

## Description

Combined with an electromagnetic flow meter and an amplifier box, the converter IZM type SV or type SEV can be used for emptying and filling processes. The device can be supplied both in Weights & Measures approved and non-approved design. The operation of the device is enabled by the aid of an alphanumeric display and a membrane keypad.

The display can show the following values:

- individual quantity
- preset quantity and valve condition
- daily quantity
- total quantity (non-resettable)
- instantaneous flow rate
- and possibly an error message

Parameters (e.g. throttling phase at the beginning and the end of the measurement, range of switch-off compensation, selection of the volume unit, etc.) can be input via menu-driven images. Control via external signals is possible.

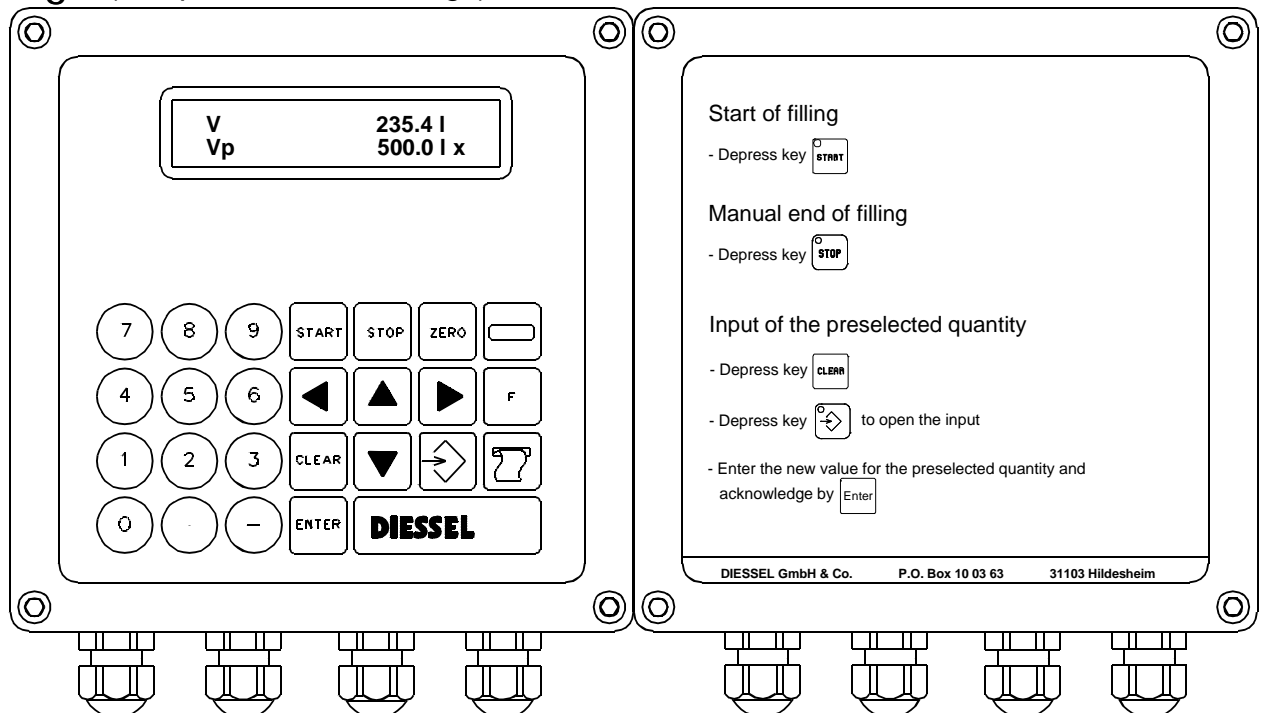
Flow meters IZM type SV or type SEV can be combined with a bus printer type BP110 (D52.49E) for printing out the following data after each quantity preselection:

- current number (resettable by the user)
- actual value of quantity preselection

The amplification of the control signals in the amplifier box enables the direct control of solenoid valves for the operation of 1-stage or 2-stage pneumatic valves. Apart from that, a contact is available for controlling a pump or a motor-driven butterfly valve.

A throttled filling process is possible both at the start and the end of the procedure. Unless the function is switched off, the afterrun is automatically compensated. An external contact permits the valves and pump to be controlled independently of a preselection procedure.

**Fig.** (2 separate field housings)



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Electro**MAG**netic Flow **METER**  
IZM

Type: SV/SEV with quantity preselection

**D 43.53 E**

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Examples for the use of the quantity preselection:

- a) Product delivery to customers
- b) Product filling into bags or containers
- c) Automatic tank filling
- d) Production of multi-component mixtures
- e) Dosing tasks (yeast into wort, culture into milk, etc.)
- f) Product distribution

## Special features

The 2-stage switch-off method (e.g. by a DIESSEL 2-stage valve) is recommendable if high-precision filling quantities are required.

The activation of a horn (including acknowledgement) can be considered as an option.

After a manual break of the filling process, it's possible to continue or to restart again. An adjustable "timeout" makes possible the automatic shut off at empty pipe or no flow.

Via the 2 digital inputs it is possible to select up to 4 different preselection quantities. There are statistic data of each selected quantity available.

## Technical data

<b>Control outputs</b>	<p>3 x optocoupler 10 - 30 V, 20 mA max. are processed in the amplifier box to realize the following functions:</p> <p>1 x volt-free contact 50 VA, 230 V AC, 1 A max. for: Error output or for: Quantity preselection run down, horn (option)</p> <p>1 x volt-free contact 50 VA, 230 V AC max. 1 A max. (noninductive) <b>presignal</b></p> <p>2 x volt-free contact 50 VA, 230 V AC max. 1 A max. (Noninductive) <b>final signal</b> for controlling a motor-driven valve and for controlling a pump contactor</p>
<b>Digital inputs</b>	4 x optocoupler; 10 - 30 V-, Ri = 1,5 kilohms for: Start, stop, CIP, count interruption, selection of 4 quantities
<b>Pulse output</b>	Optocoupler 10 - 30 V, 20 mA max.
<b>Analog output</b>	0 (4) ... 20 mA (aktive), max. load 500 ohms
<b>Serial interface</b>	RS 485 with protocol for internal DIESSEL CS3 bus (57600 bd)
<b>Protection</b>	Cast aluminium housing: IP 65
<b>Dimensions (W x H x D) in mm</b>	Aluminium housing: 316 x 157 x 100 mm for converter and amplifier box
<b>Ambient temperature</b>	0 ... +50° C
<b>Power supply</b>	230 V (115 V), -15% +10%, 50-60 Hz or 24 V DC ± 20%
<b>Power consumption</b>	Approx. 30 VA (including transmitter)