



## AS-Interface EMERGENCY STOP button

### VAA-2E1A-F85A/CB10-S-V1

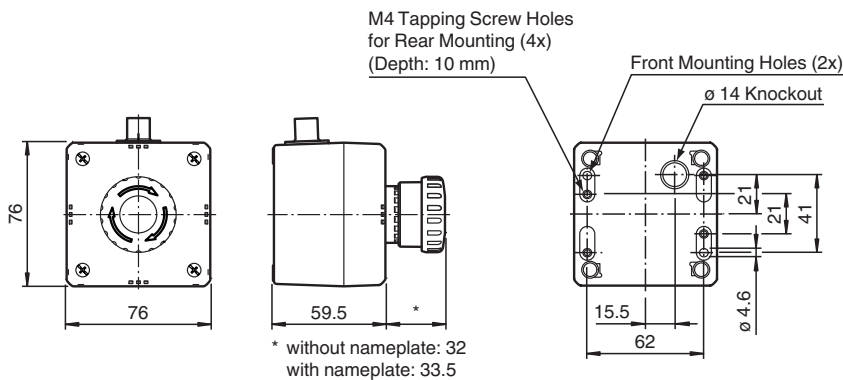
- Tamper proof according to ISO 13850/EN 418
- Integrated illumination
- TÜV certified
- UL approval
- Self-monitoring force-guided safety contacts
- EMERGENCY STOP unlocking by turning or pulling
- M12 plug connection

## AS-Interface EMERGENCY STOP button



This AS-Interface emergency stop button is a two-channel, positively driven contact, allowing the operation of personnel protection systems when used according to specification along with an AS-Interface safety monitor. It occupies one complete address in the AS-Interface segment. When the safety monitor is properly configured, up to EN 954-1 Category 4 and IEC 61508 SIL 3 can be achieved. For mounting, this AS-Interface emergency stop button can be screwed into the front plate of the machine or the switch panel. The button can be illuminated in red.

## Dimensions



## Technical Data

### General specifications

Node type	Safety node
AS-Interface specification	V3.0
Required gateway specification	≥ V2.1
Profile	S-7.B
IO code	7
ID code	B
ID1 code	F
ID2 code	0
UL File Number	E305142

### Functional safety related parameters

Safety Integrity Level (SIL)	SIL 3
Performance level (PL)	PL e
Category	Cat. 4

## Technical Data

Reaction time		< 300 µs
MTTF <sub>d</sub>		no significant contribution to MTTF <sub>d</sub> of the overall system
PFH <sub>d</sub>		no significant contribution to PFH of the overall system
B <sub>10d</sub>		250000 cycles
Design lifetime		20 a
<b>Indicators/operating means</b>		
Button		
EMERGENCY STOP		illuminated
<b>Electrical specifications</b>		
Rated operating voltage	U <sub>e</sub>	26.5 ... 31.6 V from AS-Interface
Rated operating current	I <sub>e</sub>	≤ 80 mA
Protection class		III
Surge protection		U <sub>e</sub> : Over voltage category III, safe isolated power supplies (PELV)
Rated insulation voltage		32 V
Pulse withstand voltage		0.8 kV
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		IEC 62026-2:2013 EN 61000-6-2:2005 EN 61000-6-4:2007 A1:2011-02 EN 61326-1:2013
Machinery Directive		
Directive 2006/42/EC		EN ISO 13849-1:2015 EN ISO 13849-2:2012 EN 62061:2005 + AC:2010 + A1:2013 + A2:2015 EN 60947-5-5:1997+A1:2005+A11:2013+A2:2017
<b>Standard conformity</b>		
Degree of protection		EN 60529:2000
Electrical safety		IEC 61140:2009
Emitted interference		EN 61000-6-4:2007 A1:2011-02
AS-Interface		EN 62026-2:2013
Noise immunity		IEC 62026-2:2013 EN 61326-3-1:2017 EN 61000-6-2:2005
Functional safety		EN ISO 13849-1:2015 EN ISO 13849-2:2012 EN 62061:2005 + AC:2010 + A1:2013 + A2:2015 EN 60947-5-5:1997+A1:2005+A11:2013+A2:2017
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Relative humidity		85 % , noncondensing
Climatic conditions		For indoor use only
Altitude		≤ 5000 m above MSL
Shock and impact resistance		30 g, 11 ms in 6 spatial directions, 3 shocks 10 g, 16 ms in 6 spatial directions, 1000 shocks
Vibration resistance		0.35 mm 10 ... 57 Hz , 5 g 57 ... 2000 Hz, 10 cycles
Pollution degree		2
<b>Mechanical specifications</b>		
Operating force		Push: 32 N Pull: 21 N Turn: 0.27 Nm Minimum for positive opening operation: 60 Nm
Operating distance		for positive opening operation: min. 4 mm maximal: 4.5 mm
Degree of protection		IP65
Connection		M12 round connector
Material		
Housing		Polycarbonate
Mass		225 g
Life span		> 250,000 switching operations

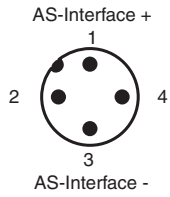
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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**PEPPERL+FUCHS**

## Connection



## Programming



**Data bit**  
(function via AS-Interface)

Data bit	Input	Output
D0	dyn. safety code 1	OUT1
D1	dyn. safety code 1	-
D2	dyn. safety code 2	-
D3	dyn. safety code 2	-

**Parameter bit**  
(programmable via AS-Interface)

Parameter bit	Function
P0	not used
P1	not used
P2	not used
P3	not used

## Accessories

	<b>VAZ-F85A-SH</b>	Actuating protection for emergency off button
	<b>VAZ-F85A-MH</b>	Mounting aid for EMERGENCY STOP button