

E-BOX XL IO-LINK, 3 installation points, with e-stop, with digital IO connector



Description

IO-LINK products make it easy to get started and can be quickly integrated into existing environments thanks to the use of standardized M12 connectors. Easily connected and individually parameterized, the E-BOX offers a housing concept with up to 6 installation points. The E-BOX IO-LINK and E-BOX XL IO-LINK are delivered as fully assembled housing solutions. The replacement of single installation points and their actuators is not intended.

Mounting

- Use a flat mounting surface for installation.
- Fix the device to the mounting surface with two mounting screws with a diameter of max. 5.3 mm and a head diameter of max. 9.5 mm. A tightening torque of 2 Nm is recommended for the mounting screws.

Parameterization

- Flexible color selection: 5 standard colors plus 3 freely selectable RGB colors
- Night mode with different brightness levels and various flashing modes
- Can be diagnosed via the control unit: temperature and monitoring of switching cycles
- Buzzer with various sound modes



technical data

➤ general

Feature	with e-stop with digital IO connector
Actuator position 1	FLEXLAB illuminated pushbutton
Actuator position 2	FLEXLAB illuminated pushbutton
Actuator position 3	Emergency stop
Installation points	3 pcs.
Color	light gray
Luminous element color	RGB
Operating temperature, min.	-30 °C
Operating temperature, max.	60 °C
Storage temperature, min.	-40 °C
Storage temperature, max.	80 °C
illuminated	Yes
Luminous elements	LED
Packaging	Box

direct links

- [RAFI eCatalog](#)

Packaging unit	1 pcs.
Net weight	251 g
Operating life E-Stop	50,000 cycles
B10 E-Stop	65,000 cycles
B10d	130,000 cycles
Operating life Illuminated pushbutton	1,000,000 cycles
B10 Illuminated pushbutton	1,300,000 cycles
Degree of protection, front side, according to DIN EN 60529	IP65
Degree of protection, rear side, according to DIN EN 60529	IP65
Environment resistance	IEC 60068-2-14 IEC 60068-2-30 IEC 60068-2-78
Shock resistance according to standard IEC 60068-2-27	50 g at 11 ms amplitude semi-sinusoidal
Vibration resistance according to standard IEC 60068-2-6	5 g at 10 - 500 Hz
Vibration resistance according to standard IEC 60068-2-64	5 g at 10 - 500 Hz
Salt-spray resistance according to standard	IEC 60068-2-11
Chemical resistance according to standard	ISO 16750-5
UV resistance according to ISO 4892-2	Method A: Artificial weathering
Impact resistance IK	07 side 07 frontal
Protection class	II
Minimum order quantity (MOQ)	1 pcs.
EMC	DIN EN 61000-6-2 Interference immunity industry DIN EN 61000-6-3 Interference emission living area DIN EN 61131-9 Single-drop digital communication interface (SDCI)
IO-Link version	Interface and System Specification 1.1.4
communication mode IO-Link	COM2 / 38.4 kBaud
cycle time	6.2 ms
Firmware Update	Yes over IO-Link Master
Pollution degree acc. to DIN EN 61010-1	Pollution degree 2
RoHS compliant	Yes
REACH compliant	Yes
> mounting diameters	
Outside dimension, length	260 mm
Outside dimension, width	40.5 mm
Outside dimension, height	63.8 mm
> mechanical data	

Connector IO-Link	M12 male 4-pin A-coded
Connector digital IO	M12 female 4-pin A-coded
Connector E-Stop	M12 male 5-pin A-coded
Tightening torque screws mounting	2 Nm
Fixing	Screw

> electrical data

Operating voltage, min.	18 V
Operating voltage, max.	30 V
Rated voltage, min.	0.02 V
Rated voltage, max.	35 V
Voltage type	DC
Rated operating voltage	24 V
Operating current, max.	940 mA
Rated current, min.	0.001 A
Rated current, max.	0.1 A
Rated power, max.	0.25 W
Categories of use	AC-15 DC-13

> Specifications according to UL 60947

Rated voltage, max.	30 V DC (42,4 V peak)
UL Enclosure Type Rating front side	type 4X indoor
Operating temperature, max. to UL/TÜV	60 °C

