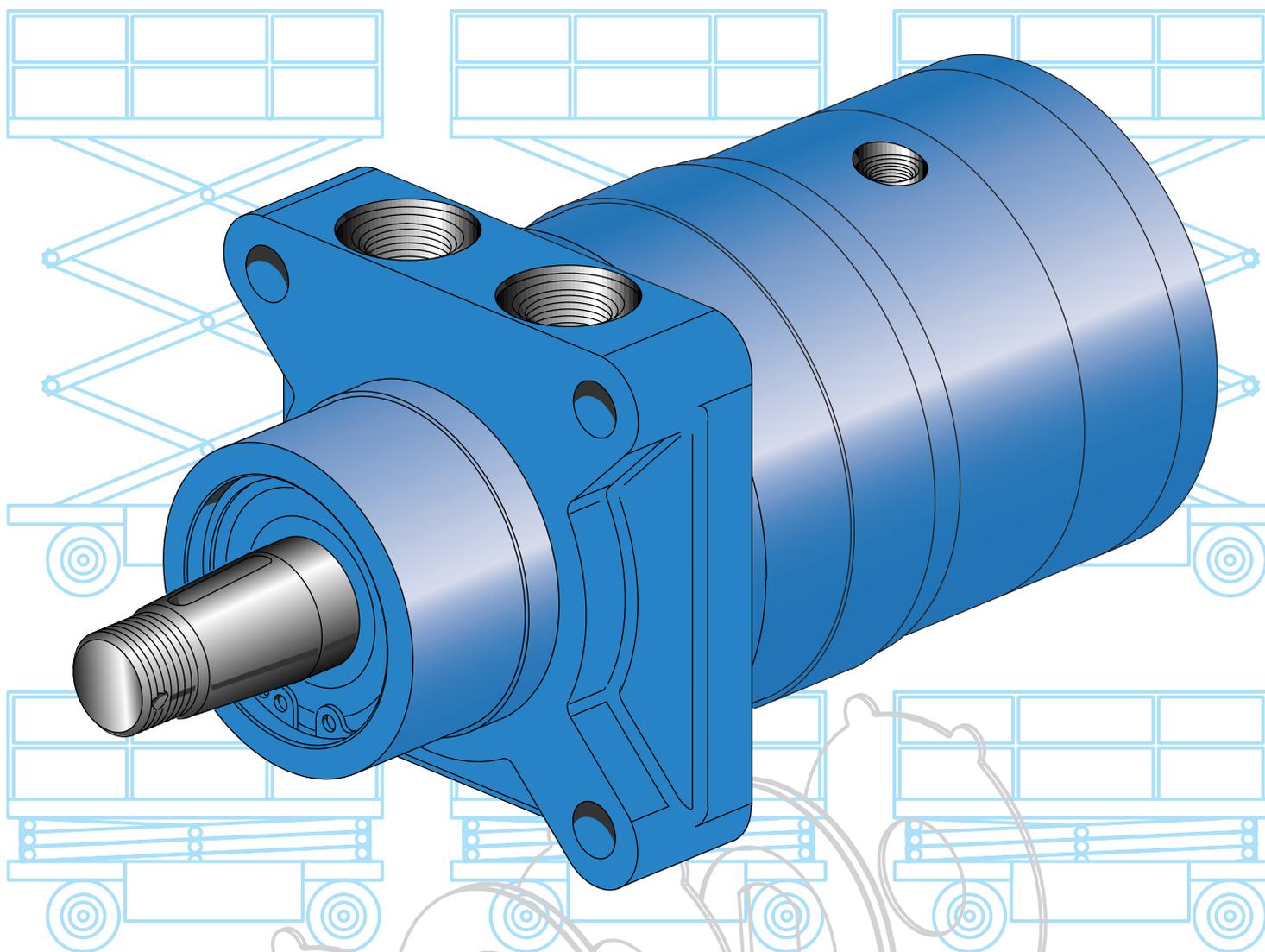


# Char-Lynn<sup>®</sup>

Spool Valve Motors

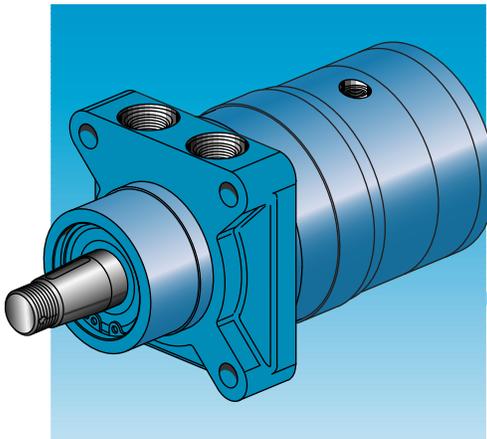
No. 10-109  
September, 1998



**W Series with Parking Brake**

## Product Information

### W Series with Parking Brake



# W

W Series Displacement Size = cubic centimeter per shaft revolution (cm<sup>3</sup>/r)  
= cubic inch per shaft revolution ([ in<sup>3</sup>/r ])

- 80 [ 4.9]
- 126 [ 7.7]
- 154 [ 9.4]
- 195 [11.9]
- 251 [15.3]
- 303 [18.5]
- 374 [22.8]

**Mounting Flange**

- 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 [5.00] Dia. Rear Mount Pilot

**Output Shaft**

- 1-1/4 inch Dia. 14 Tooth Involute Spline 3/8-16 Threaded End
- 1-1/4 inch Dia. Tapered with Woodruff Key and Nut
- 32mm Dia. Straight with Key
- 1-1/4 inch Dia. Straight with Key

**Port Type**

- 7/8-14 O-ring
- G1/2 (BSP)

**Case Flow Options**

- Internal Check Valves

**Special Features Available**

- Viton Seals
- Reverse Rotation

**Paint**

- No Paint (Standard)
- Painted Low Gloss Black

#### W Series

Geroler Element .....	7 Displacements
Flow l/min [GPM] .....	68 [18] Continuous**
