

NR-HC HYDRAULIC CONTROLLED CHECK VALVE

Description

The Hydraulic Controlled Check Valve is a special controlled damping device, composed of two major parts:

A - Single shaft tilting check valve (Check valve)

B - An hydraulic control system (Hydraulic Control).

The Hydraulic Controlled system is mounted on two models of check valves:

NR-040-HC - CHECK VALVE WITH REMOVABLE COVER

NR-050-HC - TILTING DISC CHECK VALVE

The Controlled Check Valve is a multipurpose valve offering a new approach to Pump Discharge Control. This valve combines four functions, namely: Flow Control, Non-Return Valve, Shut-off Valve and Surge Anticipation Valve, all in a single unit.

Entirely prevents the slam and shocks subsequent to shutting down the pumping unit.

Eliminating water hammer pressure while switching on or off the pumping unit.

Alleviating surges resulting from a power failure of the station.

The robust oil servo system can be relied upon for using the Controlled Check Valve also as a shut off valve.

Minimal head loss as the flap is held open by the hydraulic system.

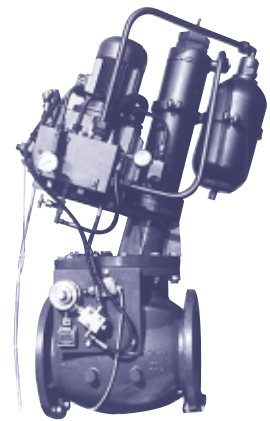
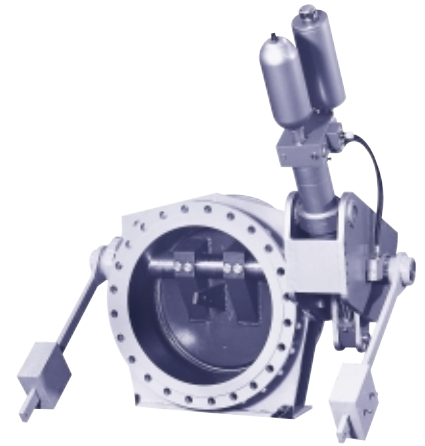
Starting the pumping unit against a Controlled Check Valve which opens gradually, according to predetermined rate of opening, cuts out the surges.

While switching off the pump, the most desirable time period for flap closure can be achieved by simple adjustment.

The operating system of the Controlled Check Valve is a separate system actuated by oil. This will go on functioning, even in the absence of electrical current supply.

The closure of the valve will take place at two sequential rates. The first 95% of closure will be extremely rapid. The remaining will close slowly. The final adjustment, will be done in the field.

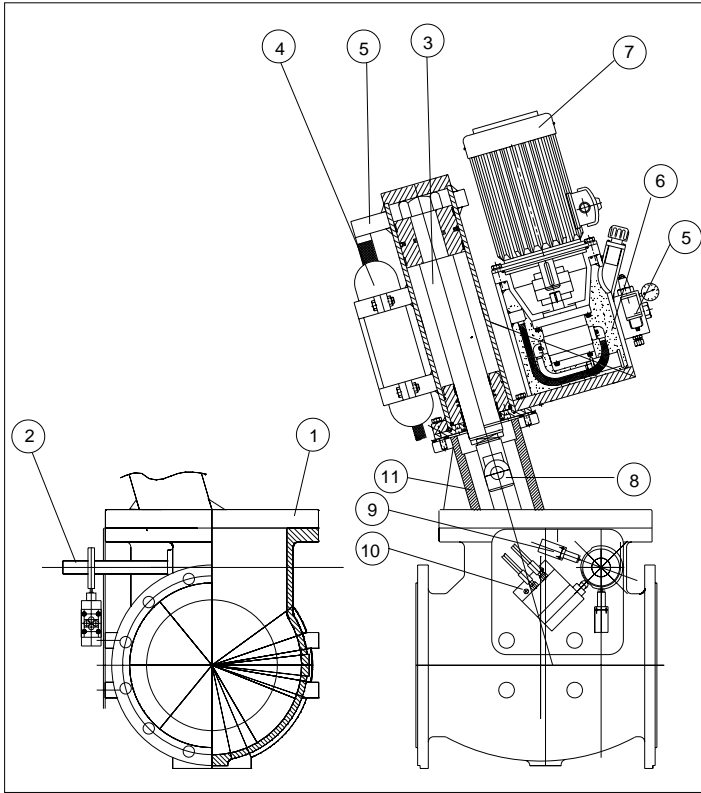
The hydraulic effectiveness of such operation is equivalent to the installation of surge anticipator releasing into the intake instead of releasing to the atmosphere.



