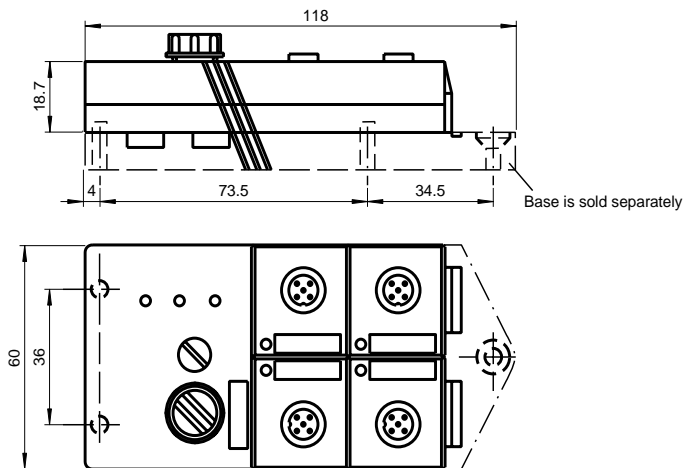


AS-i sensor/actuator module



Dimensions



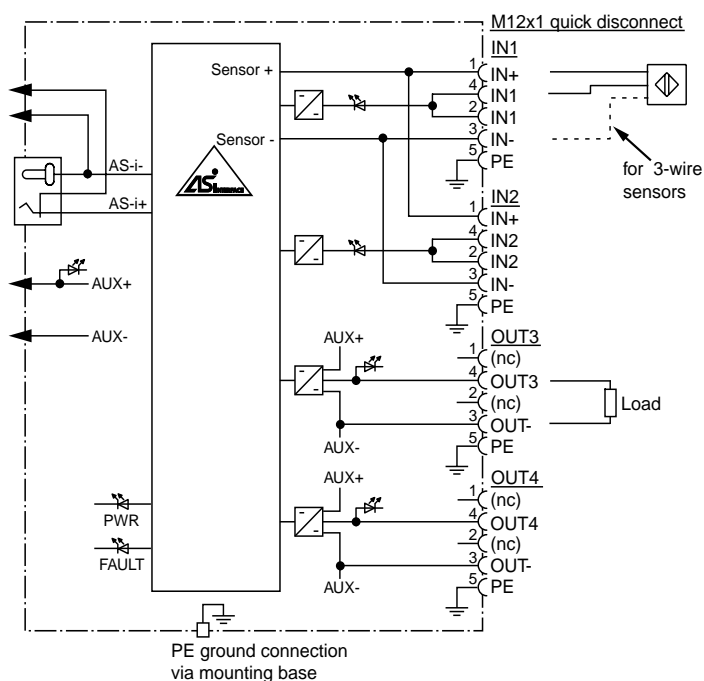
Model number

VAA-2EA-G2-ZE/E2

G2 flat module

2 inputs (PNP) and 2 electronic outputs

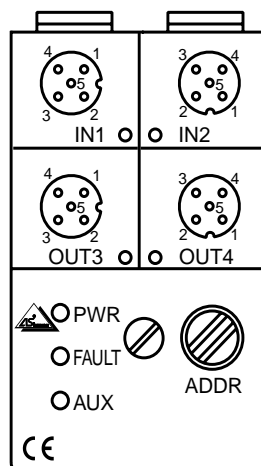
Electrical connection



Features

- AS-Interface certificate
- Protection degree IP67
- Addressing jack
- Flat cable connection with cable piercing technique, variable flat cable guide
- Communication monitoring, turn-off
- Inputs for 2- and 3-wire sensors
- Power supply of outputs from the external auxiliary voltage
- Power supply of inputs from the module
- Ground connection (PE) possible
- Function display for bus, ext. auxiliary voltage, inputs and outputs
- Monitoring of sensor overloads

Indication/operating means





Technical data

General specifications

Slave type	Standard slave
------------	----------------

Indicators/operating means

LED FAULT	error display; LED red red: communication error or address is 0 red flashing: overload of sensor supply
LED PWR	AS-i voltage; LED green
LED AUX	ext. auxiliary voltage U_{AUX} ; LED green
LED IN	switching state (input); 2 LED yellow
LED OUT	switching state (output); 2 LED yellow

Electrical specifications

Auxiliary voltage U_{AUX}	24 V DC $\pm 15\%$ PELV (protection class 3 in accordance with VDE 0106/IEC 364-4-41)
Rated operational voltage U_e	26.5 ... 31.6 V from AS-Interface
Rated operational current I_e	≤ 40 mA (without sensors) / max. 190 mA

Input

Number/Type	2 inputs for 2 or 3 wire sensors (PNP), DC
Supply	from AS-Interface
Current loading capacity	≤ 150 mA ($T_B \leq 40^\circ\text{C}$), ≤ 120 mA ($T_B \leq 60^\circ\text{C}$), short-circuit proof
Switching point	OFF ≤ 1.5 mA ON ≥ 4.5 mA input current limited ≤ 8 mA

Output

Supply	from external auxiliary voltage U_{AUX}
Number/Type	2 electronic outputs, PNP
Voltage	ext. auxiliary voltage $U_{AUX} - 0.5$ V
Current	1.5 A per output 3 A total ($T_B \leq 40^\circ\text{C}$), 2 A total ($T_B \leq 60^\circ\text{C}$)

Ambient conditions

Ambient temperature	$-25 \dots 60^\circ\text{C}$ (248 ... 333 K)
Storage temperature	$-25 \dots 85^\circ\text{C}$ (248 ... 358 K)

Mechanical specifications

Protection degree	IP67 according to EN 60529
Connection type	cable piercing method flat cable yellow/flat cable black inputs/outputs: M12 round connector
Mass	100 g
Mounting	Assembly plate

Programming instructions

Profile	S-3.F
IO code	3
ID code	F

Programming instructions (bit configuration)

Data bits (function via AS-Interface)	input	output
D0	IN1	-
D1	IN2	-
D2	-	OUT3
D3	-	OUT4

Parameter bits (programmable via AS-i)

Parameter bits	function
P0	communication monitoring P0 = 1 (basic setting), 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	not used
P2	not used
P3	not used

VAA-2EA-G2-ZE/E2

Function

The VAA-2EA-G2-ZE/E2 is an AS-Interface coupling module with 2 inputs and 2 outputs. Mechanical contacts and 2- and 3-wire sensors can be connected to the inputs. The outputs are electronic outputs, which can be loaded to 24 V DC and 1.5 A per output.

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

Connection to the sensors/actuators is provided via M12 x 1 screw connections. The current switching state of each channel is indicated by an LED, located on the module's top side. Similarly, an LED is provided to monitor the AS-i communication and to indicate that the module has the address 0. If an AS-Interface communication error occurs, the outputs are de-energised.

The input circuit is monitored for short circuits. LEDs are also provided to indicate AS-Interface voltage and external power supply.

The U-G3FF mounting base is normally used for the connection of the AS-i flat cable and the external 24 V DC power supply. The specially designed base enables the user to connect flat cables from both sides. This means, for example, that 90° curves can be laid with very tight radii (variable flat cable guide).

Note:

The mounting base for the module is sold separately.

Matching system components

U-G3FF

Mounting base for connection to flat cable (AS-i and external auxiliary voltage)

Accessories

VBP-HH1

Hand-held programming device

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

Connection cable module/hand-held programming device