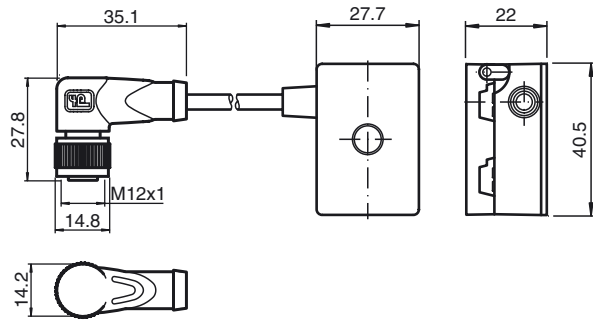
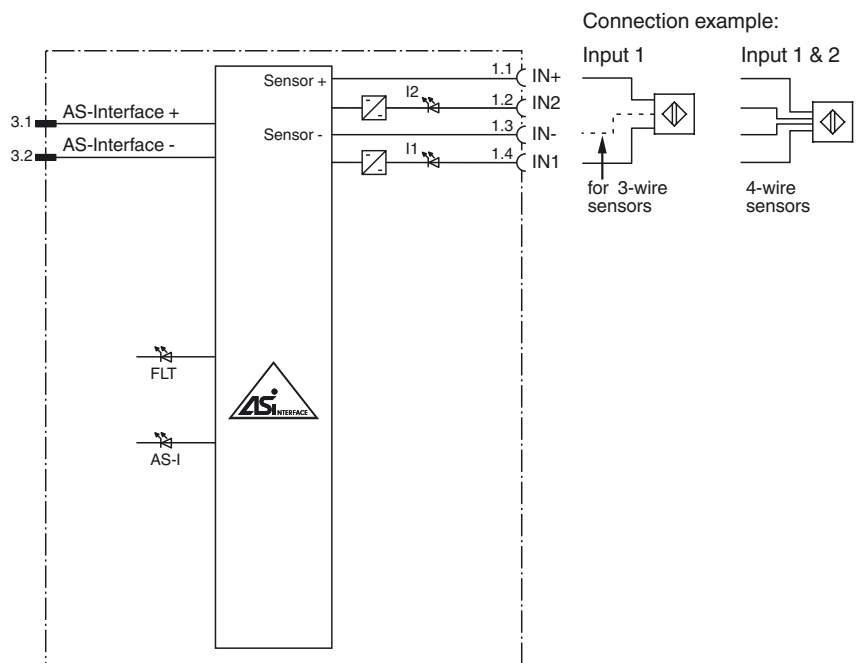




Dimensions



Electrical connection



Model number

VBA-2E-G10-ZAJ-1M-V1-W

G10 ultra compact module
2 inputs, 1 x M12 socket

Features

- Ultra-compact enclosure
- Gold-plated and machined contacts
- One piece housing
- Protection degree 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 M12 sockets.

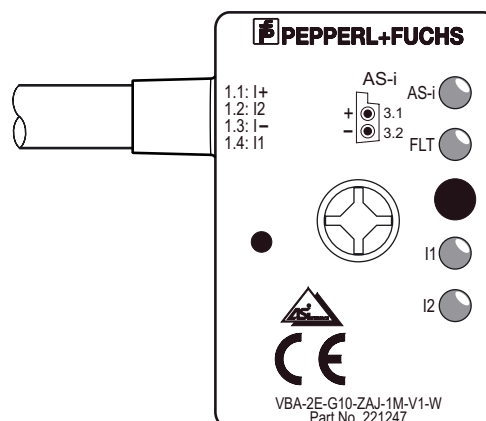
Multiple LEDs indicate the current status of the AS-Interface strand and the inputs and are used for diagnosis. The ultra-compact module is powered from the AS-Interface strand.

Accessories

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

Adapter cable G10 module/hand-held programming device

Indicating / Operating means



Release date: 2013-12-19 13:38 Date of issue: 2013-12-19 221247_eng.xml

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

| | |
|-----------|--|
| 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 |

Electrical specifications

| | | |
|-------------------------|-------|---|
| 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 |

Input

| | |
|--------------------------|--|
| Number/Type | 2 inputs for 2- or 3-wire sensors (PNP), DC option 1 input for 4-wire sensor (PNP), DC |
| Supply | from AS-Interface |
| Voltage | 21 ... 31 V |
| Current loading capacity | 75 mA at $T_B \leq 40 \text{ °C}$ (104 °F) 60 mA at $T_B \leq 75 \text{ °C}$ (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) |

Programming instructions

| | |
|----------|---------|
| Profile | S-0.A.2 |
| IO code | 0 |
| ID code | A |
| ID1 code | 7 |
| ID2 code | 2 |

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

Parameter bits (programmable via AS-i) function

| | |
|----|---|
| 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 |

Ambient conditions

| | |
|-----------------------------|---|
| 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 |

Mechanical specifications

| | |
|-------------------------------------|--|
| Protection degree | 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 |
| Material | |
| Contacts | CuSn / Au |
| Housing | PBT PC |
| Body | black PUR |
| Cable | PUR |
| Mounting screw | Stainless steel 1.4305 / AISI 303 |
| Cable | |
| Sheath diameter | Ø4,3 mm |
| Color | black |
| Cores | 4 x 0.34 mm ² |
| Length | L 1 m |
| Mass | 100 g |
| Tightening torque, fastening screws | 1.65 Nm |
| Tightening torque, cable gland | 0.4 Nm |

Compliance with standards and directives

| | |
|--|---|
| Directive conformity | |
| EMC Directive 2004/108/EC | EN 50295:1999 |
| Standard conformity | |
| 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 |
| Protection degree | 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 $\leq 65\text{ }^{\circ}\text{C}$ ($\leq 149\text{ }^{\circ}\text{F}$) | |

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.

