



# Electronic Instruments for Flow Rate and Total Flow Measurement



## Electronic Instruments of SIKA are...

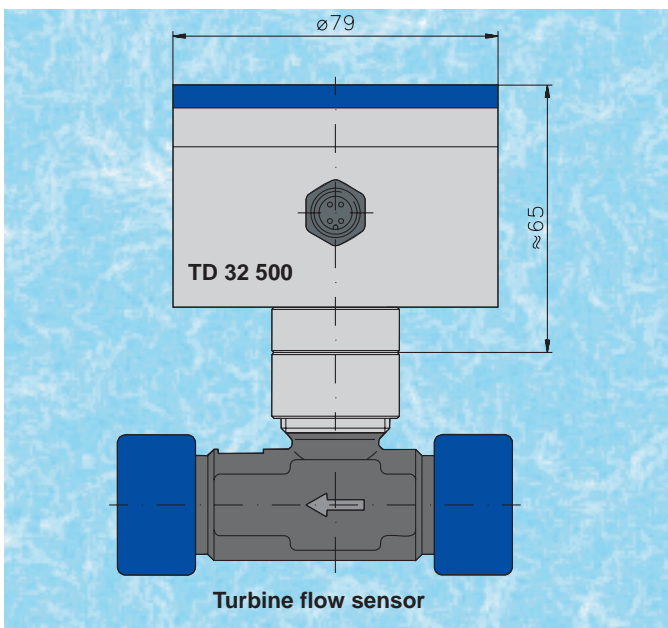
## ... Proper Ones for Each Application!

### TD 32 500 - Local Flow Rate and Total Flow Measuring Instrument

- Supplied fitted directly on SIKA turbine flow sensors, serie Turbotron
- Display can be switched to flow rate total flow (resettable) total flow (non resettable) optional temperature
- In addition bargraph 0...100 % to display flow rate, total flow (resettable) or optionally temperature
- Menu-driven programming via two light-reflex buttons
- Key lock for unintentional operation
- Robust stainless steel casing, with a closed glass window front
- Rotating case gives improved reading
- Display selection German, English or French
- Fixed connecting cable or plug connector M12x1



### The Perfect Team!



### Options

- Additional temperature display, input for resistance thermometer Pt 100/ 3-wires
- Analogue output 0/4... 20 mA or 0...10 V, freely adjustable, allocated to: flow rate, total flow (resettable) or optional temperature
- Two fast-switching alarm outputs, min or max allocation selective: flow rate, total flow (resettable) or optional temperature
- A red LED signals clearly alarms
- Pulse output for flow rate, if required with frequency divider (pulse reduction)

## Technical Data

Signal input	Frequency signal from flow or total flow sensor 0.5...2000 Hz, pulse rate programmable
Additional temperature input (optional)	Pt 100 / 3-wires, measuring range -10...+150 °C
Programming	Menu-driven with two light reflex buttons
Display	2-line LC-display with 16 characters per line, character height: 5 mm
Programmable units	l/min, l/h, m³/h, GPM (US), GPM(UK) l, m³, GAL(US), GAL(UK), °C, °F
Power supply	12...24 VDC
Power supply to sensor	12 VDC
Ambient temperature	-10...+60 °C
Temperature of medium through the flow sensor	Depending on type of sensor, maximum -20...+90 °C
Analogue output (optional)	0/4...20 mA (max. resistance 800 Ω with 24 VDC) or 0...10 V, adjustable for flow rate, total flow (resettable) or optional temperature
Alarm outputs (optional)	Two PNP transistor open collector outputs, programmable for min- or max alarm, hysteresis programmable, allocation of flow rate, total flow (resettable) or optional temperature holding current or working current programmable
Pulse output with frequency divider (optional)	PNP open collector, TTL-level, programmable divider-rate
Casing	Circular stainless steel casing, ø 80 mm, height 55 mm, 350° rotating
Protection class	IP 65
Electrical supply	PVC-connection cable, 2 m or plug connector M12x1

