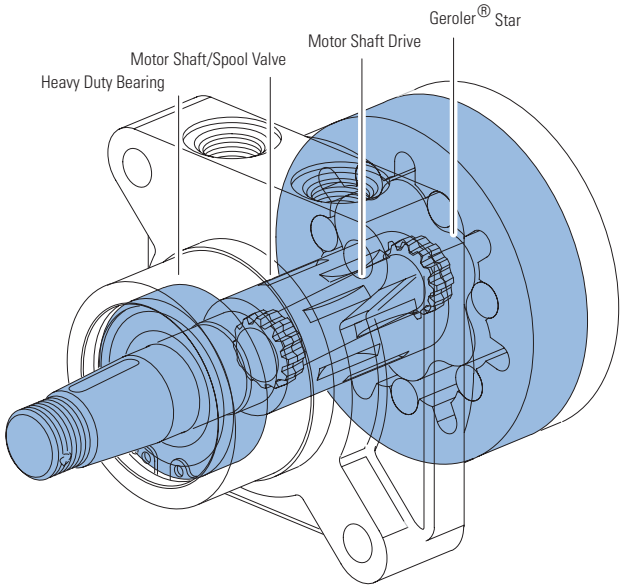
W Series (162-)

Highlights



Description

Char-Lynn W Series motors with the Geroler displacement element offer the same low friction and long-life advantages as the S and T Series.

The W Series features the simplicity of Eaton's proven spool valve and a Geroler element that provides superior drive life and smooth performance. In addition, this motor has a rugged housing with an extra large capacity side load bearing.

W Series Motors

Geroler Element	7 Displacements
Flow l/min [GPM]	68 [18] Continuous***
	76 [20] Intermittent**
Speed	288 RPM
Pressure bar [PSI]	165 [2400] Cont.***
	179 [2600] Inter.**
Torque Nm [lb-in]	410 [3624] Cont.***
	562 [4970] Inter.**

*** Continuous— (Cont.) Continuous rating, motor may be run continuously at these ratings.
** Intermittent— (Inter.) Intermittent operation, 10% of every minute.

Features:

- Heavy duty bearing
- Wheel drive interface
- Three-pressure zone design (ability to reduce case pressure)
- Variety of displacements, shafts, mounts and special options
- Special options to meet customer needs

Benefits:

- High side-load capacity
- High shock load capability
- Wheel mount interface
- Compact powerful package
- High efficiency
- Smooth low-speed operation
- Extended leak-free performance

Applications:

- Scissors lifts
- Boom lifts
- Mid-size ZTR mowers
- Turf equipment
- Greens mowers
- Sand trap rakes
- Railroad maintenance equipment
- Industrial sweepers and floor polishers
- Skid steer attachments
- Many more


Scissor Lift

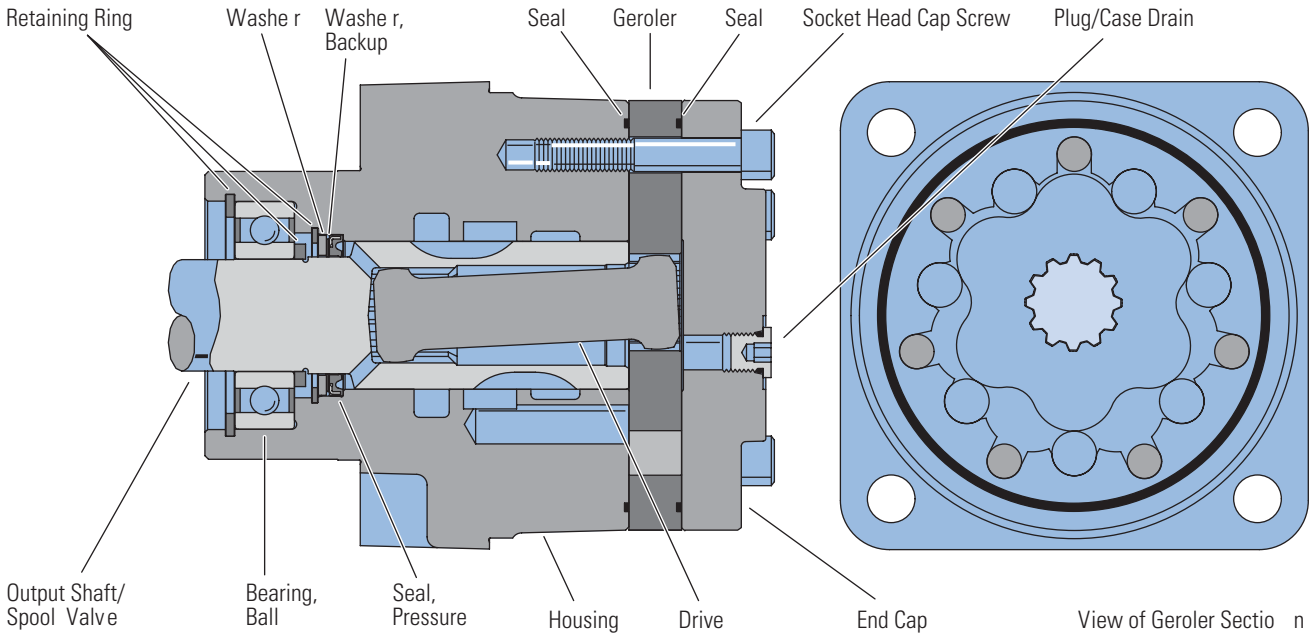

Sweeper


Trencher


Boom Lift

W Series (162-)

