



whitedriveproducts



SERIES

125 -

126 -



LIGHT DUTY
Hydraulic Motor



OVERVIEW

The WM product line with spool valve design is an economical motor with enhanced rotor technology. Intended for light-duty applications, the WM series offers many advantages such as compact size, high speed, medium torque and extreme low weight. The WM series motors are used primarily in the mobile, industrial and agricultural markets.

FEATURES / BENEFITS

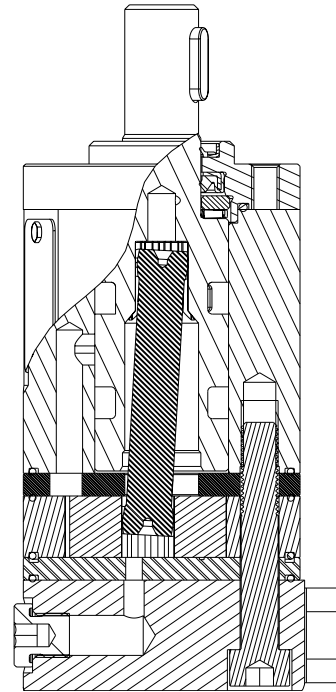
- Built-in check valves offer versatility and increased seal life.
- Bolt-on mounting flange relates to easy serviceability.
- Spool valve design gives superior performance and smooth operation over a wide speed and torque range.
- Enhanced rotor design provides smooth performance, compact volume and low weight.

TYPICAL APPLICATIONS

agriculture equipment, conveyors, carwashes, sweepers, food processing, grain augers, spreaders, feed rollers, augers, brush drives and more

SERIES DESCRIPTIONS

125/126 - Hydraulic Mini Motor
Standard



SPECIFICATIONS

CODE	Displacement cm ³ [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
008	8.4 [0.5]	1864	2293	16 [4]	20 [5]	11 [97]	14 [124]	100 [1450]	140 [2030]	200 [2900]
012	13.1 [0.8]	1521	1871	20 [5]	25 [7]	17 [150]	22 [195]	100 [1450]	140 [2030]	200 [2900]
020	20.1 [1.2]	989	1229	20 [5]	25 [7]	26 [230]	34 [301]	100 [1450]	140 [2030]	200 [2900]
032	31.8 [1.9]	622	767	20 [5]	25 [7]	40 [354]	55 [487]	100 [1450]	140 [2030]	160 [2320]
040	40.2 [2.5]	495	620	20 [5]	25 [7]	49 [434]	64 [566]	100 [1450]	140 [2030]	160 [2320]

► Performance data is typical. Performance of production units varies slightly from one motor to another. Running at intermittent ratings should not exceed 10% of every minute of operation.



DISPLACEMENT PERFORMANCE

► Performance data is typical. Performance of production units varies slightly from one motor to another.

008
8 cm³ [0.5 in³] / rev

Pressure - bar [psi]		Max. Cont.			Max. Inter.	
30 [435]		50 [725]			100 [1450]	
50 [725]		70 [1015]			120 [1740]	
70 [1015]		100 [1450]			140 [2030]	

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

Max. Max. Inter. Cont.	Flow - lpm [gpm]	2 [0.5]	3 [25] 226	5 [44] 219	7 [62] 196	10 [89] 166	11 [97] 141	14 [124] 117	Theoretical rpm
		4 [1]	3 [25] 476	5 [44] 455	8 [71] 435	10 [89] 402	12 [106] 384	12 [106] 351	
		8 [2]		5 [44] 915	7 [62] 893	10 [89] 850	12 [106] 816	14 [124] 778	
		12 [3]		5 [41] 1390	7 [62] 1366	11 [97] 1328	12 [106] 1292	14 [124] 1268	
		16 [4]		4 [35] 1864	7 [58] 1847	10 [89] 1815	12 [106] 1792	13 [115] 1771	
		20 [5]		4 [35] 2293	6 [53] 2277	9 [80] 2272	12 [106] 2245	12 [106] 2190	

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

Rotor Width
3.3 [130] mm [in]

Theoretical Torque - Nm [lb-in]		4 [36]		7 [59]		9 [83]		13 [119]		17 [148]		19 [166]	
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Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]

012
13 cm³ [0.8 in³] / rev

Pressure - bar [psi]		Max. Cont.			Max. Inter.	
30 [435]		50 [725]			100 [1450]	
50 [725]		70 [1015]			120 [1740]	
70 [1015]		100 [1450]			140 [2030]	

