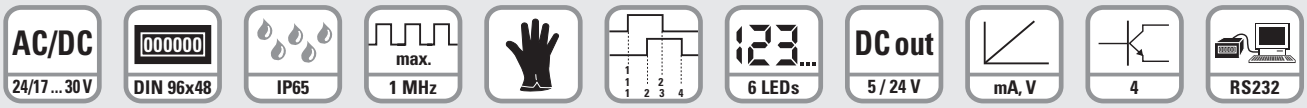
Frequency displays / tachometers with limits

LED tachometers | Dual frequency displays with 4 outputs and analog output (AC+DC) | 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 or frequency display with measurements for difference, total value, product or ratio (also with reciprocal display).



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)	*Order no.*	*Delivery specification*
6 digits	**6.574.0116.D05**	· Controller 574 · Gasket · Fastening set · Instruction manual German/English
6 digits, scalable analog output	**6.574.0116.D95**	

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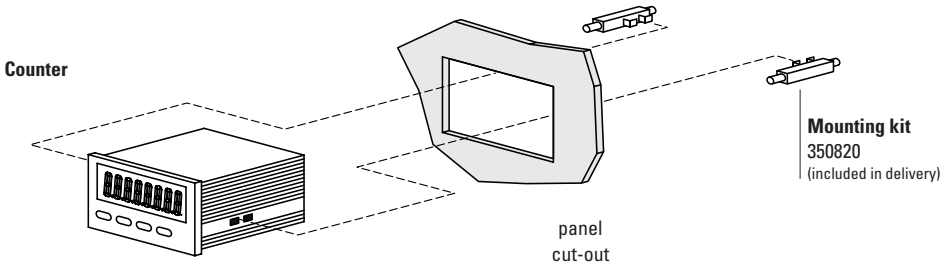
Accessories / Mounting examples



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

incl. in delivery

Technical data

General technical data

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

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
Device safety	designed to protection class application area	EN 61010 part 1 2 pollution level 2

Mechanical characteristics

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

Inputs

2 universal incremental encoder inputs

Count frequency (per encoder)

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

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

Analog 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

Approvals

CE compliant 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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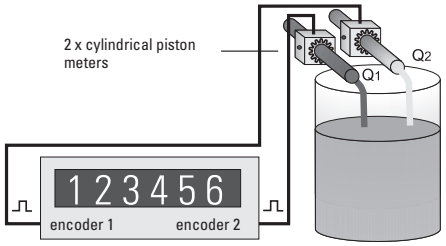
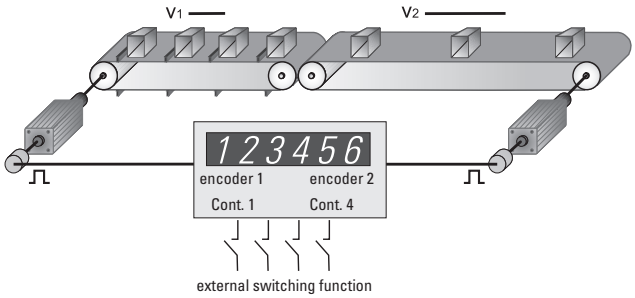
Application examples

