

Part number:

**HYDROMA**

HYDRAULICKÉ SYSTÉMY

**HIDROMA  
SYSTEMS**

UKŁADY HYDRAULICZNE

**HYDROMA**

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ



**SERIES**

125 -

126 -



**LIGHT DUTY**  
Hydraulic Motor

**WM**

# WM (All Series)

For Light Duty Applications

## 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

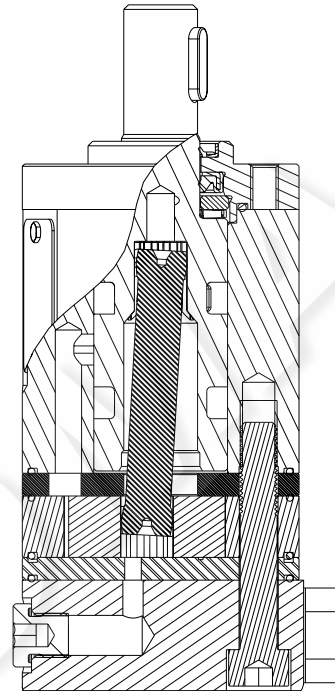
- Built-in check valves offer versatility and increased seal life.
- Bolt-on mounting flange relates to easy serviceability.
- Spool valve design gives superior performance and smooth operation over a wide speed and torque range.
- Enhanced rotor design provides smooth performance, compact volume and 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 <sup>3</sup> [in <sup>3</sup> /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]
050	50.3 [3.0]	397	487	20 [5]	25 [7]	59 [531]	81 [708]	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.

<b>008</b>		Pressure - bar [psi]			Max. Cont.		Max. Inter.		
		30 [435]	50 [725]	70 [1015]	100 [1450]	120 [1740]	140 [2030]		
		8 cm <sup>3</sup> [0.5 in <sup>3</sup> ] / rev			Intermittent Ratings - 10% of Operation				
		Torque - Nm [lb-in], <b>Speed rpm</b>							
Max. Max. Inter. Cont.	Flow - lpm [gpm]	2 [0.5]	3 [25] <b>226</b>	5 [44] <b>219</b>	7 [62] <b>196</b>	10 [89] <b>166</b>	11 [97] <b>141</b>	14 [124] <b>117</b>	237
		4 [1]	3 [25] <b>476</b>	5 [44] <b>455</b>	8 [71] <b>435</b>	10 [89] <b>402</b>	12 [106] <b>384</b>	12 [106] <b>351</b>	474
		8 [2]		5 [44] <b>915</b>	7 [62] <b>893</b>	10 [89] <b>850</b>	12 [106] <b>816</b>	14 [124] <b>778</b>	949
		12 [3]		5 [41] <b>1390</b>	7 [62] <b>1366</b>	11 [97] <b>1328</b>	12 [106] <b>1292</b>	14 [124] <b>1268</b>	1423
		16 [4]		4 [35] <b>1864</b>	7 [58] <b>1847</b>	10 [89] <b>1815</b>	12 [106] <b>1792</b>	13 [115] <b>1771</b>	1898
		20 [5]		4 [35] <b>2293</b>	6 [53] <b>2272</b>	9 [80] <b>2272</b>	12 [106] <b>2245</b>	12 [106] <b>2190</b>	2372
		<b>Rotor Width</b>							
		3.3 [130] mm [in]							
		Theoretical Torque - Nm [lb-in]							
		4 [36] 7 [59] 9 [83] 13 [119] 17 [148] 19 [166]							
		Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]							

