

# AS-Interface actuator module

## VBA-2A-G10-E2L-1M-2V1-W



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

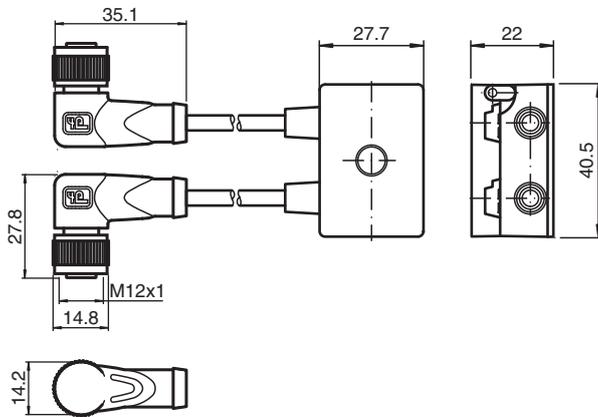
G10 ultra compact module, 2 outputs



### Function

The AS-Interface G10 ultra-compact output-module is suitable for the remote connection of 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. Sensors and actuators are connected to the module via M12 sockets. Multiple LEDs indicate the current status of the AS-Interface strand and the outputs and are used for diagnosis. The outputs of the ultra-compact module are powered from UAUX.

### Dimensions



### Technical Data

#### General specifications

Node type	A/B node
AS-Interface specification	V3.0
Required gateway specification	≥ V2.1
Profile	S-8.A.E
IO code	8
ID code	A
ID1 code	7
ID2 code	E
UL File Number	E223772 "For use in NFPA 79 Applications only"

#### Indicators/operating means

Release date: 2023-03-28 Date of issue: 2023-03-28 Filename: 244950\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

## Technical Data

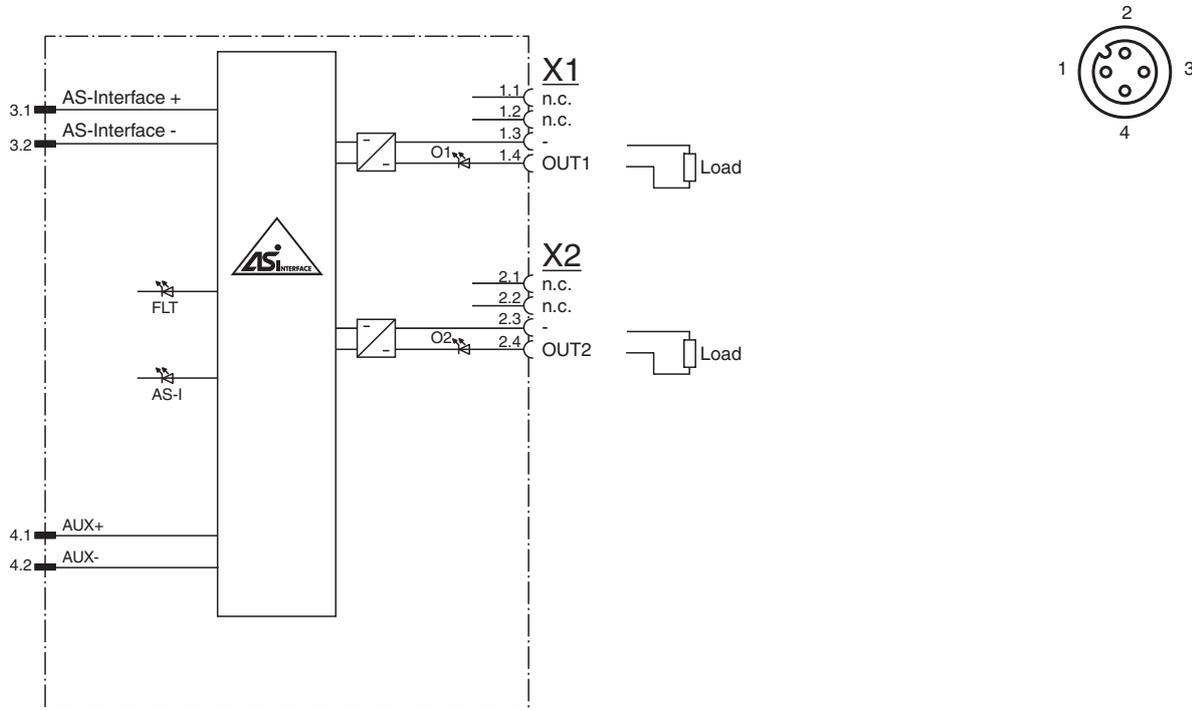
LED FAULT		error display; LED red red: communication error or address is 0 red flashing: overload of sensor power supply or overload of outputs or external auxiliary voltage $U_{AUX}$ missing
LED AS-i		AS-Interface voltage; LED green
LED OUT		Switching state (output); 2 LED yellow
<b>Electrical specifications</b>		
Auxiliary voltage	$U_{AUX}$	20 ... 30 V DC PELV
Rated operating voltage	$U_e$	18.5 ... 31.6 V from AS-Interface
Rated operating current	$I_e$	≤ 40 mA / max. 60 mA
Protection class		III
Surge protection		$U_{AUX}$ , $U_{in}$ : Over voltage category III, safe isolated power supplies (PELV)
<b>Output</b>		
Number/Type		2 electronic outputs, PNP, overload and short-circuit proof
Supply		from external auxiliary voltage $U_{AUX}$
Voltage		≥ ( $U_{AUX} - 0.5$ V)
Current		2 A per output, $T_B \leq 40^\circ\text{C}$ : 4 A total, $40^\circ\text{C} < T_B \leq 70^\circ\text{C}$ : 3 A total, overload and short-circuit protected
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 62026-2:2013
<b>Standard conformity</b>		
Degree of protection		EN 60529:2000
Fieldbus standard		EN 62026-2:2013
Electrical safety		IEC 61140:2004
Emitted interference		EN 61000-6-4:2007
AS-Interface		EN 62026-2:2013
Noise immunity		EN 61000-6-2:2005 EN 62026-2:2013
<b>Approvals and certificates</b>		
UL approval		cULus Listed, Type 1 enclosure
Maximum permissible ambient temperature		max. 65 °C (max. 149 °F)
<b>Ambient conditions</b>		
Ambient temperature		-40 ... 70 °C (-40 ... 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
<b>Mechanical specifications</b>		
Degree of protection		housing: IP67 IP67 / IP68 / IP69K with flat cable VAZ-FK-S-* M12 socket: IP67/IP68/IP69K
Connection		AS-Interface/ $U_{AUX}$ : AS-Interface flat cable Outputs & matching connector: X1 & X2, M12 plug, 4-pin, A-coded, in accordance with 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		Ø4,3 mm
Color		black
Cores		3 x 0.34 mm <sup>2</sup>
Length	L	1 m
Mass		100 g

