

AS-Interface

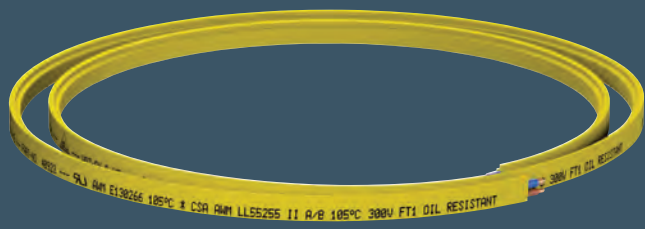
Simple and Efficient Plant Wiring

Proven millions of times, the AS-Interface enables especially fast and efficient connection of automation components. The simplified control system, topology-free optimized cabling and improved diagnostic capabilities result in significantly higher productivity.



AS-Interface Flat Cable

The flat cable for AS-Interface and AUX is ideal for easy, fast wiring. All end devices in automation technology can be connected especially efficiently using piercing technology.



Your Benefits at a Glance

- Complete solutions consisting of AS-Interface components and corresponding sensors from Pepperl+Fuchs
- Easy installation and operation: one flat cable for voltage supply and data transfer
- Impressive flexibility through topology-free optimized cabling
- Safe and error-free mounting thanks to piercing technology
- Flexible integration of safety components up to SIL 3/PL e without network changes
- Investment security through an established and manufacturer-independent system
- Cost-effective connection of all I/O signals



Typical Applications

- Efficient wiring of complex conveyor systems
- Subsequent integration of sensors and actuators into existing systems
- End-to-end wiring of large plants in the process industry
- Flexible use of safety components in the automotive industry

Technical Features

- Interoperable system with connection to almost all controllers
- Can be extended at any point on the flat cable
- Automatic addressing for module replacement
- Reverse polarity-protected flat cable design
- Extensive diagnostic function
- Transmission of secure and unsecure signals on one line
- Standardized wiring in mechanical engineering with integrated safety function
- Cost-effective, compact wiring in packaging technology

Master and Gateways

Pepperl+Fuchs offers suitable gateways for all standard fieldbus systems: PROFINET, Ethernet/IP, EtherCAT, PROFIBUS, DeviceNet, CC-Link, etc. This enables data to be transferred to the higher-level controller simply and in a standardized way. In addition, gateways with an integrated safety monitor are available, which reliably monitor both AS-Interface segments.

Power Supplies

Each AS-Interface segment requires a power supply. These include data decoupling for interference-free communication on the AS-Interface secondary side. Alternatively, double masters with integrated data decoupling are available, which can be operated with a single power supply.

AS-Interface

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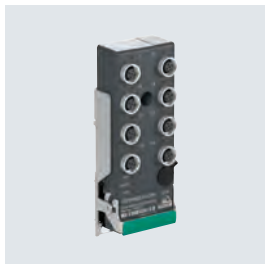
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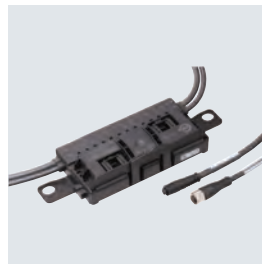
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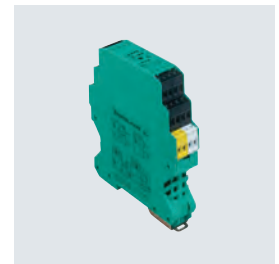
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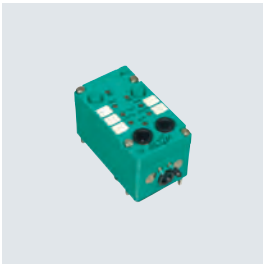
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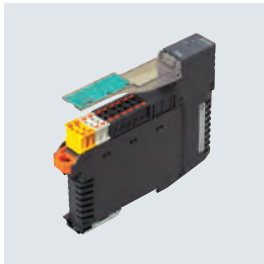
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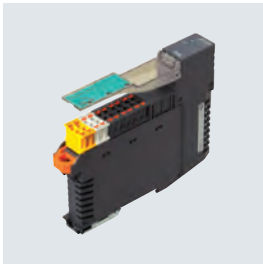
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K20 Series – Gateway



