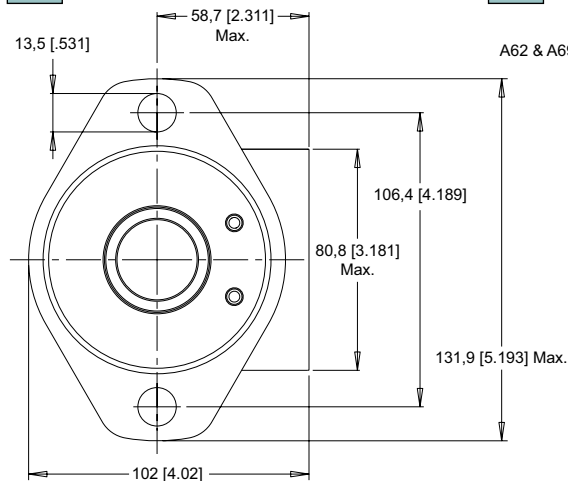


NOTE: Dimension X is found on page 16. * Add 5 [.20] to dimension for the A30 & A31 housings.

A12 2-Hole 1/2" BSP.F Offset Ports

A62 2-Hole 1/2" BSP.F Offset Ports

A69 2-Hole 7/8" O-Ring Offset Ports



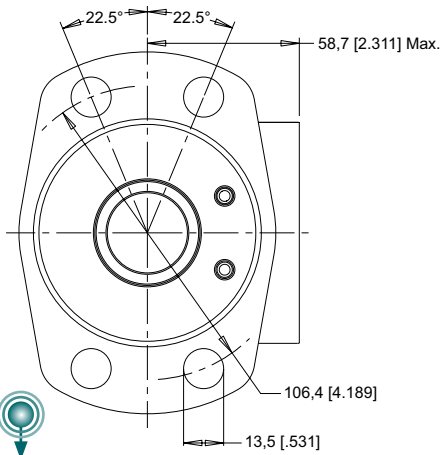
NOTE: Dimension X is found on page 16. * Add 5 [.20] to dimension for the A12 housing.



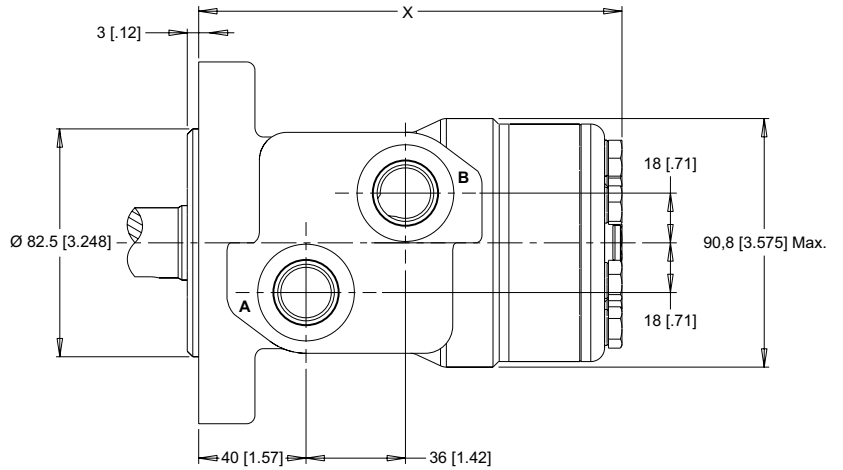
NOTE: Dimensions shown are without paint. Paint thickness can be up to 0,13 [.005]

155 & 156 SERIES HOUSINGS (SAE A & MAGNETO MOUNTS)

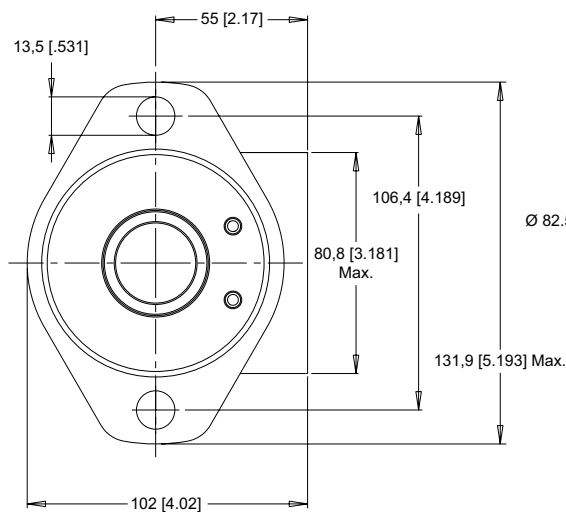
A32 4-Hole 1/2" BSP.F Offset Ports



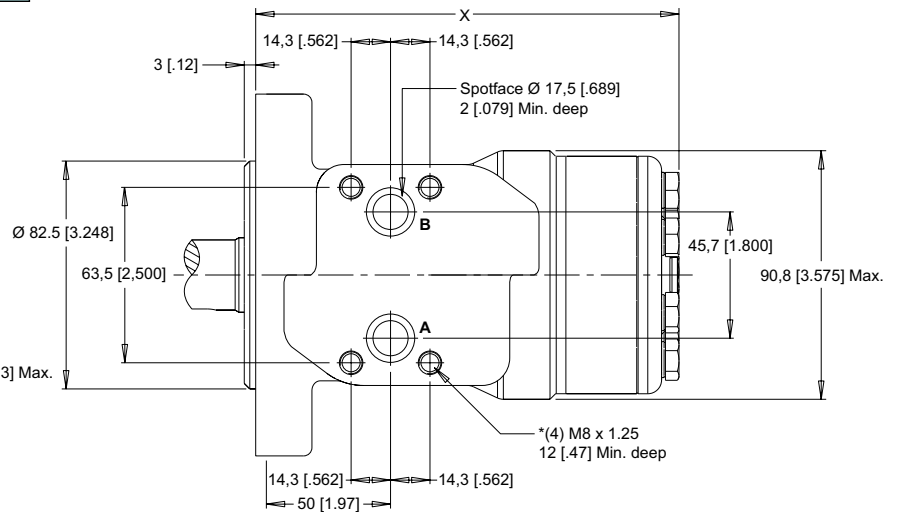
NOTE: Dimension X is found on page 16.



