

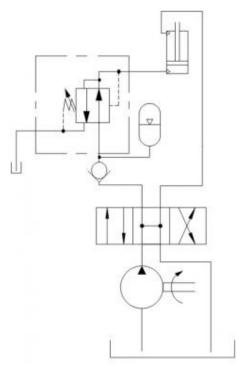
Cylinder Load - Counter Balancing

Machine: | Actuator: Cylinder | Function: Counterbalance

Prepared for :	Prepared by :

Schematics

Summary

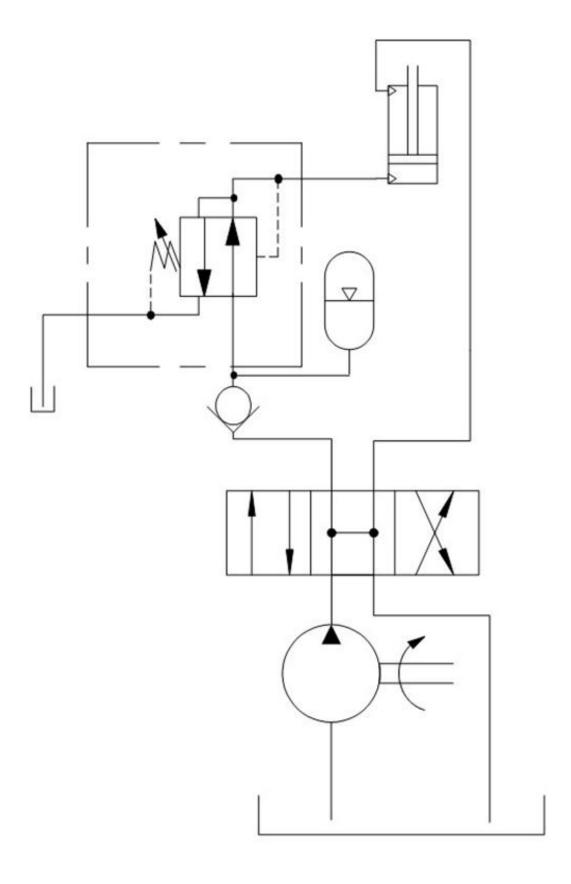


Related Products

Cartridges

PRBB - Direct-acting, pressure reducing/relieving valve

© 2025 Sun Hydraulics



In this example, a direct-acting pressure control valve is used to balance a cylinder load. An accumulator downstream from a check valve provides oil to keep the cylinder in position when the pump is idle and the directional valve is not activated.

• Direct-acting pressure control: PR*B

Benefits of this circuit arrangement:

• A direct-acting pressure control valve PR*B is used as the leakage is merely 0.01 gpm. Compared to pilot-operated pressure control valves, the losses to keep the cylinder in position are reduced by 90%.

© 2025 Sun Hydraulics

• Pilot-operated pressure control valves PP** can be replaced with direct-acting PR** cartridges in the same cavity.

© 2025 Sun Hydraulics 3 of 3