	76 [20] Intermittent*
Speed .....	200 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.

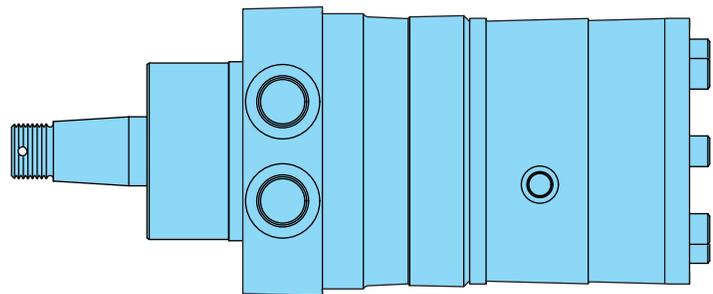
\* Intermittent— (Inter.) Intermittent operation, 10% of every minute.

### Spring-applied Hydraulic-release Integral Parking Brake

#### Features:

- Fully integrated friction disk brake
- Very compact
- Brake torque is transferred through the orbit motion inherent in the motor for a 6:1 brake torque magnification.
- Motor envelope OD unchanged – (83 mm [3-1/4 inch] front pilot and 127 mm [5 inch] rear pilot unaffected by addition of brake).
- Independent (hydraulic) brake release port — 15 bar [250 psi] minimum to release brake — capable to full system pressure.
- Isolated brake release cavity for positive actuation control.
- Short brake actuation stroke, requires very little actuation flow
- No measurable brake drag
- Brake holding torque — 791 Nm [7000 in-lb]
- ANSI/SIA A92.6-1990 standard compatible for scissors lift applications

**Brake Applications:** This brake is to be used only as a passive parking brake. It is not to be used for dynamic braking.



