

MOTION CONTROL

Overcentre (Counterbalance) Valves



Load Holding * Load Control * Load Safety

We produce fluid power **solutions**

Introduction Products & Solutions

August 2020



Overcentre Valves are used mainly for the following purposes:

Load Holding prevents the movement of a load when the directional valve is in the neutral position

Load Control prevents the actuator running ahead of the pump due to the load-induced energy

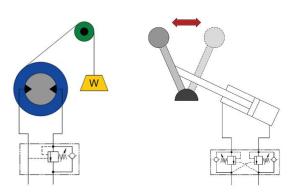
Load Safety prevents uncontrolled movement of the load in case of failure

Application Example

Controlling of Negative Load

The overcenter valve prevents the actuator running ahead of the pump due to the load-induced energy.

Thereby eliminating cavitation in the actuator and loss of control.



Advantages and Benefits of our Valves

leak free load holding

leak free adjustment, pressure setting with load applied

Extraordinary Lifetimeup to 10 Mio cycles for nominal pressure

smoothness operation reaction

80 lpm (20 GPM) and 420 bar (6,000 psi)

dual seals as standard sealing, no need for back up ring

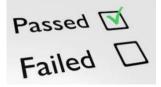
interchangeable with pilot operated check valves in the same cavity

standard and full balanced valve

optional surface protection for 520 hours salt spray according ISO 9227 (ASTM B117)

robust valve design for high dynamic applications

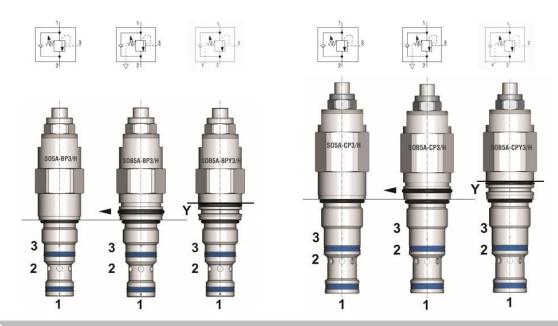




Designed for Extraordinary Performance

Compared with other valves in the market the ARGO-HYTOS Overcentre Valve offers a lifetime of 10 Mio. cycles at 420 (350) bar.

Product Portfolio



7/8-14 UNF (Size 10)

1-1/16-UNF (Size 12)

SO(B)5A-BP3

40 l/min (11 GPM) 420 bar (6100 PSI) SO(B)5A-CP3

80 l/min (21 GPM) 350 bar (5100 PSI)

Fully Balanced Valves SOB5A & SOBD5A

used if a back pressure at the secondary port (backflow) is present atmospheric ventilation or internal drain

- ✓ no influence on the pilot pressure
- ✓ independent pressure relief function
- ✓ can be used with closed centred valves

Download the Data Sheets from our Website

Introduction Products & Solutions

August 2020



Please contact us for all your enquiries or a quotation:

Robert Kern Mech. Engineer FH STV RPEQ, RPEng (Mech)

+61 (0)447 022 477 r.kern@argo-hytos.com

Next Newsletter in September ...

New Filter Element Generation EXAPOR®MAX 3