

ABSTRACT

HYDRAULIC COUPLER

A hydraulic coupler adapted to select the supply of fluid from a first source or a second source. The fluid selection is achieved by mechanically shifting a fluid selector with a male stab member that also supplies the second fluid source. When shifted, the fluid selector positively blocks the first fluid source and opens a hydraulic pathway for the second fluid source. When the male stab is disengaged, the fluid selector is pressure biased by internal and external pressure to a position allowing fluid flow from the first fluid source and preventing external fluids from entering the hydraulic system. In certain embodiments the hydraulic coupler is horizontally installed in a tubing hanger providing horizontal porting for connection with a subsea christmas tree and vertical porting for connection to a running tool. The coupler prevents riser fluid contamination of the hydraulic system regardless of the differential pressure between the riser fluid and the hydraulic system.