Better performance comes from working together.



March, 2014

Page 1 of 2

# New 3-Way High Pressure Hydraulic Check Valve Joins HydraForce Lineup of 16-Size Checks

or high pressure hydraulic applications where blocking or load-holding is needed, the HCV16-30 hydraulic check valve provides a new three-way option. The HCV16-30 allows flow from port 1 to ports 2 and 3 while blocking flow in the opposite direction.

The HVC16-30 is the third 16-size check valve in the HydraForce lineup, joining the standard model CV16-20 and the high pressure HCV16-20, which are both two-way check valves. All three check valves are rated for the same flow 151 lpm (40 gpm) but the HCV16-20 and HCV16-30 are rated for higher pressure 350 bar (5075 psi).

The HCV16-30 offers another industry advantage - lower pressure drop. At full rated flow, the pressure drop for HCV16-30 is only 3 bar (40 psi), compared with 6 bar (90 psi) for the HCV16-20

and 4 bar (60 psi) for the standard CV16-20.

With its built-in SAE fitting, the HCV16-30 can be used as a combined work port check, eliminating the need for an additional, separate fitting in the manifold.



The New, HyPerformance™ HCV16-30 Check Valve

If you have questions about the application of hydraulic check valves, contact your HydraForce Regional Sales Manager.

#### The HydraForce Lineup of 16-Size Check Valves . . .

Check Valve	CV16-20		HCV16-20		HCV16-30	
ISO Symbol						
∆P@ full flow	4 bar	60 psi	6 bar	90 psi	3 bar	40 psi
Rated flow	151 lpm	40 gpm	151 lpm	40 gpm	151 lpm	40 gpm
Work port pressure	241 bar	3500 psi	350 bar	5075 psi	350 bar	5075 psi

For detailed information and specifications, visit www.hydraforce.com or contact your local HydraForce representative at www.hydraforce.com/distribs/world.htm

#### HYDRAFORCE, INC.

500 Barclay Blvd. • Lincolnshire, IL 60069 USA Ph: +1 847 793 2300 • Fx: +1 847 793 0086 Web: www.hydraforce.com • E-Mail: sales@hydraforce.com ISO 9001 & QS 9000 • Member: National Fluid Power Association

### HYDRAFORCE HYDRAULICS, LTD. Advanced Manufacturing Hub

250 Aston Hall Road • Birmingham B6 7FE • United Kingdom
Ph: +44 121 333 1800 • Fx: +44 121 333 1810
Web: www.hydraforce.com • E-Mail: sales-uk@hydraforce.com
Member: British Fluid Power Association and
Verband Deutscher Maschinen-und Anlagenbau e.V. (VDMA)

## HYDRAFORCE HYDRAULIC SYTEMS (CHANGZHOU) Co., LTD.

388 W. Huanghe Road • Building 15A GDH Changzhou Airport Indl Park Xinbei District • Changzhou, China 213022 Ph: +86 519 6988 1200 • Fx: +86 519 6988 1205 Web: www.hydraforce.com • E-Mail: sales@hydraforce.com ISO 9001: 2008



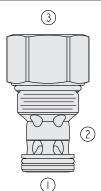
The schematic below shows how the **HCV16-30** valve can be applied in a bridge circuit.

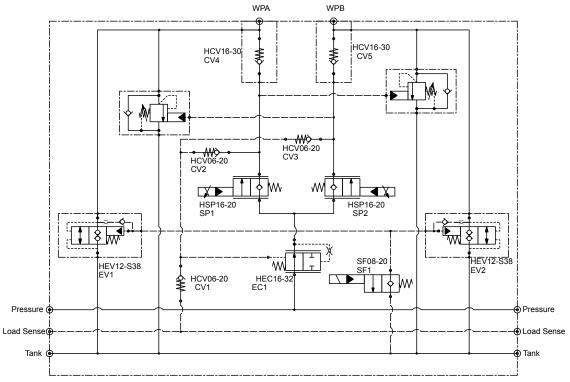
In this circuit, hydraulic pressure is provided to Work Ports A and B, which are regulated by two HCV16-30 check valves that block the flow or hold the load until the right pressure is reached in the system.

# **Applications**

The HVC16-30 check valve is ideal for these applications:

- Bridge circuits
- Directional control circuits
- Work port check
- Anywhere a 16-size load-holding check valve is needed





Features	Benefits		
Built-in SAE fitting.	Can be used as work port check, eliminating a fitting.		
Three-way port configuration.	Versatility in application, allows flow to two ports instead of just one with lower pressure drop.		
Tested to rigorous standard of NFPA specification T2.6.1.	Dependable performance at high operating pressures.		
High temperature, single-piece urethane seals.	Sealing that can tolerate high pressure and temperature.		
Standard cavity HVC16-2.	Standard, stocked housings can be used. No new tooling.		
Operating pressure to 5075 psi/350 bar.	Can be specified for high-pressure applications.		
Tested to 1 million cycles at full rated flow and pressure.	Long life; no worries about wear or decreased performance over time.		
Designed, inspected and tested to HydraForce Quality standards with 5-year warranty. (See full warranty statement in the catalog.)	Guaranteed use for five years or longer.		