Model Number

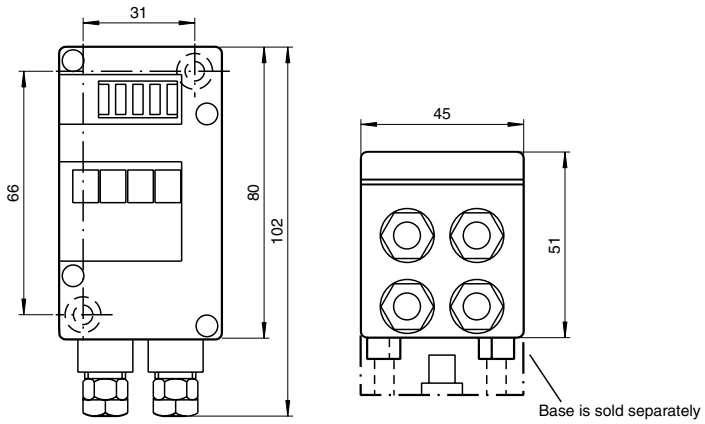
VAA-4E-G4-N

G4 module IP67
4 inputs (NAMUR)

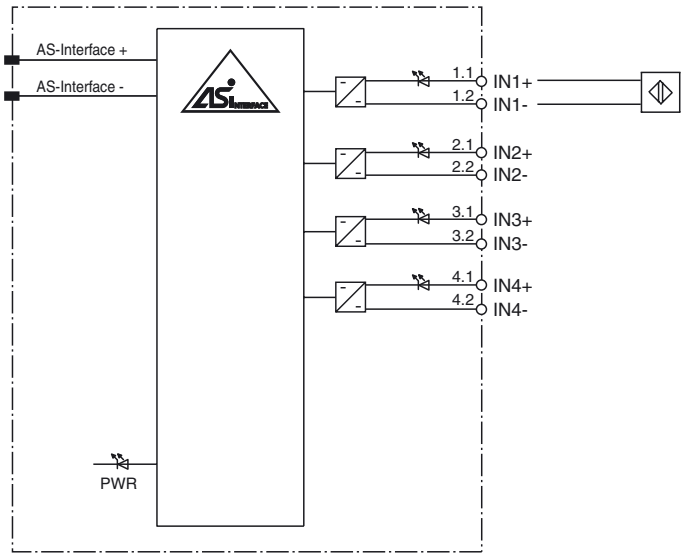
Features

- AS-Interface certificate
- Protection degree IP67
- Flat or round cable connection (via standardised EMS base, not included in the delivery package)
- Cable piercing method for flat cable
- Inputs in accordance with IEC 60947-5-6 (NAMUR, DIN 19234)
- Function display for bus and inputs
- Lead monitoring of inputs that can be switched off selectively by channel

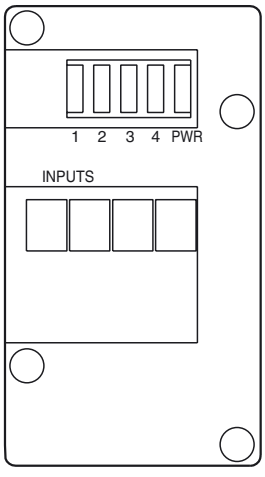
Dimensions



Electrical connection



Indicating / Operating means



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Technical data

General specifications				
Slave type		Standard slave		
AS-Interface specification		V2.0		
Required master specification		≥ V2.0		
UL File Number		E87056		
Indicators/operating means				
LED PWR		AS-Interface voltage; LED green		
LED IN		4 dual LED yellow/red yellow: switching state (input) red: lead breakage red and yellow: line short-circuit		
Electrical specifications				
Protection class		III		
Rated operational voltage	U_e	26.5 ... 31.6 V from AS-Interface		
Rated operational current	I_e	≤ 40 mA		
Input				
Number/Type		4 Inputs for NAMUR sensors		
Supply		from AS-Interface		
Voltage		8 V		
Switching point		OUT ≥ 1.8 mA ON ≤ 1.5 mA		
Lead monitoring		lead breakage: ≤ 0.15 mA lead short-circuit: ≥ 6 mA		
Programming instructions				
Profile		S-0.F		
IO code		0		
ID code		F		
Data bits (function via AS-Interface)			**input**	**output**
D0			IN1	-
D1			IN2	-
D2			IN3	-
D3			IN4	-
Parameter bits (programmable via AS-i)		**function**		
P0		lead monitoring IN1 P0 = 1 (basic setting), monitoring deactivated P0 = 0, monitoring activated		
P1		lead monitoring IN2 P1 = 1 (basic setting), monitoring deactivated P1 = 0, monitoring activated		
P2		lead monitoring IN3 P2 = 1 (basic setting), monitoring deactivated P2 = 0, monitoring activated		
P3		lead monitoring IN4 P3 = 1 (basic setting), monitoring deactivated P3 = 0, monitoring activated		
Ambient conditions				
Ambient temperature		-25 ... 60 °C (248 ... 333 K)		
Storage temperature		-25 ... 85 °C (248 ... 358 K)		
Mechanical specifications				
Protection degree		IP67		
Connection		cable piercing method or terminal compartment flat cable yellow or standard round cable inputs: screwed connection M12 x 1,5 and cage-clamp terminals		
Mass		180 g		
Mounting		DIN rail or screw mounting		
Compliance with standards and directives				
Standard conformity				
Protection degree		EN 60529		

Function

The VAA-4E-G4-N is an AS-Interface coupling module with 4 inputs for sensors per DIN 19234 (NAMUR), which can be monitored for lead breakage and short circuit (see note).
The IP67 rated G4 module is especially suitable for rough conditions. Sensors attach to cable glands and cage tension spring terminals. 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. Use the U-G1F or U-G1FF base for AS-Interface flat cables. The connection to the AS-Interface cable is established via the standardised EMS interface (cable piercing method). The U-G1F base can also be used as IP67 AS-Interface distribution box. Use the U-G1FF base, when modules with outputs are mounted in series with the module. The flat cable for external power supply can be placed in this base, since the module does not access the supply line.
Use the U-G1P or U-G1PP base for round cables. These bases have the same functionality as the U-G1F or the U-G1FF bases.

Note:
Lead breakage/short circuit monitoring is activated or deactivated per channel, by means of the parameter bits P0 ... P3. All error conditions are linked by an OR-logic-operation. In a failure case, the AS-Interface master indicates an error and the module disconnects from the AS-Interface, while the watchdog is activated.

Accessories

VBP-HH1
AS-Interface handheld

VAZ-G4-B
Blind plug

Matching system components

U-G1F
AS-Interface module mounting base

U-G1FA
AS-Interface module mounting base

U-G1P
AS-Interface module mounting base

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