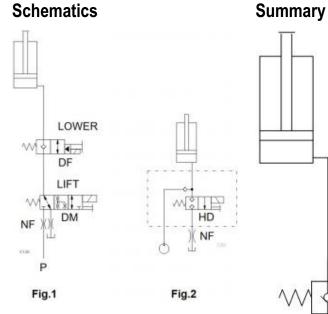


Cylinders - Lifting/Lowering, Single-Acting (1)

Machine: | Actuator: Cylinder | Function: Lift

Prepared for: Prepared by:

Schematics



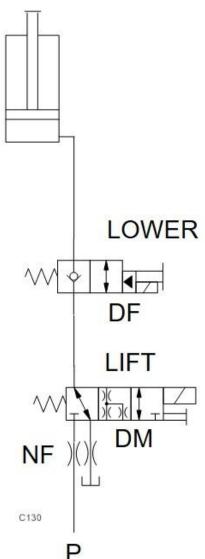
Related Products

Cartridges

DFCA - 2-way, 2-stage, solenoid-operated directional poppet valve - flow 1-2 NFAB - Fully adjustable needle valve - pilot capacity

DMDA - 3-way, solenoid-operated directional spool valve

HDDA - 2-way, solenoid-operated directional poppet valve - after check



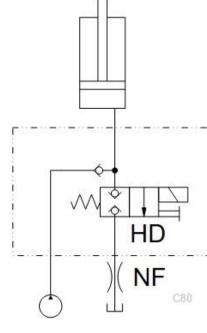


Fig.1

Fig.2

The example shows two circuits for lifting and lowering a single acting cylinder.

- 2-way, solenoid-operated poppet valve: DF*A
- Needle valve:
- 3-way, solenoid-operated spool valve: DM*A, DM*B

1 of 2 © 2024 Sun Hydraulics

• 2-way, solenoid-operated poppet valve – after check: <u>HD*A</u>

Benefits of this circuit arrangement

- Fig.1 shows a leak free poppet-type solenoid valve DF*A, that holds the cylinder in a lifted position. The cylinder can be lowered by energizing the DF*A solenoid or using the manual over-ride in an emergency. The lowering speed is determined by the setting of NF* in the tank line. Activating the 2/3 way DM*A directional valve will extend the cylinder at a rate determined by the NF* valve in the pressure line of the DM*A.
- Fig.2 shows a leak free poppet-type solenoid valve HD*A, that holds the cylinder in a lifted position. The cylinder can be lowered by energizing the HD*A solenoid or using the manual over-ride in an emergency. The lowering speed is determined by the setting of NF* in the tank line. The cylinder is extended directly via the flow from a pump through a check valve.

© 2024 Sun Hydraulics 2 of 2