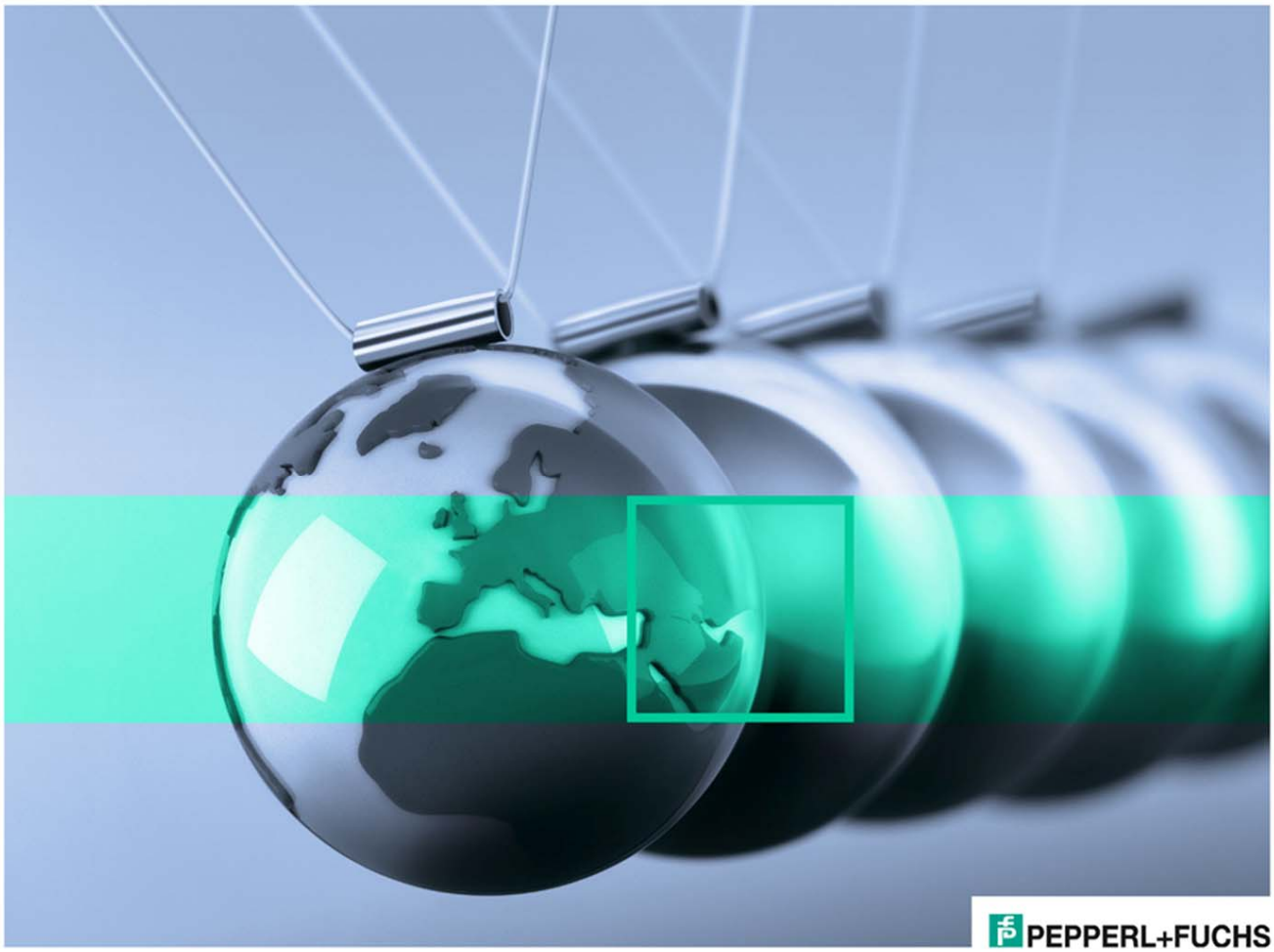


Technical manual

Ex1 Keyboard / Mouse Interface
SK-PC-KM-10

Keyboard
EXTA-K1, EXTA-K3, EXTA-K4

Version: TDOCT-1174AENG, 09.07.10

Inhaltsverzeichnis

1 Safety

1.1 Validity

The chapter „Safety“ is valid as operating instruction.

Specific process and instructions in this document require special precautions to guarantee the safety of personal.

1.2 General safety instructions

The operator of the system is responsible in terms of planning, mounting, commissioning, operating and maintenance.

Installation and commissioning of all devices must be performed by a trained professional only.

Protection of operating personnel and system is not ensured if the product is not used in accordance with its intended purpose.

Laws and regulations applicable to the usage or the intended purpose must be observed. The devices are only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

The Declaration of Conformity, Certificate of Compliance, Statement of Conformity, EC-type-examination certificate and data sheets are an integral part of this document.

The data sheet contains the electrical data of the Declaration of Conformity, the Certificate of Compliance and the EC-type-examination certificate.

The documents mentioned are available from http://www.pepperl-fuchs.com or contact your local Pepperl+Fuchs representative.

1.3 Symbols used

This document contains information that you must read for your own personal safety and to avoid property damage. The warning signs are displayed in descending order of hazardous depending on the hazard category, as follows:

Safety-relevant Symbols

	**Danger!** This symbol indicates a warning about a possible danger. In the event the warning is ignored, the consequences may range from personal injury to death.

	**Warning!** This symbol indicates a warning about a possible danger. In the event the warning is ignored, the consequences may cause personal injury or heaviest property damage.

	**Caution!** This symbol warns of a possible fault. Failure to observe the instructions given in this warning may result in the devices and any connected facilities or systems develop a fault or fail completely.

Informative Symbols

	**Note!** This symbol brings important information to your attention.

	**Action!** This symbol marks an acting paragraph.

1.4 Delivery, transport, and storage

Check the packaging and the contents for damage. If you discover any instances of damage, please notify the postal service or forwarding agent as well as the supplier.

Check the contents of the consignment against the order and make sure all delivery documents are complete and correct.

Keep the original packaging.
The device should only be stored or transported in the original packaging.

The device must always be stored in a dry, clean environment. The permissible storage temperature must not be exceeded (refer to the data sheet).

1.5 Installation and commissioning

The identification plate must not be removed.

The installation instructions in accordance with IEC/EN 60079-14 must be observed.

If devices have already been operated in general electrical systems, they may subsequently no longer be installed in electrical systems used in combination with hazardous areas.

The device must only be operated in the ambient temperature range and at the relative humidity (noncondensing) specified.

Use shielded cable
To connect interfaces only use shielded cable.

Screwing/locking connectors
To advance the cable shield screw/lock the connectors.

Leading of data cables and power circuit lines
Lead data cable and power circuit line in separate cable channels.

Check cable and connectors
Before commissioning the system check all cables and connectors.

1.6 Disposal

Disposal of devices and their packaging material must be performed in compliance with the applicable laws and guidelines of the corresponding country.

1.7 SK-PC-KM-10 Intended use

The SK-PC-KM-10 Exi Keyboard / Mouse Interface is an associated apparatus. It is an Exi Keyboard / Mouse Interface which connects intrinsically safe keyboards and keyboards with mouse of type EXTA-K* in the hazardous area (zones 1 and zones 2) with a standard PC in the non-hazardous area.

The devices are only approved for appropriate intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

1.8 Safety SK-PC-KM-10

The protective earth conductor (PE) is connected to the case. The case must be earthed (PA). The earth wire must have a cross-section of at least 4 mm² and be as short as possible.

1.9 Technical data SK-PC-KM-10

Data for application in conjunction with hazardous areas	
Voltage Uo	6 V
Current Io	250 mA
Power Po	1,2 W
Capacitance Co	38 µF
Ambient conditions	
Operating temperature	0°C - +60°C

1.10 Identification SK-PC-KM-10

SK-PC-KM-10

Pepperl+Fuchs GmbH
68307 Mannheim, Germany
DMT 02 ATEX E 140 X

Ex II (2) G [EEx ib] II C

1.11 EXTA-Kx Intended use

The intrinsically safe EXTA-Kx is a keyboard / mouse combination with PS/2 interfaces, available in different versions. The intrinsically safe keyboards integrate different mouse systems. The outside dimensions are the same for all versions. The keyboards are designed for panel mounting or for installation in a housing. The 8-pin connection cable is part of the scope of supply.

The devices are only approved for appropriate intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

1.12 Safety keyboard EXTA-Kx

- The installation instructions in accordance with IEC/EN 60079-14 must be observed.
- If devices have already been operated in general electrical systems, they may subsequently no longer be installed in electrical systems used in combination with hazardous areas.
- When connecting intrinsically safe field devices to intrinsically safe circuits on the associated apparatus, observe the relevant maximum values of the field devices and associated apparatus specified in the explosion protection documentation (certificate of intrinsic safety). Make sure to observe IEC/EN 60079-14 and IEC/EN 60079-25.
- PA Equipotential bonding
  If the keyboard is build into a metal housing with equipotential bonding the equipotential connection is given by the fixing bolts.
  If the keyboard is build into a housing without equipotential bonding (mobile housing) the equipotential connection could be done by the shield of the connection cable.

