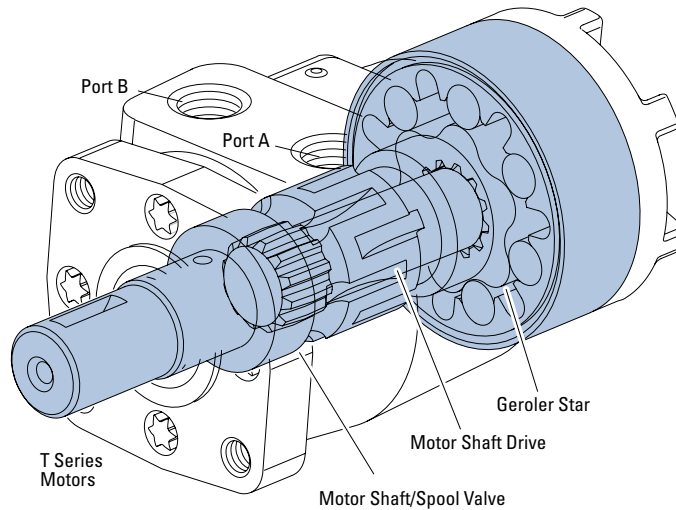


# T Series (158-)

## Highlights



### Features:

- Constant clearance Geroler, geometry
- Optimized drive system with reduced running angle
- Three-pressure zone design (ability to reduce case pressure)
- Variety of displacements, shafts and mounts
- Special options to meet customer needs

### Benefits:

- High efficiency
- Smooth low-speed operation
- Extended motor life (especially at low speed conditions)
- Design flexibility
- Ability to optimize designs for your application needs
- Extends leak-free performance

### Applications:

- Agricultural augers, harvesters, seeders
- Car wash brushes
- Food processing
- Railroad maintenance equipment
- Machine tools
- Conveyors
- Industrial sweepers and floor polishers
- Saw mill works
- Turf equipment
- Concrete and asphalt equipment
- Skid steer attachments
- Many more

### Description

The newest Geroler motor, the "T Series, features the latest innovations in Geroler technology. These innovations include optimized Geroler geometry with lower drive running angle for improved life and improved low speed performance. In addition, the improved housing and smaller diameter end cap results in increased envelope rigidity which improves efficiency under high pressure loads. All of these innovations come together to make the T Series motor the highest performing motor in its class.

### Specifications for T Series Motors

Geroler Element	11 Displacements
Flow l/min [GPM]	55 [15] Continuous***
	75 [20] Intermittent**
Speed	Up to 1021 RPM
Pressure bar [PSI]	155 [2250] Cont.***
	190 [2750] Inter.**
Torque Nm [lb-in]	441 [3905] Cont.***
	486 [4300] Inter.**

\*\*\* Continuous— (Cont.) Continuous rating, motor may be run continuously at these ratings.

\*\* Intermittent— (Inter.) Intermittent operation, 10% of every minute.



Crane (winch)



Paving



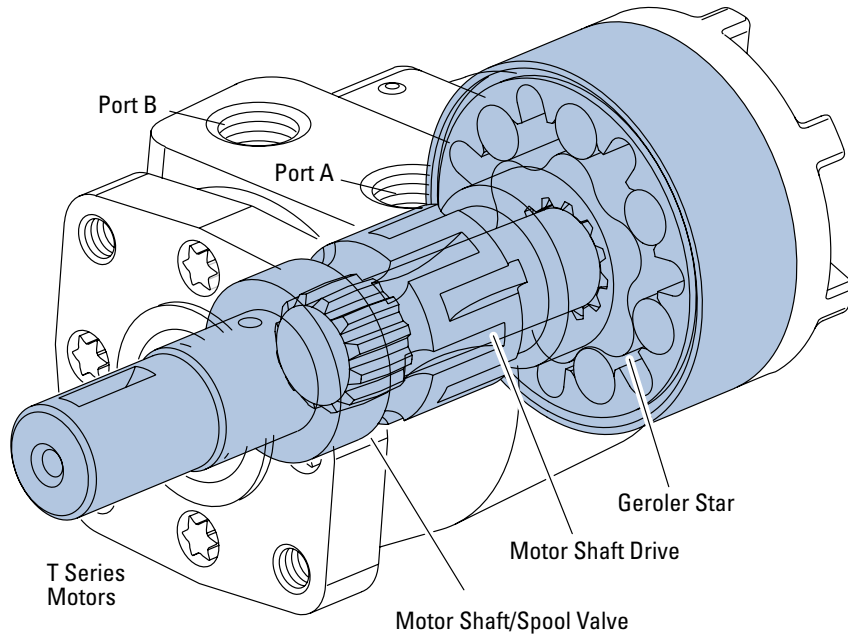
Harvester



Crane and winches

# T Series (158-)

## Specifications



### SPECIFICATION DATA — T MOTORS

Displ. cm <sup>3</sup> /r [in <sup>3</sup> /r]		36 [2.2]	49 [3.0]	66 [4.0]	80 [4.9]	102 [6.2]	131 [8.0]	157 [9.6]	195 [11.9]	244 [14.9]	306 [18.7]	370 [22.6]
Max. Speed (RPM) @ Continuous Flow		1021	906	849	694	550	426	355	287	229	183	152
Flow LPM [GPM]	Continuous Intermittent	38 [10] 38 [10]	45 [12] 57 [15]	57 [15] 68 [18]	57 [15] 76 [20]	57 [15] 76 [20]	57 [15] 76 [20]	57 [15] 76 [20]	57 [15] 76 [20]	57 [15] 76 [20]	57 [15] 76 [20]	57 [15] 76 [20]
Torque Nm [lb-in]	Continuous Intermittent **	76 [672]	105 [928]	138 [1222]	174 [1541]	219 [1936]	251 [2226]	297 [2628]	359 [3178]	410 [3633]	441 [3905]	430 [3811]
		93 [824]	118 [1131]	168 [1488]	212 [1872]	264 [2339]	307 [2718]	359 [3178]	437 [3864]	485 [4290]	483 [4275]	486 [4300]
Pressure Δ Bar Δ PSI]	Continuous* Intermittent**	155 [2250]	155 [2250]	155 [2250]	155 [2250]	155 [2250]	138 [2000]	138 [2000]	138 [2000]	127 [1850]	110 [1600]	90 [1300]
		190 [2750]	190 [2750]	190 [2750]	190 [2750]	190 [2750]	172 [2500]	172 [2500]	172 [2500]	155 [2250]	124 [1800]	103 [1500]

A simultaneous maximum torque and maximum speed NOT recommended.

#### Note:

To assure best motor life, run motor for approximately one hour at 30% of rated pressure before application to full load. Be sure motor is filled with fluid prior to any load applications.

#### Maximum Inlet Pressure:

190 Bar [2750 PSI] without regard to Δ Bar [D PSI] and/or back pressure ratings or combination thereof.

6B splined or Tapered shafts are recommended whenever operation above 282 NM [2500 lb-in] of torque, especially for those applications subject to frequent reversals.

#### Δ Pressure:

The true Δ bar [Δ PSI] between inlet port and outlet port

#### Continuous Rating:

Motor may be run continuously at these ratings

#### Intermittent Operation:

10% of every minute

#### Recommended Fluids:

Premium quality, anti-wear type hydraulic oil with a viscosity of not less than 70 SUS at operating temperature.

#### Recommended Maximum System Operating Temp.:

82°C [180°F]

#### Recommended Filtration:



per ISO Cleanliness Code 4406, level 20/18/13

# T Series (158-, 185-)

## Performance Data

Motors run with high efficiency in all areas designated with a number for torque and speed. For best motor life select a motor to run with a torque and speed range shown in the light shaded area.

Performance data is typical at 120 SUS. Actual data may vary slightly from unit to unit in production.

 Continuous  
 Intermittent

**36 cm<sup>3</sup>/r [2.2 in<sup>3</sup>/r]**  
Δ Pressure Bar [PSI]  
Continuous

		[200]	[400]	[600]	[800]	[1000]	[1200]	[1400]	[1600]	[1800]	[2000]	[2200]	[2250]	Max. Continuous	Max. Intermittent
		14	28	41	55	69	83	97	110	124	138	152	155		
Flow LPM [GPM]	[2]	[50]	[110]	[172]	[233]	[291]	[348]	[401]	[455]	[501]	[546]	[590]	[596]	[635]	[72]
	7,6	6	12	19	26	33	39	45	51	57	62	67	67	72	64
	[4]	[50]	[109]	[172]	[233]	[296]	[355]	[414]	[475]	[534]	[584]	[646]	[659]	[786]	[89]
	15,1	6	12	19	26	33	40	47	54	60	66	73	74	89	283
	[6]	[43]	[108]	[171]	[233]	[298]	[361]	[420]	[479]	[538]	[595]	[657]	[672]	[824]	[93]
22,7	5	12	19	26	34	41	47	54	61	67	74	76	93	425	
[8]	[39]	[101]	[164]	[226]	[292]	[354]	[415]	[475]	[538]	[592]	[656]	[670]	[819]	[92]	
30,3	4	11	19	26	33	40	47	54	61	67	74	76	92	607	
[10]	[30]	[93]	[155]	[214]	[278]	[342]	[406]	[473]	[532]	[590]	[650]	[668]	[805]	[91]	
37,9	3	11	18	24	31	39	46	53	60	67	73	75	91	799	

[93] } Torque [lb-in]  
 11 } Nm  
 1014 } Speed RPM

**49 cm<sup>3</sup>/r [3.0 in<sup>3</sup>/r]**  
Δ Pressure Bar [PSI]  
Continuous

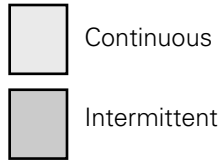
		[200]	[400]	[600]	[800]	[1000]	[1200]	[1400]	[1600]	[1800]	[2000]	[2200]	[2250]	Max. Continuous	Max. Intermittent
		14	28	41	55	69	83	97	110	124	138	152	155		
Flow LPM [GPM]	[2]	[73]	[161]	[245]	[327]	[408]	[486]	[563]	[641]	[710]	[786]	[849]	[866]	[1023]	[116]
	7,6	8	18	28	37	46	55	64	72	80	89	96	98	116	58
	[4]	[72]	[160]	[246]	[329]	[416]	[500]	[584]	[668]	[746]	[825]	[901]	[922]	[1123]	[127]
	15,1	8	18	28	37	47	56	66	75	84	93	102	104	127	152
	[6]	[58]	[148]	[234]	[326]	[413]	[500]	[583]	[663]	[746]	[827]	[909]	[928]	[1131]	[128]
22,7	7	17	26	37	47	56	66	75	84	93	103	105	128	344	
[8]	[44]	[127]	[216]	[306]	[392]	[480]	[566]	[652]	[734]	[815]	[897]	[917]	[1125]	[127]	
30,3	5	14	24	35	44	54	64	74	83	92	101	104	127	503	
[10]	[39]	[128]	[213]	[302]	[391]	[477]	[562]	[647]	[731]	[815]	[897]	[917]	[1121]	[127]	
37,9	4	14	24	34	44	54	63	73	83	92	101	104	127	638	
[12]	[33]	[119]	[203]	[291]	[378]	[464]	[551]	[635]	[719]	[802]	[883]	[900]	[1061]	[120]	
45,4	4	13	23	33	43	52	62	72	81	91	100	102	120	788	
Max. Intermittent	[15]	[26]	[86]	[172]	[256]	[342]	[430]	[505]	[591]	[674]	[745]	[830]	[851]		
56,8	3	10	19	29	39	49	57	67	76	84	94	96			

# T Series (158-, 185-)

## Performance Data

Motors run with high efficiency in all areas designated with a number for torque and speed. For best motor life select a motor to run with a torque and speed range shown in the light shaded area.

