Run LED 1 — Data channel 1 / Data channel 2

D1+ — D1-

CL1+ — CL1-
Power contact +24 V

D2+ — D2-
Power contact 0 V

CL2+ — CL2-

EL5002 BECKHOFF

Top view   Contact assembly

+60 °C
−25 °C

25 g

EL5002 | SSI encoder interfaces

The EL5002 2-channel SSI interface EtherCAT Terminal allows the direct connection of two SSI encoders. The interface circuit generates a pulse for reading the encoder and makes the incoming data stream available to the controller as a data word in the process image. Various operating modes, transmission frequencies and bit widths can be permanently stored in a control register.

Technical data	EL5002 | ES5002
Technology	SSI encoder interface
Number of channels	2
Encoder connection	D+, D-, Cl+, Cl-
Signal output (pulse)	difference signal (RS422)
Signal input (data)	difference signal (RS422)
Power supply	24 V via power contacts
Current consumption	typ. 20 mA without encoder
Encoder supply	external e.g. EL91xx
Data transfer rates	variable up to 1 MHz, 250 kHz default
Serial input	24 bit width (variable)
Data direction	read
Current consumption power contacts	typ. 20 mA
Current consumption E-bus	typ. 130 mA
Distributed clocks	yes
Special features	adjustable baud rate, coding and data length
Electrical isolation	500 V (E-bus/field potential)
Weight	approx. 55 g
Operating/storage temperature	-25…+60 °C/-40…+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
Pluggable wiring	for all ESxxxx terminals
Approvals	CE, UL, Ex

Related products	
EL5001	1-channel SSI encoder interface
EL5001-0011	SSI monitor terminal, no clock output (simply listening)