

Frequency Displays / Tachometers

LED frequency display **Dual frequency display with 4 outputs and analogue output** **574**



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, frequency display, difference, total value, product or ratio measurement, also with reciprocal display.



| | | | | | | | | | | |
|---|---|--------------------------------------|---|---------------------------|------------------------------|-----------------------------|--|---------------------------------------|-------------------------------|---------------------------|
| AC/DC 24/17...30V Supply voltage | 000000 DIN 96 x 48 DIN front panel | IP65 High protection level | max. 1 MHz 2 separate pulse inputs | Operation with gloves | TTL, HTL and RS422-input | 6 LED LED display | DC OUT 5 / 24 V 2 x Sensor supply | mA, V Analogue output optional | 4 Transistor output | RS232 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 digit)
- 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, dual, difference and total value measurement of both inputs, product and ratio measurement and percentage measurement

Compact and versatile

- 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 voltages 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 analogue 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

- 6 digits,
- 6 digits, scalable analogue output
- 6 digits, RS232 and RS485

Order No.

6.574.0116.D05

6.574.0116.D95

6.574.0116.D07

Delivery contents

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

Accessories

Mounting frame for DIN rail mount



with built-in dimension 92 x 45 mm

G300005

OS2 software for parameter setting

can be downloaded at www.kuebler.com

OS2

Further accessories can be found in the accessories section or in the accessories area of our website at: www.kuebler.com/accessories

Frequency Displays / Tachometers

| | | |
|------------------------------|--|------------|
| LED frequency display | Dual frequency display with 4 outputs and analogue output | 574 |
|------------------------------|--|------------|

| General technical data | | |
|------------------------------|---------------------|--------------------------|
| Display | 6-digit | LED display, 15 mm high |
| Operating temperature | 0°C ... +45°C | |
| Storage temperature | -25°C ... +70°C | |
| Housing material | Noryl UL94-V-0 | |
| Screw terminal | Cable cross-section | max. 1,5 mm ² |

| Electrical characteristics | | |
|---|---|-------------------|
| Supply voltage | 24 V AC, + 10% 24 (17 ... 30) V DC | |
| Current consumption DC | 100 mA + Current consumption encoder | |
| Connected load AC | 15 VA | |
| Auxiliary power supply (for sensors) | 2 x 5,2 V DC, each 150 mA 2 x 24 V DC, each 120 mA | |
| EMC | Emitted interference | EN 61000-6-3 |
| | Immunity to interference | EN 61000-6-2 |
| Device safety | designed to | EN 61010 part 1 |
| | Protection class | 2 |
| | Application area | Pollution level 2 |

| Mechanical characteristics | |
|----------------------------|-----------------|
| Protection | IP65 from front |
| Weight | approx. 250 g |

| Inputs | | |
|--|---|-----------------------------|
| 2 universal incremental encoder inputs | | |
| Count frequency: (per encoder) | RS422 and TTL with inv. HTL asymmetric TTL asymmetric | 1 MHz 200 kHz 200 kHz |

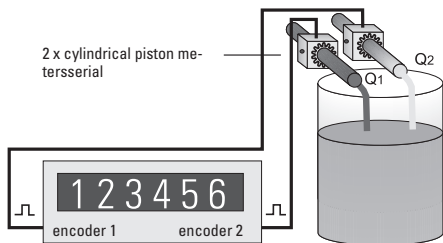
| Control inputs | |
|---|--|
| 4 control inputs HTL, Ri = 3,3kOhm | |
| Low < 2,5 V, High > 10 V, min. pulse duration 50 µs | |

| Outputs | |
|--|--|
| Switch outputs | |
| 4 fast power transistors | 5 ... 30 V DC, 350 mA |
| reaction time | < 1 ms ¹⁾ |
| inductive loads require a freewheeling diode | |
| Serial interface | RS232, 2400 ... 38400 baud RS485 (6.574.0116.D07) |

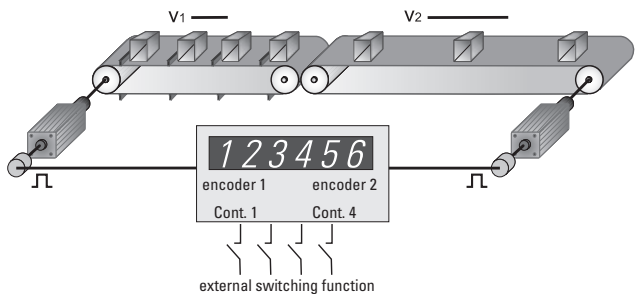
Analogue outputs (6.574.0116.D95)
 0 / 4 ... 20 mA, load max. 270 Ohm
 0 ... +10 V (max. 2 mA)
 Resolution 14 bit, precision 0,1 %, reaction time < 1 ms