1.13 Technical data EXTA-Kx

Data for application in conjunction with hazardous areas	
Voltage Ui	6 V DC
Current Ii	350 mA
Power Pi	1,1 W (70°C) 1,2 W (60°C) 1,3 W (40°C)
Inductance Li	negligible
Capacitance Ci:	
Type EXTA-K1-*	14 µF
Type EXTA-K3-*	32 µF
Type EXTA-K4-*	38 µF

1.14 Identification EXTA-Kx

EXTA-K*

Pepperl+Fuchs GmbH
68307 Mannheim, Germany
DMT 01 ATEX E 177

Ⓔx II 2 G EEx ib II C T4

2 Productspecification

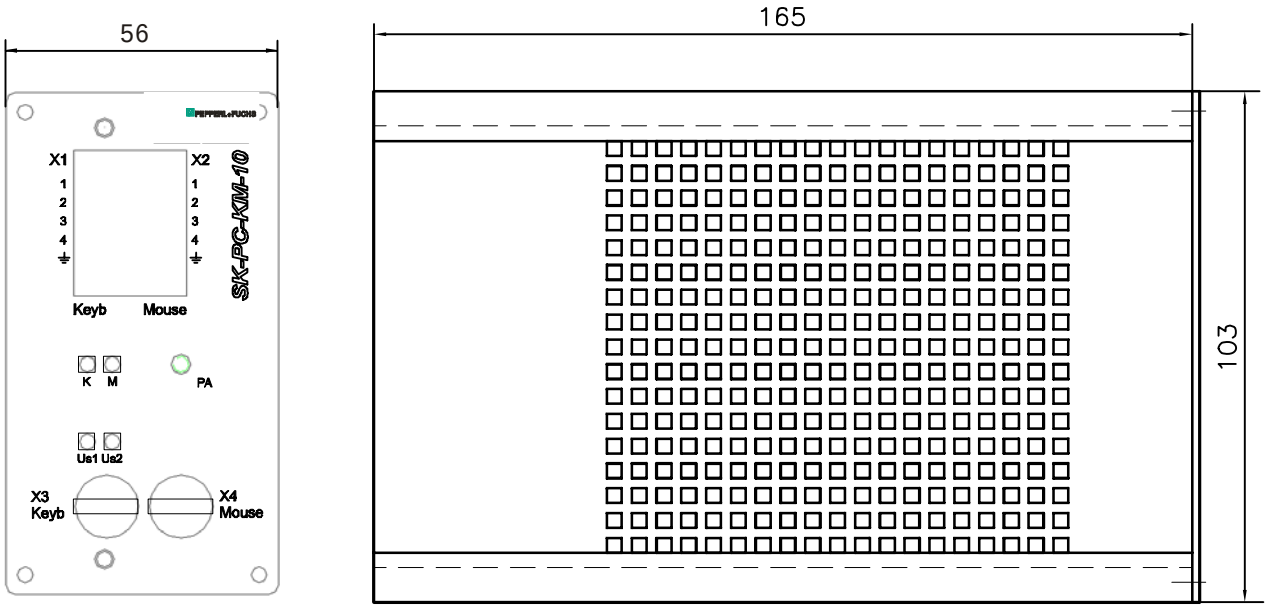
2.1 Function SK-PC-KM-10

The SK-PC-KM-10 Exi Keyboard / Mouse Interface is an associated apparatus. It is an Exi Keyboard / Mouse Interface which connects intrinsically safe keyboards and keyboards with mouse of type EXTA-K* in the hazardous area (zones 1 and zones 2) with a standard PC in the non-hazardous area.
The SK-PC-KM-10 is to be installed in the safe area (e.g. in a cabinet or inside a purged Exp case or in a flameproof Exd housing of an industrial PC).
The maximum length of the cable from SK-PC-KM-10 to the Exi keyboard and keyboard with mouse is limited to 10 m.

The SK-PC-KM-10 is certified for intrinsically safe keyboards and keyboards with mouse of type EXTA-K.

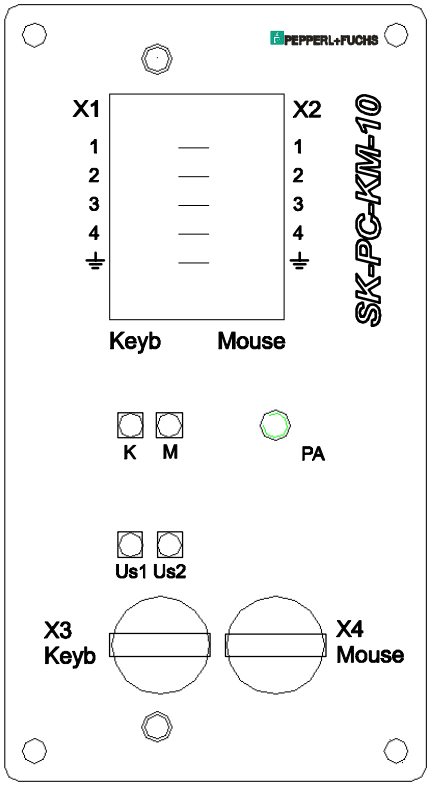
2.2 Technical data SK-PC-KM-10

Dimensions

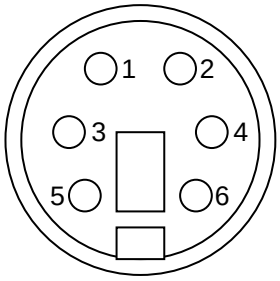


SK-PC-KM-10	
Electrical specifications	
Output voltage	+ 5 V
Max. output current	250 mA
Max. external capacitance	38 µF
Ambient conditions	
Operating temperature	0 … +60°C
Storage temperature	-10 … +70°C
Relative humidity	Max. 85% non condensing (48 h endurance test)
Mechanical specifications	
Protection degree	IP 20
Mass	approx. 0,5 kg
Dimensions	56 mm x 103 mm x 165 mm
Data for application in conjunction with hazardous areas	
EC-Type Examination Certificate	DMT 02 ATEX E 140 X
Group, category, type of protection	⟨Ex⟩ II (2) G [EEx ib] II C
Voltage Uo	6 V
Current Io	250 mA
Power Po	1,2 W
Capacitance Co	38 µF
Directive conformity	
Directive 94/9 EC	EN 50014:1997+A1-A2, EN 50020:1994

2.3 Terminal assignment SK-PC-KM-10



Detail of X3 and X4



Terminal X1 Exi-Keyboard

PIN	Assignment	Colour coding for EXTA-K1 Cable length 1,8 m	 10 m	Colour coding for EXTA-K3 / -K4 Cable length 1,8 m	 10 m
X1.1	Keyboard +5V	Green	Green	Green	Green
X1.2	Keyboard GND	Yellow	Yellow	Yellow	Yellow
X1.3	Keyboard DATA1	Grey	Black or grey	Grey	Black or grey
X1.4	Keyboard CLK1	Brown	Brown	Brown	Brown
X1.5	GND / Shield	Shield	Shield	Shield	Shield

Terminal X2 Exi-Mouse (EXTA-K3 / -K4 only)

PIN	Assignment	Colour coding for EXTA-K3 / -K4 Cable length 1,8 m	 10 m
X2.1	Mouse +5V	Red	Red
X2.2	Mouse GND	Blue	Blue
X2.3	Mouse DATA1	Pink	Purple or pink
X2.4	Mouse CLK1	White	Orange or white
X2.5	GND / Schirm	Shield	Shield

Terminal X3 Keyboard to PC

PIN	Assignment
X3.1	Data
X3.2	N.C.
X3.3	GND
X3.4	+5V
X3.5	CLK
X3.6	N.C.

Terminal X4 Mouse to PC

PIN	Assignment
X4.1	Data
X4.2	N.C.
X4.3	GND
X4.4	+5V
X4.5	CLK
X4.6	N.C.

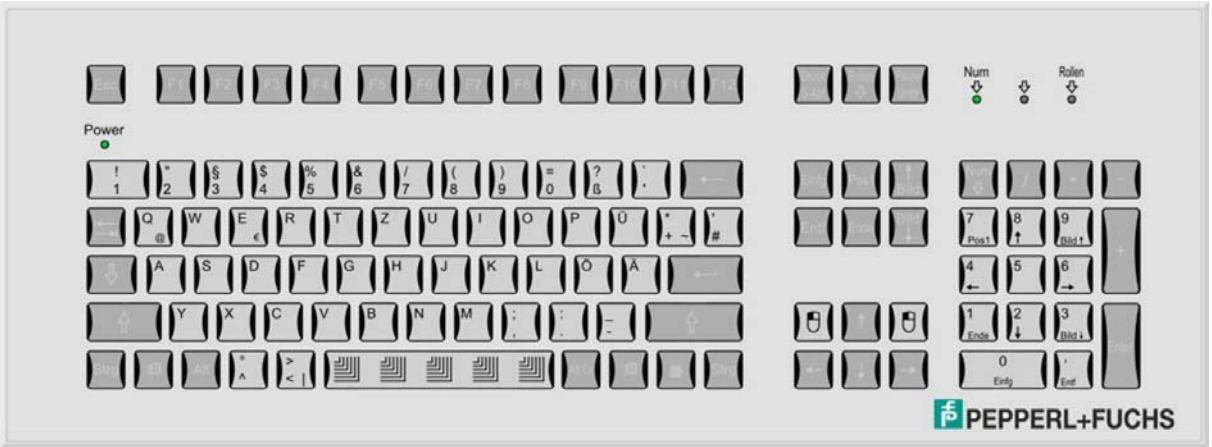
LEDs

LED	Colour	Meaning
Us1	Green	Power supply for PC keyboard port
Us2	Green	Power supply for interface
K	Yellow	Data from keyboard
M	Yellow	Data to mouse

2.4 Function EXTA-Kx

The intrinsically safe EXTA-Kx is a keyboard / mouse combination with PS/2 interfaces, available in different versions. The intrinsically safe keyboards integrate different mouse systems. The outside dimensions are the same for all versions. The keyboards are designed for panel mounting or for installation in a housing. The 8-pin connection cable is part of the scope of supply.