Performance data is typical at 120 SUS. Actual data may vary slightly from unit to unit in production.



		66 cm <sup>3</sup> /r [4.0 in <sup>3</sup> /r]											Max. Continuous	Max. Intermittent	
		Pressure Bar [PSI]													
		Continuous													
		[200]	[400]	[600]	[800]	[1000]	[1200]	[1400]	[1600]	[1800]	[2000]	[2200]	[2250]	[2750]	
Flow LPM [GPM]	[2]	[78] 9 114	[191] 22 111	[303] 34 110	[414] 47 107	[522] 59 105	[625] 71 101	[706] 80 96	[804] 91 92	[898] 101 87	[991] 112 81	[1081] 122 73	[1103] 125 72	[1318] 149 48	
	[4]	[97] 11 229	[209] 24 229	[325] 37 217	[441] 50 216	[548] 62 212	[657] 74 205	[766] 87 194	[873] 99 190	[972] 110 186	[1077] 122 183	[1181] 133 181	[1205] 136 178	[1437] 162 170	
	[6]	[79] 9 344	[192] 22 343	[309] 35 335	[426] 48 334	[534] 60 321	[649] 73 320	[760] 86 319	[874] 99 315	[984] 111 291	[1090] 123 288	[1190] 134 279	[1218] 138 276	[1488] 168 270	
	[8]	[75] 8 456	[191] 22 451	[304] 34 447	[419] 47 442	[532] 60 431	[645] 73 426	[759] 86 419	[871] 98 415	[982] 111 412	[1092] 123 401	[1197] 135 391	[1222] 138 386	[1458] 165 339	
	[10]	[49] 6 569	[163] 18 565	[283] 32 560	[398] 45 552	[509] 58 547	[623] 70 541	[742] 84 532	[856] 97 525	[971] 110 512	[1080] 122 504	[1186] 134 498	[1209] 137 496	[1425] 161 475	
	[12]	[24] 3 681	[156] 18 678	[270] 31 671	[385] 43 665	[502] 57 658	[614] 69 651	[729] 82 641	[845] 95 635	[963] 109 623	[1067] 121 612	[1182] 134 604	[1209] 137 601	[1472] 166 571	
	[14]	[19] 2 793	[143] 16 788	[261] 29 787	[370] 42 778	[485] 55 771	[602] 68 762	[718] 81 753	[837] 95 746	[948] 107 733	[1064] 120 723	[1175] 133 715	[1199] 135 711	[1436] 162 677	
	Max. Continuous	[15]	[13] 1 849	[120] 14 844	[236] 27 839	[352] 40 832	[471] 53 826	[590] 67 819	[707] 80 806	[823] 93 800	[939] 106 786	[1052] 119 779	[1165] 132 770	[1192] 135 766	[1462] 165 725
	Max. Intermittent	[18]		[107] 12 1006	[215] 24 1003	[326] 37 998	[442] 50 988	[555] 63 976	[669] 76 975	[786] 89 965	[900] 102 952	[1016] 115 940	[1123] 127 924	[1152] 130 919	

		80 cm <sup>3</sup> /r [4.9 in <sup>3</sup> /r]											Max. Continuous	Max. Intermittent	
		Pressure Bar [PSI]													
		Continuous													
		[200]	[400]	[600]	[800]	[1000]	[1200]	[1400]	[1600]	[1800]	[2000]	[2200]	[2250]	[2750]	
Flow LPM [GPM]	[2]	[123] 14 93	[265] 30 90	[405] 46 86	[544] 61 83	[680] 77 80	[804] 91 75	[934] 106 70	[1052] 119 63	[1181] 133 57	[1079] 122 43	[937] 106 24	[895] 101 20		
	[4]	[120] 14 187	[264] 30 185	[406] 46 183	[551] 62 179	[689] 78 175	[828] 94 171	[965] 109 166	[1101] 124 162	[1237] 140 156	[1369] 155 150	[1505] 170 142	[1537] 174 140	[1857] 210 121	
	[6]	[113] 13 279	[255] 29 275	[398] 45 271	[542] 61 267	[682] 77 265	[823] 93 258	[963] 109 253	[1101] 124 248	[1239] 140 240	[1373] 155 232	[1508] 170 223	[1541] 174 221	[1868] 211 198	
	[8]	[99] 11 372	[243] 27 367	[386] 44 364	[528] 60 359	[669] 76 354	[812] 92 351	[954] 108 343	[1094] 124 338	[1233] 139 333	[1368] 155 324	[1503] 170 315	[1537] 174 313	[1872] 212 289	
	[10]	[84] 9 463	[228] 26 460	[371] 42 456	[514] 58 450	[655] 74 446	[798] 90 441	[941] 106 435	[1080] 122 428	[1219] 138 420	[1357] 153 412	[1496] 169 403	[1530] 173 399	[1870] 211 368	
	[12]	[63] 7 557	[209] 24 552	[354] 40 547	[498] 56 543	[638] 72 537	[782] 88 530	[926] 105 523	[1067] 121 515	[1208] 136 509	[1346] 152 500	[1484] 168 489	[1520] 172 487	[1864] 211 470	
	[14]	[55] 6 649	[185] 21 646	[331] 37 642	[476] 54 635	[620] 70 630	[762] 86 622	[904] 102 616	[1046] 118 609	[1188] 134 599	[1327] 150 592	[1467] 166 581	[1502] 170 578	[1842] 208 550	
	Max. Continuous	[15]	[51] 6 694	[176] 20 691	[316] 36 687	[463] 52 680	[609] 69 673	[748] 85 668	[891] 101 660	[1037] 117 650	[1177] 133 642	[1316] 149 634	[1457] 165 622	[1491] 168 619	[1844] 208 598
	Max. Intermittent	[20]		[160] 18 916	[305] 34 910	[455] 51 893	[578] 65 893	[737] 83 875	[857] 97 866	[968] 109 877	[1144] 129 843	[1277] 144 833	[1412] 160 839	[1446] 163 836	





# T Series (158-, 185-)

## Performance Data

Motors run with high efficiency in all areas designated with a number for torque and speed. For best motor life select a motor to run with a torque and speed range shown in the light shaded area.

Performance data is typical at 120 SUS. Actual data may vary slightly from unit to unit in production.

 Continuous  
 Intermittent

		102 cm <sup>3</sup> /r [6.2 in <sup>3</sup> /r] Pressure Bar [PSI] Continuous											Max. Contin- uous	Max. Inter- mittent	
		[200]	[400]	[600]	[800]	[1000]	[1200]	[1400]	[1600]	[1800]	[2000]	[2200]	[2250]	[2750]	[190]
		14	28	41	55	69	83	97	110	124	138	152	155		
Flow LPM [GPM]	[2] 7,6	[161] 18 73	[341] 39 71	[519] 59 68	[697] 79 66	[871] 98 63	[1030] 116 60	[1193] 135 56	[1349] 152 51	[1511] 171 46	[1496] 169 36	[1441] 163 23	[1421] 161 20		
	[4] 15,1	[157] 18 149	[340] 38 146	[520] 59 144	[702] 79 141	[879] 99 138	[1056] 119 135	[1229] 139 131	[1401] 158 128	[1567] 177 124	[1727] 195 118	[1889] 213 111	[1925] 217 109	[2271] 257 92	
	[6] 22,7	[147] 17 221	[329] 37 217	[510] 58 214	[692] 78 211	[871] 98 208	[1050] 119 204	[1227] 139 199	[1401] 158 195	[1571] 178 190	[1731] 196 184	[1895] 214 176	[1936] 219 174	[2339] 264 154	
	[8] 30,3	[132] 15 294	[315] 36 290	[497] 56 287	[675] 76 284	[857] 97 280	[1038] 117 277	[1216] 137 271	[1392] 157 267	[1564] 177 262	[1725] 195 255	[1891] 214 247	[1932] 218 245	[2326] 263 220	
	[10] 37,9	[109] 12 367	[293] 33 363	[477] 54 360	[657] 74 355	[839] 95 347	[1018] 115 343	[1198] 135 337	[1374] 155 332	[1542] 174 332	[1711] 193 325	[1878] 212 318	[1918] 217 315	[2326] 263 287	
	[12] 45,4	[84] 9 440	[271] 31 436	[457] 52 432	[638] 72 429	[818] 92 424	[999] 113 419	[1179] 133 414	[1354] 153 409	[1527] 173 402	[1697] 192 395	[1858] 210 386	[1901] 215 384	[2323] 262 364	
	[14] 53,0	[59] 7 513	[242] 27 510	[428] 48 506	[611] 69 501	[794] 90 497	[974] 110 492	[1151] 130 487	[1328] 150 482	[1502] 170 475	[1674] 189 469	[1841] 208 458	[1883] 213 456	[2301] 260 428	
	Max. Contin- uous 56,8	[39] 4 550	[227] 26 545	[411] 46 542	[595] 67 537	[780] 88 532	[957] 108 528	[1136] 128 522	[1314] 148 516	[1486] 168 510	[1658] 187 502	[1828] 207 492	[1869] 211 490	[2285] 258 463	
	Max. Inter- mittent 75,7	[20]	[154] 17 724	[328] 37 718	[515] 58 720	[710] 80 709	[874] 99 707	[1060] 120 696	[1243] 140 684	[1405] 159 683	[1579] 178 670	[1763] 199 659	[1803] 204 660		

