



8590.5010

Universal converter: analog (voltage / current) → position, frequency and serial output formats

Product Features:

- Analog input for voltage, current or potentiometer operation
- Operation as frequency converter/-generator, positional / angular encoder or data logging possible
- Programmable curves with optionally repeating curve cycles
- Frequency output (HTL or TTL level, max. 1 MHz) proportional to the input signal
- Incremental output and SSI interface, for digital expression of linear or angular positions
- Incremental direction signal A, B under control of input signal and parameter settings
- Additional control functions similar to a motorized potentiometer
- USB programming port and serial interface (RS232 / RS485)
- Programmable marker resp. index pulse output (Z, /Z)
- Power supply 12 to 30 VDC

Technical Specifications:		
Power supply:	Input voltage: Protection circuit: Ripple: Consumption: Connections:	12 ... 30 VDC reverse polarity protection ≤ 10 % at 24 VDC approx. 50 mA (unloaded) screw terminal, 1.5 mm ² / AWG 16
Analog input:	Voltage input: Internal resistance: Current input: Internal resistance: Resolution: Accuracy: Update-time: Maximum input frequency: VREF for external potentiometer: Internal resistance of VREF: Connections:	-10 ... +10 V / 0 ... 10 V Ri ≈ 120 kOhm 0 ... 20 mA / 4 ... 20 mA Ri ≈ 100 Ohm 14 bit (± 13 bit) 0.1 % 100 μs (in accordance to 10000 measuring values per second) 1 kHz (with 10 sampling points) approx. 4.8 V (+/- 0.1%) Ri ≈ 240 Ohm screw terminal, 1.5 mm ² / AWG 16
Control inputs:	Number of inputs: Characteristic: Signal levels: Internal resistance: Input current: Minimum pulse time: Connections:	4 PNP, active high HTL: LOW = 0 ... 3 V, HIGH = 10 ... 30 V Ri ≈ 1.5 kOhm approx. 2 mA 1 msec (5 μs at Cont.1 when [HW-Z-Reference] ≠ 0) screw terminal, 1.5 mm ² / AWG 16
Incremental output:	Signal levels: Channels: Frequency range: Output current: Output circuit: Reaction time: Fastest position change possibility: Protection circuit: Connections:	HTL: 5 ... 30 V (depends from the external supply) or TTL / RS422: 4 V (no external supply necessary) A, /A, B, /B, Z, /Z 0.01 Hz ... 1 MHz max. 30 mA (per channel) push-pull < 260 μs 1 increment / μs short circuit proof screw terminal, 1.5 mm ² / AWG 16
SSI interface:	Function: Standard: Clock (input): Data (output): Termination resistors: SSI baud rate: Connections:	simulates an SSI absolute encoder according to the SSI standard, 10 ... 25 bit, binary or Gray (supports only single transmission but not multiple-transmission) TTL-differential / RS485 [Clk+], [Clk-] TTL-differential / RS485 [Dat+], [Dat-] internally not provided max. 1 MHz screw terminal, 1.5 mm ² / AWG 16
Serial interface:	Format: Baud rates: Connections:	RS232 or RS485 (2- or 4-wire) 600, 1200, 2400, 9600 (Default), 19200, 38400, 56000, 57600, 76800, 115200 SUB-D connector (female), 9-pin
USB interface:	Version: Driver: Connections:	USB 2.0 motrona_vcom.inf (download on www.motrona.com) by USB-Port, connector type „A
Housing:	Material: Mounting: Dimensions (w x h x d): Protection class: Weight:	plastic 35 mm top hat rail (according to EN 60715) 22.5 x 102 x 102 mm IP20 approx. 100 g
Temperature range:	Operation: Storage:	0 °C ... +45 °C / +32 ... +113 °F (not condensing) -25 °C ... +70 °C / -13 ... +158 °F (not condensing)
Conformity and standards:	EMC 2014/30/EU: RoHS (II) 2011/65/EU RoHS (III) 2015/863:	EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61326-1 EN IEC 63000