<b>012</b>		Pressure - bar [psi]			Max. Cont.		Max. Inter.		
		30 [435]	50 [725]	70 [1015]	100 [1450]	120 [1740]	140 [2030]		
		13 cm <sup>3</sup> [0.8 in <sup>3</sup> ] / rev			Intermittent Ratings - 10% of Operation				
		Torque - Nm [lb-in], <b>Speed rpm</b>							
Max. Max. Inter. Cont.	Flow - lpm [gpm]	3 [0.8]	5 [44] <b>220</b>	8 [71] <b>212</b>	11 [97] <b>195</b>	16 [142] <b>176</b>			230
		5 [1.3]	6 [53] <b>367</b>	9 [80] <b>362</b>	12 [106] <b>351</b>	17 [150] <b>320</b>	19 [168] <b>304</b>		383
		10 [2.6]	5 [44] <b>757</b>	9 [80] <b>748</b>	11 [97] <b>728</b>	16 [142] <b>703</b>	19 [168] <b>659</b>	22 [195] <b>609</b>	766
		15 [4.0]	4 [35] <b>1134</b>	8 [71] <b>1124</b>	11 [97] <b>1106</b>	16 [142] <b>1072</b>	18 [159] <b>1049</b>	21 [186] <b>1026</b>	1149
		20 [5.3]	3 [27] <b>1521</b>	6 [53] <b>1511</b>	10 [89] <b>1498</b>	14 [124] <b>1480</b>	17 [150] <b>1449</b>	21 [186] <b>1413</b>	1533
		25 [6.6]		5 [44] <b>1871</b>	9 [80] <b>1858</b>	13 [115] <b>1850</b>	17 [150] <b>1840</b>	19 [168] <b>1793</b>	1916
		<b>Rotor Width</b>							
		5.2 [205] mm [in]							
		Theoretical Torque - Nm [lb-in]							
		6 [55] 10 [92] 15 [129] 21 [184] 25 [221] 29 [257]							
		Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]							

<b>020</b>		Pressure - bar [psi]			Max. Cont.		Max. Inter.		
		30 [435]	50 [725]	70 [1015]	100 [1450]	120 [1740]	140 [2030]		
		20 cm <sup>3</sup> [1.2 in <sup>3</sup> ] / rev			Intermittent Ratings - 10% of Operation				
		Torque - Nm [lb-in], <b>Speed rpm</b>							
Max. Max. Inter. Cont.	Flow - lpm [gpm]	3 [0.8]	8 [12] <b>143</b>	13 [115] <b>133</b>	13 [115] <b>133</b>				149
		5 [1.3]	8 [71] <b>241</b>	13 [115] <b>233</b>	18 [159] <b>223</b>	25 [221] <b>204</b>	31 [274] <b>185</b>		248
		10 [2.6]	7 [62] <b>489</b>	12 [106] <b>479</b>	18 [159] <b>470</b>	26 [230] <b>454</b>	29 [257] <b>454</b>	34 [301] <b>454</b>	497
		15 [4.0]	6 [29] <b>731</b>	12 [106] <b>714</b>	18 [159] <b>692</b>	25 [221] <b>670</b>	29 [257] <b>648</b>	34 [301] <b>613</b>	745
		20 [5.3]	5 [44] <b>989</b>	11 [97] <b>974</b>	16 [142] <b>962</b>	24 [212] <b>941</b>	28 [248] <b>941</b>	33 [292] <b>941</b>	994
		25 [6.6]	4 [35] <b>1229</b>	10 [89] <b>1216</b>	14 [124] <b>1224</b>	22 [195] <b>1182</b>	26 [230] <b>1132</b>	31 [274] <b>1104</b>	1242
		<b>Rotor Width</b>							
		8.0 [316] mm [in]							
		Theoretical Torque - Nm [lb-in]							
		10 [85] 16 [142] 22 [199] 32 [284] 38 [336] 45 [397]							
		Displacement tested at 45°C [113°F] with an oil viscosity of 46cSt [213 SUS]							

