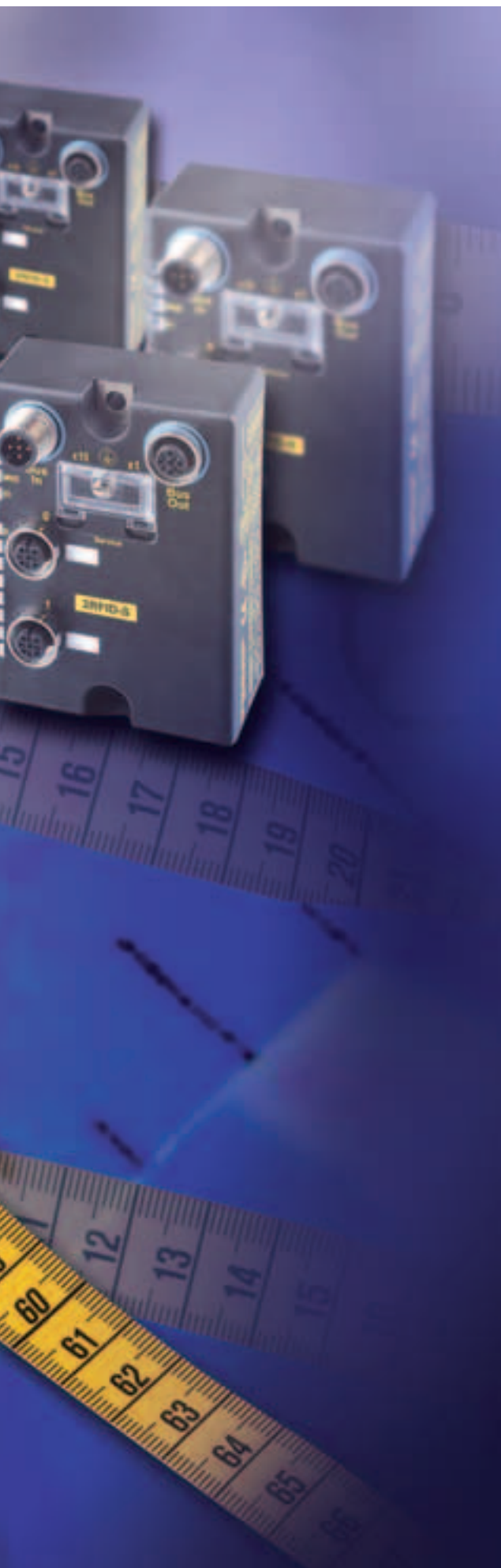


BL compact allows customized signal combinations for a multitude of I/O tasks



Tailor-Made

Rugged I/O block modules from the new BL compact series offer a variety of I/Os in a compact housing



▶ Quick read

I/O systems are increasingly being installed outside the control cabinet and in direct proximity to sensors and actuators, which demands that they be rugged, efficient and user-friendly. With the new BL compact Block I/Os, Turck is supporting this trend and adding flexible Block I/Os for analog and digital signals to its IP67 product line. These combine the variety of the modular BL67 systems in a very small space in a completely sealed housing.

The world of automation is evolving at an increasingly faster pace; customer-specific applications – regardless of whether machine manufacturing, production or logistics – are becoming more complex and challenging. Those seeking cost-effective integration of machines cannot ignore flexible solutions that allow workpiece or workflow changes at a low cost and with short retrofitting times, which in fact increase machine capacity. Sensor, connection and fieldbus solutions used should not be pushed to the back of the queue. With its new field-proven I/O solutions, Turck is now responding to the growing trend of bringing together as many varied applications as possible with the most cost-efficient automation strategies.

