OVERVIEW
SERVO VALVE
RANGE

FLEXIBLE DESIGN, HIGH PRODUCTIVITY

WHAT MOVES YOUR WORLD
# Valve Types Explained

<table>
<thead>
<tr>
<th>Mechanical Feedback (MFB)</th>
<th>Electrical Feedback (EFB)</th>
<th>Direct Drive Valve (DDV)</th>
<th>Digital (DCV) and Axis (ACV) Control Valve</th>
</tr>
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- Robust construction for use in extreme environments
- Suitable for use in high temp/high shock environments
- Very high response valve options available
- Intrinsically Safe Atex Approved Options
- Simple integration and commissioning

### Nozzle Flapper Pilot
- G631
- G761
- G771
- G772
- G773
- 72
- 79-100
- 79-200

### Servojet
- D661
- D662
- D663
- D664
- D665

### DDV Pilot
- D681
- D682
- D683
- D684
- D685

### Nozzle Flapper
- D765
- D791
- D792

### Flow Control
- D633
- D634
- D636
- D637

### Pressure Control (PQ)
- D638
- D639

- Inherently high resolution for extreme accuracy requirements
- Integral Diagnostic function
- High flow valve options available
- Exd Atex approved options
- Directly Accommodates common PLC command signals

- Inherently high resolution for extreme accuracy requirements
- High Force Linear motor technology provide greater energy efficiency
- Operates down to zero supply pressure
- Analogue Pressure control technology option
- Simple onboard diagnostics

- Integrate Digital Electronics with fieldbus technology
- Sophisticated diagnostic software and error handling capabilities
- Software configurable valve function
- Simplifies multi-axis system communications
- Integrated “System” closed loop controller (ACV)
Moog has built a reputation for engineering world-class products. Ensuring these products continue to deliver unsurpassed performance and productivity is the role of Moog Factory Repair. Here are a few real-world examples that showcase how critical the right service and support can be.

**Authentic Moog Replacement Parts**
The Unauthorised Repair House (URH) repair on the left suffered from internal leakage 9 times the Moog specification. The Moog Factory Repair on the right was brought back to “As New” performance with an authentic Moog replacement spool piece, delivering higher pressure gain and precise flow control.

**Servo Valve Repair**
As Unauthorised Repair Houses do not have access to authentic Moog parts, the quality of the repair may be limited to the effectiveness of their cleaning process. The valve on the left was cleaned by the URH. Material build-up can break free, prematurely clogging the small orifices shown in this photograph. Moog would replace the component as shown on the right.

**Actuator Repair**
Moog is the OEM supplier of actuators for many turbine engine manufacturers. We are uniquely qualified to perform repairs and overhauls during power plant outages. Incorrect assembly and material selection as shown on the left will lead to unplanned downtime and lost profits.

**Pump Repair**
Unable to repair the RKP pump pictured on the left, the URH returned the pump to the customer disassembled. The same pump is pictured at right after a Moog Factory Repair to “As New” performance and painted in accordance with custom customer specifications.
MOOG VALVE TYPES EXPLAINED
1. Selection of the optimum valve involves understanding the performance requirements of your applications. Broadly, this comprises of two parameters:
2. The system power requirement which relates broadly to the maximum rated flow of the valve (blue bars)
3. The required system dynamics which correspond closely to the small signal frequency response of the valve (red bars)
Moog offers a wide range of motion control products and systems incorporating a wide variety of world-class electric and hydraulic components.

• Actuators (Electric and Hydraulic)
• Ball Screws and Roller Screws
• Integrated Hydraulic Systems
• Miniature Actuation Products and Systems
• Servo and Machine Motion Controllers
• RKP-II Radial Piston Pumps
• Servo Drives
• Servo Motors
• Slip Rings
• Simulation and Test Systems
• Test Controllers