

## FLOW RATE CORRECTION CALCULATOR GDR 1403

with Ethernet/IP, Profibus DP, MODBUS-RTU, MODBUS-TCP



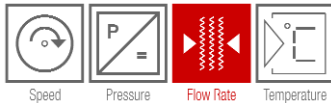
The correction calculator GDR 1403 measures volume or mass flow of flow rate sensors.

Within volume flow rate measurements the flow rate optionally can be obtained in  $\text{Nm}^3$  through additional logging of pressure and temperature.

The programming of the device is carried out by PC using the 32-bit software "E3DM" via USB interface or Ethernet/IP.

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- Integrated recording function to register measurement data (ring buffer 2GB)
- Linearisation through max. 12 data points
- Special version "Precision" with high resolution (0,1 l)
- Limit values / relay / change-over-contact
- Digital input for start-stop function to operate over SPS
- Integration into IT-networks using Ethernet TCP/IP to remote data transmission
- Integration into industrial bus systems, e.g. Profibus DP, Modbus-RTU, Modbus-TCP
- Up to 12 devices curable through internal CANBUS
- At network loss persistent data management of the total counter reading for a period of 5 years



## Technical data

The devices of the series GDR 1403 are available as 1- or 2-channel devices. The series is designed as a modular system. The system enables the configuration of inputs, outputs, interfaces and software options which are required according to the individual requirements of the installation and application. This section provides an overview of all technical information of the series.

### MESSINPUT

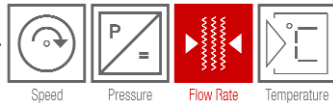
<b>INPUT 1 (CHANNEL "A")</b> TEMPERATURE	0 (4) - 20 mA, 2-/3-wire (temperature) = -100 - 2000 °C (14 bit), input resistance < 100 ohm using 20 mA
<b>INPUT 2 (CHANNEL "A")</b> FLOW RATE	0 (4) - 20 mA (flow rate) = 0 - 20.000 m <sup>3</sup> /h (14 bit), input resistance < 100 ohm using 20 mA or pulse input for gas flowmeter GD 300/GD 500 (flow rate), 10 - 1 kHz at 5% duty cycle, pulse length > 500 μs
<b>INPUT 1 AND 2 (CHANNEL "A")</b> TEMPERATURE AND FLOW RATE	RS 485 interface for gas flow sensor Ecoflow 3 (hot wire anemometer)
<b>INPUT 3 (CHANNEL "B")</b> TEMPERATUR	0 (4) - 20 mA, 2-/3-wire (temperature) = -100 - 2000 °C (14 bit), input resistance < 100 ohm using 20 mA
<b>INPUT 4 (CHANNEL "B")</b> FLOW RATE	0 (4) - 20 mA (flow rate) = 0 - 20.000 m <sup>3</sup> /h (14 bit), input resistance < 100 ohm using 20 mA or pulse input for gas flowmeter GD 300/GD 500 (flow rate), 10 - 1 kHz at 5% duty cycle, pulse length > 500 μs
<b>INPUT 3 AND 4 (CHANNEL "B")</b> TEMPERATURE AND FLOW RATE	RS 485 interface for gas flow sensor Ecoflow 3 (hot wire anemometer)
<b>INPUT 5 (CHANNEL "A")</b> PRESSURE	0 (4) - 20 mA, 2-/3-wire (pressure) = 0 - 30 bar (14 bit), input resistance < 100 ohm or virtual input using a programmable fixed value
<b>INPUT 6 (CHANNEL "B")</b> PRESSURE	0 (4) - 20 mA, 2-/3-wire (pressure) = 0 - 30 bar (14 bit), input resistance < 100 ohm or virtual input using a programmable fixed value
<b>DIGITAL INPUT S1 (CHANNEL "A")</b>	Digital gate-input
<b>DIGITAL INPUT S2 (CHANNEL "B")</b>	Digital gate-input

