# Блоки управляющих устройств серии BN

## Технические характеристики

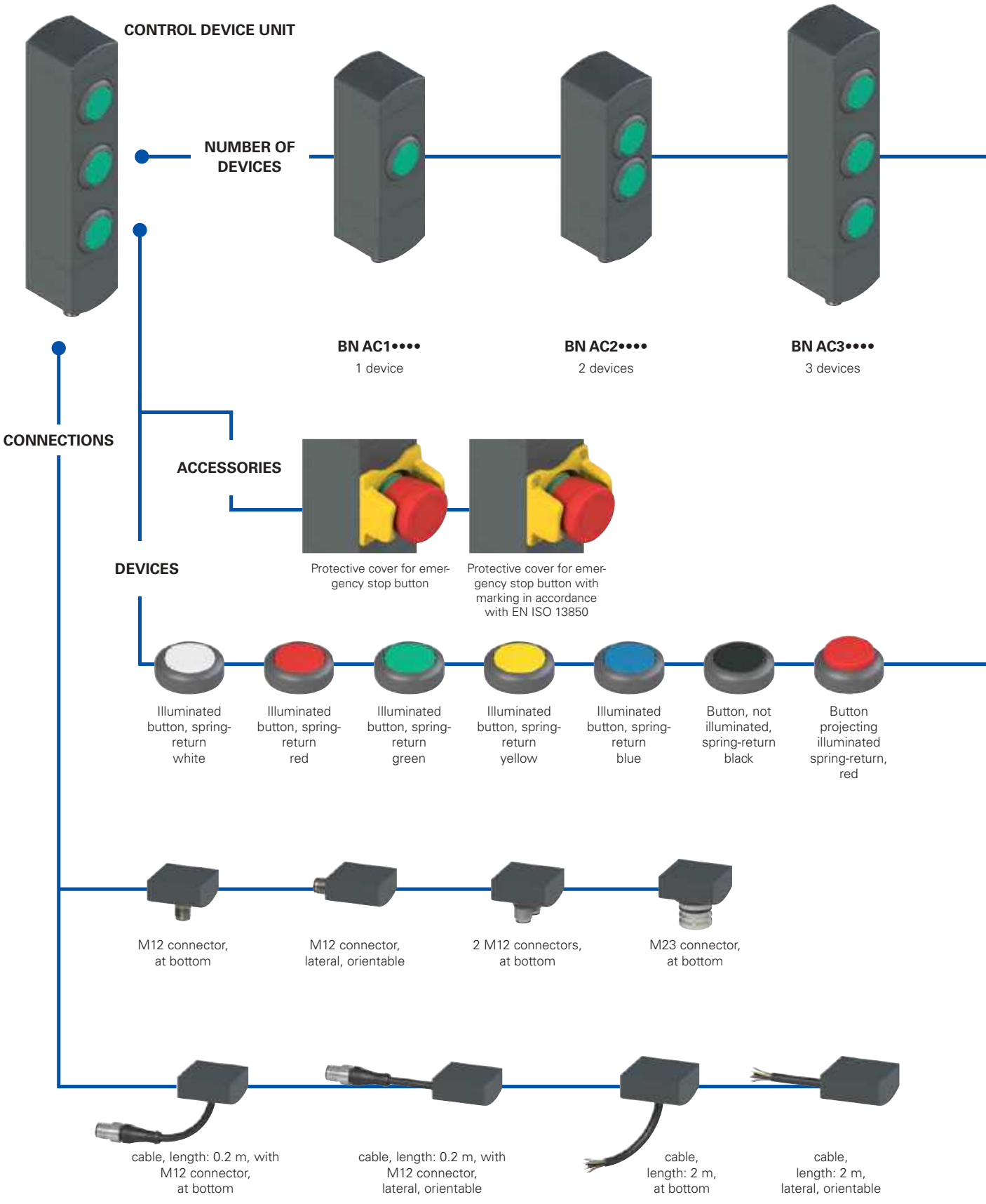

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

**Россия** +7(495)268-04-70
**Казахстан** +(727)345-47-04
**Беларусь** +(375)257-127-884
**Узбекистан** +998(71)205-18-59
**Киргизия** +996(312)96-26-47