Application examples

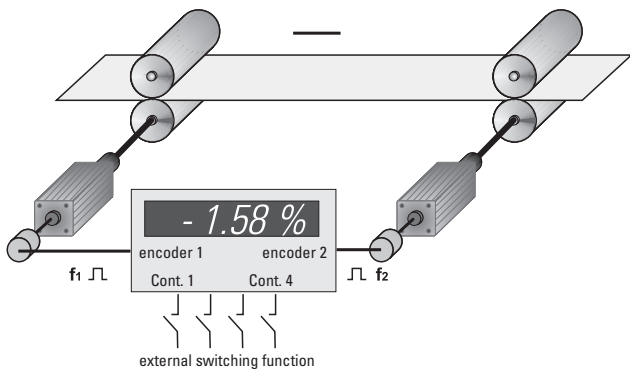
Total flow rate



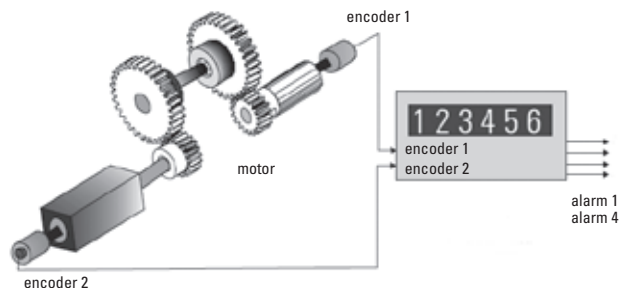
Speed difference



Material stretching to create tensile stress



Monitoring of torsion, shafts or gear breakage

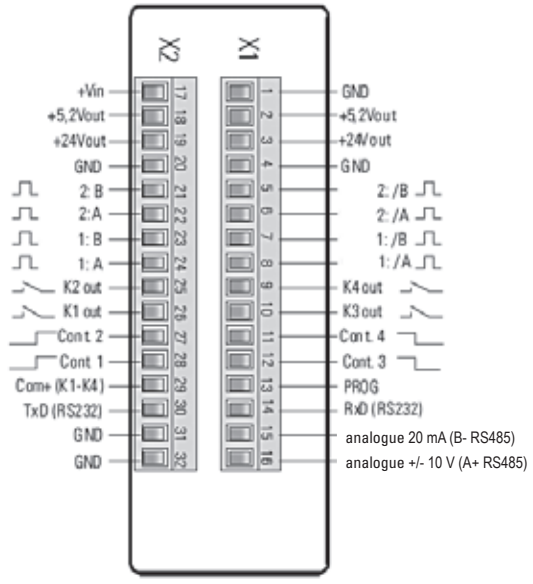


1) Intensive serial communication can temporarily increase the reaction time.

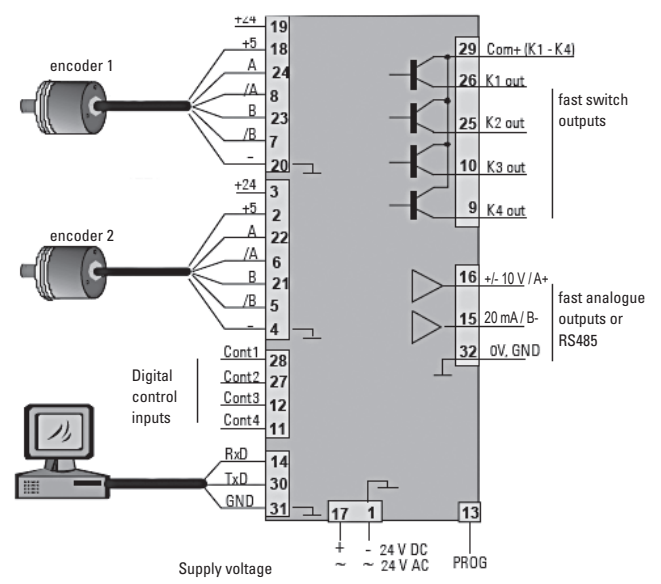
Frequency Displays / Tachometers

LED frequency display **Dual frequency display with 4 outputs and analogue output** **574**

Electrical connections



Application examples



Dimensions