### OUTPUT

<b>OUTPUT 1 (CHANNEL "A")</b>	0(4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate (freely programmable), load 500 ohm
<b>OUTPUT 2 (CHANNEL "B")</b>	0(4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate (freely programmable), load 500 ohm
<b>OUTPUT 3 (CHANNEL "A")</b>	0(4) - 20 mA = 0 - (x) Nm <sup>3</sup> partial quantity (freely programmable), load 500 ohm
<b>OUTPUT 4 (CHANNEL "B")</b>	0(4) - 20 mA = 0 - (x) Nm <sup>3</sup> partial quantity (freely programmable), load 500 ohm

### RELAY (STANDARD)

<b>K1: COUNTING OUTPUT (CHANNEL "A")</b>	Relay 1 or 10 or 100 or 1.000 or 10.000 Nm <sup>3</sup> per pulse (freely programmable), counting output quantity, NO switch
<b>K2 COUNTING OUTPUT (CHANNEL "B")</b>	Relay 1 or 10 or 100 or 1.000 or 10.000 Nm <sup>3</sup> per pulse (freely programmable), counting output quantity, NO switch
<b>K3: LIMIT VALUE (CHANNEL "A")</b>	Limit value, NO switch, 250 V, AC, 1A inductive
<b>K4: LIMIT VALUE (CHANNEL "B")</b>	Limit value, NO switch, 250 V, AC, 1A inductive



### ELECTRIC VALUES

ACCURACY	$\pm 0,05 \% \text{ EW} \pm 1 \text{ Digit at } 23^{\circ}\text{C}$
POWER SUPPLY	24 V, DC $\pm 3 \text{ V}$

### ENVIRONMENTAL INFLUENCES

AMBIENT TEMPERATURE	-10 to +55°C
STORAGE TEMPERATURE	-20 to +85°C
TEST VOLTAGE	3 kV
HUMIDITY CLASS	E-DIN 40040
ELECTROMAGNETIC COMPATIBILITY	acc. to EN 61000

### DISPLAY, HOUSING, WEIGHT

DISPLAY	6-digit LCD-display for flow rate in $\text{Nm}^3/\text{h}$ (resolution 0,1 $\text{Nm}^3$ ) 8-digit LCD-display in $\text{Nm}^3$ (resolution 0,1 $\text{Nm}^3$ ) Display height 8 mm
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STANDARD HOUSING	Dimensions: 100 mm (W) x 100 mm (H) x 107 (D) mm
RAIL MOUNTING	Protection class: IP 20 Net weight: approx. 480 g

PROTECTIVE HOUSING (OPTION M104)	Dimensions: 343 mm (W) x 330 mm (H) x 210 mm (D)
WALL MOUNTING	With tab and high-strength cable gland Protection class: IP 65

PROTECTIVE HOUSING WITH EX-ZONE (OPTION M105)	Dimensions: 385,5 mm (W) x 487 mm (H) x 210 mm (D)
WALL MOUNTING	With tab and high-strength cable gland Protection class: IP 65

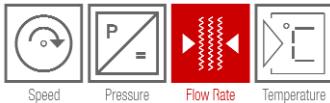
SWITCHBOARD HOUSING (OPTION M112)	Switchboard disruption: $151 \pm 1 \text{ mm} \times 332,5 \pm 1 \text{ mm}$
SWITCHBOARD DOOR MOUNTING	Front frame: 169,7 mm (W) x 351 mm (H) Front frame height: 51 mm Installation depth: 140 mm Max. wall thickness: 23 mm Protection class: IP 30

PORTABLE HOUSING (OPTION M122)	Dimensions: 147 mm (W) x 364 mm (H) x 261 mm (D) Protection class: IP 30
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SWITCHBOARD HOUSING (OPTION M113)	Switchboard disruption: $151 \pm 1 \text{ mm} \times 332,5 \pm 1 \text{ mm}$
SWITCHBOARD DOOR MOUNTING	Front frame: 169,7 mm (W) x 351 mm (H) Front frame height: 51 mm Installation depth: 140 mm Max. wall thickness: 23 mm Protection class: IP 65