		131 cm <sup>3</sup> /r [8.0 in <sup>3</sup> /r] Pressure Bar [PSI] Continuous									Max. Contin- uous	Max. Inter- mittent	
		[200]	[400]	[600]	[800]	[1000]	[1200]	[1400]	[1600]	[1800]	[2000]	[2500]	
		14	28	41	55	69	83	97	110	124	138	172	
Flow LPM [GPM]	[2] 7,6	[219] 25 57	[450] 51 55	[682] 77 53	[915] 103 51	[1144] 129 49	[1348] 152 47	[1561] 176 43	[1771] 200 40	[1979] 224 36	[2159] 244 30		
	[4] 15,1	[212] 24 115	[449] 51 113	[681] 77 110	[917] 104 109	[1148] 130 107	[1376] 155 105	[1600] 181 102	[1822] 206 99	[2025] 229 96	[2221] 251 91	[2629] 297 75	
	[6] 22,7	[197] 22 171	[435] 49 168	[669] 76 166	[903] 102 163	[1139] 129 160	[1370] 155 157	[1600] 181 154	[1818] 205 150	[2032] 230 147	[2226] 252 142	[2718] 307 125	
	[8] 30,3	[181] 20 227	[417] 47 225	[657] 74 222	[886] 100 219	[1122] 127 217	[1359] 154 213	[1589] 180 209	[1812] 205 206	[2022] 228 202	[2215] 250 196	[2699] 305 175	
	[10] 37,9	[144] 16 284	[389] 44 281	[631] 71 278	[859] 97 275	[1098] 124 271	[1330] 150 267	[1562] 176 265	[1783] 201 261	[1993] 225 258	[2198] 248 252	[2687] 304 231	
	[12] 45,4	[114] 13 341	[361] 41 338	[605] 68 334	[838] 95 332	[1075] 121 328	[1307] 148 325	[1532] 173 321	[1755] 198 318	[1965] 222 312	[2177] 246 307	[2671] 302 285	
	[14] 53,0	[82] 9 397	[327] 37 394	[569] 64 391	[803] 91 387	[1042] 118 384	[1273] 144 361	[1498] 169 378	[1722] 195 374	[1935] 219 370	[2147] 243 365	[2655] 300 339	
	Max. Contin- uous 56,8	[66] 7 426	[302] 34 423	[550] 62 422	[785] 89 415	[1025] 116 412	[1254] 142 409	[1480] 167 405	[1704] 193 402	[1915] 216 398	[2119] 239 392	[2648] 299 367	
	Max. Inter- mittent 75,7	[20]	[177] 20 565	[429] 48 560	[678] 77 556	[908] 103 553	[1143] 129 549	[1375] 155 546	[1596] 180 541	[1811] 205 536	[2017] 228 527		

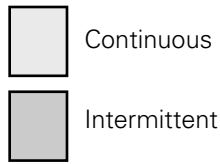
[302]  
34 } Torque [lb-in]  
423 } Nm  
Speed RPM

# T Series (158-, 185-)

## Performance Data

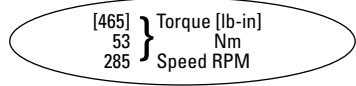
Motors run with high efficiency in all areas designated with a number for torque and speed. For best motor life select a motor to run with a torque and speed range shown in the light shaded area.

Performance data is typical at 120 SUS. Actual data may vary slightly from unit to unit in production.



		157 cm <sup>3</sup> /r [9.6 in <sup>3</sup> /r]										Max. Continuous	Max. Intermittent
		Δ Pressure Bar [PSI]											
		Continuous											
		[200]	[400]	[600]	[800]	[1000]	[1200]	[1400]	[1600]	[1800]	[2000]		[2500]
		14	28	41	55	69	83	97	110	124	138		172
Flow LPM [GPM]	[2]	[264]	[541]	[819]	[1092]	[1357]	[1605]	[1847]	[2084]	[2311]	[1858]		
	7,6	30 47	61 45	93 44	123 42	153 40	181 37	209 34	235 30	261 25	210 16		
	[4]	[259]	[541]	[822]	[1101]	[1373]	[1638]	[1890]	[2145]	[2383]	[2613]	[3063]	
	15,1	29 96	61 95	93 92	124 91	155 90	185 88	214 85	242 82	269 78	295 73	346 60	
	[6]	[241]	[526]	[808]	[1090]	[1368]	[1638]	[1900]	[2150]	[2399]	[2628]	[3169]	
	22,7	27 142	59 140	91 138	123 136	155 134	185 132	215 129	243 125	271 121	297 114	358 99	
	[8]	[219]	[506]	[789]	[1068]	[1348]	[1625]	[1885]	[2140]	[2388]	[2619]	[3178]	
	30,3	25 189	57 187	89 185	121 183	152 181	184 178	213 175	242 172	270 166	296 159	359 140	
	[10]	[180]	[472]	[759]	[1037]	[1319]	[1590]	[1853]	[2111]	[2355]	[2594]	[3170]	
	37,9	20 237	53 234	86 232	117 230	149 227	180 224	209 222	239 218	266 211	293 203	358 183	
[12]	[141]	[436]	[728]	[1010]	[1292]	[1561]	[1821]	[2079]	[2331]	[2573]	[3162]		
45,4	16 284	49 282	82 279	114 277	146 274	176 272	206 269	235 265	263 257	291 248	357 225		
[14]	[101]	[397]	[687]	[969]	[1252]	[1519]	[1778]	[2040]	[2295]	[2539]	[3147]		
53,0	11 332	45 329	78 326	109 323	141 321	172 319	201 316	230 311	259 305	287 296	356 274		
Max. Continuous	[15]	[81]	[367]	[665]	[944]	[1231]	[1497]	[1755]	[2018]	[2273]	[2512]	[3136]	
	56,8	9 355	41 353	75 350	107 347	139 344	169 342	198 339	228 334	257 327	284 318	354 300	
Max. Intermittent	[20]		[221]	[519]	[814]	[1095]	[1368]	[1631]	[1891]	[2149]	[2396]		
	75,7		25 472	59 467	92 464	124 462	155 459	184 455	214 450	243 443	271 433		

		195 cm <sup>3</sup> /r [11.9 in <sup>3</sup> /r]										Max. Continuous	Max. Intermittent	
		Δ Pressure Bar [PSI]												
		Continuous												
		[200]	[400]	[600]	[800]	[1000]	[1200]	[1400]	[1600]	[1750]	[1800]	[2000]		[2500]
		14	28	41	55	69	83	97	110	121	125	138		172
Flow LPM [GPM]	[2]	[330]	[671]	[1016]	[1345]	[1654]	[1969]	[2242]	[2507]	[2689]	[2748]	[2973]		
	7,6	37 38	76 36	115 34	152 33	187 31	222 28	253 25	283 20	304 16	310 14	336 8		
	[4]	[328]	[675]	[1026]	[1366]	[1692]	[2010]	[2289]	[2586]	[2799]	[2867]	[3144]	[3797]	
	15,1	37 77	76 77	116 75	154 73	191 73	227 71	259 68	292 65	316 62	324 61	355 55	429 40	
	[6]	[306]	[658]	[1011]	[1360]	[1698]	[2021]	[2324]	[2604]	[2829]	[2901]	[3178]	[3831]	
	22,7	35 115	74 113	114 111	154 110	192 109	228 107	263 104	294 100	320 97	328 95	359 87	433 68	
	[8]	[272]	[634]	[980]	[1331]	[1675]	[2003]	[2300]	[2592]	[2815]	[2888]	[3174]	[3864]	
	30,3	31 153	72 151	111 150	150 148	189 146	226 144	260 142	293 139	318 134	326 132	359 123	437 99	
	[10]	[238]	[596]	[945]	[1296]	[1637]	[1960]	[2255]	[2565]	[2786]	[2857]	[3140]	[3816]	
	37,9	27 192	67 189	107 188	146 186	185 184	221 183	255 181	290 176	315 168	323 166	355 156	431 133	
[12]	[181]	[545]	[908]	[1260]	[1607]	[1924]	[2223]	[2529]	[2759]	[2836]	[3121]	[3807]		
45,4	20 230	62 228	103 226	142 224	182 222	217 221	251 219	286 213	312 207	320 204	353 192	430 160		
[14]	[154]	[500]	[860]	[1211]	[1556]	[1869]	[2175]	[2483]	[2713]	[2792]	[3080]	[3778]		
53,0	17 268	56 266	97 264	137 261	176 259	211 259	246 256	281 251	307 244	315 242	348 229	427 199		
Max. Continuous	[15]	[140]	[465]	[832]	[1179]	[1525]	[1835]	[2144]	[2459]	[2693]	[2768]	[3061]	[3764]	
	56,8	16 287	53 285	94 283	133 281	172 279	207 278	242 275	278 269	304 262	313 260	346 247	425 220	
Max. Intermittent	[20]		[291]	[653]	[1013]	[1366]	[1689]	[1987]	[2298]	[2540]	[2622]	[2928]		
	75,7		33 382	74 378	114 375	154 373	191 372	225 368	260 363	287 356	296 353	331 342		



# T Series (158-, 185-)

## Performance Data

Motors run with high efficiency in all areas designated with a number for torque and speed. For best motor life select a motor to run with a torque and speed range shown in the light shaded area.

Performance data is typical at 120 SUS. Actual data may vary slightly from unit to unit in production.