Specifications



SPECIFICATION DATA — W SERIES MOTORS

Displ. cm³/r [in³/r]		80 [4.9]	126 [7.7]	154 [9.4]	195 [11.9]	251 [15.3]	303 [18.5]	374 [22.8]
Max. Speed (RPM)		267	288	214	200	200	200	200
Flow l/min [GPM]	Continuous	23 [6]	30 [8]	34 [9]	38 [10]	53 [14]	62 [16.5]	68 [18]
	Intermittent	23 [6]	30 [8]	34 [9]	38 [10]	53 [14]	62 [16.5]	76 [20]
Theo. Torque Nm [lb-in]	Continuous	176 [1555]	279 [2470]	318 [2813]	318 [2816]	375 [3319]	387 [3429]	410 [3624]
	Intermittent	189 [1676]	298 [2640]	373 [3301]	439 [3882]	548 [4849]	539 [4769]	562 [4970]
Pressure Δbar [ΔPSI]	Continuous	165 [2400]	165 [2400]	152 [2200]	124 [1800]	110 [1600]	97 [1400]	83 [1200]
	Intermittent	179 [2600]	179 [2600]	179 [2600]	179 [2600]	165 [2400]	138 [2000]	124 [1800]

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:

179 bar [2600 PSI]

Do Not Exceed Δ Pressure Rating (for displacement size see chart above).

Return Pressure (Back-Pressure):

Do not exceed Δ pressure rating (see chart above). Case drain required.

Note:

Optional version can be used without case drain.

Case Pressure:

Minimum – No Pressure

Maximum – 103 bar [1500 PSI] without case drain.

Note:

The case must be flooded when the motor is operating.

Δ Pressure:

The true Δ bar [Δ PSI] between inlet port and return 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 System Operating Temp.:

-34°C to 82°C [-30°F to 180°F]

Recommended Filtration:

per ISO Cleanliness Code, level 20/18/13

W Series (162-)

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 motor to motor in production.

Continuous

Intermittent

80 cm³/r [4.9 in³/r]

Δ Pressure bar [PSI]

Continuous

Flow l/min [GPM]	[400] 28	[600] 41	[800] 55	[1000] 69	[1200] 83	[1400] 97	[1600] 110	[1800] 124	[2000] 138	[2200] 152	[2400] 165	[2600] 179
[2] 7,6	[204] 23 93	[337] 38 89	[474] 54 88	[612] 69 84	[748] 85 83	[883] 100 79	[1019] 115 73	[1149] 130 69	[1281] 145 69	[1412] 160 61	[1540] 174 56	[1610] 182 39
[4] 15,1	[223] 25 178	[357] 40 172	[489] 55 170	[627] 71 168	[769] 87 165	[902] 102 159	[1035] 117 157	[1169] 132 154	[1295] 146 146	[1424] 161 142	[1555] 176 131	[1676] 189 117
[6] 22,7	[255] 29 267	[342] 39 265	[477] 54 262	[612] 69 258	[749] 85 257	[879] 99 252	[1014] 115 248	[1154] 130 241	[1286] 145 235	[1408] 159 229	[1533] 173 219	[1648] 186 206

126 cm³/r [7.7 in³/r]

Δ Pressure bar [PSI]

Continuous

Flow l/min [GPM]	[400] 28	[600] 41	[800] 55	[1000] 69	[1200] 83	[1400] 97	[1600] 110	[1800] 124	[2000] 138	[2200] 152	[2400] 165	[2600] 179
[2] 7,6	[390] 44 58	[605] 68 56	[817] 92 55	[1032] 117 51	[1248] 141 49	[1448] 164 45	[1656] 187 43	[1871] 211 41	[2069] 234 33	[2243] 253 32	[2414] 273 26	[2513] 284 17
[4] 15,1	[382] 43 113	[605] 68 106	[817] 92 106	[1036] 117 104	[1252] 141 93	[1463] 165 97	[1694] 191 94	[1908] 216 88	[2113] 239 82	[2306] 261 79	[2470] 279 74	[2640] 298 60
[6] 22,7	[367] 41 172	[587] 66 167	[802] 91 164	[1017] 115 161	[1236] 140 156	[1444] 163 152	[1668] 188 147	[1882] 213 141	[2091] 236 134	[2284] 258 130	[2459] 278 120	[2637] 298 103
[8] 30,3	[346] 39 228	[561] 63 225	[769] 87 220	[981] 111 216	[1203] 136 213	[1419] 160 208	[1634] 185 201	[1849] 209 195	[2039] 230 188	[2217] 250 174	[2432] 275 163	[2633] 297 149

154 cm³/r [9.4 in³/r]

Δ Pressure bar [PSI]

Continuous

Flow l/min [GPM]	[400] 28	[600] 41	[800] 55	[1000] 69	[1200] 83	[1400] 97	[1600] 110	[1800] 124	[2000] 138	[2200] 152	[2400] 165	[2600] 179
[2] 7,6	[450] 51 47	[723] 82 47	[989] 112 46	[1249] 141 44	[1512] 171 40	[1769] 200 39	[2021] 228 36	[2269] 256 33	[2502] 283 30	[2714] 307 26	[2904] 328 19	[3019] 341 10
[4] 15,1	[470] 53 94	[737] 83 93	[1009] 114 90	[1276] 144 89	[1540] 174 87	[1802] 204 84	[2064] 233 81	[2323] 262 78	[2570] 290 73	[2813] 318 67	[3019] 341 65	[3242] 366 52
[6] 22,7	[435] 49 143	[715] 81 140	[984] 111 138	[1252] 141 137	[1513] 171 134	[1787] 202 131	[2020] 228 128	[2274] 257 124	[2521] 285 117	[2812] 318 112	[3042] 344 103	[3301] 373 91
[8] 30,3	[407] 46 190	[677] 76 188	[945] 107 186	[1214] 137 184	[1477] 167 182	[1740] 197 179	[2005] 227 176	[2260] 255 171	[2503] 283 166	[2735] 309 158	[2964] 335 148	[3206] 362 137
[9] 34	[380] 43 214	[648] 73 212	[914] 103 210	[1183] 134 207	[1452] 164 206	[1714] 194 202	[1981] 224 200	[2243] 253 196	[2499] 282 191	[2733] 309 182	[2964] 335 173	[3195] 361 162

