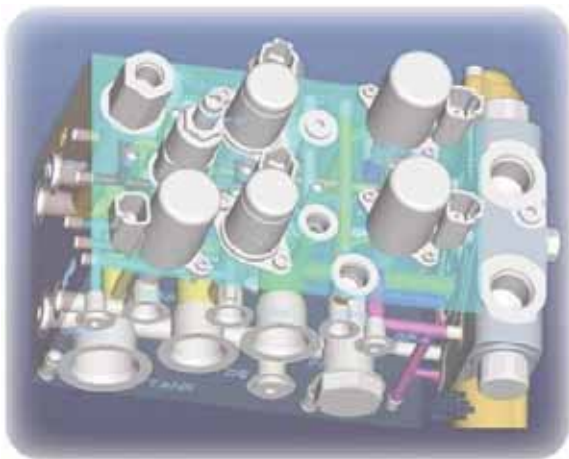




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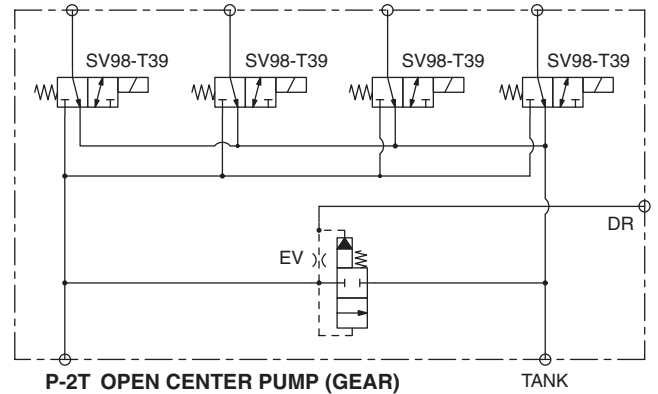
Pilot Valves & Systems



**Hydraulic Cartridge Valves
Manifold Systems
Electronic Controls**

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.

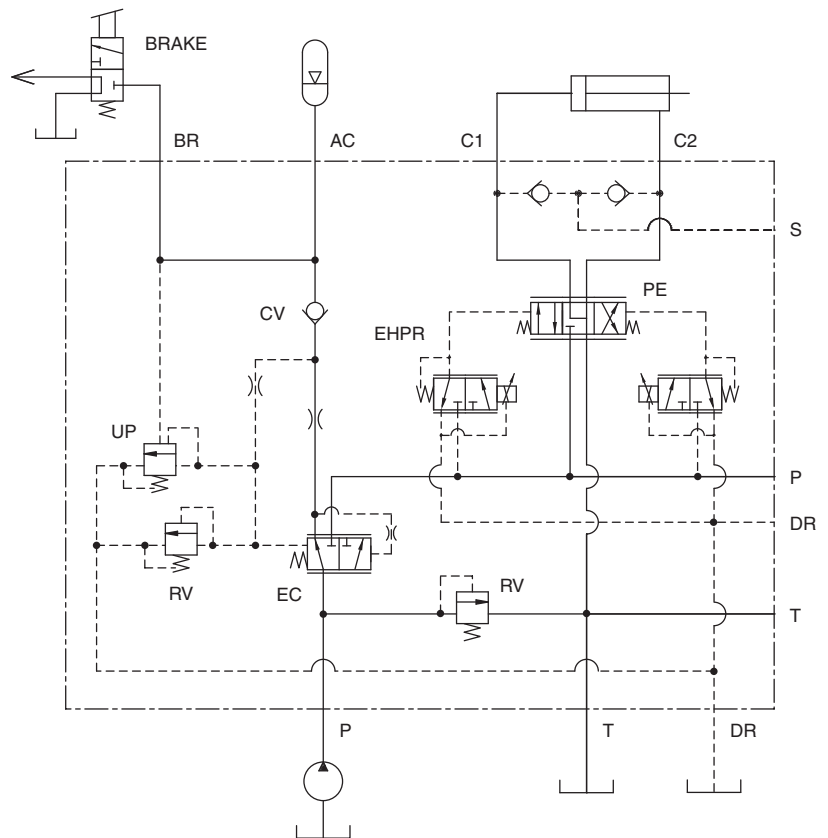
HydraForce products are supported around the world through international technical services offices, and through a global network of distributor partners. HydraForce is recognized and certified by many global equipment manufacturers for superior product quality and reliability, on-time delivery and world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



Example Pilot Selector Circuit

Pilot Manifold Capabilities:

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



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.