Continuous  
 Intermittent

**244 cm<sup>3</sup>/r [14.9 in<sup>3</sup>/r]**

Pressure Bar [PSI]

Continuous

Max. Continuous

Max. Intermittent

		[200]	[400]	[600]	[800]	[1000]	[1200]	[1400]	[1600]	[1650]	[1800]	[1850]	[2250]		
		14	28	41	55	69	83	97	110	114	125	127	155		
Flow LPM [GPM]	[2]	[406]	[833]	[1260]	[1655]	[2038]	[2403]	[2707]	[2597]	[2552]	[2373]	[2299]			
	7,6	46	94	142	187	230	272	306	293	288	268	260			
	15,1	[4]	[404]	[843]	[1277]	[1695]	[2083]	[2468]	[2820]	[3177]	[3261]	[3509]	[3589]	[4194]	
		46	95	144	192	235	279	319	359	368	396	406	406	474	
	22,7	[6]	[382]	[823]	[1261]	[1687]	[2088]	[2477]	[2843]	[3196]	[3285]	[3547]	[3633]	[4290]	
	43	93	142	191	236	280	321	361	371	371	401	410	485	60	
	30,3	[8]	[341]	[787]	[1220]	[1651]	[2059]	[2454]	[2820]	[3177]	[3265]	[3530]	[3615]	[4285]	
	39	123	122	121	120	119	116	113	108	106	101	101	99	484	85
	37,9	[10]	[297]	[744]	[1177]	[1611]	[2017]	[2412]	[2774]	[3151]	[3241]	[3504]	[3593]	[4269]	
	34	84	133	182	228	273	313	356	366	396	396	406	406	482	107
45,4	[12]	[225]	[687]	[1132]	[1553]	[1967]	[2360]	[2734]	[3105]	[3194]	[3466]	[3554]	[4237]		
25	78	128	175	222	267	309	351	361	392	402	402	479	134		
53,0	[14]	[154]	[628]	[1072]	[1498]	[1910]	[2298]	[2674]	[3052]	[3148]	[3419]	[3510]	[4226]		
17	71	121	169	216	260	302	345	356	386	397	397	477	161		
56,8	[15]	[119]	[586]	[1035]	[1458]	[1872]	[2261]	[2637]	[3022]	[3116]	[3389]	[3488]	[4220]		
13	66	117	165	212	255	298	341	352	383	394	394	477	174		
Max. Continuous	[20]	[372]	[816]	[1251]	[1663]	[2067]	[2448]	[2832]	[2928]	[3214]	[3312]				
42	92	141	188	234	277	320	331	363	374	374	477				
Max. Intermittent	[20]	305	303	301	300	297	292	284	281	273	270				

**306 cm<sup>3</sup>/r [18.7 in<sup>3</sup>/r]**

Pressure Bar [PSI]

Max. Continuous

Max. Intermittent

		[200]	[400]	[600]	[800]	[1000]	[1200]	[1400]	[1500]	[1600]	[1800]	
		14	28	41	55	69	83	97	103	110	124	
Flow LPM [GPM]	[2]	[499]	[1035]	[1560]	[2034]	[2501]	[2912]	[3239]	[2859]	[2400]		
	7,6	56	117	176	230	283	329	366	323	271		
	15,1	[4]	[497]	[1052]	[1590]	[2101]	[2561]	[3023]	[3464]	[3680]	[3886]	[4221]
		56	119	180	237	289	342	391	416	439	477	477
	22,7	[6]	[480]	[1031]	[1578]	[2096]	[2564]	[3023]	[3464]	[3689]	[3905]	[4275]
	54	116	178	237	290	342	391	417	441	483	483	
	30,3	[8]	[427]	[975]	[1520]	[2051]	[2525]	[2998]	[3448]	[3667]	[3881]	[4264]
	48	110	172	232	285	339	390	414	438	482	482	
	37,9	[10]	[370]	[930]	[1467]	[2001]	[2477]	[2955]	[3406]	[3631]	[3852]	[4264]
	42	105	166	226	280	334	385	410	435	482	482	
45,4	[12]	[281]	[871]	[1410]	[1908]	[2400]	[2887]	[3352]	[3573]	[3790]	[4189]	
32	98	159	216	271	326	379	404	428	473	473		
53,0	[14]	[192]	[791]	[1338]	[1851]	[2338]	[2816]	[3281]	[3511]	[3743]	[4135]	
22	89	151	209	264	318	371	397	423	467	467		
Max. Continuous	[15]	[148]	[738]	[1288]	[1803]	[2287]	[2773]	[3243]	[3475]	[3705]	[4098]	
17	83	146	204	258	313	366	393	419	463	463		
Max. Intermittent	[20]	183	183	182	182	181	177	165	160	146		
[20]	[476]	[1020]	[1544]	[2010]	[2519]	[3010]	[3243]	[3495]				
54	115	174	227	285	340	366	395	395				
243	242	242	241	238	231	226	209	209				

[738] } Torque [lb-in]  
 83 } Nm  
 183 } Speed RPM

**370 cm<sup>3</sup>/r [22.6 in<sup>3</sup>/r]**

Pressure Bar [PSI]

Continuous

Max. Continuous

Max. Intermittent

		[200]	[400]	[600]	[800]	[1000]	[1200]	[1300]	[1500]	
		14	28	41	55	69	83	90	103	
Flow LPM [GPM]	[2]	[590]	[1237]	[1858]	[2406]	[2953]	[3388]	[3586]		
	7,6	67	140	210	272	334	383	405		
	15,1	[4]	[588]	[1263]	[1906]	[2506]	[3029]	[3557]	[3811]	[4252]
		66	143	215	283	342	402	431	480	480
	22,7	[6]	[580]	[1245]	[1899]	[2506]	[3029]	[3544]	[3788]	[4300]
	66	141	215	283	342	400	428	486	486	
	30,3	[8]	[514]	[1164]	[1824]	[2452]	[2975]	[3518]	[3783]	[4284]
	58	132	206	277	336	397	427	484	484	
	37,9	[10]	[444]	[1119]	[1759]	[2391]	[2928]	[3479]	[3750]	[4275]
	50	126	199	270	331	393	424	483	483	
45,4	[12]	[337]	[1062]	[1690]	[2256]	[2813]	[3393]	[3685]	[4273]	
38	120	191	255	318	383	416	483	483		
53,0	[14]	[231]	[958]	[1608]	[2201]	[2748]	[3319]	[3610]	[4198]	
26	108	182	249	310	375	408	474	474		
Max. Continuous	[15]	[178]	[896]	[1543]	[2147]	[2683]	[3272]	[3572]	[4187]	
20	101	174	243	303	370	404	473	473		
Max. Intermittent	[20]	152	152	151	150	149	147	146	140	
[20]	[587]	[1228]	[1833]	[2331]	[2948]	[3273]				
66	139	207	263	333	370	370				
202	201	201	200	198	196	196				

# T Series (158-)

## Dimensions

(Refer to pages B-4-19 thru B-4-22 for shaft and port dimensions.)

### Ports

- 7/8 -14 INF O-Ring Ports (2)
- 1/2 -14 NPTF (2)
- G 1/2 BSP (2)
- Manifold Ports (5/16-18 mounting threads)

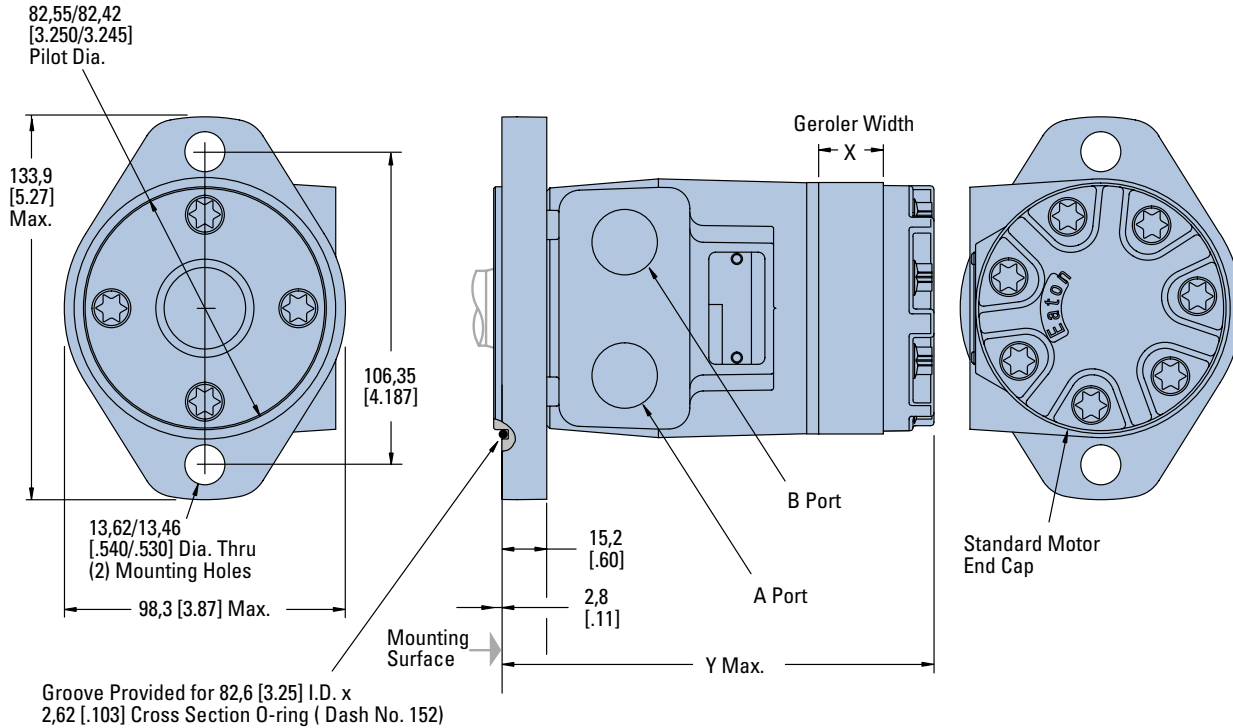
### Note:

Mounting Surface Flatness Requirement is  $\nabla$ , 13 mm [.005 inch] Max.

