

## Features

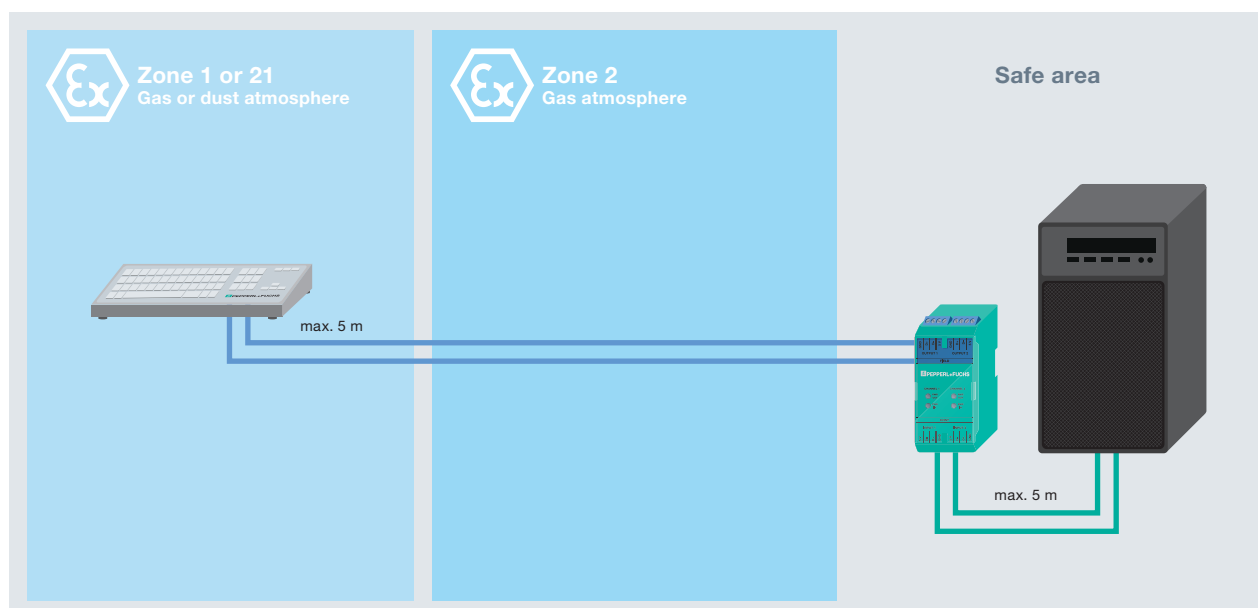
- Degree of protection: IP66 (housings), IP65 (front panel)
- Stainless steel desktop housing available
- Several national layout variants
- PC-compatible-keyboard with 105 short stroke keys
- Designed to use in hazardous area, category II 2G (zone 1)
- USB or PS/2 interface with USB cable
- Certified for ATEX and IECEx Zone 1/21
- UL listed for USA and Canada

## Application

Die EXTA2-\*-K3-\*-U-\*- is an intrinsically safe keyboard with trackball. The interfaces of mouse and keyboard are separated IS-Circuits. Both circuits are lead trough in one connecting cable. (connecting cable is included in delivery). The keyboards are designed for panel mounting or for installation in a housing.



