

## MFX\_4 RFID

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.

### MFX\_4 RFID card-reading unit

The MFX\_4 RFID (Radio Frequency Identification) is the external explosion-proof version of the multi-protocol card reader for contactless identification and access control based on RFID cards in 13.56 MHz technology. The device supports a wide range of card types and transmits the data it has read to the connected device via a bus-enabled RS485 interface.



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.

The MFX\_4 RFID was designed for connection to the devices in the MFX\_4 family, but it can also be connected to other devices as an independent component. The card reader and card detection status is signalled by an indicator light, and the signalling can be controlled via the downstream computer system.

The card reader can be used in explosive atmospheres with Zone 1 classification.

A range of different mounting kits can be purchased as an optional accessory.



# MFX\_4 RFID

## CHARACTERISTICS

Approvals	ATEX IECEX TR-CU 012/2011	
Device Identification	ATEX : II 2 G Ex mb IIB T4	
Housing	W 75 mm x H 125 mm x D 50 mm, IP66	
Weight	300 g	
Operating temperature	-20 °C ... +60 °C	
Storage temperature	-25 °C ... +70 °C	
Supply voltage	12 V <sub>DC</sub> ±10 %      or      24 V <sub>DC</sub> ±10 % P <sub>typ</sub> = 0,6 W                      P <sub>max</sub> = 1,5 W	
Card reader	RFID proximity Working frequency = 13,56 MHz Maximum signal strength = 24,5dBm Typical range = 2 cm	
Supported RFID tags	Mifare Classic 1K S50                      ISO 14443A Mifare Classic 4K S70                      ISO 14443A Mifare Classic 1K SLE66R35              ISO 14443A Mifare Classic Ultralight                  ISO 14443A  I-Code SL1    SL2                              ISO15693 I-Code EPC   SL2 ICS10                      ISO15693 I-Code 1        ICS30                                    ISO15693	
Interfaces	1 x RS485	
BUS capability	[optional]	
Protocols	Serial (RS422/RS485)	
Outputs	1 x Digital Output (passive MOSFET)	30 V / 100 mA
Light Indicators	Operational Mode                      (yellow) Card acceptance                        (green) Card rejection                            (red)	
Communication Cable	Cable length = 0,8 m	



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## PRODUCT KEY MFX\_4 RFID

	4000007 + [Interfaces] e.g. 4000007 + Standalone
<b>Basic Unit</b>	Supply voltage: 12 ... 24 VDC
<b>Interfaces</b>	Standalone = Basic equipment / Unit + BUS Coupler for itemized / single use or usage Erweiterung = Basic equipment / Unit as expansionmodule for MFX_4 Terminal or existing BUS system

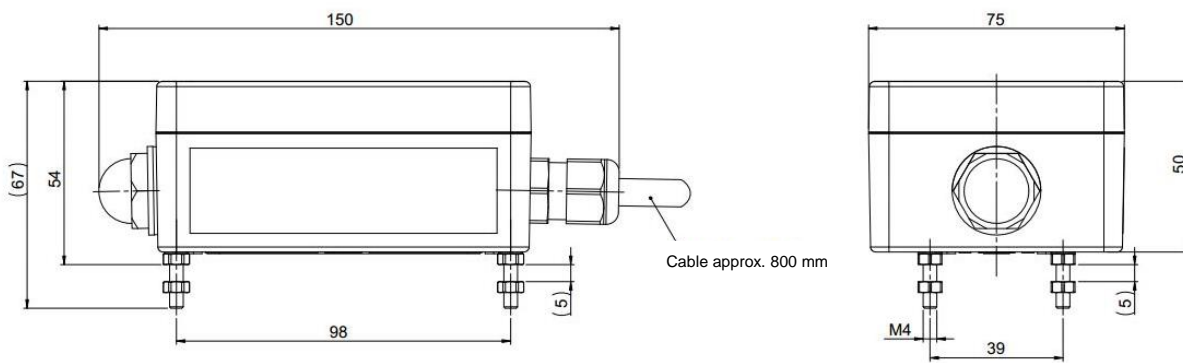
## PINOUT

The electrical connections of the MFX\_4 RFID are exclusively over/via the connector cable.

Cable number	Symbol	Comments
1	+ V	Supply voltage
2	GND	Grounding
3	Out -	Digital output
4	A	T+ (RS485)
5	B	T- (RS485)
6	Z	R- (RS485)
7	Y	R+ (RS485)
Shield		Shielding

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## DIMENSIONS



### Measurements

nnn : Measurements in Millimeter  
 (nnn) : Variable measurements in Millimeter