



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 module 4 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.

Note:

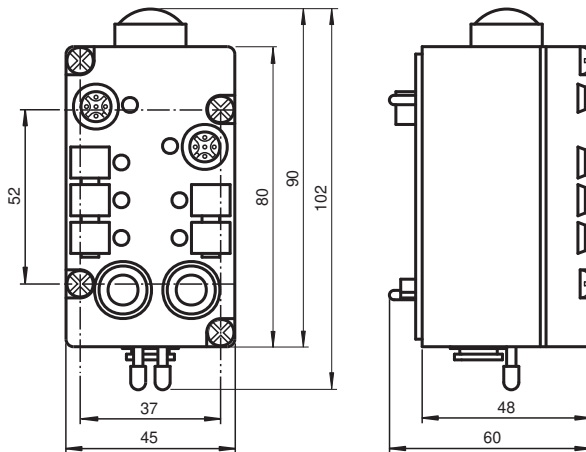
Program the slave address prior to the initial operation (default setting 0).

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

Warning:

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	

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Technical Data

Rated operating voltage	U_e	26.5 ... 31.6 V from AS-Interface 24 V DC PELV according to IEC 364-4-41 from external auxiliary voltage U_{AUX}
Rated operating current	I_e	≤ 45 mA (without sensors) ≤ 200 mA (complete)
Input		
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 unoled compressed air
Air throughput		550 NI/min at 6/0 bar 350 NI/min at 6/5 bar NI = Standard litre
Valve cross-section		5 mm
Standard conformity		
Degree of protection		EN 60529:2000
AS-Interface		EN 62026-2:2013
Programming instructions		
Profile		S-7.F
IO code		7
ID code		F
ID1 code		F
ID2 code		F
Data bits (function via AS-Interface)		Input Output
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		-20 ... 85 °C (-4 ... 185 °F)
Mechanical specifications		
Degree of protection		IP65 according to EN 60529
Connection		cable piercing method or terminals flat cable or standard round cable inputs: M12 x 1 quick disconnect outputs: plug-in hose connector (8 mm)
Mass		approx. 200 g
Mounting		DIN rail or screw mounting

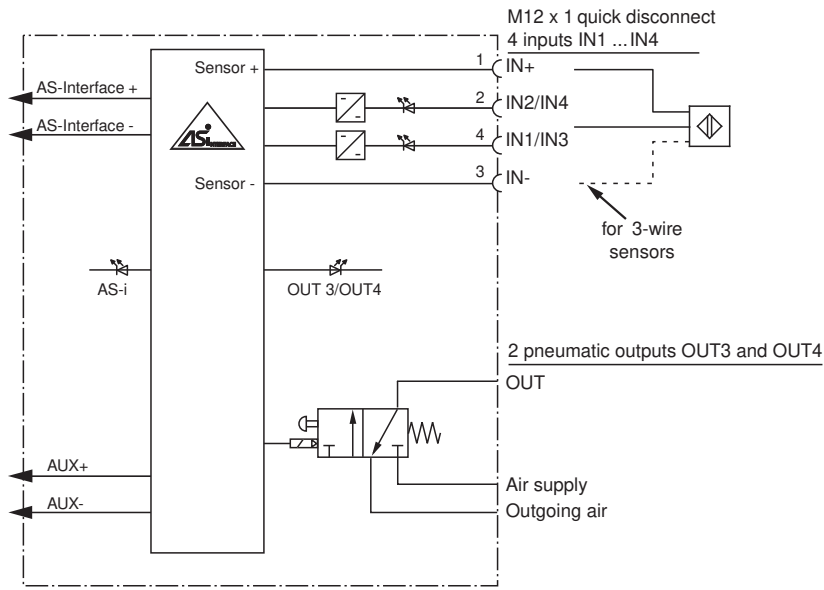
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

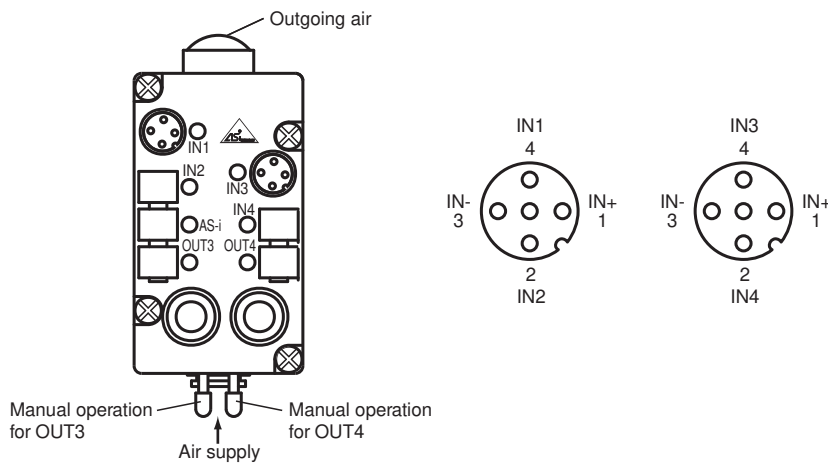
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PEPPERL+FUCHS

Connection



Assembly



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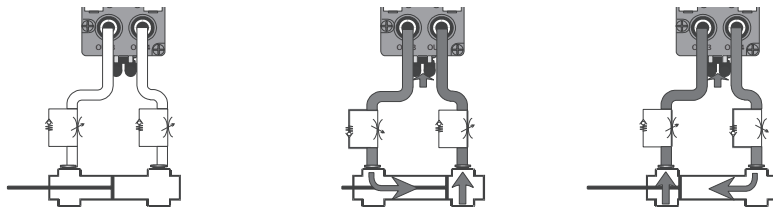
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Application

Examples for functions of the AS-Interface Airbox



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