A17 2-Hole Manifold Ports

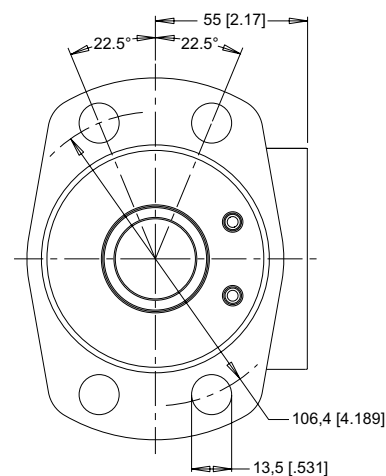


G17 2-Hole Manifold Ports

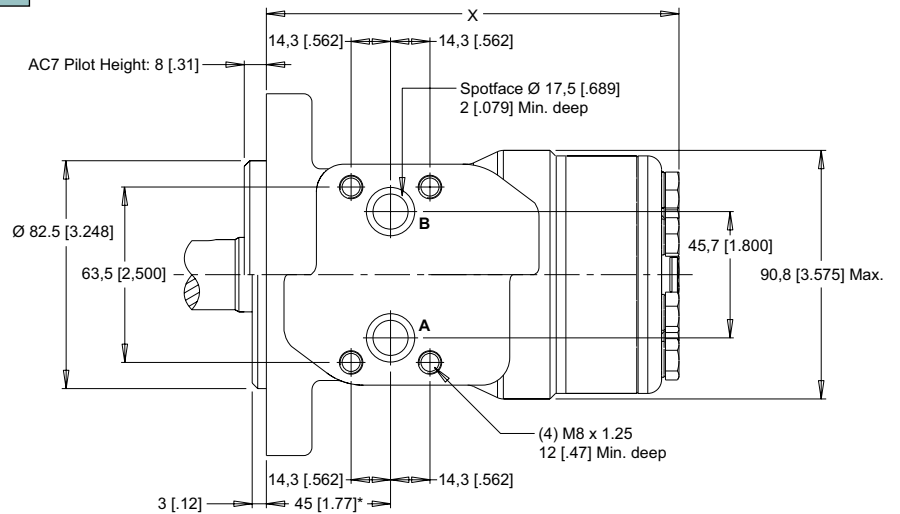


NOTE: Dimension X is found on page 16. * The four (4) mounting holes on the A17 housing are 5/16-18 UNC at the same depth.

A37 4-Hole Manifold Ports



AC7 4-Hole Manifold Ports



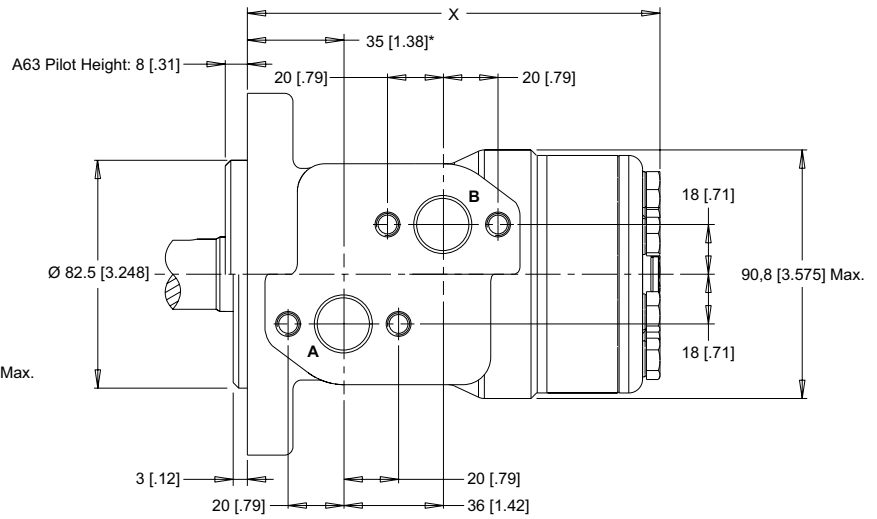
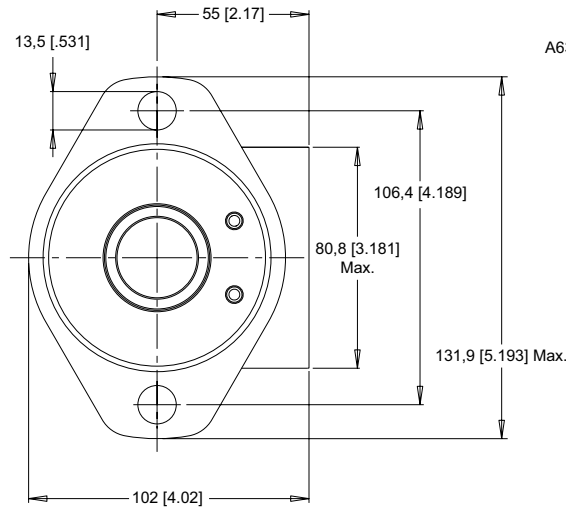
NOTE: Dimension X is found on page 16. * Pilot height is 3 [.12] for the A37 housing. ** Add 5 [.20] to dimension for the A37 housing.

