



WEBTEC

WEBSTER INSTRUMENTS
(A DIVISION OF WEBTEC PRODUCTS)

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

With the CT 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 signal 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 it is conveniently mounted in the flow block.

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 vs 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 labor. . .

. . .engineered to make monitoring or 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 analog output available, either 4 - 20 mA or 0 - 5 V*. You don't need to worry about look-up tables or complex formula, just enter the zero and full scale values and that's it! (*WPT output is 4-20 mA or 0-10 V).

SAE or BSP ports available

The CT series are available with either SAE or BSP ports across three body sizes (CT750HP only available in SAE).

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% of Indicated Reading over a wide range*. Every flow meter is tested against a flow reference that is traceable to National and International standards.

(*CT15 is accurate to 1% of full scale).

Choice of four signal types for flow measurement

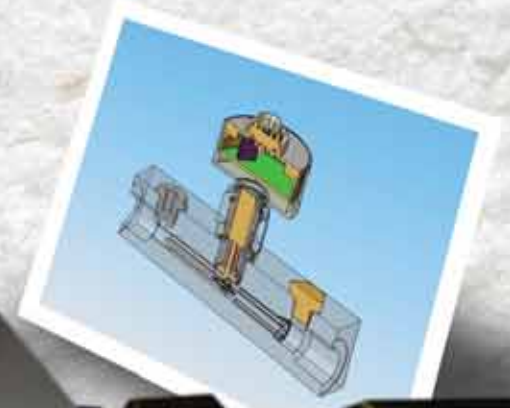
In addition to the two standard analog outputs of 4-20mA and 0-5V, frequency (TTL) and Sensor Recognition (SR) models are also available.

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

WPT Pressure sensor

CT Flow meter



Rugged construction

The CT series is designed knowing that it may be installed in harsh environments, so all connectors have been specified to eliminate possible earthing problems, while the sensor housings are machined to withstand shock and vibration..

. . .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 Sensor Recognition available)



SAE or BSP Ports
Built-in Load
Valve Optional

Model	Min Flow *	Scaled range	Pressure
CT15	0.25 gpm	0 - 4 gpm	6000 psi
CT60	0.8 gpm	0 - 16 gpm	6000 psi
CT150	1.3 gpm	0 - 40 gpm	6000 psi
CT300	2.0 gpm	0 - 80 gpm	6000 psi
CT400	2.5 gpm	0 - 100 gpm	6000 psi
CT600	4.0 gpm	0 - 160 gpm	5000 psi
CT800	5.0 gpm	0 - 210 gpm	6900 psi

* Minimum Calibrated Flow



Panel Mount Digital flow readouts

- 9-30 VDC or 85-265 VAC powered
- Optional with relays and simultaneous 4-20 mA & 0-10 VDC analog outputs
- Can be calibrated with any units

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



NPT or BSP threads

Model	Min Pressure *	Scaled range	Over Range
WPT100-P	1 psi	0 - 100 psi	2 x
WPT3000-P	30 psi	0 - 3000 psi	2 x
WPT6000-P	60 psi	0 - 6000 psi	2 x
WPT10000-P	100 psi	0 - 10000 psi	2 x

* Minimum Recommended Pressure



Panel Mount Digital pressure readouts

- 9-30 VDC or 85-265 VAC powered
- Optional with relays and simultaneous 4-20 mA & 0-10 VDC analog outputs
- Can be calibrated with any units

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



SAE, NPT or BSP
threads

Model	Output	Scaled range *	Pressure
TP200-mA	4-20 mA	0 - 302 °F	6900 psi
TP200-5V	0-5 VDC	0 - 302 °F	6900 psi

* Maximum Continuous Temperature 257 °F



Panel Mount Digital temperature readouts

- 9-30 VDC or 85-265 VAC powered
- Optional with relays and simultaneous 4-20 mA & 0-10 VDC analog outputs
- °C or °F

Your Webster Instruments representative:



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