

Downhole Safety Valve (DHSV)

The DHSV is a single-shot ball valve run in the open position. If required the ball can be closed by applying annulus pressure to burst a high-accuracy rupture disc. Once closed the ball will isolate well pressure but will still allow fluid to be pumped through from above – pump through pressures depend on hydrostatic and differential pressure.

Specifications:

O.D.	5" (12.7 cm)
I.D.	2 ¹ / ₄ " (5.72 cm)
Connections	As per client request
Tensile strength	350,000 lb (155,600 daN)
Working pressure	15,000 psi (1034 bar)
Working temperature	350°F
Torque strength	10,000 ft-lb (13,558 Nm)
Make-up torque	4000 ft-lb (5423 Nm)
Service	As per NACE MR-01-75

Operation:

The DHSV is closed by applying annular pressure to burst a high-accuracy rupture disc. Once this path is opened, the annulus pressure forces an operating mandrel in the upward direction to rotate a ball valve to the closed position. The valve will not support differential pressures from above.

