

# Frequency displays / tachometers with limits

LED tachometers	Dual frequency display with 4 outputs and analog output (AC+DC)	574
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Frequency display for demanding applications, with two individually scalable encoder inputs, in each case A, /A, B, /B for count frequencies up to 1 MHz per channel (also for single channel use).

Operating modes can be selected for tachometer or frequency display with measurements for difference, total value, product or ratio (also with reciprocal display).



<b>AC/DC</b> 24/17 ... 30V	<b>DIN 96x48</b>	<b>IP65</b>	<b>max.</b> 1 MHz			<b>6 LEDs</b>	<b>DC out</b> 5 / 24 V		<b>4</b>	<b>RS232</b>
Supply voltage	DIN front bezel	High protection level	2 separate pulse inputs	Operation with gloves	TTL, HTL and RS422-input	LED display	2 x Sensor supply	Analog output optional	Transistor output	Interface

## Innovative

- 2 separate freely scalable frequency inputs: HTL or TTL (both also with inverted inputs), max. input frequency 1 MHz/channel.
- Very bright LED display, 15 mm high (6 digits).
- 4 freely programmable fast solid-state outputs, each with 350 mA output current.
- Many different output modes.
- Simple programming – with function codes, dependent on the operating mode selected.
- With 9 fixed different frequency functions, e.g.:
  - Single, difference and total value measurement of both inputs.
  - Product and ratio measurement.
  - Percentage measurement.
  - In-process time calculated from frequency (reciprocal speed).

## Compact and multifunctional

- Up to 3 display values in a single device: display counter 1, display counter 2 as well as the display calculated from counter 1 and 2.
- AC and DC supply voltage in one device.
- Simple programming with 4 keys, all keys can be assigned dual programming functions.
- Can be used as a frequency display or tachometer with limit values.
- Monitoring function, where 2 values are monitored or calculated with respect to each other.
- 4 fast programmable inputs with various functions such as start delay, key lockout, display memory, reference input or switching between the display values.
- Scalable analog output 0/4 ... 20 mA, +/-10 V or 0 ... 10 V.
- Standard interface RS232 for parameter setting, for reading out the values to a PC or PLC, for modifications during operation.

## Order specifications

### 4 fast switch outputs, serial interface (RS232)

6 digits

6 digits, scalable analog output

### Order no.

**6.574.0116.D05**

**6.574.0116.D95**

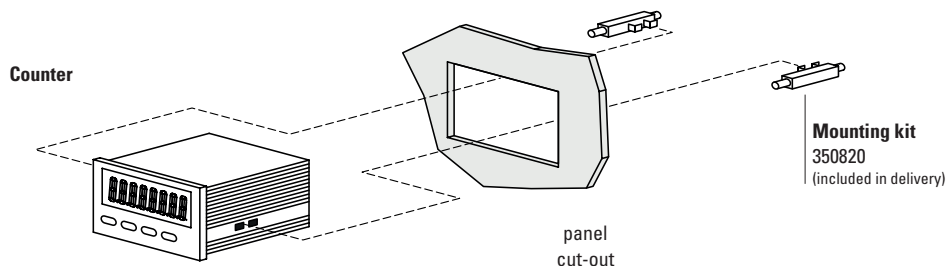
### Delivery specification

- Controller 574
- Gasket
- Fastening set
- Instruction manual German/English

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## Accessories / Mounting examples



		Type / size	Description	Order no.	
<b>Mounting kit</b>			1 kit consists of 2 latch hooks	<b>350820</b>	
<b>Mounting frame</b>		<b>cut-out</b> <b>92 x 45 mm</b> <b>[3.62 x 1.77"]</b>	for snap-on mounting on 35 mm [1.38"] top-hat DIN rail	grey <b>G300005</b>	—
<b>Software for parameter setting OSxx</b>			<a href="https://www.kuebler.com/de/docu-finder">https://www.kuebler.com/de/docu-finder</a> search box: OS1		

incl. in delivery

## Technical data

General technical data		
<b>Display</b>	6-digit	LED display, 15 mm [0.59"] high
<b>Operating temperature</b>	0 °C ... +45 °C [+32 °F ... +113 °F]	(non-condensing)
<b>Storage temperature</b>	-25 °C ... +70 °C [-13 °F ... +158 °F]	

Electrical characteristics		
<b>Supply voltage</b>	24 V AC, + 10 %	24 (17 ... 30) V DC
<b>Current consumption DC</b>	100 mA	+ current consumption encoder
<b>Connected load AC</b>	15 VA	
<b>Auxiliary power supply (for sensors)</b>	2 x 5.2 V DC, each 150 mA	2 x 24 V DC, each 120 mA
<b>Device safety</b>	designed to protection class application area	EN 61010 part 1 2 pollution level 2

Mechanical characteristics		
<b>Housing material</b>		Noryl UL94-V-0
<b>Screw terminal</b>	cable cross-section	max. 1.5 mm² [AWG 15]
<b>Protection</b>		IP65 from front
<b>Weight</b>		approx. 250 g [8.82 oz]

Inputs		
2 universal incremental encoder inputs		
<b>Count frequency (per encoder)</b>	RS422 and TTL with inv.	1 MHz
	HTL asymmetric	200 kHz
	TTL asymmetric	200 kHz
<b>Entrées de commande</b>	Ri	3.3 kOhm
4 control inputs HTL	Low	< 2.5 V
	High	> 10 V
	min. pulse duration	50 µs

Outputs		
<b>Switch outputs</b>		
4 fast power transistors	5 ... 30 V DC, 350 mA	
reaction time	< 1 ms <sup>1)</sup>	
inductive loads require a freewheeling diode		
<b>Serial interface</b>	RS232, 2400 ... 38400 baud	
<b>Analog outputs (6.574.0116.D95)</b>		
0 / 4 ... 20 mA	load max.	270 Ohm
0 ... +10 V	max.	2 mA
Resolution		14 bit
precision		0.1 %
reaction time		< 1 ms

Approvals		
<b>CE compliant</b> in accordance with		
EMC Directive	2014/30/EU	
RoHS Directive	2011/65/EU	
Low Voltage Directive	2014/35/EU	

1) Intensive serial communication can temporarily increase the reaction time.