NOTE: Dimensions shown are without paint. Paint thickness can be up to 0,13 [.005]

155 & 156 SERIES HOUSINGS (SAE A, MAGNETO, 4-HOLE SQUARE MOUNTS)

A13 2-Hole 1/2" BSP.F Offset Manifold Ports

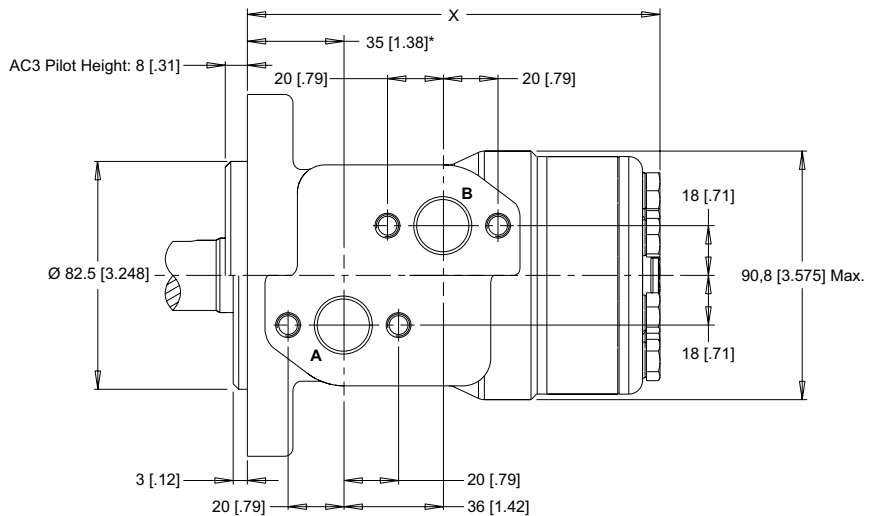
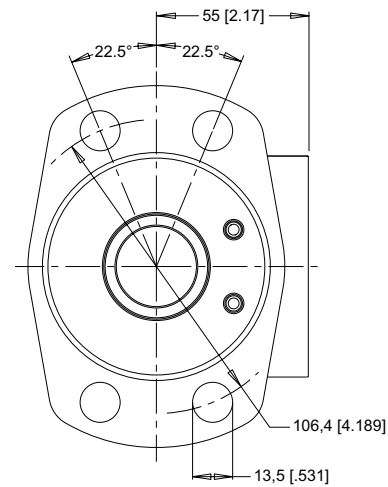
A63 2-Hole 1/2" BSP.F Offset Manifold Ports



NOTE: Dimension X is found on page 16. * Add 5 [.20] to dimension for the A13 housing.

AC3 4-Hole 1/2" BSP.F Offset Manifold Ports

A3D 4-Hole 7/8" O-Ring Offset Manifold Ports

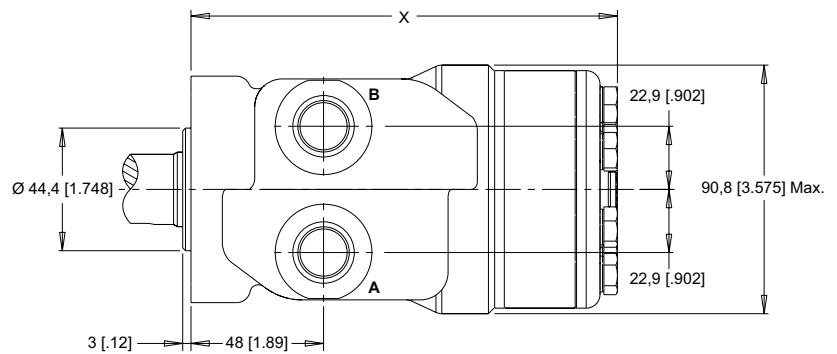
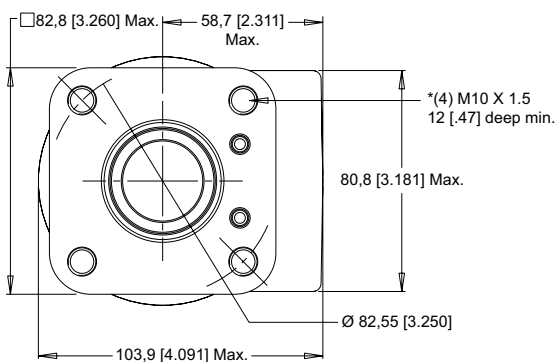


NOTE: Dimension X is found on page 16. * Add 5 [.20] to dimension for the A3D housing.

F30 4-Hole 1/2" NPT Aligned Ports

F31 4-Hole 7/8" O-Ring Aligned Ports

F38 4-Hole 1/2" BSP.F Aligned Ports



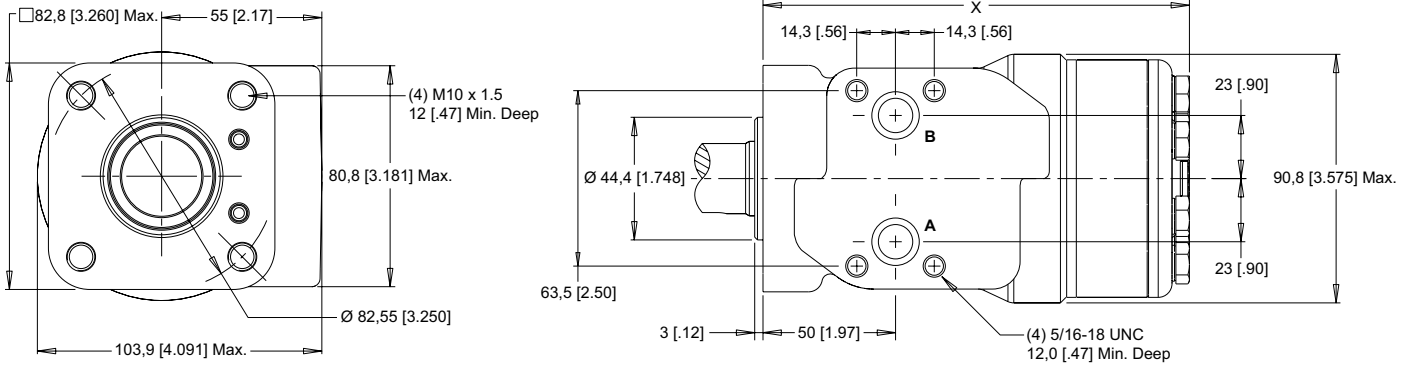
NOTE: Dimension X is found on page 16. * The four (4) mounting holes on the F30 & F31 housings are 3/8-16 UNC at the same depth.



