

# HPM 400 Series Handheld Digital Test System

- Flow
- Pressure
- Temperature
- Speed



The HPM 400 Handheld Digital Test System and its associated pressure, temperature and flow sensors provide an accurate, economic and user friendly solution for servicing and commissioning hydraulic systems.

The HPM 400 readout has two inputs which recognise which pressure, temperature or flow sensors are connected and automatically sets the correct calibration to each input for the sensors being used. The HPM 400 can be used in extreme service conditions. It has a heavy duty protective rubber cover and can be hand held or used as a desk top unit with built-in stand.

The readout is powered by a 9 Volt battery, an optional rechargeable battery and charger is available. This easy to use diagnostic test system can be used in preventative maintenance, checking the correct setting of valves, pin pointing the cause of low flow, measuring differential pressure and capturing pressure shocks. Accessories include a wide range of pressure transducers, flowmeters, temperature sensors and test points.

## Features

- **DIGITAL DISPLAY** Pressure, Temperature, Flow, Differential Pressure.
- **AUTOMATIC** set-up for any Webster sensor
- **ACCURACY** Pressure within 0.5% of full scale  
Flow within 1% of full scale.
- **PRESSURE** up to 630 bar, peaks to 1000 bar.
- **FLOW** Bi-directional 0.3 to 600 lpm 420 bar.
- **TEMPERATURE** -25 +125°C.
- **LOADING VALVE** Turbines with built in loading valve or separate loading valve available.
- **SAFE** to use in both directions of **FLOW**. Internal oil by-pass through burst discs in loading valve protects the operator, the system, and the tester against over-pressure.
- **BATTERY POWERED** standard 9 Volt battery with optional rechargeable unit.
- **SWITCHED** min/max values.
- **CARRY CASE** included.

**READOUT HPM400B and HPM400C**

Today's hydraulic system requires a precise quick and easy solution to the measurement of system information.

The HPM400 has a large easy to read 4 digit LCD display with a character height of 13mm.

The two inputs are set automatically when the required sensors are connected, pressure (bar), flow (lpm), temperature (°C), peak pressure and differential pressure can easily be read.

The ABS housing is protected to IP54 and has a rubber cover with built-in stand.

The readout has Auto 'power off' in 15 mins.

The HPM400C has an optical data output.



**Power Supply:** HPM 400B 9 V standard battery  
 HPM 400C Rechargeable battery

**Accuracy:** < 0.3% ± 2 Digit  
**Ambient temperature:** 0 to +50°C  
**Storage temperature:** -20 to +60°C  
**Rel. Humidity:** <85%  
**Dimensions:** l/w/h 145 x 70 x 40 mm  
**Weight:** approx. 340g.

**Pressure Transducer**

**Pressure Ranges:** PT63 0 - 63 bar  
 PT630 0 - 630 bar

**Accuracy:** ± 0.5% FS

**Over Pressure:** 1.5 x rated pressure without damage

**Response time:** 1 ms

**Ambient temperature:** -20 to +85°C

**Compensated temp. range:** 0 to +85°C

**Media temp. range:** - 25 to +105°C

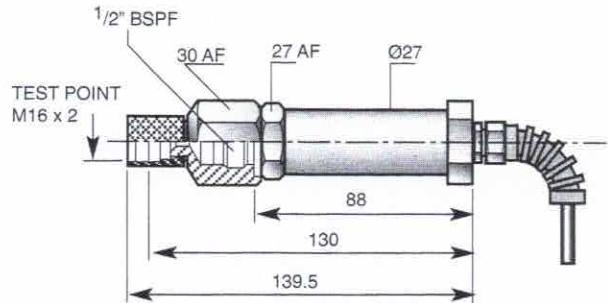
**Temp. deviation:** ± 0.03% span/°C

**Output:** 3 Volts.

**Body material:** Stainless steel 1.4301

**Connecting cable:** 2 metre long included

**Model PT63  
 Model PT630**



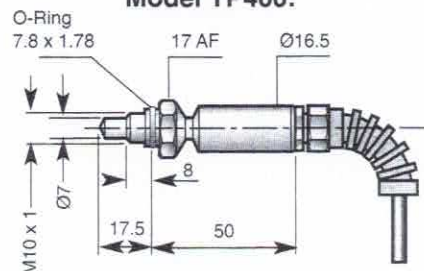
*Note:*  
 To measure differential pressure two (2) transducers of the same pressure range must be used.

*Pressure Transducer to +15 bar available  
 Consult Factory*

**Temperature Probe**

The temperature probe houses a silicone chip which produces a voltage proportional to temperature. The probe can be connected directly into a high pressure line. Media Temperature Range -25°C to 125°C. Ambient temperature range -20 to +70°C.

**Model TP400:**



**Accuracy:** ±1.5% FS

**Maximum pressure:** 630 bar

**Material:** Steel zinc plated

**Connecting Cable:** 2 metre long included

Connection port M10 x 1  
 Adaptor fitting 1/4 BSPF male and Tee fitting (16S) available for pipe mounting.