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

Max. Max. Inter. Cont.	Flow - lpm [gpm]	3 [0.8]	5 [44] 220	8 [71] 212	11 [97] 195	16 [142] 176			Theoretical rpm
		5 [1.3]	6 [53] 367	9 [80] 362	12 [106] 351	17 [150] 320	19 [168] 304		
		10 [2.6]	5 [44] 757	9 [80] 748	11 [97] 728	16 [142] 703	19 [168] 659	22 [195] 609	
		15 [4.0]	4 [35] 1134	8 [71] 1124	11 [97] 1106	16 [142] 1072	18 [159] 1049	21 [186] 1026	
		20 [5.3]	3 [27] 1521	6 [53] 1511	10 [89] 1498	14 [124] 1480	17 [150] 1449	21 [186] 1413	
		25 [6.6]		5 [44] 1871	9 [80] 1858	13 [115] 1850	17 [150] 1840	19 [168] 1793	

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

Rotor Width
5.2 [205] mm [in]

Theoretical Torque - Nm [lb-in]		6 [55]		10 [92]		15 [129]		21 [184]		25 [221]		29 [257]	
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Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]

020
20 cm³ [1.2 in³] / rev

Pressure - bar [psi]		Max. Cont.			Max. Inter.	
30 [435]		50 [725]			100 [1450]	
50 [725]		70 [1015]			120 [1740]	
70 [1015]		100 [1450]			140 [2030]	

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

Max. Max. Inter. Cont.	Flow - lpm [gpm]	3 [0.8]	8 [12] 143	13 [115] 133	13 [115] 133				Theoretical rpm
		5 [1.3]	8 [71] 241	13 [115] 233	18 [159] 223	25 [221] 204	31 [274] 185		
		10 [2.6]	7 [62] 489	12 [106] 479	18 [159] 470	26 [230] 454	29 [257] 454	34 [301] 454	
		15 [4.0]	6 [29] 731	12 [106] 714	18 [159] 692	25 [221] 670	29 [257] 648	34 [301] 613	
		20 [5.3]	5 [44] 989	11 [97] 974	16 [142] 962	24 [212] 941	28 [248] 941	33 [292] 941	
		25 [6.6]	4 [35] 1229	10 [89] 1216	14 [124] 1224	22 [195] 1182	26 [230] 1132	31 [274] 1104	

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

Rotor Width
8.0 [316] mm [in]

Theoretical Torque - Nm [lb-in]		10 [85]		16 [142]		22 [199]		32 [284]		38 [336]		45 [397]	
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Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]

PERFORMANCE

► Performance data is typical. Performance of production units varies slightly from one motor to another.

032		Pressure - bar [psi]			Max. Cont.	Max. Inter.				
		30 [435]	50 [725]	70 [1015]	100 [1450]	120 [1740]	140 [2030]			
		32 cm ³ [1.9 in ³] / rev			Intermittent Ratings - 10% of Operation					
		Torque - Nm [lb-in], Speed rpm								
Max. Max. Inter. Cont.	Flow - lpm [gpm]	3 [0.8]	12 [106] 84						94	Theoretical rpm
		5 [1.3]	12 [106] 148	21 [186] 139	28 [248] 113				157	
		10 [2.6]	12 [106] 301	20 [177] 293	28 [248] 284	39 [345] 269	46 [407] 254	55 [487] 234	314	
		15 [4.0]	11 [97] 456	19 [168] 448	28 [248] 437	40 [354] 423	44 [389] 412	52 [460] 396	472	
		20 [5.3]	9 [80] 622	18 [159] 610	26 [230] 601	38 [336] 589	42 [372] 547	51 [451] 514	629	
		25 [6.6]	7 [62] 767	16 [142] 754	24 [212] 741	35 [310] 718	42 [372] 679	48 [425] 633	786	
Rotor Width		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input checked="" type="checkbox"/>								
		Theoretical Torque - Nm [lb-in]								
		15 [134]	25 [224]	35 [314]	51 [448]	61 [538]	71 [627]			
		Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]								

