

Our Portfolio for Your Safety

Hybrid Block I/O Modules with Standard and Safety Inputs/Outputs

Type code	ID number	Description	
TBPN-L1-FDIO1-2IOL	6814053	Profinet/ProfiSafe hybrid module	2 dual-channel safety inputs; 2 configurable dual-channel safety inputs or PP/PM switching outputs, 4 DXP ports, power supply suitable for safety-related disconnection, 1 IO-Link master with power supply suitable for safety-related disconnection, 1 additional IO-Link master without disconnection
TBIP-L5-FDIO1-2IOL	6814056	Ethernet/IP/CIP safety hybrid module	
-	6814048	-	Turck Safety Configurator software for configuring hybrid modules

Light Screens

Type code	ID number	Description	
SLPP14-410P88	3083725	EZ-Screen LP, compact design, Safety light screen, Emitter/receiver pair	14 mm resolution*, 410 mm height of monitoring field**, 2 x OSSD outputs, NC contacts, cable with plug connector M12 x 1, 8-pin
SLPP14-970P88	3083729		14 mm resolution*, 970 mm height of monitoring field**, 2 x OSSD outputs, NC contacts, cable with plug connector M12 x 1, 8-pin
*Models with 25 mm resolution available   **Monitoring field heights 270...1810 mm available in 12 lengths			
SLLP14-770P88	3089673	EZ-Screen LS, simple setup, Safety light screen, Emitter/receiver pair	14 mm resolution*, 770 mm height of monitoring field**, 2 x OSSD outputs, NC contacts, cable with plug connector M12 x 1, 8-pin***
SLLP14-490P88	3089669		14 mm resolution*, 490 mm height of monitoring field**, 2 x OSSD outputs, NC contacts, cable with plug connector M12 x 1, 8-pin***
*Models available with 23 and 40 mm resolution   **Monitoring field heights 280...1820 mm available in 23 lengths  ***Models available with 5-pin with plug connector			

Illuminated Emergency-Stop Pushbuttons

Type code	ID number	Description	
SSA-EB1PLYR-12ECQ8	3025304	Illuminated emergency-stop pushbutton, round design Unactuated: yellow, permanently lit; actuated: red flashing; externally interrupted: red, permanently lit	2 safety outputs, NC contacts, 1 auxiliary output, NO contact, male connector M12 x 1, 8-pin
SSA-EB1PLYR-02ECQ5B	3026267		2 safety outputs, NC contacts, M12 x 1 male connector, 5-pin
SSA-EB1PLYR-12ED1Q8	3029989	Illuminated emergency-stop pushbutton, flat design Unactuated: yellow, permanently lit; actuated: Red flashing; externally interrupted: red, permanently lit	2 safety outputs, NC contacts, 1 auxiliary contact, NO contact Male connector M12 x 1, 8-pin
SSA-EB1PLYR-02ED1Q5B	3030028		2 safety outputs, NC contacts, M12 x 1 male connector, 5-pin

Two-Hand Module with Self-Checking Button and OSSD Output

Type code	ID number	Description	
STBVP6-RB2Q8	3083538	Duo-Touch two-hand control, kit, contains two STBVP6 touch buttons and run bar	2 outputs, NC contacts

28 subsidiaries and over 60 representations worldwide!



Enabling Devices

Type code	ID number	Description	
ED1G-L20MB-1N	3012937	Enabling device, three position activation for starting stopping machines	2 outputs, NO contacts, 2 outputs, NO contact via additional button

Position Switches

Type code	ID number	Description	
SI-LS83E	3049482	Safety switch, position switch with separate actuator <b>without</b> guard locking, additional actuator required	2 safety outputs, NC contacts, 83 mm design, plastic
SI-LS100SF	3049480		2 safety outputs, NC contacts, 1 auxiliary contact, NO contact, 100 mm design, plastic
Other position switch variants available			
SI-QS-SSA-2	3058855	Actuator, for position switch without guard locking (SI-LS83/SI-LS100)	Rigid version, straight
SI-QS-SSA-3	3058856		Rigid version, angled
SI-QS-SSU	3046996		Flexible version
SI-LS42DSH	3047875	Safety switch, position switch with separate actuator with guard locking, additional actuator required	2 safety outputs, NC contacts, 42 mm design, metal
SI-QM100DSH	3077751		2 safety outputs, NC contacts, 100 mm design, metal
Other position switch variants available			
SI-QM-SSA	3048555	Actuator, for position switch with guard locking (SI-LS42/SI-QM100)	Rigid version, straight
SI-QM-SMFA	3048562		Flexible version

