Description

The converter type IZM-MV™ and type IZM-MEV™ controls emptying and filling processes combined with the electromagnetic transmitter. The device is available both in a design officially approved byWeights & Measures Authorities (type MEV) and in a non-approved design (type MV). The operation can be done by the alphanumeric display unit (16 x 40 characters) and the foil-protected keyboard.

The following values are shown on the LC display:
- current quantity (in 15 mm digit size)
- flow rate
- preset quantity
- total quantity
- device status
- valve status
- filling time

Parameters (e.g. throttling phase at the start and end of the measurement, range of the post-run correction, choice of the volume unit, etc.) can be entered via menu-led images.

The control can be also done via external and digital signals or via serial data transfer. Optionally, a BP110™ Bus printer or a common printer, too, can be connected to the IZM-MV™ and IZM-MEV™ resp. The device prints a single voucher or a protocol line after each effected quantity preselection.

A consecutive number, date, time and filled quantity are printed out on the protocol.

Printing-out of the following data is possible:
- heading lines (3 lines, max. 30 characters, to be entered by the customer (freely programmable))
- consecutive no. (resettable by the customer)
- date / time
- actual value quantity preselection

The solenoid valves for actuating one-stage or two-stage pneumatic valves can be directly controlled via the digital outputs. A contact is also available for the pump control and for an electro-driven valve. Quantity pulses can be transferred for remote controls. Disturbances, error fillings, measurement and filling end can be called by further outputs.

Both at the start and at the end of filling, the two-stage quantity preselection controller makes filling possible in a throttled way. The post-run quantity can be corrected self-learning.

During cleaning the valves and the pump can be directly controlled through an external contact. An external selection of kegs of max. 16 different preset quantities are possible through four further digital inputs.
The quantity preselection can be used e.g. for:

a) Product delivery to the customers  
b) Filling into bags and containers  
c) Drum and keg filling  
d) Automatic tank filling  
e) Production of multi-purpose mixtures  
f) Dosing tasks (yeast into wort, culture into milk, etc.)  
g) Product distribution

Features

The 2-stage switching off e.g. by means of a GEA Diessel two-stage valve is recommended for highly precise filling processes. The hooter control before the end of filling including possible feedback can be parameterized. A settable time makes possible for the automatic closure of the valves in case of product deficiency or not being used liquid. The measured value can be read well at any time by means of the 15 mm large-size display. Most simple operation by messages in clear text. 4 different operating languages can be chosen (German, English, French and Spanish).

An keg statistics program is internally available for the keg filling process.

Technical Data

| Digital outputs | 1 x volt-free contact max. 50 VA, 230 V AC, max. 1 A for: error output or for: quantity preselection run down, hooter (option)  
| Digital inputs | 8 x Optocoupler; 10 - 30 V, Ri = 1,5 kOhm for: start, stop, CIP, counting interruption  
| Pulse output | Optocoupler 10 - 30 V, 250 mA max.  
| Serial interface | RS 485 with protocol for internal GEA Diessel CS3-Bus (57600 bd) or TTY interface (9.600 bd) (Option)  
| Protection class | Cast aluminium housing: IP 65  
| Dimensions (W x H x D) | Aluminium housing: each 330 x 230 x 151 mm  
| Ambient temperature | 0 ... +50°C  
| Supply voltage | 90 ... 260 V, 50-60 Hz  
| Power consumption | ca. 40 VA (including transmitter)  
| Digital inputs | 8 x Optocoupler; 10 - 30 V, Ri = 1,5 kOhm for: start, stop, CIP, counting interruption  
| 16 Preset quantities (BCD-coded)  
| Digital outputs | 1 x volt-free contact max. 50 VA, 230 V AC, max. 1 A for: error output or for: quantity preselection run down, hooter (option)  
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IZM-MV™  
Electromagnetic flow meter with quantity preselection functions  
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Subject to technical change without notice.  
Observe protection notices ISO 16016!