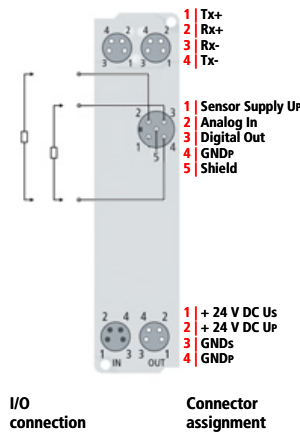


EP3182-1002



EP3182-1002 | 2-channel analog input ± 10 V or 0/4...20 mA, parameterisable, single-ended, 16 bit, 2 digital control outputs, 24 V DC, short-circuit-proof

The EP3182 EtherCAT Box has two analog inputs which can be individually parameterised, so that they process signals either in the -10/0 to +10 V or the 0/4 to 20 mA range. The voltage or input current is digitised with a resolution of 16 bits, and is transmitted (electrically isolated) to the higher-level automation device. The two input channels are single-ended inputs and possess a common, internal ground potential. The input filter and therefore the conversion times are configurable in a wide range. If required, the inputs can be scaled differently, and automatic limit monitoring is also available. EtherCAT is used for parameterisation purposes. The parameters are stored in the module.

In addition, the EP3182 has two digital outputs to connect binary control signals from the controller to the actuators at the process level. These two outputs (sink/source type) are intended to switch logic inputs or outputs with a minimum impedance of 10 k Ω (e.g. reset inputs of digital sensors). They handle load currents of up to 2 mA, are short-circuit proof and indicate their status through light emitting diodes.

The signals are connected via the two M12 connectors.

Technical data	EP3182-1002
Number of channels	2 analog inputs (single-ended), 2 digital outputs
Connection method	M12, screw type
Protocol	EtherCAT
Bus interface	2 x M8 socket, shielded, screw type
Signal type	-10/0...+10 V 0/4...20 mA
Internal resistance	> 200 k Ω typ. 85 Ω + diode voltage
Common-mode voltage U_{CM}	max. 35 V
Resolution	16 bit (incl. sign)
Measuring error	< ± 0.3 % (relative to full scale value)
Input filter limit frequency	5 kHz
Conversion time	~ 100 μ s
Nominal voltage	24 V DC (-15 %/+20 %)
Input filter	configurable
Max. output current	2 mA (short-circuit proof) per channel
Sensor supply	from load supply voltage U_P
Current consumption from U_S	120 mA
Power supply connection	feed: 1 x M8 male socket, 4-pin; downstream connection: 1 x M8 female socket, 4-pin
Bit width in the process image	4 x 16 bit input, 4 x 8 bit status
Electrical isolation	control voltage/fieldbus: yes
Special features	current or voltage parameterisable, 2 digital outputs (sink/source type)
Operating/storage temperature	0...+55 $^{\circ}$ C/-25...+85 $^{\circ}$ 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, UL

Accessories	
ZK1090-3xxx-xxxx	Cables for EtherCAT signal in- and -output
ZK2000-6xxx-xxxx	Cables for M12 I/O connection sockets
ZK2000-5xxx/71xx-xxxx	Sensor cable 5-wire unshielded/shielded
ZK2020-3xxx-xxxx	Cables for M8 power supply