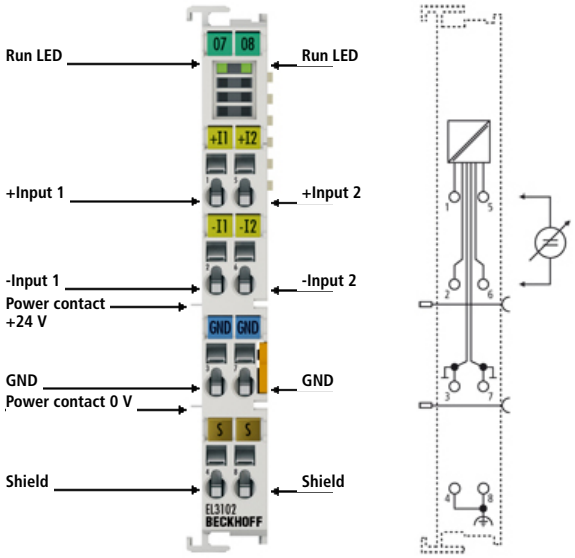
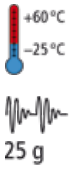


Top view

Contact assembly



EL3102 | 2-channel analog input terminal -10…+10 V, differential input, 16 bit

The EL3102 analog input terminal handles signals in the range between -10 and +10 V. The voltage is digitised to a resolution of 16 bits, and is transmitted, electrically isolated, to the higher-level automation device. The input channels of the EtherCAT Terminal have differential inputs and possess a common, internal ground potential. The signal state of the EtherCAT Terminal is indicated by light emitting diodes.

Technical data	EL3102 | ES3102
Number of inputs	2 (differential)
Power supply	via the E-bus
Technology	differential input
Signal voltage	-10…+10 V
Oversampling factor	–
Distributed clocks	yes
Distributed clock precision	<< 1 µs
Internal resistance	> 200 kΩ
Input filter limit frequency	5 kHz
Common-mode voltage U_{CM}	35 V max. (relative to the internal GND)
Conversion time	~ 60 µs (fast mode ~ 40 µs)
Input signal bandwidth	–
Resolution	16 bit (incl. sign)
Measuring error	< ±0.3 % (relative to full scale value)
Electrical isolation	500 V (E-bus/signal voltage)
Current consumption power contacts	–
Current consumption E-bus	typ. 170 mA
Bit width in the process image	inputs: 8 byte
Special features	standard and compact process image, switchable measuring data representation, activatable FIR/IIR filters, limit value monitoring
Weight	approx. 60 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