WEBTEC
Product Overview

See our range of hydraulic components and test equipment

Hydraulic measurement and control
Our vision
We believe in being better than we are today, striving to constantly improve, and inspiring others to enjoy the challenges that engineering brings. We do this by focusing tirelessly on you, our customer, and your requirements when considering the products that we design, manufacture, supply, service and support.

Quality - ISO 9001:2015
We are an accredited ISO 9001 company and are committed to a programme of “Total Quality”

Research and development
We are committed to developing new high-tech and innovative products to meet our customers’ hydraulic testing needs.

Manufacturing
We manufacture our products using precision CNC machine tools to ensure unparalleled accuracy and quality.

Test and calibration
We have in-house test benches traceable to international standards for the calibration of flow, pressure and temperature sensors.
**Hydraulic Components**

**Flow Control Valves**

**Fixed Flow Pressure Compensated Control Valve**

- Pressure compensated to ensure a constant flow rate under varying pressures
- Pre-set in factory to customer requirements at any flow rate between 0.5 US gpm - 4 US gpm
- Uncontrolled flow is permitted in reverse direction
- Cartridge insert version available, without steel bodyseals

**Variable flow pressure compensated control valve**

- Pressure compensated to ensure a constant flow rate under varying pressures
- Knurled knob enables fast, accurate adjustment of flow rate in one direction (under pressure) from 0.5 US gpm to 15 US gpm
- Free (uncontrolled) flow is permitted in reverse direction

**Fixed priority flow dividers**

- ‘Priority’ flow rate is pre-set in factory to customer specifications at any value between 1.0 US gpm and 9.0 US gpm in increments of 1.0 US gpm.
- Pressure compensated permitting both ‘Priority’ and ‘By-Pass’ flows to be used simultaneously at varying pressures without effecting the ‘Priority’ flow rate.
- Optional built-in pressure relief valve protects the ‘Priority’ circuit from excess pressure.

**Proportional flow dividers**

- Pressure compensated to keep each output flow at a fixed percentage of the input flow, regardless of pressure variations between the output ports.
- Standard proportional splits are available. Other non-standard proportional splits are available upon request.
- Four Input flow ranges are available

**Variable priority flow dividers**

- Clearly marked hand-dial permits fast visual adjustments to predetermined ‘Priority’ flow and fast easy adjustment of ‘Priority’ circuit to meet varying requirements.
- Pressure compensated permitting both ‘Priority’ and ‘By-Pass’ flows to be used simultaneously at varying pressures without affecting the Priority flow rate.
- Anti-tamper locknut option available.
- Reverse flow capable (Depending upon control knob position)
Variable priority flow dividers

- Clearly marked single-turn hand dial permits fast visual adjustments to predetermined ‘Priority’ flow and fast easy adjustments of ‘Priority’ circuit to meet varying requirements.
- Pressure compensated permitting both ‘Priority’ and ‘By-Pass’ to be used simultaneously at varying pressures without affecting the ‘Priority’ flow rate.
- Anti-tamper locknut option available for all models.

Variable priority flow divider with remote proportional control

- Minimum to maximum priority flow in less than 10 seconds (at full pressure)
- 11 – 28 Vdc supply enables unit to be powered from a vehicle supply
- Choice of remote control options: Potentiometer 0.5 - 5 Vdc 4 - 20 mA loop

Variable priority flow dividers with electric motor drive

- Remotely controlled by a toggle or rocker switch (Not supplied).
- No external control box needed. All Electronics are self-contained inside the canister.
- Pressure compensated permitting both ‘Priority’ and ‘By-Pass’ to be used simultaneously at varying pressures without affecting the ‘Priority’ flow rate.
- Designed to meet IP66

Flow divider combiner

- Pressure compensated to keep the two divided flow rates at the same ratio regardless of pressure variations between them.
- Flow ratios are pre-set at factory from 50% - 50% up to 10% - 90%.
- Flow ranges are available from 5 lpm to 70 lpm.
- Cast iron/hardened steel construction (no aluminium) makes it suitable for mining applications.

Non-Return valve

- Straight through porting allows the valve to be connected directly in-line thus making the best use of restricted space.
- Customer can select from 7 valves offering a range of flow ratings and 4 cracking pressure settings.
Hydraulic Components
Directional Control Valves

**Combination valve - variable priority flow divider with directional control**

- Clearly marked single-turn hand dial permits fast visual adjustments to pre-determined ‘Priority’ flow
- Pressure compensated permitting both ‘Priority’ and ‘By-Pass’ to be used simultaneously at varying pressures without affecting the ‘Priority’ flow rate
- Easy installation allowing side or top connections
- Adjustable relief valve factory setting 3200 psi

**Diverter valve**

- Flow may be directed by mechanically pushing the spool with spring offset or by a mechanical push pull operation in which case the valve stem is threaded or fitted with a moulded knob.
- Customer can select from one of two spool types allowing flow to be diverted from one line to another or from system to tank.
- A choice of port threads are available.
- Special versions also available.

