

AS-Interface sensor/actuator module

VBA-2E2A-G10-Z/E2J-1M-V15-G



- Ultra-compact enclosure
- Gold-plated and machined contacts
- One piece housing
- Degree of protection IP68 / IP69K
- Direct connection via cable outlet

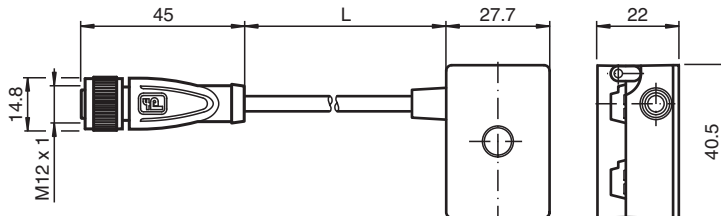
G10 ultra compact module 2 inputs, 2 outputs



Function

The AS-Interface G10 ultra-compact module is suitable for the remote connection of mech. switches and actuators within very limited space. The one-piece enclosure has the protection degree IP68/IP69K. The AS-Interface flat cable is contacted via pointy, gold-plated contact pins. The exact location of the pins on the lead is ensured by the swivel mechanism. Mech. switches and actuators are connected to the module via M12 sockets. Multiple LEDs indicate the current status of the AS-Interface strand and are used for diagnosis

Dimensions



Technical Data

General specifications

Node type	A/B node
AS-Interface specification	V3.0
Required gateway specification	V3.0
UL File Number	E223772 "For use in NFPA 79 Applications only"
MTBF	379 a

Indicators/operating means

LED FAULT	error display; LED red red: communication error or address is 0 red flashing: overload
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical Data

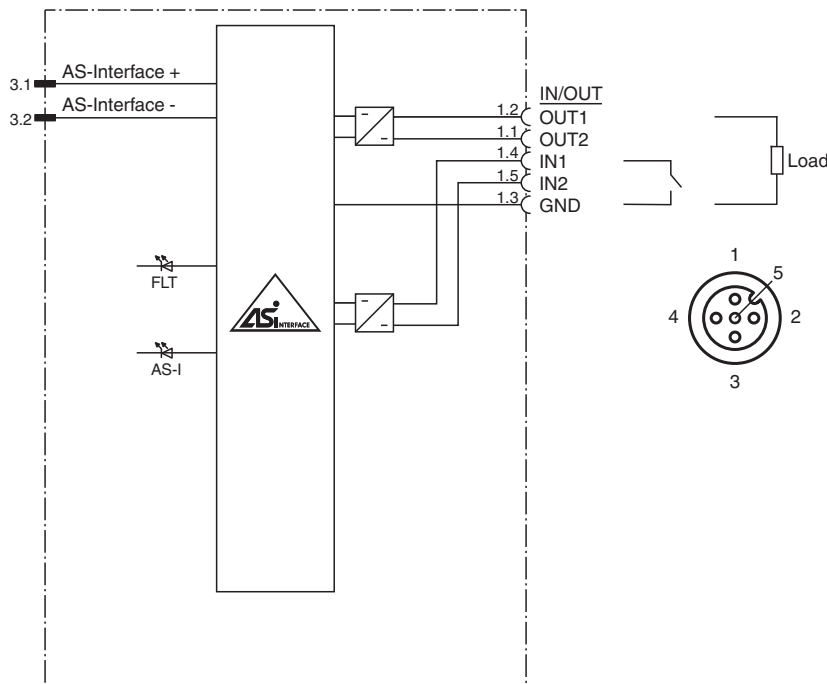
LED PWR		AS-Interface voltage; green LED green: voltage OK flashing green: address 0
Electrical specifications		
Rated operating voltage	U_e	18.5 ... 31.6 V from AS-Interface
Rated operating current	I_e	≤ 40 mA (without inputs/outputs) / max. 200 mA
Protection class		III
Surge protection		U_e : Over voltage category III, safe isolated power supplies (PELV)
Input		
Number/Type		2 inputs for mechanical contacts
Supply		from AS-Interface
Voltage		≤ U_e
Input current		≤ 8 mA (limited internally)
Switching point		
0 (unattenuated)		≤ 0.5 mA
1 (attenuated)		≥ 2 mA
Signal delay		< 1 ms (input/AS-Interface)
Output		
Number/Type		2 electronic outputs, PNP, overload and short-circuit proof
Supply		from AS-Interface
Voltage		≥ (U_e - 9.0 V)
Current loading capacity		≤ 150 mA Total current , overload and short-circuit protected
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 62026-2:2013
Standard conformity		
Degree of protection		EN 60529:2000
Fieldbus standard		EN 62026-2:2013
Emitted interference		EN 61000-6-4:2011
AS-Interface		EN 62026-2:2013
Noise immunity		EN 61000-6-2:2005 , EN 62026-2:2013
Programming instructions		
Profile		S-7.A.7
IO code		7
ID code		A
ID1 code		7
ID2 code		7
Data bits (function via AS-Interface)		InputOutput
D0		IN1 OUT1
D1		IN2 OUT2
D2		IN1 OUT1
D3		IN2 OUT2
Parameter bits (programmable via AS-i)		function
P0		communication monitoring P0 = 1 (default settings), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition
P1		Input filter P1 = 0 input filter on, pulse suppression ≤ 2 ms P1 = 1 input filter off (default settings)
P2		Synchronous mode P2 = 0 synchronous mode on P2 = 1 synchronous mode off (default settings)
P3		not used
Approvals and certificates		
UL approval		cULus Listed, Type 1 enclosure