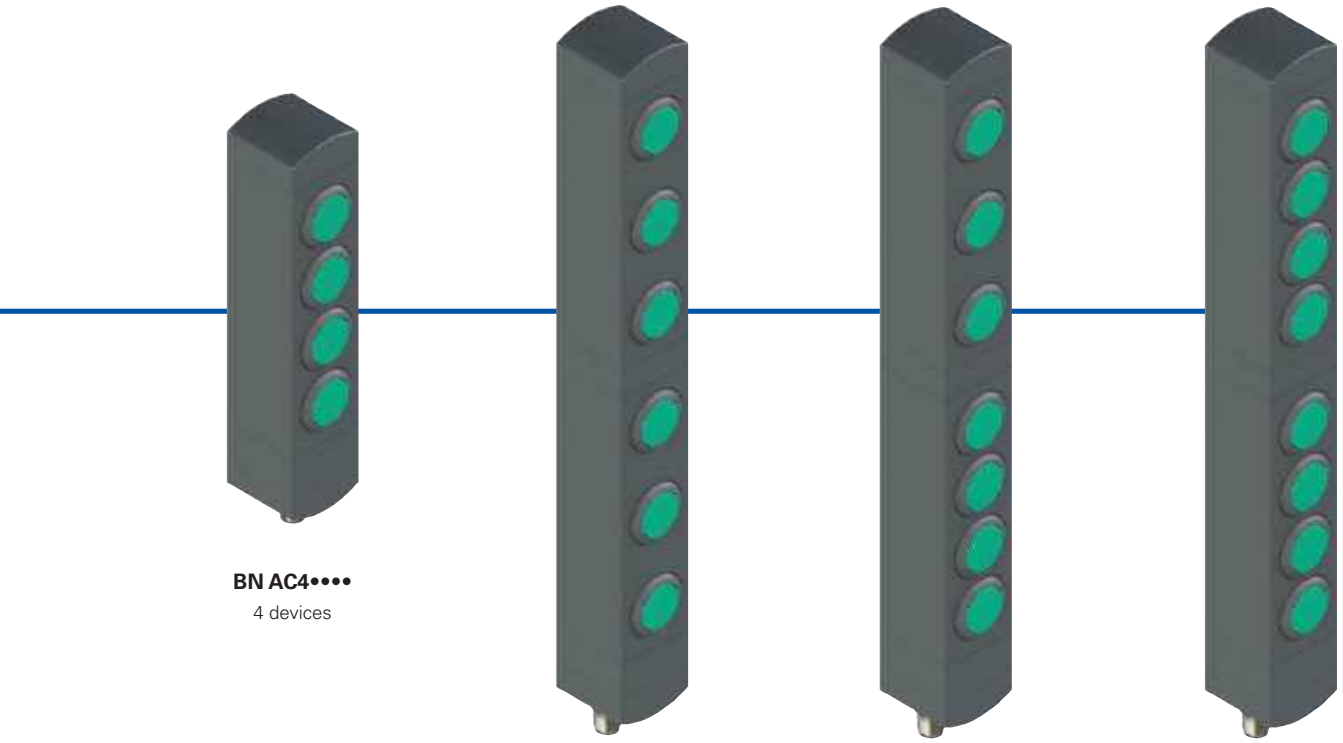
эл.почта: poz@nt-rt.ru || сайт: https://pizzato.nt-rt.ru/

## Selection diagram




product option

Sold separately as accessory



**BN AC4••••**
4 devices

**BN AC6••••**
6 devices

**BN AC7••••**
7 devices

**BN AC8••••**
8 devices

Indicator light, white

Indicator light, red

Indicator light, green

Selector switch with handle, illuminated 2 or 3 positions

Key selector switch, 2 or 3 positions

Closing cap

Emergency stop button with rotary release

Emergency stop button with push-pull release

Simple stop button with rotary release

## Code structure

**Attention!** The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

# BN AC3ZA01

| Number of devices | |
|---|---|
| **1** | 1 device |
| **2** | 2 devices |
| **3** | 3 devices |
| **4** | 4 devices |
| **6** | 6 devices |
| **7** | 7 devices |
| **8** | 8 devices |

| Button configuration | |
|---|---|
| **A01** | A01 configuration |
| **A02** | A02 configuration |
| **A03** | A03 configuration |
| **...** | other configurations on request |

**Main features**

- Modular control device unit for 1 to 8 devices
- Rotatable fixing position
- Flush-mounted control devices
- Compact dimensions, minimal housing width
- Numerous control devices available

**Quality marks:**

UL approval: E131787

**Features approved by UL**

Electrical ratings: 24 Vdc Class 2, 0,1 A

Model BN with base module dimensions 40 mm by 38.5 mm by 145.5 mm:

Input Supplied by 24 Vdc, Class 2 Source or limited voltage limited energy, 0,096 A max. (Maximum eight leds).

Output 24 Vac/dc "Class 2" 0.25 A Pilot Duty (Maximum eight Actuators, with maximum twelve contacts, NO or NC or both) or 0.18 A Pilot Duty (Maximum eight Actuators, with maximum sixteen contacts, NO or NC or both)

Model BN with base module dimensions 40 mm by 38.5 mm by 82.1 mm:

Input Supplied by 24 Vdc, Class 2 Source or limited voltage limited energy, 0,048 A max. (Maximum four leds).

Output 24 Vac/dc "Class 2" 0.25 A Pilot Duty (Maximum four Actuators, with maximum eight contacts, NO or NC or both) or 0.18 A Pilot Duty (Maximum four Actuators, with maximum eight contacts, NO or NC or both)

Environmental ratings: Type 1

## Technical data

Housing made of glass fibre reinforced technopolymer, self-extinguishing and shock-proof.
Versions with integrated cable 12 x 0.14 mm², length 2 m, other lengths from 0.5 m to 10 m on request.
Versions with integrated M23 or M12 stainless steel connector.
Versions with 2 integrated M12 stainless steel connectors.
Versions with 0.2 m cable and M12 connector, other lengths from 0.1 … 3 m on request.

| | |
|---|---|
| Protection degree: | IP65 acc. to EN 60529 |

**General data**

| | |
|---|---|
| Ambient temperature: | -25°C … +70°C |
| Fixing screws for the housing: | 2xM5, tightening torque 3 Nm |
| Fixing screws for turnable modules: | Tightening torque of 0.8 … 1.2 Nm |
| Mechanical endurance: | |
| Spring-return button: | 1 million operating cycles |
| Emergency stop button: | 50,000 operating cycles |
| Selector switch: | 300,000 operating cycles |
| Key selector switch: | 50,000 operating cycles<br>30,000 operating cycles including removal of the key |
| Safety parameter $B_{10D}$: | 100,000 (emergency stop button) |

| | | |
|---|---|---|
| Actuating force: | | |
| Spring-return button: | 4 N min | 100 N max. |
| Emergency stop button: | 20 N min | 100 N max. |
| Selector switch: | 0.1 Nm min | 1.5 Nm max. |
| Key selector switch: | 0.1 Nm min | 1.3 Nm max. |