Release date: 2023-03-28 Date of issue: 2023-03-28 Filename: 244950\_eng.pdf

## Technical Data

Tightening torque, fastening screws	1.65 Nm
Tightening torque, cable gland	0.4 Nm

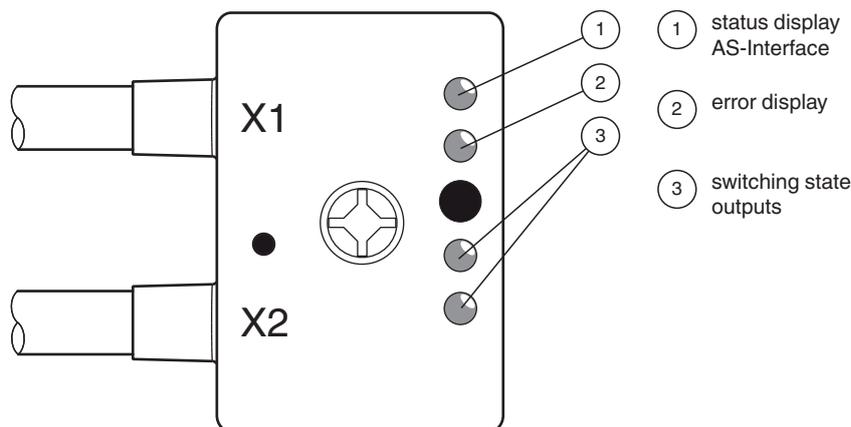
## Connection



## Connection

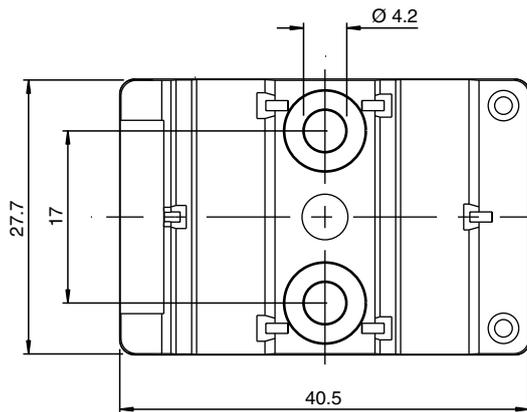
Do not connect inputs and outputs, which are supplied via the module from AS-interface or via auxiliary power, with power supply and signal circuits with external potentials.

## Assembly



Release date: 2023-03-28 Date of issue: 2023-03-28 Filename: 244950\_eng.pdf

## Mounting



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

## Programming

**Data bits**  
(function via AS-Interface)

Data bit	Input	Output
D0	-	OUT1
D1	-	OUT2
D2	-	-
D3	-	-

**Parameter bits**  
(programmable via AS-Interface)

Parameter bit	Function
P0	Communication monitoring P0=0 monitoring off, the outputs maintain the status if communication fails P0=1 monitoring on, if communication fails, the outputs are deenergised, default setting
P1	not used
P2	Lead breakage outputs P2=0 lead breakage on P2=1 lead breakage off, default setting
P3	not used

## Accessories

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