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Technical Data

Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Shock and impact resistance	30 g, 11 ms in 6 spatial directions 3 shocks 10 g, 16 ms in 6 spatial directions 1000 shocks
Vibration resistance	0.75 mm 10 ... 57 Hz , 5 g 57 ... 150 Hz, 20 cycles
Mechanical specifications	
Degree of protection	housing: IP67 IP67 / IP68 / IP69K with flat cable VAZ-FK-S* M12 socket: IP67/IP68/IP69K
Connection	AS-Interface: AS-Interface flat cable In-/outputs & matching connector: M12 connector, 5-pin, A-coded, acc. to IEC 61076-2-101:2012
Material	
Contacts	CuSn / Au
Housing	PBT PC
Body	PUR, black
Cable	PUR
Mounting screw	Stainless steel 1.4305 / AISI 303
Cable	
Sheath diameter	Ø4.8 mm
Color	black
Cores	5 x 0.34 mm ²
Length	L 1 m
Mass	84 g
Tightening torque, fastening screws	1.65 Nm
Tightening torque, cable gland	0.4 Nm

Connection



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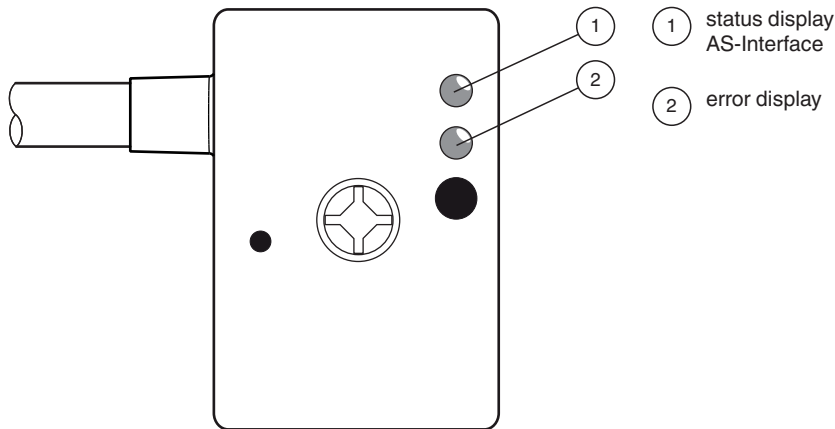
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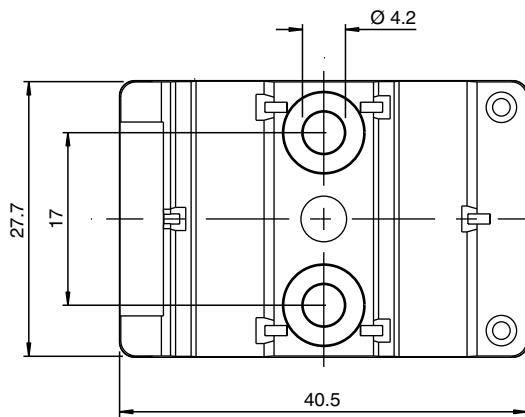
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Assembly



Mounting




You may screw the device onto a level mounting surface using two M4 attachment screws. The attachment screws are not included.

Connection

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.

Accessories

	<p>VAZ-PK-FK-0,2M-V1-W</p>	<p>Adapter cable G10 module/hand-held programming device</p>
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