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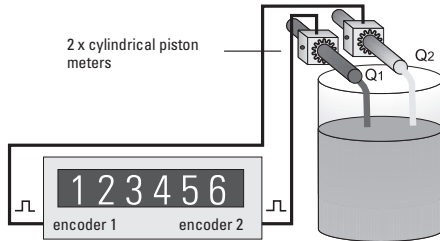
## LED tachometers

## Dual frequency displays with 4 outputs and analog output (AC+DC)

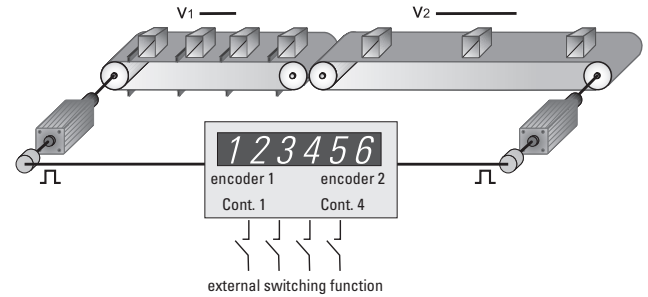
574

### Application examples

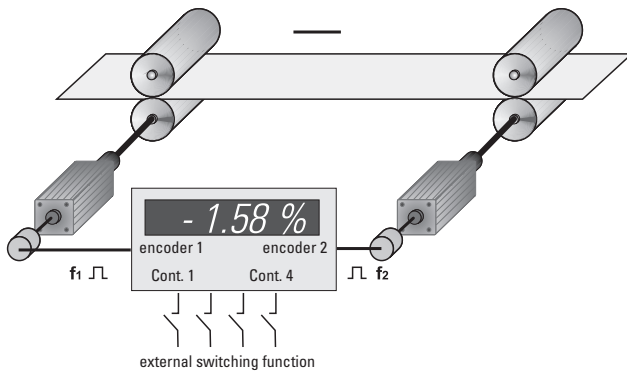
#### Total flow rate



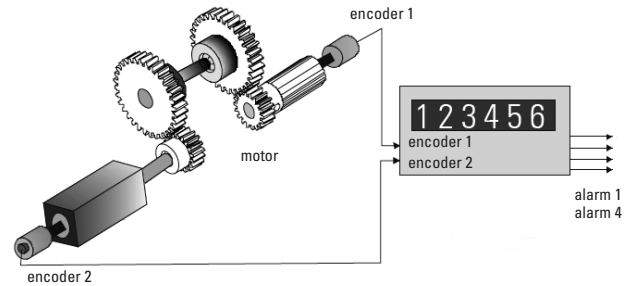
#### Speed difference



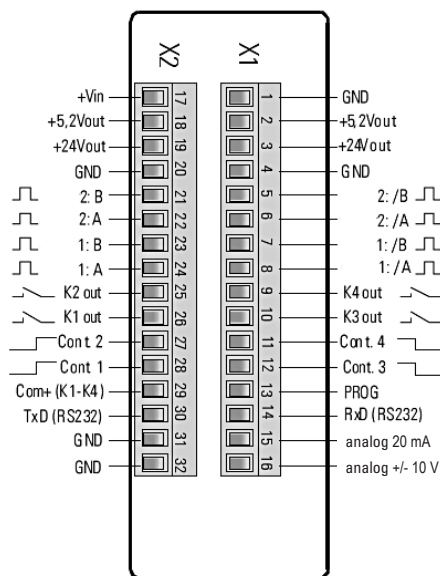
#### Material stretching to create tensile stress



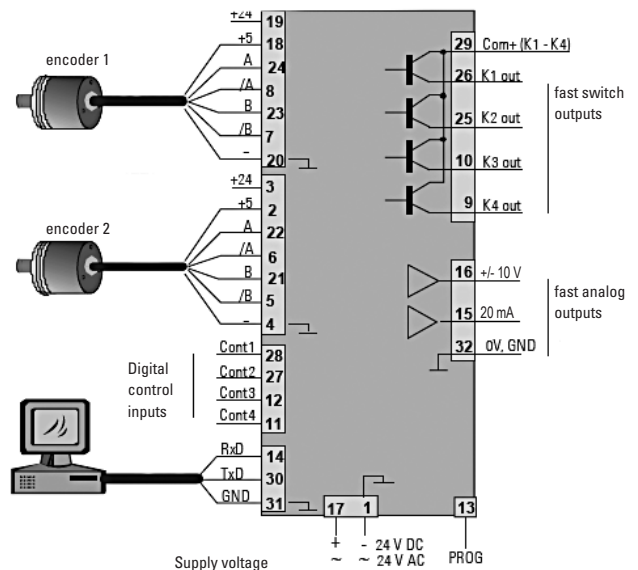
#### Monitoring of torsion, shafts or gear breakage



### Terminal assignment



### Connection examples



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## Dimensions

Dimensions in mm [inch]