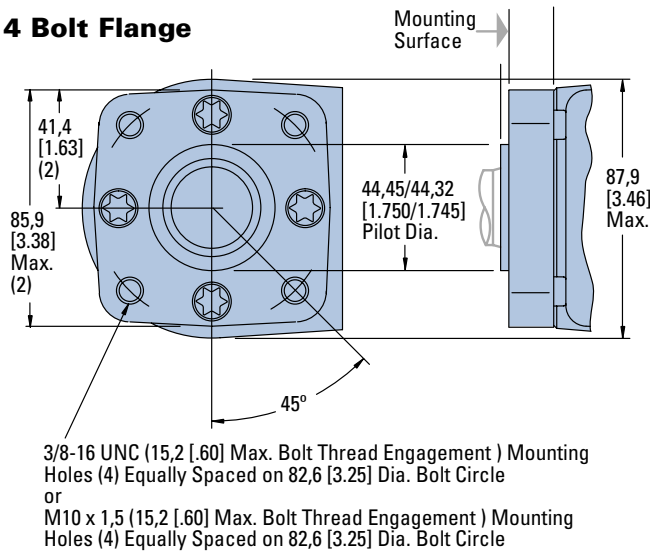
### Standard Rotation Viewed from Shaft End

- Port A Pressurized — CW
- Port B Pressurized — CCW

## 2 Bolt Flange



## 4 Bolt Flange



### 2 AND 4 BOLT FLANGE PORT DIMENSIONS

Displacement cm <sup>3</sup> /r [in <sup>3</sup> /r]	X mm [inch]	Y mm [inch]
36 [2.2]	6,6 [.26]	132,2 [5.21]
49 [3.0]	9,1 [.36]	134,6 [5.30]
66 [4.0]	12,2 [.48]	137,7 [5.42]
80 [4.9]	14,7 [.58]	140,3 [5.53]
102 [6.2]	18,5 [.73]	144,3 [5.68]
131 [8.0]	24,1 [.95]	149,6 [5.89]
157 [9.6]	29,0 [1.14]	154,5 [6.09]
195 [11.9]	35,6 [1.40]	161,3 [6.35]
244 [14.9]	44,7 [1.76]	170,3 [6.71]
306 [18.7]	56,1 [2.21]	181,6 [7.16]
370 [22.6]	72,1 [2.84]	197,9 [7.79]



# T Series (158-)

## Product Numbers

Use digit prefix—158- plus four digit number from charts for complete product number—  
Example: 158-1067.

**Orders will not be accepted without the three-digit prefix.**

### Standard

MOUNTING	SHAFT	PORT SIZE	DISPL. cm <sup>3</sup> /r [in <sup>3</sup> /r] / PRODUCT NUMBER										
			36 [2.2]	49 [3.0]	66 [4.0]	80 [4.9]	102 [6.2]	131 [8.0]	157 [9.6]	195 [11.9]	244 [14.9]	306 [18.7]	370 [22.6]
2 Bolt Flange	1 in. Straight w/Woodruff Key	7/8 -14 O-Ring	158- — —	-1537	-1034	-1035	-1538	-1036	-1037	-1038	-1039	-1040	
		1/2 NPTF	158- — —	-1540	-1026	-1027	-1541	-1028	-1029	-1030	-1031	-1032	
		Manifold*	158- — —	-1543	-1042	-1043	-1544	-1044	-1045	-1046	-1047	-1048	
	1 in. SAE 6B Splined	7/8 -14 O-Ring	158- — —	-1552	-1082	-1083	-1553	-1084	-1085	-1086	-1087	-1088	
		1/2 NPTF	158- — —	-1555	-1074	-1075	-1556	-1076	-1077	-1078	-1079	-1080	
		Manifold*	158- — —	-1558	-1090	-1091	-1559	-1092	-1093	-1094	-1095	-1096	
4 Bolt Flange	1 in. Straight w/Woodruff Key	7/8 -14 O-Ring	158- — —	-1570	-1010	-1011	-1571	-1012	-1013	-1014	-1015	-1016	
		1/2 NPTF	158- — —	-1573	-1002	-1003	-1574	-1004	-1005	-1006	-1007	-1008	
		Manifold*	158- — —	-1576	-1018	-1019	-1577	-1020	-1021	-1022	-1023	-1024	
	1 in. SAE 6B Splined	7/8 -14 O-Ring	158- — —	-1579	-1058	-1059	-1580	-1060	-1061	-1062	-1063	-1064	
		1/2 NPTF	158- — —	-1582	-1050	-1051	-1583	-1052	-1053	-1054	-1055	-1056	
		Manifold*	158- — —	-1585	-1066	-1067	-1586	-1068	-1069	-1070	-1071	-1072	

158-1067

### T Series Motors with Corrosion Protection

MOUNTING	SHAFT	PORT SIZE	DISPL. cm <sup>3</sup> /r [in <sup>3</sup> /r] / PRODUCT NUMBER										
			36 [2.2]	49 [3.0]	66 [4.0]	80 [4.9]	102 [6.2]	131 [8.0]	157 [9.6]	195 [11.9]	244 [14.9]	306 [18.7]	370 [22.6]
2 Bolt Flange	1 in. Straight w/ Woodruff Key	7/8 -14 O-Ring	158- — —	—	—	1645	—	—	—	—	-1649	—	-1650
4 Bolt Flange		1/2 NPTF	158- — —	—	—	—	—	—	—	—	-1620	—	-1621

158-1620

### T Series Motors with Low Speed Valving

MOUNTING	SHAFT	PORT SIZE	DISPL. cm <sup>3</sup> /r [in <sup>3</sup> /r] / PRODUCT NUMBER										
			36 [2.2]	49 [3.0]	66 [4.0]	80 [4.9]	102 [6.2]	131 [8.0]	157 [9.6]	195 [11.9]	244 [14.9]	306 [18.7]	370 [22.6]
2 Bolt Flange	1 in. Straight w/Woodruff Key	7/8 -14 O-Ring	158- — —	—	—	-1427	-1428	—	—	-1430	-1431	-1432	-1433
		1/2 NPTF	158- — —	—	—	-1419	-1420	—	—	-1422	-1423	-1424	-1425
		Manifold*	158- — —	—	—	—	—	—	—	—	—	—	—
4 Bolt Flange	1 in. SAE 6B Splined	7/8 -14 O-Ring	158- — —	—	—	-1525	—	—	—	—	-1675	—	—
		1/2 NPTF	158- — —	—	—	—	-1634	—	—	—	—	—	—
		Manifold*	158- — —	—	—	-1522	-2678	—	—	—	—	—	-1527
4 Bolt Flange	1 in. Straight w/ Woodruff Key	7/8 -14 O-Ring	158- — —	—	-1625	-1410	-1411	-1626	-1412	-1413	-1414	-1415	-1416
		1/2 NPTF	158- — —	—	-1644	-1402	-1403	—	-1404	-1405	-1406	-1407	-1408

158-1403

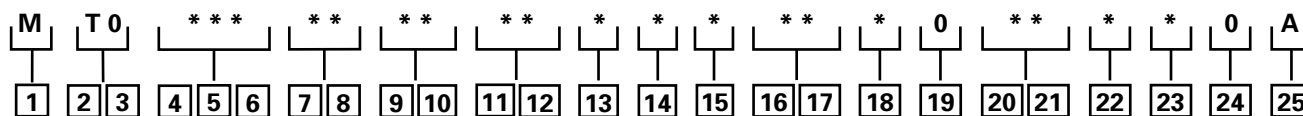
\*Manifold product numbers shown are for motors with four 5/16-18 port face mounting threads. Manifold, manifold mounting O-Rings and bolts are NOT included.

For T Series Motors with a configuration Not Shown in the charts above: Use the model code system on page B-4-10 to specify the product in detail.

# T Series (158-)

## Model Code

The following 25-digit coding system has been developed to identify all of the configuration options for the T motor. Use this model code to specify a motor with the desired features. All 25-digits of the code must be present when ordering. You may want to photocopy the matrix below to ensure that each number is entered in the correct box.



### 1 Product

M – Motor

### 2, 3 Product Series

T0 – T Series

### 4, 5, 6 Displacement cm<sup>3</sup>/r [in<sup>3</sup>/r]

022 – 35 [2.2]

030 – 49 [3.0]

040 – 65 [4.0]

049 – 80 [4.9]

062 – 102 [6.2]

080 – 131 [8.0]

096 – 158 [9.6]

119 – 195 [11.9]

149 – 244 [14.9]

187 – 306 [18.7]

226 – 370 [22.6]

### 7, 8 Mounting Type

**AA – 2 Bolt (Standard)**  
82,6 [3.248] Dia. and 3,05  
[.120] pilot, 13,59 [.535]  
Dia. Mounting Holes  
106,35 [4.187] Dia. B.C.

**BA – 4 Bolt (Standard)**  
44,40 [1.748] Dia. x 3,05  
[.120] pilot, .375-16 UNC-  
2B Mounting Holes 82,55  
[3.250] Dia. B.C.

CA – 2 Bolt (Standard)  
82,50 [3.248] Dia. x 6,10  
[.240] pilot, 10,41 [.410]  
Dia. Mounting Holes 106,35  
[4.187] Dia. B.C. (SAE A)

DD – 2 Bolt (Std.) 101,60  
[4.000] Dia. x 6,10 [.240]  
pilot, 14,35 [.565] Dia.  
Mounting Holes 146,05  
[5.750] Dia. B.C. (SAE B)  
(Ductile)

EA – 4 Bolt Magneto 82,50  
[3.248] Dia. x 3,05 [.120]  
Pilot, 13,59 [.535] Dia.  
Mounting Holes 106,35  
[4.187] Dia. B.C.

**FA – 4 Bolt (Standard)**  
44,40 [1.748] Dia. x 3,05  
[.120] pilot, M10 x 1.5-6H  
Mounting Holes on 82,55  
[3.250] Dia. B.C.

