



## OPERATION

Solenoid Valve, Spool Type, 3-Position, 4-Way, High Flow (15-Size). When de-energized, the SV15-34-02 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. Follow the "Operating Envelope" limits to ensure shifting of the valve during operation. This valve is a direct replacement for EDH 12/4306 and uses a metric M33x2 cavity (NCS 12/4) for high flow capability. The SV15-34-02 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.

## APPLICATIONS

These valves are primarily used in mobile and industrial applications for controlling the direction of the flow in a circuit. 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). This valve can operate with an inlet pressure of 315 bar on port 3 for 300,000 cycles. Port 1 may be pressurized to 150 bar, but is not intended for use as inlet (Tank only).



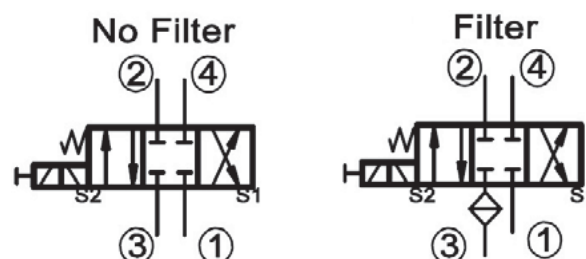
## SPECIFICATIONS

|                                       |                          |
|---------------------------------------|--------------------------|
| Rated Pressure*                       | 210 bar [3045 psi]**     |
| Maximum Rated Flow at 7 bar [100 psi] | 60 l/min [16 US gal/min] |
| Weight including coil                 | 1.400 kg [3.09 lbs]      |
| Cavity                                | NCS 12/4                 |
| Coil                                  | M19-33W                  |
| Diode (Optional)                      | Unidirectional           |

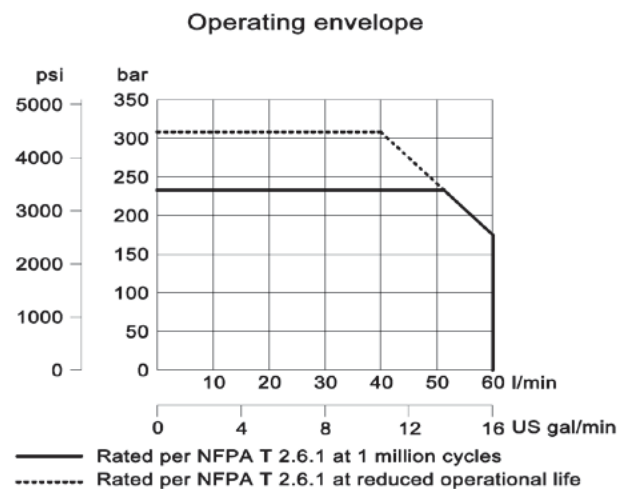
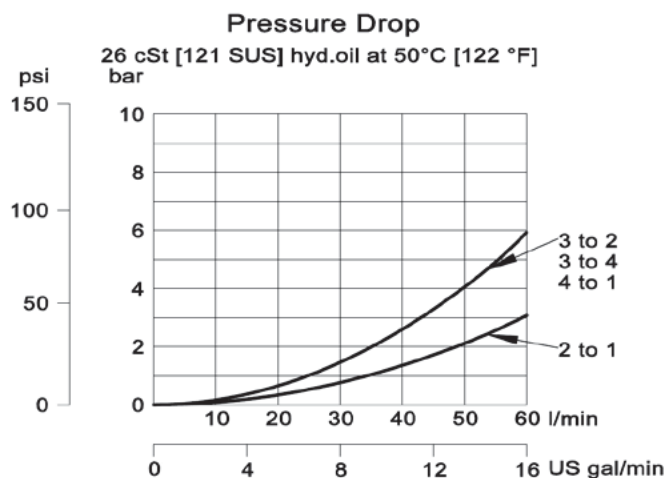
\* Rated Pressure based on NFPA fatigue test standards (at 1 Million Cycles).