# WM (All Series)

## For Light Duty Applications

### PERFORMANCE

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

<b>032</b>		Pressure - bar [psi]			Max. Cont.		Max. Inter.		
		30 [435]	50 [725]	70 [1015]	100 [1450]	120 [1740]	140 [2030]		
		32 cm <sup>3</sup> [1.9 in <sup>3</sup> ] / rev			Intermittent Ratings - 10% of Operation				
		Torque - Nm [lb-in], <b>Speed rpm</b>							
Max. Max. Inter. Cont.	Flow - lpm [gpm]	3 [0.8]	12 [106] <b>84</b>						94
		5 [1.3]	12 [106] <b>148</b>	21 [186] <b>139</b>	28 [248] <b>113</b>				157
		10 [2.6]	12 [106] <b>301</b>	20 [177] <b>293</b>	28 [248] <b>284</b>	39 [345] <b>269</b>	46 [407] <b>254</b>	55 [487] <b>234</b>	314
		15 [4.0]	11 [97] <b>456</b>	19 [168] <b>448</b>	28 [248] <b>437</b>	40 [354] <b>423</b>	44 [389] <b>412</b>	52 [460] <b>396</b>	472
		20 [5.3]	9 [80] <b>622</b>	18 [159] <b>610</b>	26 [230] <b>601</b>	38 [336] <b>589</b>	42 [372] <b>547</b>	51 [451] <b>514</b>	629
		25 [6.6]	7 [62] <b>767</b>	16 [142] <b>754</b>	24 [212] <b>741</b>	35 [310] <b>718</b>	42 [372] <b>679</b>	48 [425] <b>633</b>	786
<b>Rotor Width</b>		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input checked="" type="checkbox"/>							
12.7 [501]		Theoretical Torque - Nm [lb-in]							
mm [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]							

<b>040</b>		Pressure - bar [psi]			Max. Cont.		Max. Inter.		
		30 [435]	50 [725]	70 [1015]	100 [1450]	130 [1885]	140 [2030]		
		40 cm <sup>3</sup> [2.5 in <sup>3</sup> ] / rev			Intermittent Ratings - 10% of Operation				
		Torque - Nm [lb-in], <b>Speed rpm</b>							
Max. Max. Inter. Cont.	Flow - lpm [gpm]	3 [0.8]	15 [133] <b>71</b>						75
		5 [1.3]	16 [142] <b>116</b>	25 [221] <b>110</b>	33 [292] <b>102</b>				124
		10 [2.6]	16 [142] <b>238</b>	24 [212] <b>237</b>	35 [310] <b>224</b>	47 [416] <b>209</b>	54 [478] <b>167</b>	64 [566] <b>142</b>	249
		15 [4.0]	14 [124] <b>367</b>	24 [212] <b>359</b>	34 [301] <b>354</b>	49 [434] <b>345</b>	53 [469] <b>300</b>	62 [549] <b>277</b>	373
		20 [5.3]	11 [97] <b>495</b>	22 [195] <b>487</b>	33 [292] <b>479</b>	48 [425] <b>465</b>	52 [460] <b>434</b>	59 [522] <b>416</b>	498
		25 [6.6]	9 [80] <b>620</b>	18 [159] <b>609</b>	29 [257] <b>602</b>	44 [389] <b>576</b>	50 [443] <b>558</b>	58 [513] <b>528</b>	622
<b>Rotor Width</b>		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input checked="" type="checkbox"/>							
16.0 [631]		Theoretical Torque - Nm [lb-in]							
mm [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]							