**Electrical data of the devices**

| | |
|---|---|
| Rated operating voltage $U_e$: | 24 Vdc ±10% SELV/PELV |
| Thermal current $I_{th}$: | 1 A |
| Rated insulation voltage $U_i$: | 32 Vac/dc |
| Rated impulse withstand voltage $U_{imp}$: | 1.5 kV |
| Material of the contacts: | silver contacts |
| Contact type: | Self-cleaning contacts with double interruption |
| Utilization category of the contact block: | DC-13; $U_e$ = 24 V, $I_e$ = 0.55 A |
| LED supply voltage: | 24 Vdc ±15% |
| Single LED supply current: | 12 mA |

**M12 connector electrical data**

| | |
|---|---|
| Max. operating voltage: | 32 Vac/dc |
| Max. operating current: | 1.5 A max. |

**M23 connector electrical data**

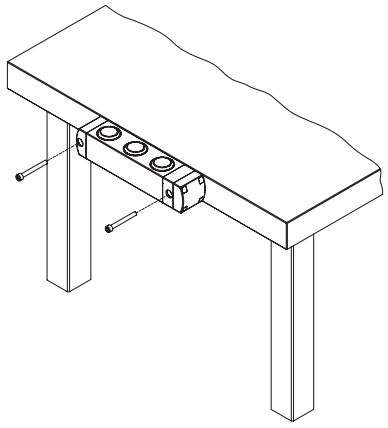
| | |
|---|---|
| Max. operating voltage: | 32 Vac/dc |
| Max. operating current: | 3 A max. |

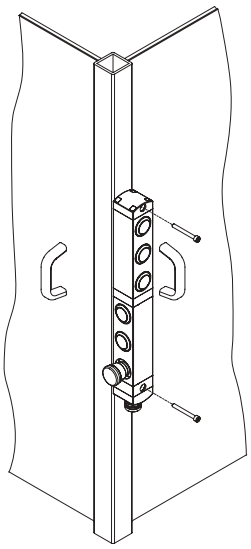
**In compliance with standards:**
IEC 60947-5-1, IEC 60947-5-5, EN ISO 13850, UL 508, CSA C22.2 No. 14.

**Compliance with the requirements of:**
Machinery Directive 2006/42/EC, Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EU, RoHS Directive 2011/65/EU.

⚠ **Installation for safety applications:**
**Always connect the safety circuit to the NC contacts (normally closed contacts) as stated in standard EN 60947-5-1.**

## Actuation of the control devices from various directions



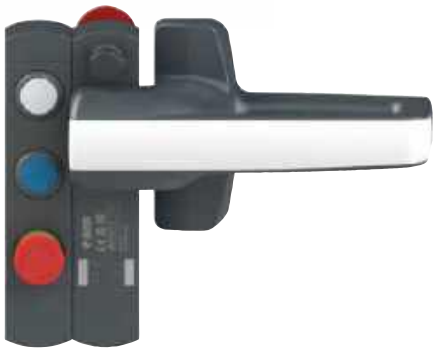


Thanks to the design with turnable modules, the control device units of the BN series offer the user many different options for fixing to the machine.
The orientation of the control devices can be selected independent of the fastening.
With the configurations for 6, 7 and 8 devices, the upper and lower part can be oriented independent of one another. This is especially useful if it should be possible to achieve a command state from two different sides of the machine. In these cases, a single device and single wiring harness can be used, thereby saving time and money.

## General data

The new modular control device units of the BN series from Pizzato Elettrica can be combined perfectly with the RFID safety switches with lock of the NS series. Machine manufacturers who already use these products thereby have the possibility to attach a control device unit directly next to the safety switch that is identical in shape and dimensions.
The control device units of the BN series are available in configurations with 1 to 8 devices.
The unique design with individually turnable modules allows the user to select from a number of combinations. He receives a very versatile product that is immediately ready for use.

## Compatibility with NS series switches

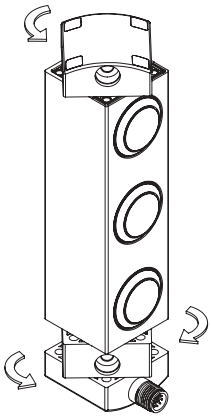


The control device units of the BN series have the same dimensions as the RFID safety switches with lock of the NS series. When mounted directly to the side of the switch, one obtains an integrated safety device whose components are made of the same material and have identical dimensions.

## Minimal dimensions

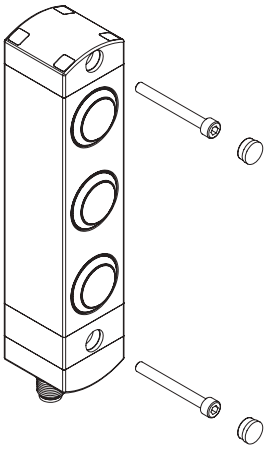

One special feature of the control device units of the BN series is the slim thickness of just 40 mm.
The control devices are embedded in the housing of the unit and protrude only slightly out of the front.
This protects the control devices from unintended impacts, thereby increasing the service life of the devices and, at the same time, giving the devices an attractive design, making them predestined for use on modern machines in which this aspect is also given special consideration.

