

Parker Product Datasheet



Parker's ball and poppet style check valves are cartridges designed to be inserted inside manifolds and can handle flow up to 500 lpm (132 gpm) and pressures at 420 bar (6,000 psi) for circuit optimization and space savings.

PART NUMBER: D1B125-1.0N

FLOW RATE: 132 GAL/MIN, 500 L/MIN

SEAL MATERIAL: Nitrile

CRACKING PRESSURE: 15 PSI, 1 BAR

MAXIMUM INLET PRESSURE RATING: 6000 PSI, 420 BAR

PRODUCT OVERVIEW

Parker's ball and poppet style insert check valves save space and reduce complexity with their high flow and low leak designs. These valves have the capability to handle flow up to 500 lpm (132 gpm) and pressures at 420 bar (6,000 psi), with a variety of crack pressure settings available as standard options. The simple construction and tolerance for contamination makes these insert check valves a cost effective solution for hydraulic systems across many markets and applications.

Markets:

- Construction Equipment
- Material Handling Equipment
- Miscellaneous Industrial
- Miscellaneous Manufacturing
- Miscellaneous Mobile

Features/Benefits:

- For inserting inside manifold blocks
- Minimal leakage – less than 3 drops/min
- High flow capacity
- Simple construction – extremely cost effective
- Wide range of crack pressures available
- High tolerance for contamination
- All external parts zinc plated

Applications:

- High flow applications
- Load holding
- Markets where cleanliness is an issue

TECH SPECIFICATIONS

MAXIMUM OPERATING TEMPERATURE	250 °F
MAXIMUM OPERATING TEMPERATURE	121 °C
DIVISION	Hydraulic Valve Systems Division
DIVISION	Hydraulic Valve Systems Division Europe
MAXIMUM OPERATING PRESSURE	6000 psi
MAXIMUM OPERATING PRESSURE	420 bar
FLOW RATE	500 L/min
FLOW RATE	132 gal/min
MINIMUM OPERATING TEMPERATURE	-30 °F
MINIMUM OPERATING TEMPERATURE	-34 °C
FOR FLUID TYPE	Synthetic Hydraulic Fluids
FOR FLUID TYPE	Mineral-based Hydraulic Fluids
CONNECTION TYPE	n/a

CONNECTION SIZE	n/a
BODY MATERIAL	n/a
SEAL MATERIAL	Nitrile
WEIGHT	0.13 lb
WEIGHT	0.6 kg
OPERATING TEMPERATURE	-34 to 121 °C
OPERATING TEMPERATURE	-30 to 250 °F
MAXIMUM FLOW RATE	500 L/min
MAXIMUM FLOW RATE	132 gal/min
MOUNTING TYPE	Inside Manifolds
FUNCTION	Check
ACTUATION TYPE	Pressure Sensing
OPERATION TYPE	Automatic
LEAK RATE	3 drops/min
LEAK RATE	n/a
CONFIGURATION	Insert
MAXIMUM KINEMATIC VISCOSITY	45-2000 SSU (6 to 420 cSt)
FILTER EFFICIENCY RATING	ISO 4406 18/16/13
FILTER EFFICIENCY RATING	SAE Class 4
CRACKING PRESSURE	1 bar
CRACKING PRESSURE	15 psi
FLOW DIRECTION	2-1 Checked
FLOW DIRECTION	1-2 Free Flow
MAXIMUM INLET PRESSURE RATING	6000 psi
MAXIMUM INLET PRESSURE RATING	420 bar
VALVE MATERIAL	Steel (all parts)

VALVE MATERIAL

Hardened Steel (all operating parts)

CAVITY SIZE

2C