Hinge Safety Interlock Switches

Type code	ID number	Description	
SI-HGZ63FQDR	3025583	Safety switch, door hinge switch, for monitoring a guard	2 safety outputs, NC contacts, 1 auxiliary contact, NO contact Right-side hinge, straight version*, die-cast zinc**
SI-HGZ63FQDRR	3025584		2 safety outputs, NC contacts, 1 auxiliary contact, NO contact Right-side hinge, angled version*, die-cast zinc**
*Models available with left-side hinge   **stainless steel versions available			

Magnetic Switches

Type code	ID number	Description	
SI-MAG1SM	3046989	Safety switch, magnetic switch, long design 88 x 25 mm	1 safety output, NC contacts, 1 auxiliary contact, NO contact
SI-MAG1MM	3046990	Coded magnet, for SI-MAG1SM magnetic switch	ON: Switching distance 0...3 mm, OFF: Switching distance 3...14 mm
SI-MAG2SM	3046991	Safety switch, magnetic switch, short design 43 x 26 mm	1 safety output, NC contacts, 1 auxiliary contact, NO contact
SI-MAG2MM	3046992	Coded magnet, for SI-MAG2SM magnetic switch	ON: Switching distance 0...4 mm, OFF: Switching distance 4...8 mm
SI-MAG3SM	3056986	Safety switch, magnetic switch, round design Ø 30 mm	1 safety output, NC contact, 1 auxiliary contact, NO contact
SI-MAG3MM	3056987	Coded magnet, for SI-MAG3SM magnetic switch	ON: Switching distance 0...3 mm, OFF: Switching distance 3...7 mm

Rope Pull Switches

Type code	ID number	Description	
RP-RM83F-75LT*	3081876	Rope pull switch with integrated Emergency-Stop pushbutton, tension indication, maximum rope length: 75 m, required accessory kit for rope pull switch	2 safety outputs, NC contacts, 2 auxiliary contact, NO contacts 83 mm design, metal
RPAC-CHP2-40-TA*	3084443	Accessory kit for rope pull switch	Kit consisting: 1 x 40 m cable, 3 mm thick, 4 x thimbles, 4 x clamps, 11 x eye bolts, 11 x equalizing pulleys, 1 x turnbuckle

Connectivity

Dimensional drawing	Ident number	Type code	Description	Length in m
	6631286	VBR54.4-2RKC4.880T-0,15/0,15/TXL4000	Y-splitter, 2-way, 5-pin, female connector for connecting light screens to hybrid modules, male connector 5-way	0.15
	6631289	RKC8.704T-2-RSC4.5T/TXY3013	Connection cable 8-pin to 5-pin for connecting an SSA illuminated emergency-stop switch, 8-pin directly to the hybrid modules	2
	6631290	RKC8.704T-5-RSC4.5T/TXY3013	Connection cable 8-pin to 5-pin for connecting an SSA illuminated emergency-stop switch, 8-pin directly to the hybrid modules	5
	6631295	VBRK8-2RSC4.870T-0,15/0,15/TXL4000	Y-splitter, 2-way, 5-pin for connecting an SSA emergency-stop switch, 8-pin to the hybrid modules	0.15
	100000219	RKC8T-2-RSC8T/TXY3013	Connection cable 8-pin to 8-pin for connecting an SSA emergency-stop switch, 8-pin directly to the hybrid modules via a 6631295 Y-splitter	2
	100000220	RKC8T-5-RSC8T/TXY3013	Connection cable 8-pin to 8-pin for connecting an SSA emergency-stop switch, 8-pin directly to the hybrid modules via a 6631295 Y-splitter	5
	6904604	B8151-0/9	M12 x 1 round connector, field-wireable female connector, straight, A-coded with screw terminals, 5-pin, PG9 screw-in thread Cable feed-through 6.0...8.0 mm	-
	6904613	BS8151-0/9	M12 x 1 round connector, field-wireable male connector, straight, A-coded with screw terminals, 5-pin, PG9 screw-in thread Cable feed-through 6.0...8.0 mm	-
	6936232	BMS8151-0/PG9/YE	M12 x 1 Rundsteckverbinder, konfektionierbarer Stecker, gerade, A-Codiert mit Schraubklemmen, 5-polig, gelbes Gehäuse, Metallüberwurfmutter, Leitungsdurchlass 4.0...8.0 mm	-
	6936233	BM8151-0/PG9/YE	M12 x 1 Rundsteckverbinder, konfektionierbare Kupplung, gerade A-Codiert mit Schraubklemmen, 5-polig, gelbes Gehäuse, Metallüberwurfmutter, Leitungsdurchlass 4.0...8.0 mm	-
Dimensional drawing				
ID number	Type code	Description		Length in m
6631344	VBR-TXL4100	Junction system for connecting an Lxxx light screen, Y-splitter with cable, 2 x male connectors M12 x 1, 4-pin to 2 x female connectors M12 x 1, 4-pin and 8-pin		0.55
6631345	VBR-TXL4200	Junction system for connecting an Lxxx light screen, Y-splitter with cable, 2 x male connectors M12 x 1, 4-pin to 2 x female connectors M12 x 1, 8-pin		0.55

Your Global Automation Partner

Overview  
Safety Solutions in IP67





# Compact Safety Solutions in IP67

## I/O Hybrid Modules for PROFIsafe and CIP Safety

Turck's TBPn and TBIP hybrid safety block I/O modules combine standard and safety inputs/outputs in a single device. This enables the IP65/IP67/IP69K hybrid modules to be adapted flexibly to the actual signal requirement of your machine. The modules can operate with external safety PLCs or also as remote safety controllers.

