

V5 ANCILLARIES

PILOT CHECK VALVE

Pilot check valves are used to lock one or both service ports to ensure that there is zero movement of the actuator whilst its control valve is in neutral.

Check valves are mounted using four cap screws on the service port face of a valve section with a 'Y' type manifold interface. Where a single acting check valve is used, the control section must be fitted with an 'M' spool to ensure pilot pressure is available to unlock the check valve.

When used with cylinders, whose rod is large in relation to the diameter of the bore, it is possible for pressures to be generated in the rod end which can not be unloaded. To avoid this the ratio of the cylinder full area to the rod annular area must not be greater than 4:1, which is the pilot ratio of this check valve.

When lowering a cylinder, the pump may not maintain the pilot pressure. This can result in jerky operation caused by oscillation of the pilot piston. This can be overcome by restricting the flow out of the cylinder to maintain pilot pressure at the check valve.

Description

Designed to be mounted directly onto the service port face of the V5 'Z' section. Chrome steel ball and hardened seats provide a positive and total lock to actuators, this cannot be released unless the pump is running and the valve is selected.

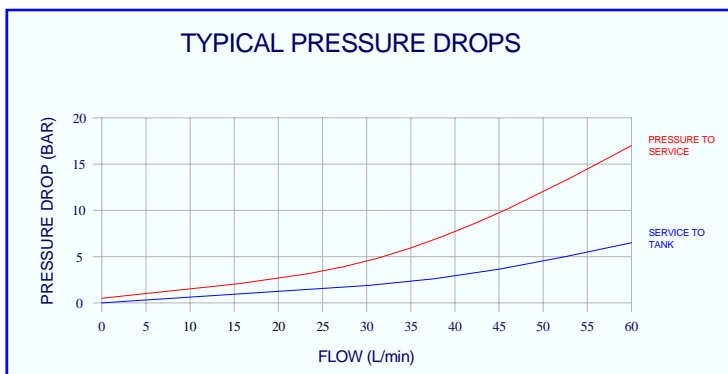


Application

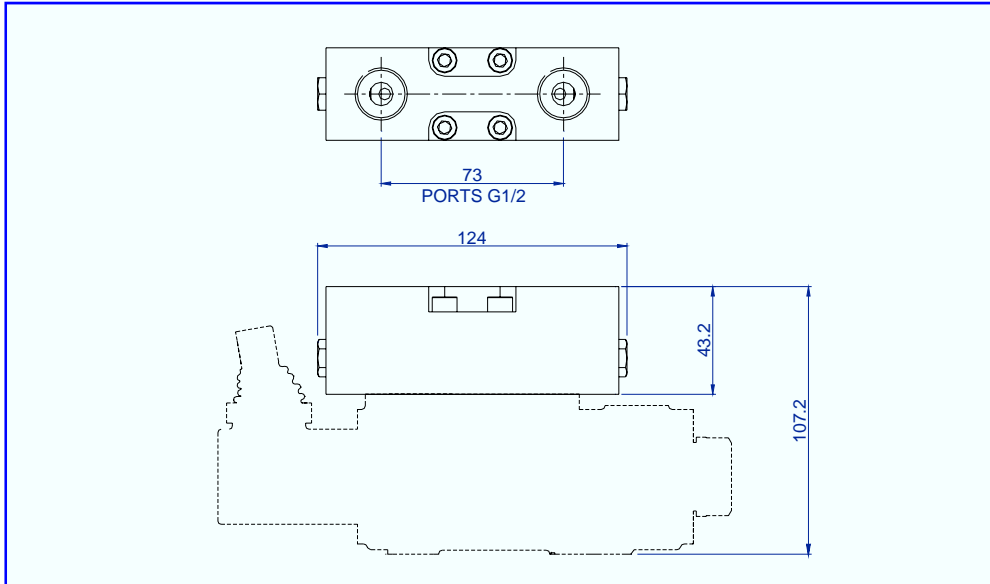
Used to positively lock cylinders and prevent involuntary movement when the pump is not running. Ideally suited to mobile applications such as back hoe and access platforms.

Features

- 4:1 pilot ratio.
- Hardened seats.
- Section mounting.
- 100% production testing.
- Suitable for manual or solenoid sections.
- Good flow characteristics.
- Low opening pressure.
- Cast iron body and hardened piston for long life.



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Pilot Check valve Specification

Performance

Rated flow	60 l/min
Maximum pressure	250 bar
Opening pressure	3.0 bar
Temperature rating: minimum	-20°C
Temperature rating: maximum	+60°C
Leakage	0 cc/min
Ratio	4:1

Recommended Oil

Mineral based hydraulic	ISO VG37
Filtration (minimum)	25 micron

Materials

Body - cast iron	BS 1452
External plating - zinc chromate	BS 1706 Zn3
M6 cap screw torque	8.0 Nm
Seals	PTFE/Nitrile
Mounting interface	Z type

Weight

1.16kg

