



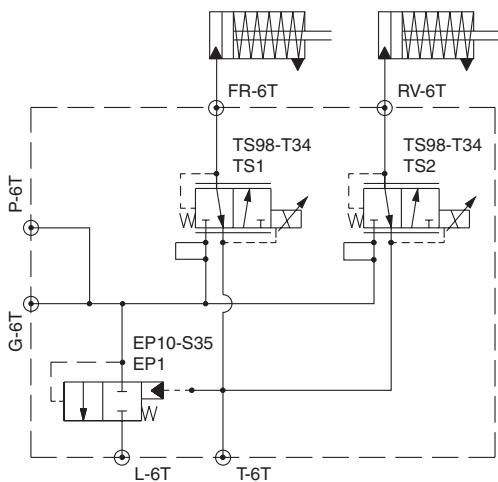
••••• **INNOVATION AT WORK FOR YOU** •••••

NEW Plug-In Style Proportional Valve Driver Regulates Clutch Engagement in Transmission and PTO Applications

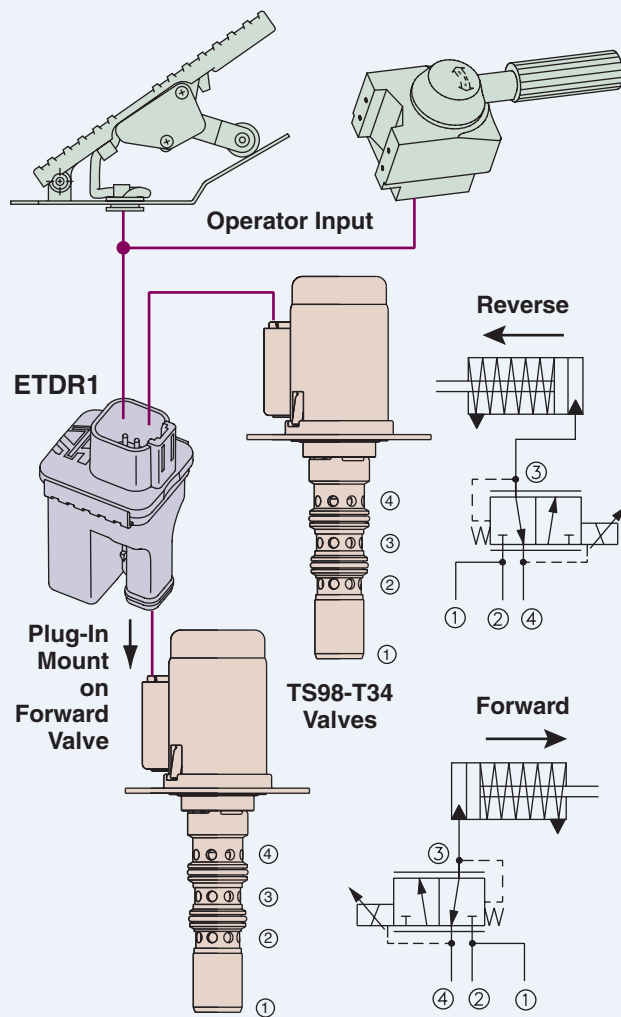
HydraForce is pleased to announce the addition of the **ETDR1** to our family of plug-in style valve drivers. The ETDR1 offers low cost, high performance electro-hydraulic clutch engagement control for transmission and PTO drive applications. It is customer-programmable for application-specific performance optimization. Environmentally sealed for protection from both dust and water intrusion, the ETDR1 mounts directly to the Deutsch connector on the valve coil, reducing installation time and complexity.

The ETDR1 controller regulates forward and reverse clutch actuation by proportionally regulating two proportional valve coils. The controller allows customer-programmable clutch fill characteristics along with the smooth and accurate control of the engagement pressure. In combination with HydraForce TS98-T34 proportional valves, the ETDR1 provides accurate low-speed control for vehicles which require precise vehicle positioning and smooth transition. Separate transmission inching spools are not required, thus reducing system complexity and cost.

ETDR1 Typical Hydraulic System Schematic



ETDR1 Typical Wiring Circuit



Continued on next page.

HYDRAFORCE, INC.