NOTE: Dimensions shown are without paint. Paint thickness can be up to 0,13 [.005]

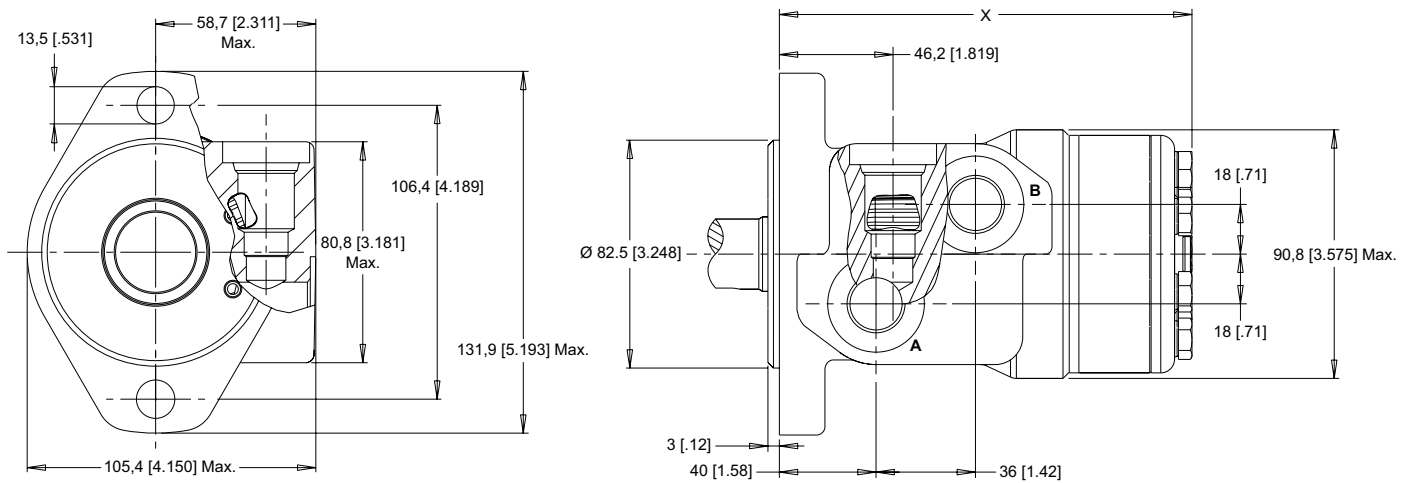
155 & 156 SERIES HOUSINGS (SAE A & MAGNETO MOUNTS WITH RELIEF CAVITY)

F37 4-Hole Manifold Ports



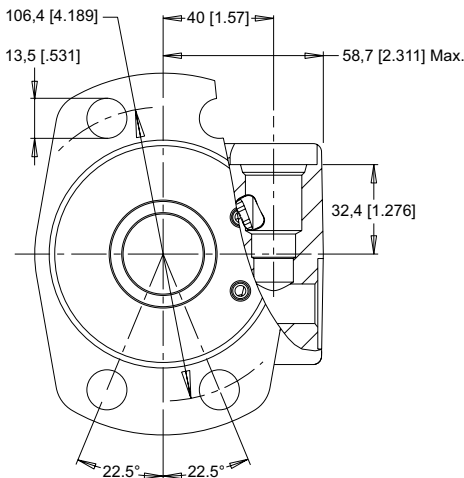
NOTE: Dimension X is found on page 16.

A19 2-Hole 7/8" O-Ring Offset Ports

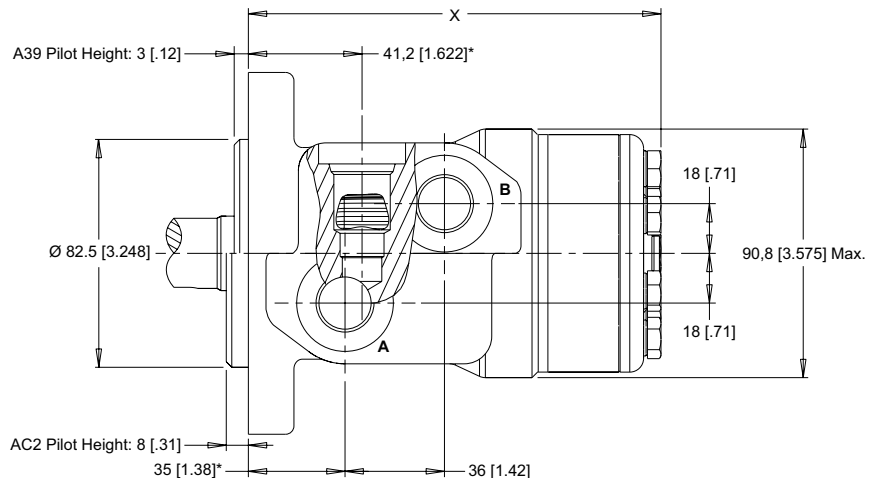


NOTE: Dimension X is found on page 16.

