



**Model Number**

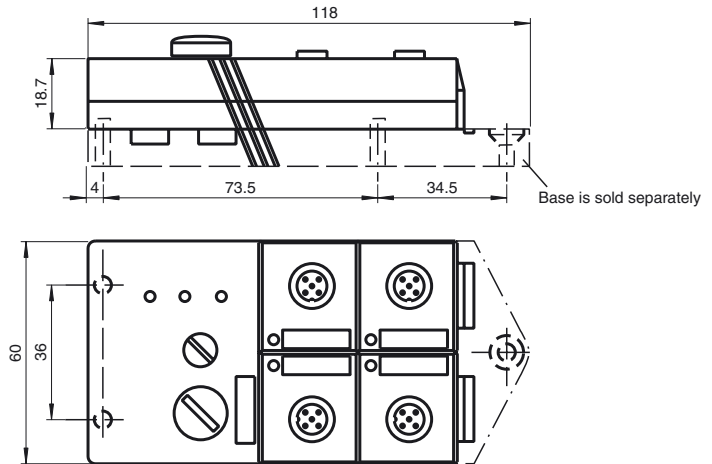
VAA-4E-G2-ZA0

G2 flat module  
4 inputs (NPN)

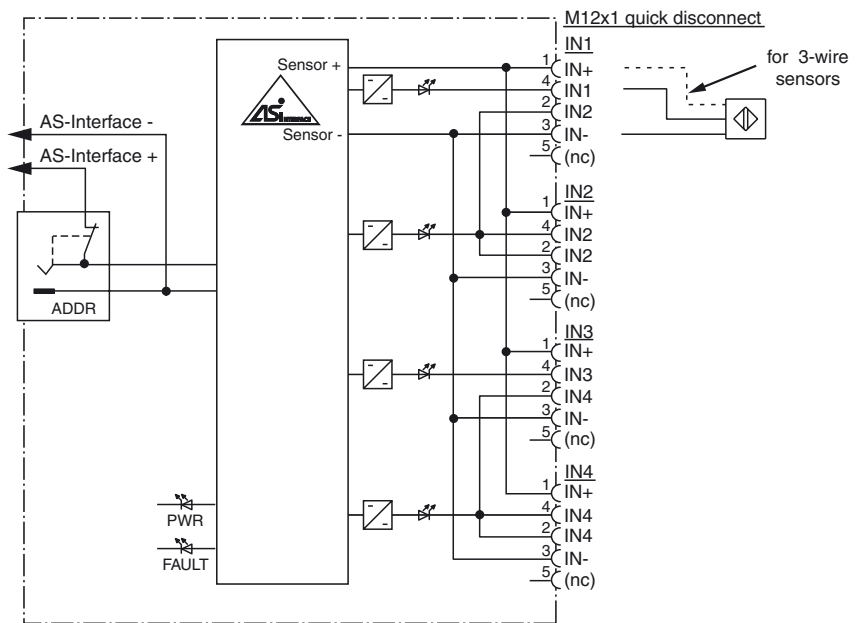
**Features**

- AS-Interface certificate
- Protection degree IP67
- Addressing jack
- Flat cable connection with cable piercing technique, variable flat cable guide
- Inputs for 2-, 3-, and 4-wire sensors
- Power supply of inputs from the module
- Function display for bus and inputs
- Monitoring of sensor overloads

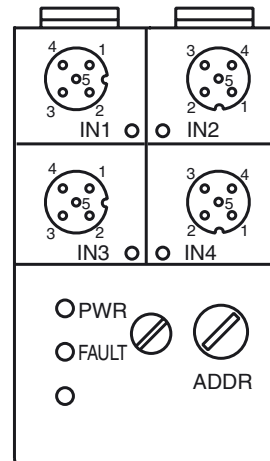
**Dimensions**



**Electrical connection**



**Indicating / Operating means**



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**Technical data****General specifications**

|                |                |
|----------------|----------------|
| Slave type     | Standard slave |
| UL File Number | E87056         |

