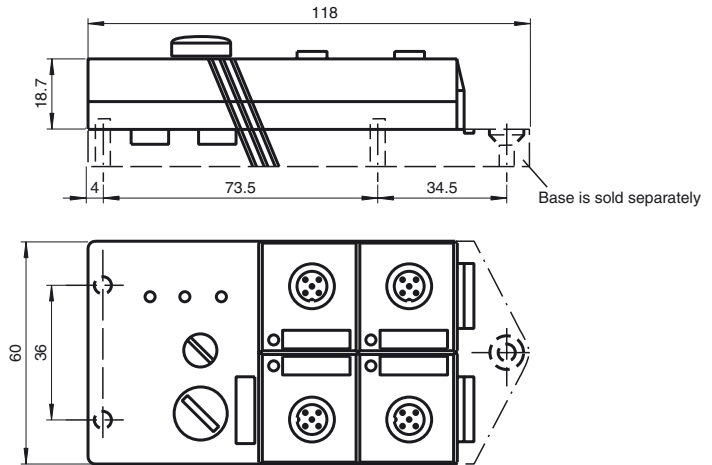




Dimensions



Model Number

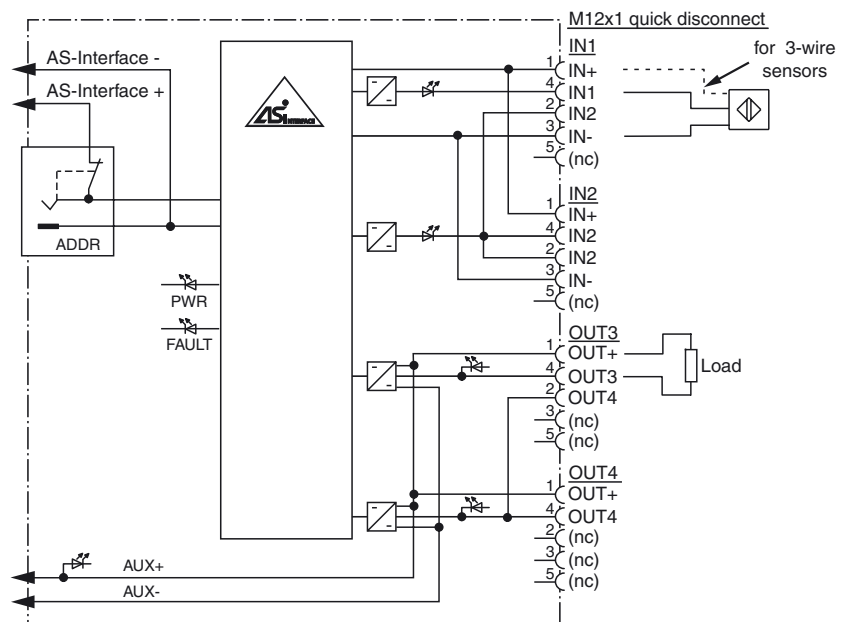
VAA-2EA-G2-ZA0/EA0

G2 flat module
2 inputs (NPN) and 2 electronic outputs

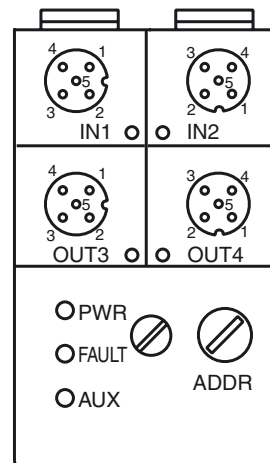
Features

- 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-, 3-, and 4-wire sensors
- Power supply of outputs from the external auxiliary voltage
- Power supply of inputs from the module
- Function display for bus, ext. auxiliary voltage, inputs and outputs
- Monitoring of sensor overloads

Electrical connection



Indicating / Operating means



Release date: 2007-03-27 15:30 Date of issue: 2007-03-27 107881_ENG.xml

Technical data

General specifications

Slave type	Standard slave
UL File Number	E87056

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-Interface 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 (output)	U_{AUX}	24 V DC \pm 15 % PELV
Protection class		III
Rated operational voltage	U_e	26.5 ... 31.6 V from AS-Interface
Rated operational current	I_e	\leq 40 mA (without sensors) / max. 190 mA

Input

Number/Type	2 inputs for 2- or 3-wire sensors (NPN), DC alternative 1 input for 4-wire sensor (NPN), DC
Supply	from AS-Interface
Voltage	21 ... 31 V
Current loading capacity	\leq 150 mA ($T_B \leq 40$ °C), \leq 120 mA ($T_B \leq 60$ °C), short-circuit proof
Input current	\leq 8 mA (limited internally)
Switching point	
0 (unattenuated)	\leq 1.5 mA
1 (attenuated)	\geq 4.5 mA

Output

Number/Type	2 electronic outputs, NPN
Supply	from external auxiliary voltage U_{AUX}
Current	1 A per output
Voltage	$\geq (U_{AUX} - 0,5$ V)

Programming instructions

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

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

Parameter bits (programmable via AS-i) 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

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 flat cable yellow/flat cable black inputs/outputs: M12 round connector
Mass	100 g
Mounting	Mounting base

Notes

In the case of 4-wire sensors, you must use slot IN3 for the inputs (internally bridged).

Function

The VAA-2EA-G2-ZA0/EA0 is an AS-Interface coupling module with two inputs and two outputs. Mechanical contacts (e. g. push buttons) as well as 2-, 3- and 4-wire sensors can be connected to the inputs. The outputs are electronic outputs, which can be loaded to 24 V DC and 1 A per output.

The 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. An LED is provided for each channel, on the top of the module, to indicate the current switching status. Similarly, an LED is provided to monitor the AS-Interface communication and to indicate that the module has the address 0. If an AS-Interface communication error occurs, the outputs are de-energised.

The VAA-2EA-G2-ZA0/EA0 monitors the inputs 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-Interface flat cable and the external 24 V DC power supply. The specially designed base enables the user to connect flat cable 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.

Accessories

VBP-HH1

AS-Interface handheld

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

Connection cable module/hand-held programming device

VAZ-FK-ED-G2

AS-Interface end seal

Matching system components

U-G3FF

AS-Interface module mounting base