



OPERATION

Solenoid Valve, Spool Type, 3-Position, 4-Way, 10-size. When de-energized, the HSV10-34-02 is closed center, blocking all flow. When coil S1 is energized, the spool shifts to allow flow from port 3 to port 4, and from port 2 to 1. When coil S2 is energized, the spool shifts to allow flow from port 3 to port 2, and from port 4 to port 1. This valve comes standard with a one-direction, push-pin manual override. When the manual override is pushed, the spool shifts following the logic of energizing S2. Follow the "Operating Envelope" limits to ensure shifting of the valve during operation.

APPLICATIONS

These spool-type valves are primarily used in mobile and industrial applications for controlling the direction of the flow in a circuit. Solenoid spool-type valves are direct acting and respond quickly to coil voltage input. Spool valves will have some leakage due to spool clearance, so if your application requires no leakage at the working port(s), apply a low leakage poppet valve(s), like PO check valve, counterbalance valve, etc., in addition to this solenoid valve. Use the optional screen to help protect the actuator from large particles. This valve comes standard with a manual override (one-direction, push-pin style). Port 1 may be pressurized to 210 bar, but is not intended as inlet (Tank only).



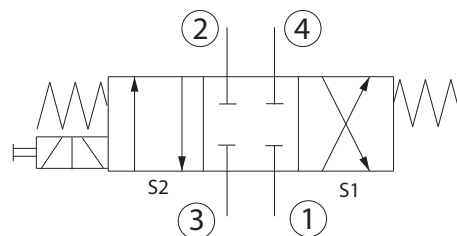
Shown with High Pressure Coils,
Deutsch Connectors

SPECIFICATIONS

| | |
|----------------------------------|------------------------------|
| Rated pressure* | 350 bar [5075 psi]* |
| Rated flow at 7 bar [100 psi] | 25 l/min [6.6 US gal/min] |
| Weight | 0.85 kg [1.87 lb] |
| Cavity | SDC10-4 |
| Standard Coil | H16 29 Watt |

* Rated Pressure based on NFPA fatigue test standards (at 1 Million Cycles).

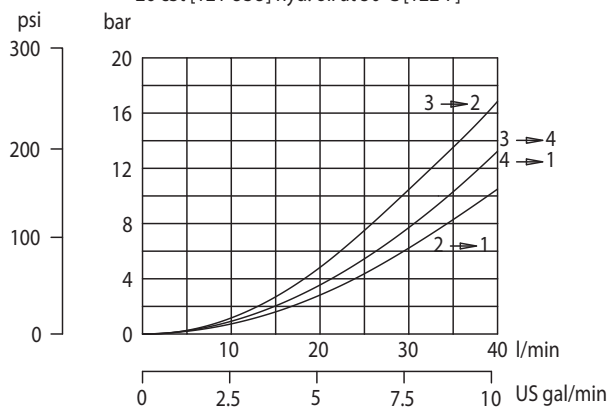
SCHEMATIC



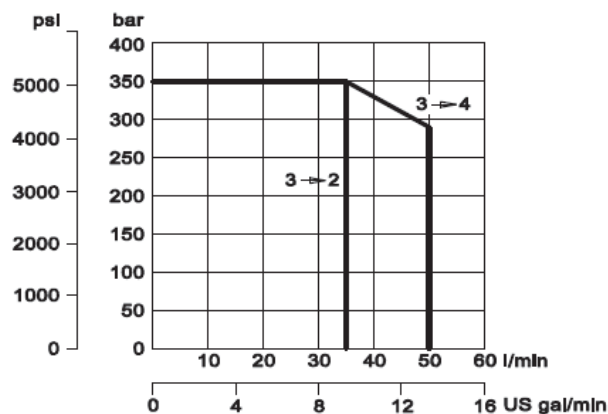
PERFORMANCE CURVES

Pressure drop

26 cSt [121 USU] hyd. oil at 50°C [122°F]