\*\* See 315 bar pressure rating note on page 10.

## SCHEMATIC



## PERFORMANCE CURVES

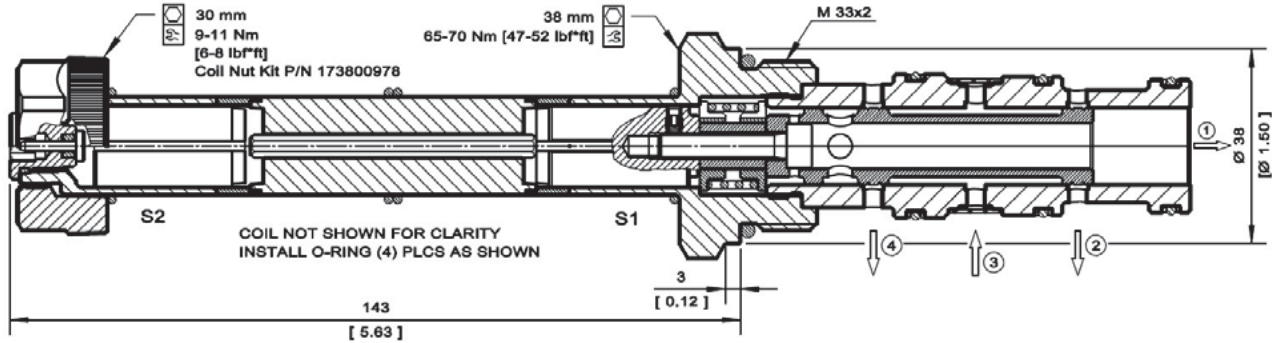




**DIMENSIONS**

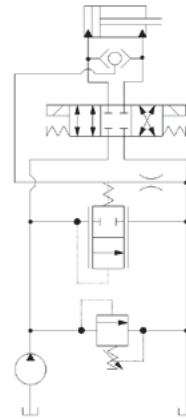
mm [in]

Cross-sectional view



**EXAMPLE CIRCUITS**

Double Acting Cylinder with Unloading Valve



**ORDERING INFORMATION**

**SV15 - 34 - 02 - 12D - DE - B - F - 00**

Solenoid Valve, Spool  
Type, 15 Size Cavity

34:  
3 Position, 4 Way

02:  
Schematic type

| Coil Voltage       | Standard Coil Code |
|--------------------|--------------------|
| No Coil, with nut* | 00                 |
| 10 VDC             | 10D                |
| 12 VDC             | 12D                |
| 20 VDC             | 20D                |
| 24 VDC             | 24D                |
| 110 VAC**          | 110A               |
| 220 VAC**          | 220A               |

\* Standard coil – plastic nut and O-rings  
\*\* External Rectifier Needed – DN termination only

| Code | Body and Ports | Body Nomenclature |
|------|----------------|-------------------|
| 00   | Cartridge Only | No Body           |
| 8S   | #8 SAE, AL     | NCS 12/4-L-8S     |
| 12S  | #12 SAE, AL    | NCS 12/4-L-12S    |
| 4B   | 1/2 BSP, AL    | NCS 12/4-L-1/2    |
| 6B   | 3/4 BSP, AL    | NCS 12/4-L-3/4    |

| Seal Code | Material | Seal Kits |
|-----------|----------|-----------|
| B         | Buna-N   | 11115884  |
| V         | Viton    | 11115885  |

Filter:  
No Filter  
300 µm

Omit  
F

| Coil Termination      | Standard Coil Code | IP Rating |
|-----------------------|--------------------|-----------|
| No Coil               | 00                 | -         |
| Amp Junior            | AJ                 | IP67      |
| Amp Junior with Diode | AJD                | IP67      |
| Deutsch               | DE                 | IP67      |
| Deutsch with Diode    | DED                | IP67      |
| Flying Leads          | FL                 | IP65      |
| DIN 46650             | DN                 | IP65      |

SV - Solenoid Valves  
SV15-34-02