PORTABLE HOUSING (OPTION M123)	Dimensions: 147 mm (W) x 364 mm (H) x 261 mm (D) Protection class: IP 65
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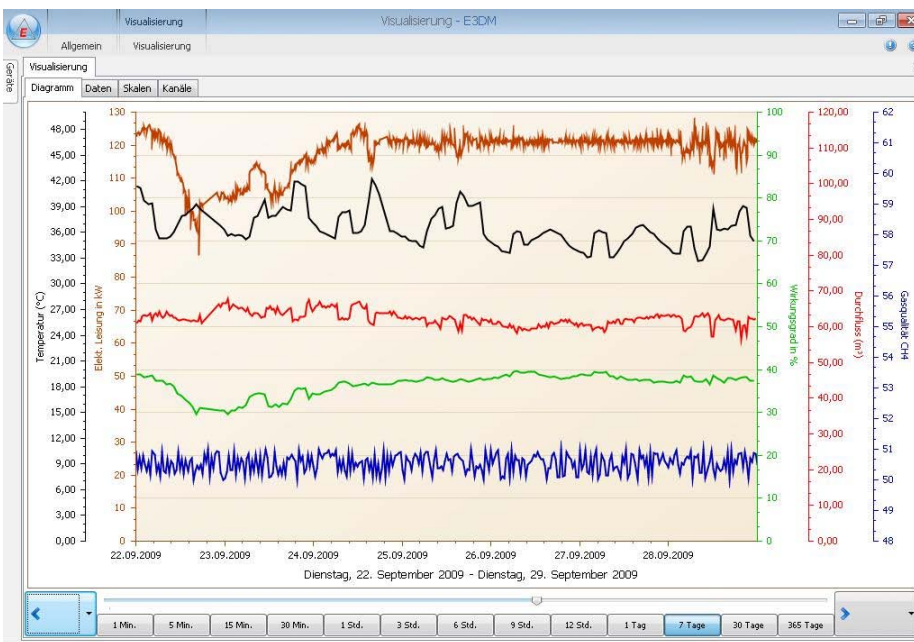
## SOFTWARE & RECORDER

PRECISION (OPTIONAL)	Integrator with high-resolution (0,1 l) within liter mode
E3DM	Esters Energy Efficiency and Device Manager Energy Management- and Configuration Software for Microsoft Windows (32-Bit)
RECORDER (OPTIONAL)	Ring buffer 2 GB Data recorder for logging of measurement values over a period of several years.

## INTERFACES

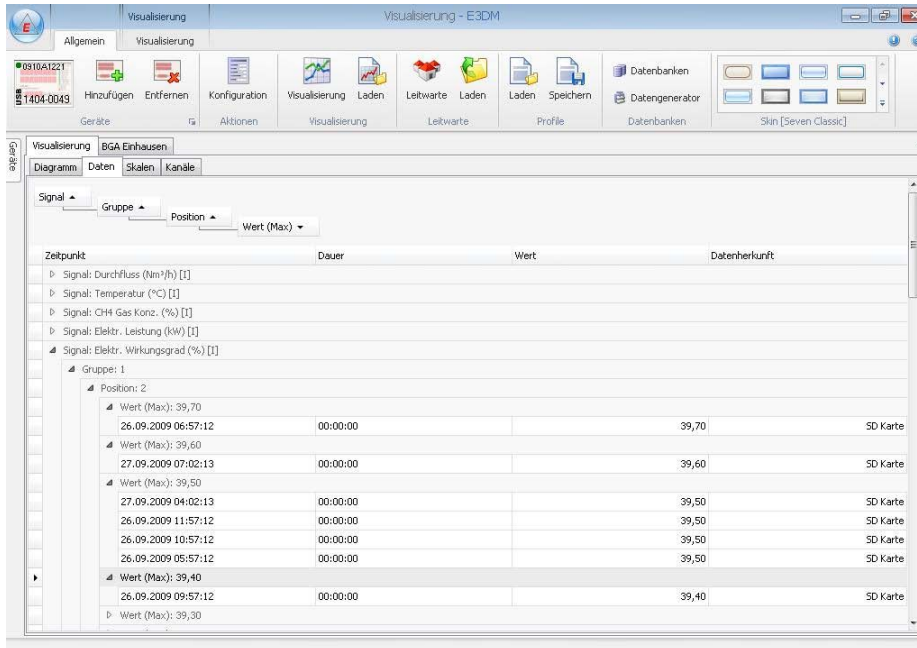
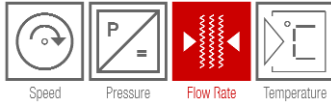
RS 232	9-pin connection to update the firmware
USB	Mini USB-connection (5-pin, USB 2.0) for configuration and data transfer through PC
CANBUS (OPTIONAL)	Internal communication of up to 12 curable devices
PROFIBUS DP (OPTIONAL)	Data transmission via Profibus-DP protocol
MODBUS RTU (OPTIONAL)	Data transmission via MODBUS-RTU protocol
MODBUS IP (OPTIONAL)	Data transmission via MODBUS-TCP protocol
ETHERNET (OPTIONAL)	Integration into the IT-network for configuration and data transfer through PC

