



AS-Interface EMERGENCY STOP button

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

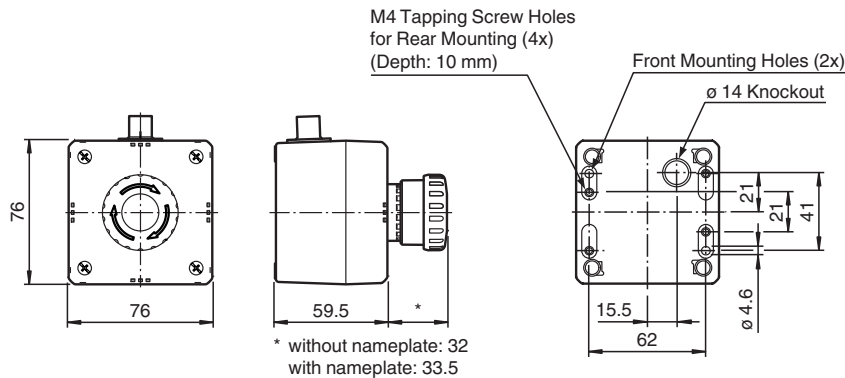
- Tamper proof according to ISO 13850/EN 418
- Integrated illumination
- TÜV certified
- UL approval
- Self-monitoring force-guided safety contacts
- EMERGENCY STOP unlocking by turning or pulling
- M12 plug connection

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

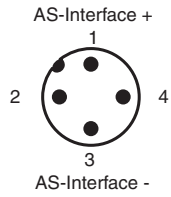
Functional safety related parameters

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

Technical Data

Reaction time		< 300 μ s
MTTF _d		no significant contribution to MTTF _d of the overall system
PFH _d		no significant contribution to PFH of the overall system
B _{10d}		250000 cycles
Design lifetime		20 a
Indicators/operating means		
Button		
EMERGENCY STOP		illuminated
Electrical specifications		
Rated operating voltage	U _e	26.5 ... 31.6 V from AS-Interface
Rated operating current	I _e	≤ 80 mA
Protection class		III
Surge protection		U _e : Over voltage category III, safe isolated power supplies (PELV)
Rated insulation voltage		32 V
Pulse withstand voltage		0.8 kV
Directive conformity		
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
Standard conformity		
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
Ambient conditions		
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
Mechanical specifications		
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

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

	VAZ-F85A-SH	Actuating protection for emergency off button
	VAZ-F85A-MH	Mounting aid for EMERGENCY STOP button