<b>050</b>		Pressure - bar [psi]			Max. Cont.		Max. Inter.		
		30 [435]	50 [725]	70 [1015]	100 [1450]	125 [1815]	140 [2030]		
		50 cm <sup>3</sup> [3.1 in <sup>3</sup> ] / rev			Intermittent Ratings - 10% of Operation				
		Torque - Nm [lb-in], <b>Speed rpm</b>							
Max. Max. Inter. Cont.	Flow - lpm [gpm]	3 [0.8]	20 [178] <b>53</b>						60
		5 [1.3]	19 [169] <b>90</b>	32 [284] <b>85</b>	44 [391] <b>77</b>				99
		10 [2.6]	17 [151] <b>195</b>	29 [257] <b>190</b>	41 [364] <b>176</b>	59 [524] <b>155</b>	73 [348] <b>132</b>	81 [719] <b>114</b>	198
		15 [4.0]	13 [115] <b>297</b>	25 [222] <b>289</b>	38 [337] <b>279</b>	55 [488] <b>257</b>	68 [604] <b>236</b>	77 [684] <b>220</b>	298
		20 [5.3]	7 [62] <b>397</b>	20 [178] <b>393</b>	33 [293] <b>383</b>	50 [444] <b>366</b>	63 [559] <b>347</b>	73 [648] <b>332</b>	398
		25 [6.6]		14 [124] <b>487</b>	26 [231] <b>485</b>	44 [391] <b>472</b>	57 [506] <b>457</b>	65 [577] <b>445</b>	497
<b>Rotor Width</b>		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input checked="" type="checkbox"/>							
20.0 [787]		Theoretical Torque - Nm [lb-in]							
mm [in]		23 [334]	39 [566]	55 [798]	79 [1146]	99 [1436]	111 [1610]		
		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].

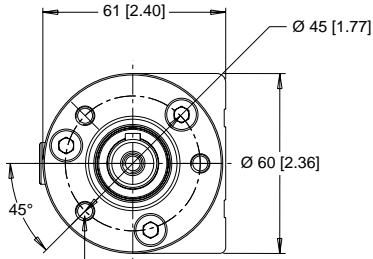
**3-HOLE, ROUND MOUNT, ALIGNED SIDE PORTS**

**JKB** G 3/8

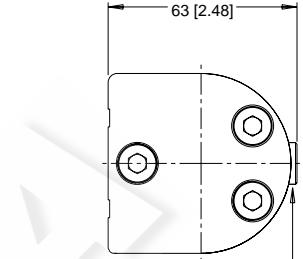
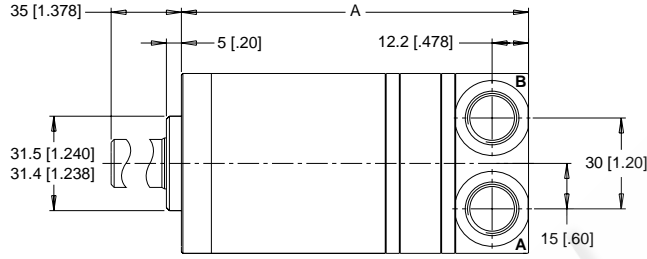
**JK5** 9/16-18 UNF

**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

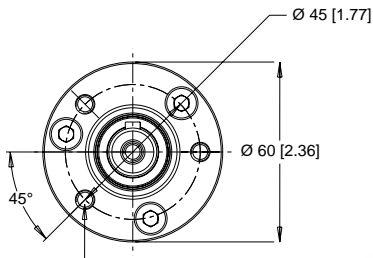
**3-HOLE, ROUND MOUNT, ALIGNED END PORTS**

**JMB** G 3/8

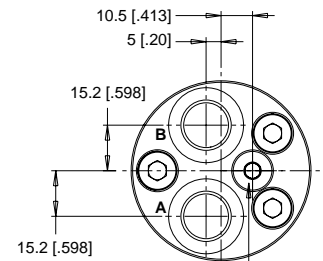
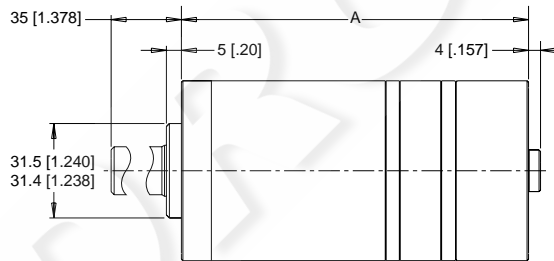
**JM5** 9/16-18 UNF