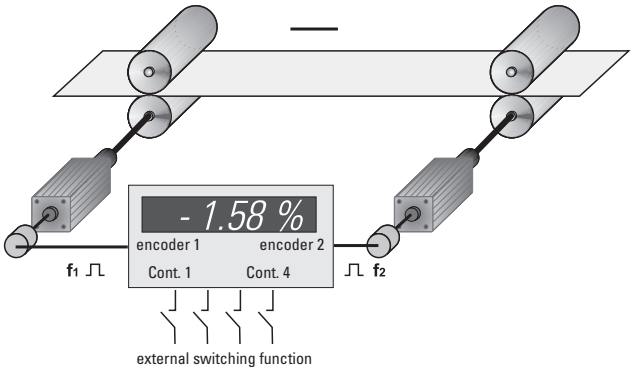
Total flow rate



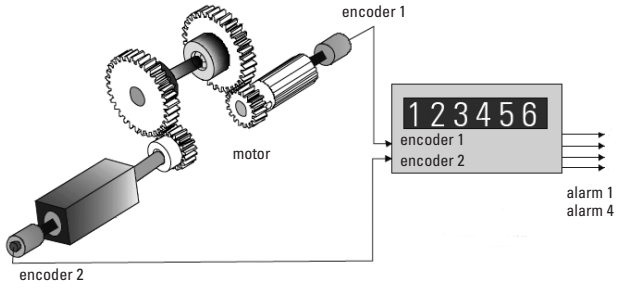
Speed difference



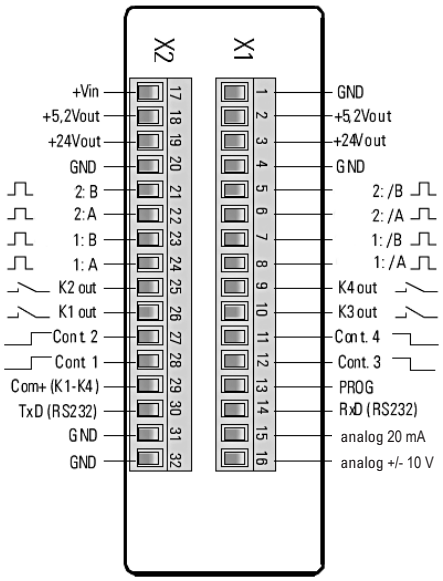
Material stretching to create tensile stress



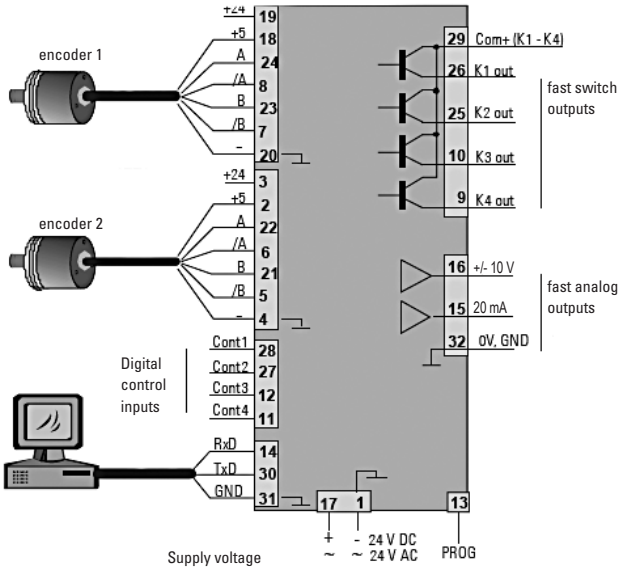
Monitoring of torsion, shafts or gear breakage



Terminal assignment



Connection examples



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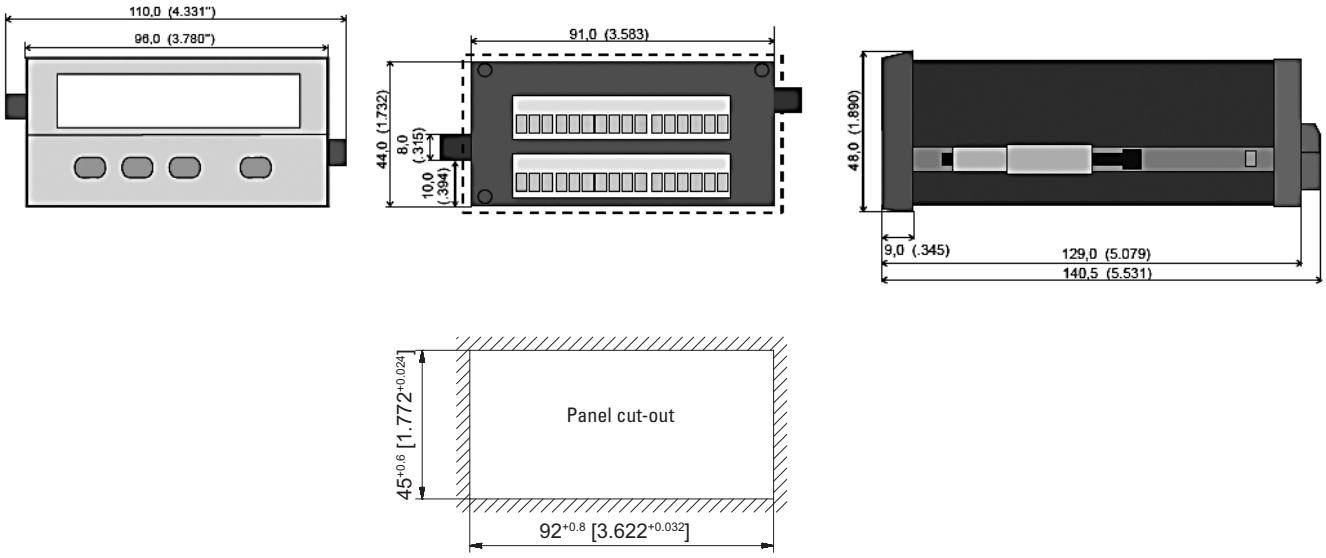
Dimensions

Dimensions in mm [inch]



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