2.5 Technical data EXTA-K1 Exi keyboard without mouse



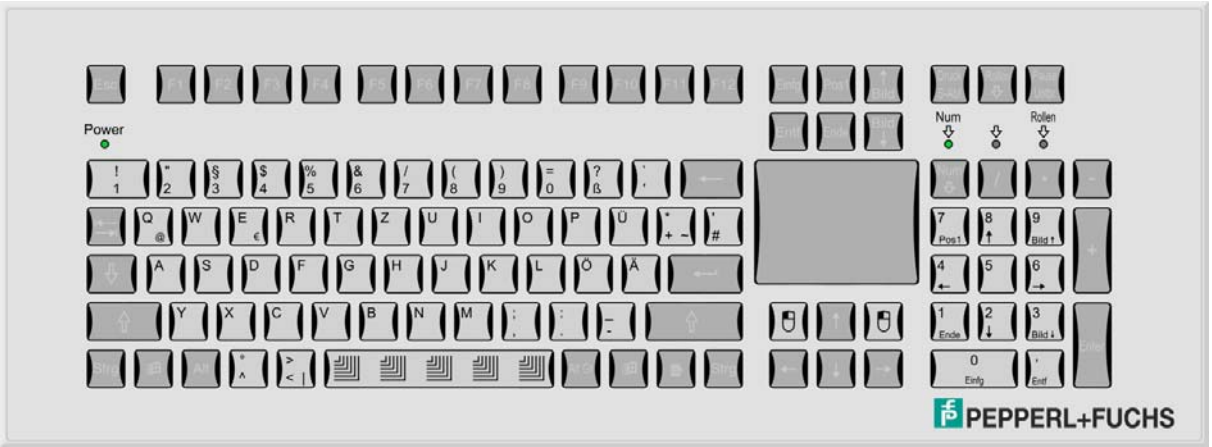
EXTA-K1	
General specifications	
Type	Keyboard without mouse
Supply	
Rated voltage	Exi, via data line
Indicators/operating means	
Keyboard	105 short stroke keys
Layout	Keyboard Layout: US International, German, French, Swedish, Danish, Korean, (further keyboard layouts on request)
Interface	
Interface type	TTL / PS/2 (USB via adapter)
Conformity	
Protection degree	IP 65
Ambient conditions	
Operating temperature	-20 … +50°C (on request + 60°C)
Storage temperature	-10 … +70°C
Relative humidity	Max. 85% non-condensing (48 h endurance test)
Mechanical specifications	
Material	Anodized aluminium, 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	1,8 m, wire end ferrule
Data in application in conjunction with hazardous areas	
EC-Type Examination Certificate	DMT 01 ATEX E 177
Group, category, type of protection	Ⓔx II 2 G EEx ib II C T4
Input	
Voltage Uo	6 V
Current Io	350 mA
Power Po	1,2 W
Capacitance Co	14 µF
Directive conformity	
Directive 94/9 EG	EN 50014:1997+A1-A2, EN 50020:1994

2.6 Technical data EXTA-K3 Exi keyboard with trackball

EXTA-K3	
General specifications	
Type	Keyboard with trackball
Supply	
Rated voltage	Exi, via data line
Indicators/operating means	
Keyboard	105 short stroke keys
Layout	Keyboard Layout: US International, German, French, Swedish, Danish, Korean, (further keyboard layouts on request)
Trackball	
Diameter	51 mm
Material	Pheol resin (black)
Motiv force	0,5 N
Driver	Microsoft Mouse ®, USB
Interface	
Interface type	TTL / PS/2 (USB via adapter)
Conformity	
Protection degree	IP 65, if trackball is inactive. Undefined during motion.
Ambient conditions	
Operating temperature	0 … +50°C (on request + 60°C)
Storage temperature	-10 … +70°C
Relative humidity	Max. 85% non-condensing (48 h endurance test)
Mechanical specifications	
Material	Anodized aluminium, 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	1,8 m, wire end ferrule
Data in application in conjunction with hazardous areas	
EC-Type Examination Certificate	DMT 01 ATEX E 177
Group, category, type of protection	Ⓔx II 2 G EEx ib II C T4
Input	
Voltage Uo	6 V
Current Io	350 mA
Power Po	1,2 W
Capacitance Co	32 µF
Directive conformity	

Directive 94/9 EG	EN 50014:1997+A1-A2, EN 50020:1994

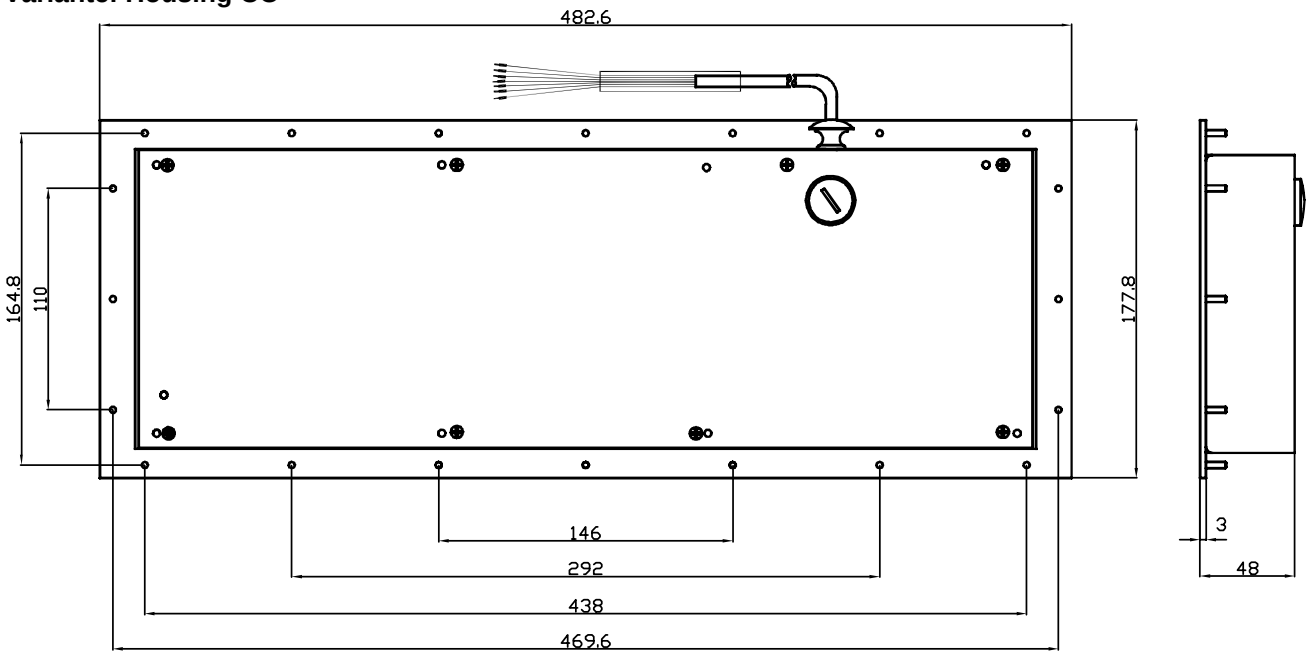
2.7 Technical data EXTA-K4 Exi keyboard with touchpad



EXTA-K4	
General specifications	
Type	Keyboard with touchpad
Supply	
Rated voltage	Exi, via data line
Indicators/operating means	
Keyboard	105 short stroke keys
Layout	Keyboard Layout: US International, German, French, Swedish, Danish, Korean, (further keyboard layouts on request)
Touchpad	
Active principle	capacitive
Resolution	40 Pts. / mm
Dimensions	66 mm x 50 mm
Driver	Microsoft Mouse ®, USB
Interface	
Interface type	TTL / PS/2 (USB via adapter)
Conformity	
Protection degree	IP 65
Ambient conditions	
Operating temperature	-20 … +50°C (on request + 60°C)
Storage temperature	-10 … +70°C
Relative humidity	Max. 85% non-condensing (48 h endurance test)
Mechanical specifications	
Material	Anodized aluminium, 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	1,8 m, wire end ferrule
Data in application in conjunction with hazardous areas	
EC-Type Examination Certificate	DMT 01 ATEX E 177
Group, category, type of protection	⟨Ex⟩ II 2 G EEx ib II C T4
Input	
Voltage Uo	6 V
Current Io	350 mA
Power Po	1,2 W
Capacitance Co	38 µF
Directive conformity	
Directive 94/9 EG	EN 50014:1997+A1-A2, EN 50020:1994

2.8 Back view EXTA-Kx

Dimensions: EXTA-Kx
Variante: Housing CO



3 Installation and Commissioning

3.1 Preparation

	Unpacking the unit 1. Check that all package contents are present an undamaged. If anything is damaged, inform the shipper and contact the supplier. 2. Check that all items are present and correct based on your order and the sipping documents. If you have any questions, please contact Pepperl+Fuchs. 3. Keep the original packing material in case you need to store or ship the unit at a later time.

