

Data Sheet



Description

The **GEA Diessel** process metering system **DI-LIQUIZ** is a combination of electromagnetic flow meter type **IZMS** (Data sheet D12.70E)

and the concentration meter type **DI-LIQUI** (Data sheet D23.11E). Thus, the arising quantities are measured in dependency of the concentration and are allocated to the respective product phases as water, intermediate phases and main product what ensures a complete batch logging.

The average concentration is determined additionally for each batch.

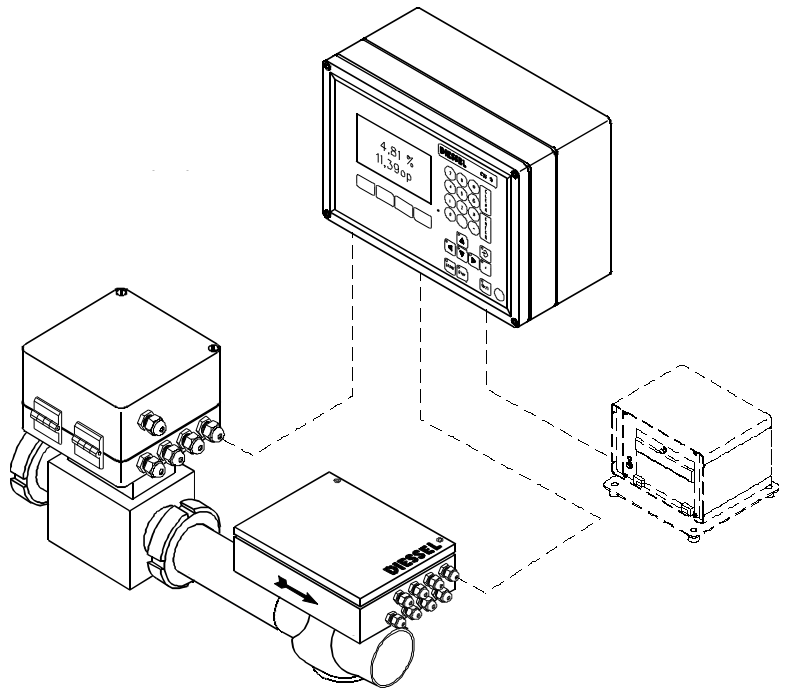
In beer the allocation can be done as per original gravity or alcohol. For non-alcoholic drinks it is common to measure in Brix.

A risk in quality due to bacteriological impurities in the final beverage is excluded by the use of **IN-LINE** metering devices.

Alarms or other control functions can be triggered via certain limit value parameters. In order to reach a precise limitation of quantity and concentration, a delayed change-over of the valves dependent on the installation can be done via a pushing-out control.

Continuously, all measured data are well legible on a 16 x 40 display, possible errors or product-dependent information are displayed in clear text. The operator language can be altered.

A printer type **BP110** (Data sheet D52.49E) that automatically prints the batch logging is available as an option.



Special Features

- Direct "IN-LINE" measurement without bypass lines, as a result **bacteriologically safe**
- Suitable for SIP/CIP without any problems
- Measurement of original gravity and alcohol in beer or of Brix content in non-alcoholic drinks is possible
- Quantity and concentration data are current and refer to batches. These are constantly available
- Up to 3 metering lines can be run by 1 operating unit
- 3 freely programmable limit values for each metering system line
- Integrated pushing-out control for up to 3 product phases
- Possible connection to an operational data logging via serial interface (option)
- Up to 94 different calibrating curves can be stored for each metering line
- Suitable for STOP & GO operation as well

GEA Diessel GmbH
Steven 1
D-31135 Hildesheim
Germany
☎ +49 (0)5121-742-0

**Concentrate based
Volume Metering System**
DI-LIQUIZ

D 23.41 E

Issued: 04.1999

Page -1- of -2- pages

Technical Data

Transmitter type **IZM** (D12.70E) and **DI-LIQUI** c and (D23.18E)

Assembly:	delivered as single parts or pre-mounted on a frame (option)	
Nominal diameter:	DN50 ... DN150	
Flow range:	from 1.000 ... 10.000 l/h up to 20.000 l/h ... 200.000 l/h	
Typical tolerances:	flowrate	± 0,25 %
	original gravity in beer:	± 0,05 °Plato
	alcohol in beer:	± 0,07 vol%
	sugar in alc. free beverages:	± 0,10 °Brix
Connection:	IZM → standard:	FG flange
	DI-LIQUI → mounted:	FG flange
Material:	all product-contacting parts made of material no.: 1.4571	
Admissible pressure:	10 bar max.	
Temperature:	Product temperature:	120 °C max.
	Cleaning:	130 °C max. for 30 min.
	the product temperature and the representative temperature range must be indicated for the concentration measurement (see data sheet D23.11E)	
Protection class:	IP65	

DI-LIQUIZ Operating unit

Mounting:	Field housing or incorporated in a control panel	
Dimensions:	330 x 230 x 155 (L x W x H)	Control panel on demand
Weight:	10 kg	Control panel on demand
Protection class:	IP65	Control panel on demand
Supply voltage:	230 V Alternating voltage	
Power consumption:	30 VA only for operating unit and 1 metering system line	
Ambient temperature:	0 ... 40 °C	
Display:	16 x 40 Characters, illuminated, with large-scale screen	
Keyboard:	27 Keys	(numeric plus special keys)
Outputs:	analog standard:	
	4 x 0/4 ... 20 mA	for concentrations or temperature
	1 x 0/4 ... 20 mA	for each metering system line for the IZMS flow
	digital standard:	(for each metering system line)
	3 Limit values	for concentration as alarm or valve control
	1 Error output	
Contact load:	50 V / 500 mA	
Inputs:	analog standard:	(for each metering system line)
	3 x 0/4 ... 20 mA	CO ₂ -compensation from external meter
	digital standard:	
	4 Product sort selection	(32 product sorts max.)
	3 START Batch	
	3 STOP Batch	
	3 Error acknowledgement	
Activation:	24 V / 30 mA	
Interface:	standard	
	BUS interface for BP110 printer	
	(Option) TTY	on demand
	RS232	on demand
	RS485	on demand

BP110 Printer (D52.49E)

Mounting:	Field housing or incorporated in the control panel	
Dimensions:	330 x 230 x 155 (L x W x H)	
Weight:	Field housing:	5 kg
Protection class:	Field housing:	5 kg
Supply voltage:	230 V Alternating voltage	
Power consumption:	10 VA	
Ambient temperature:	0 ... 40 °C	

*) *comparable conditions*

GEA Diessel reserves the right for alterations subject to the technical progress without notification.