

# BLOOM™ WINCH



## Series 1400

*“Quality Since  
1910”*

### *Hydraulic Speed Reducer*

The rugged construction and versatility of the **Series 1400 Speed Reducer** is ideal for stationary & mobile applications where slow speed, high torque, or variable speed and reversing are needed. Applications include paving and curb forming, ditching, irrigation and plastic and extruding equipment. Available with an optional hydraulic brake.

***Powerful – Compact  
Efficient***

**Up To 54,000  
Inch Pounds of Output Torque**

## Bloom™ Hydraulic Speed Reducers – Standard Features

- GEAR CASE** - Made of high strength cast iron. Completely sealed for oil enclosed operation and to keep dirt out.
- WORM SHAFT** - One piece alloy steel hardened and ground to insure long service. The hydraulic motor couples direct to the shaft.
- WORM GEAR** - High tensile aluminum-nickel alloy bronze cast on high strength ductile iron hub. Optimum lead and pressure angles transmit maximum power to the drum.
- GEAR RATIO** - 25:1 standard and 12.5:1 optional ratios provide optimum efficiency in power and speed.
- BEARINGS** - Worm gear and worm shaft run on tapered roller bearings in an oil enclosed gear case.
- OUTPUT SHAFT** - 2-1/4" diameter heat -treated alloy steel minimum tensile strength 150,000 psi.
- MOTOR MOUNT** - SAE (A) 2 bolt flange mount-standard. 1 1/4" straight keyed motor shaft. Motor is directly coupled into worm shaft. No separate coupling required.
- BRAKE OPTION** - Optional spring applied hydraulic release fail-safe brake automatically holds load when hydraulic pressure is released.



# BLOOM

Manufacturing Inc.

Winch Division

**Lifting  
Pulling  
Hoisting**

Toll Free Number: 1-800-394-1139

[www.bloommfg.com](http://www.bloommfg.com)

**“Custom Engineered Solutions”**

1443 220<sup>th</sup> Street,, Independence, Iowa 50644 • FAX: 319-827-1140 • PHONE: 319-827-1139

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## Series 1400

### Model Selection from Performance Data

"Quality Since 1910"

#### MODEL EXAMPLE: 14-4.9-SR-RH-25-LP

Gear Case and  
Shaft Designation

14 = Series 1400 with 2-1/4" Output Shaft only

*Optional*  
Low Profile  
Mounting

Hydraulic Motor Designation

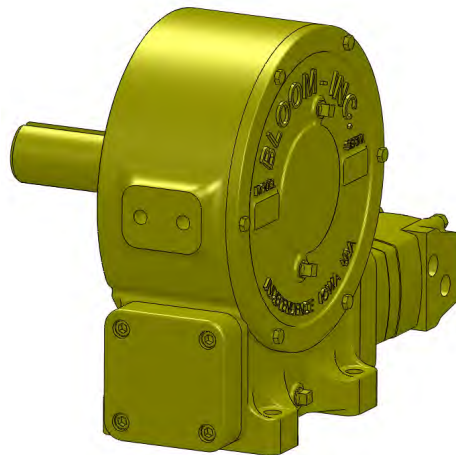
4.9, 6.2, 9.6, 11.9, 18.6

IS - Input Shaft

Gear Ratios  
25:1

Speed Reducer

Shaft Position  
RH - Right Hand  
LH - Left Hand



# BLOOM™ WINCH

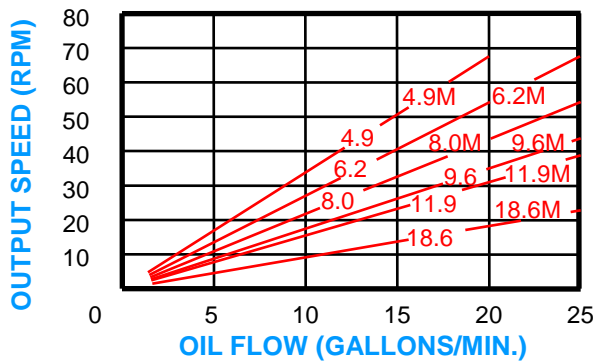
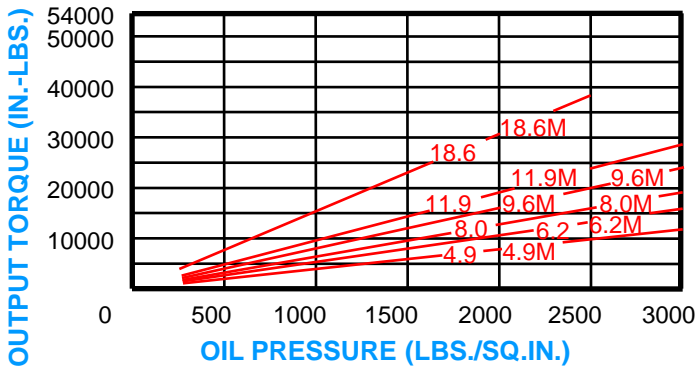