3.2 Commissioning SK-PC-KM-10

	• Switch off the system or machine. • Make sure that the installation area is safe for the duration of the startup procedure if any non-intrinsically safe voltages need to be wired and/or non-intrinsically safe devices opened. • Mount the SK-PC-KM-10 to its intended place of operation. • Connect the Exi keyboard + Exi mouse to the SK-PC-KM-10. • Connect the SK-PC-KM-10 to the PC.

	**Danger!** Danger of explosion In the event the warning is ignored, the consequences may range from personal injury to death. The protective earth conductor (PE) must be connected to the housing. The housing must be earthed (PA).The earth wire must have a cross-section of at least 4 mm² and be as short as possible.

	• Switch on the power supply. • Check all the functions. • Switch on system or machine. • Check the function of the complete system or machine.

3.3 Commissioning keyboard EXTA-Kx

	**Danger!** Danger of explosion In the event the warning is ignored, the consequences may range from personal injury to death. • Equipotential bonding must be ensured. If the keyboard is build into a metal housing with equipotential bonding the equipotential connection is given by the fixing bolts. If the keyboard is build into a housing without equipotential bonding (mobile housing) the equipotential connection could be done by the shield of the connection cable.

3.4 Installation EXTA-Kx

Installation of the connecting cable oft the keyboard to the SK-PC-KM-10 refere to **Fehler! Verweisquelle konnte nicht gefunden werden.**.

There are different possibilities to install the keyboard.

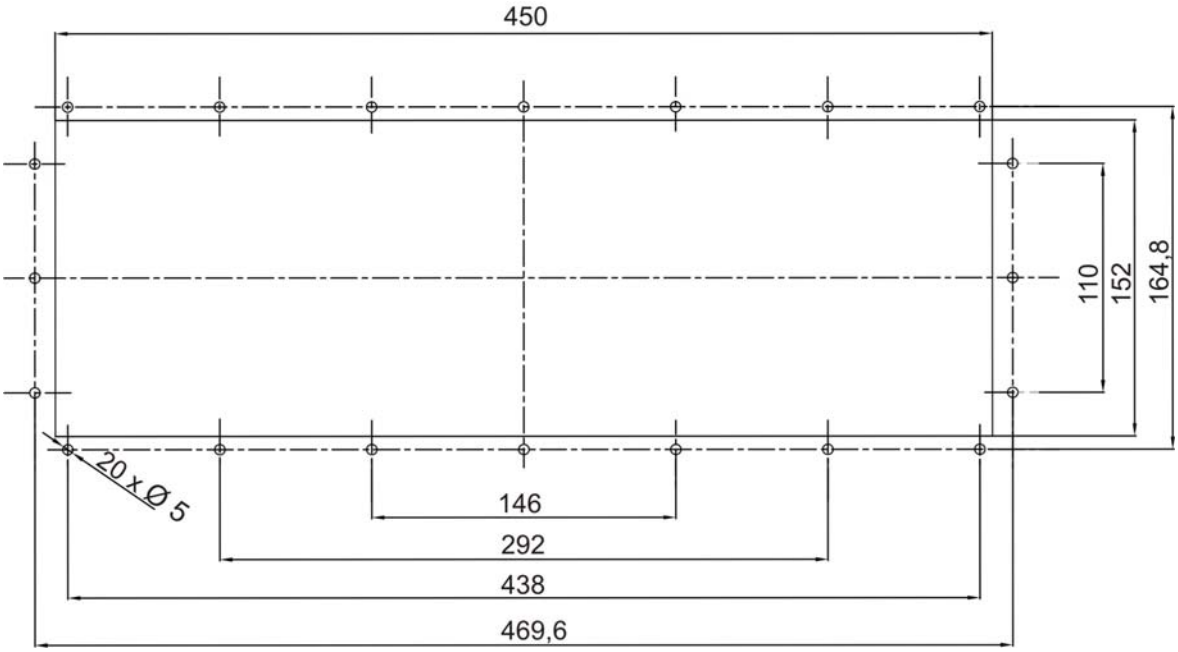
1. Panel mounting (housing version –C0)
2. Mounted in the housing ABG-EXTA-K134 (housing version –ABG)

Equipotential bonding

STOP	**Danger!** Danger of explosion Explosion with heaviest personal injury to death. Heaviest property damage. The housing must always be connected to the PE. There are 2 possibilities: Connection via cable shielding of the connecting cable. Build into a metal housing which is connected with the PE.

3.4.1 Keyboard for panel mounting (housing version –C0)

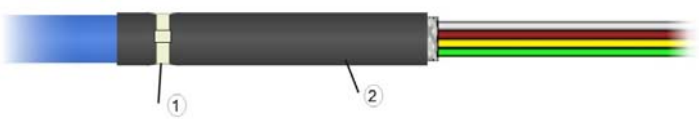
Assembly of the keyboard with cover at the back: Cutout



Equipotential bonding
There are 2 possibilities

1.) The shielding of the keyboard cable must be clamped into the PE terminal of the SK-PC-KM-10 (X1.5 or X2.5). (see chap. 2.3). Thereto you have to open the cable clip (1) and to remove the cable protective tube (2)

End of the keyboard cable (fix part of the keyboard)

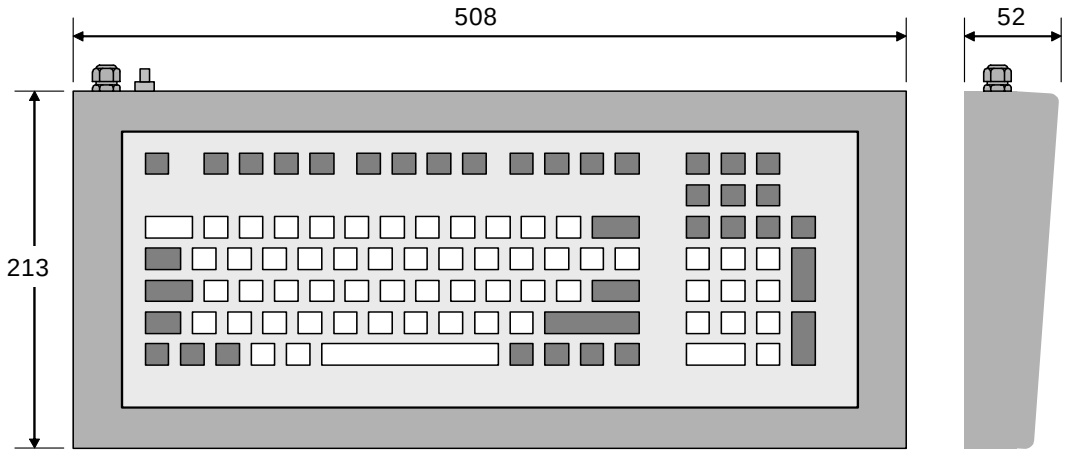


(1) Cable clip
(2) Cable protective tube

2.) Build the keyboard into a metal housing which is connected with the PE.

3.4.2 Keyboard for mounting into the housing ABG-EXTA-K134 (Version –ABG)

Dimensions keyboard EXTA-Kx installed into the housing ABG-EXTA-K134
Version: Housing AGB

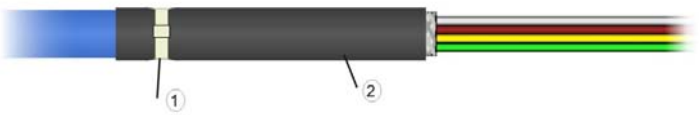


ABG-EXTA-K134	
Weight with keyboard:	Approx. 5,4 kg
Degree of protection (housing):	IP 65

Equipotential bonding
There are 2 possibilities

1.) The shielding of the keyboard cable must be clamped into the PE terminal of the SK-PC-KM-10 (X1.5 or X2.5). (see chap.2.3). Thereto you have to open the cable clip (1) and to remove the cable protective tube (2)

End of the keyboard cable (fix part of the keyboard)



(3) Cable clip
(4) Cable protective tube

2.) Connection via a separate grounding cable (min. 4 mm^2) to the PE connecting bolt (1) of the keyboard.

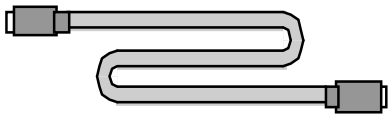
3.5 Accessory

	Component	Order designation	Order number
1	Adapter PS/2 to USB	USB-PS2-ADAPTER	193420
2	Connecting cable between PC and SK-PC-KM-10	S-PS2-PS2	520911

