



Model number

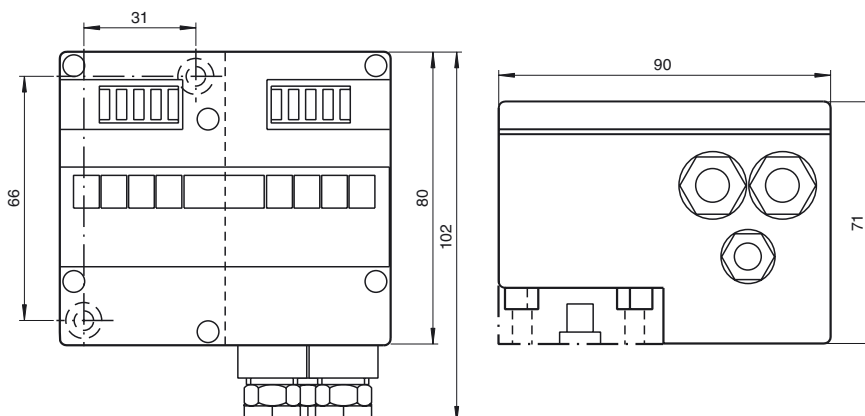
VBA-2E-G4-U

G4 module IP65
2 analog inputs (voltage)

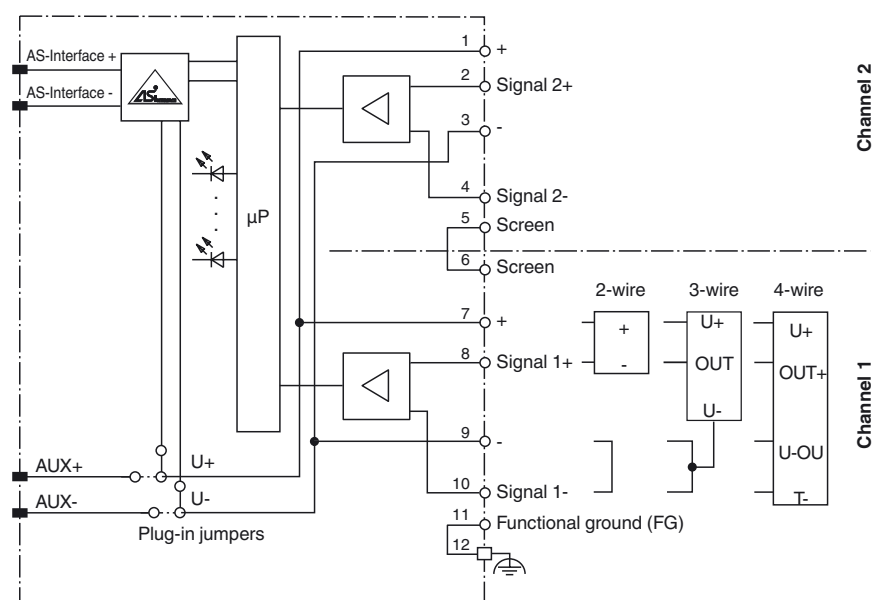
Features

- Degree of protection 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

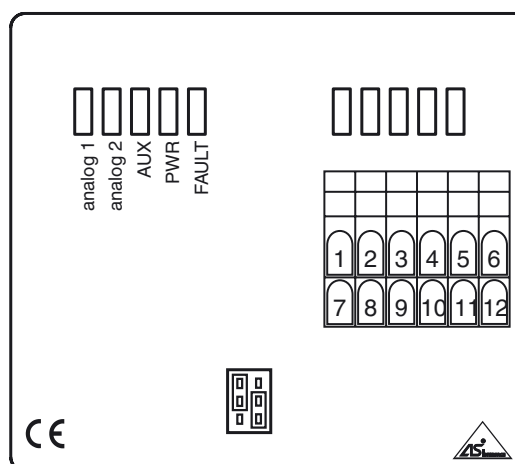
Dimensions



Electrical connection



Indicating / Operating means



Spring terminal block:

- | | |
|----------------|----------------|
| 1: 24V ext. | 7: 24V ext. |
| 2: Sig.+ Ch. 2 | 2: Sig.+ Ch. 1 |
| 3: 0 V ext. | 9: 0 V ext. |
| 4: N.C. | 10: N.C. |
| 5: Shield | 11: FG |
| 6: Shield | 12: FG |

Plug-in jumper:

Power supply of outputs from the external auxiliary power

Power supply of outputs from the module (AS-Interface)

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 parameters

MTTF _d	160 a at 30 °C
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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: $0\text{ V} \leq U \leq 11.5\text{ V}$ green flashing: $U > 11.5\text{ V}$ (peripheral error)
LED AUX	ext. auxiliary voltage U_{AUX} ; LED green

Electrical specifications

Auxiliary voltage (output)	U_{AUX}	24 V DC ± 15 % PELV
Rated operating voltage	U_e	26.5 ... 31.6 V from AS-Interface
Rated operating current	I_e	≤ 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_{AUX}
Current loading capacity	≤ 200 mA from AS-Interface ≤ 500 mA from external auxiliary voltage U_{AUX}
Input resistance	100 kΩ
Resolution	16 Bit / 1 mV

Directive conformity

Electromagnetic compatibility	
Directive 2014/30/EU	EN 62026-2:2013

Standard conformity

Degree of protection	EN 60529:2000
AS-Interface	EN 62026-2:2013

Programming instructions

Profile	S-7.3.D
IO code	7
ID code	3
ID2 code	D
Data bits (function via AS-Interface)	The transfer of the data value is based on AS-Interface Profile 7.3.

Parameter bits (programmable via AS-i) function

P0	mains power frequency filter 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

Degree of protection	IP65
Connection	cable piercing method or terminal compartment yellow flat cable/black flat cable or standard round cable inputs/outputs: 2 x M16 x 1.5 cable glands and cage tension spring terminals, 1 x M12 x 1.5 cable gland (not used)
Material	
Housing	PA 6 GF30
Mass	350 g
Mounting	DIN mounting rail

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 addressing 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)