A39 4-Hole 7/8" O-Ring Offset Ports



AC2 4-Hole 1/2" BSP.F Offset Ports

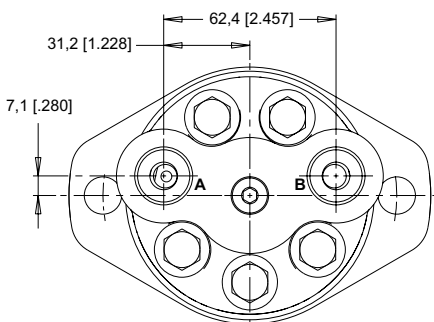
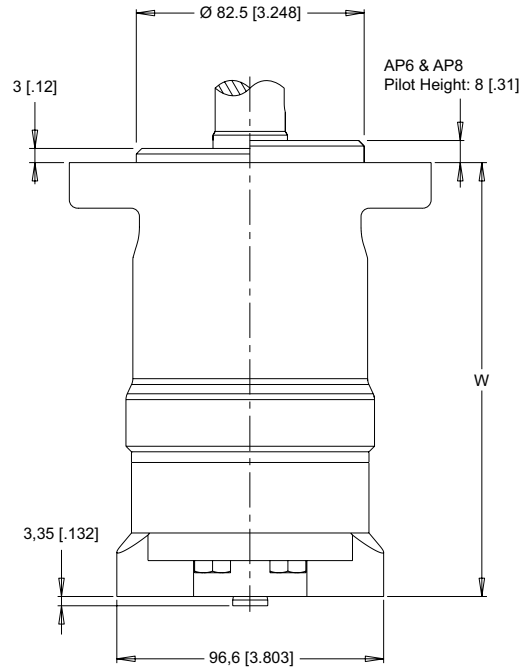
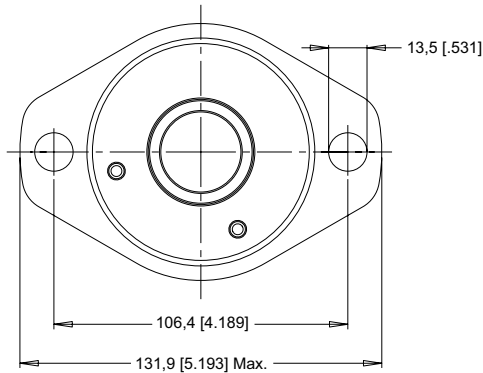


NOTE: Dimension X is found on page 16. * Add 5 [.20] to dimension for the A39 housing.

NOTE: Dimensions shown are without paint. Paint thickness can be up to 0,13 [.005]

155 & 156 SERIES HOUSINGS (SAE A MOUNT WITH END PORTS)

- A06** 2-Hole 3/4" O-Ring Ports With 3mm Pilot
- A08** 2-Hole 1/2" BSP.F Ports With 3mm Pilot
- AP6** 2-Hole 3/4" O-Ring Ports With 8mm Pilot
- AP8** 2-Hole 1/2" BSP.F Ports With 8mm Pilot



LENGTH / WEIGHT CHART		
3mm Pilot Mounts - Dimension W		
Code	mm [in]	kg [lb]
025	144 [5.67]	5.9 [13.0]
032	145 [5.71]	6.0 [13.2]
040	146 [5.75]	6.1 [13.4]
050	146 [5.75]	6.1 [13.4]
060	148 [5.83]	6.1 [13.4]
080	150 [5.91]	6.2 [13.6]
100	153 [6.02]	6.3 [13.9]
125	157 [6.18]	6.4 [14.1]
160	161 [6.33]	6.5 [14.3]
200	166 [6.54]	6.7 [14.7]
250	173 [6.81]	6.9 [15.2]
315	181 [7.13]	7.2 [15.8]
400	192 [7.56]	7.5 [16.5]

NOTE:
WP motor weights vary $\pm 0,5$ kg [1 lb] depending upon motor configuration.

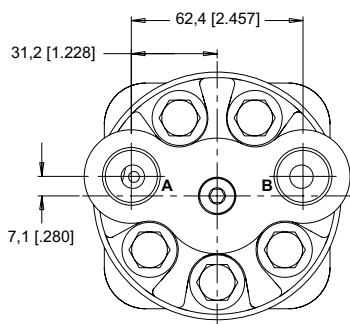
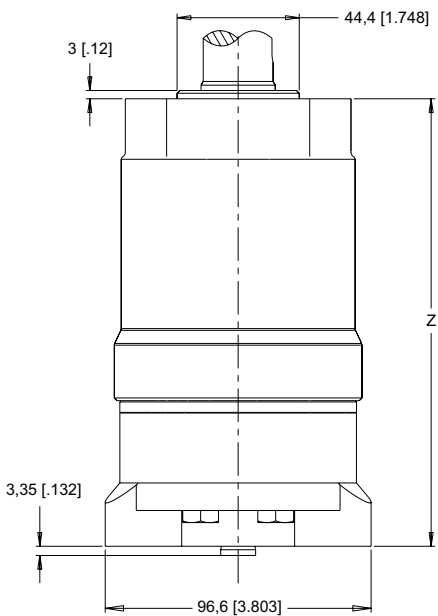
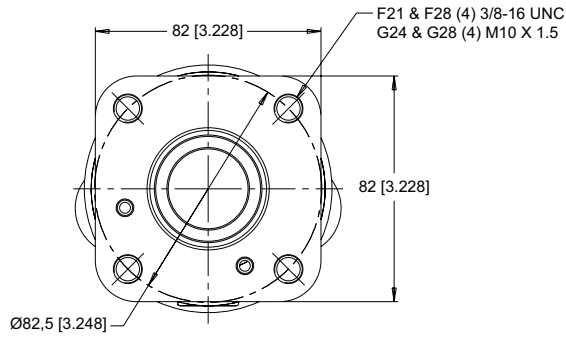
LENGTH / WEIGHT CHART		
8mm Pilot Mounts - Dimension W		
Code	mm [in]	kg [lb]
025	139 [5.47]	5.8 [12.1]
032	140 [5.51]	5.9 [13.0]
040	141 [5.55]	6.0 [13.2]
050	141 [5.55]	6.0 [13.2]
060	143 [5.63]	6.0 [13.2]
080	145 [5.71]	6.1 [13.4]
100	148 [5.83]	6.2 [13.6]
125	152 [5.98]	6.3 [13.9]
160	156 [6.14]	6.4 [14.1]
200	161 [6.34]	6.6 [14.5]
250	168 [6.61]	6.8 [15.0]
315	176 [6.93]	7.1 [15.6]
400	187 [7.36]	7.4 [16.3]

NOTE:
WP motor weights vary $\pm 0,5$ kg [1 lb] depending upon motor configuration.



