



**Model number**

**VBA-2E-G10-ZEJ-2X3M**

G10 ultra-compact module  
2 inputs, open cable ends

**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 sensors 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. Sensors are connected to the module via open cable end.

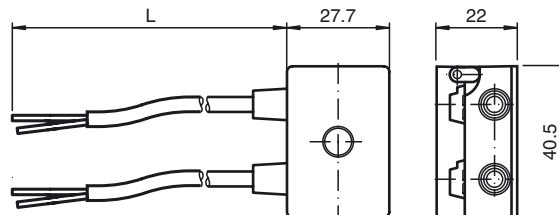
Multiple LEDs indicate the current status of the AS-Interface strand and the inputs and are used for diagnosis. The ultra-compact module is powered from the AS-Interface strand.

**Accessories**

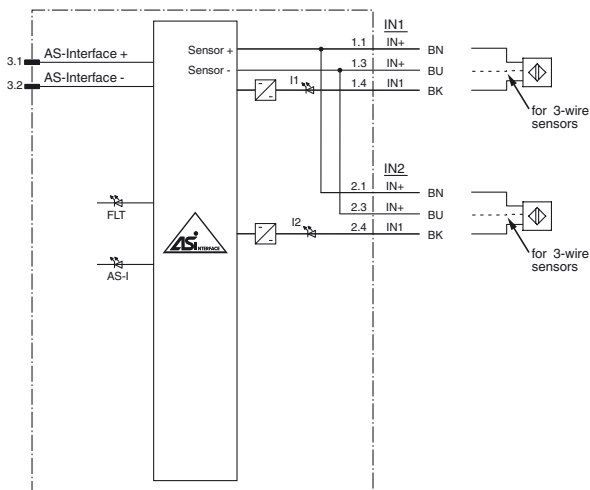
**VAZ-PK-FK-0,2M-V1-W**

Adapter cable G10 module/hand-held programming device

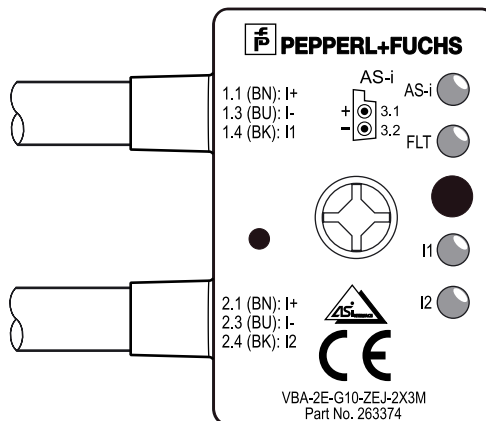
**Dimensions**



**Electrical connection**



**Indicating / Operating means**



**Technical data**

**General specifications**

Slave type	A/B slave
AS-Interface specification	V3.0
Required master specification	≥ V2.0
UL File Number	E223772 "For use in NFPA 79 Applications only"

**Indicators/operating means**

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LED FAULT	error display; LED red red: communication error or address is 0 red flashing: overload of sensor power supply or outputs	
LED AS-i	AS-Interface voltage; LED green	
LED IN	switching state (input); 2 LED yellow	
<b>Electrical specifications</b>		
Rated operating voltage	$U_e$	18.5 ... 31.6 V from AS-Interface
Rated operating current	$I_e$	≤ 40 mA (without sensors) / max. 120 mA
Protection class	III	
Surge protection	$U_{AUX}$ , $U_{in}$ : Over voltage category III, safe isolated power supplies (PELV)	
<b>Input</b>		
Number/Type	2 inputs for 2- or 3-wire sensors (PNP), DC	
Supply	from AS-Interface	
Voltage	21 ... 31 V	
Current loading capacity	75 mA at $T_B \leq 40^\circ\text{C}$ (104 °F) 60 mA at $T_B \leq 75^\circ\text{C}$ (167 °F) overload and short-circuit resistant	
Input current	≤ 9 mA (limited internally)	
Switching point	according to DIN EN 61131-2 (Type 2)	
0 (unattenuated)	≤ 3 mA	
1 (attenuated)	≥ 5 mA	
Signal delay	< 1 ms (input/AS-Interface)	
<b>Programming instructions</b>		
Profile	S-0.A.2	
IO code	0	
ID code	A	
ID1 code	7	
ID2 code	2	
<b>Data bits</b> (function via AS-Interface)	<b>input</b>	<b>output</b>
D0	IN1	-
D1	IN2	-
D2	-	-
D3	-	-
<b>Parameter bits</b> (programmable via AS-i)	<b>function</b>	
P0	not used	
P1	Input filter P1 = 0 input filter on, pulse suppression ≤ 2 ms P1 = 1 input filter off (basic setting)	
P2	Synchronous mode P2 = 0 synchronous mode on P2 = 1 synchronous mode off (basic setting)	
P3	not used	
<b>Ambient conditions</b>		
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)	
Storage temperature	-25 ... 85 °C (-13 ... 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	
<b>Mechanical specifications</b>		
Degree of protection	IP67 IP67 / IP68 / IP69K with flat cable VAZ-FK-S*	
Connection	AS-Interface: AS-Interface flat cable Inputs & matching connector: M12 round connector, 4-pin, A-coded, according to IEC 61076-2-101:2012	
<b>Material</b>		
Contacts	CuSn / Au	
Housing	PBT PC	
Cable	PUR	
Mounting screw	Stainless steel 1.4305 / AISI 303	
<b>Cable</b>		
Sheath diameter	Ø4,3 mm	
Color	black	
Cores	4 x 0.34 mm <sup>2</sup>	
Length	L	3 m
Mass	100 g	
Tightening torque, fastening screws	1.65 Nm	
Tightening torque, cable gland	0.4 Nm	
<b>Compliance with standards and directives</b>		
<b>Directive conformity</b>		
EMC Directive 2004/108/EC	EN 50295:1999	
<b>Standard conformity</b>		
Noise immunity	EN 61000-6-2:2005, EN 61326-1:2006, EN 50295:1999	
Emitted interference	EN 61000-6-4:2007	
Input	EN 61131-2:2007	
Degree of protection	EN 60529:2000	
Fieldbus standard	EN 50295:1999, IEC 62026-2:2006	

**Approvals and certificates**

UL approval	cULus Listed, Type 1 enclosure
Maximum permissible ambient temperature	$\leq 65\text{ °C}$ ( $\leq 149\text{ °F}$ )

**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.

