

Subsea Operating Valve
Connectable to Low Pressure Recipient

ABSTRACT

A valve useable in an undersea apparatus for generating a force for closing a blowout preventer (BOP) based on a pressure difference between a low pressure recipient and ambient pressure, an apparatus including the valve and related methods are provided. The valve includes a valve body enclosing a chamber with an input port selectively connectable to an output port, and a chamber separating assembly configured to separate the chamber from a region of different pressure. The assembly includes (1) a backup plate having a first portion of a first diameter towards the chamber and a second portion of a second diameter larger than the first diameter, towards the region, and (2) an upper seat located between the first portion of the backup plate and the valve body.

Figure 1