VDM control valve is a manifold mounted spool valve designed for mobile applications. Manifold mounting allows a lever valve to be combined with the system manifold block. Work ports and cartridges, required by the spool section, are in the custom manifold block.

- A mobile control valve integrated with the system manifold block
  - More integration eliminates plumbing
- Custom manifold block can be tailored to the spool sections
  - Customization improves versatility
- Manifold mounting
  - Provides easier serviceability since the valve can be removed without breaking into plumbing
- Precision spool in a honed cast iron bore
  - Great load holding capability with low work port leakage
- Plated valve housing
  - Corrosion resistant, just like the valve cartridges screwed into the manifold
- Wet spool ends
  - Positively protects spool ends and eliminates spool seals
  - A dirt resistant rotary seal is used on the manual lever
- Maximum size, high force electro magnet
  - Valve powers through dirt and cold oil
- Proven design
  - FORCE America has years of experience manufacturing products for application in severe environments
- Two sizes available
  - Both valve sizes can work side by side providing appropriate size and control
Model VDM Spool Valve

Technical Information

Specification for Electrical Pilot Section

- Rated Voltage: 12 VDC
- Coil Resistance: 7 ohms
- Nom Current Rating: 1.5 amps
- Coil Max Power Rating: 38 watts
- Duty Cycle: 100%
- Frequency: 50-125 Hz PWM
- Electrical Connection: Din 43650A

Specification for VDM Spool Section

- Flow rating:
  - VDM 12: 35 GPM
  - VDM 10: 20 GPM
- Pressure Rating:
  - Inlet port (alum): 3000 PSI
  - Tank port: 850 PSI
- Spool Leakage P to T:
  - VDM 12: 21 cc per min. 1000 PSI 150 SUS
  - VDM 10: 16 cc per min.
- Environmental limitations:
  - Temp range: -40°F to +180°F
  - Viscosity range: 35 to 1750 SUS
  - Filtration requirement: ISO 18/14
  - Seal compound: Nitrile
  - Mounting orientation requirement: None
  - Orientation preference: Horizontal spool

Add-a-Fold Manifold Sections Available

Aluminum manifold sections, produced by FORCE America, are bolted together to form a single manifold. The manifold section provides porting and a load sense shuttle. Inlet sections accommodate both piston pumps and gear pumps.

Some manifold sections do not have a spool section bolted on top. These sections rely on solenoid operated cartridges screwed into them to provide useful function.