## Turnable and non-detachable modules



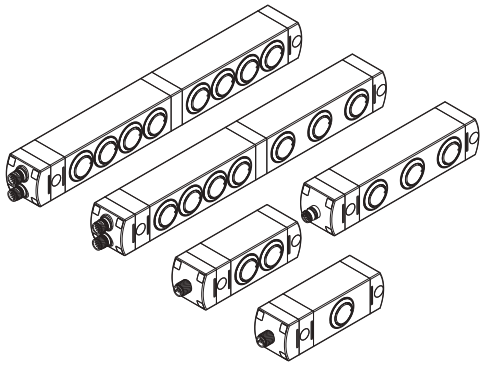
During installation, the fixing modules can be turned on the top and bottom of the device to enable variable orientation of the control devices.
Operation is very simple: after loosening the fixing screws, the device body can be turned in steps of 90° and fixed in the desired position. Another advantage for the installer is that the fixing modules cannot be detached from the device body. Disassembly of the individual parts is not necessary and there is no risk of losing parts or reassembling incorrectly.

## Protection against tampering



Each control device unit of the BN series is supplied complete with snap-on protection caps to be applied on the holes of the fixing screws. Not only do the caps prevent deposits of dirt from accumulating and simplify cleaning, they also prevent access to the fixing screws of the device, thereby offering increased protection against tampering.

## Individually and freely configurable



The control device unit is available in various configurations: for standard applications there are configurations with 1 to 4 devices, while configurations with 6, 7 or 8 devices are available for more complex applications that allow a larger number of control and signalling devices to be attached at the same location for the user.

## Laser markable lenses

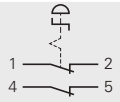

With all product configurations, a number of devices can be installed that can also be illuminated via LEDs integrated in the device.
The buttons are equipped with lenses that can be marked by laser for a resistant, indelible engraving. This allows you to customize the lenses with a wide range of text and symbols. For a complete list of available engravings, please refer to the tables on pp. 165-168.

## Protection guard for emergency stop button

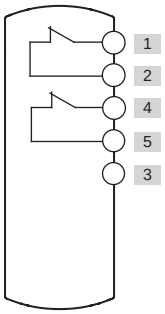
The mushroom-shaped emergency stop button can be combined with a yellow protection guard that serves to protect the device from shocks. The protection guard can also be provided with a laser marking in accordance with EN ISO 13850.

## Examples of available configurations

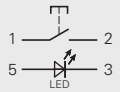
### BN AC1ZA12

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Emergency stop button with rotary release 2NC, with laser-marked protection guard | red |  |
| Connector | M12, 5-pole at bottom | / |  |

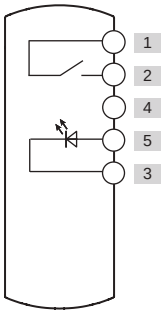
Connections



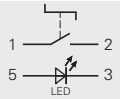

### BN AC1ZA02

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated button, spring-return 1NO | white |  |
| Connector | M12, 5-pole, at bottom | / |  |

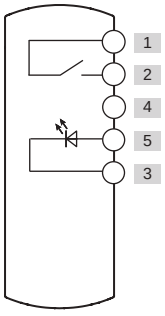
Connections




### BN AC1ZA03

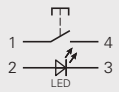
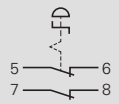
| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated selector switch with handle with two positions 1NO | black |  |
| Connector | M12, 5-pole, at bottom | / |  |

Connections

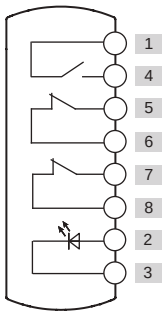



For pin assignments of the connectors, see page 156

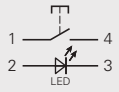
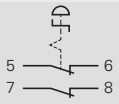
## BN AC2ZA26

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated button, spring-return 1NO | white |  |
| Device 2 | Emergency stop button with rotary release 2NC, with protection guard | red |  |
| Connector | M12, 8-pole, at bottom | / |  |

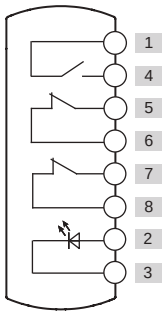
Connections



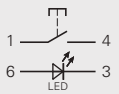
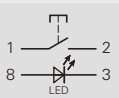
## BN AC2ZA02

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated button, spring-return 1NO | blue |  |
| Device 2 | Emergency stop button with rotary release 2NC | red |  |
| Connector | M12, 8-pole, at bottom | / |  |

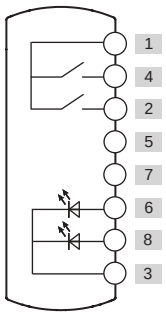
Connections



## BN AC2ZA03

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated button, spring-return 1NO | white |  |
| Device 2 | Illuminated button, spring-return 1NO | blue |  |
| Connector | M12, 8-pole, at bottom | / |  |

Connections

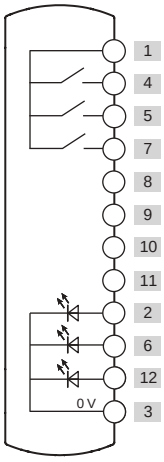


For pin assignments of the connectors, see page 156

## BN AC3ZA01

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated button, spring-return 1NO | white | 1 4 2 3 LED |
| Device 2 | Illuminated button, spring-return 1NO | blue | 1 5 6 3 LED |
| Device 3 | Illuminated button, spring-return 1NO | yellow | 1 7 12 3 LED |
| Connector | M12, 12-pole, at bottom | / | |

