EtherCAT Box | Water- and dust-proof EtherCAT I/Os

The Beckhoff EtherCAT system has been extended with EtherCAT Box modules with protection class IP 67. Due to the integrated EtherCAT interface the modules can be connected directly to an EtherCAT network without an additional Coupler Box. The high EtherCAT performance is therefore maintained right down to each IP 67 box. With dimensions of only 126 x 30 x 26.5 mm (H x W x D) – the same as the Extension Box modules – the modules are exceptionally small and are therefore particularly suitable for applications where space is tight. The low weight of the EtherCAT modules makes them useful in applications with mobile I/O interface (e.g. on a robot arm). The EtherCAT connection is established via shielded M8 screw connectors.
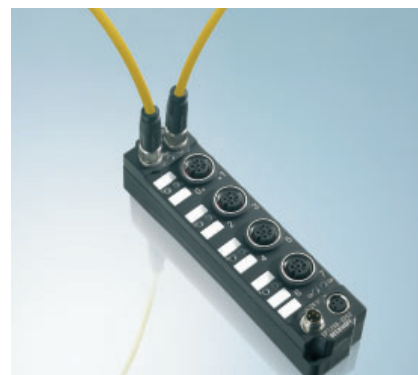
The robust design of the EtherCAT Box modules enables them to be used directly at the machine. Control cabinets and terminal boxes are now no longer required. The modules are fully sealed and therefore ideally prepared for wet, dirty or dusty conditions.

Pre-assembled cables significantly simplify EtherCAT and signal wiring. Wiring errors can be avoided, so that commissioning is optimised. In addition to pre-assembled EtherCAT, power and sensor cables, field-configurable connectors and cables are available for maximum flexibility. Sensors and actuators are connected via screw-type M8 or M12 connectors as required.

The EtherCAT modules cover the typical range of requirements for IP 67 I/O signals: digital inputs with different filters (3.0 ms or 10 µs), digital outputs with 0.5 or 2 A output current, analog inputs and outputs with 16 bit resolution, thermocouple and RTD inputs, and stepper motor modules. XFC (eXtreme Fast Control Technology) modules, including inputs with time stamp, are also available.

EtherCAT Box with M8 connectors

EtherCAT Box with M12 connectors

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