

HYDRAULIC CONTROL SYSTEM FOR ACTUATING DOWNHOLE TOOLS

ABSTRACT OF THE DISCLOSURE

A hydraulic control system (100) for actuating a downhole tool. The hydraulic control system (100) includes a plurality of valve members (124) operable to selectively allow and prevent fluid communication between high and low pressure sources (54, 56) and first and second sides (58, 60) of an actuator (64) operably associated with the downhole tool. In the hydraulic control system (100), a first valve member (124) is ported between the high pressure source (54) and the first side (58) of the actuator (64), a second valve member (124) is ported between the low pressure source (56) and the first side (58) of the actuator (64), a third valve member (124) is ported between the high pressure source (54) and the second side (60) of the actuator (64) and a fourth valve member (124) is ported between the low pressure source (56) and the second side of the actuator (60).

Figure 1