

Parker Product Datasheet



Parker's pilot operated pressure reducing valves are capable of flows up to 150 lpm (40 gpm) and regulating pressures up to 350 bar (5000 psi) and are commonly used for setting the pressure of a sub-circuit within a hydraulic system.

PART NUMBER: PRH102S30

FLOW RATE: 15 GAL/MIN, 56.3 L/MIN

SEAL MATERIAL: D-ring (Standard)

PRESSURE CONTROL RANGE: 600-3000 PSI, 41.4-210 BAR

ADJUSTMENT MECHANISM: Screw

PRODUCT OVERVIEW

Parker's family of pilot operated pressure reducing valves provide stable pressure control with low pressure rise in applications where specific a specific pressure is needed for precise operation on functions that require regulated pressures up to 350 bar (5000 psi) and flows up to 150 lpm (40 gpm). Parker's pilot operated reducing valves are designed with several pressure and flow ranges in order to give a higher degree of control with a variety of adjustment style options available. The additional valve stability due to the pilot operation make these valves ideal for functions such as brake releases, dual pressure circuits, pilot pressure control, and downstream pressure control on various types of machinery within the mobile and industrial markets.

Markets:

- Industrial
- Miscellaneous Manufacturing
- Miscellaneous Mobile

Features/Benefits:

- Spool design provides low hysteresis
- Low parasitic loss
- High pressure capable
- Multiple pressure ranges available for more accurate pressure control
- Adjustable and tamperproof versions available
- All external parts zinc plated
- Hardened, precision ground parts for durability
- “D”-Ring seal standard on Winner's Circle
- Low profile adapter for minimal space requirements

Applications:

- Brake release
- Multiple pressure circuits
- Pilot pressure control

TECH SPECIFICATIONS

MAXIMUM OPERATING TEMPERATURE	+200 °F
MAXIMUM OPERATING TEMPERATURE	+93 °C
DIVISION	Hydraulic Valve Systems Division
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MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM OPERATING PRESSURE	5000 psi
FLOW RATE	15 gal/min
FLOW RATE	56.3 L/min
MINIMUM OPERATING TEMPERATURE	-37 °C
MINIMUM OPERATING TEMPERATURE	-35 °F
FOR FLUID TYPE	Mineral-based or synthetic hydraulic fluids

BODY MATERIAL	N/A
SEAL MATERIAL	D-ring (Standard)
WEIGHT	0.5 lb
WEIGHT	0.23 kg
OPERATING TEMPERATURE	-35 to +200 °F
OPERATING TEMPERATURE	-37 to +93 °C
MAXIMUM FLOW RATE	56.3 L/min
MAXIMUM FLOW RATE	15 gal/min
MOUNTING TYPE	Screw in cartridge valve
FUNCTION	Pilot Operated
ACTUATION TYPE	Pressure Sensing
OPERATION TYPE	Automatic
CONFIGURATION	Pressure Reducing
PRESSURE CONTROL RANGE	41.4-210 bar
PRESSURE CONTROL RANGE	600 to 3000 psi
MAXIMUM KINEMATIC VISCOSITY	45-2000 SSU (6 to 420 cSt)
FILTER EFFICIENCY RATING	ISO 4406 18/16/13, SAE Class 4
MAXIMUM INLET PRESSURE RATING	380 bar
MAXIMUM INLET PRESSURE RATING	5500 psi
MAXIMUM PRESSURE SETTING	3000 psi
MAXIMUM PRESSURE SETTING	210 bar
ADJUSTMENT MECHANISM	Screw
VALVE MATERIAL	All parts steel. All operating parts hardened steel.
PRESSURE CONTROL SENSITIVITY	942 per turn psi

PRESSURE CONTROL SENSITIVITY	64.9 per turn bar
CAVITY SIZE	C10-3
INSTALLATION TORQUE	51 to 55 lb-ft
INSTALLATION TORQUE	69 to 75 Nm
MAXIMUM TANK PRESSURE	5000 psi
MAXIMUM TANK PRESSURE	350 bar
STANDARD SETTING PRESSURE	103.5 bar
STANDARD SETTING PRESSURE	1500 psi
MAXIMUM DRAIN FLOW RATE	0.94 L/min
MAXIMUM DRAIN FLOW RATE	0.25 gal/min