F2 Calculator Installation Guide

Delivery

F2 is delivered in the *transport mode*. This means that only the real time clock is active. No measurements take place in this mode. *Transport mode* is indicated by the display showing "no" in the upper left hand corner.

If the calculator is mains supplied, the power supply unit is equipped with a backup battery for the real time clock. The life time of the battery is 6 months. If the calculator is stored without mains connection, the power supply unit must be disconnected inside the calculator. Please cf. the F2 manual.

Before installation commences the meter is to be set in the *operating mode*. This is done by pressing the push button for approximately five seconds, and thus entering one of the following two modes:

1. *Service mode*: Normally the calculator is set to enter the *service mode*. Here it is possible to alter certain parameters in the calculator. See also *the **F2 manual***. To indicate that the meter has left *transport mode*, "no" on the display extinguishes and is replaced by "00" - *service mode*.
2. *Operating mode*: If so ordered, the F2 calculator is set to enter the *operating mode* directly. To indicate that the meter has left *transport mode*, "no" on the display extinguishes and is replaced by "10" - *operating mode*. To enter the *service mode* from *operating mode*, please cf. *the **F2 manual.***

Connections

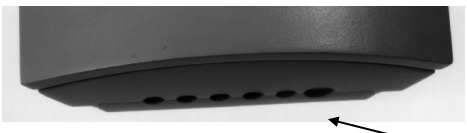
The screw terminal blocks are situated under the cover on the rear side of the calculator. Signals to the calculator are connected as follows:

Terminal no. According to EN1434	Terminal Inscription	Signal descriptor
9	3V	Flow sensor, positive supply voltage output
10	Kt	Flow sensor signal input
11	0	Flow sensor reference input
5	F	High temperature sensor
6	F	High temperature sensor
7	R	Low temperature sensor
8	R	Low temperature sensor
16	P1	Remote counting pulses energy output / pulse input 1
17/19	0	Remote counting outputs/pulse inputs reference level
18	P2	Remote counting pulses volume output / pulse input 2
50	A	Alarm output signal
60	A1	SIOX interface (option)
61	B1	SIOX Interface (option)
24	MBUS	Meter bus interface
25	MBUS	Meter bus interface

If the calculator is fed power from mains, the mains part is furnished with a fixed cable for connection to mains.

Lead-throughs

F2 has six holes for connecting cables. To ensure that the casing complies with requisite environment class prerequisites the following cable diameters are to be used:



These holes are used for temp. sensor, flow sensor and communication
Ø4.3 ± 0.2 mm

For mains cable
Ø6.4, +0, -0.2mm

F2 can be mounted either on the flow sensor or on a wall. When the calculator is mounted on the flow sensor, the adapter provided for this purpose is to be used. The adapter allows the calculator to be mounted vertically or horizontally, see figure below.

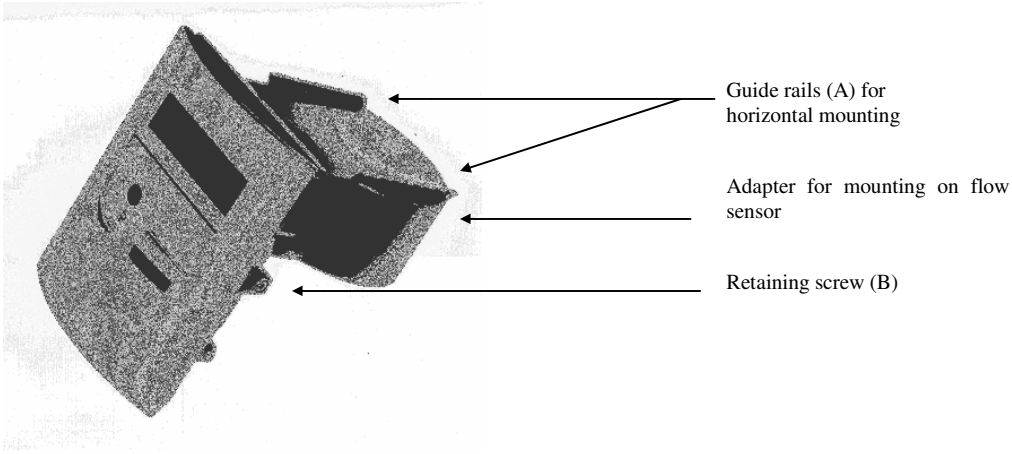


Fig.1, Vertical mounting

Slide the calculator onto the guide rails (A), and secure it with the retaining screw (B). **NOTE:** In the figure the rails for vertical mounting are concealed behind the meter.

The special wall holder is to be used for mounting on a wall.

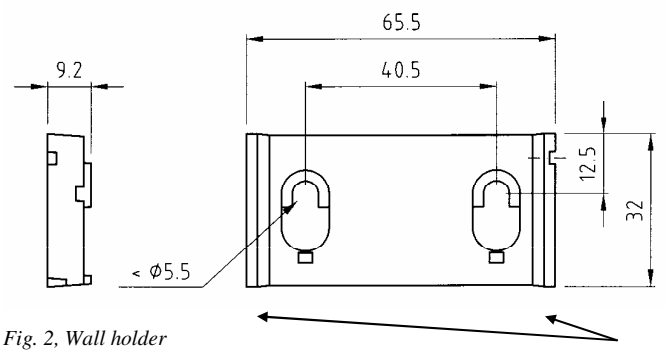


Fig. 2, Wall holder

Mount the holder at the wall and slide the calculator onto the guide rails (A). Secure it with the retaining screw (B in figure 1).

Function test

When installation has been completed a simple test is to be undertaken to verify that the calculator has been installed correctly. This is easiest done by waiting until the flow sensor supplies a pulse. This shall result in the symbol for flow sensor pulse, see point 2.2 *Values shown on display* in the manual, flashing once, and display of the correct temperatures.

If not undertaken previously, a check is to be made to verify that the built-in realtime clock is working correctly. If this is not the case, correct it, see point 2.2 *Service* in the manual.

Elster Messtechnik GmbH
Otto-Hahn-Str 25
68623 Lampertheim

www.elstermesstechnik.com

F2_M_09.20e / 04.10