New solenoid-operated valve with built-in reverse-flow check can reduce system cost

New SVCV08-20 and SVCV08-21 dual-function valves can help reduce costs in medium flow applications that require low leakage. They are solenoid-operated, two-way, pilot-operated valves with outlet flow check. As poppet-type valves, the SVCVs are well-suited for load-holding or blocking applications. And being uni-directional, they are ideal for single-acting cylinder applications. They are rated for flows up to 6 gpm/22.7 lpm, with an impressive low-leakage rate of 5 dpm between ports 2 to 1, and 10 dpm from ports 1 to 2 at rated pressure. The pressure drop is 74 psi/5.1 bar for the rated flow, so there is little heat build-up or energy loss.

With conventional single-function valves, both an 08-size solenoid valve and a separate reverse flow check valve would have been required to achieve the same functionality. By using one cartridge instead of two, initial cost, cavity machining costs, and the size and weight of the manifold can all be reduced.

Although the SVCVs are 2-way valves, they require a 3-way cavity, with the normal inlet at cavity port 3 (valve port 2) and with the outlet at cavity ports 1 and 2 blocked. However, cavity port 2 can be connected as an alternate outlet port, though the pressure drop will be significantly higher from ports 3 to 2. This feature offers manifold design and application flexibility.

Features

- Compact, multi-function solenoid valve with integral outlet-flow check.
- Industry common cavity.
- Poppet-style construction.
- New manual-override options.
- Optional waterproof E-Coils rated up to IP69K.
- Hardened seat for long life and low leakage.
- 5-year limited warranty. See full warranty statement in the catalog or website.

Benefits

- Dual functionality allows lower cost, smaller packaging and lighter-weight manifolds.
- Easy manifold machining using standard tooling and set-up configurations.
- Suitable for load-holding applications.
- SVCV08-20 has ‘M’ Manual override option. SVCV08-21 has ‘P’ and ‘K’ option.
- Reliability in the harshest, most severe operating conditions.
- Reliable operation in mobile machinery application conditions.
- Confidence, with the backing of the industry’s leading manufacturer of hydraulic cartridge valves.
- Long life without wear or decreased performance over time.

For additional product information, or contact your HydraForce representative for assistance.

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