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M+F | Systems

MFX_4 TERMINAL PRO

The high-performance MFX_4 system-based flow computer meets the highest standards for flexible and reliable Office of Weights and Measures testing, for mixing and for the control of processes in liquid handling, particularly for petroleum products. With more than 30 years of operational experience and 18,000 installations, the fourth generation combines long-standing industry experience with state-of-the-art technology and uses communication standards that have never before been applied to industrial flow computers.

Because of the wide variety of different protocols and communication standards they support, all MFX_4 systems can be easily integrated, quickly configured and serviced remotely while in operation. In order to substantially expand the range of application options, the MFX_4 system-based flow computer sets itself apart with its distributed architecture consisting of centralised processing units and decentralised control units.

MFX_4 Terminal Pro [Ex]-housing

The MFX_4 Terminal Pro is the enhanced version of the human-machine interface (HMI) from the MFX_4 family for use in explosive atmospheres with Zone 1 classification. The terminal enables communication with the MFX_4 Controller, with other suitable system participants or with connected host systems such as SCADA or TAS systems.

In order to ensure optimal ease of use, it is equipped with a configurable graphic, high-contrast and full-colour display. It also offers a user interface in several languages and displays all of the attached system's process data.

To address the importance of legibility in difficult operating conditions, the MFX_4 Terminal Pro comes with a 10.4" colour display and is able to display the process data in various font sizes. The alphanumeric keypad of the MFX_4 Terminal Pro is also equipped with assignable buttons.
This allows the display to be individually configured for a wide range of applications.

With the direct support of the MFX_4 RFID card reader, its TCP/IP connection and the optional control inputs and outputs, the MFX_4 Terminal Pro is also fully equipped to serve as a separate access control for inflows and outflows in the loading terminal, for example.

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CHARACTERISTICS

Approvals	ATEX IECEx TR-CU 012/2011
Housing	W 350 mm x H 290 mm x D 142 mm, IP65
Device identification	II 2 G Ex d[ia/ib] IIB T5 (Housing) II 2 G EEx ia IIB T4 (Keyboard) II (2) G EEx [ia] IIB (Isolating Device)
Weight	25 kg
Operating temperature	-20 °C ... +40 °C [extended temperature range on request]
Storage temperature	-25 °C ... +75 °C
Supply voltage	100 V_{AC}... 240 V_{AC} P_{typ} = 15 W P_{max} = 40 W
Display	Large graphic colour display, XGA (1024 x 768 pixel) LED backlight Automatic contrast adjustment
Keyboard	Foil keyboard Mechanical keyboard (weatherproof)
Card reader	Supporting the external card reader MFX_4 RFID Transponder [Proximity] 13,56 MHz
Interfaces	1 x CAN-Bus 1 x RS232 1 x RS485 [optional] 1 x Ethernet [TCP/IP]
Protocols	CANopen MODBUS RTU MODBUS TCP OPC [via separate software license]
Inputs/Outputs	4 x Digital inputs (galvanically isolated) [optional] 4 x Digital outputs (galvanically isolated) [optional] Auxiliary voltage 12 V_{DC} (galvanically isolated) [optional]
Multi language capability	German, English (UK), English (USA), French, Spanish, Portuguese, Dutch, Polish, Russian, Hungarian, Slovenian, Slovak, Czech, Romanian

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	4000006 + [Keyboard type] + [Card reader] + [Interface] + [Cable set] + [Configuration CAN] z.B. 4000006 + KF + CR2 + RS232 + IK0 + B125
Basic device (without keyboard)	Supply voltage: 100 ... 240 V_{AC} Working temperature: -20 °C ... +40 °C [extended temperature range on request]
Keyboard type	K0 = No keyboard KF = Foil keyboard KM = Mechanical keyboard
Card reader	CR0 = Without RFID card reader CR2 = External RFID card reader
Interface	RS232 = RS232 RS485 = RS232 + RS485
Cable set	IK0 = No cable IK01 = 5m (Power + CANopen) IK02 = 10m (Power + CANopen) IK03 = 15m (Power + CANopen)
Configuration CAN	B125 = Baud rate CANopen bus 125 baud B250 = Baud rate CANopen bus 250 baud

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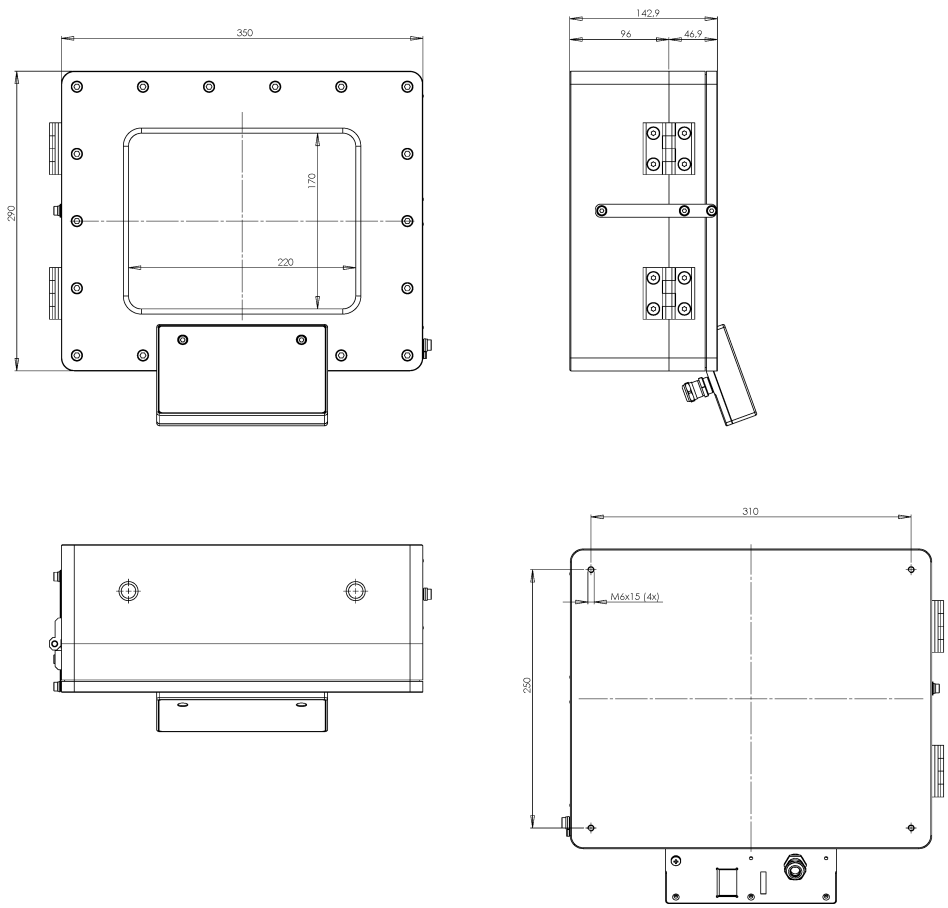
DIMENSIONS



Measurement
nnn : Measurements in Millimeter

Date 05/01/17