Ex i keyboard with joystick

EXTA4-*-K6*

- Degree of protection: IP66 (housing), IP65 (front panel)
- Stainless steel housing
- National layout variants available for US, GER and FR
- PC-compatible-keyboard with 105 short stroke keys
- Designed for use in Zone 1/21 and Zone 2/22 hazardous areas
- USB or PS/2 interface with USB cable
- UL listed for USA and Canada, Class I, Div. 2 (UL HazLoc Equipment)

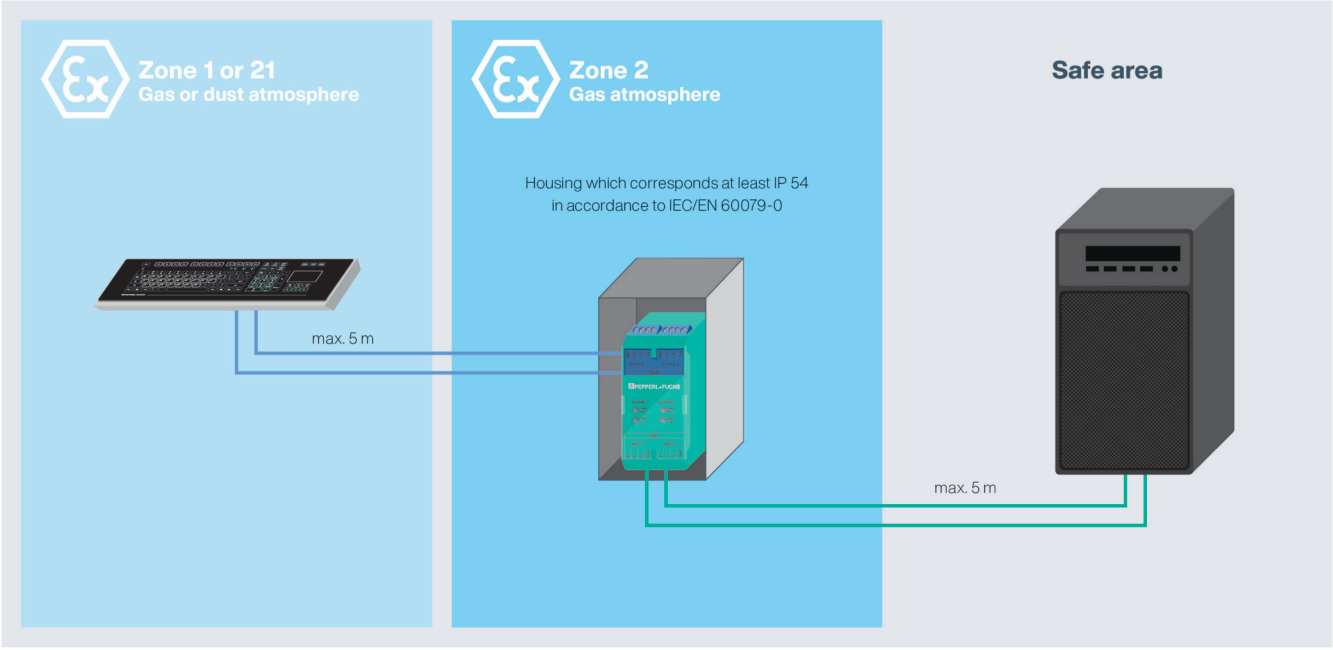
Ex i keyboard with joystick

Function

EXTA4-* is an intrinsically safe keyboard with touchpad (EXTA4-*-K4*), joystick (EXTA4-*-K6*) or optical trackball (EXTA4-*-K8*). 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.
The EXTA4-* is designed as accessory for the Pepperl+Fuchs Workstations VisuNet GXP and VisuNet FLX but can be used as stand-alone keyboard in combination with the available barriers as well.

Function Principle

Sample Stand-alone Application for Keyboards (Refer to the manual for further samples.)