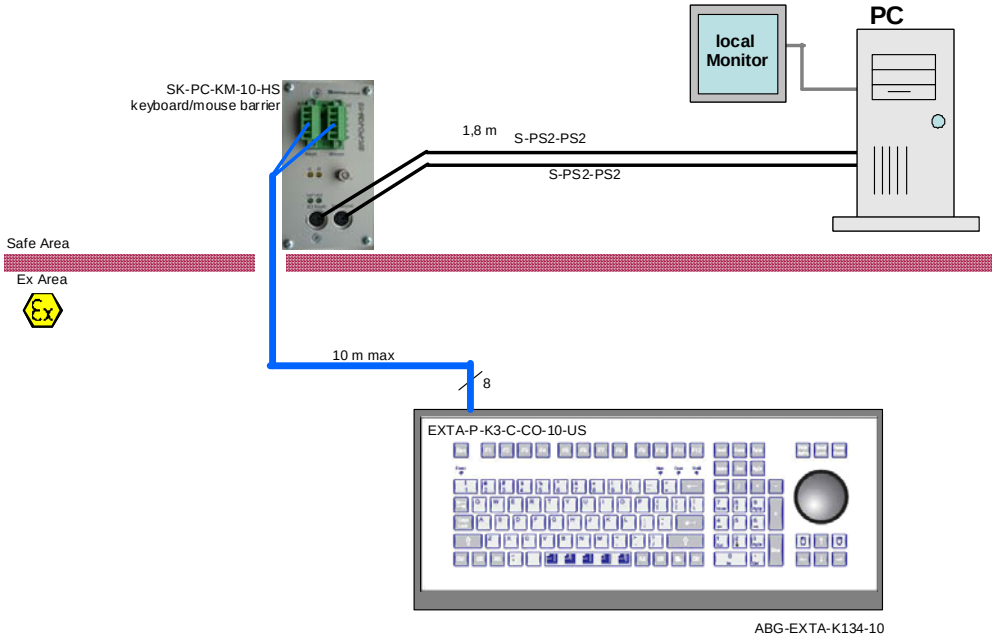
1
Adapter PS/2 to USB

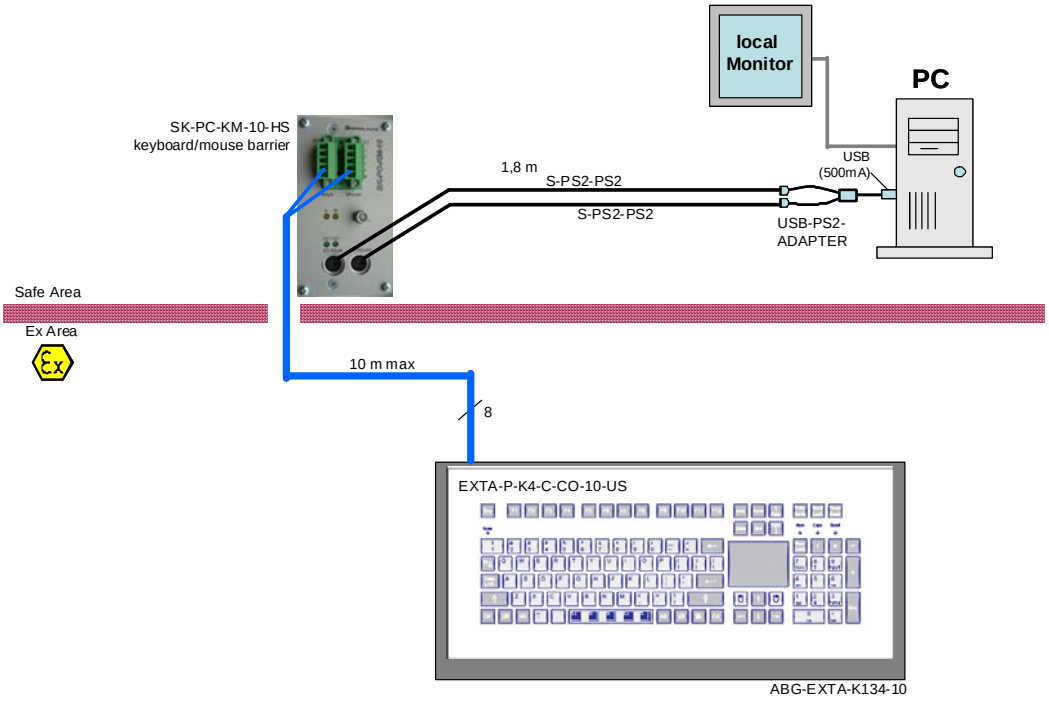
2
Connecting cable between PC and SK-PC-KM-10

- 2 x PS/2 connector
- Length approx. 1,8 m



3.6 Application





4 Appendix

4.1 EXTA-K* chemical resistance of the front foil

Polyester foil, resistant to the following chemicals in accordance with DIN 42 115 Part 2:

(Concentration 100%, unless otherwise specified)

Alcohols:		**Alkaline solutions:**	
Ethanol		Ammonia	< 2%
Cyclohexanol		Sodium hydroxide solution	< 2%
Diacetone alcohol			
Glycol		**Saline solutions:**	
Glycerine		Alkali carbonates	
Isopropanol		Bichromates	
Methanol		Yellow potassium prussiates	
Aldehydes:		**Miscellaneous substances:**	
Acetaldehyde		Molecular chlorine	
Formaldehyde		Cresol phenol soaps in solution	
		Oxygen	
Hydrocarbons:		Tricresyl phosphate	
Aliphatic hydrocarbons		Water	
Benzine		Hydrogen peroxide	< 25%
Benzene			
Toluene		**Washing, rinsing and cleaning agents:**	
Xylene		Potassium soap	
		Detergent solution (tensides)	
Chlorinated hydrocarbons:		Softener	
Chlorofluorocarbons			
Perchloroethylene		**Industrial oils and greases:**	
III-trichloroethylene		Drilling emulsions	
Trichloroethylene		Diesel fuel	
		Boiled oil	
Other organic solvents:		Fuel oil	
Ether		Paraffin oil	
Acetone		Castor oil	
Diethyl formamide		Silicone oil	
Dioxane		Turpentine oil and turpentine substitute	
Acids:			
Formic acid	< 50%		
Acetic acid			
Phosphoric acid	< 30%		
Hydrochloric acid	≤ 10%		
Nitric acid	≤ 10%		

Not resistant to:

Concentrated mineral acids Concentrated alkaline solutions High-pressure vapour hotter than 100°C	Benzyl alcohol Methylene chloride

Like all polyester foils, not resistant to long-term exposure to direct sunlight (UV).

4.2 Type code TASTEX

Click to select	Type	Connection	Mouse Type	Ex protection	Housing / Cover	Cable length	Keyboard layout	
EXTA	EXTA	Keyboard/Mouse in EX version						
	TA	Keyboard/Mouse in Non-EX version						
		Connection						
P		P	PS2 interface					
			Keyboard Type					
			K1	Keyb. without mouse				
			K3	Keyboard with mechanical Trackball Mouse, 50mm diameter				
K4			K4	Keyboard with Touch-Pad Mouse, 50x60 mm				
				Ex protection				
C				C	ATEX II 2 G, EEx ib IIC T4			
				N	Non-Ex solution, only available as TA			
					Housing / Cover			
					C0	keyboard for flush mounting, IP65 front (only for K1,K4), with steel housing on rear side, IP20		
ABG					ABG	Keyboard with Stainless Steel desktop housing, 1.4301 - 316		
						Cable length		
1,8						1,8	1.8 meter cable, keyboard for iPC…	
						10	10.0 meter cable, keyboard for connection with barrier SK-PC-KM	
							Keyboard layout	
US							US	International layout
							GER	German layout
							FR	French layout
							SW	Swedish layout
							DK	Danish layout
							RU	US-Cyrillic layout
							KOR	Korean layout
	EXTA-	P-	K4-	C	ABG-	1,8-	US	

Not all features can be combined. Please contact your local Pepperl+Fuchs partner.

4.3 Type code SK-PC-KM-10

Type	
SK-PC-KM-10-AB	Exi keyboard / mouse interface with desktop housing
SK-PC-KM-10-HS	Exi keyboard / mouse interface with Din-rail mounting housing

4.4 Repair send back form (in case of repair)

Repair send back form

4.5 Certifications

4.5.1 Certifications SK-PC-KM-10

Declaration of Conformity Pepperl + Fuchs
EC-Type Examination Certificate DMT 02 ATEX E 140 X

4.5.2 Certifications EXTA-Kx

Declaration of Conformity Pepperl + Fuchs
EC-Type Examination Certificate DMT 01 ATEX E 177

1. **Addendum**
2. **Addendum**

Rücksendung Reparatur / Repair send back form

Please make absolutely sure to include it with the shipping documents, or – even better – **attach it to the outside of the packaging**

PEPPERL+FUCHS
PROTECTING YOUR PROCESS

Kunde / Customer	**Firmenname / Company Name:**	**Abteilung / Department**
Adresse / Address	**Ansprechpartner / Contact person**	**Telefon / Phone Number**
	Fax / E-Mail	**Ihre Auftragsnummer / Your Order No.**

Gerät / Device	**Typ / Type**	**Seriennummer / serial number**
Fehlerbeschreibung / error description (compulsory):		**sporadisch/ sporadic** / **permanent/ constant**
Konfigurationsdetails / configure details (e.g. bar code scanner: baudrate, code family)		

Erklärung zur Kontamination und Reinigung
Declaration of Contamination and cleaning

Aufgrund der gesetzlichen Vorschriften und zum Schutz unserer Mitarbeiter und Betriebseinrichtungen, benötigen wir die unterschriebene "Erklärung zur Kontamination", bevor ihr Auftrag bearbeitet werden kann. Legen Sie diese unbedingt den Versandpapieren bei oder bringen Sie sie idealerweise außen an der Verpackung an.
Because of legal regulations and for the safety of our employees and operating equipment, we need the "declaration of contamination" with your signature, before your order can be handled. Please make absolutely sure to include it with the shipping documents, or – even better – attach it to the outside of the packaging.

Warnhinweise zum Medium
Medium and warnings

Medium/Konzentration Medium/concentration	**identification CAS no.**	**entzündlich flammable**	**giftig toxic**	**ätzend corrosive**	**Gesundheits-Schädlich/ reizend harmful/irritant**	**sonstiges * other ***	**unbedenklich harmless**
Medium im Prozess Process medium /							
Medium zur Prozessreinigung Medium for process cleaning /							
Medium zur Endreinigung Returned part cleaned with /							

Zutreffendes bitte ankreuzen; trifft einer der Warnhinweise zu, Sicherheitsdatenblatt und ggf. spezielle Handhabungsvorschriften beilegen.
Please tick should one of the above be applicable, include security sheet, if necessary, special handling instructions.

