

Flow Computer

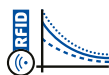
VCA-T Series



Automatic matching
with flow sensor



Real-time data processing



Up to 10 custom fluid curves
selectable

Functional description

The smart VCA-T flow computer is designed for harsh environment. It is best choice for reliable operation at the demanding conditions of vehicle road testing. Due to the extremely compact housing, it simply fits into the engine compartment where space is limited.

The automatic flow sensor identification ensures the flow computer is immediately ready to measure after connected to any VCT series flow meter (Hot-plug-capable). Up to 10 custom fluid curves (viscosity vs. temperature) can be stored for viscosity correction. The actual fluid to be measured can be selected wirelessly by means of an RFID-Tag. Both flow meter frequency and media temperature are precisely measured. A linearised and viscosity-corrected flow rate analoge output is generated in real time. TEDS data memories enable automatic set up of data acquisition systems connected. This significantly simplifies the configuration of the measurement chain.

Input signals

Flow meter pulses	2.5 kHz TTL max.
Media temperature	Single Wire Bus

Output signals

(linearised & viscosity corrected)	
Flow rate (custom scaled)	0 to 10 V
Media temperature (-50°C to +150°C)	0 to 10 V

Flow rate metrological properties

Accuracy	± 0.1 %
Response time	1 ms
Low flow cut off	0.6 to 5 s
Adjustable filtering	0 to 5 s

Temperature properties

Resolution	0.25 °C
Sampling rate	0.5 s

Custom fluid characteristics

Up to 10 fluid curves, 29 points each (RFID-Tag selectable)

Supply voltage

9 to 32 V DC reverse polarity protected

Power consumption

≤ 60 mA

Degree of protection

IP 67

Operating temperature range

-40 °C to +125 °C

Electrical connections

LEMO/Yamaichi size 0

EMC

EN 55011
EN 61000-4-2 bis EN 61000-4-6

TEDS

IEEE 1451.4:2004

Calibration certificate

included for both flow rate and media temperature analog outputs

Housing material

Anodised aluminium

Weight

170 g, app.

Accessories

Mating connectors for Flow and Temperature, analog outout, RFID Tag, optional Accessories see separat data sheet

Dimensions (mm)

