

FT-10 Fill weight indicator



product description

The FT-10 Fill Weight Controller is a very accurate and versatile weight indicator which is used for a wide variety of process weighing applications including filling and dispensing. Whether filling or dispensing solids, liquids or gases, the FT-10 Fill Weight Controller automates the entire process. Due to its variety of industrial communication interfaces and selectable scale functions the indicator is the perfect fit for all kinds of weighing applications and process control systems. Powerful calibration options including electronic calibration without test weights supports easy and fast start-up and service.

The instrument is approved by a European Notified Body of Weights and Measures for use in Accuracy Class III applications with up to 10,000 intervals according to OIML R76.

Large 6 digit LED weight display (red 13.5mm) with weight status allows good readability.

options

Ethernet-based protocols: Ethernet interface (TCP/IP, Modbus TCP), EtherNET/IP, EtherCAT, ProfiNet, PowerLink

Fieldbus protocols: Profibus (DP-V0, DP-V1), CANopen interface 2.0, CC-Link

key features

EU Type approved for 10,000 intervals

Internal resolution 16,000,000 counts, display up to 999,000 counts

Approved sensitivity 0.4 μ V/e

Serial Interface RS232C, RS485

4 opto - isolated in- and 5 outputs

Pre-configured applications for typical filling / dispensing-and packaging tasks

eCal through fieldbus

Display kg or lb



RoHS
compliant



specification

Accuracy Class	III
EU Type approved (verification scale intervals)	10,000 vsi (according 2004/22/EC directive)

display and keyboard

Display	6 digits, 7 segments, LED red, 13.5 mm high
Update rate	250 ms
Keyboard	5-key membrane, with tactile feedback
Key lock	Keys are locked automatically during process

a/d converter

Type	24 bit Delta-Sigma ratiometric with integral analog and digital filters
Conversion rate	Up to 1,600 measurement values per second
Minimum input sensitivity	0.1 μ V/d (non legal for trade) 0.4 μ V/d (legal for trade)
Analogue input range	-18 mV to 18 mV
Resolution	Internal up to 16 million counts, display up to 999,999 counts not legal for trade / 10,000 counts legal for trade

scale calibration and functions

Calibration	Calibration is performed by application weights
Digital filter	10 step adjustable digital adaptive filter
Weighing functions	Tare, zero, motion detection, auto zero tracking, total weight
Other functions	Date and time, total indication, temporarily switching between net and gross
Digital inputs / digital outputs	4x isolated digital inputs (24 V) and 5x isolated digital outputs (open collector)

linearity and stability

Linearity & temperature coefficient	Within 0.0015 % FS; ≤ 2 ppm/°C
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load cells

Excitation	5 V DC max. 30 mA
Number of load cells	Up to 8 load cells (350 Ω) or 25 load cells (1,100 Ω) in parallel
Connection	4-wire or 6-wire technology. Cable length 1000 m/mm ² for 6-wire connection

communication

Serial interface:	
RS232C	1,200...115,200 baud, 8 N1 / 7E1 / 701
RS 485	1,200...115,200 baud, 8 N1 / 7E1 / 701
Modbus RTU	On RS - 485, 1,200...115,200 baud, programmable

optional

Ethernet TCP/IP or Modbus TCP	10 Mbit/s, half duplex, galvanically isolated
EtherNet/IP	10 Mbit/s or 100 Mbit/s, full duplex, galvanically isolated
EtherCAT	100 Mbit/s, full duplex, galvanically isolated
Profibus	Profibus DP-V1. 9.6 kbit/s to 12 Mbit/s automatic baud rate detection
Profinet	100 Mbit/s, full duplex, galvanically isolated
CANopen	10 kbit/s - 1 Mbit/s automatic baud rate detection
CC-Link	156 kbit/s - 10 Mbit/s (selectable baud rate)
Powerlink	100 Mbit/s, half duplex

environment and enclosure

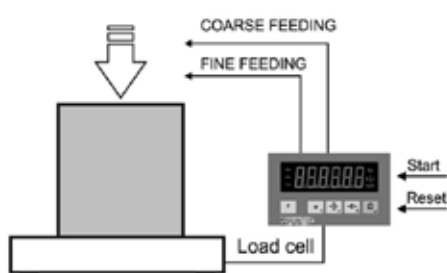
Operation temperature & humidity	-10 °C to +40 °C legal for trade; 85% RH max, non-condensing / -15°C to +55°C not legal for trade;
Dimensions	48 x 96 x 100 mm
Enclosure	Stainless steel front panel, aluminium body, stainless steel rear panel.

power supply

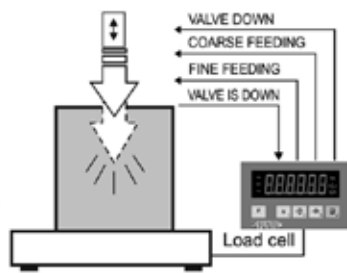
DC Power Supply	12...28 VDC max. 300 mA
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application modes

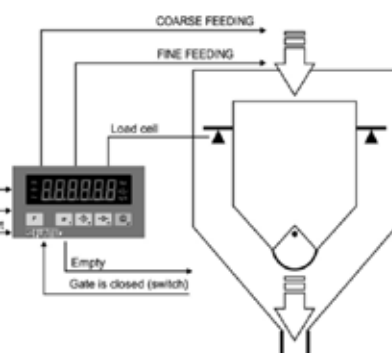
Surface Filling



Below Surface Filling



Filling for Packaging-Bagging



Dimensions and specifications are subject to change without notice.