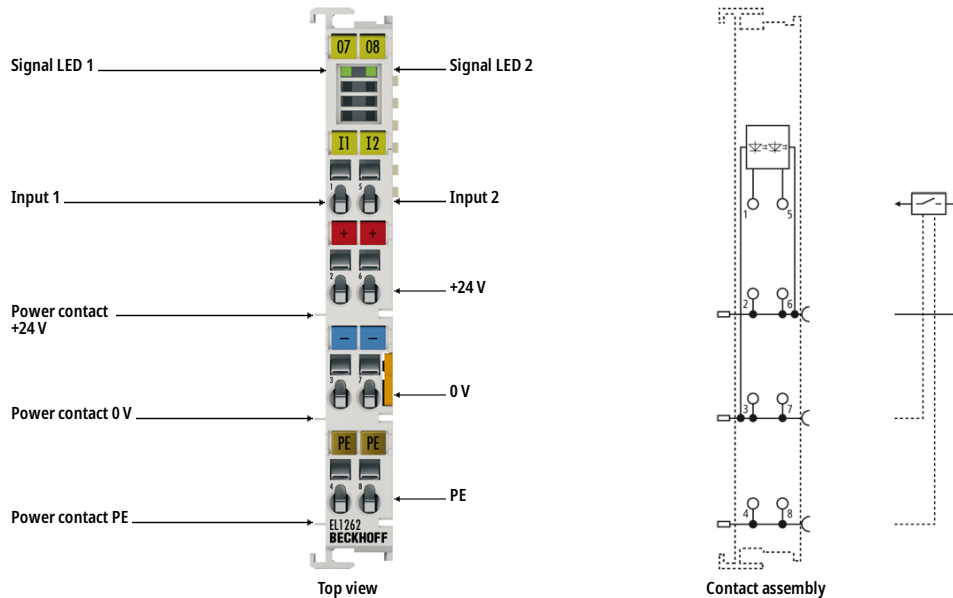


# EL1262 | EtherCAT Terminal, 2-channel digital input, 24 V DC, 1 $\mu$ s, oversampling



**i Product status:** Regular delivery

The EL1262 digital input terminal acquires the fast binary 24 V control signals from the process level and transmits them, in an electrically isolated form, to the controller. The EtherCAT Terminal has two channels that indicate their signal state via light emitting diodes. The signals are sampled with a configurable, integer multiple (oversampling factor:  $n$ ) of the bus cycle frequency ( $n$  microcycles per bus cycle). For each bus cycle, the EtherCAT Terminal generates a process data block that is transferred collectively during the next bus cycle. The timebase of the terminal can be synchronized precisely with other EtherCAT devices via distributed clocks. This XFC procedure enables the temporal resolution of the digital input signals to be increased to  $n$  times the bus cycle time.

Special features:

- suitable for particularly fast signals due to very low input delay
- synchronized operation through distributed clocks XFC technology possible
- multiple sampling of a process data through oversampling

## Product information

### Technical Data

Technical data	EL1262, ES1262
Connection technology	4-wire
Specification	similar to EN 61131-2, type 3, "0": -3...5 V DC, "1": 11...30 V DC, typ. 3 mA input current
Number of inputs	2
Sampling rate	max. 1 Msample/s

Nominal voltage	24 V DC (-15 %/+20 %)
"0" signal voltage	-3...+5 V (EN 61131-2, type 3)
"1" signal voltage	11...30 V (EN 61131-2, type 3)
Input current	typ. 3.0 mA
Input filter	typ. < 1 µs
Oversampling/multi-timestamping factor	n = integer multiple of the cycle time, 1...1000, see documentation
Precision of timestamp in the terminal	10 ns (+ input delay)
Distributed clock precision	<< 1 µs
Distributed clocks	yes
Current consumption power contacts	typ. 20 mA + load
Current consumption E-bus	typ. 70 mA
Electrical isolation	500 V (E-bus/field potential)
Bit width in the process image	n x 2 inputs + 64 bit CycleCounter/latch
Special features	oversampling
Weight	approx. 55 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
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. rating/installation pos.	IP20/variable
Pluggable wiring	for all ESxxx terminals
Approvals/markings	CE, UL, ATEX, IECEx, cFMus
Ex marking	ATEX: II 3 G Ex nA IIC T4 Gc IECEx: Ex nA IIC T4 Gc Ex tc IIIC T135 °C Dc cFMus: Class I, Division 2, Groups A, B, C, D Class I, Zone 2, AEx ec IIC T4 Gc

Housing data	EL-12-8pin	ES-12-8pin
Design form	compact terminal housing with signal LEDs	terminal housing with pluggable wiring level
Material	polycarbonate	
Dimensions (W x H x D)	12 mm x 100 mm x 68 mm	
Installation	on 35 mm DIN rail, conforming to EN 60715 with lock	
Side by side mounting by means of	double slot and key connection	
Marking	labeling of the BZxxx series	

<b>Wiring</b>	solid conductor (e), flexible conductor (f) and ferrule (a): spring actuation by screwdriver	
<b>Connection cross-section</b>	s*: 0.08...2.5 mm <sup>2</sup> , st*: 0.08...2.5 mm <sup>2</sup> , f*: 0.14...1.5 mm <sup>2</sup>	s*: 0.08...1.5 mm <sup>2</sup> , st*: 0.08...1.5 mm <sup>2</sup> , f*: 0.14...1.5 mm <sup>2</sup>
<b>Connection cross-section AWG</b>	s*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16	s*: AWG 28...16, st*: AWG 28...16, f*: AWG 26...16
<b>Stripping length</b>	8...9 mm	9...10 mm
<b>Current load power contacts</b>	I <sub>max</sub> : 10 A	

\*s: solid wire; st: stranded wire; f: with ferrule

## Ordering Information

Related products	
EL1262	EtherCAT Terminal, 2-channel digital input, 24 V DC, 1 μs, oversampling
ES1262	EtherCAT Terminal, 2-channel digital input, 24 V DC, 1 μs, oversampling, pluggable wiring