

Fill Control for Automatic Liquid Filling Weighing Systems

IT8000E

FILL



IT8000E FILL universal W&M approved filling controller for use as automatic (AGFI) weighing instrument for the gravimetric filling of liquids.

The controller connects to 1 or 2 scales of any type with analog or digital force transducers.

The **IT8000E FILL** is configurable for various fill lance operations:

- Above-surface
- Below-bunghole
- Partially sub-surface
- Sub-surface.

Single and multi-containers can be filled in semi or fully automatic operation.

The controller is available in two styles:

- Compact stainless steel enclosure for desk or wall mounting
- Panel-mount version.

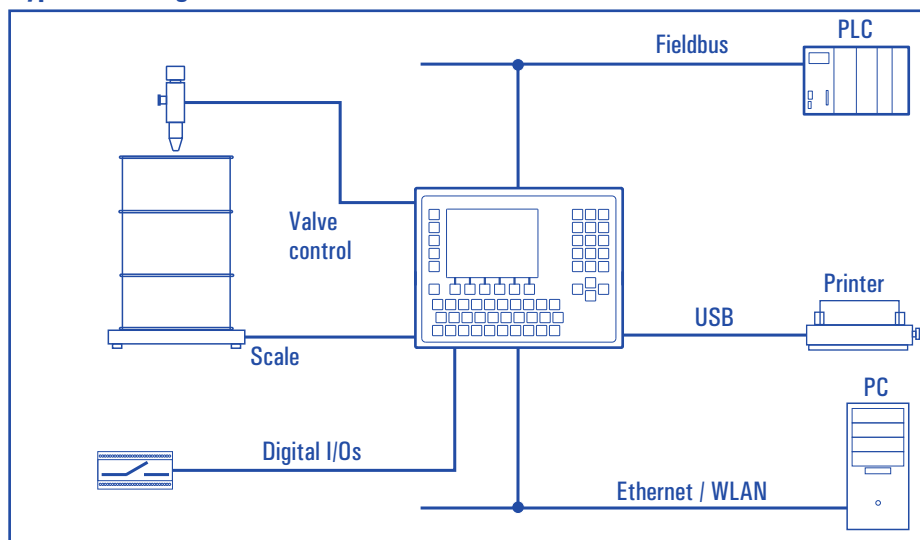
The fill controller offers functionality to conform with ISO 9001 standards:

- **Accurate fill control** through fast signal processing, trend-sensing preact adjustment and weight tolerance control
- **High operational security** through extensive monitoring functions and simple operator control
- **Recording of all data** of single or multiple container fills with optional hardcopy printout and/or data transfer.

The **IT8000E FILL** controls the filling lance, fill valve and the container movement onto and off the scale providing maximum throughput.

Operator prompting with clearly structured onscreen menus ensures **fast and error-free operation** and minimum training requirements.

Typical Setting:



Fast and accurate filling

- Fast signal processing (up to 800 updates / sec)
- Weights and Measures approved resolution of 6,000 d with a max. preload of 80 %, 524,000 d internal resolution
- Filling with one or two speeds
- Automatic trend-sensing preact adjustment.

Monitoring functions

- Fill time and product flow control
- Fill valve collision and end stop control
- Limit switch monitoring.

Security

- Power-fail-safe storage of data
- Password protection
- Battery-backed real-time clock
- All error messages can be displayed, printed and transmitted to host system.

Simple and secure operation

- Operator is guided on a high-contrast color TFT display. Data entry is via alphanumeric tactile acid-resistant membrane keyboard or optional full-size PC keyboard
- Sequence and operation are individually configurable. This eliminates unnecessary operator actions
- Up to 99 products with pertaining values for target weight, tare weight, weight tolerance etc. can be stored against a 2-digit ident number.

Weighing electronics

- Integrated signal amplifier to connect up to 16 strain gauge load cells in 4- or 6-wire mode
- Calibration as single or multiple-range and as single or multi-interval scale.

Ethernet connection (option: WLAN)

Integrated Ethernet interface with configurable IP address, for data transmission or remote diagnosis over Internet.

Serial interfaces

- For printer (option)
- For data transfer to PC (option), protocols: STX....ETX, TTY, AckNak, DUST3964R etc.
- RS232, 20mA CL, RS422 or RS485 selectable, protocol/baudrate configurable.

Digital interfaces / Fieldbus

- Opto-isolated inputs / outputs (24 V) to connect to relays / PLC
- Profibus DP, Profinet, Ethernet/IP or Modbus TCP.

Electrical connections

110 (-15 %)-240 (+10 %) VAC;
50 / 60 Hz, option: 12-30 VDC,
power consumption max. 20 VA.

Operating temperature

-10 °C (+14 °F) to +40 °C (+104 °F),
max. 95 % relative humidity, non condensing.

Accessories

- Relay module with secure isolation of inputs/outputs (24 V, 3 A)
- Remote display, and others.

Ex2/22 version

For installation in Ex zones 2 and 22.

Typical drum filling cycle:

- Product selection – input of target weight and number of containers
- Ready status – start fill manually or via external signal
- Tare check and/or auto-tare function
- Lower fill lance (drum with bung-hole)
- Fill in 1 or 2 speeds with simultaneous monitoring of fill time and material flow (when sub-surface operation, fill-lance lift during fill is possible)
- Raise fill lance (drum with bung-hole)
- Tolerance weight check with auto-preact adjustment and automatic fill-jog if underweight
- Capture of statistical data – printout and data transfer of gross, tare and net weights, date, time, consec. number, product ID and associated data – also batch data at batch end
- End of sequence, ready for next filling cycle.

Construction:

Desk/wall version



- Stainless steel housing, IP69K, NEMA 4X
- Dimension W x H x D: 330 x 239 x 134 mm (13.0" x 9.4" x 5.3")

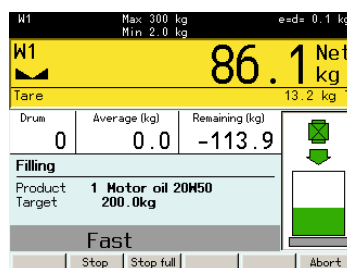
Panel-mount version



- Stainless steel housing, fascia plate protected to IP69K, NEMA 4X
- Dimension W x H x D: 285 x 224 x 69 mm (11.2" x 8.8" x 2.7")
- Cutout in panel: 268 x 207 mm (10.6" x 8.1")

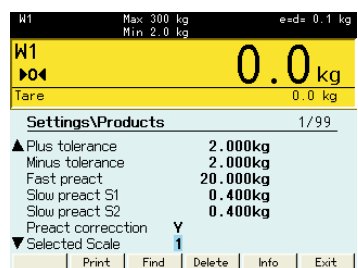
Display / operation:

Start menu for filling



Product selection, entry of target weight and number of fillings, start

Product File



Entry of product data, softkeys for simple operation

Directives: 2009/23/EC, 2004/108/EC, 2006/95/EC, 2004/22/EC



MID approval as AGFI

Standards: EN 45501, OIML R76-1, EN 61000-6-2, EN 61000-6-3, NAMUR NE21, EN 60950, OIML R61



NTEP approval as indicating element



ETL certified in accordance with UL 60950-1 and CSA C22.2 No. 60950-1



EMI compliance with FCC Part 15



Other certificates on demand