## Connection



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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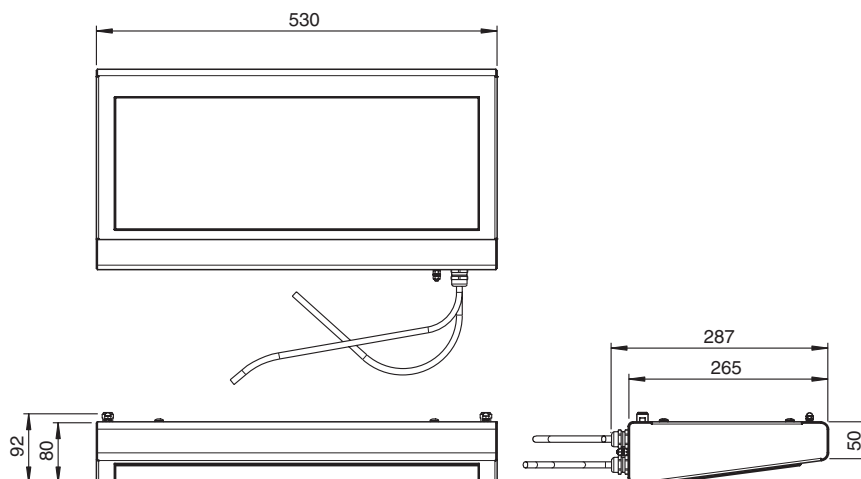
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|  |   |  |
|--|---|--|
| <b>General specifications</b>                                  |   |  |
| Type   | Keyboard with trackball   |  |
| Suitable components  | SK-PC-Z1D1-UU1-10-HS  |  |
| <b>Supply</b>  |   |  |
| Rated voltage $U_r$  | Ex i, via data line   |  |
| <b>Indicators/operating means</b>                              |   |  |
| Keyboard   | 105 short stroke keys<br>Keyboard layout: US international, German, French, (further keyboard layouts on demand)  |  |
| Trackball  |   |  |
| Diameter   | 50 mm   |  |
| Material   | Phenolic resin (black)  |  |
| Driver   | Microsoft Mouse ® , USB   |  |
| <b>Interface</b>   |   |  |
| Interface type   | USB   |  |
| <b>Directive conformity</b>                                    |   |  |
| Electromagnetic compatibility                                  |   |  |
| Directive 2014/30/EU   | EN 61326-1:2013 (industrial locations) ; EN 61000-6-4:2007+A1:2011  |  |
| RoHS   |   |  |
| Directive 2011/65/EU (RoHS)                                    | EN 50581:2012-09  |  |
| <b>Conformity</b>  |   |  |
| Electromagnetic compatibility                                  | EN 61000-6-2:2005   |  |
| Degree of protection   | IP65 , if trackball is inactive. Undefined during motion.   |  |
| <b>Ambient conditions</b>                                      |   |  |
| Ambient temperature  | 0 ... 50 °C (32 ... 122 °F)   |  |
| Storage temperature  | -20 ... 70 °C (-4 ... 158 °F)   |  |
| Relative humidity  | max. 85 % , non-condensing  |  |
| <b>Mechanical specifications</b>                               |   |  |
| Material   | anodized aluminum , Polyester foil  |  |
| Mass   | 1.2 kg  |  |
| Dimensions   | 482.6 mm x 177.8 mm x 45 mm   |  |
| Cut out dimensions   | 450 mm x 152 mm   |  |
| Cable length   | 5 m / 1.8 m, USB  |  |
| <b>Data for application in connection with hazardous areas</b> |   |  |
| EU-Type Examination Certificate                                | BVS 07 ATEX E 163 X   |  |
| Marking  |  II 2G Ex ib IIC T4 Gb<br> II 2D Ex ib IIIB T135°C Db |  |
| <b>Input</b>   |   |  |
| Voltage $U_i$  | 5.4 V   |  |
| Current $I_i$  | 240 mA  |  |
| Internal capacitance $C_i$                                     | 24 µF   |  |
| Internal inductance $L_i$                                      | negligible  |  |
| <b>Directive conformity</b>                                    |   |  |
| Directive 2014/34/EU   | EN 60079-0:2012+A11:2013, EN 60079-11:2012  |  |
| <b>International approvals</b>                                 |   |  |
| UL approval  | UL listing / recognition : E190294  |  |
| IECEx approval   | IECEx BVS 08.0022X  |  |
| Approved for   | Ex ib IIC T4 Gb , Ex ib IIIB T135 °C Db   |  |

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**Dimensions**



**Accessories**

USB stand alone Barrier

SK-PC-Z1D1-UU1-10-HS

USB intrinsic safety barrier for stand-alone keyboard applications

**Chemical resistance of keyboard foil**

The keyboard foil is manufactured from a biaxially aligned polyester-based material and therefore has a greater resistance to solvents. The foil is stronger and more durable than other standard foils used on keyboards and front panels, such as polycarbonate and PVC.