**Rotary shear directional control valve**

- Spring to centre or detent action
- Position lock version available. Constructed from zinc plated & stainless steels with technopolymer button or removable key
- Pressurised tank port with additional drain available
- Zero leakage

**Stainless steel rotary direction control valve**

- Pressurised tank port with additional drain available
- Over 4000 possible configurations
- BS EN13463-1:2009 (ATEX) rating of ‘II 3G TX’
- BS ISO 4401-03, NFPA T3.5.1-D03 (CETOP3/NG06/D03) mounting adapter

**Directional control valves**

- Heavy duty, low leakage directional control valve with many customer configurable elements, including selection mechanism, porting, spool type and control plus additional options such as built in relief valves.
- Nitrile rubber seals
- Highly customisable
Flow Condition Monitoring
Analogue and digital flow indicators

FlowHUB digital monitoring solution
- Flow and temperature monitoring - Measure, display, switch, transmit
- Low cost of ownership, accuracy 3% FS
- 5 flow sizes cover range 0.25 - 100 US gpm, option of 3000 / 6000 psi
- Optional switches and analogue output (mA, V)

Hydraulic flow monitors
- Flows up to 150 US gpm
- Pressures up to 3500 psi
- Accuracy 4% of full scale
- Range of porting options
- Low pressure drop

High pressure flow indicators
- Unidirectional, up to 48 US gpm and 6000 psi
- Optional thermometer
- Available in aluminium for oil, or brass for water

CT SAE J1939 CAN Turbine flow meters
- Built-in loading valve optional
- SAE J1939 CAN compatible (configured to customer’s specification)
- Wide range of hydraulic oil, lubrication oils, and fuels

Accuracy: See below
Pressure: Up to 6000 psi
Type: Unidirectional/Reversible
Ports: BSP / NPT
Applications: Hydraulic condition monitoring and test stands

Flow: Up to 150 US gpm

Accuracy: 4% FSD
Pressure: Up to 6000 psi
Type: See below
Ports: BSP / SAE
Applications: Hydraulic condition monitoring and test stands

Flow: Up to 100 US gpm

Unidirectional, up to 100 US gpm and 5000 psi
Optional thermometer
Available in aluminium for oil, or brass for water

Unidirectional, up to 48 US gpm and 6000 psi
Optional thermometer
Available in aluminium for oil, or brass for water

Unidirectional, up to 100 US gpm and 5000 psi
Optional thermometer
Available in aluminium for oil, or brass for water

Reversible, up to 54 US gpm and 6000 psi
Built-in thermometer
Available in aluminium for oil

Accuracy:
Flow:
Pressure:
Type:
Ports:
Applications:

Accuracy:
Flow:
Pressure:
Type:
Ports:
Applications:
Pressure test kits

- Complete kits for pressure testing
- Assembled to customer specification
- Fit test points wherever required in the circuit
- Kit includes gauges, hoses and test points

Mechanical testers

- Improved design, low pressure drop
- Measure flow (reversible), pressure and temperature
- Built-in loading valve, INTERPASS® protected
- No batteries required

Simplified digital testers

- Measure flow (1% FS), pressure and temperature
- Simple ‘On / Off’ control
- Simulate machine performance using loading valve
- INTERPASS® protected

Separate loading valve

- Simulate machine performance (Bidirectional)
- Five models: up to 400 US gpm
- Safe and clean to use, INTERPASS® protected
- Use separately or with LT / CT flow meters

Digital hydraulic multimeter

- Measure flow (1% IR), pressure, peak, power and temperature
- Log results and email a test certificate instantly via QuickCert(TM) App for iPhone®
- Easy to use, four standard screens
- Measure hydraulic pump efficiency with P-Q test
- Simulate machine performance using loading valve
- INTERPASS® protected

Accuracies:
- Flow: Up to 54 US gpm
- Pressure: Up to 6000 psi
- Ports: BSP / SAE
- Applications:
  Agricultural, small-medium mobile machinery

Accuracies:
- Flow: Up to 210 US gpm
- Pressure: Up to 7000 psi
- Ports: BSP / SAE
- Applications:
  Mobile machinery and large fixed installations

Applications:
- Agricultural, small-medium mobile machinery
- Mobile machinery and large fixed installations

Flow rates:
- Up to 54 US gpm
- Up to 210 US gpm

Pressures:
- Up to 6000 psi
- Up to 7000 psi

Ports:
- BSP / SAE
- BSP / SAE

Uses:
- See below

Devices:
- PT100 Series
- RFIK Series
- HV Series
- DHT ‘1’ Series
- DHM ‘4’ Series
- DMI "F" Series
- P-Q Test
- Volumetric Efficiency