Standard Technical Data

Design	K20
Installation conditions	Switch cabinet mounting
Operating voltage (min)	20 V
Operating voltage (max)	31.6 V
Degree of protection	IP20
Housing height H	120 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Number of masters	Interface	Data decoupling	Diagnostic interface	Integrated control function	Programming interface	Length L	Width W	EAC
VBG-CCL-K20-D-BV	1	CC-Link					83	85	■
VBG-DN-K20-D	1	DeviceNet		RS-232	Optional		76	85	■
VBG-DN-K20-DMD	1	DeviceNet		RS-232	Optional		76	85	■
VBG-DN-K20-DMD-BV	2	DeviceNet			Optional		76	85	
VBG-ENX-K20-D	1	EtherNet/IP, MODBUS TCP		RS-232	Optional		76	85	■
VBG-ENX-K20-D-EV24	1	EtherNet/IP, MODBUS-TCP	Yes	Ethernet	Optional	Ethernet	83	85	
VBG-ENX-K20-DMD	2	EtherNet/IP, MODBUS-TCP		RS-232	Optional		76	85	■
VBG-ENX-K20-DMD-EV	2	EtherNet/IP, MODBUS-TCP	Yes	RS-232	Optional		76	85	
VBG-MOD-K20-D	1	MODBUS RTU		RS-232	Optional		76	75	
VBG-PB-K20-D-BV	1	PROFIBUS					83	75	
VBG-PB-K20-D-EV1	1	PROFIBUS		Ethernet	Optional	Ethernet	93	75	
VBG-PB-K20-D-EV24	1	PROFIBUS	Yes		Optional		83	75	
VBG-PB-K20-DMD-BV	2	PROFIBUS			Optional		76	75	
VBG-PB-K20-DMD-EV	2	PROFIBUS	Yes	Ethernet	Optional	Ethernet	93	75	
VBG-PB-K20-DMD-EV1	2	PROFIBUS		Ethernet	Optional	Ethernet	93	75	
VBG-PN-K20-D	1	PROFINET		RS-232			76	85	■
VBG-PN-K20-D-BV	1	PROFINET			Optional		76	85	
VBG-PN-K20-D-EV24	1	PROFINET	Yes				83	85	
VBG-PN-K20-DMD	2	PROFINET		RS-232			76	85	■
VBG-PN-K20-DMD-EV	2	PROFINET	Yes	RS-232	Optional		76	85	
VBG-PN-K20-DMD-EV2	2	PROFINET					76	85	
VBM-CTR-K20-R2	1	RS-232			Enabled		76	75	

Highlights

- Up to 2 x 62 participants
- LCD and function keys
- Memory Card
- Color coded, removable terminals
- Double address detection
- Earth fault detection
- Diagnosis of bus communication
- Optionally with integrated data decoupling

Brief Description

Many masters/gateways offer a separate diagnostic interface, an earth-fault detector, and double address detection on the AS-Interface segment.

Accessories

USB-0,8M-PVC ABG-SUBD9	USB to RS 232 interface converter
VAZ-PB-DB9-W	PROFIBUS D-sub connector with switchable terminator
VAZ-PB-SIM	PROFIBUS master simulator
VBG-RIO-KHD2-R2	Bus coupler for Allen Bradley Remote I/O

K30 Series – Gateway



Standard Technical Data

Design	K30
Installation conditions	Switch cabinet mounting
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP20
SIL	3
Housing height H	120 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