155 & 156 SERIES HOUSINGS (4 HOLE SQUARE MOUNT WITH END PORTS)

- F21** 4-Hole 7/8" O-Ring Ports
- F26** 4-Hole 3/4" O-Ring Ports
- G24** 4-Hole M22 x 1.5 Ports
- G28** 4-Hole 1/2" BSP.F Ports



LENGTH / WEIGHT CHART		
Dimension Z		
Code	mm [in]	kg [lb]
025	144 [5.67]	5.5 [12.1]
032	145 [5.71]	5.6 [12.3]
040	146 [5.75]	5.7 [12.6]
050	146 [5.75]	5.7 [12.6]
060	148 [5.83]	5.7 [12.6]
080	150 [5.91]	5.8 [12.8]
100	153 [6.02]	5.9 [13.0]
125	157 [6.18]	6.0 [13.2]
160	161 [6.34]	6.1 [13.4]
200	166 [6.54]	6.3 [13.9]
250	173 [6.81]	6.5 [14.3]
315	181 [7.13]	6.8 [15.0]
400	192 [7.56]	7.1 [15.7]

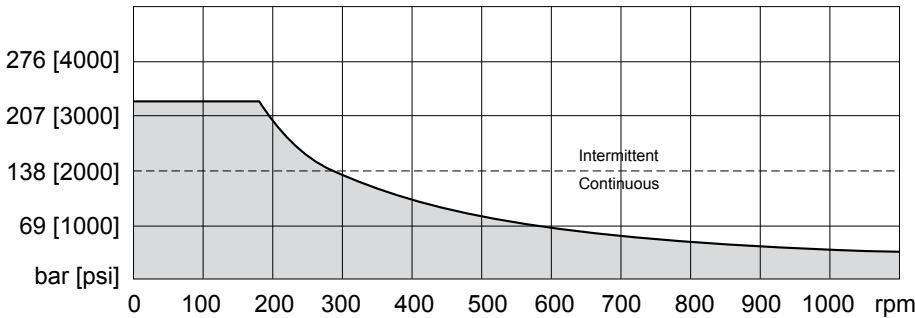
NOTE:
WP motor weights vary ± 0,5 kg [1 lb] depending upon motor configuration.



155 & 156 SERIES TECHNICAL INFORMATION

PERMISSIBLE SHAFT SEAL PRESSURE

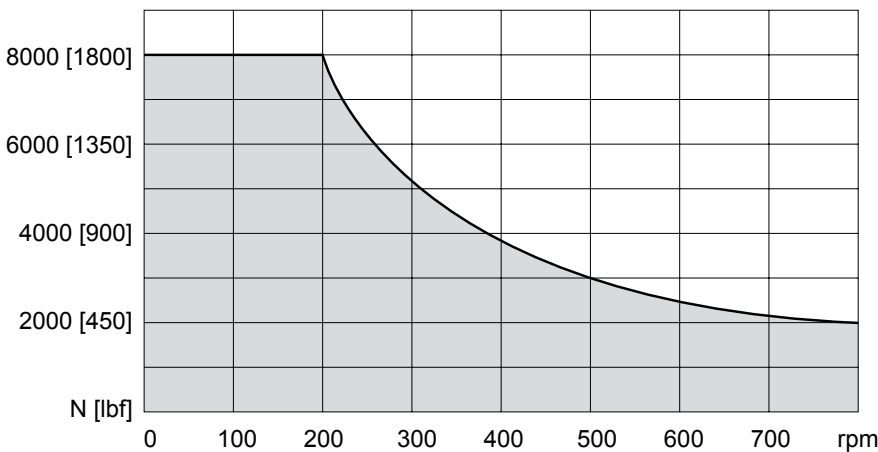
The curve below represents allowable seal pressure at various speeds. Operation in the gray area results in maintaining the rated life of the shaft seal. Actual shaft seal pressure depends on motor configuration (see below).



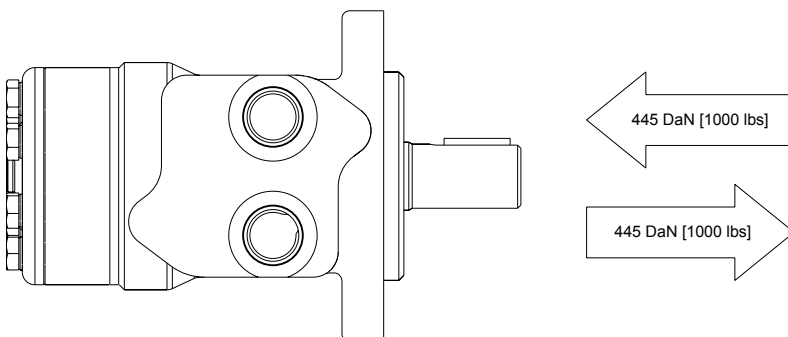
With check valves and drain connection, the shaft seal pressure equals pressure in the drain line. With check valves and no drain connection, shaft seal pressure is identical to output pressure. No check valves and no drain connection, the shaft seal pressure is identical to the average value of input and output pressure.

ALLOWABLE SHAFT LOAD / BEARING CURVE

The bearing curve below represents the side load capacity of the motor at the centerline of the key for various motor speeds. Operating conditions within the shaded area will maintain acceptable oil film lubrication with recommended fluids. Operating conditions outside the shaded area are susceptible to motor failure due to oil starvation and/or excessive heat generation. Fluids with low lubricity or low viscosity may require the maximum load and speed ratings to be derated to provide acceptable motor life and performance.



THRUST LOAD



LENGTH / WEIGHT CHART		
3mm Pilot Mounts - Dimension X		
Code	mm [in]	kg [lb]
025	133 [5.24]	6.3 [13.9]
032	134 [5.28]	6.4 [14.1]
040	136 [5.34]	6.5 [14.2]
050	136 [5.34]	6.5 [14.2]
060	137 [5.40]	6.5 [14.3]
080	139 [5.49]	6.6 [14.5]
100	142 [5.59]	6.7 [14.7]
125	146 [5.74]	6.8 [14.9]
160	150 [5.90]	6.9 [15.2]
200	155 [6.10]	7.1 [15.6]
250	162 [6.36]	7.3 [16.1]
315	170 [6.69]	7.6 [16.7]
400	181 [7.13]	7.9 [17.5]

NOTE:

WP motor weights vary $\pm 0,5$ kg [1 lb] depending upon motor configuration.

