# Manifold Mounted Proportional Directional Control Valves

# **Proportional Valves**

Parker proportional valves employ powerful voice-coil valve technology, which allows higher flows from smaller valves. Our valves offer extremely high response up to 300 Hz, and are offered with or without on-board control electronics.

Three performance levels are provided:

- Economical standard performance valves are suitable for automotive, marine equipment, and metal fabrication applications, offering open-loop controlling velocity.
- Medium performance valves employ spool feedback and use both open and closedloop control in applications such as material feeding and edge grinding.
- Applications requiring pressure and force control, as well as closed-loop control for tight positioning, are perfect for Parker's high-performance proportional valves.



#### Series D\*FW, D\*FT

- Optional integrated control electronics with ramp adjustment
- Low leakage
- Progressive flow characteristics for improved low flow resolution
- Spring-centered main stage spool
- Wide selection of spool options and flow capacity



#### Series D\*FP

- Servovalve dynamics
- Full flow capacity up to 315 Bar (4500 PSI) pressure drop through the valve
- Maximum tank pressure 315 Bar (4500 PSI) with external drain Y-port
- Spool moves to defined position on loss of power
- High flow



### Series D\*\*FL

- Integrated microprocessor based valve electronics
- On-board open-loop motion control profiler
- Optically isolated 'on-off' inputs trigger motion profiles
- User selectable operation modes: slow shift or profiler
- Test points indicating speed and ramp settings
- On-board microprocessor selfdiagnostics on start-up
- LED functional diagnostic indicators
- Spring-centered spool
- Manual overrides



#### Series D\*FB

- Spool/Sleeve designs
- High repeatability from valve to valve
- Low hysteresis
- Manual override



#### Series D\*1FS

- High performance, two-stage pilot operated solenoid valves
- Electronic spool position feedback
- High frequency response
- Spring-centered main stage spool
- LED functional diagnostic indicator
- Wide selection of spool options and flow capacity
- 2:1 ratio and regeneration spool options



#### Series D\*1FP

- High dynamics
- High flow
- Defined spool positioning in case of power supply breakdown
- On-board electronics
- Closed loop position controlled pilot valve and main stage



# Series D1FC

- Spool/Sleeve designs
- Spool position feedback
- High repeatability from valve to valve
- Very low hysteresis
- Manual override