Hiermit bestätigen wir, dass die zurückgesandten Teile sorgfältig gereinigt wurden und nach unserem Wissen frei von Rückständen in gefahrbringender Menge sind.
We hereby certify that the returned parts have been carefully cleaned. To the best of our knowledge they are free from any residues in dangerous quantities.

_____
(Ort, Datum / Place, date)

_____
(Firmenstempel und rechtsverbindliche Unterschrift)
(Company stamp and legally binding signature)

Pepperl+Fuchs plant Wernau * phone : +49 (0) 621 776-3700 * Fax : +49 (0) 621 776-3719 * email : repair_hmi@de.pepperl-fuchs.com

Konformitätserklärung / Declaration of Conformity

nach EN 45014:1998 / in accordance with EN 45014:1998

Diese Konformitätserklärung gilt nur in Zusammenhang mit dem gültigen Pepperl+Fuchs Datenblatt und/oder Betriebsanleitung für alle Pepperl+Fuchs Produkte, die unter die Richtlinie 89/336/EWG (EMV) und 94/9/EG (ATEX) fallen.

This Declaration of Conformity is only valid in connection with the valid datasheet and/or instruction of Pepperl+Fuchs, for all Pepperl+Fuchs products that are relevant to the EC-directive 89/336/EWG (EMV) and 94/9/EG (ATEX)

Die Pepperl+Fuchs GmbH in 68301 Mannheim erklärt hiermit in alleiniger Verantwortung, daß alle richtlinienrelevanten Produkte mit den angegebenen Normen oder normativen Dokumenten übereinstimmen und, wenn notwendig, von einer zuständigen Stelle freigegeben wurden.

We, Pepperl+Fuchs GmbH at 68301 Mannheim hereby declare under our sole responsibility that all directive relevant products are in accordance with the listed harmonized standards or normative documents and, where necessary, a competent body has been released.

Angewandte harmonisierte Normen :
Applied harmonized standards

Siehe gültiges Datenblatt / Betriebsanleitung
See valid datasheet / instruction

Benannte Stelle für QS-Überwachung :
Notified body for QA-Assessment

PTB Physikalisch-Technische Bundesanstalt Nr.: 0102

ZERTIFIZIERTES DIN EN ISO 9001 QUALITÄTSMANAGEMENTSYSTEM
Reg. Nr. 14 760-02

Hersteller Unterschrift : Signature of manufacturer	Dr. Adolphs	Dr. Kegel
Funktion des Unterzeichners : Function of the signer	Geschäftsführer Managing Director	Geschäftsführer Managing Director

Datum / date : September 2003

PEPPERL+FUCHS

(1) # EG-Baumusterprüfbescheinigung

(2) **- Richtlinie 94/9/EG -**
Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen

(3) ## DMT 02 ATEX E 140 X

(4) **Gerät:** **Tastaturspeisegerät Typ SK-PC-KM-10-****

(5) **Hersteller:** **EX TEC Oesterle GmbH**

(6) **Anschrift:** **D 73730 Esslingen**

(7) Die Bauart dieses Gerätes sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser Baumusterprüfbescheinigung festgelegt.

(8) Die Zertifizierungsstelle der Deutsche Montan Technologie GmbH, benannte Stelle Nr. 0158 gemäß Artikel 9 der Richtlinie 94/9/EG des Europäischen Parlaments und des Rates vom 23. März 1994, bescheinigt, dass das Gerät die grundlegenden Sicherheits- und Gesundheitsanforderungen für die Konzeption und den Bau von Geräten und Schutzsystemen zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen gemäß Anhang II der Richtlinie erfüllt.
Die Ergebnisse der Prüfung sind in dem Prüfprotokoll BVS PP 02.2071 EG niedergelegt.

(9) Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt durch Übereinstimmung mit

EN 50014:1997 + A1 – A2	Allgemeine Bestimmungen
EN 50020:1994	Eigensicherheit ´i´

(10) Falls das Zeichen „X" hinter der Bescheinigungsnummer steht, wird in der Anlage zu dieser Bescheinigung auf besondere Bedingungen für die sichere Anwendung des Gerätes hingewiesen.

(11) Diese EG-Baumusterprüfbescheinigung bezieht sich nur auf die Konzeption und die Baumusterprüfung des beschriebenen Gerätes in Übereinstimmung mit der Richtlinie 94/9/EG.
Für Herstellung und Inverkehrbringen des Gerätes sind weitere Anforderungen der Richtlinie zu erfüllen, die nicht durch diese Bescheinigung abgedeckt sind.

(12) Die Kennzeichnung des Gerätes muss die folgenden Angaben enthalten:

Ex II (2) G [EEx ib] IIC

Deutsche Montan Technologie GmbH
Essen, den 26.Juli 2002

DMT-Zertifizierungsstelle

Fachbereichsleiter

Am Technologiepark 1, 45307 Essen, Telefon (0201)172-1416, Telefax (0201)172-1716

(13) Anlage zur

(14) # EG-Baumusterprüfbescheinigung

DMT 02 ATEX E 140 X

(15) 15.1 Gegenstand und Typ

Tastaturspeisegerät Typ SK-PC-KM-10-**
Anstelle der ** werden die Buchstaben 19K = 19"-Einschubkassette, HS = Hutschienengehäuse oder AB = Aufbaugehäuse eingefügt.

15.2 Beschreibung
Das Tastaturspeisegerät, das außerhalb des explosionsgefährdeten Bereiches errichtet wird, dient als Schnittstellenkoppler zur Versorgung einer Tastatur bzw. Maus, die im explosionsgefährdeten Bereich installiert sind, und zur Datenübertragung zu einem Rechner, der außerhalb des explosionsgefährdeten Bereiches errichtet wird.

15.3 Kenngrößen

15.3.1	nichteigensichere Stromkreise (Anschl.J1)				
	Nennspannung		DC	5	V
	max. Fehlerspannung	Um	AC	265	V
15.3.2	eigensichere Stromkreise (nicht galvanisch getrennt von den nichteigensicheren Stromkreisen) in der Zündschutzart EEx ib IIC				
	nichtlineare Ausgangskennlinie				
	max. Spannung	Uo	DC	6	V
	Stromstärke	Io		250	mA
	Leistung	Po		1,2	W
	Anschluss des Verbrauchers über eine bis zu 10 m lange Leitung				
	max. äußere Kapazität	Co		38	µF
15.3.3	Umgebungstemperaturbereich	Ta		- 20 °C bis + 60 °C	

(16) Prüfprotokoll
BVS PP 02.2071 EG, Stand 26.07.2002

(17) Besondere Bedingungen für die sichere Anwendung

17.1 Das Tastaturspeisegerät ist außerhalb des explosionsgefährdeten Bereiches in ein Gehäuse einzubauen, das mindestens die Schutzart IP 20 gemäß EN 60529 gewährleistet.

17.2 Der Einbau des Tastaturspeisegerätes hat so zu erfolgen, dass die Luftstrecken von blanken Teilen eigensicherer Stromkreise zu metallischen Gehäuseteilen mind. 3 mm betragen.

17.3 Anschlussteile für die eigensicheren Stromkreise sind so anzuordnen, dass die blanken Teile mind. 50 mm von Anschlussteilen oder blanken Leitern nichteigensicherer Stromkreise entfernt oder von diesen durch eine Trennwand nach 6.3.1 von EN 50020 getrennt sind.

Am Technologiepark 1, 45307 Essen, Telefon (0201)172-1416, Telefax (0201)172-1716

CERTIFIED TRANSLATION

Ex **DMT**

(1) **EC Type Examination Certificate**

(2) **- Directive 94/9/EC -**
Equipment and protective systems for use to the intended purpose in potentially explosive atmospheres

(3) **DMT 02 ATEX E 140 X**

(4) **Equipment:** **Keyboard Power Supply Unit Type SK-PC-KM-10-****

(5) **Manufacturer:** **EXTEC Oesterle GmbH**

(6) **Address:** **D 73730 Esslingen**

(7) The design of this equipment and the various permissible variants are specified in the Appendix to this Type Examination Certificate.

(8) The certification body of Deutsche Montan Technologie GmbH, accredited as body no. 0158 in accordance with Article 9 of Directive 94/9/EC of the European Parliament and the Council dated March 23rd 1994, hereby certifies that the equipment conforms with the basic safety and health requirements relating to the design and construction of equipment and protective systems for use to the intended purpose in potentially explosive atmospheres in accordance with Annex II of the same Directive.
The results of the test are recorded in Test Report No. BVS PP 02.2071 EG.

(9) The basic safety and health requirements are satisfied through conformance with:

EN 50014:1997 + A1 - A2	General requirements
EN 50020:1994	Intrinsic safety 'i'

(10) If the mark "X" appears after the certificate number, it means that this equipment is subject to the special conditions for safe usage specified in the Appendix to this certificate.

(11) This EC Type Examination Certificate only refers to the design of, and the type examination for, the equipment described here in conformance with Directive 94/9/EC.
The manufacture and introduction into circulation of the equipment are subject to other Directive requirements which are not covered by this certificate.