LENGTH / WEIGHT CHART		
8mm Pilot Mounts - Dimension X		
Code	mm [in]	kg [lb]
025	128 [5.04]	6.2 [13.6]
032	129 [5.08]	6.3 [13.9]
040	131 [5.16]	6.4 [14.1]
050	131 [5.16]	6.4 [14.1]
060	132 [5.20]	6.4 [14.1]
080	134 [5.28]	6.5 [14.3]
100	137 [5.39]	6.6 [14.5]
125	141 [5.55]	6.7 [14.7]
160	145 [5.71]	6.8 [15.0]
200	150 [5.91]	7.0 [15.4]
250	157 [6.18]	7.2 [15.8]
315	165 [6.50]	7.5 [16.5]
400	176 [6.93]	7.8 [17.2]

NOTE:

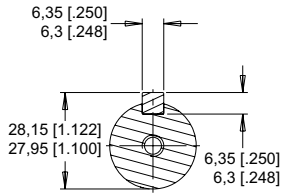
WP motor weights vary $\pm 0,5$ kg [1 lb] depending upon motor configuration.



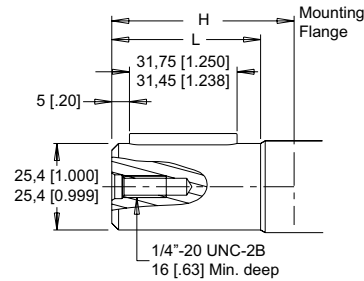
155 & 156 SERIES SHAFTS

10 1" Straight

Max. Torque: 655 Nm [5800 lb-in]



15 1" Straight Extended

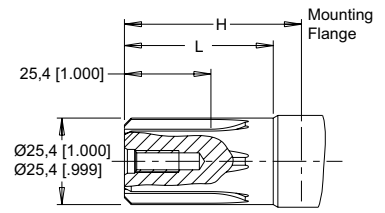


02 6B Spline (1/4" UNC Tap)

Max. Torque: 429 Nm [3800 lb-in]



04 6B Spline (M8 x 1.25 Tap)



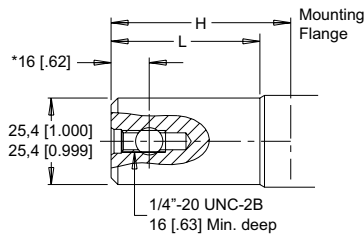
05 1" Pinhole 9,5 [.375]

66 1" Pinhole 8,0 [.315]

Max. Torque: 678 Nm [6000 lb-in]

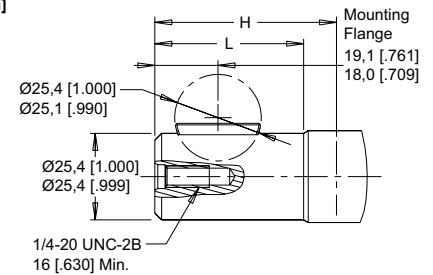
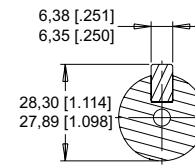


53 1" Pinhole 10,3 [.406]



B1 1" Straight with Woodruff Key

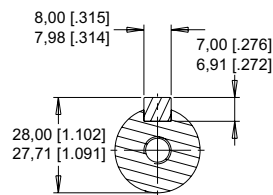
Max. Torque: 655 Nm [5800 lb-in]



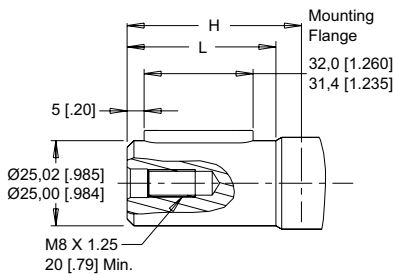
NOTE: *For 66 shaft subtract 4,6 [.18] from this dimension.

12 25mm Straight

Max. Torque: 678 Nm [6000 lb-in]

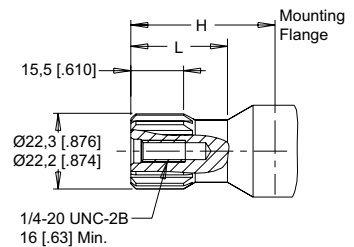


16 25mm Straight Extended



01 13 Tooth Spline

Max. Torque: 170 Nm [1500 lb-in]



MOUNTING FLANGE TO SHAFT END Dimension H			
Code	8mm Pilot	Code	8mm Pilot
01	48,3 [1.902]	15	67,1 [2.642]
02	50,3 [1.980]	16	67,6 [2.661]
04	50,3 [1.980]	53	50,3 [1.980]
05	50,3 [1.980]	66	55,3 [2.177]
10	50,3 [1.980]	B1	50,3 [1.980]
12	55,3 [2.177]		

Dimension L			
Code	8mm Pilot	Code	8mm Pilot
01	33,0 [1.299]	15	56,0 [2.205]
02	39,5 [1.555]	16	56,5 [2.224]
04	39,5 [1.555]	53	39,5 [1.555]
05	39,5 [1.555]	66	44,5 [1.752]
10	39,5 [1.555]	B1	39,5 [1.555]
12	44,5 [1.752]		

NOTE: For 3mm pilot housings subtract 5,0 [.197] from dimension. Shaft lengths vary ± 0,8 [.030].

