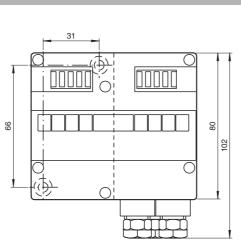
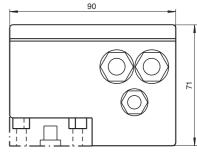
# AS-Interface analog module







# **Electrical connection**

Dimensions

### Model number

### VBA-2E-G4-U

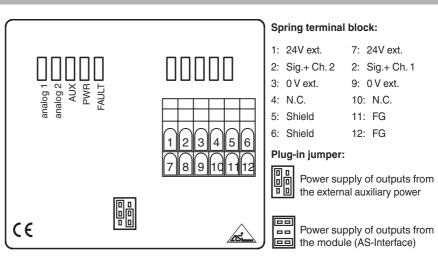
G4 module IP65 2 analog inputs (voltage)

### Features

- Protection degree IP65
- Flat or round cable connection (via standardized EEMS base, not included with delivery)
- Cable piercing method for flat cable
- Function display for bus and inputs
- Supply of inputs external or from the module, as required

<u>1 j</u> AS-Interface 2 | Signal 2+ Channel 2 AS-Interface 13. 3 × K 4 🔆 Signal 2-: μP 5 Screen × N 6 Screen 2-wire 3-wire 4-wire U-U+ 8 Signal 1 OUT OUT+ Channel 1 <<u>9</u> U-OU U+ AUX+ 10 ↔ Signal 1-່ ປ-AUXď 11 - Functional ground (FG) Plug-in jumpers 12 A

# Indicating / Operating means



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## AS-Interface analog module

# VBA-2E-G4-U

Technical data		
General specifications		
Slave type		Standard slave
AS-Interface specification		V2.1
Required master specification		≥ V2.1
UL File Number		E223772
Functional safety related parame	ters	
MTTF <sub>d</sub>		160 a at 30 °C
Indicators/operating means		
LED FAULT		error display; LED red red: communication error red flashing: peripheral error
LED PWR		AS-Interface voltage; LED green
LED ANALOG		status input signal; LED green off: not connected (peripheral error) green: $0 V \le U \le 11.5 V$ green flashing: U > 11.5 V (peripheral error)
LED AUX		ext. auxiliary voltage U <sub>AUX</sub> ; LED green
Electrical specifications		
Auxiliary voltage (output)	U <sub>AUX</sub>	24 V DC ± 15 % PELV
Rated operating voltage	U <sub>e</sub>	26.5 31.6 V from AS-Interface
Rated operating current	le	≤ 80 mA
Protection class		III
Input		
Number/Type		2 analog inputs (voltage), 0 10 V
Supply		from AS-Interface or from external auxiliary voltage as required U <sub>AUX</sub>
Current loading capacity		$\leq$ 200 mA from AS-Interface $\leq$ 500 mA from external auxiliary voltage U <sub>AUX</sub>
Input resistance		100 kΩ
Resolution		16 Bit / 1 mV
Programming instructions		
Profile		S-7.3.D
IO code		7
ID code ID2 code		3 D
Data bits (function via AS-Interface)		The transfer of the data value is based on AS-Interface Profile
		7.3. function
P0		mains power frequency filter
FU		P0=1, 50 Hz filter active P0=0, 60 Hz filter active
P1		projecting of the 2nd channel P1=1, channel 2 is projected P1=0, channel 2 is not projected
P2		Message of peripheral error P2=1, peripheral error is reported P2=0, peripheral error is not reported
P3		not used
Ambient conditions		
Ambient temperature		0 70 °C (32 158 °F)
Storage temperature		-25 85 °C (-13 185 °F)
Mechanical specifications		
Protection degree		IP65
Connection		cable piercing method or terminal compartment yellow flat cable/black flat cable or standard round cable inputs/outputs: $2 \times M16 \times 1.5$ cable glands and cage tension spring terminals, $1 \times M12 \times 1.5$ cable gland (not used)
Material		
Housing		PA 6 GF30
Mass		350 g
Mounting		DIN mounting rail
Compliance with standards and ves	directi-	
Standard conformity		
Protection degree		EN 60529:2000
Notes		

### **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.

### Function

The VBA-2E-G4-U analogue module has two analogue voltage inputs 0 V ... 10 V. The asynchronous transformation of measured values and the data transfer is accomplished in accordance with AS-Interface profile 7.3. The measured-value transmitter can be supplied from the AS-Interface or from the external auxiliary power via the black flat cable, depending on the wiring of the plug-in jumpers. The resolution of the analogue values is 16 bit. System disturbances are eliminated using a filter, programmable via P0 (50 Hz/60 Hz).

The IP65 rated G4 module is especially suitable for rough conditions. Connection to the measured-value transmitters is established by means of cable glands and cage tension spring terminals thus making the installation especially user-friendly. For pre-addressing the module, it can be plugged directly onto the adapter of the hand-held programming device VBP-HH1.

Both flat and round cables can be used for the connection of the AS-Interface transmission line and the external 24 V DC power supply. Use the U-G1FF base for the AS-Interface flat cable. The AS-Interface standardised EEMS interface, uses the cable piercing method to connect both the yellow and black flat cables.

Use the U-G1PP base for a round cable. The AS-Interface-cable as well as the external power supply may be connected within the U-G1PP base.

### Accessories

VBP-HH1-V3.0-KIT AS-Interface Handheld with accessory

### VBP-HH1-V3.0

AS-Interface Handheld

#### VAZ-G4-B Blind plug PG7

VAZ-G4-B1

Blind plug M12

### Matching system components

#### U-G1FF

AS-Interface module mounting base for connection to flat cable (AS-Interface and external auxiliary power)

### **U-G1FFA**

AS-Interface module mounting base with adressing jack for connection to flat cable (AS-Interface and external auxiliary power)

## U-G1PP

AS-Interface module mounting base for connection to round cable (AS-Interface and external auxiliary power)

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