

SYSTEM AND METHOD FOR UMBILICAL-LESS POSITIONAL FEEDBACK OF A SUBSEA WELLHEAD MEMBER DISPOSED IN A SUBSEA WELLHEAD ASSEMBLY

Abstract of the Disclosure

A positional feedback system includes a seal assembly (23) coupled to a running tool (17), the seal assembly having a seal ring (31) and an energizing ring (45) positioned between a hanger (21) and a subsea wellhead (13). The energizing ring (45) moves relative to the seal ring (31) from an unset position to a set position to seal to the wellhead (13) and the hanger (21). The system includes a magnet (57) disposed on the energizing ring (45) and having a magnetic field (63). One or more sensing devices (59) are disposed on running tool (17) and positioned in the magnetic field (63) of the magnet (57) in the set position and the unset position. The sensing devices (59) are configured to communicate with a surface platform (25) when the magnet (57) passes a magnetic field (63) through the sensing devices (59).

Figure 1