

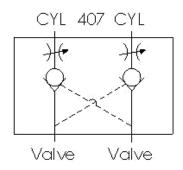
Phone: 320-743-2276

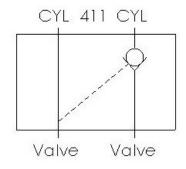
Email: CustomerService@Doering.com

Web: www.doering.com

# Lock Valve, Pilot Operated Check Valve Hydraulic

# **Functional Symbol:**







# **Description:**

Metro's lock valves, is a pilot operated check valve, is designed to lock a hydraulic cylinder and prevent them from drifting due to hydraulic leak from a directional control valve being in the neutral position or worn hydraulic valves or even a hose failure.

Double Lock Valves: 407, 408 and 409, will lock a hydraulic cylinder in both directions.

Single Lock Valves: 411 and 412, will lock a hydraulic cylinder in one direction.

# Operation:

With the directional control valve in the neutral position, flow from both ends of a cylinder is blocked, locking the cylinder piston in position by the Double Lock Valve. When the directional control valve is shifted to direct flow to one side of the cylinder, pressure opens the check ball and simultaneously moves the piston over to the opposite side of the valve, opening this check ball, allowing free flow return to the directional control valve. By adjusting the flow control in or out, changes the pressure drop in the valves. This, in most cases, smoothes out pulsations and eliminates valve chatter.

### Features:

- Engineered for -22° to 194°F (-30° to 90°C) operating temperatures
- Rated for 3,000 psi (207 bar)
- Made in the USA
- Fast 10-day delivery

## **Specification:**

Flow	Pressure	Temperature	
Capacity	Rating	Range	Weight
30 GPM	3000 PSI	-22° to + 194° F	2 lbs. 1 oz.
114 (L/MIN)	(207 Bar)	-30° to + 90° C	(1.00 kg.)
			to
			2 lbs. 8 oz.

#### (BAR) P.S.I. **Pressure Drop Characteristics:** (34.5)500 (27.6)400 (20.7)300 (13.8)200 2 (6.9)100 (0) 20 GPM (30.2)(60.5)(68.1) (75.7)LPM (15.1)

- 1. Valve Port to Cylinder Port
- 2. Cylinder Port to Valve Port



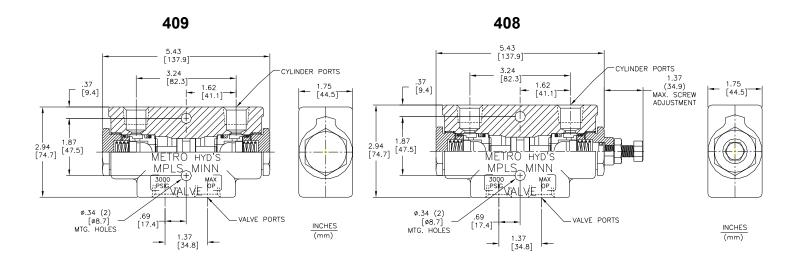
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## Technical:



# **Applications:**

- Loaders, outriggers, backhoes, work platforms and cranes.
- Any hydraulic circuit where you want to hold a cylinder in place with no hydraulic leakage.

## Installation Examples:

Hydraulic Circuit- D1 Control Valve and Single Lock Valve

Hydraulic Circuit- 2 Independent D1 Control Valves

# **Ordering Instructions:**