195 cm³/r [11.9 in³/r]

Δ Pressure bar [PSI]

Continuous

Flow l/min [GPM]	[400] 28	[600] 41	[800] 55	[1000] 69	[1200] 83	[1400] 97	[1600] 110	[1800] 124	[2000] 138	[2200] 152	[2400] 165	[2600] 179
[2] 7,6	[478] 54 38	[827] 93 38	[1171] 132 37	[1511] 171 36	[1839] 208 35	[2153] 243 34	[2452] 277 34	[2756] 311 30	[3027] 342 29	[3275] 370 26	[3513] 397 22	[3673] 415 16
[4] 15,1	[515] 58 75	[872] 99 73	[1220] 138 73	[1558] 176 71	[1886] 213 70	[2206] 249 69	[2518] 284 66	[2816] 318 64	[3107] 351 62	[3382] 382 56	[3647] 412 52	[3882] 439 44
[6] 22,7	[524] 59 114	[878] 99 111	[1214] 137 111	[1551] 175 110	[1875] 212 108	[2199] 248 106	[2518] 284 105	[2824] 319 103	[3113] 352 99	[3389] 383 95	[3666] 414 91	
[8] 30,3	[518] 59 151	[856] 97 150	[1187] 134 150	[1524] 172 149	[1861] 210 147	[2187] 247 145	[2499] 282 144	[2782] 314 143	[3064] 346 141	[3334] 377 136		
[10] 38	[462] 52 190	[797] 90 188	[1133] 128 187	[1468] 166 186	[1799] 203 184	[2118] 239 184	[2442] 276 182	[2739] 309 179	[3023] 342 176	[3281] 371 160		

[3673] Torque [lb-in]
415 Nm
16 Speed RPM

W Series (162-)

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 motor to motor in production.

Continuous

Intermittent

251 cm³/r [15.3 in³/r]

Δ Pressure bar [PSI]

Continuous

Flow l/min [GPM]	[400] 28	[600] 41	[800] 55	[1000] 69	[1200] 83	[1400] 97	[1600] 110	[1800] 124	[2000] 140	[2200] 152	[2400] 165
[2] 7,6	[759] 86 30	[1194] 135 29	[1683] 190 29	[2122] 240 28	[2535] 286 27	[2928] 331 27	[3319] 375 25	[3634] 411 22	[3946] 446 17	[4242] 479 15	[4553] 514 14
[4] 15,1	[806] 91 59	[1257] 142 58	[1691] 191 58	[2130] 241 56	[2563] 290 55	[2988] 338 55	[3381] 382 52	[3799] 429 48	[4147] 469 47	[4515] 510 41	[4849] 548 40
[6] 22,7	[780] 88 90	[1219] 138 88	[1646] 186 87	[2084] 235 86	[2515] 284 85	[2933] 331 83	[3336] 377 83	[3716] 420 79			
[8] 30,3	[720] 81 120	[1148] 130 118	[1590] 180 117	[2029] 229 117	[2449] 277 114	[2861] 323 112	[3236] 366 111	[3627] 410 108			
[10] 37,9	[645] 73 148	[1080] 122 147	[1513] 171 147	[1947] 220 145	[2371] 268 145	[2779] 314 143	[3151] 356 141	[3515] 397 137			
[12] 45,4	[557] 63 178	[992] 112 177	[1428] 161 176	[1864] 211 174	[2292] 259 174	[2697] 305 172	[3087] 349 169				
[14] 53,0	[460] 52 208	[888] 100 206	[1330] 150 206	[1761] 199 203	[2191] 248 202	[2615] 295 200	[3035] 343 197				

303 cm³/r [18.5 in³/r]

Δ Pressure bar [PSI]

Continuous

Flow l/min [GPM]	[400] 28	[600] 41	[800] 55	[1000] 69	[1200] 83	[1400] 97	[1600] 110	[1800] 124	[2000] 140
[2] 7,6	[920] 104 24	[1454] 164 24	[1974] 223 24	[2480] 280 23	[2969] 335 22	[3429] 387 22	[3859] 436 20	[4230] 478 18	[4583] 518 16
[4] 15,1	[960] 108 49	[1487] 168 49	[2007] 227 47	[2513] 284 47	[3006] 340 46	[3457] 391 45	[3905] 441 44	[4338] 490 41	[4769] 539 39
[6] 22,7	[911] 103 73	[1445] 163 73	[1961] 222 72	[2473] 279 72	[2952] 334 71	[3411] 385 69	[3842] 434 68	[4276] 483 66	
[8] 30,3	[843] 95 99	[1375] 155 98	[1888] 213 97	[2393] 270 96	[2886] 326 95	[3350] 379 94	[3763] 425 93		
[10] 37,9	[752] 85 123	[1274] 144 122	[1789] 202 122	[2303] 260 120	[2792] 316 119	[3274] 370 119	[3650] 412 118		
[12] 45	[652] 74 148	[1170] 132 147	[1691] 191 146	[2199] 248 145	[2691] 304 145	[3123] 353 144			
[14] 53	[526] 59 172	[1039] 117 172	[1560] 176 171	[2064] 233 170	[2548] 288 169	[2999] 339 168			
[16.5] 62	[353] 40 203	[864] 98 203	[1367] 154 201	[1876] 212 200	[2369] 268 200				

[4583] 518 16 } Torque [lb-in] Nm Speed RPM

374 cm³/r [22.8 in³/r]