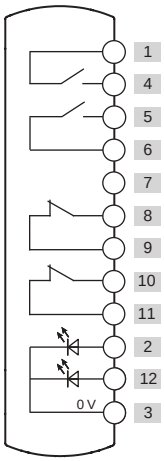
Connections




## BN AC3ZB59

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated button, spring-return 1NO | white | 1 4 2 3 LED |
| Device 2 | Illuminated button, spring-return 1NO | blue | 5 6 12 3 LED |
| Device 3 | Emergency stop button with rotary release 2NC, with laser-marked protection guard | red | 8 9 10 11 |
| Connector | M12, 12-pole, at bottom | / | |

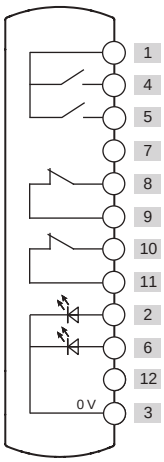
Connections




## BN AC3ZA03

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated button, spring-return 1NO | white | 1 4 2 3 LED |
| Device 2 | Illuminated button, spring-return 1NO | yellow | 1 5 6 3 LED |
| Device 3 | Emergency stop button with rotary release 2NC | red | 8 9 10 11 |
| Connector | M12, 12-pole, at bottom | / | |

Connections

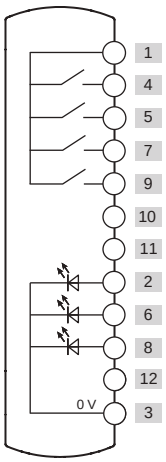



For pin assignments of the connectors, see page 156

## BN AC4ZA01

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated button, spring-return 1NO | green | 1 4 / 2 3 LED |
| Device 2 | Illuminated button, spring-return 1NO | red | 1 5 / 6 3 LED |
| Device 3 | Illuminated button, spring-return 1NO | white | 1 7 / 8 3 LED |
| Device 4 | Two-position key selector switch 1NO | black | 1 9 |
| Connector | M12, 12-pole, at bottom | / | |

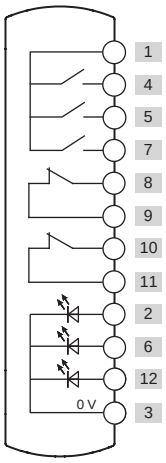
Connections




## BN AC4ZB19

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated button, spring-return 1NO | white | 1 4 / 2 3 LED |
| Device 2 | Illuminated button, spring-return 1NO | blue | 1 5 / 6 3 LED |
| Device 3 | Illuminated button, spring-return 1NO | yellow | 1 7 / 12 3 LED |
| Device 4 | Emergency stop button with rotary release 2NC, with protection guard | red | 8 9 / 10 11 |
| Connector | M12, 12-pole, at bottom | / | |

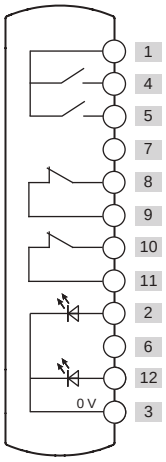
Connections




## BN AC4ZA03

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated button, spring-return 1NO | white | 1 4 / 2 3 LED |
| Device 2 | Spring-return button 1NO | black | 1 5 |
| Device 3 | Indicator light | green | 12 3 LED |
| Device 4 | Emergency stop button with rotary release 2NC | red | 8 9 / 10 11 |
| Connector | M23, 12-pole, at bottom | / | |

Connections

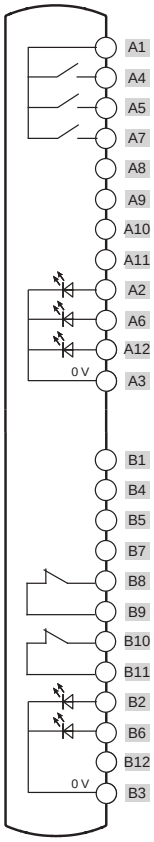



For pin assignments of the connectors, see page 156

## BN AC6ZA40

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated button, spring-return 1NO | white | A1 — A4, A2 — A3, LED |
| Device 2 | Illuminated button, spring-return 1NO | blue | A1 — A5, A6 — A3, LED |
| Device 3 | Illuminated button, spring-return 1NO | yellow | A1 — A7, A12 — A3, LED |
| Device 4 | Indicator light | green | B2 — B3, LED |
| Device 5 | Indicator light | white | B6 — B3, LED |
| Device 6 | Emergency stop button with rotary release 2NC, with protection guard | red | B8 — B9, B10 — B11 |
| Connector | Two M12, 12-pole, at bottom | / | A, B |

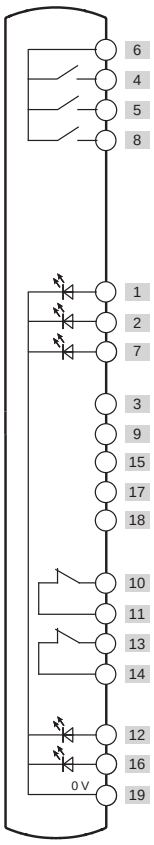
Connections




## BN AC6ZA02

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated button, spring-return 1NO | white | 6 — 4, 1 — 19, LED |
| Device 2 | Illuminated button, spring-return 1NO | blue | 6 — 5, 2 — 19, LED |
| Device 3 | Illuminated button, spring-return 1NO | yellow | 6 — 8, 7 — 19, LED |
| Device 4 | Indicator light | green | 12 — 19, LED |
| Device 5 | Indicator light | white | 16 — 19, LED |
| Device 6 | Emergency stop button with rotary release 2NC | red | 10 — 11, 13 — 14 |
| Connector | M23, 19-pole, at bottom | / | |

