Hydraulic Shuttle Valve

Subsea | Specialty Valves

Features

- Manufactured from high strength stainless steels
- Available in high- and low-interflow configurations
- Allows for a primary and back-up control pod connection to BOP, and to multiple inlets

Benefits

- Soft seated for leak-free operation
- Extensively tested under high flow conditions to confirm dependability
- Hydraulically damped to provide long life in extreme high flow applications

Hunting's Hydraulic Shuttle Valve (HSV) is specifically designed for use in oilfield drilling control applications, including BOP control systems, where high pressures and flow rates can quickly destroy industrial-grade shuttle valve designs.

Able to accept flow from two different hydraulic sources, Hunting's HSV directs the highest-pressure source to a single outlet function, while sealing off the other inlet source.

In drilling control circuits, this function permits a primary and back-up control pod connection to a single outlet function, such as a BOP. If a failure occurs in the primary hydraulic system, the shuttle valve routes pressure from the back-up system to the BOP, while isolating the primary control pod.

If more than two inlets are required, the outlet of one shuttle valve may be connected to the inlet of another shuttle valve to obtain three inlets. It is possible to serially connect additional shuttle valves to obtain as many inputs as desired.

The reliability of this critical application was confirmed with extensive developmental testing. More than 2,000 leak-free cycles were achieved in simulated BOP control systems tests. A qualification report is available on request.

Specifications

	HSV-12	HSV-16
Design Pressure	5,000 psi	5,000 psi
Test Pressure	7,500 psi	7,500 psi
Depth	15,000 ft	15,000 ft
Operating Temperature	20°F to 120°F	20°F to 120°F
Inlet/Outlet Connection	1" NPT (f)*	1" NPT (f)*
Flow Coefficient (Cv)	Cv = 8	Cv = 15
Max Flow Rate	150 gpm	320 gpm

*Other end connections are available on request.

subsea@hunting-intl.com