## Series 1400

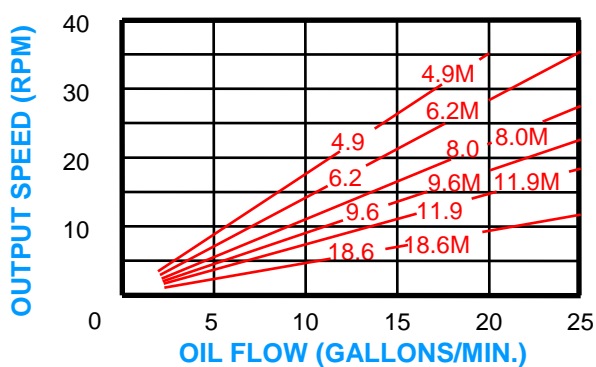
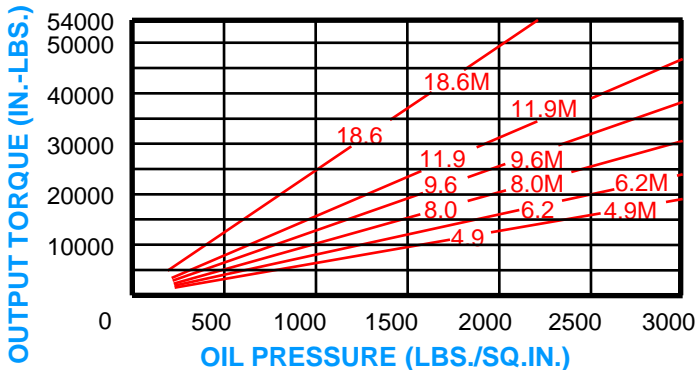
"Quality Since 1910"

