



EPR Series

Electro-proportional Pressure Reducing Valves



ENGINEERING YOUR SUCCESS.

EPR Series

Parker's EPR valve provides remote pressure control for hydraulic devices up to 285 bar (4,000 psi), most typically for power shift transmissions available as either a screw-in or slip-in mounting configuration. The EPR valve is proportionally controlled by the solenoid's electro-magnetic force, providing smooth proportional pressure control for shifting and clutch engagement with a high level of controllability.



The EPR valve is proportionally controlled by the solenoid's electro-magnetic force, providing smooth proportional pressure control for shifting and clutch engagement with a high level of controllability.

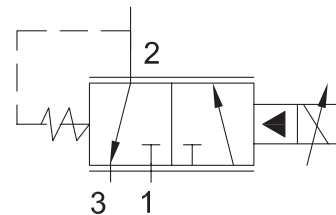
Parker's EPR valve solution outperforms manually operated valve alternatives and provides a distinct competitive advantage due to simple system integration through programming and installation, extended clutch and transmission life, and reduced maintenance.

Combining Parker's EPR valve with an electronic control module provides a unique high-quality solution that will help machinery outperform their competition and increase market share.

A unique high-quality solution that will help machinery outperform their competition and increase market share

How It Works

The hydraulic system's current-controlled valve driver sends a Pulse Width Modulated (PWM) signal to the EPR valve's solenoid coil to set the desired output control pressure of the valve assembly. Inlet pressure to the EPR valve is directed to the control port and held to the desired pressure level. When the pressure in the control port rises due to external forces, the EPR relieves any excess pressure to a separate relieving port, enabling the hydraulic system to maintain the desired control pressure at all times. End users can expect reductions in energy consumption related to the smooth operation of powershift or other systems.



For more technical details please consult our catalog pages available on our website www.parker.com/hcs or by emailing us at HCSinfo@parker.com.

Features & Benefits

The EPR valve's market leading performance features the capability to handle flow rates up to 60 lpm (15 gpm) and can control pressures as high as 285 bar (4,000 psi). For systems with pressures less than 70 bar (1,000 psi), a slip-in style is available, otherwise a threaded screw-in style connection is available for systems with pressure in excess of 70 bar (1,000 psi), making the EPR a versatile addition for numerous applications.

Ease of Use:

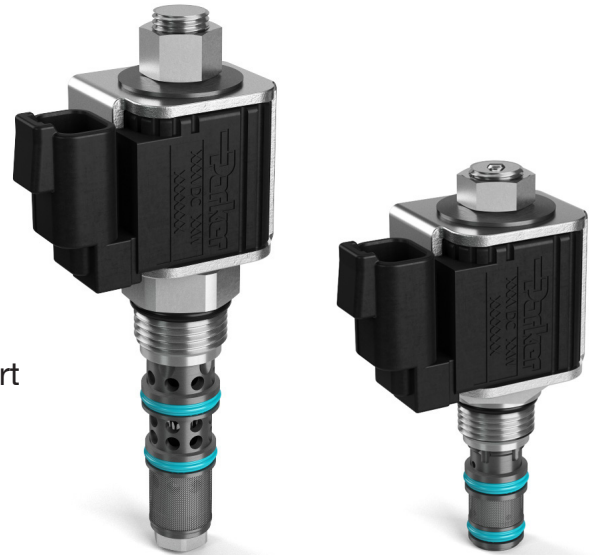
- Valve Installation
- Programming Simplicity
- Zero Calibration Required

Superior Engineering:

- Predictable and Consistent Performance
- High Quality Manufacturing
- Ability for OEM Specific Customization
- Global Manufacturing, Distribution, and Support

Reduced Service and Maintenance:

- Extended Vehicle Service Life
- Improved Fuel Efficiency
- Extended Clutch and Transmission Life
- Reduced Wear & Life-cycle Cost of Operation
- Improved Uptime



Markets & Applications

Parker's EPR valve is primarily targeted towards the Agriculture and Mobile Hydraulics markets. This valve can be used in many applications that require remote pressure control such as hydraulically actuated clutches and pumps or motors.

Specific applications include but aren't limited to:

- Powershift Clutches/Transmissions
- PTO Clutches
- Service Brake Control
- Engine Brake Control
- Pump Stroking/Control
- IVT Control
- Other Mobile Hydraulic Devices Requiring Remote Pressure Control





Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
595 Schelter Road
Lincolnshire, IL 60069
phone 847 955 5000
fax 847 383 8900
www.parker.com/hcs
hcsinfo@parker.com