Large variety, small package

Based on its tried-and-true modular BL67 I/O systems, the automation specialist is launching a new series of rugged I/O modules: the BL compact fieldbus family. In doing so, Turck is using its existing BL67 I/O portfolio and combining the electronics from different BL67 modules, including gateways, in a unique housing. The compact stations combine connections for up to 16 digital or analog input signals, regardless of whether they are simple, discrete signals or special applications such as RFID, with distinctive monitoring and diagnosis functions. The

fieldbus modules initially available for Profibus DP and DeviceNet allow end users to reach the next step towards decentralized automation – and to do so cost effectively. Even under tough electrical and mechanical conditions, these modules can be connected directly to the machine in a rugged industrial environment.

While Turck's BL67 – consisting of a gateway and stackable I/O modules – continues to offer an unbeatable variety of signal combinations and fieldbus interfaces, BL compact can be mounted where limited space is available. A BL67 station can be used to process many different signals, but requires more space for mounting than BL compact. If only a small number of specific signal combinations needs to be processed, BL compact's limited space requirements and simple assembly provide a viable alternative.

The plastic housing of the BL compact series is completely sealed with epoxy resin and meets the requirements of the IP67 protection class. It is initially available in three sizes each with varying connection profiles. Alternatively, it can be equipped with M8, M12, or M16 metal plug-in connectors for the full plug-and-play functionality, control for on-site diagnosis and rotary encoding switches for simple address setting. Thus, the I/O modules offer a new degree of application compatibility in the market of compact fieldbus solutions.

Increased flexibility, low configuration costs

The BL compact series is strategically positioned between the reliable modular stations of the BL67 series and the compact fieldbus modules (FLDP, FDN) from the Turck portfolio. It combines the advantages of modularity with the benefits of cost, installation and low maintenance modules in a new decentralized concept. Market-oriented connection combinations (XSG-PD, analog inputs/outputs, RS232, RS 485, SSI or RFID) and, on request, possible special customer solutions allow end users a high level of flexibility even at low levels of expansion in supply chain management – regardless of whether in the machine manufacturing, automobile, packaging or food industries.

Thanks to its coherent modular concept, Turck has integrated the complexity of hybrid fieldbus solutions normally handled by the customer into its own production processes. The customer now receives a tailor-made solution right off the rack at a competitive price. In addition to the procurement costs, the BL compact solution can provide impress with further savings in processing costs. Compared to hybrid fieldbus systems, storage is easier because space no longer has to be reserved for each individual I/O module, including the gateway. Furthermore, a module that is precisely tailored to the application can be installed without engineering or assembly work, which above all results in a time advantage particularly with the use of numerous fieldbus stations. The



use of new modules will pay off anywhere that new I/Os are to be integrated into existing control system solutions in the foreseeable future.

26 variations to start with

The Profibus DP and DeviceNet bus protocols used most often in production automation will initially support 26 different housing and connection configurations at the time of market launch in November. In the future, Turck will offer CANopen and Ethernet-based I/O solutions (Modbus/TCP and Ethernet/IP) in this design. Due to the modular concept, the customer can also have tailor-made I/O block

BL compact is based on Turck's tried-and-true BL67 I/O system and combines the electronics of different BL67 modules into a fully encapsulated housing



modules assembled. And should the market require certain module combinations that are not yet part of the portfolio, Turck can assemble these in just a few weeks.

Even intelligent actuators and sensors, such as valve clusters or optical sensors via an I/O link interface, will be installed in the future using BL compact. With the inclusion of this interface in the BL compact product family, Turck is not only rounding off its comprehensive fieldbus portfolio, but also highlighting its claim as a competent solution partner that offers its customers complete automation strategies. From a multitude of pressure, ultrasound or temperature sensors to flexible interface modules

from the BL compact series, end users can rely on complete I/O link solutions from Turck.

Summary

With the BL compact rugged I/O block module series, Turck has created an easy-to-install low-maintenance fieldbus solution that allows users to fully exploit newly emerging automation potentials in rugged industrial environments and to increase their machine capacity based on highly compatible and simple to integrate I/O stations.

► Webcode

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