



AS-Interface pneumatic module VAA-4E2A-G1-ZE/PEXT-S

- AS-Interface certificate
- Degree of protection IP65
- Flat or round cable connection (via standardized EEMS base, not included with delivery)
- Cable piercing method for flat cable
- Inputs for 2- and 3-wire sensors
- Function display for bus, inputs and outputs
- Direct connection of pneumatic cylinders
- External power supply necessary

Pneumatic module4 inputs/2 pneumatic outputs





Function

The VAA-4E2A-G1-ZE/PEXT-S module has four inputs for the connection of 2 or 3 wire sensors and two pneumatic outputs with a high air throughput for direct control of pneumatic drives in the field. The module houses two separate 3/2 port directional control valves. The module as well as the sensors connected are supplied with energy by the bus line. For faster switching action, the valves can be supplied by external power. By means of the M12 x 2 round connectors, the sensors are connected up to the module; standard hose plug connectors (LEGRIS LF 3000, 8 mm) are used to attach the outputs to the pneumatic drive.

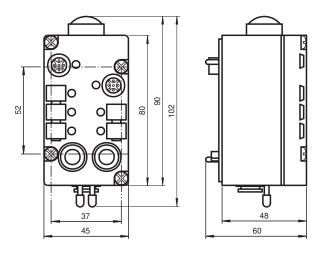
Various base units are available for the module. If the external energy supply of the valves is provided by a flat cable (EEMS), the connection of the AS-Interface is rendered by means of U-G1FF base (or U-G1PP). If the external power supply is provided by a round cable, the connection is established to the U-G1PP base.

Program the slave address prior to the initial operation (default setting 0).

Medium: filtered (5 μm), oiled or unoiled compressed air (2 to 8 bar).

Dangerous electric voltage may lead to electric shock and burns. De-energise the plant and the device prior to any work.

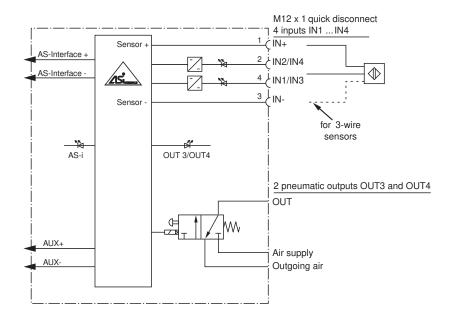
Dimensions



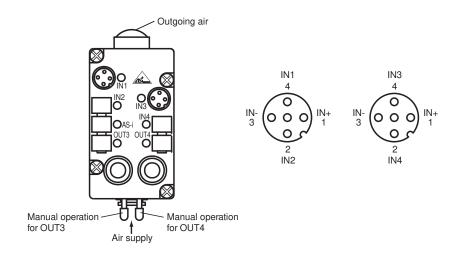
Technical Data

| General specifications | |
|----------------------------|--|
| Node type | Standard node |
| Indicators/operating means | |
| LED AS-i | AS-Interface voltage; LED green |
| LED IN | switching state (input); 4 LED yellow |
| LED OUT | Switching state (output); 2 LED yellow |
| Electrical specifications | |