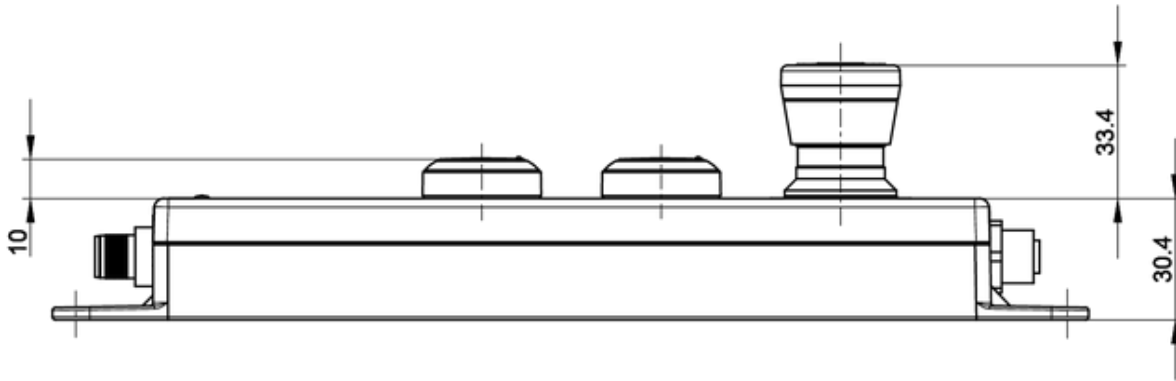
Use according to UL:

Type 4x indoor only with cables as listed in E-File E325311 as "Cat. Nos. 7xxx-yyyyy-zzz(+)" where 'xxx' is any 3 digits number, 'yyyyy' is a five digit combination, 'zzz' is followed by any combination of 3 numbers and/or letters, (+) followed by 4 digits number representing cable length."

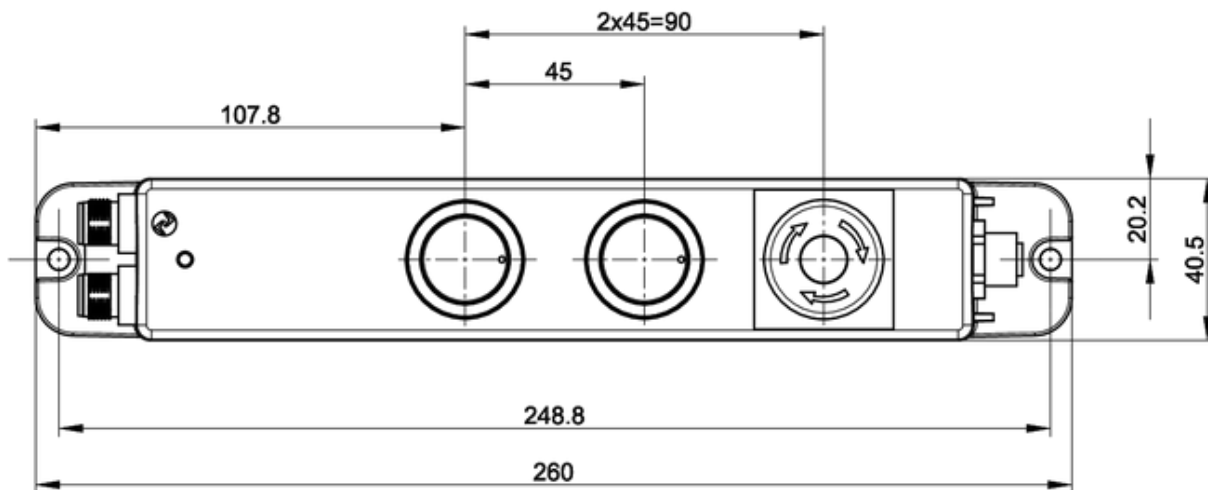
Only approved for Class 2 power sources or limited voltage/current. For connecting the device use UL certificated cables of category CYJV or PVVA.