040		Pressure - bar [psi]			Max. Cont.	Max. Inter.				
		30 [435]	50 [725]	70 [1015]	100 [1450]	130 [1885]	140 [2030]			
		40 cm ³ [2.5 in ³] / rev			Intermittent Ratings - 10% of Operation					
		Torque - Nm [lb-in], Speed rpm								
Max. Max. Inter. Cont.	Flow - lpm [gpm]	3 [0.8]	15 [133] 71						75	Theoretical rpm
		5 [1.3]	16 [142] 116	25 [221] 110	33 [292] 102				124	
		10 [2.6]	16 [142] 238	24 [212] 237	35 [310] 224	47 [416] 209	54 [478] 167	64 [566] 142	249	
		15 [4.0]	14 [124] 367	24 [212] 359	34 [301] 354	49 [434] 345	53 [469] 300	62 [549] 277	373	
		20 [5.3]	11 [97] 495	22 [195] 487	33 [292] 479	48 [425] 465	52 [460] 434	59 [522] 416	498	
		25 [6.6]	9 [80] 620	18 [159] 609	29 [257] 602	44 [389] 576	50 [443] 558	58 [513] 528	622	
Rotor Width		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input checked="" type="checkbox"/>								
		Theoretical Torque - Nm [lb-in]								
		19 [170]	32 [283]	45 [397]	64 [567]	83 [736]	90 [793]			
		Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]								

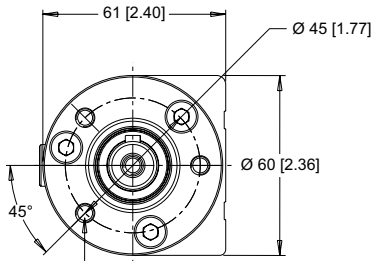
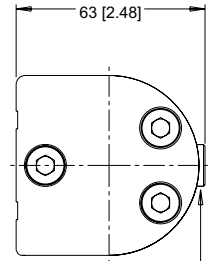
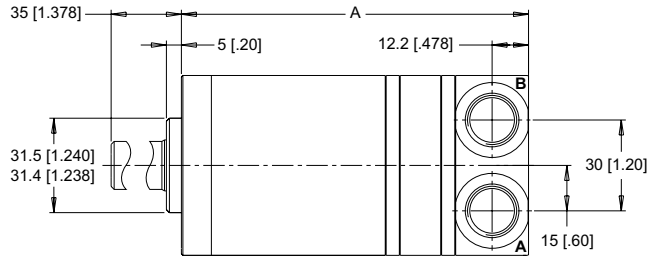
HOUSINGS

► Dimensions shown are without paint. Paint thickness can be up to 0.13 [.005].

3-HOLE, ROUND MOUNT, ALIGNED SIDE PORTS
JKB G 3/8

JK5 9/16-18 UNF

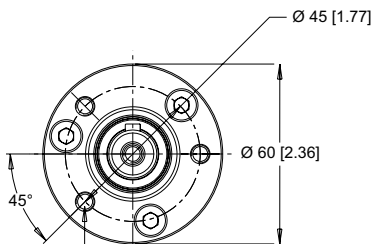
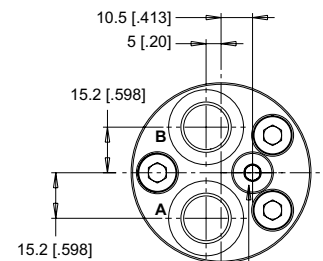
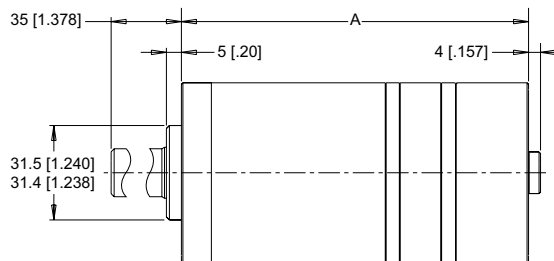
JLB G 3/8

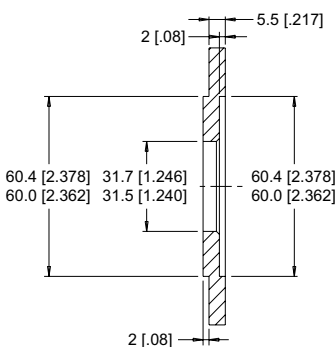
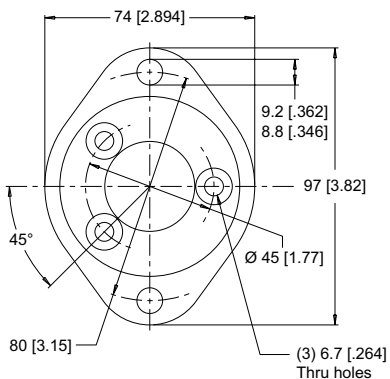
JL5 9/16-18 UNF

 JKB, JK5 - (3) M6 x 1, Min. Depth 10 [.394]
 JLB, JL5 - (3) 1/4-28 UNF, Min. Depth 10 [.394]

