

Foxboro® Flow Simulator for MagPLUS Electromagnetic Flowmeters



Order by Part No. 1800630100

Introduction

The IMTSIM-22 flow simulator provides calibrated feedback to the MagPLUS electromagnetic meter converter that simulates specific calibrated flow conditions in place of the meter flowtube. It has 5 selectable simulated flow range settings plus zero flow and is usable with Foxboro® MagPLUS 4-wire converters. When connected to the converter in place of the flowtube, it provides a precise, consistent signal to the converter that is representative of specific flow conditions

Model IMTSIM-22 Operational Description

Similar to the meter flowtube, the IMTSIM-22 is a passive device that derives its operating power from the converter. Depending on the range selected, the IMTSIM-22 then delivers a precision signal back to the converter that simulates a specific, calculable flow condition in a simulated flowtube. This instrument is fabricated of high quality, precision components to provide stable, reliable performance.

Each instrument is factory calibrated to verify the accuracy of its operation.

A zero position on the range switch simulates zero flow, which allows the determination of any zero offset which may be present. This can be used to zero the converter electronics or to provide a computational null for the simulated flows.

Flow Simulator for MagPLUS Electromagnetic Flowmeters



Compatible Converters

The IMTSIM-22 can be used with the following Foxboro MagPLUS electromagnetic flowmeter converters for verification of converter and electronic systems operation:

IMT30A C/W	IMT30A/31A/33A Note - Compact "C" versions use the Z3 interface cable. The Z3 cable also expedites connections for "W" converter versions. The "F" version utilizes the M Pig-Tail cable as can also the "W" versions, if so desired.
IMT31A C/W	
IMT33A C/F/W/R	
NOTE: Z3 cable not compatible with IMT31A C/W – Ex/FM/DIV2	

NOTE: For IMT25 converters refer to the IMTSIM-11 simulator.

Items Included

- IMTSIM-22 flow simulator
- Connecting cable M for remote installations (with separate terminated pig-tail ends)
- Connecting cable Z3 (with ONE modular in-line plug connections and separate ground lead) – for use with IMT30A, IMT31A, IMT33A Compact and Wall mount converters*
- Carry/storage bag
- IMTSIM-22 technical data and operating instructions
- IMTSIM-22 calibration certificate
- CD w/electronic copy of manual and computational software

***NOTE:** For extra/replacement M and Z3 cables and parts contact Global Customer Support Inside U.S.: 1-866-746-6477, Outside U.S.: 1-508-549-2424, Website: <http://support.ips.invensys.com> Specific converter product user manuals are available on www.schneider-electric.com.

Technical Data

Ambient Temperature	-4°F to +140°F (-20°C to +60°C)
Protection Category	IP 40, per IEC/EN 60529
Field Current	±60 to ±125 mA pulsed DC 120 to 250 mA Peak to Peak
Error (% of measured value)	±0.4%
Recommended Calibration Interval	Annual

IMTSIM-22 Data Sheet subject to change without notice.
It is prohibited to reproduce this documentation, or any part thereof, without the prior written authorization of Foxboro.