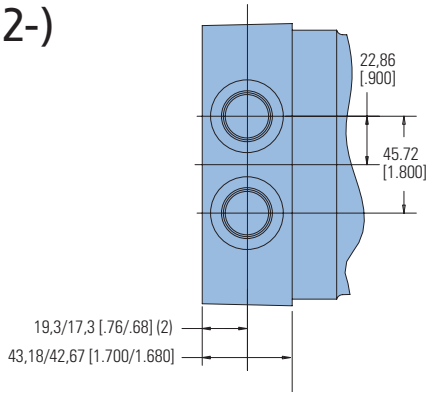
Δ Pressure bar [PSI]

Continuous

Flow l/min [GPM]	[400] 28	[600] 41	[800] 55	[1000] 69	[1200] 83	[1400] 97	[1600] 110	[1800] 124
[2] 7,6	[1086] 123 20	[1753] 198 19	[2365] 267 17	[2960] 334 16	[3533] 399 14	[4025] 455 12	[4484] 507 12	[4970] 562 11
[4] 15,1	[1152] 130 39	[1797] 203 39	[2431] 275 38	[3048] 344 36	[3624] 409 34	[4129] 467 33	[4599] 520 31	
[6] 22,7	[1099] 124 60	[1749] 198 58	[2377] 269 57	[2996] 339 56	[3557] 402 54	[4077] 461 53		
[8] 30,3	[1018] 115 80	[1662] 188 79	[2290] 259 78	[2894] 327 76	[3440] 389 75	[3952] 447 74		
[10] 37,9	[940] 106 100	[1582] 179 99	[2210] 250 97	[2812] 318 96	[3346] 378 95	[3816] 431 95		
[12] 45,4	[809] 91 120	[1454] 164 119	[2077] 235 117	[2677] 302 116	[3216] 363 115			
[14] 53,0	[648] 73 141	[1284] 145 139	[1907] 215 138	[2506] 283 137	[3033] 343 137			
[16] 60,6	[485] 55 160	[1107] 125 159	[1722] 195 157	[2315] 262 157	[2838] 321 157			
[18] 68,1	[307] 35 180	[930] 105 179	[1543] 174 178	[2133] 241 178				
[20] 75,7	[111] 13 201	[730] 82 199	[1342] 152 198	[1939] 219 197				

W Series (162-)