| The keyboard foil is resistant against the following substances: (Test method: DIN42115) | The foil passed the anti microbial effectiveness tested with: (Test method: AATCC Test method 100): |
|--|---|
| Alcohols   | Staphylococcus aureus (MRSA)  |
| Dilute acids   | Escherichia coli 0157   |
| Dilute alkalis   | Listeria monocytogenes  |
| Esters   | Pseudomonas aeruginosa  |
| Hydrocarbons   | Salmonella enteritidis  |
| Ketones  | Bacillus cereus   |
| Household cleaning agents  | Streptococcus faecalis  |
|  | Klebsiella pneumoniae   |
|  | Aspergillus niger   |
|  | Penicillium purpurogenum  |
|  | Phoma violacea  |
|  | Saccharmyces cerevisiae   |
|  |   |

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**EXTA2**

| Type          | Explosion Protection         | Housing  | Keyboard Type        | Keyboard Layout | Interfaces | Cable Length | Connector Type | Mounting Option | Revision | Options |  |
|---------------|------------------------------|--|----------------------|-----------------|------------|--------------|----------------|-----------------|----------|---------|--|
| <b>EXTA2-</b> | Keyboard for hazardous areas |  |                      |                 |            |              |                |                 |          |         |  |
| <b>TA2-</b>   | Keyboard for safe areas      |  |                      |                 |            |              |                |                 |          |         |  |
|               | <b>Ex Protection</b>         |  |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-F</b>                    | ATEX II 2 GD; Zone 1/21  |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-J</b>                    | IECEX & ATEX II 2 GD; Zone 1/21<br>NEC Class I, Div. 2, Zone 22; Class II, Div. 2, Zone 22; and Class III, Zone 22 (only in combination with "N" housing option) |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-N</b>                    | Version for safe area  |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-K</b>                    | ATEX/IECEX, Class I, Div. 2, in combination with housing options "T" or "F"  |                      |                 |            |              |                |                 |          |         |  |
|               |                              | <b>Housing</b>   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-N</b>                    | Panel mount version  |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-T</b>                    | Desktop version  |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-F</b>                    | Enclosure Version  |                      |                 |            |              |                |                 |          |         |  |
|               |                              | <b>Keyboard Type</b>   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-K3</b>                   | Foil keyboard with trackball. ATEX/IECEX only.   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-K4</b>                   | Foil keyboard with touchpad  |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-K6</b>                   | Foil keyboard with joystick. Not to be used with option "N" when marked as Class I, Div. 2, Zone 2; Class II, Div. 2, Zone 22; Class III, Zone 22.               |                      |                 |            |              |                |                 |          |         |  |
|               |                              | <b>Keyboard Layout</b>   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-US</b>                   | US international keyboard layout   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-DE</b>                   | German keyboard layout   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-FR</b>                   | French keyboard layout   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-XXX</b>                  | Other keyboard layouts on demand   |                      |                 |            |              |                |                 |          |         |  |
|               |                              | <b>Interface</b>   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-U</b>                    | 2 x USB interface  |                      |                 |            |              |                |                 |          |         |  |
|               |                              | <b>Cable Length</b>  |                      |                 |            |              |                |                 |          |         |  |
|               |                              | 02   | 1.8 m keyboard cable |                 |            |              |                |                 |          |         |  |
|               |                              | 05   | 5 m keyboard cable   |                 |            |              |                |                 |          |         |  |
|               |                              | <b>Connector Type</b>  |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-CF</b>                   | Cable ends with wire end ferrule   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-UA</b>                   | 2 x USB plugs type A (not available for Ex protection option "-J")   |                      |                 |            |              |                |                 |          |         |  |
|               |                              | <b>Mounting Option</b>   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-Z</b>                    | No mounting option necessary   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-F</b>                    | 15° mounting adapters, vertical  |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-L</b>                    | 75° mounting adapters, vertical  |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-H</b>                    | 15° mounting adapters, horizontal  |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-G</b>                    | 1-Arm for mounting to housing AG-XX00  |                      |                 |            |              |                |                 |          |         |  |
|               |                              | <b>Revision</b>  |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-10</b>                   | Release 1.0  |                      |                 |            |              |                |                 |          |         |  |
|               |                              | <b>Options</b>   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-N</b>                    | No options   |                      |                 |            |              |                |                 |          |         |  |
|               | <b>-U</b>                    | UV-resistant foil  |                      |                 |            |              |                |                 |          |         |  |

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