### 9, 10 Output Shaft Description

01 – 25,4 [1.00] Dia.  
Straight, Woodruff Key,  
.250-20 UNC-2B Hole in  
Shaft End

02 – 25,4 [1.00] Dia. SAE  
6B Spline, .25-20 UNC-2B  
Hole in Shaft End

07 – 25,4 [1.00] Dia.  
Straight, 8,03 [.316] Dia.  
Crosshole 11,2 [.44] from  
End, 5,6 [.22] Extra Length

08 – 25,4 [1.00] Dia.  
Straight, 10,31 [.406] Dia.  
Crosshole 15,7 [.62] from  
End, .250-20 UNC-2B Hole  
in Shaft End

16 – 22,22 [.875] Dia. SAE  
13 Tooth Spline (SAE B)

17 – 22,22 [.875] Straight  
Dia. 6,4 [2.5] x 19,0 [.75]  
Square Key (SAE B)

18 – 25,4 [1.00] Dia.  
Tapered, Woodruff Key  
and Nut, 34,92 [1.375]  
Taper Length

24 – 25.00 [.984] Dia.  
Straight, 8.0 [.315] Key,  
MB x 1.25-6H Hole in Shaft  
End

### 11, 12 Port Type

**AA – .875-14 UNF-2B SAE  
O-Ring Ports**

**AB – .500-14 NPTF Dryseal  
Pipe Thread Ports**

**AC – Manifold (.3125-18  
UNC-2B Mounting Holes)**

AD – Manifold Ports (MB x  
1.25-6H Mounting Holes)

**AF – G 1/2 BSP Straight  
Thread Ports**

### 13 Case Flow Options

0 – None Specified

1 – .4375-20 UNF-2B SAE  
O-Ring Port (End Cap)

2 – G 1/4 BSP Straight  
Thread Port (End Cap)

A – Internal Check Valves

### 14 Geroler Options

0 – None

A – Free Running

### 15 Shaft Options

0 – None

N – Electroless Nickel Plated

### 16, 17 Seal Options

00 – Standard Seals

02 – Seal Guard

03 – Vitron Seals

04 – Vitron Shaft Seal

05 – Vented Two-Stage Seal

07 – High Pressure Shaft  
Seal

### 18 Speed Sensor Options

0 – None

A – 12 mm Digital Speed  
Pickup (15 Pulse) without  
Lead Wire

B – Magnetic Speed Pickup  
(60 Pulse by Quadrature),  
No Lead Wire with M12  
Connector

(A=Power, B=Common,  
C=Signal)

### 19 Valve Options

A – None

### 20, 21 Special Features (Hardware)

00 – None Specified

AB – Low Speed Valving

SS – Stainless Steel Flange  
Bolts

### 22 Special Assembly Instructions

0 – None

A – Reverse Rotation

2 – Flange Rotation 90°

### 23 Paint/Packaging Options

0 – No Paint

A – Painted Low Gloss  
Black

D – Environmental Coated  
Gloss White

### 24 Customer ID/ Nameplate Options

A – None Specified

### 25 Design Code

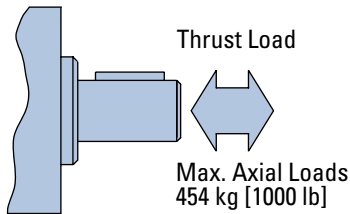
A – One (1)

Feature in **bold** are preferred and  
allow for shorter lead time.

# Case Pressure and Case Drain — H, S, and T Series

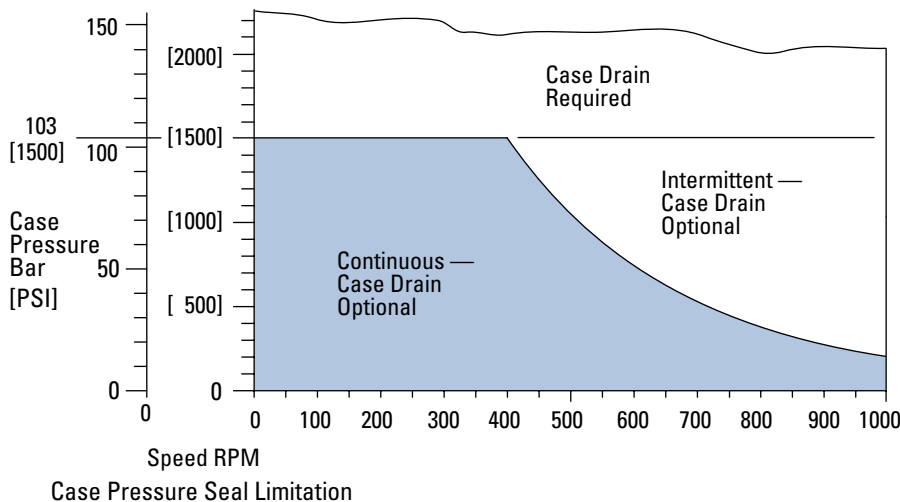
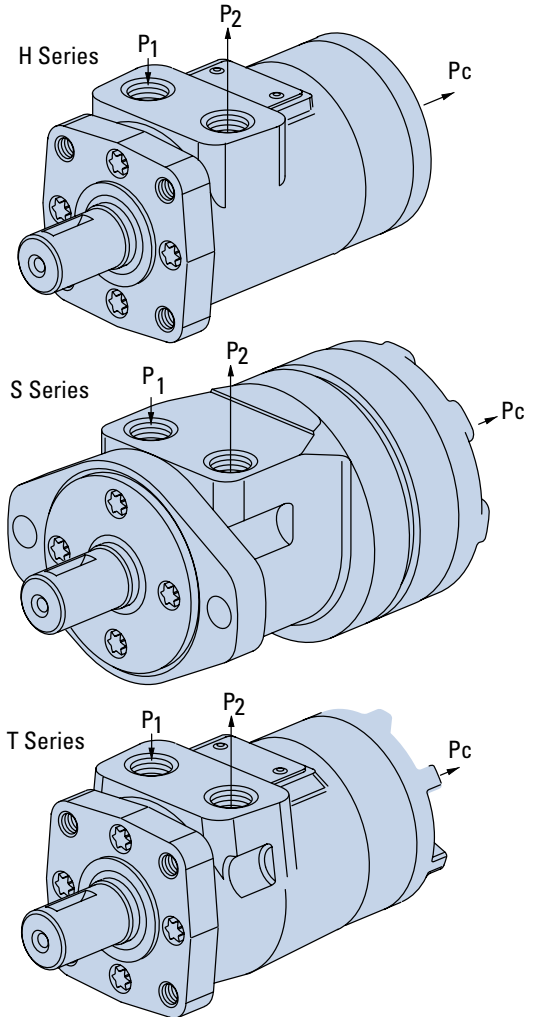
Char-Lynn H Series, S Series and T Series motors are durable and have long life as long as the recommended case pressure is not exceeded. Allowable case pressure is highest at low shaft speeds. Consequently, motor life will be shortened if case pressure exceeds these ratings (acceptability may vary with application). Determine if an external case drain is required

from the case pressure seal limitation chart below — chart based on case pressure and shaft speed. If a case drain line is needed, connect drain line to assure that the motor will always remain full of fluid. A pressure restriction should be added to the case drain line, during which a motor case pressure of 3,5 Bar [50 PSI] is maintained.



$$P_C \approx 6 \cdot P + P_2$$

$P_C$  = Case Pressure  
 $P_1$  = Inlet Line Pressure  
 $P_2$  = Back Pressure  
 $P = P_1 - P_2$



# H, S and T Series (101-, 103-, 158-, 185-)

## Side Load Capacity

The hydrodynamic bearing has infinite life when shaft load ratings are not exceeded. Hence, the shaft side load capacity is more than adequate to handle most externally applied loads (such as belts, chains, etc.), providing the motor to shaft size is applied within its torque rating.

Allowable side load chart, shaft load location drawing and load curves (below) are based on the side / radial loads being applied to shaft at locations A, B, and C, to

determine the shaft side load capacity at locations other than those shown use the formula (shown below).

For more information about shaft side loads on Char-Lynn motors contact your Eaton representative.

**Note:**

When the speed sensor option is used, side load ratings are reduced 25%.

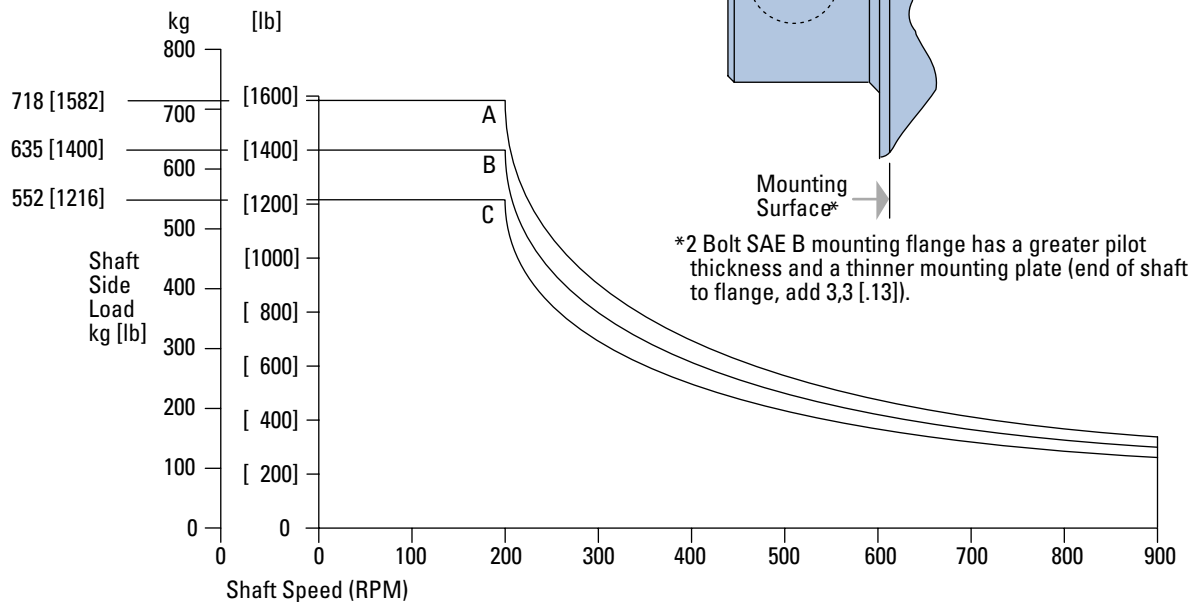
RPM	ALLOWABLE SHAFT SIDE LOAD — KG [LB]		
	A	B	C
900	154 [ 339]	136 [ 300]	118 [ 261]
625	205 [ 452]	181 [ 400]	158 [ 348]
500	256 [ 565]	227 [ 500]	197 [ 435]
400	307 [ 678]	272 [ 600]	237 [ 522]
300	410 [ 904]	363 [ 800]	316 [ 696]
200	718 [1582]	635 [1400]	552 [1216]

$$\text{Sideload P kg} = \frac{900}{N} \left( \frac{16800}{L + 96,3} \right) \text{ for 200-900 RPM}$$

$$\text{Sideload P [lb]} = \frac{900}{N} \left( \frac{1460}{L + [3.79]} \right) \text{ for 200-900 RPM}$$

Where N = Shaft Speed (RPM)