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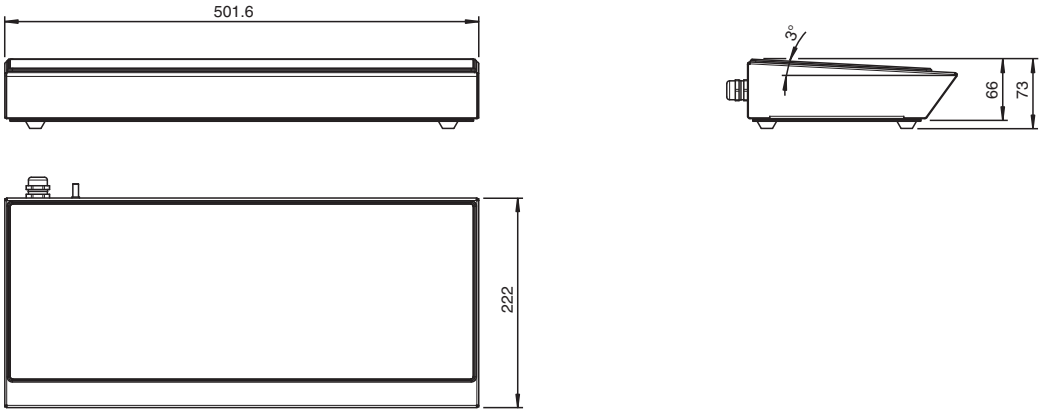
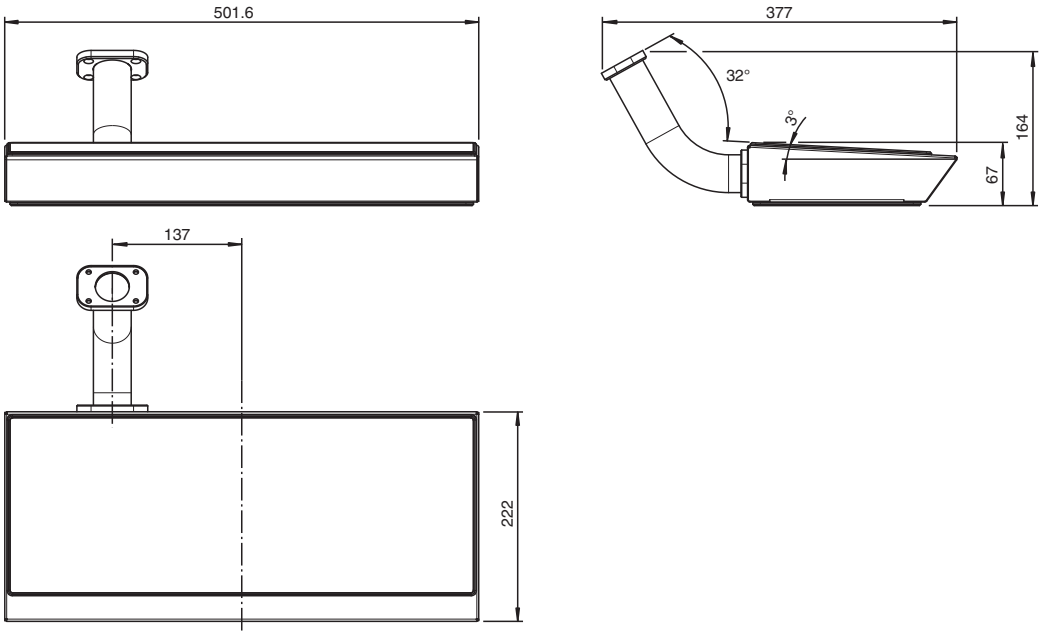
Dimensions

Desktop housing



Standard housing with mounting options – sample VisuNet GXP One-Arm Installation



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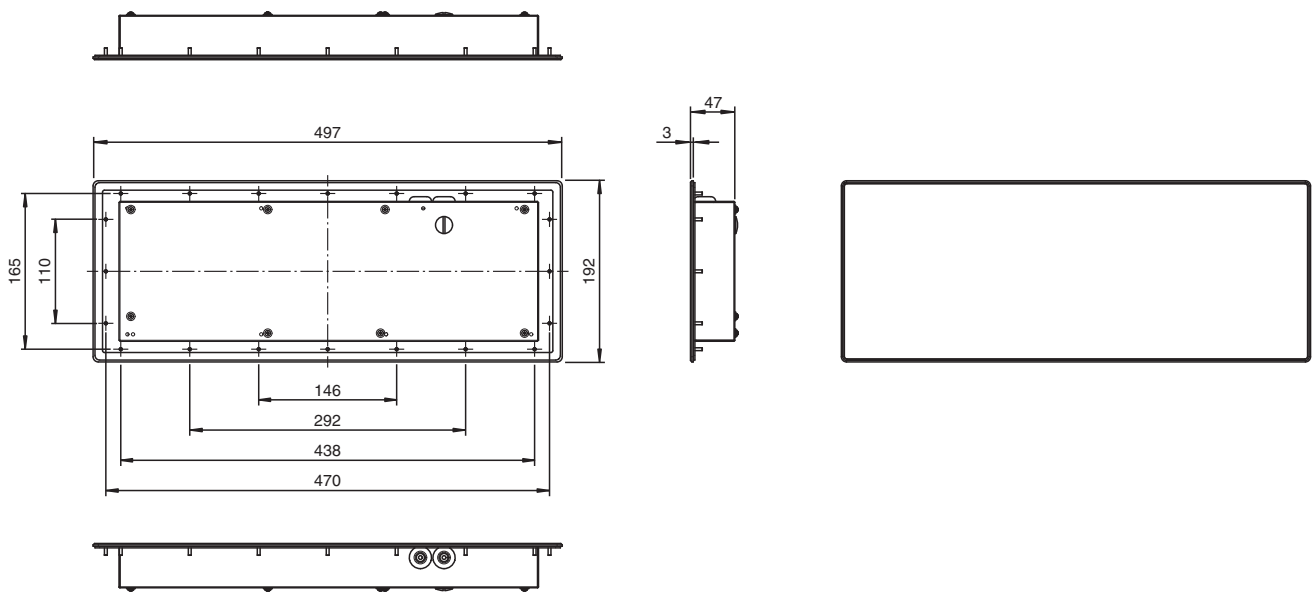
Dimensions

