

The Eaton logo is displayed in white, bold, sans-serif font against a blue background. It consists of the word "EATON" with a stylized dot between the "A" and "O".

**EATON**

The Char-Lynn logo is displayed in white, bold, sans-serif font against a blue background. It consists of the words "Char-Lynn" with a hyphen between the two words.

**Char-Lynn**

A yellow wheel loader is shown in operation, dumping a load of sand. The loader's bucket is tilted, and sand is falling from it. The background shows green trees and a clear sky.

**Steering Control Unit  
Technology Leaders**

Proven Technologies:

**Two-Speed**

**Four-Wheel Steering  
Control**

**Balanced  
Architecture**

**Cylinder Damping**

**Dual Gerotor**

**GPS Steer Valve**

**Q-Amp™**

**STC® Direct Porting**

**Unprecedented High  
Pressure and Flow**

**VersaSteer™**

**Wide Angle**

# Performance Leaders

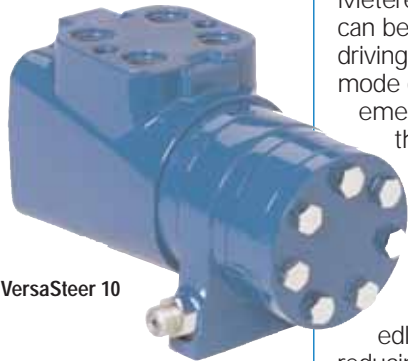
- Eaton Char-Lynn Steering is the **global market share and technology leader**.  
We invented this technology!  
We have the most experience!
- **Complete product offering**, including low flow-low pressure to unprecedented high pressure (4000 psi, 275 bar) and high flow (60 gpm, 227 lpm) performance products.
- **Several differentiating and patented technologies**, such as Wide Angle, Q-Amp™, VersaSteer™, STC Direct Porting, and 2-Speed Steering.
- **Smoothest steering available** for Articulated and Ackerman-steered vehicles.
- Eaton Char-Lynn Steering provides **overall system cost savings**.

## Wide Angle™

- Another Eaton Char-Lynn patent
- Provides the smoothest steering for articulated vehicles
- Reduces lateral jerk by a factor of 2 !
- Provides system cost savings by eliminating the need for accumulators & cushion valves to smooth vehicle dynamics while steering
- Available option on Series 10, 25, and standard on all Series 20 steering control units

## Cylinder Damping

- Patented technology that reduces lateral jerk
- Results in smooth steering for articulated vehicles
- Ideal for loaders, scrapers, and skidders
- Customize your application with three flow levels



VersaSteer 10

## VersaSteer™

For Repeated Fast Turns PatentedVersaSteer Provides...

Dual operator-selectable Metered and Quick Steering modes in one compact SCU. These modes provide the operator the flexibility to dramatically improve productivity and the overall steering experience. Metered Steering mode can be used for normal driving or roading. This mode can also provide emergency steering in the event of power loss. Quick Steering mode is used in environments where the operator performs fast turns repeatedly, dramatically reducing the work cycle and effort.

- Provides steering system cost savings by eliminating the need for a separate joystick system
- Easy one-touch switch (OEM defined)
- Compact and versatile design for tight space constraints
- High pressure rating and flow capabilities
- Easily retrofit to existing vehicles
- Suitable for all articulated vehicles including wheel loaders, log skidders, and telehandlers

## Two-Speed

Two-Speed technology provides two operator selectable metered steering modes. The first mode is used for normal roading with 4-6 turns lock-to-lock. With the same SCU, the driver can switch modes during the work cycle having two or less turns lock-to-lock. Two-Speed is suitable for Ackerman steered vehicles, including but not limited to agriculture tractors, combines, sprayers, and backhoe loaders. Two-Speed technology provides:

- Reduced steering effort and operator fatigue
- Increased efficiency during the work cycle
- With both modes metered, steering remains very intuitive



## Q-Amp™ (Flow Amplification)

Q-Amp patented steering increases flow to the steering cylinder(s) during rapid turns. This provides:

- Improved roading performance
- Increased efficiency during the work cycle
- Manual steering capability on some applications
- Significant cost savings over a high displacement unit

The customer selects the amount of amplification. A typical Q-Amp unit has ratio of 1.6: meaning the flow to the cylinder is 1.6 times the flow going through the gerotor when turning the steering wheel at medium to fast speeds.

## Four-Wheel Steer Switch Valve

The Four Wheel Steer Switching Valves provide three different types of steering to improve vehicle maneuverability in tight areas.

- Two-Wheel Steering for traditional applications
- Four-Wheel Steering for reduced turning radius
- Crab Steering for angular movement
- Ideal for telehandlers, sprayers, rough terrain cranes and backhoe loaders



Series 10



Eaton  
14615 Lone Oak Road  
Eden Prairie, MN 55344  
USA  
Tel: 952 937-9800  
Fax: 952 974-7722  
[www.hydraulics.eaton.com](http://www.hydraulics.eaton.com)

© 2006 Eaton Corporation  
All Rights Reserved  
Printed in USA  
Document No. C-STOV-MR002-E  
October 2006



**Char-Lynn**