

DEPTH COMPENSATED ACTUATOR AND USE OF SAME IN ASSOCIATION WITH A TRANSPORTABLE HEAVE COMPENSATOR

Abstract

The publication relates to a depth compensated actuator (0), for a transportable inline depth compensated heave compensator for subsea lifting operations. The actuator (1,10) comprises a cylinder shaped body (1 1) and a piston (12) with a piston rod (3, 13), the piston rod being intended for exposure to external water pressure, a first and second connection means (14) associated with the actuator. Further, the actuator comprises a depth compensator (20) comprising a cylinder, a piston and a piston rod, the end of which being exposed to surrounding water; and conduit means (17) between at least one volume in the actuator and one volume in the depth compensator. The pistons and piston rods are shaped as any of: hollow piston rod, ring shaped piston, ring piston rod. The depth compensated actuator solves the problem of improving depth compensation performance regarding size, weight, required fluid consumption, internal/inherent friction and adaptability. Further, use of a depth compensated actuator is claimed.

Fig. 2