L = Distance from Mounting Surface

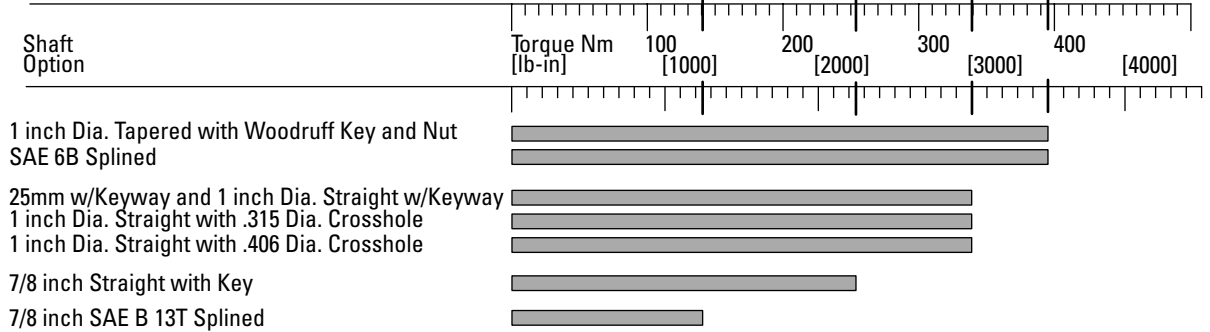


# H, S and T Series (101, 103- 158, 185)

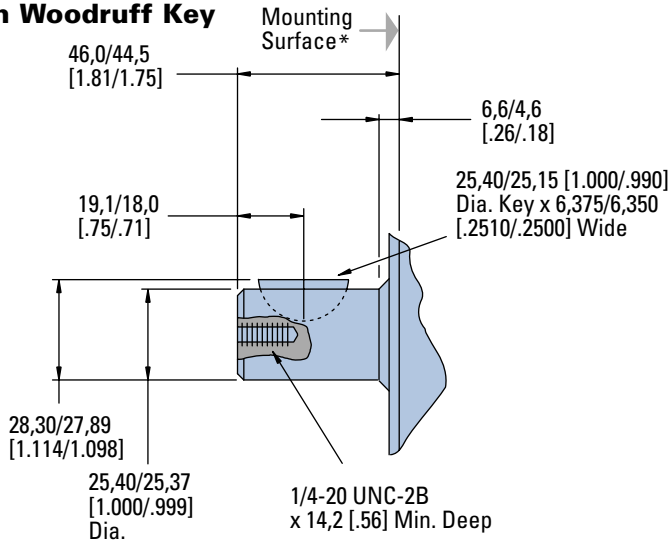
## Dimensions

Shafts

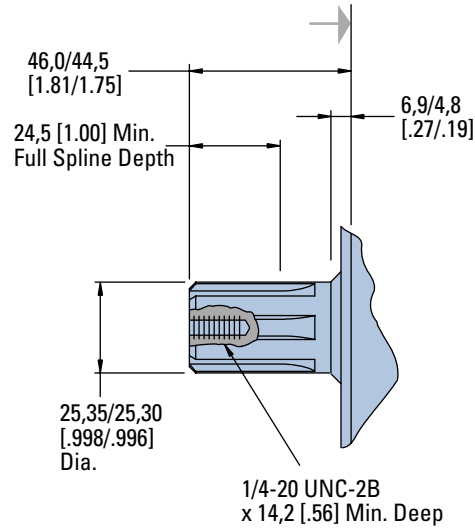
### Shaft Size Motor Torque Combination Limit Guide



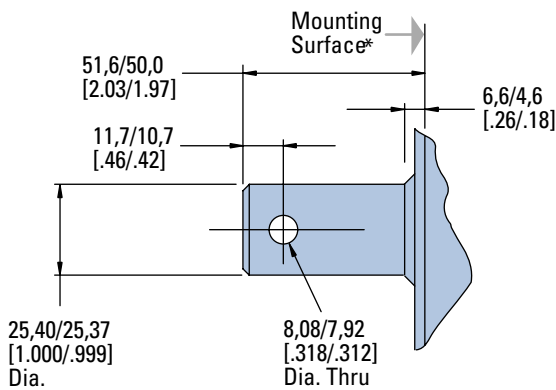
### 1 in. Dia. Straight with Woodruff Key



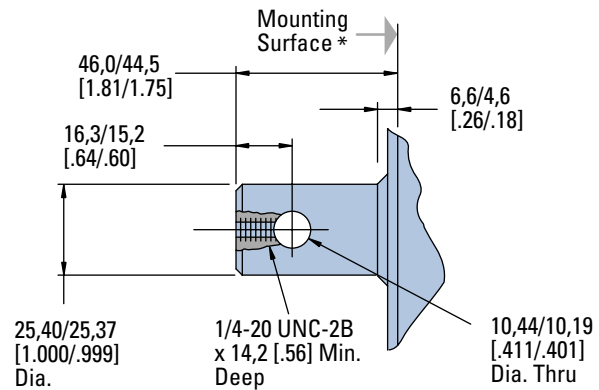
### SAE 6B Splined Shaft



### 1 in. Dia. Straight Shaft with .315 Dia. Crosshole



### 1 in. Dia. Straight Shaft with .406 Dia. Crosshole



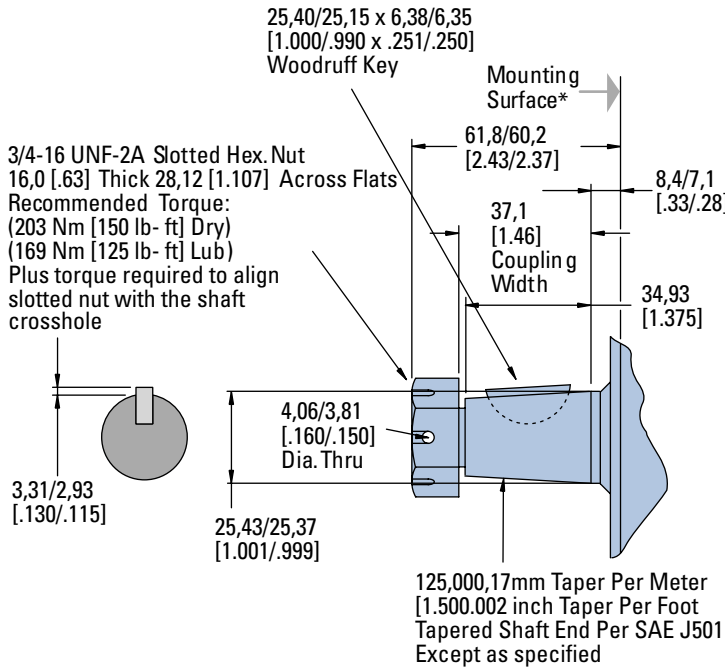
\* 2 Bolt SAE B mounting flange has a greater pilot thickness and a thinner mounting plate (end of shaft to flange, add 3,3 [.13]).

# H, S and T Series (101-, 103- 158-, 185-)

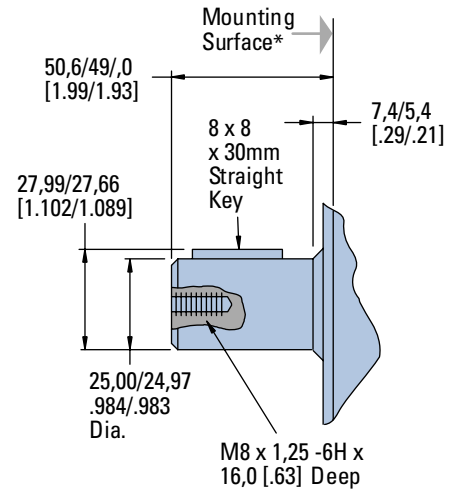
## Dimensions

Shafts

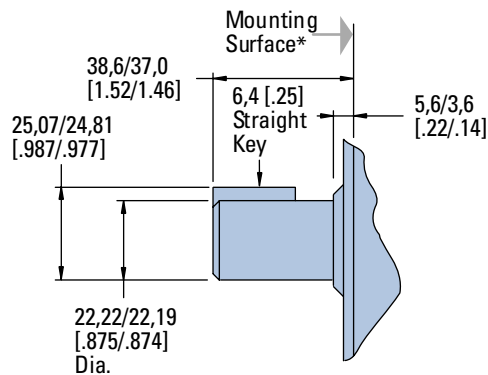
### 1 in. Dia. Tapered Shaft with Woodruff Key and Nut



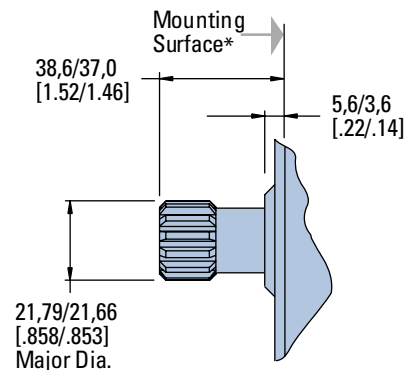
### 25mm Dia. Straight Shaft with 8mm Keyway



### 7/8 in. Dia. Straight Shaft with Key



### 7/8 in. Dia. SAE B Shaft 13 T Spline d



\* 2 Bolt SAE B mounting flange has a greater pilot thickness and a thinner mounting plate (end of shaft to flange, add 3,3 [.13]).

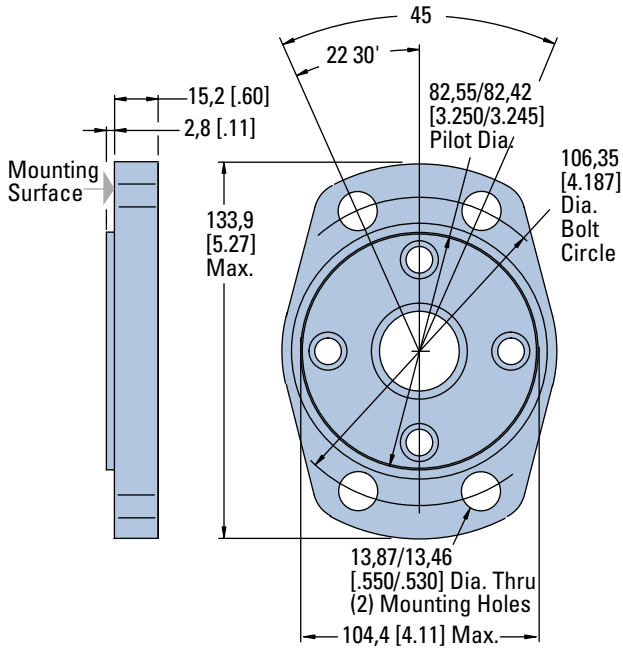
# H, S and T Series (101-, 103- 158-, 185-)

## Mounting Options

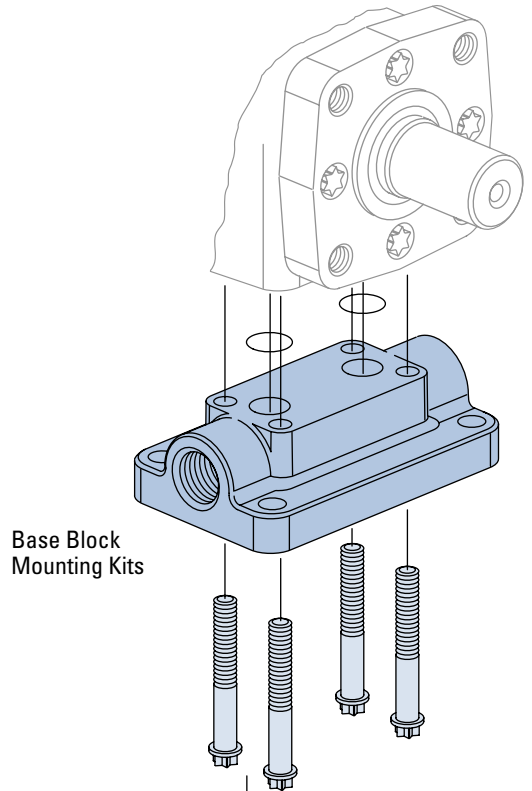
**Note:**

Mounting Surface Flatness Requirement is  $\nabla$ ,13mm [.005 inch] Max.