**Indicators/operating means**

|           |   |
|-----------|---|
| LED FAULT | error display; LED red<br>red: communication error or address is 0<br>red flashing: overload of sensor supply |
| LED PWR   | AS-Interface voltage; LED green   |
| LED IN    | switching state (input); 4 LED yellow   |

**Electrical specifications**

|                           |   |
|---------------------------|---|
| Protection class          | III   |
| Rated operational voltage | $U_e$ 26.5 ... 31.6 V from AS-Interface       |
| Rated operational current | $I_e$ ≤ 40 mA (without sensors) / max. 240 mA |

**Input**

|                          |  |
|--------------------------|--|
| Number/Type              | 4 inputs for 2- or 3-wire sensors (NPN), DC<br>alternative 2 inputs for 4-wire sensors (NPN), DC         |
| Supply                   | from AS-Interface  |
| Voltage                  | 21 ... 31 V  |
| Current loading capacity | ≤ 200 mA ( $T_B \leq 40 \text{ °C}$ ),<br>≤ 150 mA ( $T_B \leq 60 \text{ °C}$ ), short-circuit protected |
| Input current            | ≤ 8 mA (limited internally)  |
| Switching point          |  |
| 0 (unattenuated)         | ≤ 1.5 mA   |
| 1 (attenuated)           | ≥ 4.5 mA   |

**Programming instructions**

|         |       |
|---------|-------|
| Profile | S-0.1 |
| IO code | 0     |
| ID code | 1     |

| Data bits (function via AS-Interface) | input | output |
|---------------------------------------|-------|--------|
| D0                                    | IN1   | -      |
| D1                                    | IN2   | -      |
| D2                                    | IN3   | -      |
| D3                                    | IN4   | -      |

**Parameter bits (programmable via AS-i) function**

|    |          |
|----|----------|
| P0 | not used |
| P1 | not used |
| P2 | not used |
| P3 | not used |

**Ambient conditions**

|                     |                               |
|---------------------|-------------------------------|
| Ambient temperature | -25 ... 60 °C (248 ... 333 K) |
| Storage temperature | -25 ... 85 °C (248 ... 358 K) |

**Mechanical specifications**

|                   |   |
|-------------------|---|
| Protection degree | IP67 according to EN 60529  |
| Connection        | cable piercing method<br>flat cable yellow<br>inputs: M12 round connector |
| Mass              | 100 g   |
| Mounting          | Mounting base   |

**Notes**

For 4-wire sensors, it is only possible to use plug-in slot IN1 or IN3 for inputs 1+2 or 3+4 (jumpered internally).

**Function**

The VAA-4E-G2-ZA0 is an AS-Interface coupling module with 4 inputs. Mechanical contacts (e. g. push buttons) as well as 2-, 3- and 4-wire sensors can be connected to the inputs.

The IP67 flat module features an integrated addressing jack and is ideal for applications in the field.

Sensors are connected via M12 x 1 screw connections. The current switching state of each channel is indicated by an LED. Similarly, an LED is available to monitor the AS-Interface communication and the indication that the module has the address 0.

The input is monitored for short circuits. In a failure case, the module disconnects from the AS-Interface and an error is indicated.

The U-G3FF mounting base is used as a standard connection to the AS-Interface. The specially designed base enables the flat cable to be contacted from both sides. This means, for example, that 90° curves can be laid with very tight radii (variable flat cable guide). If input and output modules are used in an application, the flat cable for the external power supply can be placed in the base of the module, since the module does not access this line. The advantage is that both flat cables can be placed in parallel without destroying the module due to a wrong connection.

**Note:**

The mounting base for the module is sold separately.

**Accessories****VBP-HH1-V3.0**

AS-Interface Handheld

**VAZ-PK-1,5M-V1-G**

Connection cable module/hand-held programming device

**VAZ-FK-ED-G2**

AS-Interface end seal

**U-G3FF**

AS-Interface module mounting base