

## AS-Interface analog module

### VBA-4E-G4-Pt100

- Degree of protection IP65
- Flat or round cable connection (via standardized EMS base, not included with delivery)
- Cable piercing method for flat cable
- Function display for bus and inputs

G4 module IP654 inputs for Pt100



## Function

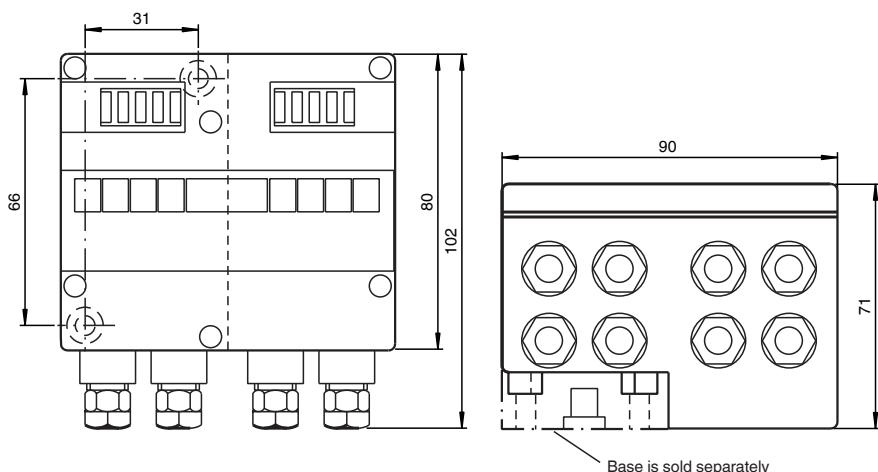
The VBA-4E-G4-Pt100 analogue module has four analogue inputs for Pt100 RTDs. The asynchronous transformation of measured values and the data transfer is accomplished in accordance with AS-Interface profile 7.3. The resolution of the analogue values is 16 bit or 0.1 °C. System disturbances are eliminated using a programmable filter (50 Hz/60 Hz).

The IP65 rated G4 module is especially suitable for use in hazardous environments. 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 preaddressing the module, it can be plugged directly onto the adapter of the hand-held programming device VBP-HH1.

Various bases are available for the module. Use the U-G1F base to connect to the ASInterface flat cable, and the U-G1P base to connect to the round cable. The bases can, at the same time, be used as IP67 rated distributor box. Moreover, they both have two connection possibilities for AS-Interface cables.

Output modules often have to be mounted in series with input modules. The outputs of the output modules are supplied externally with power. If the power is supplied via a flat cable, the power cable has to be mounted in the base of the input module. The U-G1FF base should be used in this case. The VBA-4E-G4-Pt100 then uses the AS-Interface cable instead of the power cable.

## Dimensions



## Technical Data

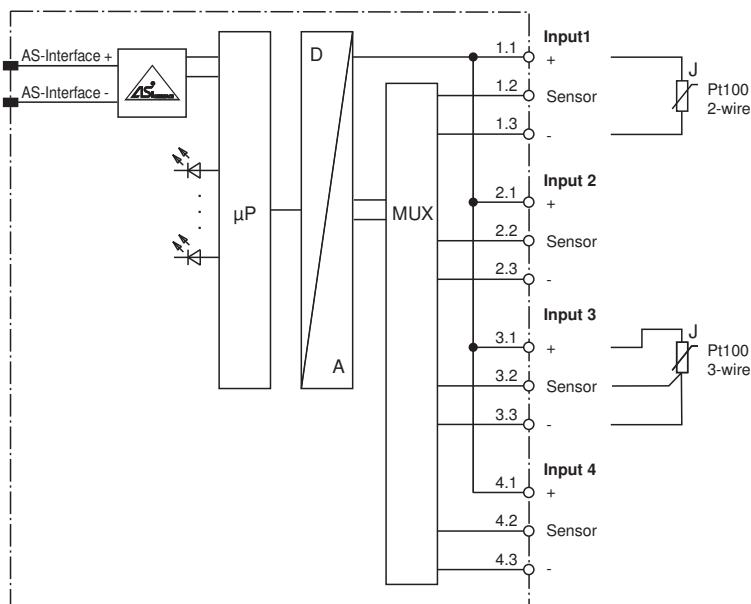
### General specifications

Node type	Standard node
AS-Interface specification	V2.1
Required gateway specification	≥ V2.1
UL File Number	E223772
Functional safety related parameters	
MTTF <sub>d</sub>	150 a at 30 °C

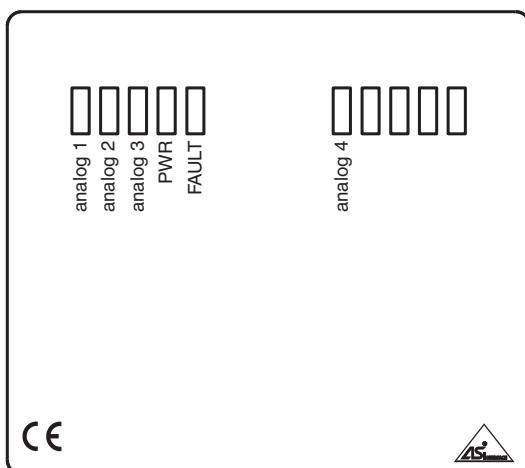
## Technical Data

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 of input signal; LED green off: not connected (peripheral error) green: signal within measurement range green flashing: signal outside of measurement range (peripheral error)			
Electrical specifications				
Rated operating voltage	$U_e$	26.5 ... 31.6 V from AS-Interface		
Rated operating current	$I_e$	$\leq 80$ mA		
Protection class	III			
Input				
Number/Type	4 inputs for Pt100, 2- or 3-wire connection			
Supply	from AS-Interface			
Resolution	16 Bit / 0.1 °C			
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.E			
IO code	7			
ID code	3			
ID2 code	E			
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/P2	Communication of the peripheral fault on measuring channels 1 to 4: [*PD-Z02313A*]			
P3	configuration Pt100 P3=1, 2-wire connection P3=0, 3-wire connection			
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 or standard round cable inputs: M12 x 1.5 cable gland and cage tension spring terminals			
Material				
Housing	PA 6 GF30			
Mass	350 g			
Mounting	DIN mounting rail			

## Connection



## Assembly



## Connection

Release date: 2021-09-28 Date of issue: 2021-09-28 Filename: 112493\_eng.pdf

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.

## Matching System Components

	<b>U-G1F</b>	AS-Interface module mounting base for connection to flat cable (AS-Interface)
	<b>U-G1FA</b>	AS-Interface module mounting base with addressing jack for connection to flat cable (AS-Interface)
	<b>U-G1P</b>	AS-Interface module mounting base for connection to round cable (AS-Interface)

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

## Accessories

	<b>VBP-HH1-V3.0-KIT</b>	AS-Interface Handheld with accessory
	<b>VAZ-G4-B1</b>	Blind plug M12