| Rated operating voltage | echnical Data | | |
|--|---------------------------------------|----------------|---|
| Rated operating current | ated operating voltage | U _e | |
| Input Number/Type | ated operating current | l _e | ≤ 45 mA (without sensors) |
| Number/Type 2x 2 inputs for 2- or 3-wire sensors (PNP), DC Supply from AS-Interface Current loading capacity ≤ 100 MA, short-circuit protected Switching point OFF: ≤ 1.5 mA ON ≥5 mA, ≥ 10 V Output Number/Type 2 pneumatic outputs with separated 3/2-way valves Pneumatic output Venting guide Sinter filter Compressed air 2 8 bar, filtered (5 μm), oiled or unoiled compressed air Air throughput 550 N/min at 6/0 bar 350 N/ | *** | | ≤ 200 mA (complete) |
| Supply from AS-Interface Current Ioading capacity ≤ 100 mA, short-circuit protected Switching point OFF: ≤ 1.5 mA on N: ≥ 5 mA, ≥ 10 V Output NumberType NumberType 2 pneumatic outputs with separated 3/2-way valves Pneumatic output Venting guide Venting guide Sinter filter Compressed air 2 8 bar, filtered (5 μm), oiled or unoiled compressed air Air throughput 550 Nl/min at 6/0 bar with at 6 | | | Ov 2 inputs for 2 or 2 wire concers (DND) DC |
| Current loading capacity ≤ 100 mA, short-circuit protected Switching point OFF: ≤ 1.5 mA ON: ≥ 5 mA, ≥ 10 V Output Verting guide Verting guide Sinter filter Compressed air 2 8 bar, filtered (5 μm), oiled or unoiled compressed air Air throughput 550 Nl/min at 670 bar 350 Nl/min at 670 bar NI = Standard litre Valve cross-section 5 mm Standard conformity EN 60529:2000 Degree of protection EN 60529:2000 AS-Interface EN 60529:2013 Programming instructions F Profile S-7.F IO code F ID1 code F ID2 code F Data bits (function via AS-Interface) InputOutput D0 IN1 - D1 IN2 - D2 IN3 OUT3 D3 IN4 OUT4 Parameter bits (programmable via AS-I) function P1 not used P2 not used P3 not used P4 not used P | • • | | |
| Switching point OFF: ≤ 1.5 mA ON: ≥ 5 mA, ≥ 10 V Output Number/Type 2 pneumatic outputs with separated 3/2-way valves Pneumatic output Venting guide Sinter filter Compressed air 2 8 bar, filtered (5 μm), oiled or unoiled compressed air Air throughput 550 Nl/min at 6/0 bar 350 Nl/ | | | |
| ON: ≥ 5 mA, ≥ 10 V Output NumberType 2 pneumatic outputs with separated 3/2-way valves Pneumatic output Venting guide Sinter filter Compressed air 2 8 bar, filtered (5 μm), oiled or unoiled compressed air Air throughput 550 Nl/min at 6/5 bar Nl = 150 Nl/min at 6/5 bar Nl = 1 | | | |
| Number/Type 2 pneumatic outputs with separated 3/2-way valves Pneumatic output Venting guide Sinter filter Compressed air 2 8 bar, filtered (5 μm), oiled or unoiled compressed air Air throughput 550 Nl/min at 6/0 bar 300 Nl/min at 6/6 bar Nl Standard litre Valve cross-section 5 mm Standard conformity Standard conformity Degree of protection EN 60529:2000 AS-Interface EN 60529:2000 AS-Interface EN 602026-2:2013 Programming instructions 7 Profile S-7,F 10 code 7 1D1 code F 1D2 code F Data bits (function via AS-Interface) InputOutput D0 IN1 - D1 IN2 - D2 IN3 OUT3 D3 IN4 OUT4 Parameter bits (programmable via AS-i) function P0 not used P1 not used P2 not used P3 not used P4 not used | • | | |
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| Air throughput | | | |
| Sas Ni/min at 6/5 bar Ni = Standard litre | • | | , , , |
| Standard conformity Degree of protection EN 60529:2000 | r throughput | | 350 NI/min at 6/5 bar |
| Degree of protection | alve cross-section | | 5 mm |
| AS-Interface EN 62026-2:2013 Programming instructions S-7.F Profile S-7.F IO code 7 ID code F ID1 code F ID2 code F Data bits (function via AS-Interface) InputOutput D0 IN1 - D1 IN2 - D2 IN3 OUT3 D3 IN4 OUT4 Parameter bits (programmable via AS-i) function P0 not used P1 not used P2 not used P3 not used Ambient conditions Ambient temperature 0 55 °C (32 131 °F) Storage temperature 0 55 °C (32 185 °F) Mechanical specifications Degree of protection IP65 according to EN 60529 Connection cable piercing methos or terminals flat cable or standard round cable inputs: M12 x 1 quick disconnect | ndard conformity | | |
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| Data bits (function via AS-Interface) | code | | F |
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| flat cable or standard round cable inputs: M12 x 1 quick disconnect | egree of protection | | IP65 according to EN 60529 |
| Surpaise plag in nood do millotter (a min) | onnection | | flat cable or standard round cable |
| Mass approx. 200 g | ass | | approx. 200 g |
| Mounting DIN rail or screw mounting | ounting | | DIN rail or screw mounting |



Assembly



Examples for functions of the AS-Interface Airbox