drawings

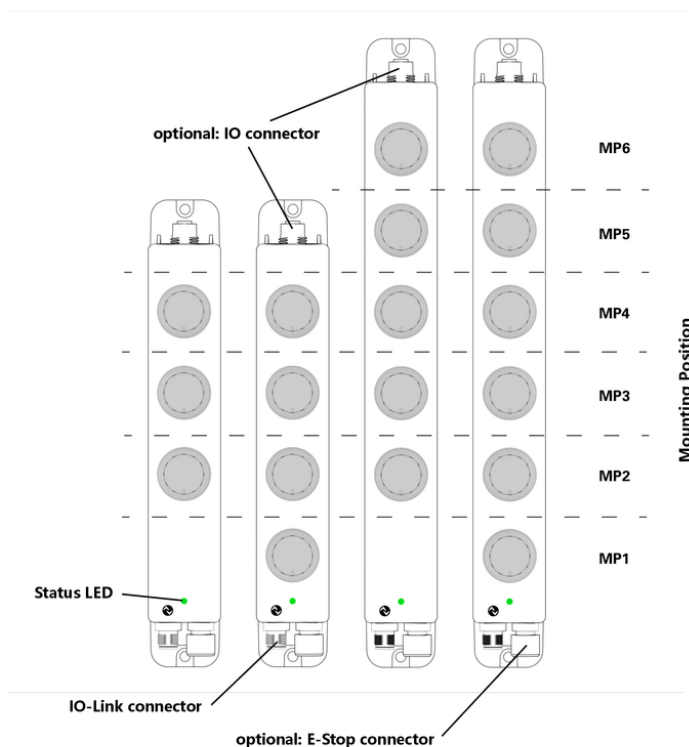
Dimensioned drawing



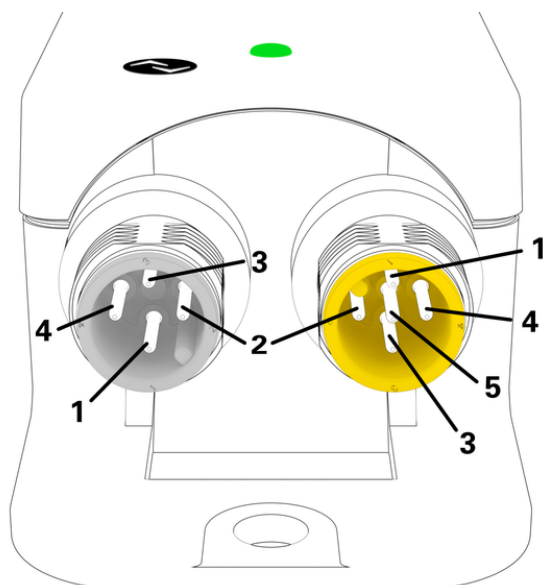
Dimensioned drawing



System drawing



Connection drawing



IO-Link connector

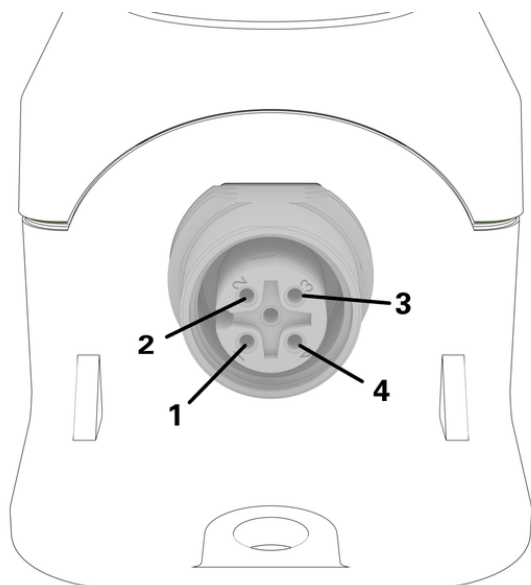
M12, 4-pole, a-coded

- PIN 1: L+ (+24 VCC)
- PIN 2: n.c.
- PIN 3: L- (GND)
- PIN 4: C/Q (IO-Link data)

E-Stop connector

M12, 5-pole, a-coded

- PIN 1: NC - contact 1
- PIN 2: NC - contact 2
- PIN 3: n.c.
- PIN 4: NC - contact 1
- PIN 5: NC - contact 2

Connection drawing**IO connector**

M12, 4-pole, a-coded, for digital IO functionality

PIN 1: IO #1

PIN 2: IO #2

PIN 3: IO #3

PIN 4: IO #4

mounting**RAFI****Montageanleitung für
E-BOX XL IO-LINK****Version: 1.0 vom 03.12.2025
Original in Deutsch**

Folgen Sie dieser Montageanleitung für einen
ordnungsgemäßen und sicheren Gebrauch.
Bewahren Sie diese für die spätere Verwendung auf.