

PW: 78021036



OPERATION

This is a normally-closed, pilot-operated, poppet-type 10-size solenoid valve with free reverse flow. When de-energized, the valve acts as a check valve, allowing flow from port 1 to port 2, and blocking flow from port 2 to port 1. When energized, the valve's poppet is shifted and allows flow from port 2 to port 1, and from 2 to 1. This valve is available with an optional pull-type manual override.

APPLICATIONS

This valve is designed for low leakage applications and can be used in a circuit with a single acting cylinder to control motion, provide load holding or as a general purpose diverter or dump valve. The SVP10-NCR can operate at an inlet pressure of 315 bar on port 2 for 250,000 cycles.



Shown with Standard Coil, Deutsch Connector

SV - Solenoid Valves
SVP10-NCR

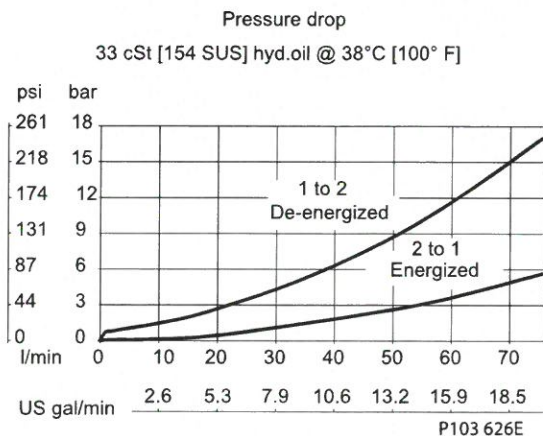
SPECIFICATIONS

| | |
|-------------------------------|--|
| Rated pressure* | 230 bar [3300 psi]** |
| Rated flow at 7 bar [100 psi] | 80 l/min [21 US gal/min] |
| Leakage | 6 drops/min @ Rated pressure |
| Weight | 0.43 kg [0.95 lb] |
| Cavity | SDC10-2 |
| Standard Coil | M16 26 Watt |
| Robust Coil | R16 20 Watt Robust Nut P/N 173804910 (no coil O-rings needed) |

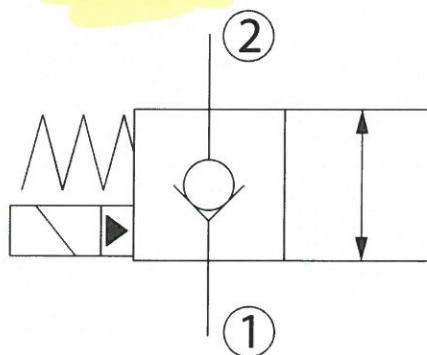
* Rated Pressure based on NFPA fatigue test standards (at 1 Million Cycles).