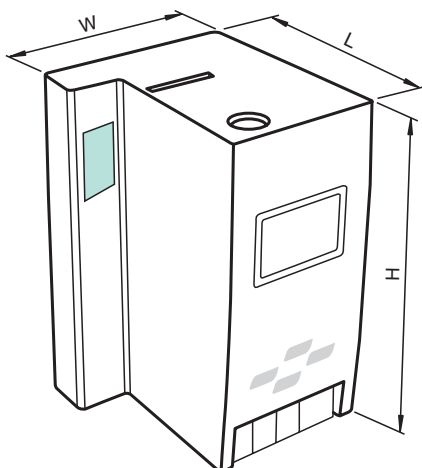
Model number	Num-ber of mas-ters	Interface	Inputs per module	Outputs per module	Number/type of secure outputs	Data decou-pling	Diagnostic interface	Integrated control function	Length L	Width W
VBG-CCL-K30-D-S32-EV	1	CC-Link	6		6/PNP	Yes	Ethernet	Optional	106	109
VBG-ENX-K30-DMD-S16	2	EtherNet/IP, MODBUS-TCP	4	2	2/PNP; 2/normally-open		RS-232	Optional	89	110
VBG-ENX-K30-DMD-S16-EV	2	EtherNet/IP, MODBUS-TCP	4	2	2/PNP; 2/normally-open	Yes	Ethernet	Optional	89	110
VBG-PB-K30-D-S16	1	PROFIBUS	4	2	2/PNP; 2/normally-open		RS-232	Optional	89	100
VBG-PB-K30-DMD-S16	2	PROFIBUS	4	2	2/PNP; 2/normally-open		RS-232	Optional	89	100
VBG-PB-K30-DMD-S16-EV	2	EtherNet/IP, PROFIBUS	4	2	2/PNP; 2/normally-open	Yes	Ethernet	Optional	89	100
VBG-PBS-K30-DMD	2	PROFIBUS, PROFIsafe	4	2	2/PNP; 2/normally-open		RS-232		89	100
VBG-PN-K30-DMD-S16	2	PROFINET	4	2	2/PNP; 2/normally-open		RS-232	Optional	120	100
VBG-PN-K30-DMD-S32-EV	2	PROFINET	6		6/PNP	Yes	Ethernet	Optional	120	110
VBG-PNS-K30-DMD	2	PROFINET, PROFIsafe	4	2	2/PNP; 2/normally-open		RS-232		89	110

Highlights

- Up to 2 x 31 secure modules per gateway
- Integrated secure electronic or relay outputs
- PL e, SIL3, Cat. 4 approved
- Extended diagnostic function from the PLC to the module
- Comprehensive software package VAZ-SW-SIMON+ for especially simple configuration and thorough diagnosis

Brief Description

In addition to the single or double master, the safety monitor is integrated in the same housing, which reliably monitors both AS-Interface segments.



Accessories

USB-0,8M-PVC ABG-SUBD9	USB to RS 232 interface converter
VAZ-PB-DB9-W	PROFIBUS D-sub connector with switchable terminator
VAZ-SIMON+-R2-1,8M-PS/2	Interface cable for connecting the K30/K31 safety monitor to a PC
VAZ-SW-SIMON+	Software for configuring K30 master monitors/ K31 and KE4 safety monitors

Power Supplies



Standard Technical Data	
Installation conditions	Switch cabinet mounting
Degree of protection	IP20
Connection type	Screw terminals

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

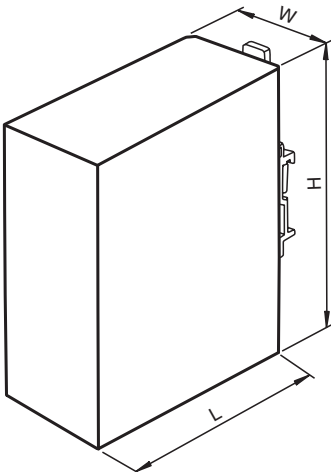
Model number	Output voltage	Output current	Voltage type	UB (min)	UB (max)	Length L	Width W	Height H	UL
VAN-115/230AC-K16	30.55	8.00	AC/DC	85	264	102	91	124	■
VAN-115/230AC-K19	30.55	2.80	AC	85	264	102	49	124	■
VAN-115/230AC-K27	30.50	4.00	AC/DC	85	264	102	73	124	■
VAN-230/500AC-K24	31.20	8.00	AC	195	500	151	70	141	
VAN-24DC-K28	30.55	4.00	DC	24	24	102	40	124	■

