



The new Beckhoff EQxxxx stainless steel EtherCAT Box modules with IP 69K protection are ideal for use directly on the machine in areas with high hygiene requirements. Digital input and output modules in different channel densities as well as combination modules cover a broad range of I/O requirements.

Beckhoff extends its product range for "Hygienic Design" applications

Stainless steel modules with IP 69K protection

The new Beckhoff EQxxxx EtherCAT Box series in V2A stainless steel housings meet the requirements of protection class IP 69K. As a result, these rugged and robust I/O modules are designed for use directly on machines in application areas with high hygienic standards, such as in the food, packaging, chemical and pharmaceutical industries. A wide range of digital and analog units in this new product series covers the typical I/O requirements.

Beckhoff is extending its I/O systems with the new EQ series EtherCAT Box modules with IP 69K protection and a stainless steel finish. This means that processes and signals in hygienically critical areas can be measured, evaluated and controlled directly on the machine with the high-performance of EtherCAT. The EQ series EtherCAT Box meets all "Hygienic Design" requirements and can be used outside of electrical cabinets: the housing and all screw connections are made entirely of stainless steel. The screws are fitted flush without grime-collecting contours. The distributed I/O boxes are mounted to the machine or plant by means of mounting brackets. This avoids unwanted cavities and joints in which dirt can settle and ensures proper cleaning procedures.

Due to the highest protection class IP 69K and the stainless steel material, the new box modules ensure resistance to corrosion and impermeability to moisture and can be cleaned with high-pressure cleaners. The EQxxxx EtherCAT Box series is qualified for the extended temperature range of -25 to +60 °C (storage temperature -40 to +85 °C) and can therefore also be used in extreme climatic zones.

Through the integrated EtherCAT interface the modules can be connected directly to an EtherCAT network without an additional Coupler Box. The high-performance of EtherCAT is thus maintained into each module. Each box is a 100 % self-contained EtherCAT device and an EtherCAT slave, which can be connected directly to any other EtherCAT device via an Ethernet cable with 100BASE-TX.

The EtherCAT Box modules from the EQxxxx series cover an extensive range of I/O signal requirements:

- **EQ1008-0002:** 8-channel digital input, filter 3.0 ms
- **EQ1809-0022:** 16-channel digital input, filter 3.0 ms
- **EQ2008-0002:** 8-channel digital output, $I_{MAX} = 0.5 A$
- **EQ2809-0022:** 16-channel digital output, $I_{MAX} = 0.5 A$
- **EQ2339-0022:** 16-channel digital input or output, freely selectable
- **EQ3174-0002:** 4-channel analog input $\pm 10 V$ or $0/4 \dots 20 mA$, parameterizable
- **EQ3204-0002:** 4-channel analog input PT100 (RTD)
- **EQ3314-0002:** 4-channel analog input, thermocouple

The signals are connected via rugged M12 connectors. As usual, the stainless steel box modules are compact: The EQxxxx-0002 modules have housing dimensions of 39 x 160 x 43 mm (W x H x D); the EQxxxx-0022 series, with 16 channels, measures 72 x 160 x 43 mm (W x H x D).

With these EtherCAT Box modules Beckhoff is extending its broad product range of "Hygienic Design" stainless steel devices. In addition to the stainless steel Control Panels and Panel PCs with gap-free and flush fitting housing design, the new Beckhoff AM8800 servomotor series is also available in a stainless steel version. All devices meet the strict "Hygienic Design" requirements and are optimally suited for use in the food and beverage industry, the pharmaceutical industry and packaging technology.

Further Information:

www.beckhoff.com/EQxxxx

Estimated market release:

4th quarter 2012

Beckhoff offers a complete control system in a stainless steel finish for areas of application with strict hygienic requirements: from the Panel PC and I/O modules with IP 69K protection to the "Hygienic Design" servomotor.