Connections

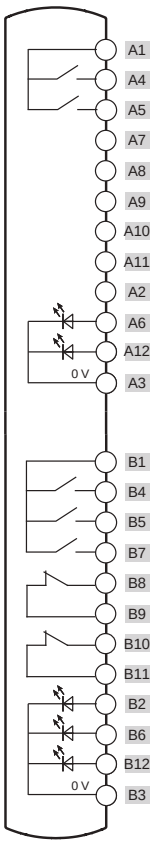



For pin assignments of the connectors, see page 156

## BN AC7ZA07

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Two-position key selector switch 1NO | black | A1 — A4 |
| Device 2 | Illuminated selector switch with handle with two positions 1NO | black | A1 — A5; A6 — A3 (LED) |
| Device 3 | Indicator light | green | A12 — A3 (LED) |
| Device 4 | Illuminated button, spring-return 1NO | white | B1 — B4; B2 — B3 (LED) |
| Device 5 | Illuminated button, spring-return 1NO | blue | B1 — B5; B6 — B3 (LED) |
| Device 6 | Illuminated button, spring-return 1NO | yellow | B1 — B7; B12 — B3 (LED) |
| Device 7 | Emergency stop button with rotary release 2NC, with protection guard | red | B8 — B9; B10 — B11 |
| Connector | Two M12, 12-pole, at bottom | / | A B |

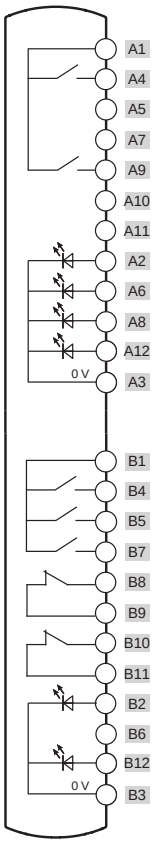
Connections




## BN AC8ZA01

| | Description | Colour | Diagram |
|---|---|---|---|
| Device 1 | Illuminated selector switch with handle with two positions 1NO | black | A1 — A4; A2 — A3 (LED) |
| Device 2 | Indicator light | red | A6 — A3 (LED) |
| Device 3 | Indicator light | green | A8 — A3 (LED) |
| Device 4 | Illuminated button, spring-return 1NO | yellow | A1 — A9; A12 — A3 (LED) |
| Device 5 | Illuminated button, spring-return 1NO | white | B1 — B4; B2 — B3 (LED) |
| Device 6 | Spring-return button 1NO | black | B1 — B5 |
| Device 7 | Illuminated button, spring-return 1NO | blue | B1 — B7; B12 — B3 (LED) |
| Device 8 | Emergency stop button with rotary release 2NC | red | B8 — B9; B10 — B11 |
| Connector | Two M12, 12-pole, at bottom | / | A B |

Connections




For pin assignments of the connectors, see page 156

## Spare devices available

| | Description | Colour | Article | Combinable with contacts (1) | Protrusion (x) mm |
|---|---|---|---|---|---|
|  | Illuminated button, spring-return | White<br>Red<br>Green<br>Yellow<br>Blue | VN NG-AC27121<br>VN NG-AC27123<br>VN NG-AC27124<br>VN NG-AC27125<br>VN NG-AC27126 | 1NO<br>(1NC)<br>(2NO)<br>(1NO+1NC) | 3 |
|  | Non-illuminated button, spring-return | Black | VN NG-AC27122 | 1NO<br>(1NC)<br>(2NO)<br>(1NO+1NC) | 3 |
|  | Non-laser-markable, illuminated, projecting push button(2) | Red | VN NG-AC26018 | 1NO<br>(1NC)<br>(2NO)<br>(1NO+1NC) | 6,1 |
|  | Indicator light | Red<br>Yellow<br>Green<br>Blue<br>White | VN NG-AC26060<br>VN NG-AC26061<br>VN NG-AC26062<br>VN NG-AC26063<br>VN NG-AC26064 | / | 2,7 |
|  | Emergency stop button acc. to. EN ISO 13850<br>Rotary release<br>Push-pull release | <br>Red<br>Red | <br>VN NG-AC26052<br>VN NG-AC26055 | 2NC | 26,4 |
|  | EN ISO 13850-compliant emergency pushbutton for 2NC+1NO pulse contacts (3)<br>Rotary release | <br>Red | <br>VN NG-AC26056 | 2NC + 1NO pulse | 26,4 |
|  | Illuminated emergency stop button acc. to. EN ISO 13850<br>Rotary release<br>Push-pull release | <br>Red<br>Red | <br>VN NG-AC26051<br>VN NG-AC26054 | 2NC | 26,4 |
|  | Simple stop button<br>Rotary release<br>Push-pull release | <br>Black<br>Black | <br>VN NG-AC26053<br>VN NG-AC26057 | 2NC | 26,4 |
|  | Illuminated selector switch with handle with 2 or 3 positions and transparent lens for LED<br>  <br>  <br>  <br>  | <br>Black<br>Black<br>Black<br>Black | <br>VN NG-AC26033<br>VN NG-AC26030<br>VN NG-AC26034<br>VN NG-AC26031 | 1NO<br>(1NC)<br>(2NO)<br>(1NO+1NC) | 16,8 |
|  | Key selector switch, 2 or 3 positions<br>  <br>  <br>  | <br>Black<br>Black<br>Black | <br>VN NG-AC26043<br>VN NG-AC26040<br>VN NG-AC26041 | 1NO<br>(1NC)<br>(2NO)<br>(1NO+1NC) | 39 (a)<br>14 (b) |
|  | Closing cap | Black | VN NG-AC26020 | / | 2,7 |
|  | Fixing key | Black | VN NG-AC26080 | / | / |

**Legend:** Maintained Spring-return Key extraction position (a) with key (b) without key

(1) The contacts in brackets are on request. Contact our technical department to verify the effective feasibility of the control panel with the chosen combination of control devices.
(2) The projecting buttons are not laser markable.
(3) The pulse NO contact is activated only when the emergency button reaches the bottom of the stroke. The NO contact signal should be detected by analyzing the rising edge.

