







Via Italo Calvino 7 Lotto 1 - Edificio A13-14 20017 Rho (MI) Tel. +39 02 36569371 info@danetech.it www.danetech.it



Flow Computer

VCA-CAN Series



Automatic matching with flow sensor



Real-time data processing



Up to 10 custom fluid curves selectable



Functional description

The smart VCA-CAN 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 extremly 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 DDM 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 wireless by means of an RFID-Tag. Both flow meter frequency and media temperature are precisely measured. The input signals are processed, viscosity corrected and linearised in real time. The flow computer VCA-CAN calculates the flow rate, medium temperature, viscosity, turbine K-factor and impeller frequency. All calculated parameters can be transmitted on the CAN 2.0B high speed bus.

Input signals

Flow meter pulses 2.5 kHz TTL max. Media temperature digital

Output signals

(linearised & viscosity corrected) CAN 2.0B high Speed (ISO 11898-2:2016) Baud Rate: 10kBit/s up to 1MBit/s

Flow rate metrological properties

 $\begin{array}{lll} \mbox{Accuracy} & \pm \, 0.1 \, \% \\ \mbox{transmit cycle} & \geq 1 \, \mbox{ms} \\ \mbox{Low flow cut off} & 0.6 \, \mbox{to 5 s} \\ \mbox{Adjustable filtering} & 0 \, \mbox{to 5 s} \\ \end{array}$

Temperature properties

Resolution 0,25 $^{\circ}$ 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

Calibration certificate

included for frequency measurement

Housing material

Anodised aluminium

Weight

170 g, app.

Accessories

Mating connector for Flow and Temperatire, RFID Tag, optional Accessories see separat data sheet

Dimensions (mm)

