

NON-ORIENTING MULTIPLE BORE HUB

Abstract

A connector for a dual subsea flowline simultaneously connects a primary pipe and an offset auxiliary pipe carried alongside of the primary pipe. The connector has mating hub members, each having a face, a primary bore and an auxiliary passage. The auxiliary passages intersect annular concentric grooves formed in the faces. Inner and outer auxiliary seals seal the grooves, and a primary seal seals the junction of the primary bores. The seals are linked together with a seal retainer which is installed with a remote operated vehicle in one of the hubs prior to make-up.

FIGURE 3