Dimensions



Ports

7/8-14 SAE O-Ring Ports

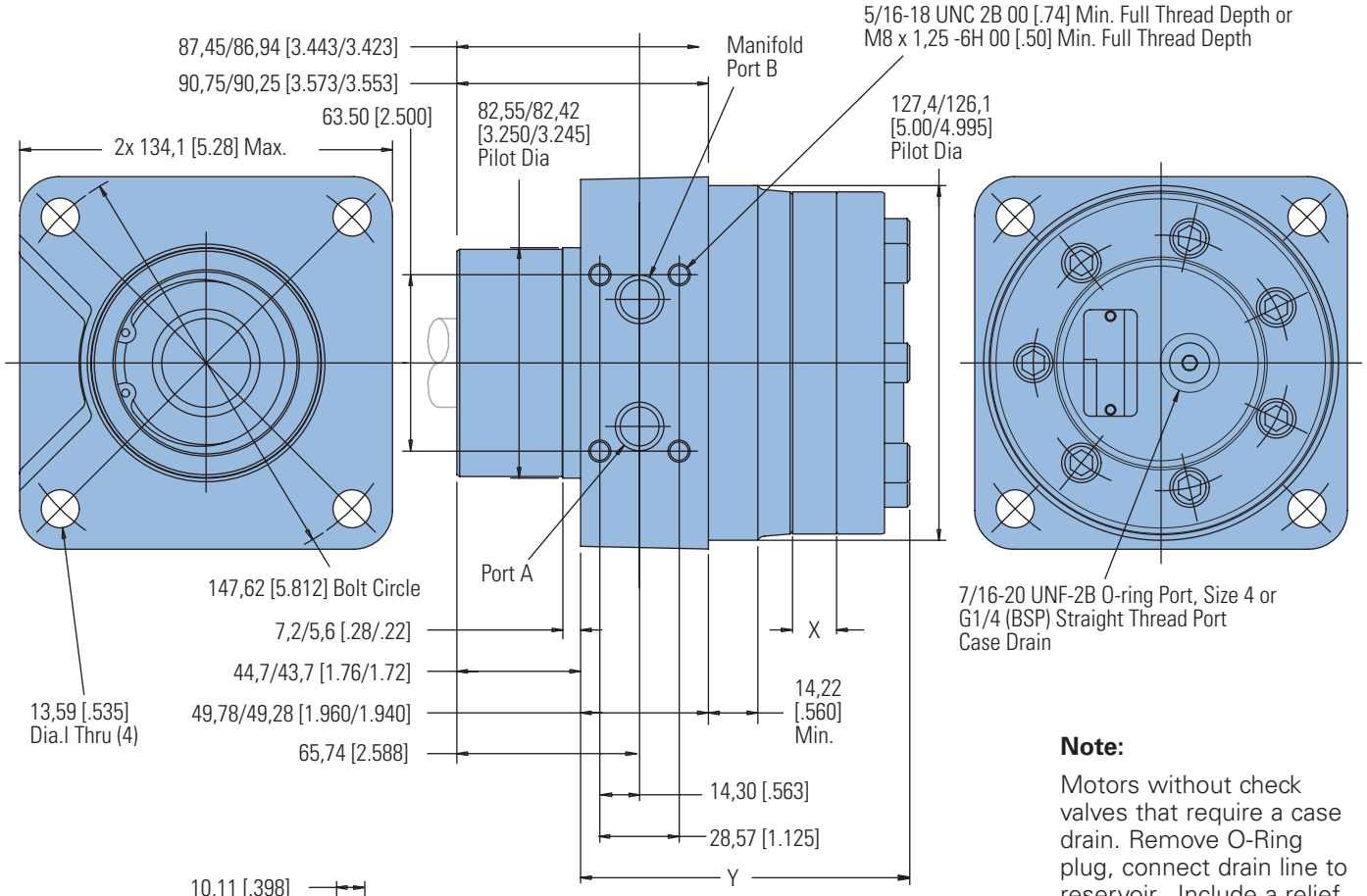
G1/2 BSP Straight Thread Port

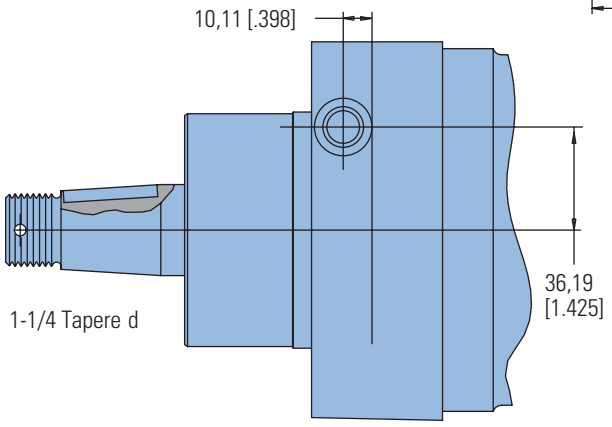
Manifold (15/16-18 Mounting Threads)

Standard Rotation Viewed from Shaft End

Port A Pressurized — CW

Port B Pressurized — CCW





Note:

Motors without check valves that require a case drain. Remove O-Ring plug, connect drain line to reservoir. Include a relief valve (in the drain line) set to maintain 3,4 bar [50 PSI] motor case pressure.

W SERIES DIMENSIONS

Displacement cm³/r [in³/r]	X mm [inch]	Y mm [inch]
80 [4.9]	9,1 [.36]	116,6 [4.59]
126 [7.7]	11,9 [.47]	119,6 [4.71]
154 [9.4]	14,7 [.58]	122,2 [4.81]
195 [11.9]	18,5 [.73]	126,2 [4.97]
251 [15.3]	23,9 [.94]	131,6 [5.18]
303 [18.5]	29,0 [1.14]	136,4 [5.37]
374 [22.8]	35,6 [1.40]	143,3 [5.64]

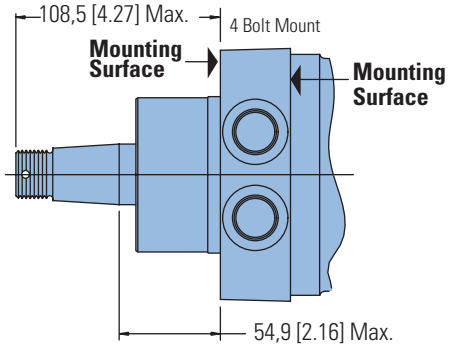
W Series (162-)

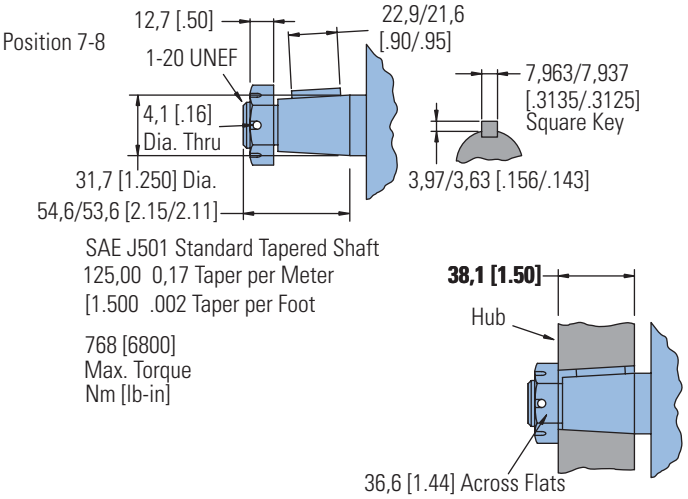
Dimensions Shafts

Recommended Torque:

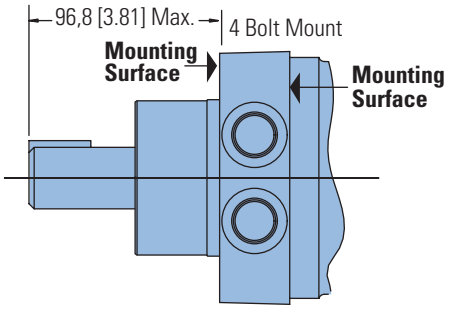
(373 Nm [275 lb-ft] Dry)
(305 Nm [225 lb-ft] Lub) Plus Torque required to align the slotted nut with the Shaft Crosshole.