## Software E3DM - Esters Energy Efficiency and Device Manager



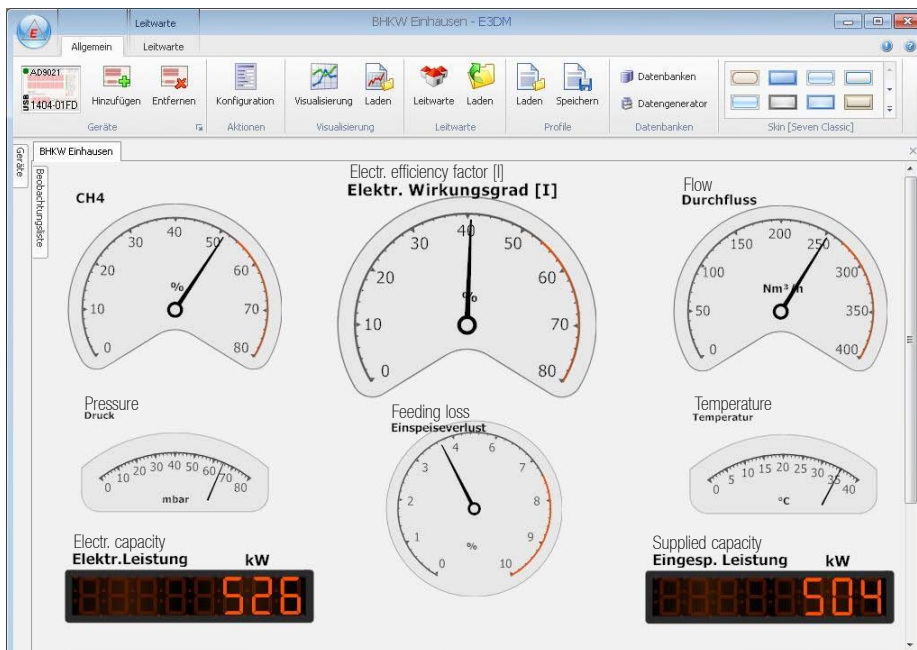
Graphic visualization of the measured values continuously recorded in the ring buffer. In the illustration the following measured values are displayed:

- Efficiency factor in % (Wirkungsgrad in %)
- Flow (m<sup>3</sup>) (Flow rate m<sup>3</sup>)
- Gas quality (CH<sub>4</sub>) (Gasqualität (CH<sub>4</sub>))
- Electrical capacity in kW (Elektrische Leistung in kW)
- Temperature in °C (Temperatur in °C)



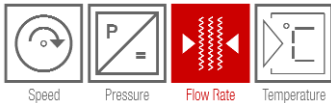
Tabular visualization of the measured values continuously stored in the ring buffer. The reported data can be assorted with multi-level column sort.

In the illustration the data is arranged according to signal and height of the measured value.



In the master display the actual measured values are mapped. The amount of the displayed values and the graphical illustration can be adjusted individually.