**To order buttons with marking:**
add the marking code indicated in the tables on pp. 165-168 to the article codes.
Example: Black spring-return button with "O" engraving.
VN NG-AC27122 → VN NG-AC27122-L1

## Technical data of the control devices

**General data**

| | |
|---|---|
| Protection degree: | IP65 acc. to EN 60529 |
| Mechanical endurance: | |
| Spring-return button: | 1 million operating cycles |
| Emergency stop button: | 50,000 operating cycles |
| Selector switch: | 300,000 operating cycles |
| Key selector switch: | 50,000 operating cycles<br>30,000 operating cycles including removal of the key |
| Safety parameter $B_{10D}$: | 100,000 (emergency stop button) |

**Actuating force**

| | | |
|---|---|---|
| Spring-return button: | 4 N min | 100 N max. |
| Emergency stop button: | 20 N min | 100 N max. |
| Selector switch: | 0.1 Nm min | 1.5 Nm max. |
| Key selector switch: | 0.1 Nm min | 1.3 Nm max. |

**Contact blocks of the control devices**

| | |
|---|---|
| Material of the contacts: | silver contacts |
| Contact type: | Self-cleaning contacts with double interruption |

**Electrical data:**

| | |
|---|---|
| Thermal current $I_{th}$: | 1 A |
| Rated insulation voltage $U_i$: | 32 Vac/dc |
| Rated impulse withstand voltage $U_{imp}$: | 1.5 kV |
| LED supply voltage: | 24 Vdc ± 15% |
| LED supply current: | 10 mA per LED |

**Utilization category of the contact block:**
Direct current: DC13

| | |
|---|---|
| $U_e$ (V) | 24 |
| $I_e$ (A) | 0.55 |

**Signalling contact with spring return:**
Direct current: DC13

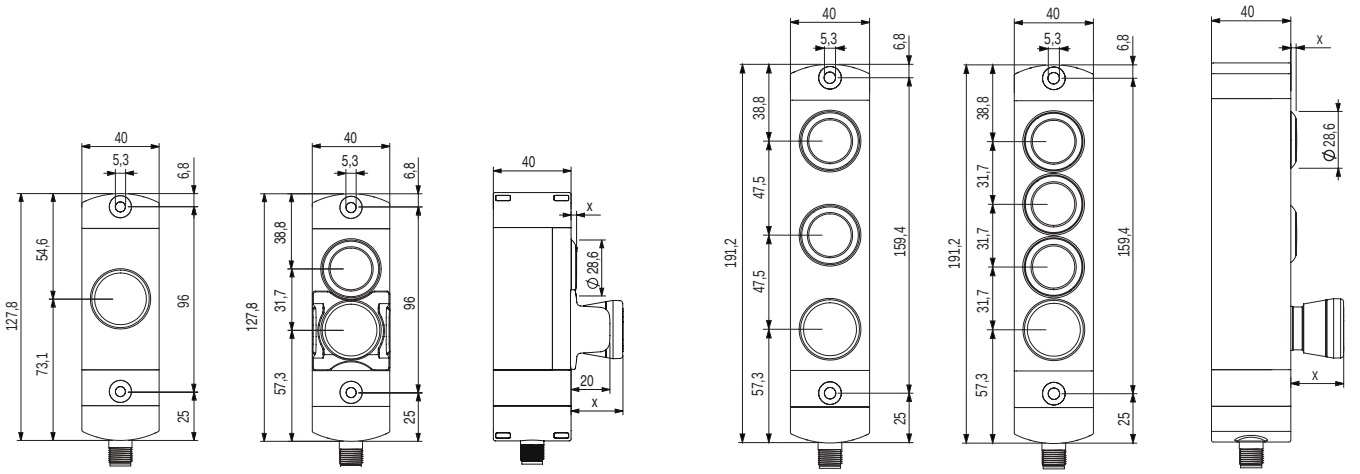
| | |
|---|---|
| $U_e$ (V) | 24 |
| $I_e$ (mA) | 10 |

