HydraForce is the world’s leading manufacturer and supplier of cartridge valve technology, electro-hydraulic controls and integrated circuit manifolds. Our standard product line features flow ranges of up to 379 lpm / 100 gpm at up to 350 bar/5075 psi continuous operating pressure.

HydraForce products are supported around the world through international technical services offices, and through a global network of distributor partners. HydraForce is recognized and certified by many global equipment manufacturers for superior product quality and reliability, on-time delivery and world class technical support.

**Pilot Manifold Capabilities:**
- Aluminum
- Cast Iron
**OPTIONS:**
- Electronic Controller
- Accumulators
- Fittings
- Wiring Harnesses

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Image: Example Pilot Selector Circuit

Image: Example Proportional Pilot Auxiliary Circuit
**Pilot Systems**

**Purpose-Built Piloting Valves**
- EH Proportional Pilot Control, Diff Lock, Pilot Selector, Clutch Engagement, PTO, Park Brake, etc.
- Cost & Performance Optimized.
- Single-Piece Sealed Construction.
- Designed for Exposed Environments.
- Drop-in Mounting – Small and Lightweight.
- 100% Tested. Unsurpassed Quality Assurance.

**Integral E-Coils**
- IP69K Waterproof
- Contamination Resistance
- Thermal Shock Resistance
- Vibration Resistance to 20 GRMS
- Enhanced Corrosion Protection
- 1000-Hour Salt Spray Resistant
- 5-Year Warranty

**EH Proportional Control**

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow Rate (lpm/gpm)</th>
<th>Pressure (bar/psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS98-T34</td>
<td>30/8</td>
<td>30/435</td>
</tr>
</tbody>
</table>

**Solenoid Selector Valves**

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow Rate (lpm/gpm)</th>
<th>Pressure (bar/psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SV98-T39</td>
<td>30/8</td>
<td>45/650</td>
</tr>
<tr>
<td>SV98-T40</td>
<td>30/8</td>
<td>30/435</td>
</tr>
</tbody>
</table>
EH Proportional Spool Piloting

Proportional Pressure Reducing/Relieving

- EHPR Series Valves are designed to electro-hydraulically pilot HydraForce PE Series cartridge directional valves or other spool-operated controls.
- Three configurations are available in order to customize the speed of actuation and system performance to the application requirement.
- Valves are designed for high performance reliability, cost effective application, and are environmentally protected for severe mobile machinery operating conditions.

EHPR Proportional Control

EHPR98-T33
3.8 lpm/1 gpm
241 bar/3500 psi
Max. Reducing Pressure: 31 bar/450 psi

EHPR98-T35
5.7 lpm/1.5 gpm
103 bar/1500 psi
With the ‘T35A’ option, 241 bar/3500 psi performance can be achieved.
Max. Reducing Pressure: 20 bar/290 psi

EHPR98-T38
19 lpm/5 gpm
241 bar/3500 psi
Max. Reducing Pressure: 31 bar/450 psi

Typical Relieving/Reducing Pressure vs. Flow Characteristic

Typical Relieving Pressure at Various %s of Maximum Control Current
Inlet: 241 bar/3500 psi; 100 Hz PWM (Both Directions); Hysteresis less than 5%

Complete technical information and New Products at www.hydraforce.com
Pressure Control

EP Pressure Limiting Valves

- Compact Screw-in Design.
- Accurate Pressure Control.
- Up to 345 bar/5000 psi continuous operating pressure.
- Low Pressure Drop.
- Common Cavity Sizes.
- Bias Springs available from 0.7 bar/10 psi to 15.9 bar/230 psi.

New PRES50-30 Pressure Reducing/Relieving Valve

The New PRES50-30 valve features a unique steel adapter inlet port which can withstand full system pressure. High pressure does not enter the manifold, so aluminum manifolds can be used for secondary machine circuits.

Maximum Inlet Pressure: 350 bar/5000 psi
Maximum Reduced Pressure: 55 bar/800 psi
 Rated Flow: 11.4 lpm/3 gpm

EV Vented Spool-Type Logic Elements

- Multiple function/application potential.
- Smooth shift transition.
- Low pressure drop.

*Rated for 345 bar/5000 psi or higher.
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Main headquarters, engineering and manufacturing facility in Lincolnshire Illinois, just north of Chicago.

Precision machining facility in Lincolnshire, Illinois.

European headquarters, engineering and manufacturing facility in Birmingham, England.

HydraForce valves meet RoHS environmental requirements restricting the use of cadmium, quick silver, lead hexavalent chrome, polybrominated biphenyl (PPB) or polybrominated diphenyl Ester (PPDE) in products, components and packing materials. All HydraForce products meet requirements limiting the use of hazardous materials as indentified in OSHA Standard 1910.1200(g).

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