

AS-Interface sensor/actuator module VBA-2E2A-G10-ZEJXE2J-1M-2V1-G

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

G10 ultra compact module, 2 inputs, 2 outputs



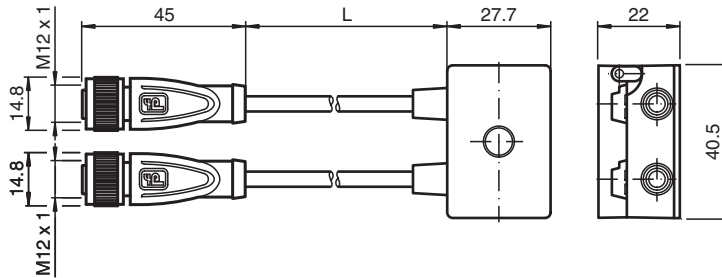
Function

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

Dimensions



Technical Data

General specifications

| | |
|--------------------------------|--|
| Node type | A/B node |
| AS-Interface specification | V3.0 |
| Required gateway specification | V3.0 |
| Profile | S-7.A.7 |
| IO code | 7 |
| ID code | A |
| ID1 code | 7 |
| ID2 code | 7 |
| UL File Number | E223772 "For use in NFPA 79 Applications only" |

Indicators/operating means

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Technical Data

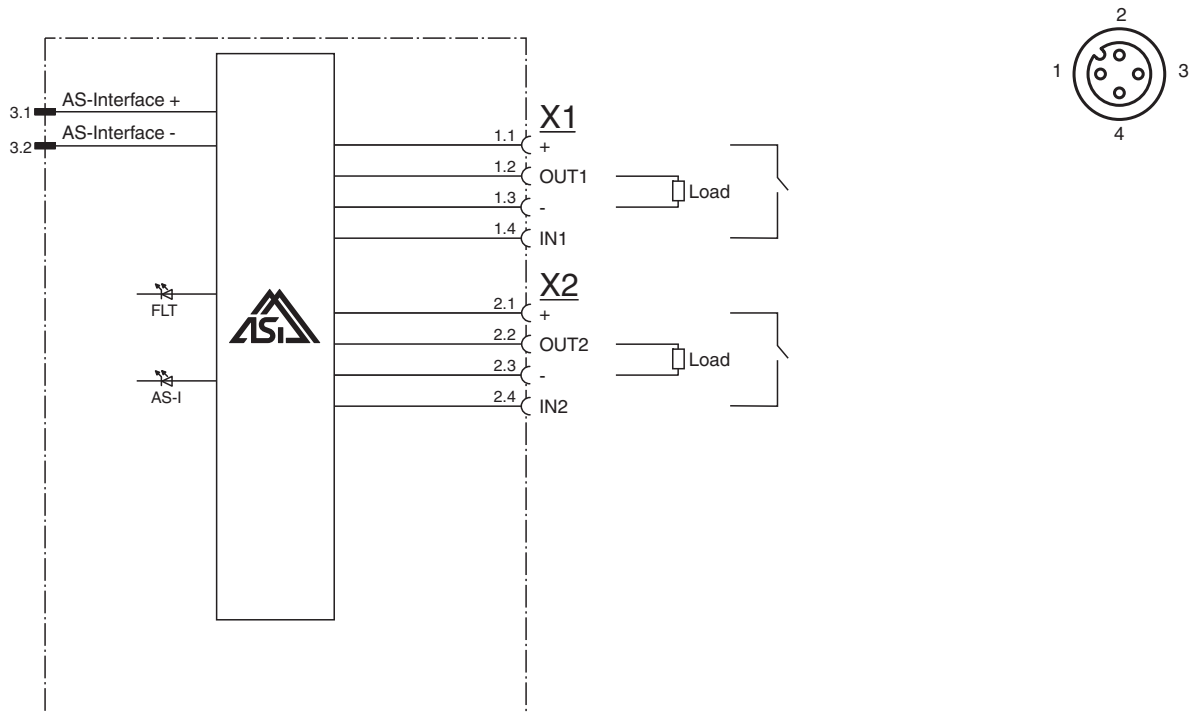
| | | |
|---|-------|---|
| LED FAULT | | error display; LED red red: communication error or address is 0 red flashing: overload of sensor power supply or outputs |
| LED AS-i | | AS-Interface voltage; LED green |
| Electrical specifications | | |
| Rated operating voltage | U_e | 18.5 ... 31.6 V from 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 2- or 3-wire sensors (PNP), DC |
| Supply | | from AS-Interface |
| Voltage | | ≤ U_e |
| Current loading capacity | | ≤ 150 mA Total current , overload and short-circuit protected |
| 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 |
| Approvals and certificates | | |
| UL approval | | cULus Listed, Type 1 enclosure |
| Maximum permissible ambient temperature | | max. 65 °C (max. 149 °F) |
| 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 |
| Connection | | AS-Interface: AS-Interface flat cable In-/outputs & matching connector: X1 & X2, M12 plug, 4-pin, A-coded, in accordance with IEC 61076-2-101:2012 |
| Material | | |
| Contacts | | CuSn / Au |
| Housing | | PBT PC |
| Body | | PUR, black |
| Cable | | PUR |
| Mounting screw | | Stainless steel 1.4305 / AISI 303 |
| Cable | | |

