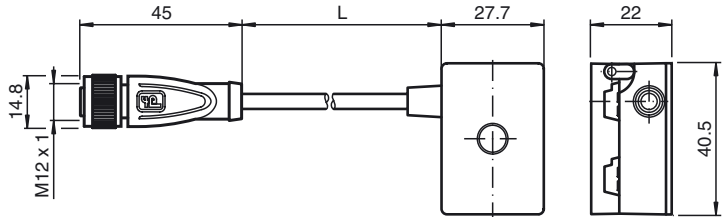


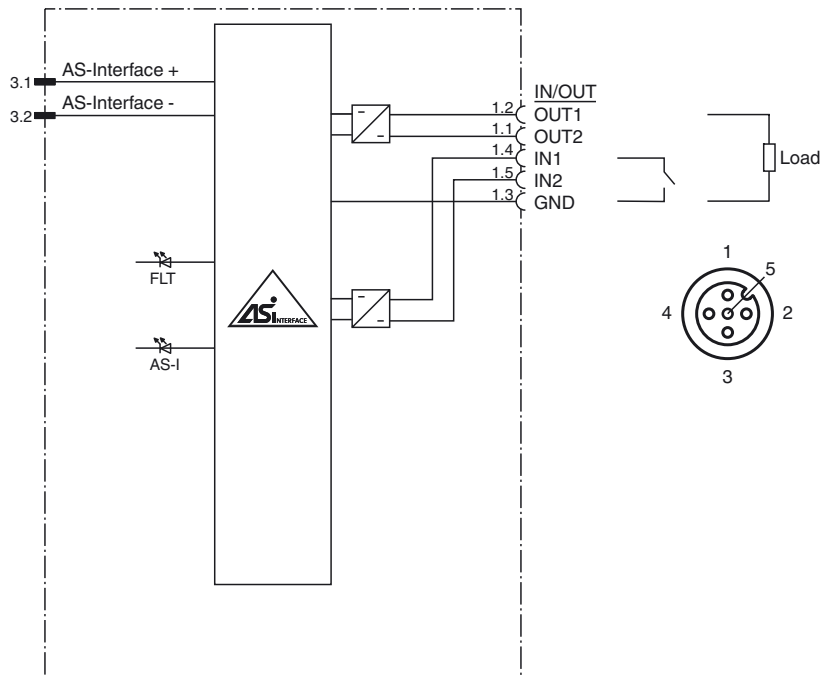


ECOLAB

Dimensions



Electrical connection



Model number

VBA-2E2A-G10-Z/E2J-1M-V15-G

G10 ultra compact module
2 inputs, 2 outputs

Features

- Ultra-compact enclosure
- Gold-plated and machined contacts
- One piece housing
- Degree of protection IP68 / IP69K
- Direct connection via cable outlet

Function

The AS-Interface G10 ultra-compact module is suitable for the remote connection of mech. switches and actuators within very limited space. The one-piece enclosure has the protection degree IP68/IP69K.

The AS-Interface flat cable is contacted via pointy, gold-plated contact pins. The exact location of the pins on the lead is ensured by the swivel mechanism. Mech. switches and actuators are connected to the module via M12 sockets.

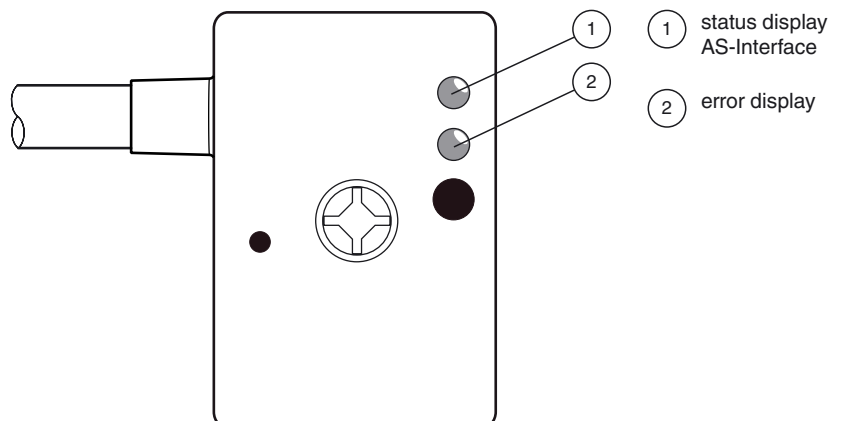
Multiple LEDs indicate the current status of the AS-Interface strand and are used for diagnosis.