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

PERFORMANCE CURVES



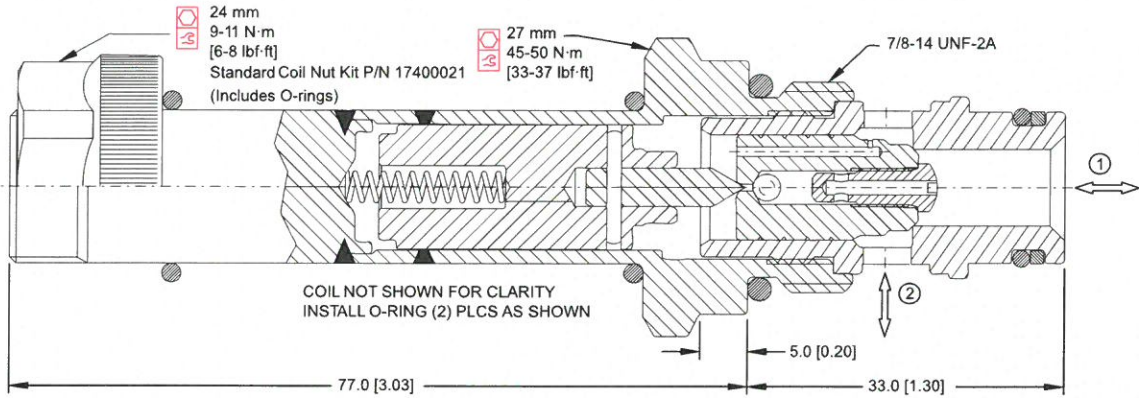
SCHEMATIC



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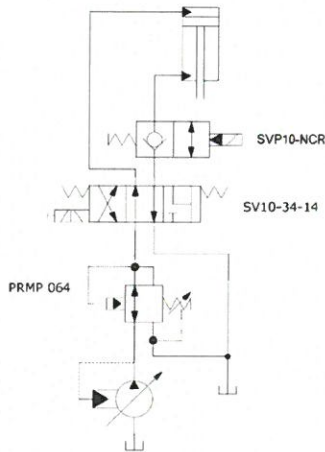


DIMENSIONS

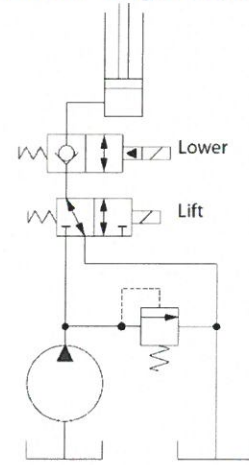


EXAMPLE CIRCUITS

Height Control with Float Option



Lift, hold, & lower single acting cylinder



P103 102E

ORDERING INFORMATION

SVP10 - NCR - 12D - DN - DE - M - B - F - DG4R - 00

Solenoid Valve,
 Poppet Type, 10
 Size Cavity

NCR:
 Normally Closed, Free
 Reverse Flow, Pull Type

Filter:
 No Filter
 Filter 300 μm

| Code | Body and Ports | Body Nomenclature |
|------|----------------|-------------------|
| 00 | Cartridge Only | No Body |
| 6S | #6 SAE, AL | CP10-2-6S |
| 8S | #8 SAE, AL | CP10-2-8S |
| S8S | #8 SAE, Steel | CP10-2-S8S |
| DG3B | 3/8 BSP, AL | SDC10-2-DG3B |
| DG4B | 1/2 BSP, AL | SDC10-2-DG4B |
| S4B | 1/2 BSP, Steel | CP10-2-S4B |

| Seal Code | Material | Seal Kits |
|-----------|----------|-----------|
| B | Buna-N | 354000719 |
| V | Viton | 354000819 |

| Coil Voltage | Standard Coil Code | Robust Coil Code |
|--------------------|--------------------|------------------|
| No Coil, with nut* | 00 | R00 |
| 10 VDC | 10D | R10D |
| 12 VDC | 12D | R12D |
| 20 VDC | 20D | R20D |
| 24 VDC | 24D | R24D |
| 110 VAC** | 110A | - |
| 220 VAC** | 220A | - |

* Standard coil – plastic nut and O-rings
 R-coil – steel nut P/N 173804910
 (no coil O-rings needed)
 ** DIN only - external rectifier needed

| Coil Termination | Standard Coil Code | IP Rating | Robust Coil Code | IP Rating |
|---------------------------|--------------------|-----------|------------------|-----------|
| No Coil | 00 | - | 00 | - |
| Amp Junior | AJ | IP67 | - | - |
| Amp Junior with Diode | AJD | IP67 | - | - |
| AMP SuperSeal 1.5 | AS | IP67 | AS | IP69K |
| AMP SuperSeal with Diode | ASD | IP67 | ASDB | IP69K |
| Deutsch | DE | IP67 | DE | IP69K |
| Deutsch with Diode | DED | IP67 | DEDB | IP69K |
| Flying Leads | FL | IP65 | FL | IP69K |
| Flying Leads with Diode | FLD | IP65 | FLDB | IP69K |
| DIN 43650 | DN | IP65 | - | - |
| Metri-Pack 150 Type 2 | - | - | M3 | IP69K |
| Metri-Pack 150 with Diode | - | - | M3DB | IP69K |

| Code | Manual Override |
|------|------------------------------|
| Omit | No Override |
| M | Pull Screw* |
| OP | Pull Screw w/ Protection* |

* Only available with standard coil