A.R.I. Flow Control Accessories

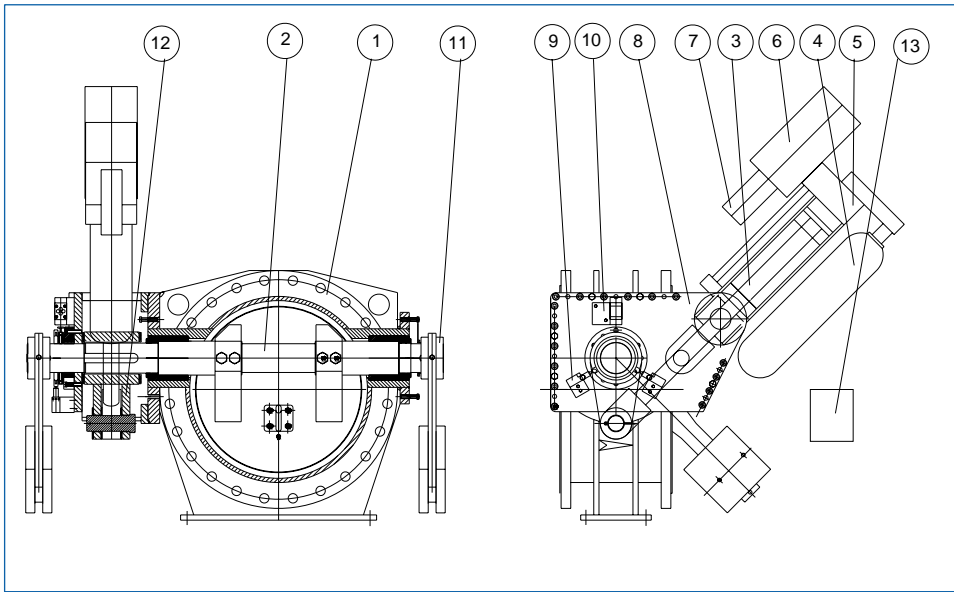
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<http://arivalves.com>



SWING CHECK VALVE WITH HYDRAULIC VALVE - MODEL NR-040-HC

| No. | Part | Material |
|-----|--------------------------|-------------------------|
| 1. | Body | Steel DIN ST.37 |
| 2. | Shaft (1 pc.) | Stainless Steel SAE 431 |
| 3. | Hydraulic Piston | |
| 4. | Acumulator | |
| 5. | Logic Block | |
| 6. | Oil Tank | |
| 7. | Electric Motor | |
| 8. | Hydraulic System Support | |
| 9. | Limit Switch | |
| 10. | Hydraulic Valve | |
| 11. | Actuator Lever | |



TILTING DISC CHECK VALVE WITH HYDRAULIC VALVE - MODEL NR-050-HC

| No. | Part | Material |
|-----|--------------------------|-------------------------|
| 1. | Body | Steel DIN ST.37 |
| 2. | Shaft (1 pc.) | Stainless Steel SAE 431 |
| 3. | Hydraulic Piston | |
| 4. | Acumulator | |
| 5. | Logic Block | |
| 6. | Oil Tank | |
| 7. | Electric Motor | |
| 8. | Hydraulic System Support | |
| 9. | Limit Switch | |
| 10. | Hydraulic Valve | |
| 11. | Counterweight | |
| 12. | Actuator Lever | |
| 13. | Electric Cabinet | |