Accessories

VAZ-PK-FK-0,2M-V1-W

Adapter cable G10 module/hand-held programming device

Indicating / Operating means



Release date: 2019-01-09 10:03 Date of issue: 2019-01-09 301502_eng.xml

Technical data**General specifications**

Slave type	A/B slave
AS-Interface specification	V3.0
Required master specification	V3.0
UL File Number	E223772 "For use in NFPA 79 Applications only"
MTBF	379 a

Indicators/operating means

LED FAULT	error display; LED red red: communication error or address is 0 red flashing: overload
LED PWR	AS-Interface voltage; green LED green: voltage OK flashing green: address 0

Electrical specifications

Rated operating voltage	U_e	18.5 ... 31.6 V from AS-Interface
Rated operating current	I_e	≤ 40 mA (without inputs/outputs) / max. 200 mA
Protection class		III
Surge protection		U_e : Over voltage category III, safe isolated power supplies (PELV)

Input

Number/Type	2 inputs for mechanical contacts
Supply	from AS-Interface
Voltage	≤ U_e
Input current	≤ 8 mA (limited internally)
Switching point	
0 (unattenuated)	≤ 0.5 mA
1 (attenuated)	≥ 2 mA
Signal delay	< 1 ms (input/AS-Interface)

Output

Number/Type	2 electronic outputs, PNP, overload and short-circuit proof
Supply	from AS-Interface
Voltage	≥ (U_e - 9.0 V)
Current loading capacity	≤ 150 mA Total current , overload and short-circuit protected

Directive conformity

Electromagnetic compatibility	
Directive 2014/30/EU	EN 62026-2:2013

Standard conformity

Degree of protection	EN 60529:2000
Fieldbus standard	EN 62026-2:2013
Emitted interference	EN 61000-6-4:2011
AS-Interface	EN 62026-2:2013
Noise immunity	EN 61000-6-2:2005 , EN 62026-2:2013

Programming instructions

Profile	S-7.A.7
IO code	7
ID code	A
ID1 code	7
ID2 code	7

Data bits (function via AS-Interface)	input	output
D0	IN1	OUT1
D1	IN2	OUT2
D2	IN1	OUT1
D3	IN2	OUT2

Parameter bits (programmable via AS-i) function

P0	communication monitoring P0 = 1 (default settings), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition
P1	Input filter P1 = 0 input filter on, pulse suppression ≤ 2 ms P1 = 1 input filter off (default settings)
P2	Synchronous mode P2 = 0 synchronous mode on P2 = 1 synchronous mode off (default settings)
P3	not used

Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
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	0.75 mm 10 ... 57 Hz , 5 g 57 ... 150 Hz, 20 cycles

Mechanical specifications

Degree of protection	housing: IP67 IP67 / IP68 / IP69K with flat cable VAZ-FK-S- M12 socket: IP67/IP68/IP69K
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Connection	AS-Interface: AS-Interface flat cable In-/outputs & matching connector: M12 connector, 5-pin, A-coded, acc. to IEC 61076-2-101:2012	
Material		
Contacts	CuSn / Au	
Housing	PBT PC	
Body	black PUR	
Cable	PUR	
Mounting screw	Stainless steel 1.4305 / AISI 303	
Cable		
Sheath diameter	Ø4.8 mm	
Color	black	
Cores	5 x 0.34 mm ²	
Length	L	1 m
Mass	84 g	
Tightening torque, fastening screws	1.65 Nm	
Tightening torque, cable gland	0.4 Nm	
Approvals and certificates		
UL approval	cULus Listed, Type 1 enclosure	

Notes

Do not connect inputs and outputs, which are supplied via the module from AS-interface or via auxiliary power, with power supply and signal circuits with external potentials.

Mounting instructions

You may screw the device onto a level mounting surface using two M4 attachment screws. The attachment screws are not included.