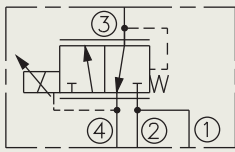
Integral E-Coils

- 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

TS98-T34

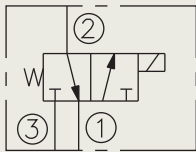
30 lpm/8 gpm
30 bar/435 psi



Solenoid Selector Valves

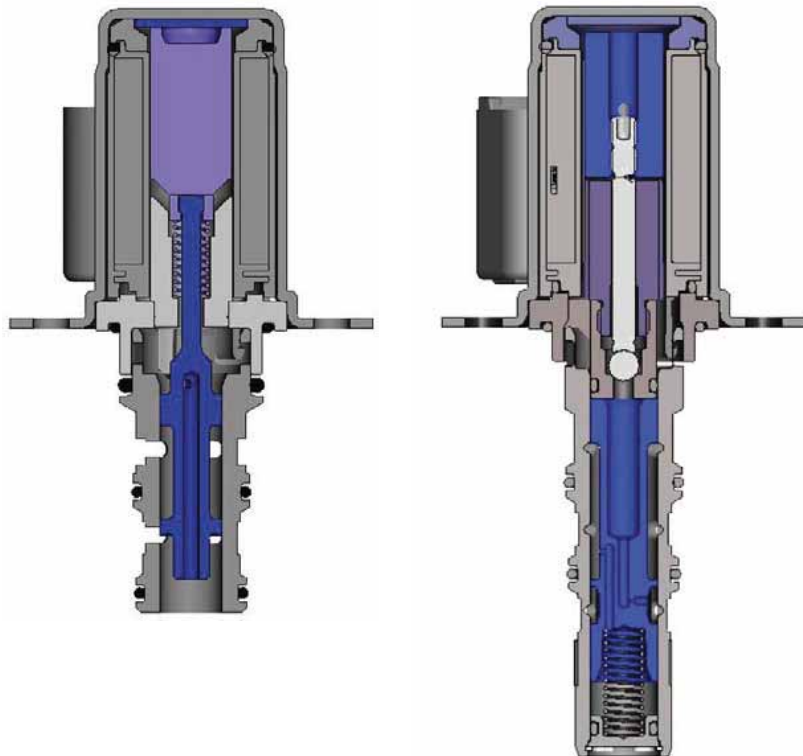
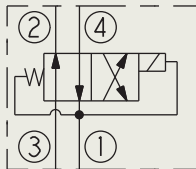
SV98-T39

30 lpm/8 gpm
45 bar/650 psi



SV98-T40

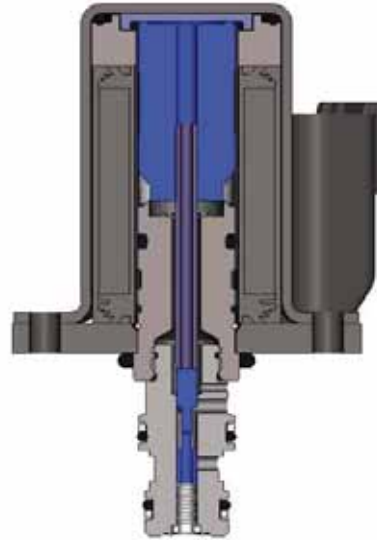
30 lpm/8 gpm
30 bar/435 psi



EH Proportional Spool Piloting

Proportional Pressure Reducing/Relieving

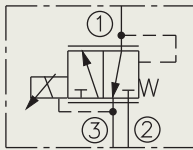
- EHPR Series Valves are designed to electro-hydraulically pilot HydraForce PE Series cartridge directional valves or other spool-operated controls.
- Three configurations are available in order to customize the speed of actuation and system performance to the application requirement.
- Valves are designed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