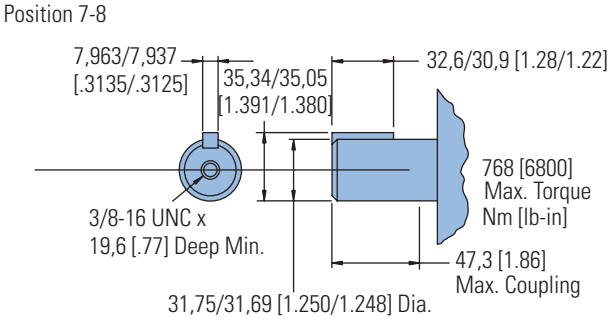
1 1/4 Tapered



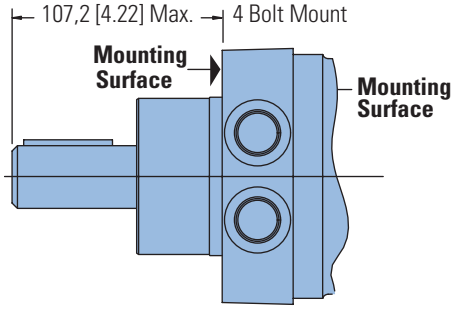


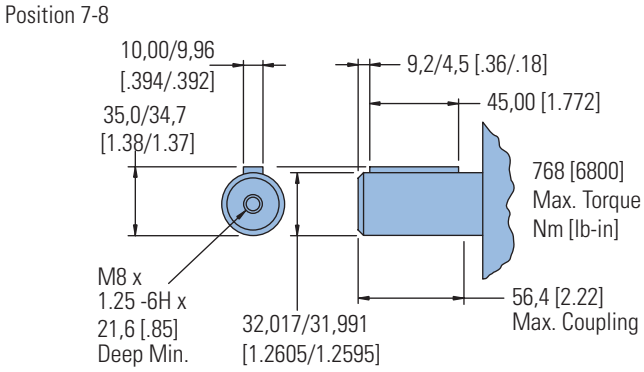
1 1/4 Inch Straight



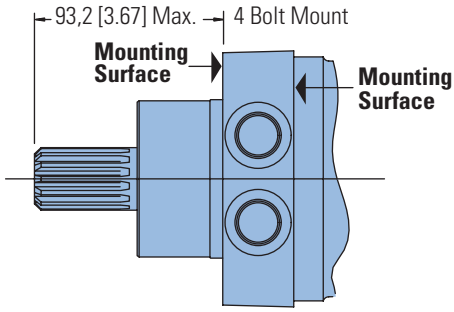


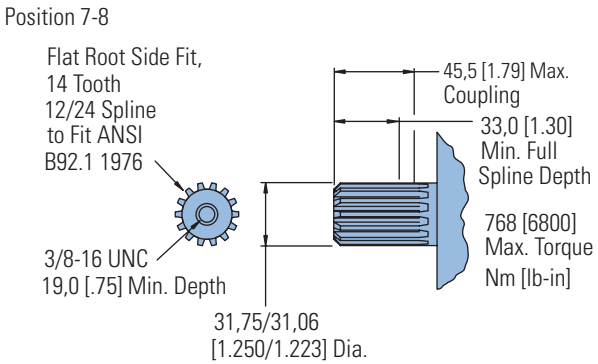
32 mm Straight





1 1/4 14 Tooth Splined





W Series (162-)

Shaft Side Load Capacity

1) Case pressure needs to be added to the outward axial thrust load and subtracted from inward axial thrustload – Case Pressure bar x 87, 1 [PSI x 1.35]
2) Life values in Chart A can be adjusted for speeds up to 200 rpm.

$$\frac{\text{Life value x 100 rpm}}{\text{application rpm}}$$

3) Shaded areas are intermittent loading.
4) To convert application radial load at any load location to sideload at the center of keyway multiply load by the application factor from Chart B.

Example:

Side Load: 4849 N @ 120 mm [1090 lbf @ 4.75 inch] from flange.
Average Thrust Load: 890 N [200 lbf] inward (toward motor).
Case Pressure: 66 bar [960 PSI].
Average Speed: 150 rpm.

Expected Life Calculation: Adjust side load value (due to load variation): from Chart B look at 120mm [4.75 inch] read at angled curve for load adjustment factor of 1.38. Adjusted load is: (4849 N [1090 lbf]) x (1.38) = 6690 N [1504 lbf]
Thrust Load Value (due to case pressure):
(960 PSI) x (1.35) = [1296 lbf]
(66 bar) x (87,1) = 5750 N
Average thrust load found to be 890 N [200 lbf] inwards so subtract from thrust load due from case pressure:
5750 N - 890 N = 4860 N or
[1296 lbf] - 200 lbf = [1096 lbf]

Read Life Expectancy from Chart A: Value from chart reading across top to 6672 [1500] (6090 N [1504 lbf]) and down left side to 4895 [1100] (4875 N [1096 lbf])
Life = 1800 Hours
Speed Adjustment for over 100 rpm:

$$\frac{\text{(1800 hrs) x (100 rpm)}}{\text{150 rpm}} = \text{1200 Hours}$$

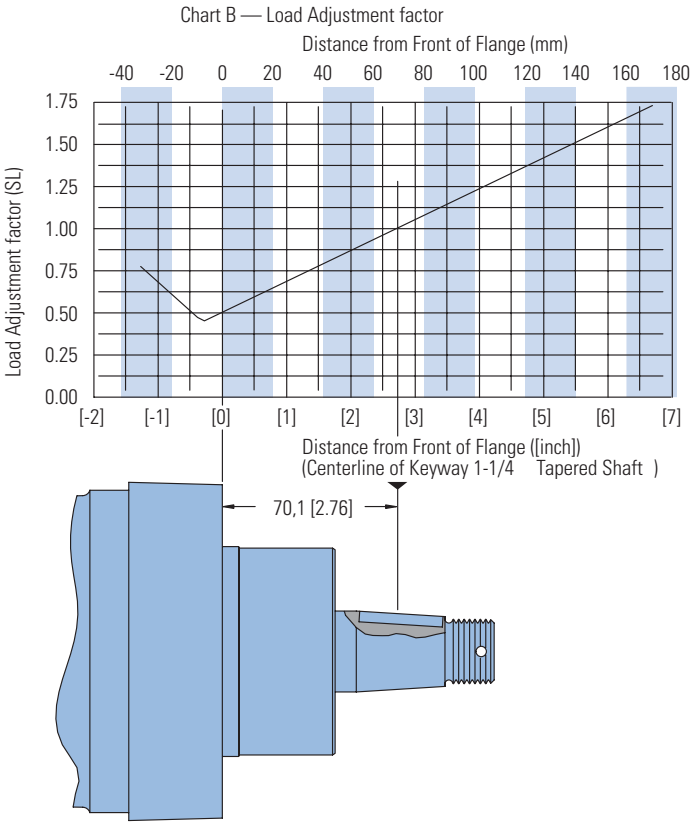


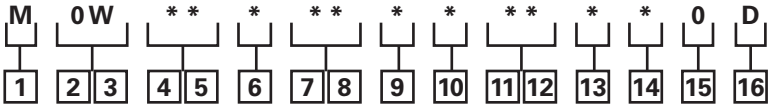
CHART A — EXPECTED B10 LIFE (HOURS) OF BEARING UNDER VARIOUS LOADS

Axial Thrust		Radial Load at Centerline of keyway at 100 RPM									
N	**lbf]**	**1110 [250]**	**2225 [500]**	**3335 [750]**	**4450 [1000]**	**4560 [1250]**	**6670 [1500]**	**7785 [1750]**	**8895 [2000]**	**11120 N [2500lbf]**	**13345 N [3000lbf)**
445	[100]	410 600	66 000	19 600	8 300	4 200	2 400	1 500	1 000	530	310
1335	[300]	92 700	40 900	19 600	8 300	4 200	2 400	1 500	1 000	530	310
2225	[500]	39 400	20 900	12 400	7 900	4 200	2 400	1 500	1 000	530	310
3115	[700]	21 400	12 600	8 100	5 500	3 900	2 400	1 500	1 000	530	
4005	[900]	13 300	8 400	5 700	4 000	2 900	2 200	1 500	1 000	530	
4895	[1100]	9 000	6 000	4 200	3 100	2 300	1 800	1 400	1 000		
5785	[1300]	6 500	4 500	3 200	2 400	1 900	1 500	1 200	900		
6670	[1500]	4 800	3 500	2 600	2 000	1 500	1 200	1 000			
7560	[1700]	3 700	2 800	2 100	1 600	1 300					
8450	[1900]	3 000	2 200								
8895	[2000] Max. Thrust										

W Series (162-)

Model Code

The following 16-digit coding system has been developed to identify all of the configuration options for the W Series motor. Use this model code to specify a motor with the desired features. All 16-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 Series

0W – W Series

4, 5 Displacement cm³/r [in³/r]

05 – 30 [4.9]

08 – 126 [7.7]

09 – 154 [9.4]

12 – 195 [11.9]

15 – 251 [15.3]

19 – 303 [18.5]

23 – 374 [22.8]

6 Mounting Type

B – 4 Bolt (Wheel) 82,6 [3.25] Pilot Dia. and 13,59 [.535] Dia. Mounting Holes 147,6 [5.81] Dia., B.C., 127,0 127,0 [5.00] rear pilot

7, 8 Output Shaft

02 –1 1/4 inch Dia. Flat Root Side Fit, 14 Tooth, 12/24 DP 30° Involute Spline with 3/8-16 UNC-2B Thread in End, 33,0 [1.30] Min. Full Spline

03 – 1 1/4 inch Dia. .125:1 Tapered Shaft Per SAE J501 with 1– 20 UNEF -2A Threaded Shaft End and Slotted Hex Nut, 7,938 [.3125] Square x 22,22 [.875] Straight Key

04 – 32mm Dia. Straight Shaft with M8 x 1, 25-6H Thread in End, 9,982 [.3930] Wide x 7,995 [.3132] High x 45,00 [1.772] Long Key

06 – 1 1/4 inch Dia. Straight Shaft with 3/8 – 16 UNC 2B Thread in End, 7.938 [.3125] Square x 34,92 [1.375] Straight Key

9 Ports

A – 7/8 -14 UNF - 2B SAE O-Ring Port

B – G 1/2 (BSP) Straight Thread Port

10 Case Flow Options

A – 7/16 - 20 UNF - 2B SAE O-Ring Port

B – G 1/4 (BSP) Straight Thread Port

C – Internal Check Valve

11, 12 Special Features (Hardware)

