



## EL5042 | 2-channel BiSS-C interface



The 2-channel BiSS-C interface for direct connection of BiSS-C encoders is suitable for exact and fast positioning applications – ensuring high synchronicity with other processes through distributed clocks. Via unidirectional BiSS-C communication, the EL5042 sends as a master the clock signal for position detection to the BiSS-C slave (encoder), which returns the position data with up to 64-bit resolution. The EL5042 can be optimally adapted to different encoder types by selecting appropriate operation modes, transmission frequencies and frame widths.

Technical data	EL5042
Technology	BiSS-C, unidirectional
Encoder type	BiSS-C, unidirectional
Number of channels	2
Encoder connection	D+, D-, C+, C-
Encoder operating voltage	optionally 5 V DC or 9 V DC, 0.5 A
Encoder output current	max. 0.5 A for both channels
Supply voltage electronics	24 V DC (via power contacts)
Commands	–
Resolution	max. 64 bit position, 2 bit status, 16 bit CRC
Data transfer rates	up to 10 MHz, variable
Current consumption power contacts	typ. 150 mA
Current consumption E-bus	typ. 120 mA
Distributed clocks	yes
Special features	adjustable baud rate, data length, two status bits (error and warning) can be evaluated separately
Electrical isolation	500 V (E-bus/field potential)
Weight	approx. 50 g
Operating/storage temperature	0...+50 °C/-25...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/variable
Approvals	CE