 Drain Port: JKB, JLB - G 1/8
 JK5, JL5 - 3/8-24 UNF

3-HOLE, ROUND MOUNT, ALIGNED END PORTS
JMB G 3/8

JM5 9/16-18 UNF

JNB G 3/8

JN5 9/16-18 UNF

 JKB, JK5 - (3) M6 x 1, Min. Depth 10 [.394]
 JLB, JL5 - (3) 1/4-28 UNF, Min. Depth 10 [.394]

 Drain Port: JKB, JLB - G 1/8
 JK5, JL5 - 3/8-24 UNF

2-HOLE FLANGE MOUNTING KIT (OPTIONAL)

LENGTH & WEIGHT CHART

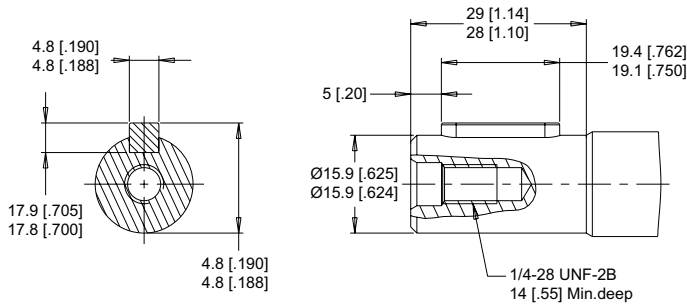
Dimension A is the overall motor length from the rear of the motor to the mounting flange surface and is referenced on detailed housing drawings above.

A	Length	Weight
#	mm [in]	kg [lb]
008	106 [4.16]	2.2 [4.8]
012	108 [4.23]	2.2 [4.9]
020	110 [4.34]	2.3 [5.0]
032	115 [4.53]	2.3 [5.1]
040	118 [4.66]	2.4 [5.2]

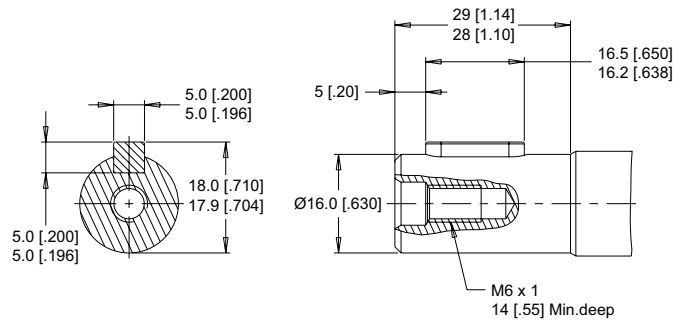
► Reference part number 125017004 when ordering the 2-Hole flange mounting kit. The kit contains three M6 and three 1/4" bolts to accommodate either thread type. The recommended mounting flange bolt torque is 10 ±1 Nm [88.5 ±9 lb-in].

SHAFT & TECHNICAL INFORMATION

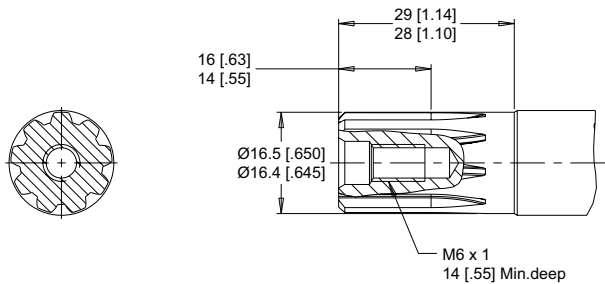
C3 5/8" Straight



C4 16mm Straight

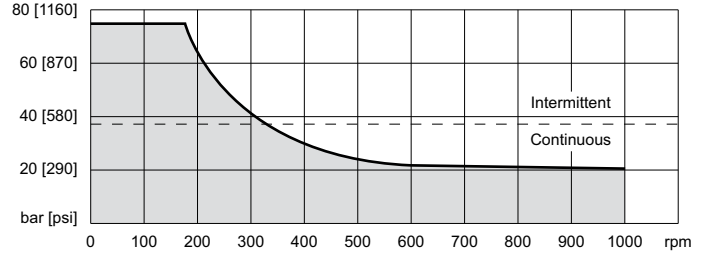


C5 16mm, 9 Tooth Spline



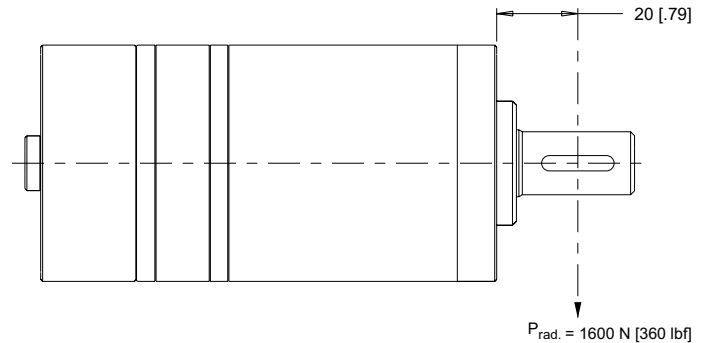
PERMISSIBLE SHAFT SEAL PRESSURE

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.