**JNB** G 3/8

**JN5** 9/16-18 UNF

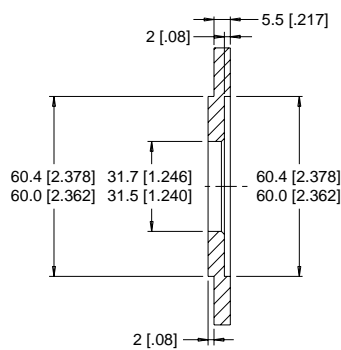
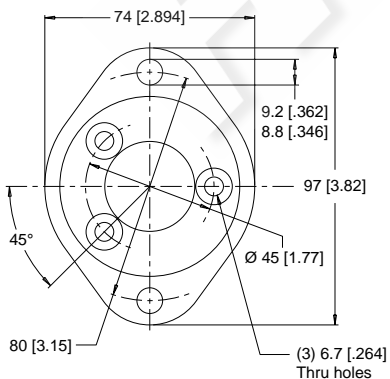


JKB, JK5 - (3) M6 x 1, Min. Depth 10 [.394]  
JLB, JL5 - (3) 1/4-28 UNF, Min. Depth 10 [.394]



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]
050	122 [4.80]	2.5 [5.5]

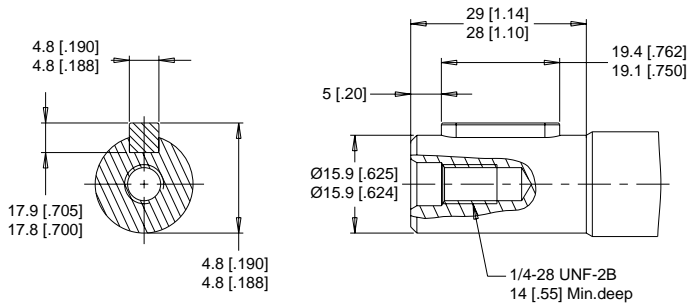
► Reference part number 125017004 when ordering the 2-Hole flange mounting kit. The kit contains three M6 and three 1/4" bolts to accommodate either thread type. The recommended mounting flange bolt torque is 10 ±1 Nm [88.5 ±9 lb-in].

