



## EP5001-0002 | SSI encoder interface

The EP5001 EtherCAT Box is an interface for the direct connection of SSI encoders with differential inputs (RS485). 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. The encoder is connected via an 8-pin M12 socket.

Technical data	EP5001-0002
Connection technology	M12, screw type
Number of channels	1
Connection encoder/sensor	M12, screw type
Encoder connection	binary input: D+, D-, binary output: Cl+, Cl-
Nominal voltage	24 V DC (-15 %/+20 %)
Signal type	differential (RS422)
Distributed clocks	yes
Data transfer rates	variable up to 1 MHz, 250 kHz default
Serial input	24 bit width (variable)
Data direction	read
Power supply connection	feed: 1 x M8 male socket, 4-pin; downstream connection: 1 x M8 female socket, 4-pin
Current consumption from Us	typ. 130 mA + sensor supply
Bit width in the process image	1 x 32 bit input, 8 bit status
Electrical isolation	500 V
Special features	adjustable baud rate, coding and data length
Weight	approx. 165 g
Operating/storage temperature	0...+55 °C/-25...+85 °C
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 65/66/67 (conforms to EN 60529)/variable
Approvals	CE

Accessories	
ZK1090-3xxx-xxxx	Cables for EtherCAT signal in- and -output
ZK2020-3xxx-xxxx	Cables for M8 power supply