

# Frequency displays / tachometers with limits

<b>LED tachometers</b>	<b>Dual frequency displays with 4 outputs and analog output (AC+DC)</b>	<b>574</b>
------------------------	---	------------



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

6 digits, RS232 and RS485

Order no.

**6.574.0116.D05**

**6.574.0116.D95**

**6.574.0116.D75**

Delivery specification

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

### Accessories

Dimensions in mm [inch]

Order no.

#### Mounting frame for DIN rail mount

with cut-out 92 x 45 [3.62 x 1.77]

**G300005**



### OS6.0 software for parameter setting

can be downloaded at [www.kuebler.com](http://www.kuebler.com)

Suitable gaskets as well as further accessories can be found in the accessories section or in the accessories area of our website at: [www.kuebler.com/accessories](http://www.kuebler.com/accessories).

# Frequency displays / tachometers with limits

## LED tachometers Dual frequency displays with 4 outputs and analog output (AC+DC) 574

### 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>Power supply</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>EMC standards</b>	EN 55011 class B, EN 61000-6-2, EN 61000-6-3 EN 61326-3-2	
<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 mm <sup>2</sup> [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

#### Entrées de commande

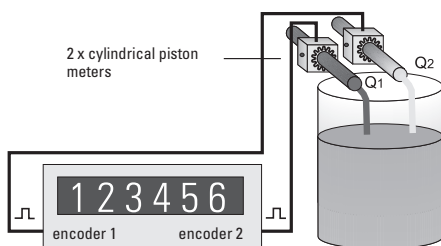
4 control inputs HTL	
Ri	3.3 kOhm
Low	< 2.5 V
High	> 10 V
min. pulse duration	50 µs

#### Outputs

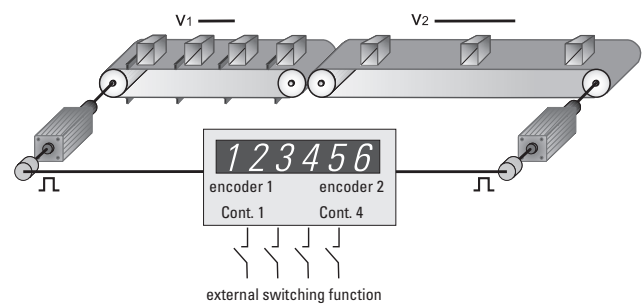
<b>Switch outputs</b>	
4 fast power transistors	5 ... 30 V DC, 350 mA
reaction time	< 1 ms <sup>1)</sup>
inductive loads require a freewheeling diode	
<b>Serial interface</b>	
	RS232, 2400 ... 38400 baud
	RS485 (6.574.0116.D07)
<b>Analog outputs (6.574.0116.D95)</b>	
0 / 4 ... 20 mA	load max. 270 Ohm
0 ... +10 V	max. 2 mA
Resolution	14 bit
precision	0.1 %
reaction time	< 1 ms

### Application examples

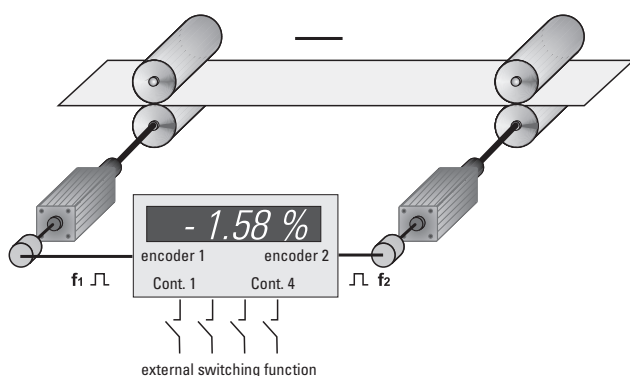
#### Total flow rate



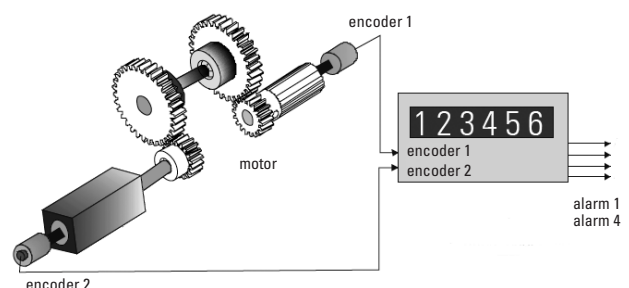
#### Speed difference



#### Material stretching to create tensile stress



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

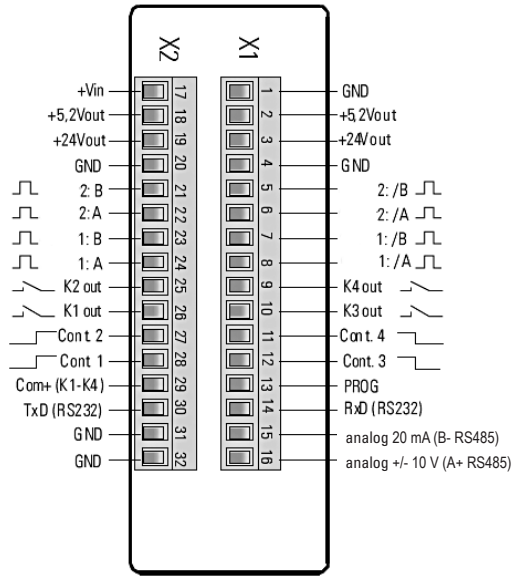


1) Intensive serial communication can temporarily increase the reaction time.

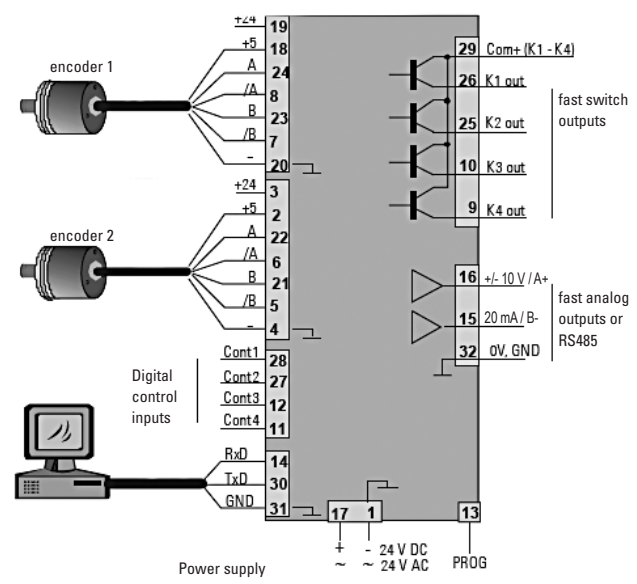
# Frequency displays / tachometers with limits

## LED tachometers Dual frequency displays with 4 outputs and analog output (AC+DC) 574

### Terminal assignment



### Application examples



### Dimensions

Dimensions in mm [inch]