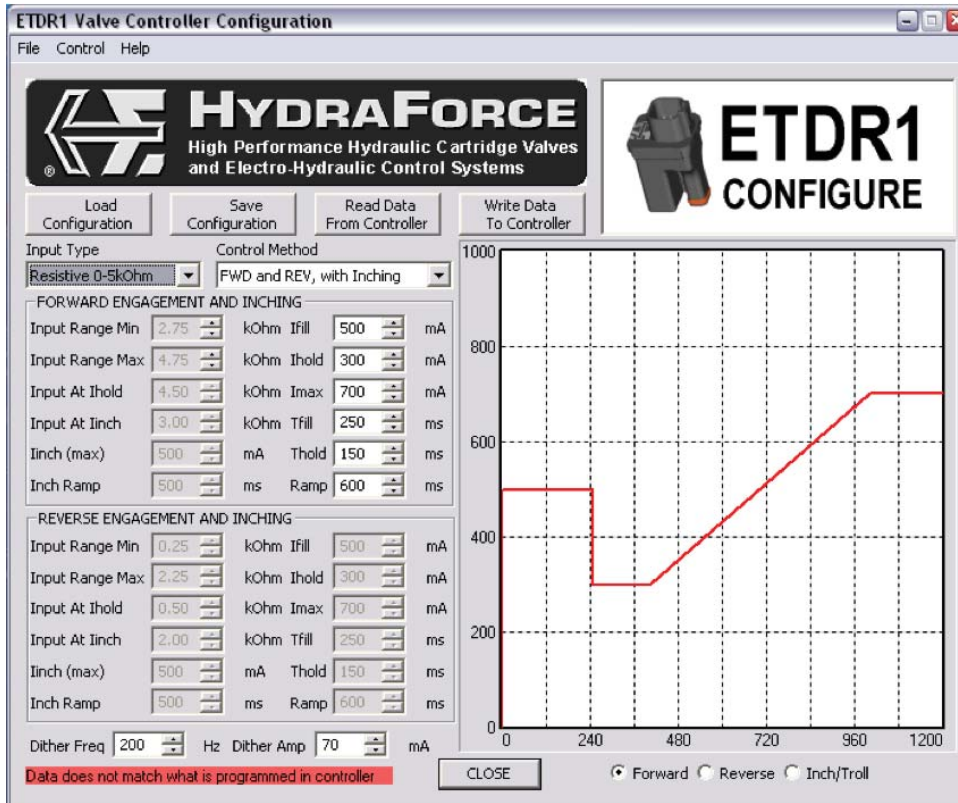
500 Barclay Blvd. • Lincolnshire, IL 60069 USA
Ph: 847 793 2300 • Fx: 847 793 0086
Web: www.hydraforce.com • E-Mail: sales@hydraforce.com
ISO 9001 • Member: National Fluid Power Assn.

HYDRAFORCE HYDRAULICS, LTD.

St. Stephens Street • Birmingham B6 4RG England
Ph: 0121 333 1800 • Fx: 0121 333 1810
Web: www.hydraforce.com • E-Mail: sales@hydraforce.com
ISO 9001 & ISO 14001 • Member: British Fluid Power Assn.



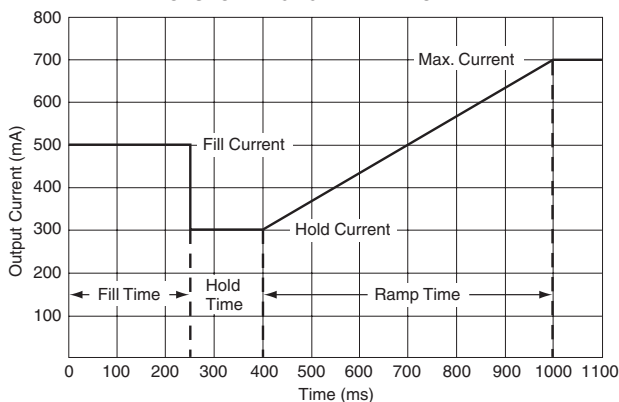
NEW Plug-In Style Proportional Valve Driver Regulates Clutch Engagement in Transmission and PTO Applications



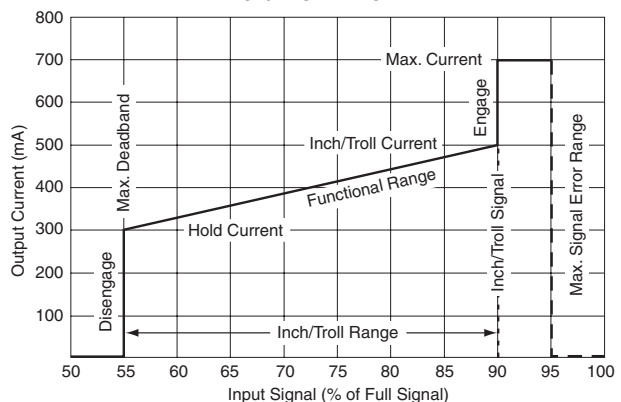
ETDR1
Typical
Programming
Screen

[go to ETDR1
catalog page](#)

CLUTCH ENGAGEMENT PROFILE



INCH/TROLL PROFILE



Application guides, connector kits, and configuration software are available for the ETDR1.

For detailed information and specifications please see www.hydraforce.com
or contact your HydraForce representative.

HYDRAFORCE, INC.

500 Barclay Blvd. • Lincolnshire, IL 60069 USA
Ph: 847 793 2300 • Fx: 847 793 0086
Web: www.hydraforce.com • E-Mail: sales@hydraforce.com
ISO 9001 • Member: National Fluid Power Assn.

HYDRAFORCE HYDRAULICS, LTD.

St. Stephens Street • Birmingham B6 4RG England
Ph: 0121 333 1800 • Fx: 0121 333 1810
Web: www.hydraforce.com • E-Mail: sales@hydraforce.com
ISO 9001 & ISO 14001 • Member: British Fluid Power Assn.