#### Specifications — Brake Release Pressure

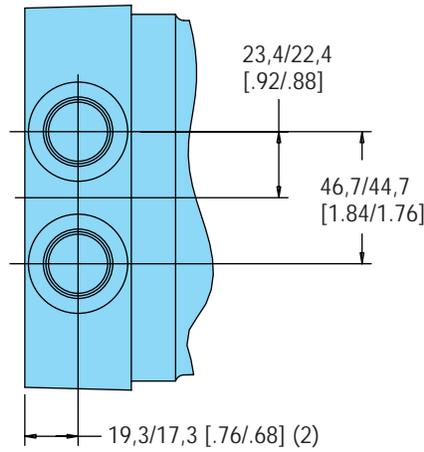
205 bar [3000 PSI] Max.  
15 bar [ 250 PSI] Min.

**Comprehensive W Series Motor Description**  
(see Char-Lynn® W Series Motor Catalog 11-111)

# Product Information

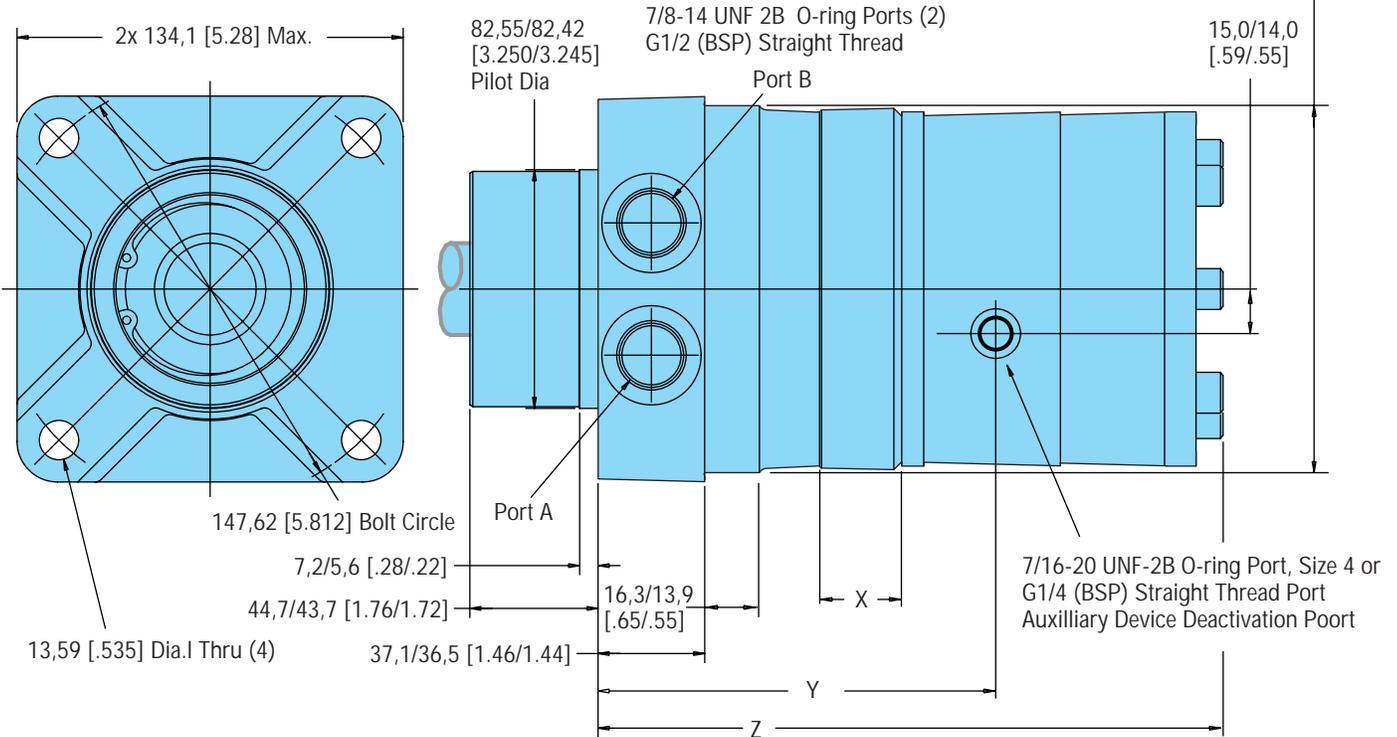
## W Series with Parking Brake

Displ. cm <sup>3</sup> /r [in <sup>3</sup> /r]	X Dim. Max.	Y Dim. Max.	Z Dim. Max.
80 [ 4.9]	9,1 [ .36]	119,9 [4.72]	198,4 [7.81]
126 [ 7.7]	11,9 [ .47]	122,9 [4.84]	201,2 [7.92]
154 [ 9.4]	14,7 [ .58]	125,5 [4.94]	204,0 [8.03]
195 [11.9]	18,5 [ .73]	129,6 [5.10]	207,8 [8.18]
251 [15.3]	23,9 [ .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]



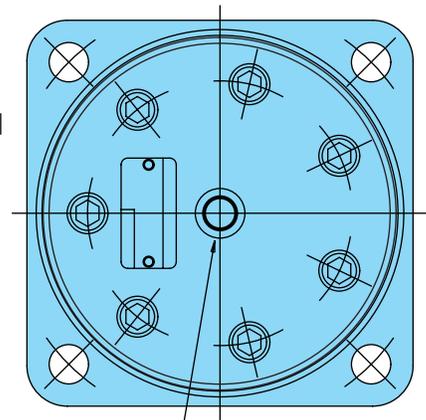
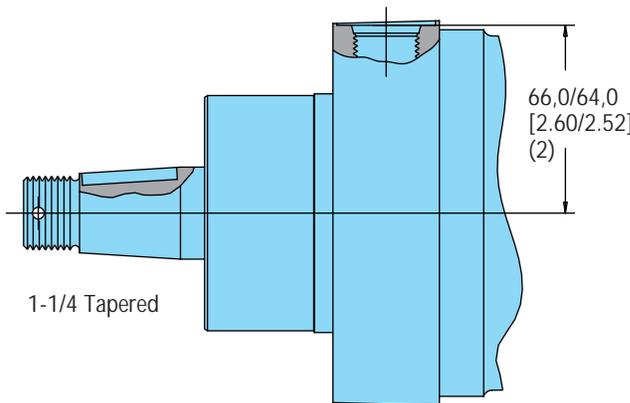
Standard Rotation  
Viewed from Shaft End  
Port A Pressurized — CW  
Port B Pressurized — CCW

127,0/126,9  
[5.00/4.995]  
Pilot Dia



13,59 [ .535] Dia.I Thru (4)

**Shaft Dimensions —**  
see W Series  
Catalog 11-111  
page 8 and 9  
1-1/4 Inch Tapered  
1-1/4 Inch Straight  
32 mm Straight  
1-1/4 Inch 14T Splined



7/16-20 UNF-2B O-ring Port, Size 4 or  
G1/4 (BSP) Straight Thread Port —  
Service Port

## Spool Valve Motors

# Product Information

## W Series with Parking Brake

### Product Numbers—W Series with Parking Brake

Add three digit prefix —162—to four digit number from chart for complete product number — Example 162-1153.  
**Orders will not be accepted without three digit prefix.**

Displ. cm <sup>3</sup> /r [in <sup>3</sup> /r]	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	-1134	-1148	-1149

Note: All above motors have 1-1/4 inch tapered output shaft, 7/8 inch o-ring ports.



For W Series motors with a configuration not shown in the charts above: Use the model code number system to specify the product in detail (see page 15, Catalog 11-111 and use the model code supplement shown below for spring-applied hydraulic-release parking brake).

### Model Code — W Series Spool Valve Motors



Position 11, 12 Special Features (Hardware)  
 06 ..... Spring-applied hydraulic-release brake

This catalog information was current at date of printing, but may be subject to change.

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