



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 possible a direct reading of flow and differential pressures.

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.

TA-CMI, complete



400 MHz

TA No	Language
52 198-501	SE
52 198-502	GB
52 198-503	DK
52 198-504	NO
52 198-505	FI
52 198-506	DE
52 198-507	FR
52 198-508	NL
52 198-509	ES
52 198-510	CZ
52 198-511	PL
52 198-512	RU
52 198-513	HU
52 198-514	PT
52 198-515	IT
52 198-516	CN

900 MHz (The US, Canada and South America)

TA No	Language
52 198-550	US
52 198-551	FR
52 198-552	ES
52 198-553	PT

Case contents:

1. Instrument unit
2. Sensor unit
3. Connection cable
4. Temperature sensor Pt 1000
5. Charger
6. Measuring hoses:
 - 400 mm blue
 - 400 mm red with shut-off valve
7. Chuck, red, for old valves
8. Chuck, blue, for old valves
9. Measuring needles
10. Chain for mounting
11. User manual
12. Calibration certificate

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.

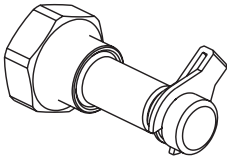
Battery

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

Accessories

Measuring nipple

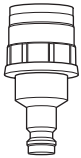
Thread connections G1/2 and G3/4



TA No	
52 197-303	G1/2
52 197-304	G3/4

Chuck

For older valves

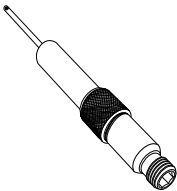


TA No	
52 198-802	Red
52 198-803	Blue

Measuring nipple

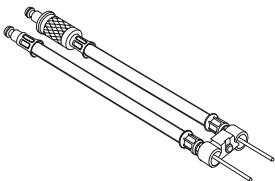
Extension 60 mm

Can be installed without draining of the system.



TA No	
52 179-006	

Measuring hose with twin needle



TA No	Length
52 198-801	150

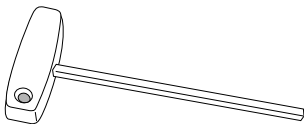
Measuring hose

Extension



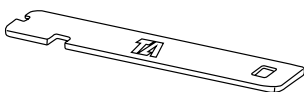
TA No	Length	
52 197-093	3 m	red, with shut-off valve
52 197-094	3 m	blue

Allen key



TA No		
52 187-103	3 mm	Pre-setting
52 187-105	5 mm	Draining

Key for measurement point



TA No	
52 187-004	

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