Operating envelope





Solenoid Valves Catalog

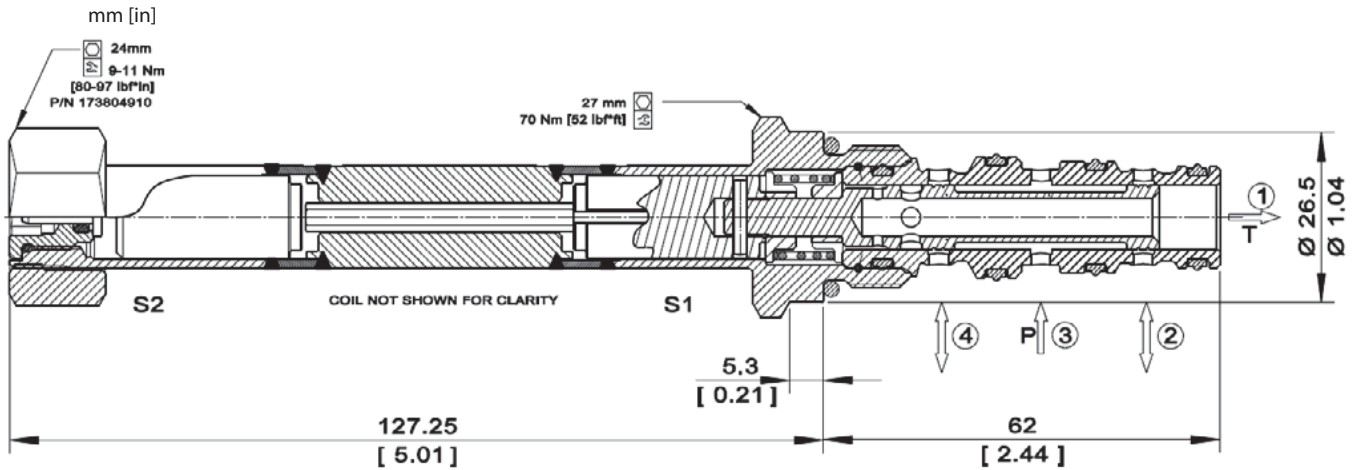
4-Way, 3-Position Spool

HSV10-34-02



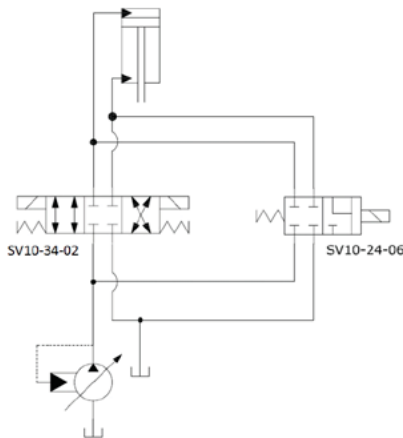
DIMENSIONS

Cross-sectional view

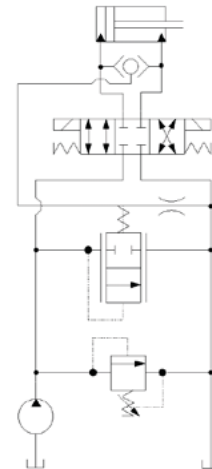


EXAMPLE CIRCUITS

Fourth Position Float



Double Acting Cylinder with Unloading Valve



ORDERING INFORMATION

HSV10 - 34 - 02 - H12D - DE - PN - P - 00

High Pressure Solenoid Valve,
This is a direct-acting, 3-position,
4-way, spool-type solenoid valve.

Coil Voltage

| Code | Description |
|------|-------------|
| H00 | No Coil |
| H12D | 12 VDC |
| H24D | 24 VDC |

Coil Termination

| Code | Description | IP Rating |
|------|---|-----------|
| 00 | No Coil | - |
| FL | Flying Lead | IP 69k |
| DE | Deutsch | IP 69k |
| AS | AMP SuperSeal 1.5 and Metri-Pack 150 type 1 | IP 69k |
| ASDB | AMP Super Seal with Diode Bidirectional | IP 69k |
| DEDB | Deutsch with Diode Bidirectional | IP 69k |
| FLDB | Flying Lead with Diode Bidirectional | IP 69k |

Bodies

| Code | Port & Material | Body Nomenclature |
|------|------------------|-------------------|
| 00 | Cartridge only | No Body |
| S3B | 3/8 BSP, Ductile | SDC10-4-S3B |
| S4B | 1/2 BSP, Ductile | SDC10-4-S4B |
| S6S | #6 SAE, Ductile | SDC10-4-S6S |
| S8S | #8 SAE, Ductile | SDC10-4-S8S |

*** Aluminum bodies available for lower pressure application. Please consult factory for details.

Seal Option

| Code | Seal Material | Seal kit |
|------|--------------------------|----------|
| P | Polyurethane Single Seal | 11143824 |

Manual Override

| Code | Description |
|------|---|
| PN | Push Pin |
| OPS | Push Pin M/O Nut for Protection & Actuation |
| PAT | Push and Twist |

SV - Solenoid Valves
HSV10-34-02