Parker Product Datasheet

REGIONAL - Parker’s 2-position, 2-way normally-closed manual poppet valves are available with stem, knob, or lever actuators and are capable of flows up to 49 lpm (13 gpm) and pressures as high as 210 bar (3000 psi).

PART NUMBER: DL101K
FLOW RATE: 13 GAL/MIN, 48.8 L/MIN
SEAL MATERIAL: Nitrile
ACTUATION TYPE: Knob
CONFIGURATION: Normally Closed

PRODUCT OVERVIEW

Parker’s selection of 2-position, 2-way normally-closed manual poppet valves provide a low leak solution to simple 2-way manually operated circuits. These valves are capable of flows up to 49 lpm (13 gpm) and pressures as high as 210 bar (3000 psi). Parker’s 2-position, 2-way normally-closed manual poppet valves are available with knob, stem, lever, or lock pin manual controls in a normally-closed configurations and are ideal for on/off style applications, such as emergency lift/lower circuits or just simple actuation or motor control on a variety of machinery within the construction, material handling, or industrial markets.

Markets:
• Construction
• Material Handling
• Miscellaneous Industrial
• Miscellaneous Mobile

Features/Benefits:
• Low leak poppet design
• External parts zinc plated

Applications:
• On/off applications
• Emergency lower/actuate applications

Additional Technical Insight:
DL081 is a manually operated 8 GPM (30 LPM) check valve that is rated for 3000 psi (210 Bar) and has leakage rates of less than 5 drops per minute. In the unactuated state oil at port 2 is prevented from exiting port 1. Once the valve is actuated, oil is allowed to pass from port 2 to port 1. Back pressures on port 1 greater than 80 psi (5.5 Bar) will prevent the internal spring from closing the poppet, so care should be taken to ensure port 1 is plumbed back to the reservoir with minimum restriction. Knob, Stem, Lever, and Lock Pin actuators are standard options.

DL101 is a manually operated 13 GPM (49 LPM) check valve that is rated for 3500 psi (240 Bar) and has leakage rates of less than 5 drops per minute. In the unactuated state oil at port 2 is prevented from exiting port 1. Once the valve is actuated, oil is allowed to pass from port 2 to port 1. Back pressures on port 1 greater than 250 psi (17.3 Bar) will prevent the internal spring from closing the poppet, so care should be taken to ensure port 1 is plumbed back to the reservoir with minimum restriction. Knob and Stem actuators are standard options.

Parker’s DL081 and DL101 manual check valves are ideal for emergency lowering applications and for on-off applications where manual actuation is desired to allow flow to return to a reservoir with limited back pressure.

TECH SPECIFICATIONS

MAXIMUM OPERATING TEMPERATURE	+121 °C
MAXIMUM OPERATING TEMPERATURE	+250 °F
DIVISION	Hydraulic Valve Systems Division
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MAXIMUM OPERATING PRESSURE	240 bar

MAXIMUM OPERATING PRESSURE	3500 psi
FLOW RATE	48.8 L/min
FLOW RATE	13 gal/min
MINIMUM OPERATING TEMPERATURE	-34 °C
MINIMUM OPERATING TEMPERATURE	-30 °F
FOR FLUID TYPE	Mineral-based or synthetic hydraulic fluids
CONNECTION TYPE	N/A
CONNECTION SIZE	N/A
BODY MATERIAL	N/A
SEAL MATERIAL	Nitrile
WEIGHT	0.09 kg
WEIGHT	0.21 lb
OPERATING TEMPERATURE	-34 to +121 °C
OPERATING TEMPERATURE	-30 to +250 °F
MAXIMUM FLOW RATE	48.8 L/min
MAXIMUM FLOW RATE	13 gal/min
MOUNTING TYPE	Screw in cartridge valve
FUNCTION	Poppet Type
ACTUATION TYPE	Knob
OPERATION TYPE	Manual
LEAK RATE	5 @ 3500 PSI (240 BAR) drops/min
CONFIGURATION	Normally Closed
MAXIMUM KINEMATIC VISCOSITY	45-2000 SSU (6 to 420 cSt)
FILTER EFFICIENCY RATING	ISO 4406 18/16/13, SAE Class 4
CRACKING PRESSURE	N/A
FLOW DIRECTION	Port 2 (side) inlet - Port 1 (nose) outlet

MAXIMUM INLET PRESSURE RATING	3500 psi
MAXIMUM INLET PRESSURE RATING	240 bar
VALVE MATERIAL	All parts steel. All operating parts hardened steel
CAVITY SIZE	C10-2
INSTALLATION TORQUE	22 Nm
INSTALLATION TORQUE	16 lb-ft
MAXIMUM TANK PRESSURE	250 psi
MAXIMUM TANK PRESSURE	17.3 bar