## Order Code-No:

Order number	ED 325	X	X	I000	XX	9	X	X
Input	flow sensor flow sensor and Pt 100	6 7						
Outputs	none analogue output pulse + frequency divider analogue + frequency divider		O A F B					
Alarm output	none 2, programmable				00 29			
Electr. connection	2 m cable plug M12x1						1 2	
Number of pins/leads	laid down by SIKA, depending on requirements							0

## TS 11500C – Programmable Flow Rate and Total Flow Measurement Instrument

- Universal control panel fitted measurement instrument, suitable for all SIKA flow sensors
- Display can be switched between 'Flow Rate' and 'Total Flow'
- Various units programmable
- Voltage supply for connected flow sensor integrated
- Optional 3 alarm contacts  
2 for flow rate (min. or max.)  
1 for total flow (dosing function, batch control)
- Optional serial interface RS 232 C or free adjustable analogue output 0/4...20 mA or 0...10V (programmable)



### Technical Data

Signal input	Frequency signal from flow sensor 0...1.5 kHz
Sensor adaptation	Programming of pulses/l (K-factor)
Programming	Three pushbuttons at the front or via serial interface / software
Display	5-digit 7 segment display, height 14 mm, red, switched between "flow rate" and "total flow"
Programmable units	Q: l/min, m³/h, l/h, GPM (US), GPM (UK)      V: l, m³, GAL (US), GAL (UK)
Power supply	Standard: 230 VAC      Optional: 115 VAC, 24 VAC, 12 VDC, 24 VDC
Power consumption	1.65 VA with 230 VAC
Electr. sensor supply	24 V, 15 V or 10 VDC, max. 750 mW
Casing (w x h x d)	96 x 48 x 150 mm, plastic casing for panel installation
Storage temperature	-10 ... +80 °C
Ambient temperature	0 ... 60 °C
Serial interface (optional)	RS 232 C
Analogue output (optional)	For flow rate 0/4 ... 20 mA (max. resistance 200 Ω) or 0 ... 10 V programmable
Alarm relay (optional)	Max. contact capacity 230 V / 0.2 A / 50 VA

### Order Code Number

Order number	ES 1156	X	X	000	XX	X
Signal output	none analogue output RS 232 C	0 2 8				
Protection class	IP 20 IP 54		0 5			
Rated value monitoring	none 3 alarm contacts				00 39	
Supply voltage	230 VAC 115 VAC 24 VAC 12 VDC 24 VDC					0 2 3 5 6

## FlowTest - Portable Flow Indicator

The SIKA FlowTest is a digital display unit for temporary connection to flow sensors and flow switches. The following characteristics ensure a fast and user-friendly measurement on site:

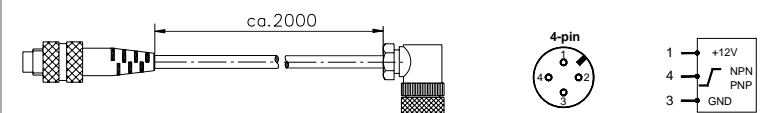
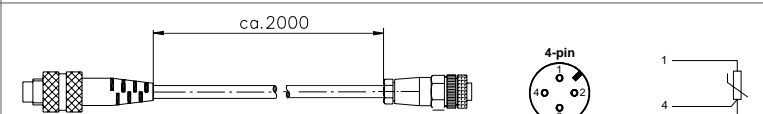
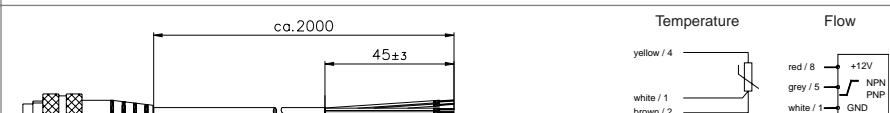
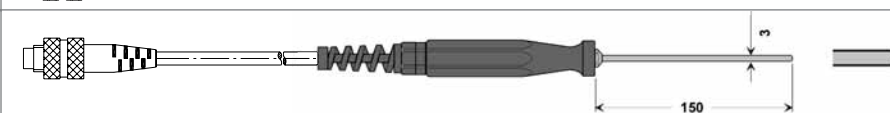
- Compact hand-held unit for service and startup
- Display of flow rate or total flow
- Power supply by rechargeable battery also for the connected flow sensor, thus independent from local mains voltage supply
- Supplementary measurement of temperature
- Supply complete in a service case with battery charger and a measurement cable



