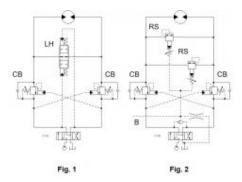


Motor Load-Control with Free Wheel Option

Machine: | Actuator: Motor | Function: Counterbalance, Load/Force

Prepared for : Prepared by :

Schematics

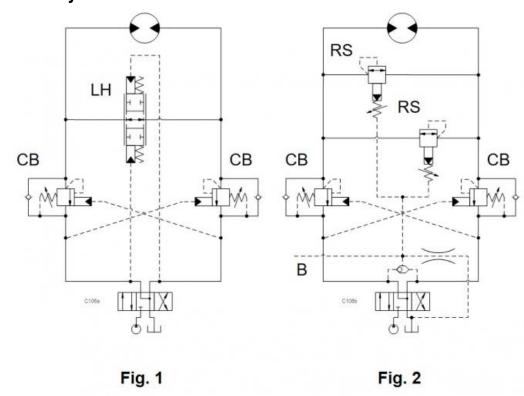


Related Products

Cartridges

LHDT - Normally open, bi-directional, modulating element CBAA - 3:1 pilot ratio, ultra-restrictive counterbalance valve RSDC - Pilot-operated, balanced piston sequence valve

Summary



The circuits show bi-directional logic elements and sequence valves for reduced force on the motor in its neutral position.

Normally open, bi-directional, modulating element: <u>LH*T</u>
Standard counterbalance valve: <u>CB**</u>
Pilot-operated sequence valve: <u>RS**</u>

Benefits of this circuit arrangement

- Figure 1: The circuit allows the motor to float when the directional valve is not activated. Counterbalance valves allow the motor to move (free wheel) with positive and negative loads on the motor. LH*T valves are available with spring settings of 3.5-, 5-, and 7-bar preload.
- Figure 2: shows two sequence valve between the motor ports for cross-port relief protection. The setting of the sequence valve is boosted with the inlet pressure when the directional valve is activated. Port B is used to open a mechanical brake.

Note: The pilot pressure required to open the CBVs need to be higher than the LH*T spring settings.

For Sun technical support, contact Bernhard Kristen.

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