EHPR Proportional Control

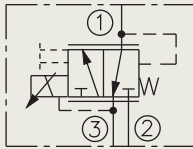
EHPR98-T33

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



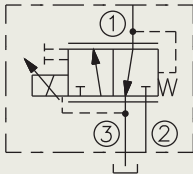
EHPR98-T35

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

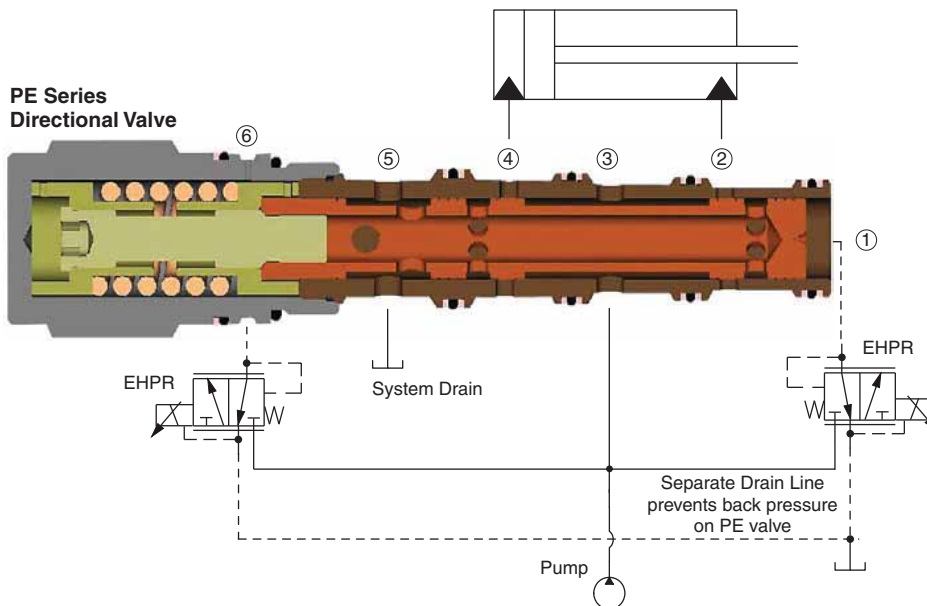
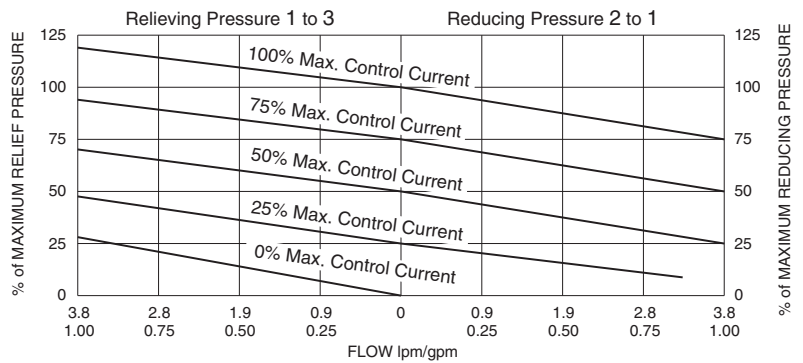


EHPR98-T38

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



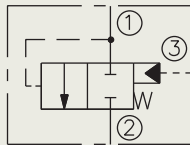
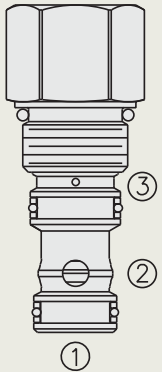
Typical Relieving/Reducing Pressure vs. Flow Characteristic
Typical Relieving Pressure at Various %s of Maximum Control Current
Inlet: 241 bar/3500 psi; 100 Hz PWM (Both Directions); Hysteresis less than 5%



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.