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## Order information

The ordering code consists of the device type GDR 1403 and an 8-digit code, which itself is divided into 2 sections with four points.:

GDR 1403-xxxx-xyy

In the following tables the first six points are defined according to the desired equipment. The last two digits define the content of functions (such as ring buffer, interfaces for industrial bus systems).

Example:

### GDR 1403-00DF-001C

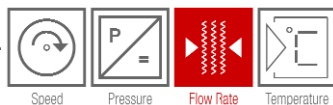
2 channel device with 2 pulse-inputs for flow measurement, input for pressure and temperature sensor and 2 output signals for Nm<sup>3</sup>/h and Nm<sup>3</sup> for each channel as well as 2 digital inputs. The unit is also equipped with the optional functions Profibus-DP interface, Ethernet TPC/IP interface, 2 GB ring buffer.

### GDR 1403-001F-111C M104

2 channel device with 2 flow rate sensors with a RS 485 interface for measuring flow rate and temperature as well as 2 inputs for pressure for each channel and 2 digital inputs. Each channel provides an output for Nm<sup>3</sup>/h and Nm<sup>3</sup>. The unit is also equipped with the optional functions Profibus-DP interface, Ethernet TPC/IP interface, 2 GB ring buffer and is built into the field housing M104 for wall mounting.

legend:

- hardware integrated
- v fixed value programmable via Software E3DM

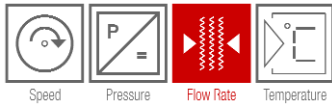


### Devices with pulse-input for flow measurement (GD 300, GD 500 incl. Ex ia isolating amplifier)

GDR 1403-xxxx-00yy	1-CHANNEL "A"											
	0041	0241	0141	0341	0049	0249	0149	0349	0245	005D	025D	
<b>INPUT</b>												
1: 0 (4) - 20mA, 2/3-wire temperature ("A")	●	●	●	●	●	●	●	●	●	●	●	●
2: Pulses, flow rate ("A")	●	●	●	●	●	●	●	●	●	●	●	●
3: 0 (4) - 20 mA, 2/3-wire temperature ("B")												
4: Pulses, flow rate ("B")												
5: 0 (4) - 20 mA, 2/3-wire pressure ("A")	●	●	v	v	●	●	v	v	●	●	●	●
6: 0 (4) - 20 mA, 2/3-wire pressure ("B")												
<b>DIGITAL INPUT</b>												
7: S1 ("A")									●	●	●	●
8: S2 ("B")												
<b>OUTPUT</b>												
9: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("A")					●	●	●	●		●	●	●
10: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("B")												
11: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("A")										●	●	●
12: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("B")												
<b>SOFTWARE</b>												
Precision		●		●		●		●	●			●
Power supply: 24 V, DC	●	●	●	●	●	●	●	●	●	●	●	●

GDR 1403-xxxx-00yy	2-CHANNEL "A" AND "B"									
	00C3	02C3	01C3	03C3	00CB	02CB	01CB	03CB	00DF	02DF
<b>INPUT</b>										
1: 0 (4) - 20mA, 2/3-wire temperature ("A")	●	●	●	●	●	●	●	●	●	●
2: Pulses, flow rate ("A")	●	●	●	●	●	●	●	●	●	●
3: 0 (4) - 20 mA, 2/3-wire temperature ("B")	●	●	●	●	●	●	●	●	●	●
4: Pulses, flow rate ("B")	●	●	●	●	●	●	●	●	●	●
5: 0 (4) - 20 mA, 2/3-wire pressure ("A")	●	●	v	v	●	●	v	v	●	●
6: 0 (4) - 20 mA, 2/3-wire pressure ("B")	●	●	v	v	●	●	v	v	●	●
<b>DIGITAL INPUT</b>										
7: S1 ("A")									●	●
8: S2 ("B")									●	●
<b>OUTPUT</b>										
9: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("A")					●	●	●	●	●	●
10: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("B")					●	●	●	●	●	●
11: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("A")									●	●
12: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("B")									●	●
<b>SOFTWARE</b>										
Precision		●		●		●		●		●
Power supply: 24 V, DC	●	●	●	●	●	●	●	●	●	●