Accuracy:
- 4% FSD
- See below

Flow:
- Up to 54 US gpm
- See below

Pressure:
- Up to 6000 psi
- Up to 7000 psi

Use:
- See below
- Bidirectional
Digital testers with remote inputs

- Measure flow, pressure and temperature
- Secondary flow and speed inputs
- Simulate machine performance using loading valve
- INTERPASS® protected

Accuracy: 1% IR
Flow: Up to 400 US gpm
Pressure: Up to 7000 psi
Use: Bidirectional
Ports: BSP / SAE
Applications: Mobile machinery and large fixed installations

Analogue testers with remote input

- Measure flow, pressure and temperature
- External speed input
- Simulate machine performance using loading valve
- INTERPASS® protected

Accuracy: 1% FS
Flow: Up to 210 US gpm
Pressure: Up to 7000 psi
Use: Bidirectional
Ports: BSP / SAE
Applications: Mobile machinery and large fixed installations

Digital test kit (up to 400 US gpm)

- Measure flow, pressure, temperature and optional speed
- Kit designed for hydraulic testing of very large mobile machinery
- Optional load valve rated to 400 US gpm and 6000 bar to simulate machine load

Accuracy: 1% FS
Flow: Up to 400 US gpm
Pressure: Up to 7000 psi
Use: Bidirectional
Ports: BSP / SAE
Applications: Mobile machinery and large fixed installations

OEM test kits

- Custom test kits built to your specification
- Ideal tool kits for service engineers
- OEM branding and marketing solutions available
- Used by major mobile machinery OEMs worldwide
Digital pressure gauge

- Digital pressure gauge with peak capture
- Two pressure ranges available 1500 / 8700 psi
- Backlit display
- Change engineering units

Diagnostic Test Equipment
Portable hydraulic testers

Sensor Recognition (SR):
Sensors can be plugged into any input of an HPM readout, automatic recognition of the type, range and calibration of the sensor. No user input.
Application: Mobile hydraulic system testing

Intelligent Digital (ID):
Digital sensors (CAN protocol) with automatic sensor recognition, connect in-line with one another using shorter cables. Uniquely identified by the datalogger.
Application: In-depth hydraulic system fault-finding

Hydraulic data loggers (SR & ID)

- Two models - choose between SR and ID
- Choose between 2 or 3 input version
- USB connectivity, Nano-USB up to 4GB
- Supplied with HPMComm software

Flow meters (SR & ID)

- Precision turbine flow meters (1% IR)
- 12 models cover range 0.25 - 200 US gpm, up to 7000 psi
- Additional top ports
- With or without built-in loading valve

Hydraulic data loggers (SR & ID)

- 3 models, offering between 16 & 26 inputs
- Connect Intelligent Digital (ID) and Sensor Recognition (SR) sensors
- Full colour 5.7" display, USB, Ethernet
- Supplied with HPMComm software

Sensors (SR & ID)

- Pressure transducers rated up to 15000 psi
- Temperature sensor
- Speed sensor
- Current & voltage input converters for custom sensors
**Test Stand Instrumentation**
*Flow, pressure, temperature speed sensors*

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**CT flow meters**
- Precision turbine flow meters (1% IR)
- 8 models cover range 0.25 - 400 US gpm, up to 7000 psi
- Additional top ports for pressure and temperature
- Other outputs available (mA, V, pulse)

**Pressure transducers**
- Models cover pressure range 1 - 1000 bar
- Accurate to 0.25% full scale
- Fast response time
- Other outputs available (mA, V)

**Temperature sensors**
- Scaled up to 302°F
- Rated to 7000 psi
- Fast response time
- Other outputs available (mA, V)

**4 - 20 mA sensors:**
On-board electronics to optimise accuracy. Industry standard 4 - 20 mA output. Fast and simple to install. Other analogue outputs available.

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**C2000 hydraulic data-acquisition system**
- Complete hydraulic test stand solution
- Includes sensors, hardware, software and training (optional)
- Up to 64 inputs. Choice of mA and frequency
- Display, datalog and produce test certificates

**Applications:**
Condition monitoring, hydraulic test stands, control systems, remote monitoring

**Speed sensors**
- Speed sensor with TTL output
- 0 - 2 kHz magnetic pickup
- Ideal for measuring pump/motor speed
- Connects directly into C2000

**Flow meters - special applications**
- Precision gear type flow meters (0.5% IR)
- 3 models cover flow range 0.3 - 40 US gpm up to 6000 psi
- Bidirectional
- 4-20 mA as standard

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**CT-mA Series**

**MPT Series**

**TP Series**

**SP-TTL Series**

**GF Series**