### The flexible block I/O modules offer on the safety side:

- Two redundant safety-related inputs
- Two redundant safety-related universal inputs/outputs

### on the non-safety side:

- Four configurable digital inputs/outputs
- Two IO-Link masters

The configurable digital inputs/outputs are suitable for safety disconnections according to SIL3/PL e. This also applies to the second IO-Link master.

**Maximum output current of the safety outputs and the two IO-Link masters**

- max. load 2 A (DC13 with free-wheeling diode)

**Maximum total output current of the configurable outputs**

- max. load 2 A (DC13 with free-wheeling diode)

### Easy installation and startup

- Configuration of the safety features via a software tool
- Web server simplifies diagnostics and startup
- Integrated switch enables installation in a linear topology

**Robust design enables use in harsh industrial environments**

- Housing with fully potted module electronics
- High degrees of protection: IP65/IP67/IP69K
- Extended temperature range -40...+70 °C



## Light Screens and Scanners

Turck's light screens and scanners are contactless personal protection systems for area and access protection at hazardous machines. The devices are designed in compact and robust housings for simple and economical use. Scan ranges of 0.8...20 m as well as 15...70 m are possible, depending on type.



### Benefits:

- Simple and rapid implementation in your automation environment
- Extensive diagnostic functions
- Possibility to preconfigure the safety application in the module
- Reduced wiring effort
- Extremely robust thanks to fully potted module electronics
- Flexible use thanks to large temperature range from -40...+70 °C
- High degrees of protection to IP65/IP67/IP69K enable mounting directly at the safety guard or machine
- Processing of safety signals and IO-Link function in a single device
- Simple device replacement in the event of a fault, thanks to cabling and downloading of the program that already exists
- Program transferable from one module to another

## Mechanical Safety Switches

The safety portfolio also offers Turck customers a range of conventional mechanical safety switches. These are built in compliance with EN/IEC 60947-5-1 with and without guard locking. They are positively driven and have positively opening contacts.



## Magnetic and Hinge Switches

Small, compact and robust. The switches are designed exactly like the safety position switches in accordance with EN/IEC 60947-5-1 and have positively driven and positively opening contacts. The magnetic proximity switches are built in accordance with EN/IEC 60947-5-1 and EN 62246-1 and are coded via three internal reed contacts per switch contact.



Turck offers an extensive portfolio of switches with a wide range of actuator designs with or without guard locking.



The OSSD outputs of light screens and scanners can be integrated in the hybrid module. Turck also provides the right cabling.



The safety rope pull switches of the RP-RM (metal housing) are approved for all commonly recognized standards. After actuation or in the event of a rope break, the emergency-stop switching device locks automatically and can only be reset by means of the reset feature on the device.



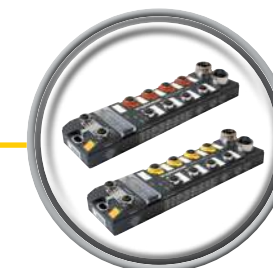
The illuminated emergency-stop switches with rotary release indicate the status of a machine or plant at a glance. The tripped switch can be identified immediately, even on large installations, thanks to the illumination feature.



Hinge switches and magnetically coded safety switches can be connected simply to the hybrid modules, as well as all other electromechanical safety switches.



No safety without the appropriate configuration. The Turck Safety Configurator enables you to create your safety application directly in the module. A safety controller is not absolutely necessary.



Whether for PROFINET or Ethernet/IP™ – Turck can always offer the right connection for PROFIsafe and CIP Safety with both TBPn and TBIP modules. Both modules talk safely with a safety controller but can also operate safely automatically.



Enabling functions are often used for applications in which the presence of persons in the hazardous area of a machine is required. For example during setup or maintenance of robots. The enabling devices can be integrated simply in the hybrid module by means of a simple configuration.

## Turck Safety Configurator

The safety hybrid module is configured simply and quickly using the Turck Safety Configurator. The software preconfigures the module according to the I/O assignment. The standard configuration is based on the assumption that a safety controller is connected. However, the configuration can be adapted to your individual requirements at any time. For this Turck offers a large range of libraries, application and logic function blocks right through to start and monitoring function blocks.

