

TA-CMI

Measuring instrument



Pressurisation & Water Quality › Balancing & Control › Thermostatic Control

ENGINEERING ADVANTAGE

The TA-CMI is a tough, effective tool for measuring differential pressure, flow and temperature in a hydronic system, and which allows you to pinpoint problems accurately and quickly. Robust, accurate and easy-to-use, the TA-CMI can be used on almost any system, while its small size means it is easy to take measurements in confined spaces.

➤ User-friendly design

Simple to use, the TA-CMI speeds up the measuring process.

➤ Anti-freeze correction

System data is easily adjusted to take the effect of anti-freeze agents into account.

➤ Wireless communication

For even greater ease-of-use, the TA-CMI has a wireless communication that is functional at a distance of up to five metres.



➤ Technical description

The TA-CMI is a computer programmed measuring instrument. It consists of an electronic differential pressure gauge and a micro computer that has been programmed with the TA valve characteristics which makes the direct reading of flow and differential pressures possible.

The TA-CMI has two main components:

- An instrument unit which contains a micro computer, input touch pad, LCD display and re-chargeable NiMH batteries.
- A sensor unit which contains a piezoresistive pressure sensor, one measurement valve and connections. The measurement valve has a safety function which protects the sensor from surges in differential pressure.

The instrument unit and the sensor unit communicate wirelessly or alternatively by cable.

Measurement range:

Total pressure: max 2 500 kPa.

Differential pressure: -9 to 200 kPa.

Flow: During flow measurements the pressure range is 0.5 to 200 kPa.

Temperature: -20 to 120°C

Temperature liquid medium:

-20 to 120°C

Measurement deviation:

Differential pressure: The greater of $\pm 1\%$ of displayed value or ± 0.2 kPa

Flow: As for differential pressure + valve deviation.

Temperature: $< 0.2^\circ\text{C}$ + sensor deviation.

Effective operating time:

18 h between charges depending upon application.

Ambient temperature for the instrument:

0 to 40°C (during operation)

0 to 40°C (charging)

-20* to 60°C (storage)

*) Do not leave water in the sensor when there is a risk of freezing. Storage above 40°C reduces battery life.

➤ Case contents

- | | |
|--------------------------------|---------------------------|
| - Instrument unit | - Chucks for old valves: |
| - Sensor unit | Red |
| - Connection cable | Blue |
| - Temperature sensor Pt 1000 | - Measuring needles |
| - Charger | - Chain for mounting |
| - Measuring hoses: | - User manual |
| 400 mm blue | - Calibration certificate |
| 400 mm red with shut-off valve | |

Function

Differential pressure measurement

Sensor for high total pressures and low differential pressures gives quick results and reliable readings.

Temperature measurement

A Pt 1000 temperature sensor which allows measurement direct in the media is included. Air temperature can also be measured by using the temperature sensor (reading can be taken after a couple of minutes).

Automatic calibration

The pressure sensor is automatically calibrated before each measurement sequence. The TA-CMI should be recalibrated once a year by the manufacturer.

Automatic venting

The design of the sensor unit and a short flow-through during calibration eliminate measurement errors caused by insufficient venting.

Media correction

The TA-CMI can calculate flows with different contents of glycol or similar anti-freeze additives in the water.

Wireless communication

Wireless communication between the instrument and sensor unit (400 MHz and 900 MHz) or by cable.

Battery

The re-chargeable NiMh batteries can not be exchanged by the user. The batteries will be exchanged at repair or calibration at the manufacturer.

Articles



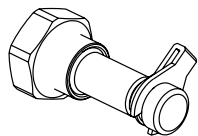
400 MHz

Language		Article No	EAN
SE	International version	52 198-501	73 18793828903
GB		52 198-502	73 18793829009
DK		52 198-503	73 18793829108
NO		52 198-504	73 18793829207
FI		52 198-505	73 18793829306
DE		52 198-506	73 18793829405
FR		52 198-507	73 18793829504
NL		52 198-508	73 18793829603
ES		52 198-509	73 18793829702
CZ		52 198-510	73 18793829801
PL		52 198-511	73 18793829900
RU		52 198-512	73 18793830005
HU		52 198-513	73 18793830104
PT		52 198-514	73 18793830203
IT		52 198-515	73 18793830302
CN		52 198-516	73 18793931207
UK	Specific for the UK	52 198-517	

900 MHz (The US, Canada and South America)

Language	Article No	EAN
US	52 198-550	73 18793830500
FR	52 198-551	73 18793830609
ES	52 198-552	73 18793830708
PT	52 198-553	73 18793830807

Accessories



Measuring nipple

Thread connections G1/2 and G3/4

Article No	EAN	
52 197-303	7318793536808	G1/2
52 197-304	7318793536907	G3/4

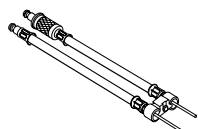


Measuring nipple

Extension 60 mm

Can be installed without draining of the system.

Article No	EAN
52 179-006	7318792812804



Measuring hose with twin needle

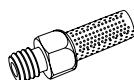
Article No	EAN	Length
52 199-999		150



Measuring hose

Extension with shut-off valve

Article No	EAN	Length	
52 199-997	7318793817709	3 m	Red
52 199-998	7318793817808	3 m	Blue



Filter

Spare part to measuring hoses

Article No	EAN
309 206-01	7318793741301



Key for older measuring points

Article No	EAN
52 187-004	7318792835902



Allen key

Article No	EAN		
52 187-103	7318792836008	3 mm	Pre-setting
52 187-105	7318792836107	5 mm	Draining

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For the most up to date information about our products and specifications, please visit www.tahydraulics.com.

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