# WM (125/126 Series)

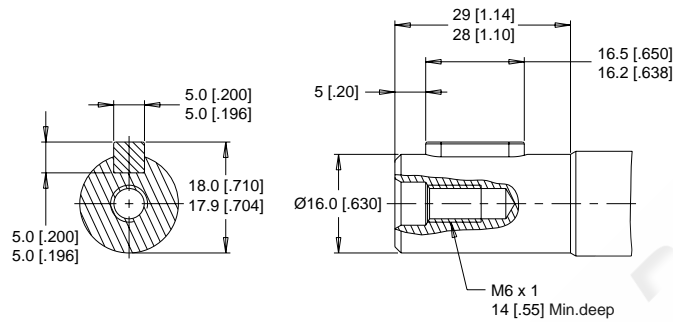
## Light Duty Hydraulic Motor

### SHAFT & TECHNICAL INFORMATION

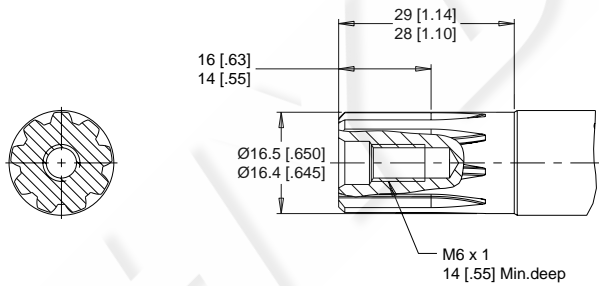
#### C3 5/8" Straight



#### C4 16mm Straight

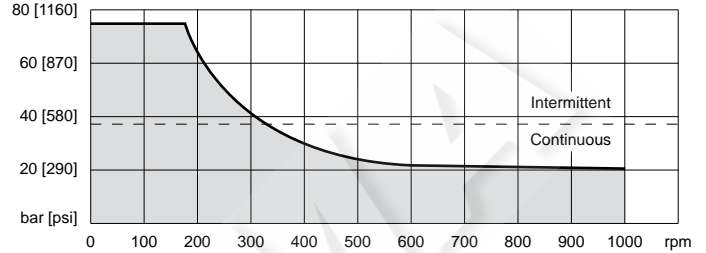


#### C5 16mm, 9 Tooth Spline



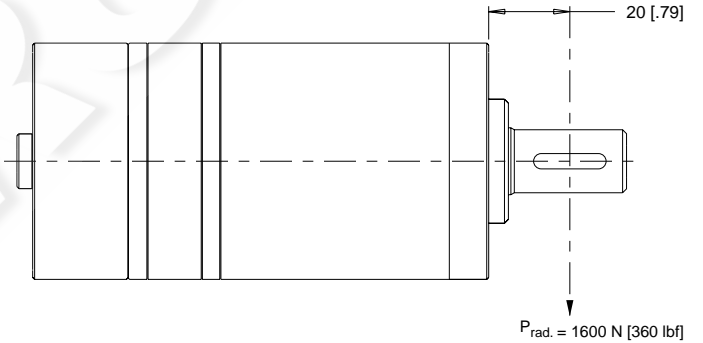
### PERMISSIBLE SHAFT SEAL PRESSURE

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.

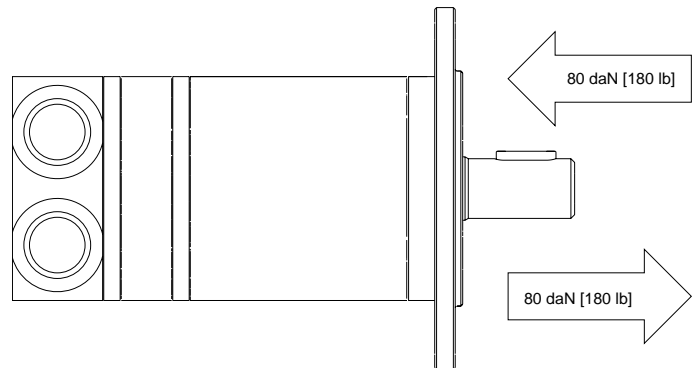


► With check valves and drain connection, the shaft seal pressure equals pressure in the drain line.  
With check valves and no drain connection, shaft seal pressure is identical to output pressure.

### PERMISSIBLE SHAFT SIDE LOAD / AXIAL LOAD



### THRUST LOAD



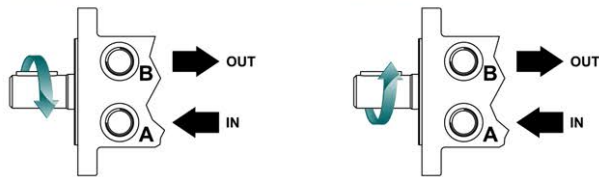


**125 & 126 SERIES MODEL CODE BUILDER**



**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**

<b>008</b>	8 cm <sup>3</sup> /rev [0.5 in <sup>3</sup> /rev]	<b>032</b>	32 cm <sup>3</sup> /rev [1.9 in <sup>3</sup> /rev]
<b>012</b>	13 cm <sup>3</sup> /rev [0.8 in <sup>3</sup> /rev]	<b>040</b>	40 cm <sup>3</sup> /rev [2.5 in <sup>3</sup> /rev]
<b>020</b>	20 cm <sup>3</sup> /rev [1.2 in <sup>3</sup> /rev]	<b>050</b>	50 cm <sup>3</sup> /rev [3.1 in <sup>3</sup> /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      **C5** 16mm, 9 Tooth Spline  
**C4** 16mm Straight

**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