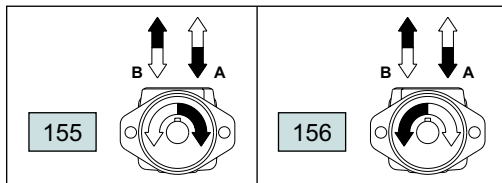


155 & 156 SERIES MODEL CODE BUILDER

SERIES	DISPLACEMENT	HOUSING	SHAFT	PAINT	CAVITY	ADD ON	MISCELLANEOUS
STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8

STEP 1 - Select a series

155 Clockwise Rotation **156** Counterclockwise Rotation



NOTE: To obtain the desired direction of shaft rotation, use the graphic above to determine the rotation code for the motor.

STEP 2 - Select a displacement option

025	25 cc	[1.5 in ³ /rev]	125	125 cc	[7.6 in ³ /rev]
032	32 cc	[2.0 in ³ /rev]	160	154 cc	[9.4 in ³ /rev]
040	40 cc	[2.5 in ³ /rev]	200	190 cc	[11.6 in ³ /rev]
050	50 cc	[3.0 in ³ /rev]	250	240 cc	[14.6 in ³ /rev]
060	59 cc	[3.6 in ³ /rev]	315	303 cc	[18.5 in ³ /rev]
080	78 cc	[4.8 in ³ /rev]	400	388 cc	[23.7 in ³ /rev]
100	96 cc	[5.9 in ³ /rev]			

STEP 3 - Select a housing option

A06	2-Hole 3/4" O-Ring With End Ports (S)
A08	2-Hole 1/2" BSP.F With End Ports (S)
AP6	2-Hole 3/4" O-Ring With End Ports 8mm Pilot
AP8	2-Hole 1/2" BSP.F With End Ports 8mm Pilot
A10	2-Hole 1/2" NPT Aligned Ports (S)
A11	2-Hole 7/8" O-ring Aligned Ports (S)
A12	2-Hole 1/2" BSP.F Offset Ports (S)
A13	2-Hole 1/2" BSP.F Offset Manifold (S)
A17	2-Hole Manifold Ports (S)

STEP 3 (Continued) - Select a housing option

A18	2-Hole 1/2" BSP.F Aligned (S)
A19	2-Hole 7/8" O-ring With Valve Cavity (S)
A30	4-Hole 1/2" NPT Aligned Ports
A31	4-Hole 7/8" O-ring Aligned Ports
A32	4-Hole 1/2" BSP.F Offset Ports
A37	4-Hole Manifold Ports
A39	4-Hole 7/8" O-ring With Valve Cavity
A3D	4-Hole 7/8" O-ring Offset Manifold Ports
A62	2-Hole 1/2" BSP.F Offset 8mm Pilot
A63	2-Hole 1/2" BSP.F Offset Manifold 8mm Pilot
A68	2-Hole 1/2" BSP.F Aligned 8mm Pilot
A69	2-Hole 7/8" O-Ring Offset Ports 8mm Pilot
AC2	4-Hole 1/2" BSP.F Offset Ports 8mm Pilot Valve Cavity
AC3	4-Hole 1/2" BSP.F Offset Manifold 8mm Pilot
AC7	4-Hole Manifold Ports 8mm Pilot
AC8	4-Hole 1/2" BSP.F Aligned Ports 8mm Pilot
F21	4-Hole 7/8" O-ring With End Ports (S)
F26	4-Hole 3/4" O-ring With End Ports (S)
F30	4-Hole 1/2" NPT Aligned Ports (S)
F31	4-Hole 7/8" O-ring Aligned Ports (S)
F37	4-Hole Manifold Ports (S)
F38	4-Hole 1/2" BSP.F Aligned Ports (S)
G17	2-Hole Manifold Ports (S)
G24	4-Hole M22 x 1.5 With End Ports (S)
G28	4-Hole 1/2" BSP.F With End Ports (S)

NOTE: Housings with metric ports will have a 1/4" BSP.F drain. Housings with SAE and NPT ports will have a 7/16-20 UN drain.



155 & 156 SERIES MODEL CODE BUILDER

SERIES	DISPLACEMENT	HOUSING	SHAFT	PAINT	CAVITY	ADD ON	MISCELLANEOUS
STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8

STEP 4 - Select a shaft option

01	13 Tooth Spline	15	1" Straight Ext. (S)
02	6B (1/4" UNC Tap)	16	25mm Straight Ext. (S)
04	6B (M8 x 1.25 Tap)	53	1" Pinhole (.406")
05	1" Pinhole (.375")	66	1" Pinhole (8mm)
10	1" Straight	B1	1" Straight (Woodruff Key)
12	25mm Straight		

STEP 5 - Select a paint option

A	Black	B	Black (Unpainted Flange)
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STEP 6 - Select a valve cavity option and installed valve

A	None	F	121 bar [1750 psi]
B	Relief Valve Cavity	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]		

NOTE: Valve cavity is only available on the A19, A39, A62 & AC2 housings. The B option will not have a valve cartridge listed above installed.

STEP 7 - Select an add on option

A	Standard
B	Lock Nut
C	Solid Hex Nut
W	4-Pin Dual Male Weatherpack Connector (S)
X	4-Pin M12 Dual Male Connector (S)
Y	3-Pin Single Male Weatherpack Connector (S)
Z	4-Pin M12 Single Male Connector (S)

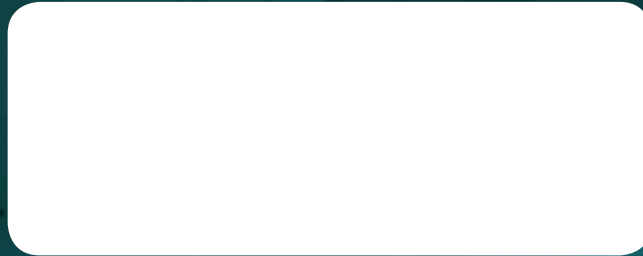
NOTE: (S) - STEP 3 Housings available for use with speed sensors. STEP 4 Shafts available for use with speed sensors. STEP 7 Speed sensor options.

STEP 8 - Select a miscellaneous option

AA	None
AC	Freeturning Rotor
FB	No Check Valves Installed In Motor

Delivering The Power To Get Work Done.

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