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Technical Data

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

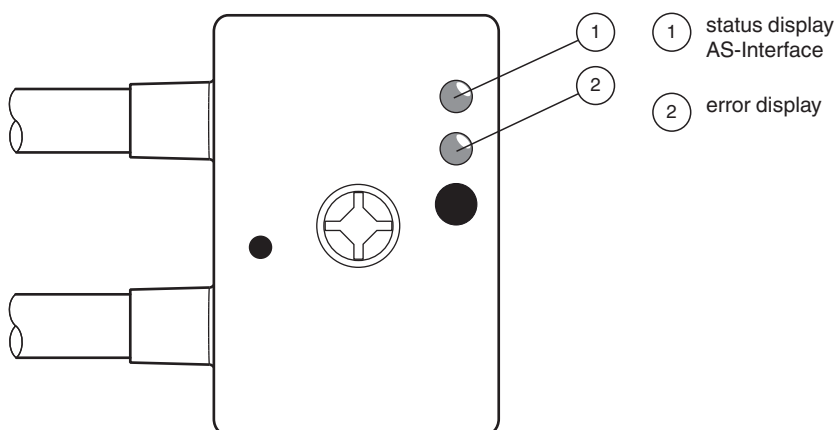
Connection Assignment



Connection

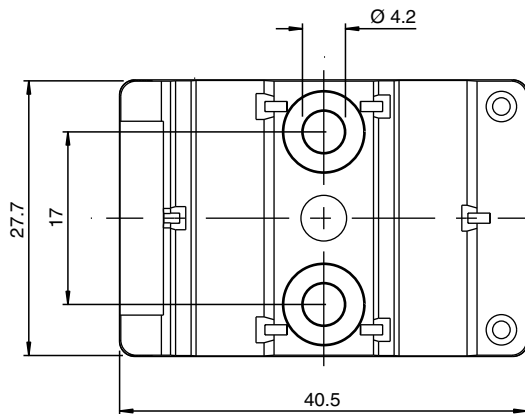
Do not connect inputs and outputs, which are supplied via the module from AS-interface or via auxiliary power, with power supply and signal circuits with external potentials.

Indication



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Mounting



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

Programming

Data bits

(function via AS-Interface)

| Data bit | Input | Output |
|----------|-------|--------|
| D0 | IN1 | OUT1 |
| D1 | IN2 | OUT2 |
| D2 | IN1 | OUT1 |
| D3 | IN2 | OUT2 |


Parameter bits

(programmable via AS-Interface)

| Parameter bit | Function |
|---------------|---|
| P0 | Communication monitoring P0=0 monitoring off, the outputs maintain the status if communication fails P0=1 monitoring on, if communication fails, the outputs are deenergised, default setting |
| P1 | Input filter P1=0 input filter on, pulse suppression ≤ 2 ms P1=1 input filter off, default setting |
| P2 | Synchronous mode P2=0 Synchronous mode on P2=1 Synchronous mode off, default setting |
| P3 | not used |

Programming

Accessories

| | | |
|---|----------------------------|---|
|  | VAZ-PK-FK-0,2M-V1-W | Adapter cable G10 module/hand-held programming device |
|---|----------------------------|---|