# FO Fuji Electric

# External temperature sensors for FSC Ultrasonic Flow Meter (thermal flow measurement function)

#### Application:

#### Heat quantity measurement -

This function calculates the heat quantity received and sent with liquid (water) in cooling and heating. Two 4-20mA inputs are available for temperature measurements.



T2: Fluid temperature (outlet)

Q: Flow rate of the fluid

#### Temperature Pt100 Sensor (10m cable) Converter (2 channels) FSC-PT100-10 **FSC-PTCONV** Al1 (-) Al1 (+) Inlet Tube Al2 (-) Al2 (+) Analog cable (1.5m) Ref. TK4J2639C1 Supplied with PORTAFLOW-C Pt100 Sensor (10m cable) FSC-PT100-10 85-264 Vac power supply Outlet Tube PORTAFLOW-C

# Connection diagram:

#### Optional items to order :

2x Pt100 Sensor (10m cable) ref. FSC-PT100-10 1x Temperature Converter (2 channels) ref. FSC-PTCONV



# **Connection diagram :**

#### Pt100 sensor



Sensor cable (Pt100 sensor to converter):





**Pt100 temperature contact sensor** A female connector is mounted on the cable. In the case where the customer uses his own probes, two connectors are provided with the converter





#### **Configuration of Portaflow-C:**

- 1- Configuration of analogue inputs,
  - Plugs the analogue cable on the AI/AO connector of Portaflow-C,



- Select "SYSTEM SETUP" menu and then "ANALOG INPUT/OUTPUT" menu



- Configure 'ANALOG INPUT/OUTPUT' with 'USED' option and 'INPUT CH\_ DEFINITION' with 'CURRENT (SUPPLY TEMP.) for CH1 and 'CURRENT (RETURN SUPPLY)' for CH2





- Select "RANGE" menu and then "1: INPUT RANGE" menu,



Configure -40°C for base and 120°C for full scale of CH1 and CH2 in the Portaflow-C.

For all other information concerning the configuration of Portaflow-C, please read the instruction manual supplied with the flowmeter.

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