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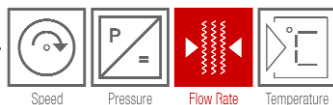
## Devices with mA-input for flow measurement (Ecoflow2, third-party products)

GDR 1403-xxxx-00yy	1-CHANNEL "A"					2-CHANNEL "A" AND "B"					
	0001	0101	0009	0109	001D	0003	0103	0007	000B	010B	001F
<b>INPUT</b>											
1: 0 (4) - 20mA, 2/3-wire temperature ("A")	●	●	●	●	●	●	●	●	●	●	●
2: 0 (4) - 20 mA, flow rate ("A")	●	●	●	●	●	●	●	●	●	●	●
3: 0 (4) - 20 mA, 2/3-wire temperature ("B")						●	●	●	●	●	●
4: 0 (4) - 20 mA, flow rate ("B")						●	●	●	●	●	●
5: 0 (4) - 20 mA, 2/3-wire pressure ("A")	●	v	●	v	●	●	v	●	●	v	●
6: 0 (4) - 20 mA, 2/3-wire pressure ("B")						●	v	●	●	v	●
<b>DIGITAL INPUT</b>											
7: S1 ("A")					●			●			●
8: S2 ("B")								●			●
<b>OUTPUT</b>											
9: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("A")			●	●	●				●	●	●
10: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("B")									●	●	●
11: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("A")					●						●
12: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("B")											●
Power supply: 24 V, DC	●	●	●	●	●	●	●	●	●	●	●

## Devices with pulse-input and mA-input for flow measurement - divers measurements

GDR 1403-xxxx-00yy	2-CHANNEL "A" AND "B"									
	0043	0243	0143	0343	004B	024B	0247	005F	025F	
<b>INPUT</b>										
1: 0 (4) - 20mA, 2/3-wire temperature ("A")	●	●	●	●	●	●	●	●	●	●
2: Pulses, flow rate ("A")	●	●	●	●	●	●	●	●	●	●
3: 0 (4) - 20 mA, 2/3-wire temperature ("B")	●	●	●	●	●	●	●	●	●	●
4: 0 (4) - 20 mA, flow rate ("B")	●	●	●	●	●	●	●	●	●	●
5: 0 (4) - 20 mA, 2/3-wire pressure ("A")	●	●	v	v	●	●	●	●	●	●
6: 0 (4) - 20 mA, 2/3-wire pressure ("B")	●	●	v	v	●	●	●	●	●	●
<b>DIGITAL INPUT</b>										
7: S1 ("A")							●	●	●	
8: S2 ("B")							●	●	●	
<b>OUTPUT</b>										
9: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("A")					●	●		●	●	
10: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("B")					●	●		●	●	
11: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("A")								●	●	
12: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("B")								●	●	
<b>SOFTWARE</b>										
Precision		●		●		●	●			●
Power supply: 24 V, DC	●	●	●	●	●	●	●	●	●	●





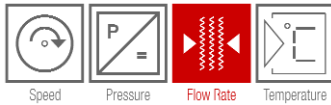
## Devices with pulse-input and mA-input for flow measurement - divers measurements

GDR 1403-xxxx-00yy	2-CHANNEL "A" AND "B"							
	0083	0283	0183	0383	008B	028B	009F	029F
<b>INPUT</b>								
1: 0 (4) - 20mA, 2/3-wire temperature ("A")	●	●	●	●	●	●	●	●
2: 0 (4) - 20 mA, flow rate ("A")	●	●	●	●	●	●	●	●
3: 0 (4) - 20 mA, 2/3-wire temperature ("B")	●	●	●	●	●	●	●	●
4: Pulses, flow rate ("B")	●	●	●	●	●	●	●	●
5: 0 (4) - 20 mA, 2/3-wire pressure ("A")	●	●	v	v	●	●	●	●
6: 0 (4) - 20 mA, 2/3-wire pressure ("B")	●	●	v	v	●	●	●	●
<b>DIGITAL INPUT</b>								
7: S1 ("A")							●	●
8: S2 ("B")							●	●
<b>OUTPUT</b>								
9: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("A")					●	●	●	●
10: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("B")					●	●	●	●
11: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("A")							●	●
12: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("B")							●	●
<b>SOFTWARE</b>								
Precision		●		●		●		●
Power supply: 24 V, DC	●	●	●	●	●	●	●	●