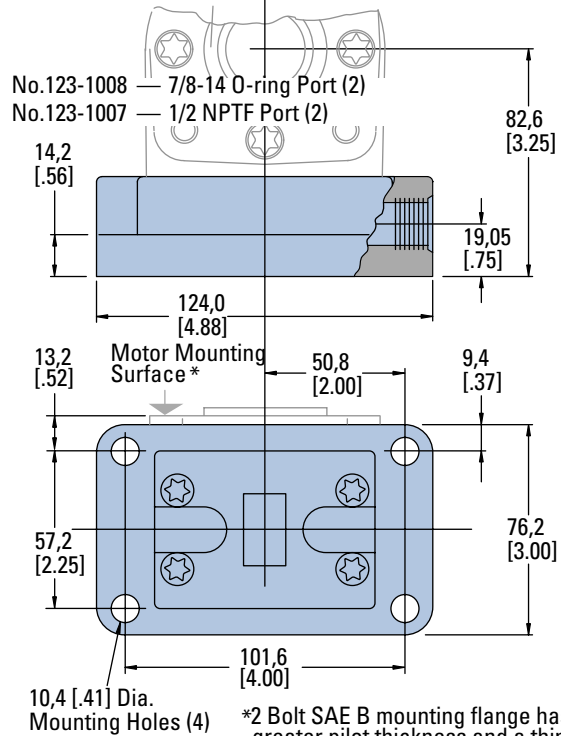
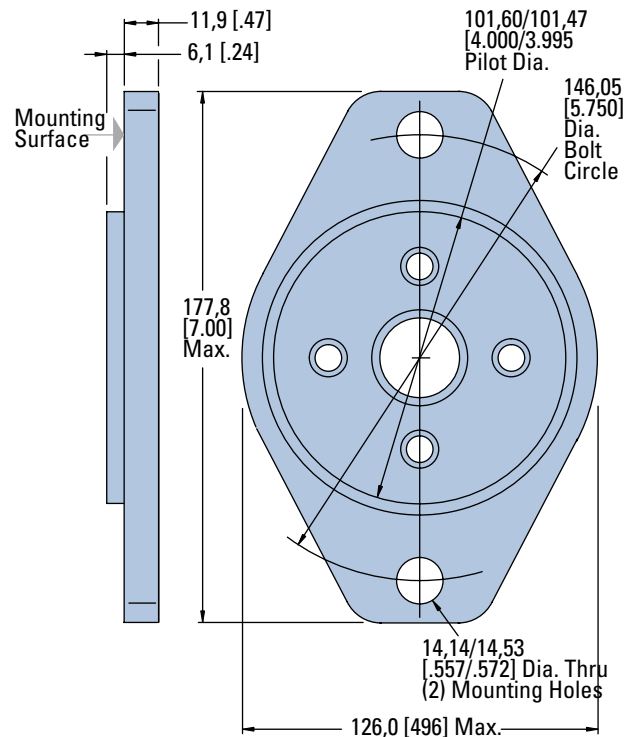
### 4 Bolt Magneto



### Base Block Mounting Kits



### 2 Bolt SAE B



\*2 Bolt SAE B mounting flange has a greater pilot thickness and a thinner mounting plate.

# H, S and T Series (101-, 103-, 158-, 185-)

## Dimensions

Ports

### Ports

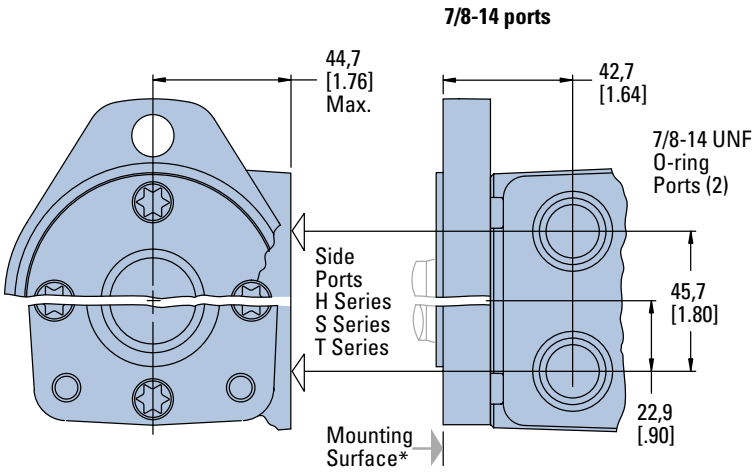
End Ports — H Series only  
G 1/2 (BSP) (2)  
or 3/4-16 O-Ring (2)

### Standard Rotation Viewed from Drive End

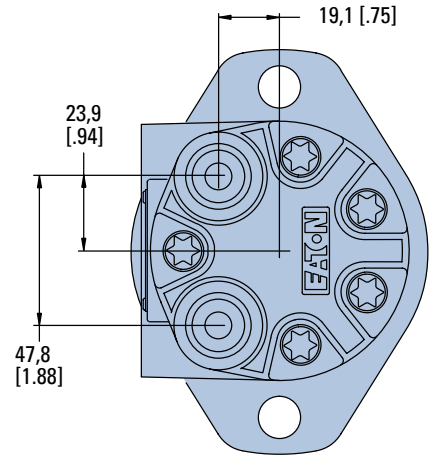
Port A Pressurized — CW  
Port B Pressurized — CCW

### Note:

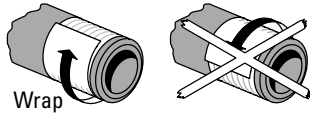
End ported motor pressure is derated. Reference page B-2-2 for ratings.



### End Ports (H Series only)

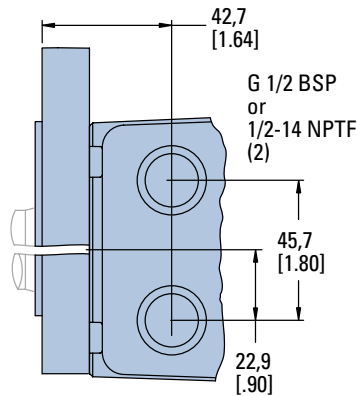


Use of Teflon Tape Sealant/Lubricant (with 1/2 14 NPTF Port Connectors only).

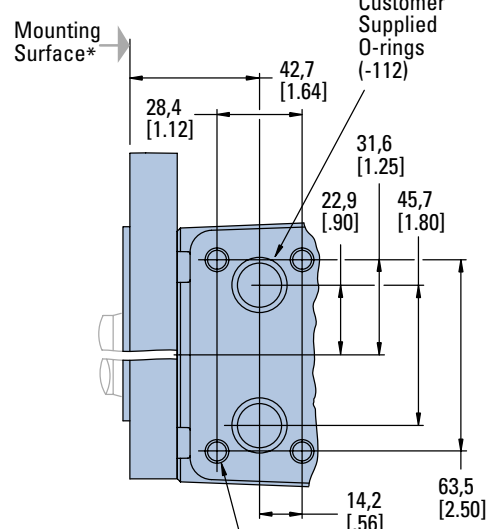


When using fittings with Teflon tape, be careful when taping and tightening. Over tightening or improperly taped fittings can cause damage to housing or leakage.

### 6-1/2 or 1/2 NPTF ports



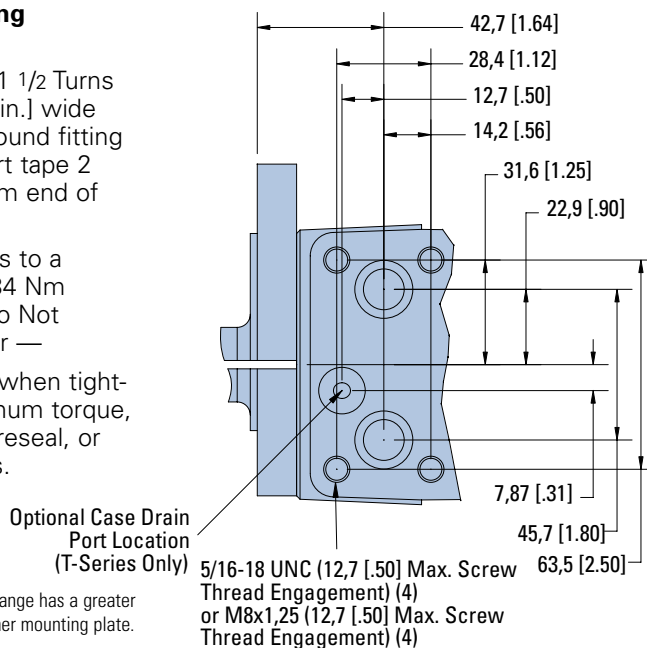
### Manifold Ports



### Use the following procedures:

- Wrap approx. 1 1/2 Turns of 13 mm [1/2 in.] wide Teflon Tape fitting threads — start tape 2 threads up from end of fitting.
- Tighten threads to a Maximum of 34 Nm [25 lb-ft]. — Do Not Tighten Further —
- If fittings leak when tightened to maximum torque, either retape, reseal, or replace fittings.

### Manifold Ports w/manifold case port



### Note:

End ported motor option is derated to 1400 continuous, 1700 psi intermittent.

\*2 Bolt SAE B mounting flange has a greater pilot thickness and a thinner mounting plate.