**In compliance with standards:**
IEC 60947-5-1, IEC 60947-5-5, EN ISO 13850

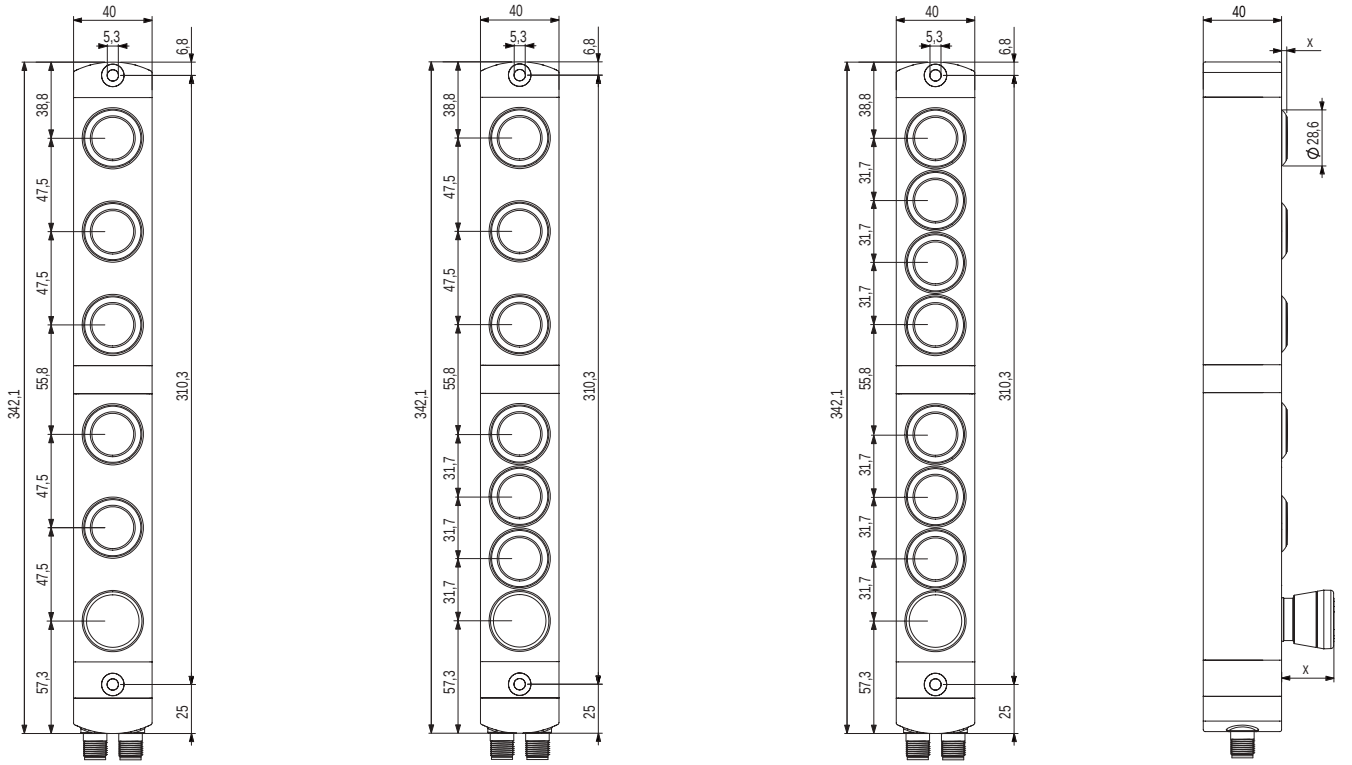
⚠ **Installation for safety applications:**
Always connect the safety circuit to the **NC contacts** (normally closed contacts) as stated in standard EN 60947-5-1.

## Dimensional drawings

BN AC1•••• | BN AC2•••• | BN AC3•••• | BN AC4••••

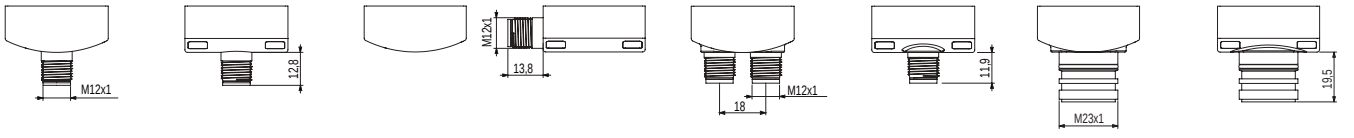



BN AC6•••• | BN AC7•••• | BN AC8••••




## Output type

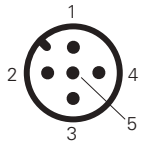
| M12 connector, at bottom | M12 connector, lateral | Two M12 connectors, at bottom | M23 connector, at bottom |
|---|---|---|---|



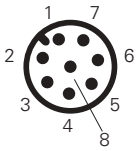

All values in the drawings are in mm

## Electrical connections

### M12 connector, 5-pole




### M12 connector, 8-pole

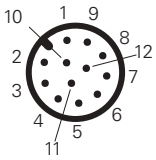



### Cable

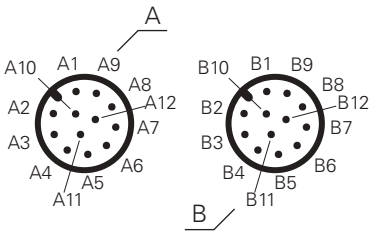
| Pin No. | Cable colour |
|---|---|
| 1 | brown |
| 2 | blue |
| 3 | white |
| 4 | green |
| 5 | pink |
| 6 | yellow |

| Pin No. | Cable colour |
|---|---|
| 7 | black |
| 8 | grey |
| 9 | red |
| 10 | purple |
| 11 | grey-pink |
| 12 | red-blue |

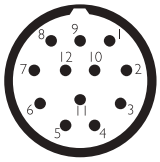
### M12 connector, 12-pole



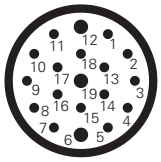

### Two M12 connectors, 12-pole




### M23 connector, 12-pole




### M23 connector, 19-pole



По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

**Россия** +7(495)268-04-70
**Казахстан** +(727)345-47-04
**Беларусь** +(375)257-127-884
**Узбекистан** +998(71)205-18-59
**Киргизия** +996(312)96-26-47

эл.почта: poz@nt-rt.ru || сайт: https://pizzato.nt-rt.ru/