## Devices with RS 485 interface for flow measurement (Ecoflow3, third-party products)

GDR 1403-xxxx-01yy	1-CHANNEL "A"										
	0001	0241	0101	0341	0009	0249	0109	0349	0245	001D	025D
<b>INPUT</b>											
1, 2: RS 485 for flow rate and temperatur ("A")	●	●	●	●	●	●	●	●	●	●	●
3, 4: RS 485 for flow rate and temperatur ("B")											
5: 0 (4) - 20 mA, 2/3-wire pressure ("A")	●	●	v	v	●	●	v	v	●	●	●
6: 0 (4) - 20 mA, 2/3-wire pressure ("B")											
<b>DIGITAL INPUT</b>											
7: S1 ("A")									●	●	●
8: S2 ("B")											
<b>OUTPUT</b>											
9: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("A")					●	●	●	●		●	●
10: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("B")											
11: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("A")										●	●
12: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("B")											
<b>SOFTWARE</b>											
Precision		●		●		●		●	●		●
Power supply: 24 V, DC	●	●	●	●	●	●	●	●	●	●	●

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## Devices with RS 485 interface flow measurement

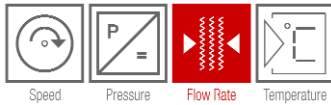
GDR 1403-xxxx-11yy	2-CHANNEL "A" AND "B"													
	0003	0243	0103	0343	000B	024B	010B	03CB	011B	03DB	0007	0247	001F	025F
<b>INPUT</b>														
1, 2: RS 485 for flow rate and temperatur ("A")	●	●	●	●	●	●	●	●	●	●	●	●	●	●
3, 4: RS 485 for flow rate and temperatur ("B")	●	●	●	●	●	●	●	●	●	●	●	●	●	●
5: 0 (4) - 20 mA, 2/3-wire pressure ("A")	●	●	v	v	●	●	v	v	v	v	●	●	●	●
6: 0 (4) - 20 mA, 2/3-wire pressure ("B")	●	●	v	v	●	●	v	v	v	v	●	●	●	●
<b>DIGITAL INPUT</b>														
7: S1 ("A")											●	●	●	●
8: S2 ("B")											●	●	●	●
<b>OUTPUT</b>														
9: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("A")					●	●	●	●	●	●			●	●
10: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("B")					●	●	●	●	●	●			●	●
11: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("A")										●	●		●	●
12: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("B")										●	●		●	●
<b>SOFTWARE</b>														
Precision		●		●		●		●		●		●		●
Power supply: 24 V, DC	●	●	●	●	●	●	●	●	●	●	●	●	●	●

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## Devices with pulse-input and RS 485 interface flow measurement

### - divers measurements

GDR 1403-xxxx-10yy	2-CHANNEL "A" AND "B"											
	0043	0243	0143	0343	004B	024B	01CB	03CB	005F	025F	0247	
<b>INPUT</b>												
1: 0 (4) - 20mA, 2/3-wire temperature ("A")	●	●	●	●	●	●	●	●	●	●	●	●
2: Puls, Flow rate ("A")	●	●	●	●	●	●	●	●	●	●	●	●
3, 4: RS 485 for flow rate and temperatur ("B")	●	●	●	●	●	●	●	●	●	●	●	●
5: 0 (4) - 20 mA, 2/3-wire pressure ("A")	●	●	v	v	●	●	v	v	●	●	●	●
6: 0 (4) - 20 mA, 2/3-wire pressure ("B")	●	●	v	v	●	●	v	v	●	●	●	●
<b>DIGITAL INPUT</b>												
7: S1 ("A")										●	●	●
8: S2 ("B")										●	●	●
<b>OUTPUT</b>												
9: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("A")					●	●	●	●	●	●		
10: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("B")					●	●	●	●	●	●		
11: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("A")										●	●	
12: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("B")										●	●	
<b>SOFTWARE</b>												
Precision		●		●		●		●		●		●
Power supply: 24 V, DC	●	●	●	●	●	●	●	●	●	●	●	●