(12) The marking on the equipment must include the following information:
Ex II (2) G [EEx ib] IIC T4

Deutsche Montan Technologie GmbH
Essen, July 26, 2002

(Signature illegible)
DMT certification body

(Signature illegible)
Department head

Am Technologiepark 1, D-45307 Essen, Phone +49 (0)201/172-1416, Fax +49 (0)201/172-1716

LEGAL CERTIFICATION

I hereby certify that this is a complete and correct translation of the original document drawn up in the German language
Date: May 14, 2004

David Allison
Officially appointed and sworn document translator for the English language at the Regional Court of Stuttgart in Baden-Württemberg, Federal Republic of Germany.

DAVID ALLISON
VVU
Öffentl. bestellter und beeidigter Urkundenübersetzer der englischen Sprache in Baden-Württemberg
72581 DETTINGEN

CERTIFIED TRANSLATION

DMT

(13) Appendix to
(14) **EC Type Examination Certificate**
DMT 02 ATEX E 140 X

(15) 15.1 Subject and type

Keyboard Power Supply Unit Type SK-PC-KM-10-**
In the full designation the ** are replaced by the letters 19K = 19" cartridge, HS = case for mounting on DIN rails or AB = surface-mounting case.

15.2 Description
The keyboard power supply unit, which is installed outside the potentially explosive atmosphere, is used as an interface coupler to supply power to a keyboard and/or mouse installed in the potentially explosive atmosphere and to transmit data to a computer installed outside the potentially explosive atmosphere.

15.3 Parameters

15.3.1 Non-intrinsically safe circuits (terminal J1)

Rated voltage		DC	5	V
Max. fault voltage	Um	AC	265	V

15.3.2 Intrinsically safe circuits (no electrical isolation from the non-intrinsically safe circuits) with the EEx ib IIC type of protection
Non-linear output characteristic

Max. voltage	Uo	DC	6	V
Current	Io		250	mA
Power	Po		1.2	W

The load is connected by means of a cable with a maximum length of 10 m

Max. external capacitance	Co		38	µF

15.3.3 Ambient temperature range Ta -20 °C to +60 °C

(16) Test report
BVS PP 02.2071 EG, dated 26.07.2002

(17) Special conditions for safe usage

17.1 The keyboard power supply unit is to be installed outside the potentially explosive atmosphere in an enclosure which complies with the IP 20 degree of protection according to EN 60529 as a minimum.

17.2 The keyboard power supply unit is to be installed so that the clearances in air between the uninsulated parts of intrinsically safe circuits and the metal parts of the enclosure are at least 3 mm.

17.3 The facilities for connection of the intrinsically safe circuits are to be arranged such that the uninsulated parts are at least 50 mm clear of the connection facilities for or uninsulated conductors of non-intrinsically safe circuits. Alternatively, they may be isolated from such facilities or conductors by means of a barrier as described in section 6.3.1 of EN 50020.

Am Technologiepark 1, D-45307 Essen, Phone +49 (0)201/172-1416, Fax +49 (0)201/172-1716

LEGAL CERTIFICATION

I hereby certify that this is a complete and correct translation of the original document drawn up in the German language
Date: May 14, 2004

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David Allison
Officially appointed and sworn document translator for the English language at the Regional Court of Stuttgart in Baden-Württemberg, Federal Republic of Germany.

DAVID ALLISON VVU Öffentl. bestellter und beeidigter Urkundenübersetzer der englischen Sprache in Baden-Württemberg 72581 DETTINGEN

(1) # EG-Baumusterprüfbescheinigung

(2) **- Richtlinie 94/9/EG -**
Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen

(3) ## DMT 01 ATEX E 177

(4) **Gerät:** **Tastatur Typ EXTA-K*-***-**-****

(5) **Hersteller:** **EX TEC Oesterle GmbH**

(6) **Anschrift:** **D 73730 Esslingen**

(7) Die Bauart dieses Gerätes sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser Baumusterprüfbescheinigung festgelegt.

(8) Die Zertifizierungsstelle der Deutsche Montan Technologie GmbH, benannte Stelle Nr. 0158 gemäß Artikel 9 der Richtlinie 94/9/EG des Europäischen Parlaments und des Rates vom 23. März 1994, bescheinigt, dass das Gerät die grundlegenden Sicherheits- und Gesundheitsanforderungen für die Konzeption und den Bau von Geräten und Schutzsystemen zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen gemäß Anhang II der Richtlinie erfüllt.
Die Ergebnisse der Prüfung sind in dem Prüfprotokoll BVS PP 01.2125 EG niedergelegt.

(9) Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt durch Übereinstimmung mit

EN 50014:1997 + A1 – A2 Allgemeine Bestimmungen
EN 50020:1994 Eigensicherheit ‘i’

(10) Falls das Zeichen „X“ hinter der Bescheinigungsnummer steht, wird in der Anlage zu dieser Bescheinigung auf besondere Bedingungen für die sichere Anwendung des Gerätes hingewiesen.

(11) Diese EG-Baumusterprüfbescheinigung bezieht sich nur auf die Konzeption und die Baumusterprüfung des beschriebenen Gerätes in Übereinstimmung mit der Richtlinie 94/9/EG.
Für Herstellung und Inverkehrbringen des Gerätes sind weitere Anforderungen der Richtlinie zu erfüllen, die nicht durch diese Bescheinigung abgedeckt sind.

(12) Die Kennzeichnung des Gerätes muss die folgenden Angaben enthalten:

II 2G EEx ib IIC T4

Deutsche Montan Technologie GmbH
Essen, den 27. Dezember 2001

DMT-Zertifizierungsstelle

Fachbereichsleiter

Am Technologiepark 1, 45307 Essen, Telefon (0201)172-1416, Telefax (0201)172-1716

(13) Anlage zur

(14) # EG-Baumusterprüfbescheinigung

DMT 01 ATEX E 177

(15) 15.1 Gegenstand und Typ

Tastatur Typ EXTA-K*-***-**-**

Anstelle der *** werden in der vollständigen Benennung Buchstaben und Ziffern eingefügt, die unterschiedliche Ausführungen kennzeichnen:

Typ EXTA-K*-***-**-**

- Versionsnummer
- Gehäuseausführung
  AB = Aufbaugehäuse
  FP = Frontplatteneinbau
- Schnittstelle
- Ziffer für Ausführung
  1 = Tastatur
  3 = Tastatur mit Rollkugelmaus
  4 = Tastatur mit Mauspad

15.2 Beschreibung

Die Tastatur dient in Verbindung mit einer Verarbeitunseinheit zur Eingabe von Daten und zur Steuerung von Abläufen.

Die Tastatur Typ EXTA-K*-***-FP-** ist zum Einbau in Gehäuse (Z. B. Pulte, Schalttafeln) vorgesehen.

15.3 Kenngrößen

Spannung	Ui	DC 6	V
Stromstärke	Ii	350	mA
Leistung	Pi		
für -20 °C ≤ Ta ≤ +40 °C		1,3	W
für -20 °C ≤ Ta ≤ +60 °C		1,2	W
für -20 °C ≤ Ta ≤ +70 °C		1,1	W
wirksame innere Induktivität	Li	vernachlässigbar	
wirksame innere Kapazität	Ci		
bei Typ EXTA-K1-***-**-**		14	µF
bei Typ EXTA-K3-***-**-**		32	µF
bei Typ EXTA-K4-***-**-**		38	µF

Umgebungstemperaturbereich Ta
in Abhängigkeit des Speisegerätes entsprechend folgender Tabelle

Leistung des Speisegerätes	Umgebungstemperatur-bereich
1,1 W	-20 °C bis +70 °C
1,2 W	-20 °C bis +60 °C
1,3 W	-20 °C bis +40 °C

(16) Prüfprotokoll
BVS PP 01.2125 EG, Stand 27.12.2001

(17) Besondere Bedingungen für die sichere Anwendung
Entfällt

Am Technologiepark 1, 45307 Essen, Telefon (0201)172-1416, Telefax (0201)172-1716

EXAM
BBG Prüf- und Zertifizier GmbH

1. Nachtrag

(Ergänzung gemäß Richtlinie 94/9/EG Anhang III Ziffer 6)

zur EG-Baumusterprüfbescheinigung
DMT 01 ATEX E 177

Gerät:	**Tastatur Typ EXTA-K*-***-**-**
Hersteller:	**Pepperl+Fuchs - EXTEC GmbH**
Anschrift:	**73730 Esslingen**

Beschreibung
Die Tastatur kann auch nach den im zugehörigen Prüfprotokoll aufgeführten Prüfungsunterlagen gefertigt werden.
Grund des Nachtrages ist Änderung des Firmennamens auf Pepperl+Fuchs – EXTEC GmbH

Die grundlegenden Sicherheits- und Gesundheitsanforderungen der geänderten Ausführung werden erfüllt durch Übereinstimmung mit

EN 50014:1997 + A1 – A2	Allgemeine Bestimmungen
EN 50020:1994	Eigensicherheit 'i'

Die Kennzeichnung des Gerätes muss die folgenden Angaben enthalten:

Ex II 2G EEx ib IIC T4

Besondere Bedingungen für die sichere Anwendung bzw. Verwendungshinweise
Entfällt

Prüfprotokoll
BVS PP 01.2125 EG, Stand 19.07.2005

EXAM BBG Prüf- und Zertifizier GmbH
Bochum, den 19. Juli 2005

Zertifizierungsstelle

Fachbereich

Dinnendahlstraße 9 44809 Bochum Telefon 0234/3696-105 Telefax 0234/3696-110
(bis 31.05.2003: Deutsche Montan Technologie GmbH Am Technologiepark 1 45307 Essen)

EXAM
BBG Prüf- und Zertifizier GmbH

2. Nachtrag

(Ergänzung gemäß Richtlinie 94/9/EG Anhang III Ziffer 6)

zur EG-Baumusterprüfbescheinigung
DMT 01 ATEX E 177

Gerät: **Tastatur Typ EXTA-K*-***-**-****

Hersteller: **Pepperl+Fuchs - EXTEC GmbH**

Anschrift: **73730 Esslingen**

Beschreibung

Die Tastatur kann auch nach den im zugehörigen Prüfprotokoll aufgeführten Prüfungsunterlagen gefertigt werden. Für die Schnittstelle gibt es auch die Variante USB und die Schaltung der Tastatur Typ EXTA-K4-***-**-** kann geändert werden.

