WEBTEC

WEBTEC PRODUCTS LIMITED

CT Series 3-in-1 Industrial Hydraulic Sensors

One compact unit to measure flow, pressure and temperature

Another quality product from the Webster range

CT Series 3-in-1 Industrial Hydraulic Sensors

Monitoring your hydraulic system couldn't be easier. . .

Hydraulic condition monitoring
It's no coincidence that the CT brings together the measuring of flow, pressure and temperature; monitoring these three factors can tell you a lot about the health of your system.

Pressure line monitoring
If the CT is installed in the pressure line you can monitor the pump flow, oil temperature and the system pressure. All three measurements can be used to trigger an alarm or control another function, for example: to prevent a drop in flow, overheating or a sudden rise in system pressure.

P-Q testing
A common test to measure the performance and health of a pump is to measure the flow at the outlet of the pump at different pressures. Many hydraulic systems will have a standard operating cycle during which the flow will be fixed and the pressure will vary. With a CT installed on the pressure line the flow rates at different pressures can easily be logged and compared every month to monitor for pump wear and pre-empt a hydraulic failure.

Pressure spikes
A common, but difficult to measure cause of hydraulic failure is rapid pressure spikes. This could be caused by bad design or excessive wear, for example by having too little damping in a cylinder; if left uncorrected this can result in fatigue and component or hose failure. A WPT series pressure transducer has a 0.5ms response time ideal for capturing these pressure spikes and you don't need to break into the circuit again as it is mounted directly onto the flow meter.

Measuring power, volume and viscosity
Constantly monitoring the flow, pressure and temperature also allows you to calculate hydraulic power (flow x pressure), total volume of oil pumped (flow x time), oil viscosity* (oil type x temperature) as well as the rate of change of any of the three factors.
(*Theoretical kinematic viscosity)

Webster CT's reduce down-time and save on labour. . .

. . .engineered to make testing of hydraulic machinery fast and convenient.

Ideal for connecting to a digital readout, PLC or PC
All three sensors have on-board signal conditioning making them simple to connect to a panel mount readout, PLC or proprietary PC data-logging system. There are two types of linear analogue output available, either 4 - 20 mA or 0 - 5 V*. You don't need to worry about look-up tables or complex formulae, just enter the zero and full scale values and that's it! (**WPT output is 0 - 10V*).

BSP and SAE ports available
The CT series are available with both BSP and SAE ports across three body sizes (CT800 only available in SAE).

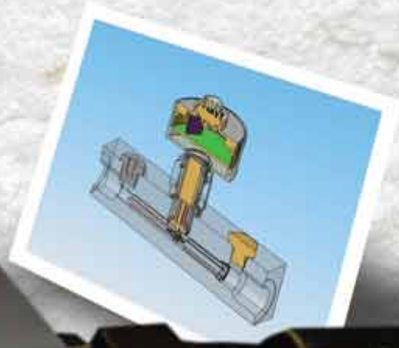
WPT Pressure sensor

CT Flow meter

Choice of four signal types for flow measurement
In addition to the two standard analogue outputs of 4-20mA and 0-5V, frequency (TTL) and Sensor Recognition (SR) models are also available.

Some customers may prefer to use the TTL output with their PLC or readout (signal is unlinearised) while SR output is suitable for use with the Webster HPM series of portable readouts and dataloggers.

TP200 Temperature sensor



Bi-directional
The CT series of turbine flow meters are bi-directional by design with a very low pressure drop as compared to variable orifice flow indicators.

High accuracy with traceable calibration
All CT flow meters are calibrated at 10 points to achieve accuracy of better than 1% IR over a wide range*. Every flow meter is tested against a flow reference that is traceable to UK and International standards.
(**CT15 is accurate to 1% of full scale*).

Rugged construction
The CT series is designed knowing that it may be treated harshly, so all connectors have been specified to minimise possible earthing problems, while the sensor housings are machined to withstand possible knocks.

. . .with the 3-in-1 CT series (only break into your circuit once)

Features and specifications

CT - Conditioned turbine flow meters, 4 - 20 mA or 0 - 5 V output (TTL and SR available)

BSP or SAE Ports

Model	Min Flow*	Scaled range	Pressure
CT15	1 lpm	0 - 15 lpm	420 bar
CT60	3 lpm	0 - 60 lpm	420 bar
CT150	5 lpm	0 - 150 lpm	420 bar
CT300	8 lpm	0 - 300 lpm	420 bar
CT400	10 lpm	0 - 400 lpm	420 bar
CT600	15 lpm	0 - 600 lpm	350 bar
CT800	20 lpm	0 - 800 lpm	480 bar

* *Minimum Calibrated Flow*

Panel Mount
Digital flow readouts

- 9-30 VDC or 85-265 VAC
- Available with relays and analogue outputs
- Can be calibrated with any units

WPT - Pressure transducers, 4 - 20 mA or 0 - 10 V output

BSP or NPT threads

Model	Min Pressure*	Scaled range	Over Range
WPT100-B	1 bar	0 - 100 bar	2 x
WPT250-B	2.5 bar	0 - 250 bar	2 x
WPT400-B	4 bar	0 - 400 bar	2 x
WPT700-B	7 bar	0 - 700 bar	2 x

* *Minimum Calibrated Pressure*

Panel Mount
Digital pressure readouts

- 9-30 VDC or 85-265 VAC
- Available with relays and analogue outputs
- Can be calibrated with any units

TP - Temperature probes, 4 - 20 mA or 0 - 5 V output

BSP, SAE or NPT threads

Model	Output	Scaled range*	Pressure
TP200-mA	4 - 20mA	0 - 150 °C	480 bar
TP200-5V	0 - 5V DC	0 - 150 °C	480 bar

* *Maximum Continuous Temperature 125 °C*

Panel Mount
Digital temperature readouts

- 9-30 VDC or 85-265 VAC
- Available with relays and analogue outputs
- °C or °F

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