



Model number

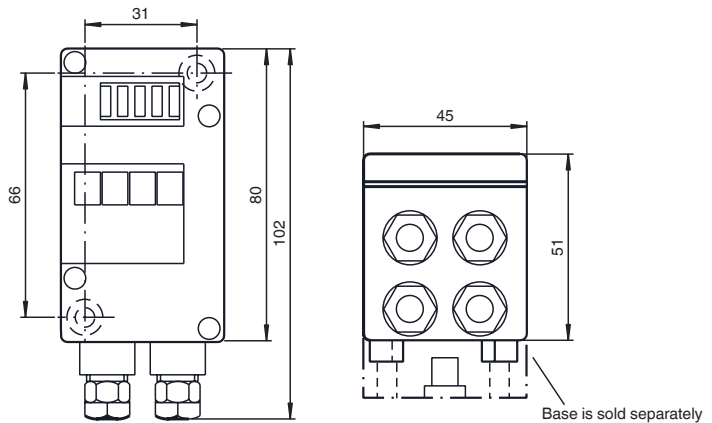
VAN-G4-PE

AS-Interface power extender

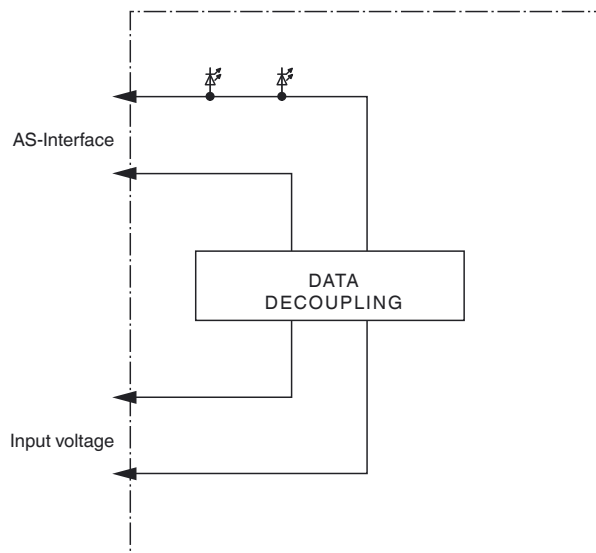
Features

- Up to 2.8 A output load
- Multiple AS-Interface networks can be operated through a single power stage
- G4 housing with screwed connection
- Protection degree IP67
- LEDs for display of AS-Interface voltage

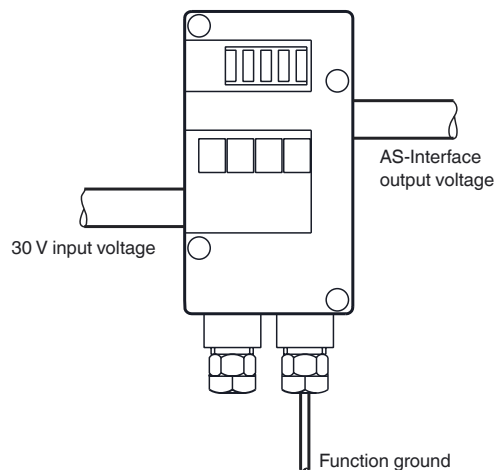
Dimensions



Electrical connection



Indicating / Operating means



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Technical data**Functional safety related parameters**

MTTF _d	350 a at 30 °C
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Indicators/operating means

LED U AS-i	AS-Interface voltage on the output is displayed in two stages: AS-Interface voltage > 28 V; LED green AS-Interface voltage > 26 V; LED green
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Electrical specifications

Insulation voltage	U _i	≥ 500 V
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Rated operating voltage	U _e	30 V DC
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Rated operating current	I _e	2.8 A at 30 V
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Input

Line fault detection	3 A self resetting fuse,
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Output

Voltage	29.5 ... 31.6 V DC
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Ambient conditions

Ambient temperature	0 ... 70 °C (32 ... 158 °F)
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Storage temperature	-25 ... 85 °C (-13 ... 185 °F)
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Mechanical specifications

Protection degree	IP67 according to EN 60529
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Connection	standard AS-Interface EEMS base, i. e. cable piercing method screwed connection M12 x 1,5 and cage-clamp terminals
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Material

Housing	PA 6 GF30
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Mass	120 g
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Function

The maximum cable length in an AS-Interface line is 100 m. There is often a great distance to the modules in the field, when the power supply unit is located in the cabinet. When an AS-Interface power extender is used, the distance between the power supply unit and the power extender is not included in the calculation of the bus length. Instead of an AS-Interface power supply unit, a standard power supply unit with an output voltage of 30 V in accordance with AS-Interface specifications can be used. The AS-Interface master and slaves are only usable on the side of the power extender opposite to the power supply unit (AS-Interface output).

The AS-Interface power extender is located in an IP67 rated field housing. Small decentralized AS-Interface networks can easily be arranged together with IP67 rated AS-Interface gateways.

Depending on the lead resistance and the current, a voltage drop between the power supply unit and the AS-Interface power extender occurs. The AS-Interface power extender indicates the AS-Interface voltage on the output, in two stages (see technical data) by means of two LEDs. It has to be ensured that actuators are supplied with the permissible voltage tolerance of 24 V +10%/-15%, as is the case with all AS-Interface circuits. A rule-of-thumb formula for the AS-Interface cable length relative to the AS-Interface voltage is:
AS-Interface voltage > 28 V: approx. 80 m cable length,
AS-Interface voltage > 26 V: approx. 60 m cable length.

Note:

The AS-Interface power extender contains a data decoupling for a maximum current of 2.8 A at 30 V AS-Interface voltage.

Accessories**VAZ-G4-B**

Blind plug PG7

VAR-G4F

AS-Interface Advanced Repeater

VAZ-G4-B1

Blind plug M12

AS-Interface Power Calculator

AS-Interface Power supply and network checking utility

Matching system components**U-G1FF**

AS-Interface module mounting base 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)