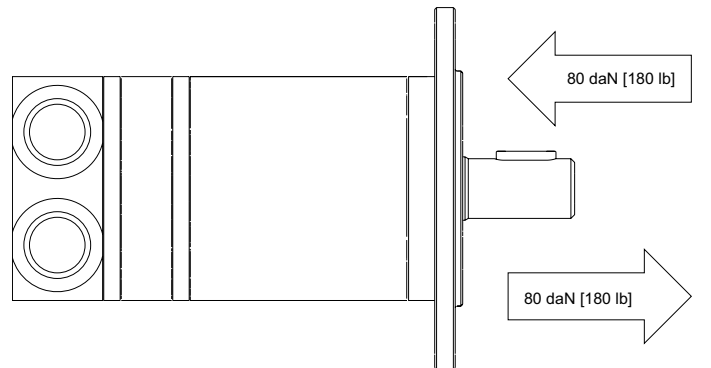


▶ With check valves and drain connection, the shaft seal pressure equals pressure in the drain line.
With check valves and no drain connection, shaft seal pressure is identical to output pressure.

PERMISSIBLE SHAFT SIDE LOAD / AXIAL LOAD

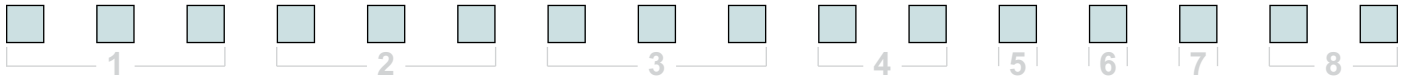


THRUST LOAD



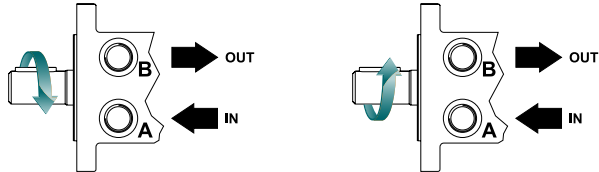


125 & 126 SERIES MODEL CODE BUILDER



1. CHOOSE SERIES DESIGNATION

- 125** Clockwise Rotation
- 126** Counterclockwise Rotation



► The 125 & 126 series are bi-directional. Reversing the inlet hose will reverse shaft rotation.

2. SELECT A DISPLACEMENT OPTION

- 008** 8 cm³/rev [0.5 in³/rev]
- 012** 13 cm³/rev [0.8 in³/rev]
- 020** 20 cm³/rev [1.2 in³/rev]
- 032** 32 cm³/rev [1.9 in³/rev]
- 040** 40 cm³/rev [2.5 in³/rev]

3. SELECT A MOUNT & PORT OPTION

- JKB** 3-Hole, M6 Round Mount, Side Ports, G 3/8
- JK5** 3-Hole, M6 Round Mount, Side Ports, 9/16-18 UNF
- JLB** 3-Hole, 1/4" Round Mount, Side Ports, G 3/8
- JL5** 3-Hole, 1/4" Round Mount, Side Ports, 9/16-18 UNF
- JMB** 3-Hole, M6 Round Mount, End Ports, G 3/8
- JM5** 3-Hole, M6 Round Mount, End Ports, 9/16-18 UNF
- JNB** 3-Hole, 1/4" Round Mount, End Ports, G 3/8
- JN5** 3-Hole, 1/4" Round Mount, End Ports, 9/16-18 UNF

4. SELECT A SHAFT OPTION

- C3** 5/8" Straight
- C4** 16mm Straight
- C5** 16mm, 9 Tooth Spline

5. SELECT A PAINT OPTION

- A** Black
- B** Black, Unpainted Mounting Surface

6. SELECT A VALVE CAVITY / CARTRIDGE OPTION

- A** None

7. SELECT AN ADD-ON OPTION

- A** Standard

8. SELECT A MISCELLANEOUS OPTION

- AA** None

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