00 – None

01 – Viton Seals

13 Special Features (Assembly)

0 – None

1 – Reverse Rotation

14 Paint/Special Packaging

0 – No Paint, Individual Box

A – Low Gloss Black Primer, Bulk Box Option

15 Eaton Assigned Code when Applicable

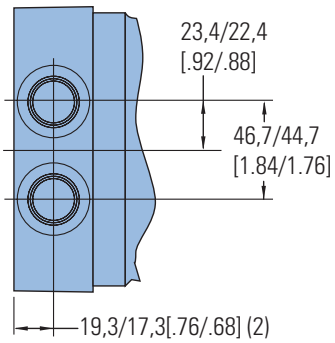
0 – Assigned Code

16 Eaton Assigned Design Code

D – Assigned Design Code

W Series (162-) with Parking Brake

Dimensions



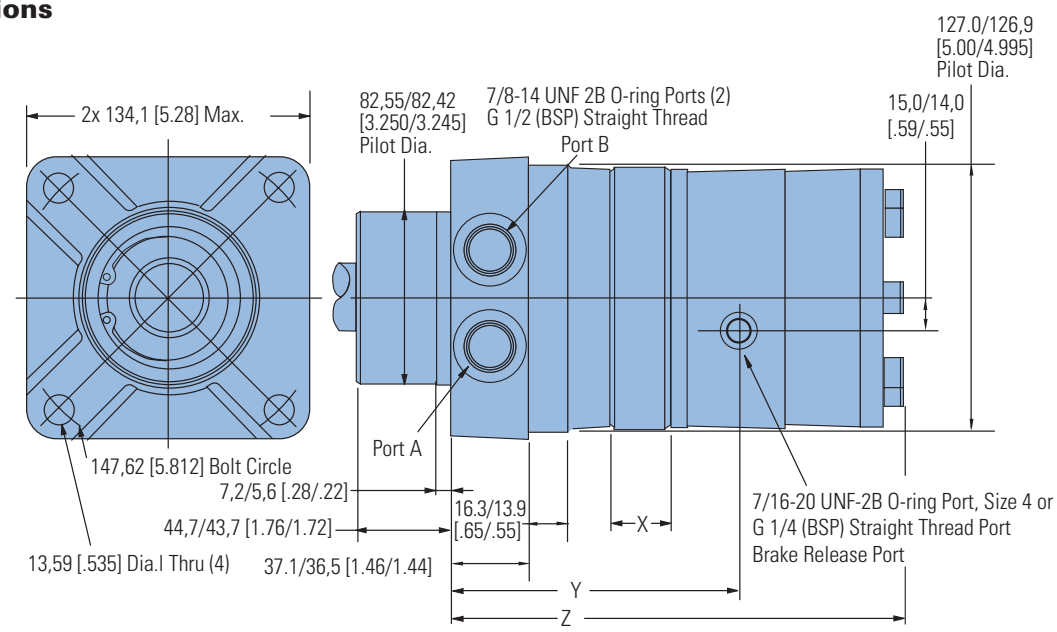
Ports

7/8 -14 UNF 2B SAE O-Ring Ports (2) or
G 1/2 (BSP) Straight Thread

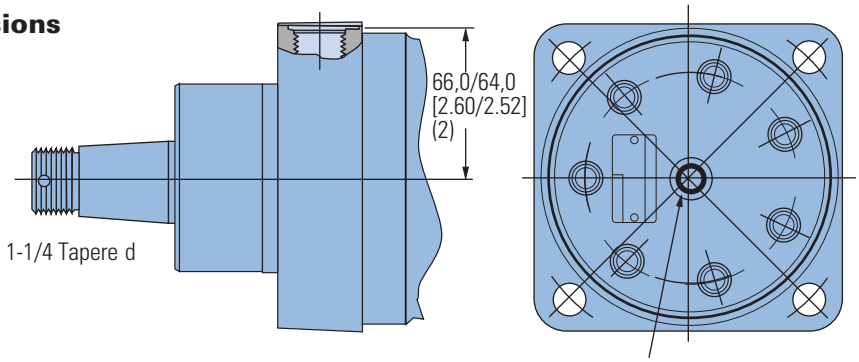
Standard Rotation Viewed from Shaft End

Port A Pressurized — CW
Port B Pressurized — CCW

Port Dimensions



Mounting Dimensions



PORTING AND MOUNTING DIMENSIONS

Displacement cm3/r [in3/r]	X mm [inch]	Y mm [inch]	Z mm [inch]
80 [4.9]	9,1 [0.36]	119,9 [4.72]	198,4 [7.81]
126 [7.7]	11,9 [0.47]	122,9 [4.84]	201,2 [7.92]
154 [9.4]	14.7 [0.58]	125,5 [4.94]	204,0 [8.03]
195 [11.9]18,5 [0.73]	129,6 [5.10]	207,8 [8.18]	
251 [15.3]23,9 [0.94]	134,9 [5.31]	213,4 [8.40]	
303 [18.5]29,0 [1.14]	139,7 [5.50]	217,7 [8.59]	
374 [22.8]35,6 [1.40]	146,6 [5.77]	226,8 [8.85]	

SPECIFICATIONS

Brake Release Pressure	205 bar [3000 PSI] Max.; 15 bar [250 PSI] Min.

W Series,
W Series (162-) with Parking Brake

Product Numbers

Use digit prefix — 162 plus four digit number from charts for complete product number — Example 162-1153.

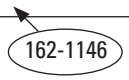
Orders will not be accepted without three digit prefix.

Standard

SHAFT	DISPL. cm^3/r [in^3/r] / PRODUCT NUMBER						
	80 [4.9]	126 [7.7]	154 [9.4]	195 [11.9]	251 [15.3]	303 [18.5]	374 [22.8]
Standard	162-1016	-1017	-1018	-1019	-1020	-1021	-1022
w/Case Drain	162-1023	-1024	-1025	-1009	-1008	-1026	-1027

W Series with Parking Brake

SHAFT	DISPL. cm^3/r [in^3/r] / PRODUCT NUMBER						
	80 [4.9]	126 [7.7]	154 [9.4]	195 [11.9]	251 [15.3]	303 [18.5]	374 [22.8]
Standard	162-1143	-1144	-1145	-1146	-1183	-1148	-1149



Note:

All above motors have 1-1/4 inch tapered output shaft, 7/8 inch O-Ring Ports, internal check valves.

For W Series Motors with a configuration not shown in the chart above: Use the model code number system to specify the product in detail. (see page B-5-8 and use the model code supplement shown on page B-5-11 for spring-applied hydraulic-release parking brake).

W Series with Parking Brake (162-)

Model Code

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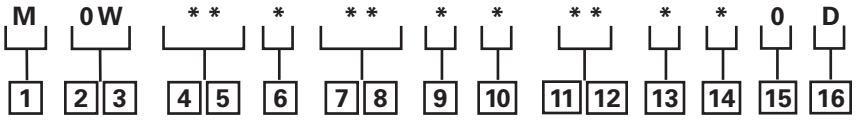

1 Product

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2, 3 Series

0W – W Series with Parking Brake

4, 5 Displacement cm3/r [in3/r]

05 – 30 [4.9]

08 – 126 [7.7]

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C – Internal Check Valve

11, 12 Special Features (Hardware)

00 – None

01 – Viton Seals

11 – Spring-applied hydraulic-release brake

13 Special Features (Assembly)

0 – None

1 – Reverse Rotation

14 Paint/Special Packaging

0 – No Paint, Individual Box

A – Low Gloss Black Primer - Individual Box

15 Eaton Assigned Code when Applicable

0 – Assigned Code

16 Eaton Assigned Design Code

D – Assigned Design Code