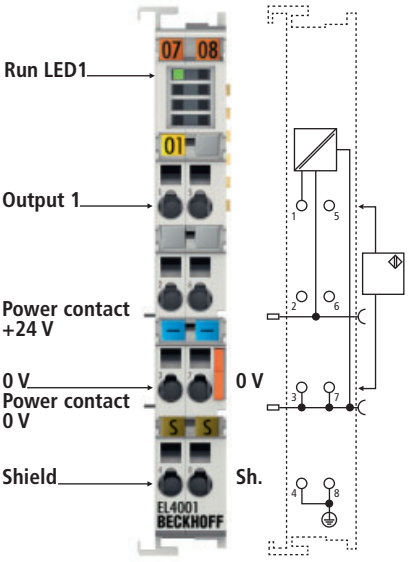
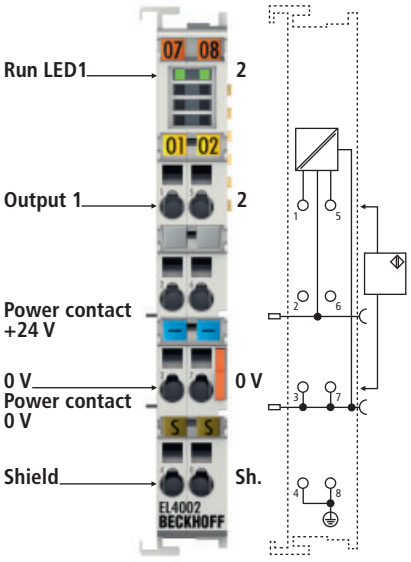
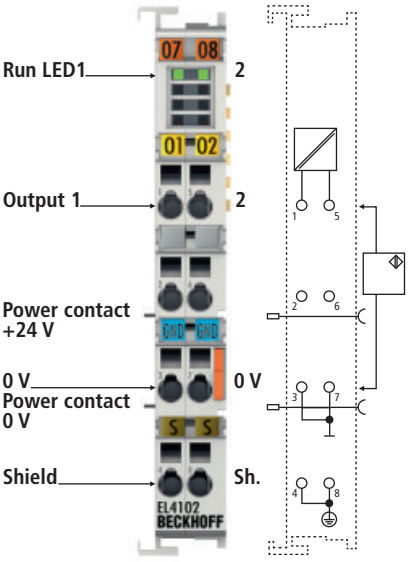


Top view, contact assembly, connection



Top view, contact assembly, connection



Top view, contact assembly, connection

EL4001, EL4002, EL4102 | 1-, 2-channel analog output terminals 0…10 V, 12/16 bits

The EL4001, EL4002 and EL4102 analog output terminals generate signals in the range between 0 and 10 V. The voltage is supplied to the process level with a resolution of 12 bits (EL4001/EL4002) or 16 bits (EL4102), and is electrically isolated. The output channels of the EtherCAT Terminals have a common ground potential. The EL4001 is the single-channel variant which when combined with the EL95xx is particularly suitable for signals with electrically isolated ground potentials. The EL4002 and EL4102 versions combine two channels in one housing. The output stages are powered by the 24 V supply. The signal state of the EtherCAT Terminals is indicated by light emitting diodes.

Technical data	**EL4001** | ES4001	**EL4002** | ES4002	**EL4102** | ES4102
Number of outputs	1	2	2
Power supply	24 V DC via the power contacts	24 V DC via the power contacts	via the E-bus
Signal voltage	0…10 V		
Distributed clocks	yes		
Load	> 5 kΩ (short-circuit-proof)		
Measuring error	< 0.1 % (relative to full scale value)	< 0.1 % (relative to full scale value)	±0.1 % (relative to full scale value)
Resolution	12 bits	12 bits	16 bits (incl. sign)
Electrical isolation	500 V_{rms} (E-bus/signal voltage)		
Conversion time	~ 100 µs	~ 150 µs	~ 40 µs (fast mode ~ 25 µs)
Current consumption E-bus	typ. 190 mA	typ. 190 mA	typ. 210 mA
Bit width in the process image	1 x 16 bit AO output	2 x 16 bit AO output	2 x 16 bit AO output
Weight	approx. 60 g		
Operating/storage temperature	0…+55 °C/-25…+85 °C		
Relative humidity	95 %, no condensation		
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27/29		
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		
Further information	www.beckhoff.com/EL4001		

We reserve the right to make technical changes.