

DHCR1500R

Complete hydraulic test kit to measure flow, pressure and temperature under load

Up to

- 1500 lpm, 400 US gpm
- 420 bar, 6,000 psi

Made up of two kits: DHCR-LT1500 kit & HV1500 kit

The DHCR1500R digital test kit combines a flow meter and load valve kit to produce a hydraulic tester capable of handling the flows up to 1500 lpm (400 US gpm) and pressures up to 420 bar (6000 psi) as might be found in the very largest mobile and static hydraulic machinery.

The LT1500 flow block accurately measures flow, pressure and temperature.

The HV1500 loading valve gives smooth progressive pressure control allowing components such as pumps, cylinders or motors to be tested without re-plumbing the test connections.

The loading valve incorporates a safety disc system which protects the device from over-pressurisation above the rated 420 bar (6000 psi). In the event of overpressure the discs rupture and operate an internal oil bypass valve. Oil is never vented to atmosphere, so protecting the environment and operator from oil spillage.

The DHCR readout can be used in the most convenient position with the flow block installed anywhere in the circuit. The readings are displayed in US or Metric units, selected by push button.

This diagnostic setup can pin point hydraulic system faults, reduce downtime and help in preventative maintenance. Please note that the HV1500 is designed for loading a system and is not suitable as a shut-off valve to hold a static load.



Manufacturers of hydraulic components and test equipment
for the Mobile, Industrial and Agricultural industries



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Features

DHCR-LT1500 kit

- **FLOW:** Up to 1500 lpm, 400 US gpm
- **PRESSURE:** Up to 420 bar, 6000 psi
- **ACCURACY:** $\pm 1\%$ of indicated reading
- **FAST** checks on pumps, motors, valves, cylinders and hydrostatic transmissions.
- **REMOTE INPUTS:** 2 Flow and Temperature, Pressure and Speed
- **ECONOMICAL** low power consumption from standard battery. Automatic "Power Off" feature.
- **INFRA-RED PHOTOTACHOMETER** with 'On Target' indicator.
- **MEASURES** flow in both directions (Note: LT1500 is uni-directional when used with HV1500 kit)

HV1500 kit

- Smooth progressive pressure control
- High tensile aluminium body rated at 420 bar (6000 psi)
- Connecting flange for use with DHCR-LT1500 kit included, with seals and bolts
- Pilot operated over pressure internal bypass valve
- Spare burst discs included
- Uni-directional



DHCR1500-BU-USA-2476.pdf 01/10
(Issue 1)

DHCR-LT1500 kit

Dimensions in Millimetres (Inches)

Contents

DHCR, LT1500, connecting hose and cable assembly, user manuals all housed in a rugged carry case.

Case Dimensions: 626 x 492 x 350 (24.6 x 19.4 x 13.8)

Total Weight (Inc Case): 24 kg (53 lbs)

Operating specification for all parts

Ambient temperature: 15 to 40 °C (59 to 104 °F)

Ambient humidity: 10 to 95% RH

Altitude: up to 2000m (6,500 feet)

Oil temperature range: 15 to 90 °C (59 to 194 °F)

Oil cleanliness: ISO 18/15/12 (NAS 6) or better

Fluid type: Mineral oil only typically ISO 15 -68 oil

Viscosity Range: 10 centi-strokes to 100 centi-strokes

Max pressure: 420 bar (6,000 psi)

Seals: Viton

DHCR

Inputs: 1 pressure, 1 speed, 2 flow and temperature

Max pressure: 420 bar

Engineering units: (selectable)

Flow: lpm, US gpm, l gpm

Temperature: °C or °F

Dimensions: 200 x 160 x 90 (7.8 x 6.3 x 3.5)

Weight: 2.6 kg (5.7 lbs)

See Separate Bulletin for further information.

LT1500

Main ports: 2" #32 SAE Code 62 4-bolt flange

Top ports: 7/16" -20UN #4 SAE ORB x 2

Flow range: 50 to 1500 lpm (13 to 400 US gpm)

Accuracy*: 1% of indicated reading over 15 to 100% of flow range. (Below 15% of flow range ± 2.25 lpm) * When used with DHCR

Dimensions: 260 x 140 x 100 (10 x 5.5 x 4)

Weight: 10 kg (22 lbs)

Frequency Output

Frequency: 20 - 2000 Hz

Impedance: 3700 Ohm +25% - 20%

Inductance: 1 kHz: 1,55H +25% - 20%

Construction

High tensile aluminium block houses a six blade turbine rotating on a combination axial/radial needle roller bearing and alloy steel shaft.

Filtration

It is recommended that a 25 micron filter is installed in the hydraulic circuit prior to the flow meter.

HV1500 kit

Dimensions in Millimetres (Inches)

Contents

HV1500 load valve, 2" #32 SAE Code 62 4-bolt flange Connector and fitting kit, user manual, all housed in a rugged carry case.

Case Dimensions: 626 x 492 x 350 (24.6 x 19.4 x 13.8)

Total Weight (Inc Case): 39 kg (86 lbs)

Specification

Controllable flow range: 100 - 1500 lpm (26 - 400 US gpm)

Ports, load valve: 2" #32 SAE Code 62 4-bolt flange

Ports, connector: 2" #32 SAE Code 62 4-bolt flange

Dimensions: 300 x 250 x 140 (12 x 10 x 5.5)

Weight: 28 kg (61.6 lbs)

Construction

Wetted parts:

High tensile aluminium block, Steel 212A42 electroless nickel plated and alloy steel.

Ordering information

Description	Order code / model number
DHCR / LT1500 kit	DHCR1500K
HV1500 kit	HV1500K

Installation

Dimensions in Millimetres (Inches)