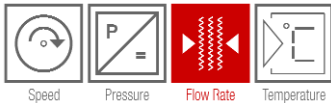
## Devices with mA-input and RS 485 interface for flow measurement - divers measurements

GDR 1403-xxxx-10yy	2-CHANNEL "A" AND "B"					
	0003	0103	0007	000B	010B	001F
<b>INPUT</b>						
1: 0 (4) - 20mA, 2/3-wire temperature ("A")	●	●	●	●	●	●
2: 0 (4) - 20 mA, flow rate ("A")	●	●	●	●	●	●
3, 4: RS 485 for flow rate and temperature ("B")	●	●	●	●	●	●
5: 0 (4) - 20 mA, 2/3-wire pressure ("A")	●	v	●	●	v	●
6: 0 (4) - 20 mA, 2/3-wire pressure ("B")	●	v	●	●	v	●
<b>DIGITAL INPUT</b>						
7: S1 ("A")			●			●
8: S2 ("B")			●			●
<b>OUTPUT</b>						
9: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("A")				●	●	●
10: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> /h flow rate ("B")				●	●	●
11: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("A")						●
12: 0 (4) - 20 mA = 0 - (x) Nm <sup>3</sup> part. quantity ("B")						●
<b>SOFTWARE</b>						
Precision						
Power supply: 24 V, DC	●	●	●	●	●	●

## Optional device functions and housings

GDR 1403-xxxx-xx	
0	Without option
1	Interface PROFIBUS-DP
2	Interface Modbus-RTU
4	Interface Modbus-TCP
0	Without option
1	Interface CAN-Bus
4	Interface Ethernet TCP/IP
5	Interface CAN-Bus, Interface Ethernet TCP/IP
8	Ring buffer 2 GB (data recorder)
9	Ring buffer 2 GB (data recorder), Interface CAN-Bus
C	Ring buffer 2 GB (data recorder), Interface Ethernet TCP/IP
D	Ring buffer 2 GB (data recorder), Interface CAN-Bus, Interface Ethernet TCP/IP

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## HOUSING

M104	Field housing for wall mounting, protection class IP 65
M105	Field housing with Ex zone for wall mounting, protection class IP 65
M112	Switchboard door housing, protection class IP 30
M122	Portable housing, protection class IP 30
M113	Switchboard door housing, protection class IP 65
M123	Portable housing, protection class IP 65

### Fluidistor Gas Flowmeter GD 300

The Fluidistor Gas Flowmeter measures all technical and medical gases with a nominal width of DN 25 to DN 400 and a measurement range of 0,2 ... 20 ... 16.000 m<sup>3</sup>/h.

Accuracy:  $\pm 1,5\%$

For further information see datasheet DS 312 E.



### Compact-Fluidistor Gas Flowmeter GD 500

The Compact-Fluidistor Gas Flowmeter (stainless steel 1.4571) measures all technical and medical gases with a measurement range of 0,21 - 16,8 m<sup>3</sup>/h (process connection G 1/2", G 1").

Accuracy:  $\pm 1,5\%$

For further information see datasheet DS 312 E.



### Thermal Mass Flowmeter Ecoflow3

The thermal mass flow meter measures pressured air, nitrogen, oxygen and carbon dioxide with a measurement range of 0,32 ... 1.400 Nm<sup>3</sup>/h (nominal size DN 15 - DN 50) in industrial and medical areas.

Accuracy:  $\pm 2,5\% + 0,3\%$

For further information see datasheet DS 313 E.