Panel Mounting



Technical Data

General specifications		
Type		Keyboard with joystick
Suitable components		SK-PC-Z1D1-UU1-10-HS and SK-PC-D2-UU1-10-HS
Supply		
Rated voltage	U_r	Ex i, via data line
Indicators/operating means		
Keyboard		105 short stroke keys Keyboard layout: US international, German, French
Joystick		
Driver		Microsoft Mouse ® , USB
Interface		
Interface type		USB
Directive conformity		
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
Conformity		
Degree of protection		IP65
Ambient conditions		
Ambient temperature		-20 ... 50 °C (-4 ... 122 °F)
Storage temperature		-20 ... 70 °C (-4 ... 158 °F)
Relative humidity		max. 85 % , non-condensing
Mechanical specifications		
Material		anodized aluminum , Polyester foil
Mass		1.2 kg
Dimensions		502 mm x 222 mm x 66 mm
Cut out dimensions		450 mm x 152 mm
Cable length		5 m / 1.8 m / 1 m

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Technical Data

Data for application in connection with hazardous areas	
EU-type examination certificate	Zone 1/21 BVS 07 ATEX E 163 X Zone 2/22 BVS 21 ATEX E 009 X
Marking	Zone 1/21 Ⓔx II 2G Ex ib IIC T4 Gb Ⓔx II 2D Ex ib IIIB T135°C Db Zone 2/22 Ⓔx II 3G Ex ic IIC T4 Gc Ⓔx II 3D Ex ic IIIB T135°C Dc
Directive conformity	
Directive 2014/34/EU	EN IEC 60079-0:2018 EN 60079-11:2012
International approvals	
UL approval	in preparation
IECEx approval	
IECEx certificate	Zone 1/21 IECEx BVS 08.0022X Zone 2/22 IECEx BVS 08.0022X
IECEx marking	Zone 1/21 Ex ib IIC T4 Gb Ex ib IIIB T135°C Db Zone 2/22 Ex ic IIC T4 Gc Ex ic IIIB T135°C Dc

Type Code

EXTA4-*

EXTA4-	(1)-	(2)-	K(3)	(4)-	U(5)	(6)-	(7)-	(8)

Model	
EXTA4-	Short travel foil keyboard for use in explosion hazardous environments - standard option

(1)-	Ex Protection
N-	Industrial, general purpose (non-ex)
J-	ATEX & IECEx Zone 1/21
L-	ATEX & IECEx Zone 2/22

(2)-	Housings
NN-	No housing, panel mounting
F1-	Standard housing with mounting options
T1-	Desktop housing

K(3)	Mouse Options
K4	Capacitive Touchpad
K6	Joystick
K8	Optical Trackball

(4)-	Keyboard Layouts
US0-	US-International Layout (QWERTY)
DE0-	German Layout (QWERTZ)
FR0-	French Layout (AZERTY)
xxx-	Other languages on request [place holder option for other languages]

U(5)	Cable Length
U10	1 m cable length (preferred for GXP and FLX) [only for housing options "NN" and "F1", not for "T1"]
U18	1.8 m cable length (preferred option for AG1 housing)
U50	5 m cable length (preferred for Desktop housing option) [only for housing options "NN" and "T1", not for "F1"]

(6)-	Connectors
CF-	Cable ends with crimped ferrules (e.g. to connect to VisuNet GXP or Barrier) - standard option
UA-	2x USB type A male connectors (e.g. to connect to VisuNet FLX) - standard option

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Type Code

(7)-	Mounting Options
NP-	Panel mounting [only for housing option "NN"]
T1-	No mounting option - Desktop housing [only for housing options "T1" AND cable length "U18" or "U50"]
G1-	GXP One-Arm installation to AG-XX00 - standard option [only for housing option "F1" AND cable length "U10" AND connector "CF"]
G2-	GXP Double-Arm installation to AG1 - standard option [only for housing option "F1" AND cable length "U18" AND connector "CF"]
H1-	Hinged version for VisuNet FLX - standard option [only for housing option "F1" AND cable length "U10" AND connector "UA"]
C1-	Cabinet / horizontal installation on vertical housing (wall mounting) - standard option [only for housing option "F1" AND cable length "U18" AND connector "UA"]

(8)	Options
N0	Standard, no options - standard option [standard option & preferred]
UV	UV-resistant front foil for outdoor use

Example:

EXTA4-	N-	NN-	K4	US0-	U10	CF-	NP-	N0

Accessories

	SK-PC-Z1D1-UU1-10-HS	USB intrinsic safety barrier for stand-alone keyboard applications
	SK-PC-D2-UU1-10-HS	Div. 2 / Zone 2 Ex-rated barrier

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Additional Information

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 methode: DIN42115)	The foil passed the anti microbial effectiveness tested with: (Test method: AATCC Test method 100)
Alcohols	Staphyloccus 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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