

# PILOT OPERATED CHECK VALVES 27, 40 & 60 LPM



The Hy-Pro range of inline pilot operated check valves lock and prevent movement in a cylinder until oil pressure is applied to the pilot piston. Manufactured in three flow rates, 27, 40 and 60 litres per minute these valves are located between the control valve and actuator to lock the system.

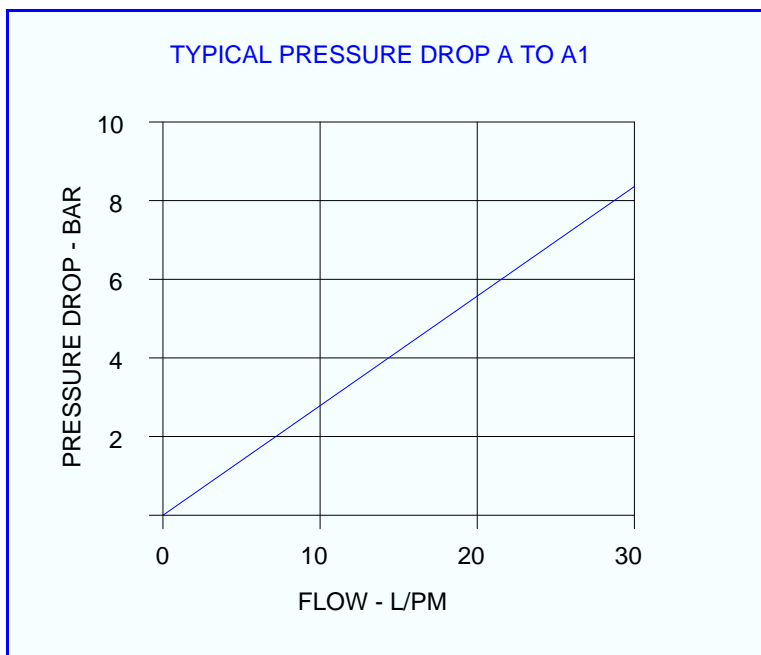
## Description

Hy-Pro check valves are manufactured using hardened components and toughened seats to provide a positive lock and extended service. The precision ground piston has a generous pilot ratio to ensure ease of unlocking.

## Application

Used to lock cylinders to prevent movement. The Hy-Pro check valve can be used with single or double acting cylinders. However, when lowering a single acting cylinder a pilot flow must be provided to unlock the check valve.

Note, if the cylinder runs ahead of the pump flow the pilot pressure may fall, causing the check valve to ratchet. This can be resolved by restricting the flow of oil from the ram. When using double acting cylinders it is possible for pressure to be intensified in the rod end, so that the pilot piston is unable to release. This can be avoided if the ratio of the ram full end area to rod end area is less than check valve ratio.

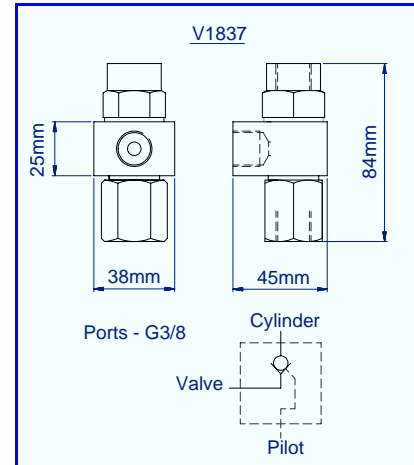


## Features

- Compatible with all Hy-Pro valves.
- Line mounted.
- Three flow rate versions.
- Lock single and double acting cylinders.

**ORDER CODES**

V1837		27 l/min Pilot Check Valve G3/8 Single Acting
V1030	□	40 l/min Pilot Check Valve
	□ M	G3/8 Double Acting
	□ M SA	G3/8 Single acting
V2050	□	60 l/min Pilot Check Valve
	□ M	G1/2 Double Acting
	□ M SA	G1/2 Single acting



**Technical Data**

**Performance**

**V1837 V1030 M V2050 M**

Rated flow litres per minute	27	40	60
Maximum pressure bar	210	210	210
Pilot ratio	2.25:1	4:1	3.28:1
Port size	G3/8	G3/8	G1/2
Temperature rating: min	-20°C	-20°C	-20°C
Temperature rating: max:	+65°C	+65°C	+65°C

**Recommended Oil**

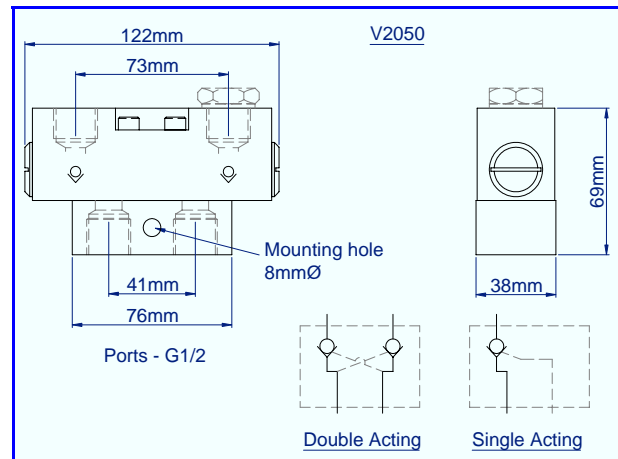
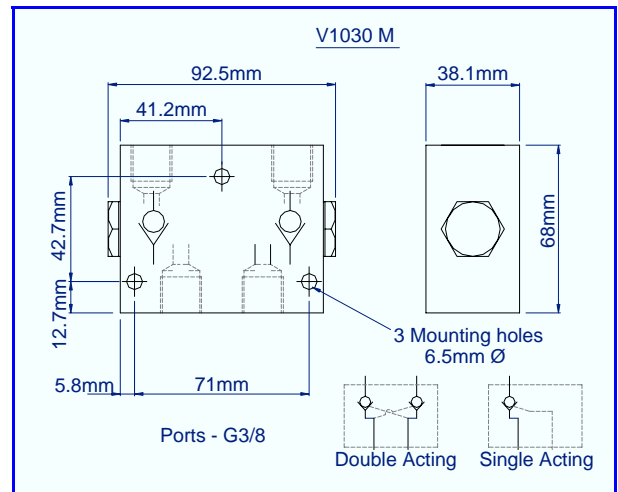
Mineral based hydraulic	ISO VG37
Filtration (minimum)	25 micron

**Materials**

Body – cast iron	BS1452 – 250
Seat hardened	BC standard 019
Manifold – aluminium	BS 1490
External steel – zinc chromate	BS 1706 Zn3
Seals	Nitrile

**Weights**

V1837	0.28 kg
V1030 M	0.95 kg



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