



MINIATURE PILOTING SOLENOID VALVES

Innovation in Miniature
LEE 
The Lee Company

**YOUR SPECS
OUR EXPERTISE
GREAT SOLUTIONS**
FOR YOUR APPLICATION



MINIATURE SOLENOID VALVES

Adapting technology to quickly evolving needs has enabled The Lee Company to remain a pioneer in miniature fluid control for 70 years. We offer the most compact, efficient, and reliable solenoid valves available. Our wide range of capabilities can be tailored to meet even the most demanding applications.

LONG LIFE

Standards qualified to 2.5 million cycles for extended operation without replacement or repair.

HIGH PERFORMANCE

Fast response, low leakage, and a wide choice of materials to withstand high temperatures and pressures.

LOW POWER CONSUMPTION

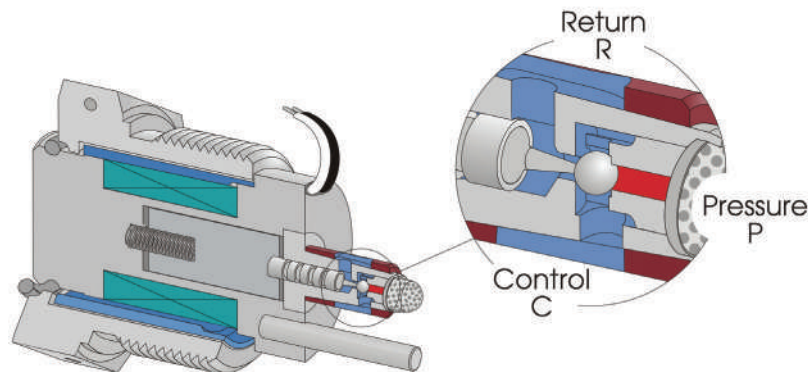
Standard coil designs below 5W and latching configurations available.

COMPACT DESIGN

Our MultiSeal™ technology offers significant space savings and reduces machining costs.

SOLENOID VALVE FEATURES:

- ⬡ Designs proven through decades of performance in the field
- ⬡ 100% tested
- ⬡ Highly configurable
 - 2/3 Way
 - Normally open/Normally closed
 - Single/Dual coil
 - Lead wire/Connector
 - Retaining nut/Flange mount
- ⬡ Low leakage

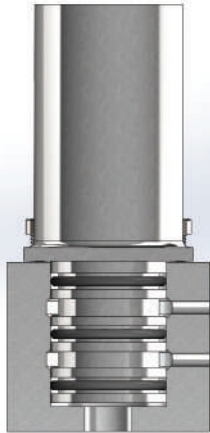


Standard 3-way, single coil, normally closed configuration

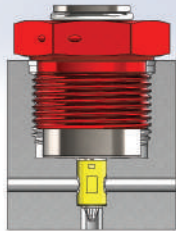


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TRADITIONAL VS. LEE



Traditional Flange Mounted Solenoid Valve



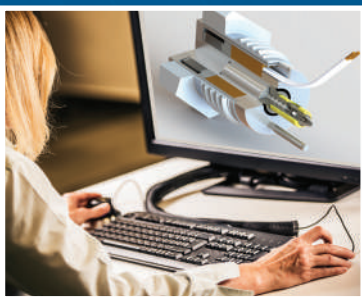
Lee Miniature Piloting Solenoid Valve

FIELD-PROVEN INNOVATION.

Using patented MultiSeal™ technology and a compact, efficient coil design, The Lee Company offers the smallest solenoid valves available to the market. These valves have proven themselves with decades of use in demanding applications under harsh conditions ranging from the high temperatures and pressures of deep subsea oil wells to the cold and vacuum of outer space – places where superior reliability and consistent performance are absolute requirements. Our success in these challenging environments is made possible by a highly technical staff – one engineer to every seven employees – who drive our capabilities forward and keep us at the forefront of fluid control technology.

COMMITMENT TO QUALITY AND RELIABILITY.

Quality at The Lee Company is a company-wide, management driven commitment. Lee invests heavily in facilities, people, and state-of-the-art equipment, enabling us to perform all machining, assembly, and testing in-house. Every component is tested prior to shipment to ensure the highest levels of reliability and repeatability. This commitment to end-to-end quality control assures that Lee products will consistently meet and exceed the performance demands of mission-critical applications.



ENGINEERED FOR YOUR REQUIREMENTS.

We offer a broad line of standard solenoid valves, but meeting the exact requirements of a particular application often requires a custom solution. Our solenoid valves can be customized to meet your needs, whether that requires operating in extreme environments, accommodating electrical requirements or modifying the hydraulic interface. Our global sales force of degreed engineers can provide fast, accurate technical assistance to help you find the best solution for your fluid control problems.

FOR MORE DETAILS, VISIT

www.theleeco.com/solenoid

OIL INDUSTRY



The Lee Company meets the challenges of extreme temperatures and pressures in down-hole environments and the demand for small size and compatibility with aggressive fluids.

CAPABILITIES:

- ⬡ NACE-compliant materials for a wide range of fluid compatibility
- ⬡ Reduced diameters to accommodate down-hole space constraints
- ⬡ High temperatures (450°F)
- ⬡ High pressures (7500 psid, pressure-balanced for extreme hydrostatic pressures)
- ⬡ Magnetic latching to reduce battery drain
- ⬡ Pressure to close designs

APPLICATIONS:

- ⬡ Subsea control systems
- ⬡ Steerable drilling tools
- ⬡ Completion tools
- ⬡ Wireline tools
- ⬡ Well tractors
- ⬡ ROV

AIRCRAFT

Reliability is the number one concern for any aircraft, but size, weight, and affordability are also important factors. The Lee Company delivers on all counts.

CAPABILITIES:

- ⬡ Ultra-fast response
- ⬡ Integrated diodes
- ⬡ Manual override
- ⬡ Pressure to close
- ⬡ Multiple interface options:
 - O-Ring
 - Face mount
 - LRU connectors

APPLICATIONS:

- ⬡ Primary flight controls
- ⬡ Fuel systems
- ⬡ Landing gear
- ⬡ Engine driven pump
- ⬡ Bleed air systems
- ⬡ RAM air turbine



SPACE



The vibration, shock and weight requirements of launch create unique challenges that are compounded by the extreme environment of space. Lee Solenoid Valves meet these challenges in a small lightweight package.

CAPABILITIES:

- Low power consumption
- Materials compatible with propellants and oxidizers
- Low pneumatic leakage
- Precision cleaning
- High speed operation

APPLICATIONS:

- Fuel pilot valves
- Thrust vector control actuation
- Satellite propulsion

HIGH PERFORMANCE RACING

Small, lightweight, reliable designs are critical in every race. Yearly rule changes make The Lee Company's responsiveness and quick turnaround on parts the potential difference between success and failure.

CAPABILITIES:

- Fast response times (as low as 5 ms)
- Short lead times on parts and engineering support
- 12 VDC coil designs
- Offset porting for manifold flexibility

APPLICATIONS:

- Rear wing control
- Clutch disengage system
- Fuel filler cap
- Reverse gear select
- Lubrication system



COMPLETE FLUID CONTROL.

The Lee Company is wholly dedicated to high-precision fluid control. We offer a wide range of solutions, all engineered to deliver the highest levels of reliability and performance.



**Lee Plug®
Expansion Plugs**



Restrictors



Nozzles



Lee Chek® Valves



**Flow Control
Components**



Shuttle Valves



Relief Valves



Safety Screens



Solenoid Valves



**Positive
Displacement
Pumps**