EP08-S35	38 lpm/10 gpm
EP10-S35	76 lpm/20 gpm
EP12-S35	114 lpm/30 gpm
EP16-S35	189 lpm/50 gpm
EP20-S35	379 lpm/100 gpm

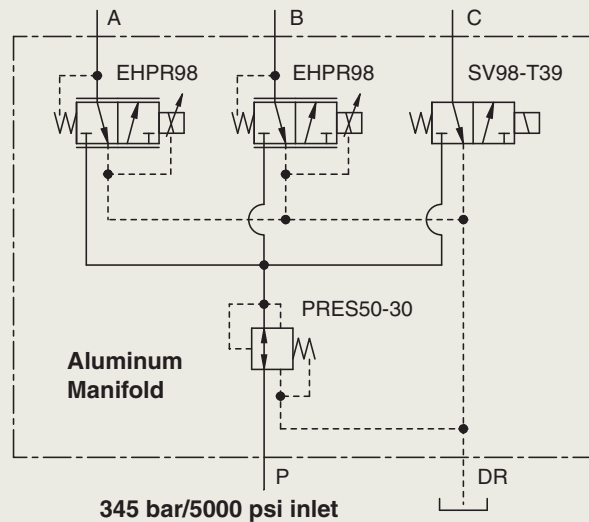
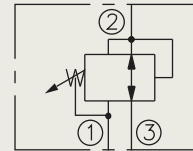
NEW PRES50-30 Pressure Reducing/Relieving Valve

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

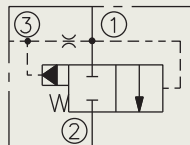
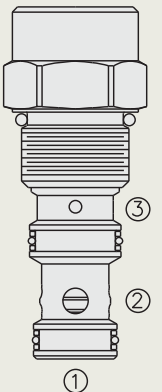
Maximum Reduced Pressure:
55 bar/800 psi

Rated Flow: 11.4 lpm/3 gpm



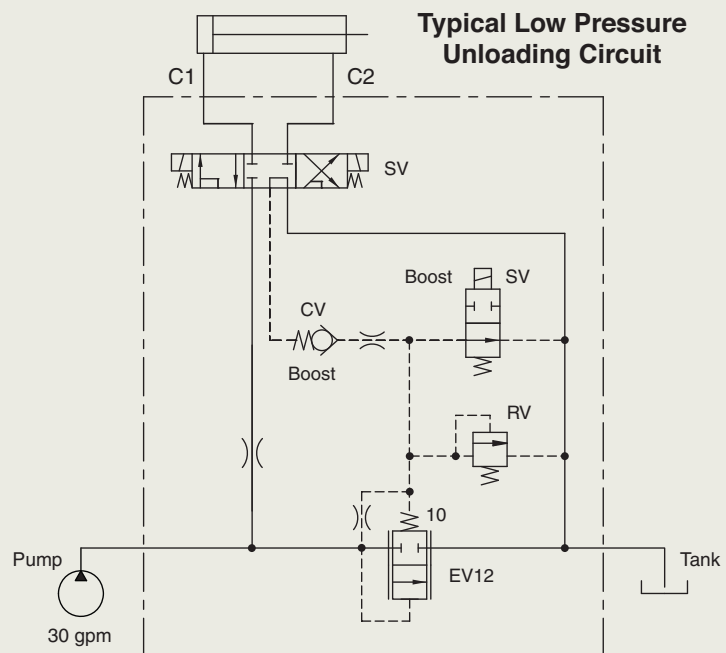
EV Vented Spool-Type Logic Elements

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



EV58-34*	38 lpm/10 gpm
EV10-S34	76 lpm/20 gpm
EV12-S34	114 lpm/30 gpm
EV16-S34	189 lpm/50 gpm
EV20-S34	379 lpm/100 gpm
HEV42-S34*	379 lpm/100 gpm

*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.



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ISO 9001 & ISO 14001

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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 identified in OSHA Standard 1910.1200(g).

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