## Technical Data

Sensor inputs	Frequency signal of flow sensors NPN or PNP, Pt 100 / 3 wire		
Adaptation to flow sensors	Through programmable pulse rate		
Power supply for sensor	12 VDC (by integrated battery)		
Display	LCD		
Display values and units	Flow rate: l/min, l/h, m <sup>3</sup> /h, USGPM, IGPM total flow: l, m <sup>3</sup> , USGAL, GAL (UK) temperature: °C, resolution: 0.5 °C		
Casing	Dimensions	Aluminum, hollow profile, golden anodized	130 x 70 x 20 (H x W x D)

## Order Code and Accessory

Description	Order-No.	
<b>Flow indicator FlowTest</b>	<b>ET 7250</b>	<b>Incl. measurement cable flow AD 2030, battery charger and service case</b>
Measurement cable flow (in ET 7250 included)	AD 2030	
Measurement cable temperature Pt 100/3-wire	AD 2037	
Measurement cable open, flow / temperature	AD 2039	
Hand-held temperature sensor	VGTF 401	

## TU 7055 - Electronic Measuring Transducer for Flow Sensors

- Transforms the frequency-output signal of flow sensors into analogue signals
- 0/4...20 mA and 0...10 V are simultaneously available
- Casing for mounting rail installation
- Voltage supply for the connected flow sensor integrated



## Technical Data

Signal input	Frequency signal from flow sensor
2 output signals	0/4...20 mA and 0...10 V
Power supply	12...24 VDC $\pm 10\%$ galvanically insulated
Casing dimensions (w x h x d)	17,5 x 82 x 67 mm
Casing	Plastic casing for c-rail
Ambient temperature	0...+60 °C
Storage temperature	-10...+80 °C

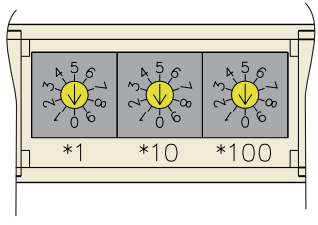
## Order Code Number

Order number: EU705520000006

## TU 7052 –Electronic Frequency Divider for Flow Sensors

If the output frequency of a flow sensor is too high for a present evaluation instrument, TU 7052 should be installed. It transforms a high output frequency of a sensor into a lower frequency which can be processed by the present instrument:

$$\text{output frequency} = \frac{\text{input frequency}}{\text{divisor}}$$



The divisor can simply be switched by three rotary switches.  
 The voltage supply for the connected sensor is integrated in the device.

### Technical Data

Signal input	Frequency signal from flow sensor
Divisor	Switched by three rotary switches in the range of 1...999
Output	Square-wave signal, pulse duty ratio 1:1 • NPN with 5 kΩ internal pull-up resistance and • PNP with 5 kΩ internal pull-down resistance • Optocoupler
Power supply	12...24 VDC ±10 %
Casing dimensions (w x h x d)	17,5 x 82 x 67 mm
Casing	Plastic casing for c-rail
Ambient temperature	0...60 °C
Storage temperature	-10...+80 °C

### Order Code Number

Order number:	EU7052F0000006
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# Our Production and Sales Range



Flow Measurement Equipment



Axial Turbine Flow Sensor



Flow Switches



Pressure Gauges and Pressure Sensors



Industrial Thermometers



Electronic Digital Thermometer, Dial Thermometer



Measuring Instruments



Temperature Sensors



Calibrators, DKD-Laboratory

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Subject to technical modification



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