Die grundlegenden Sicherheits- und Gesundheitsanforderungen der geänderten Ausführung werden erfüllt durch Übereinstimmung mit
EN 50014:1997 + A1 – A2 Allgemeine Bestimmungen
EN 50020:1994 Eigensicherheit 'i'

Die Kennzeichnung des Gerätes muss die folgenden Angaben enthalten:

II 2G EEx ib IIC T4

Besondere Bedingungen für die sichere Anwendung bzw. Verwendungshinweise
Entfällt

Prüfprotokoll
BVS PP 01.2125 EG, Stand 28.11.2006

EXAM BBG Prüf- und Zertifizier GmbH
Bochum, den 28. November 2006

Zertifizierungsstelle

Fachbereich

Dinnendahlstraße 9 44809 Bochum Telefon 0234/3696-105 Telefax 0234/3696-110 E-mail ZS@bg-exam.de
(bis 31.05.2003: Deutsche Montan Technologie GmbH Am Technologiepark 1 45307 Essen)

CERTIFIED TRANSLATION

Ex DMT

(1) **EC Prototype Test Certificate**

(2) **- Directive 94/9/EC -**
Equipment and protective systems for usage to the intended purpose in potentially explosive atmospheres

(3) **DMT 01 ATEX E 177**

(4) **Equipment:** **Keyboard Type EXTA-K*-***-**-**

(5) **Manufacturer:** **EXTEC Oesterle GmbH**

(6) **Address:** **D 73730 Esslingen**

(7) The design of this equipment and the various permissible variants are specified in the Appendix to this Prototype Test Certificate.

(8) The certification body of Deutsche Montan Technologie GmbH, accredited as body no. 0158 in accordance with Article 9 of Directive 94/9/EC of the European Parliament and the Council dated March 23rd 1994, hereby certifies that the equipment conforms with the basic safety and health requirements relating to the design and construction of equipment and protective systems for usage to the intended purpose in potentially explosive atmospheres in accordance with Appendix II of the same Directive.
The results of the test are recorded in test certificate no. BVS PP 01.2125 EG.

(9) The basic safety and health requirements are satisfied through conformance with:

EN 50014:1997 + A1 - A2	General requirements
EN 50020:1994	Intrinsic safety 'i'

(10) If the mark "X" appears after the certificate number, it means that this equipment is subject to the special conditions for safe usage specified in the Appendix to this certificate.

(11) This EC Prototype Test Certificate only refers to the design of, and the prototype test for, the equipment described here in conformance with Directive 94/9/EC.
The manufacture and introduction into circulation of the equipment are subject to other Directive requirements, which are not covered by this certificate.

(12) The mark on the equipment must include the following information:
Ex II 2G EEx ib IIC T4

Deutsche Montan Technologie GmbH
Essen, December 27th 2001

(Signature illegible)
DMT certification body

(Signature illegible)
Department head

Am Technologiepark 1, D-45307 Essen, Phone +49 (0)201/172-1416, Fax +49 (0)201/172-1716

LEGAL CERTIFICATION

I hereby certify that this is a complete and correct translation of the original document drawn up in the German language.
Date: February 27, 2002

D Allison

David Allison
Officially appointed and sworn document translator for the English language at the Regional Court of Stuttgart in Baden-Württemberg, Federal Republic of Germany.

DAVID ALLISON
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Öffentl. bestellter und beeidigter Urkundenübersetzer der englischen Sprache in Baden-Württemberg
72581 DETTINGEN

CERTIFIED TRANSLATION

DMT

(13) **Appendix to**
(14) **EC Prototype Test Certificate**
DMT 01 ATEX E 177

(15) 15.1 Object and type
Keyboard Type EXTA-K*-*-**-****
In the full designation the ** are replaced by letters and numbers which identify the different variants and have the following meanings:
Type EXTA-K*-***-**-**

Version number
Type of casing
AB = Casing for surface-mounting
FP = Front-panel mounting
Interface
Digit to indicate type
1 = Keyboard
3 = Keyboard with trackball
4 = Keyboard with mouse pad

15.2 Description
The keyboard is used in combination with a processing unit to enter data and to control sequences of operations.
The type EXTA-K*-***-FP-** keyboard is intended for installation in a casing (e.g. a desk or a panel).
15.3 Characteristics

Voltage	Ui	DC	6	V
Current	Ii		350	mA
Power	Pi			
for -20 °C ≤ Ta ≤ +40 °C			1.3	W
for -20 °C ≤ Ta ≤ +60 °C			1.2	W
for -20 °C ≤ Ta ≤ +70 °C			1.1	W
Effective internal inductance	Li		negligible	
Effective internal capacitance	Ci			
for type EXTA-K1-***-**-**			14	µF
for type EXTA-K3-***-**-**			32	µF
for type EXTA-K4-***-**-**			38	µF

Ambient temperature range Ta
dependent on the supply unit in accordance with the following table

Output power of supply unit	Ambient temperature range
1.1 W	-20 °C to +70 °C
1.2 W	-20 °C to +60 °C
1.3 W	-20 °C to +40 °C

(16) Test report
BVS PP 01.2125 EC, dated 27.12.2001

(17) Special conditions for safe usage
Not applicable

Am Technologiepark 1, D-45307 Essen, Phone +49 (0)201/172-1416, Fax +49 (0)201/172-1716

LEGAL CERTIFICATION

I hereby certify that this is a complete and correct translation of the original document drawn up in the German language
Date: February 27, 2002

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DAVID ALLISON
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72581 DETTINGEN

Ex

EXAM
BBG Prüf- und Zertifizier GmbH

Addendum 1
(Amendment in accordance with Directive 94/9/EC Annex III Clause 6)

to EC Type Examination Certificate
DMT 01 ATEX E 177

Equipment: **Keyboard Type EXTA-K*-***-**-****

Manufacturer: **Pepperl+Fuchs – EXTEC GmbH**

Address: **D – 73730 Esslingen**

Description

The keyboard can also be manufactured in accordance with the test documentation mentioned in the associated Test Report. The reason for this Addendum is the change in the manufacturer's name to Pepperl+Fuchs - EXTEC GmbH.

The basic safety and health requirements of the modified version are satisfied through conformance with
EN 50014:1997 + A1 – A2 General requirements
EN 50020:1994 Intrinsic safety 'i'

The marking on the device must contain the following information:

Ex II 2G EEx ib IIC T4

Special conditions for safe usage
Not applicable

Test Report
BVS PP 01.2125 EG, dated July 19, 2005

EXAM BBG Prüf- und Zertifizier GmbH
Bochum, July 19, 2005

(Signature illegible) (Signature illegible)

Certification body Department

Dinnendahlstrasse 9, D-44809 Bochum, Phone +49 (0)234/3696-105, Fax +49 (0)234/3696-110
(Until May 31, 2003: Deutsche Montan Technologie GmbH, Am Technologiepark 1, D-45307 Essen)

LEGAL CERTIFICATION

I hereby certify that this is a complete and correct translation of the original document drawn up in the German language

Date: 14.08.07 D Allison

David Allison
Officially appointed and sworn document translator for the English language at the Regional Court of Stuttgart in Baden-Württemberg, Federal Republic of Germany.

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72581 DETTINGEN

Ex

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Addendum 2
(Amendment in accordance with Directive 94/9/EC Annex III Clause 6)

to EC Type Examination Certificate
DMT 01 ATEX E 177

Equipment: **Keyboard Type EXTA-K*-***-**-****

Manufacturer: **Pepperl+Fuchs – EXTEC GmbH**

Address: **D – 73730 Esslingen**

Description

The keyboard can also be manufactured in accordance with the test documentation mentioned in the associated Test Report. A USB variant is additionally available for the interface, and the circuit of the keyboard Type EXTA-K4-***-**-** can be modified.

The basic safety and health requirements of the modified version are satisfied through conformance with
EN 50014:1997 + A1 – A2 General requirements
EN 50020:1994 Intrinsic safety 'i'

The marking on the device must contain the following information:

Ex II 2G EEx ib IIC T4

Special conditions for safe usage
Not applicable

Test Report
BVS PP 01.2125 EG, dated November 28, 2006

EXAM BBG Prüf- und Zertifizier GmbH
Bochum, November 28, 2006

(Signature illegible) (Signature illegible)

Certification body Department

Dinnendahlstrasse 9, D-44809 Bochum, Phone +49 (0)234/3696-105, Fax +49 (0)234/3696-110, e-mail ZS@bg-exam.de
(Until May 31, 2003: Deutsche Montan Technologie GmbH, Am Technologiepark 1, D-45307 Essen)

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