

Custom system manifolds and accessories



System Application Expertise

Custom manifolds consolidate and optimize the many control functions of a machine's hydraulic circuitry. External connections are minimized. Installation time and maintenance are reduced. Valve replacement, when necessary, is fast and easy. All manifolds are 100% circuit logic and function tested. HydraForce produces a wide range of custom valves, manifolds and electro-hydraulic systems for specific applications.

- Steel, aluminum, cast or ductile iron blocks.
- Anodized or zinc plated for protection in severe environments.
- Industry-common valve cavities.
- Fittings, CETOP valves and accessory components can be included.
- "FastTrak" service for quick delivery of a working prototype.



Valve Housings

Single cavity housings are available in a wide variety of port sizes for industry-common valve cavity sizes. Anodized aluminum housings are rated up to 240 bar (3500 psi). Steel and ductile iron housings are available in select sizes for high-pressures up to 350 bar (5075 psi).

Custom Manifold Accessories

A full line of manifold accessories are available from stock including: hand pumps, cavity plugs, orifice discs, port plugs, orifice plugs, pilot pistons, screen cartridges, as well as cavity form tools and finishing tools.



HydraForce Valve Size	Cavity Thread Size
04	7/16-20UNF-2B
07	5/8-18UNF-2B
08, 38, 58, 98	3/4-16UNF-2B
10, 50, 70	7/8-14UNF-2B
12, 52, 72	1-1/16-12UN-2B
16, 76	1-5/16-12UN-2B
20	1-5/8-12UN-2B
42	M42 x 2,0-6H
32	2-1/2-12UN-2A

FIVE-YEAR LIMITED WARRANTY

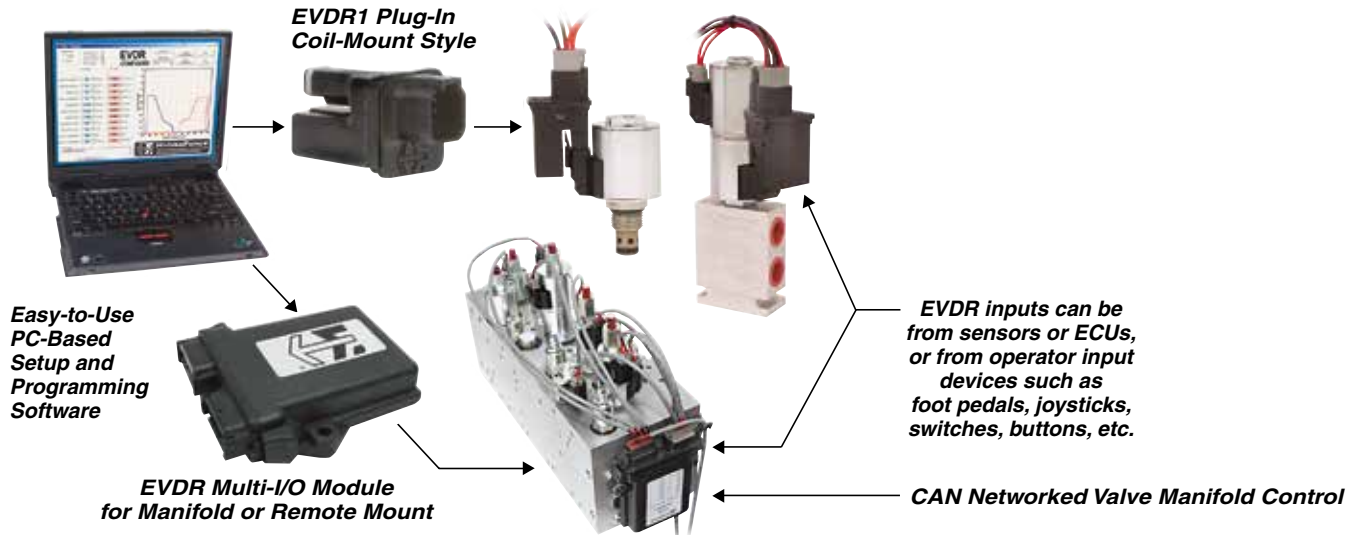
All HydraForce products carry a five-year limited warranty against defects in material and workmanship.

For full warranty information see page 9.03 in this catalog.

Heavy-duty electronic controllers and vehicle controls & systems

Rugged, Reliable Electro-Hydraulic Controllers and Systems

PC-Programmable EVDR controllers, heavy-duty ECU machine controllers, proportional fan controllers and proportional valve drivers, support a wide range of machine control installations.



EVDR1, EFDR1, ETDR1 Plug-In-Style Controllers for Valve Coil Mounting

The EVDR1 is a general-purpose PC-programmable controller for HydraForce proportional directional, flow or pressure control valves. EFDR for proportional fan drive control, and ETDR for transmission control applications. Designed for convenient plug-in coil mounting on valve coils with Deutsch electrical connectors.

EVDR4 and EVDR5 can drive four proportional and one on/off valve with customer-programmable interface. The EVDR4 is stand-alone. The EVDR5 uses a CAN communications interface.
EVDR6 Operates six on/off coils using J1939 CAN Communications port.
EVDR7 Operates two proportional or on/off valves and provides up to four 5V references.
EVDR9, EVDR10 and EVDR18 CAN expansion modules provide up to nine networked outputs and ten to eighteen inputs using a J1939 interface.



Heavy-Duty Electronic Controls and Complete Machine Control Systems

HydraForce offers a full line of vehicle controls, sensors, monitors, displays and electrical connectors for integrated control applications in mobile, off-highway and material handling and industrial equipment.

- Rugged and reliable in the most demanding mobile equipment applications.
- Optimized electro-hydraulic system integration.
- Rugged die-cast enclosures.
- Operating temperatures from -40 to 110°C.
- Chemical splash immunity.
- Moisture resistance to IP67 specifications.
- Fully resistant to EMI/RFI.
- Vibration resistant to 8 Grms (random) 24–200 Hz, 3-axis.
- CE rated for global application.