### Bloom Hydraulic Speed Reducer Model Selection from Performance Data

#### 12.5:1 RATIO



#### 25:1 RATIO



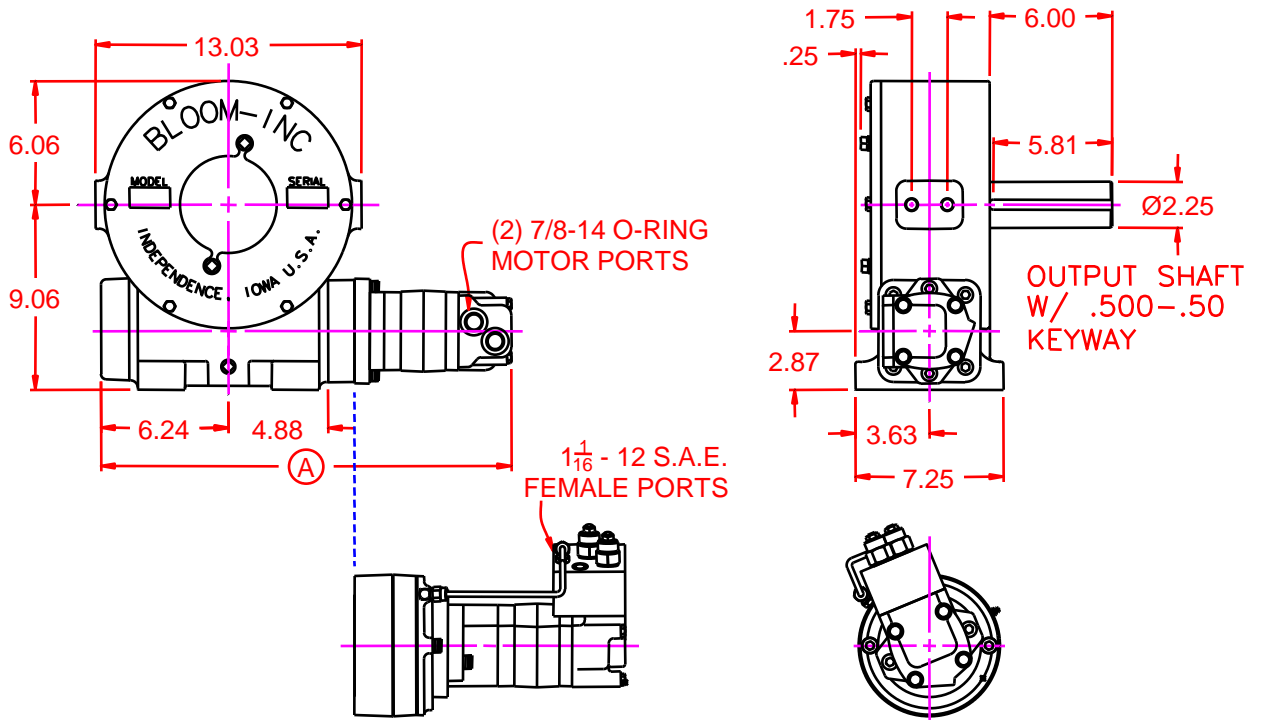
# BLOOM™ WINCH



## Dimensional Drawings

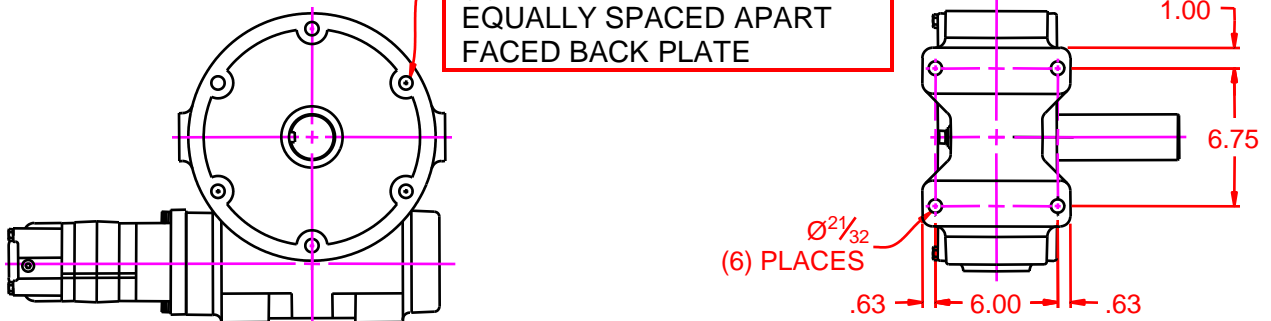
Series 1400 Speed Reducer

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1910”



W/ FAIL-SAFE BRAKE & MOTOR MODEL

**OPTIONAL**  
 Ø.75-10UNC x 1.00 DP.  
 (6) HOLES ON 10.625 B.C.  
 EQUALLY SPACED APART  
 FACED BACK PLATE



MOTOR DESIGNATION	4.9	4.9M	6.2	6.2M	8.0	8.0M	9.6	9.6M	11.9	11.9M	18.6	18.6M
(A) DIMENSION	19.68	19.24	19.86	24.42	20.11	24.67	20.11	24.67	20.38	24.94	21.18	25.74

# **BLOOM™ WINCH**

## Correct choice of Directional Control Valves for Bloom Winches

**Tandem Center Spool Valve** – Work Ports are **blocked** in neutral position

Use on all winches that use motor only to hold load.

\*Winches require ridged mounting plate.

See owner's manual for information about proper mounting plate thickness or call Bloom Sales Engineer at factory

### **WARNING!**

Goods are not intended for use in the moving or lifting of persons!

The winches described herein are neither designed nor intended for use or application to equipment used in the lifting or moving of persons and it is understood that all such use shall be at the sole risk of the user.

The cable clamps on winches are not designed to hold rated loads. A minimum of 5 wraps of cable must be left on drum barrel to guarantee holding of rated load.

Applications of winch where life would be endangered by any event are not recommended.



## **BLOOM Manufacturing Inc.** **Winch Division**

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