## Series LS12H

## Hydraulic Cable Winches

Lift-Safe ${ }^{\circledR}$ hydraulic winches are specifically designed for lifting applications and optimum load control . Engineered for enhanced safety with redundant braking systems, and available in a variety of configurations. Lift-Safe ${ }^{\circledR}$ winches utilize the DUET-SAFE Double Action Braking System to provide both static and dynamic braking. Lift-Safe ${ }^{\circledR}$ winches offer increase operational flexibility, and superior load control in lifting applications. Series LS12H direct drive winches can be used on small cranes, rear load waste packers, drill rigs, fishing boats, marine craft, mining and logging operations. Series LS12H may be ordered galvanized.

## Bloom Hydraulic Cable Winches - Standard Features

MOTOR-BRAKE

GEAR CASE

WORM SHAFT
WORM GEAR

GEAR RATIO

BEARINGS

DRUM SHAFT
CABLE DRUM

- DUET-SAFE ${ }^{\circledR}$ Double Action Braking System combines a powerful spring applied, hydraulic released motor-brake with a double counter balance brake valve to automatically hold loads when hydraulic pressure is released and control speed during lowering operations. Winch is ideal for high speed lifting and pulling applications or wherever load holding is critical.
- Made of high strength cast iron. Completely sealed for oil enclosed operation and to keep dirt out.
- One piece alloy steel hardened and ground for extra durability.
- High tensile aluminum-nickel alloy bronze. Optimum lead and pressure angles transmit maximum power to the drum.
- 20:1 standard, 27:1 and 40:1 optional ratios provide optimum efficiency in power and speed.
- Worm gear and worm shaft run on tapered roller bearings. Outer end housing has a sealed ball bearing.
- 1-1/2" diameter heat -treated alloy steel minimum tensile strength 150,000 psi.
- Tough all steel construction resists breakage or warping.


## MODEL EXAMPLE: LS12H-3.0T-L8-RH-20


3.0T, 4.0T, 6.2T, 9.6T

Drum Sizes
S8, L8, XL10, XL12 \& XL14 With 4" Core

Gear Ratios
20:1, 27:1, 40:1

Hydraulic Motor Position
(R.H. or L.H.)

DRUM CAPACITY

| CABLE <br> DIAMETER (IN.) | $1 / 4$ | $5 / 16$ | $3 / 8$ | $7 / 16$ | $1 / 2$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DRUM "S8" <br> CAPACITY (FT.) | 260 | 160 | 105 | 75 | 55 |
| DRUM "L8" <br> CAPACITY (FT.) | 390 | 240 | 160 | 110 | 80 |
| DRUM "XL10" <br> CAPACITY (FT.) | 840 | 550 | 340 | 380 | 170 |
| DRUM "XL12" <br> CAPACITY (FT.) | 1320 | 840 | 760 | 540 | 410 |
| DRUM "XL14" <br> CAPACITY (FT.) | 1900 | 1180 |  |  |  |

# Lift Safe ${ }^{\circ}$ Cable Winches Series LS12H W/ 4" Core With Hydraulic Fail-safe Brake Model Selection from Performance Data <br> B BLOOM <br> "Quality Since 1910" 



27:1 RATIO (optional)



40:1 RATIO (optional)


"Quality Since 1910"

## Dimensional Drawings

Series LS12K With S8 and L8 Drum
Base Mount Model - Direct Drive


| MOTOR <br> DESIGNATION | 3.0 | 4.0 | 6.2 | 9.6 |
| :---: | :---: | :---: | :---: | :---: |
| (A) DIMENSION | 17.48 | 17.60 | 17.85 | 18.10 |


| DRUM | WINCH DIMENSION |  |  |
| :---: | :---: | :---: | :---: |
|  | B | C | D |
| S8 | 6.69 | 15.98 | 9.18 |
| L8 | 9.69 | 18.98 | 12.18 |

"Quality Since 1910"

## Dimensional Drawings <br> Series LS12K With XI10, XL12 and XL14 Drum <br> Base Mount Model - Direct Drive



| MOTOR <br> DESIGNATION | 3.0 | 4.0 | 6.2 | 9.6 |
| :---: | :---: | :---: | :---: | :---: |
| (A) DIMENSION | 17.48 | 17.60 | 17.85 | 18.10 |


| DRUM <br> DESIGNATION | XL10 | XL12 | XL14 |
| :---: | :---: | :---: | :---: |
| B DIMENSION | 10 | 12 | 14 |
| C DIMENSION | 10.56 | 11.56 | 12.56 |



| MOTOR <br> DESIGNATION | 3.0 | 4.0 | 6.2 | 9.6 |
| :---: | :---: | :---: | :---: | :---: |
| (A) DIMENSION | 17.48 | 17.60 | 17.85 | 18.10 |


| DRUM <br> DESIGNATION | WINCH DIMENSION |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | B | C | D | E | F | G |
| S8 | 7.19 | 9.75 | 16.44 | 18.00 | 9.28 | 14.46 |
| L8 | 10.19 | 12.75 | 19.44 | 21.00 | 12.28 | 17.46 |

## LS12H Series Model Selection

3.0T MOTOR<br>LS12H-3.0T-S8<br>LS12H-3.0T-L8<br>LS12H-3.0T-XL10<br>LS12H-3.0T-XL12<br>LS12H-3.0T-XL14<br>6.2T MOTOR<br>LS12H-6.2T-S8<br>LS12H-6.2T-L8<br>LS12H-6.2T-XL10<br>LS12H-6.2T-XL12<br>LS12H-6.2T-XL14<br>9.6T MOTOR<br>LS12H-9.6T-S8<br>LS12H-9.6T-L8<br>LS12H-9.6T-XL10<br>LS12H-9.6T-XL12<br>LS12H-9.6T-XL14

## Correct choice of Directional Control Valves for Lift-Safe® Winches

## All Lift-Safe® Winches require a Motor Spool Control Valve.

That is the valve's work ports are open to tank in neutral position.

## *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.