Highlights

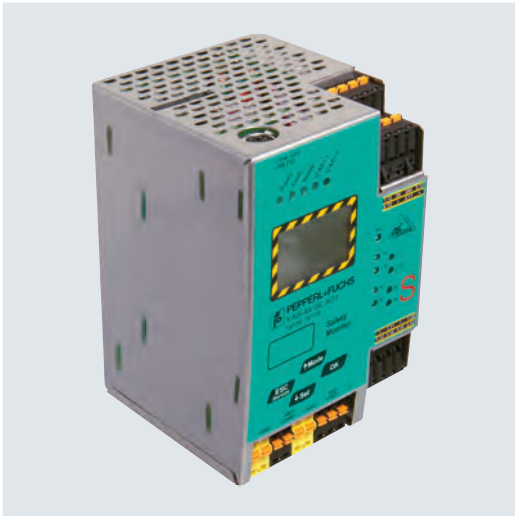
- Each AS-Interface segment requires an AS-Interface power supply (30.5 V)
- Various versions from 2.8 A to 8 A
- With power factor correction and high efficiency factor
- Can be used worldwide thanks to wide range voltage input
- Integrated, cyclical overload protection

Brief Description

AS-Interface power supplies contain data decoupling for interference-free communication on the AS-Interface secondary side. Each AS-Interface segment requires a power supply. Alternatively, double masters with integrated data decoupling are available, which can be operated with one power supply.



K31 Series – Safety Monitors



Standard Technical Data	
Design	K31
Number of masters	2
Installation conditions	Switch cabinet mounting
Inputs per module	4
Outputs per module	2
Interface	RS-232
Number/type of secure outputs	2/PNP; 2/normally-open
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP20
SIL	3
Housing material	Stainless steel (V2A)
Housing length L	89 mm
Housing width W	85 mm
Housing height H	120 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

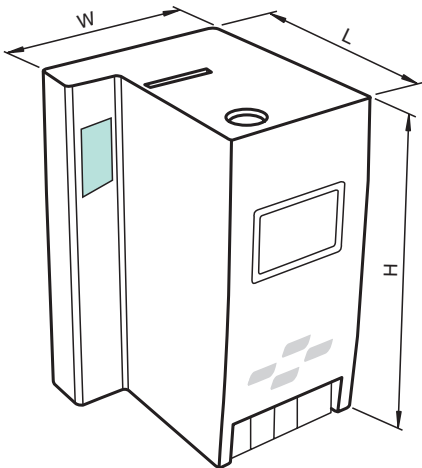
Model number	
VAS-4A16L-K31	

Highlights

- Certified to SIL 3 in accordance with IEC 61508 and EN 62061 and to PLe in accordance with EN 13849
- Stainless steel enclosure
- LC display for slave addresses and error messages

Brief Description

The K31 series has four inputs and four outputs. Two inputs are used for extended device monitoring (EDM). Several safe AS-Interface outputs are possible on one address thanks to the 16 independent AS-Interface enabling circuits. The K31 type is especially suitable for use in switch cabinets. The connected loads are safely switched by two safety relays.



Accessories	
USB-0,8M-PVC ABG-SUBD9	USB to RS 232 interface converter
VAZ-SIMON+-R2-1,8M-PS/2	Interface cable for connecting the K30/K31 safety monitor to a PC
VAZ-SW-SIMON+	Software for configuring K30 master monitors/ K31 and KE4 safety monitors



KE4 Series – Safety Monitors



Standard Technical Data	
Design	KE4
Installation conditions	Switch cabinet mounting
Outputs per module	2
Supply inputs	External (from AUX)
Supply outputs	External (from AUX)
Operating voltage (min)	18 V
Operating voltage (max)	31.6 V
Degree of protection	IP20
SIL	3
Housing material	Polyamide
Housing length L	113 mm
Housing width W	22.5 mm
Housing height H	99 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

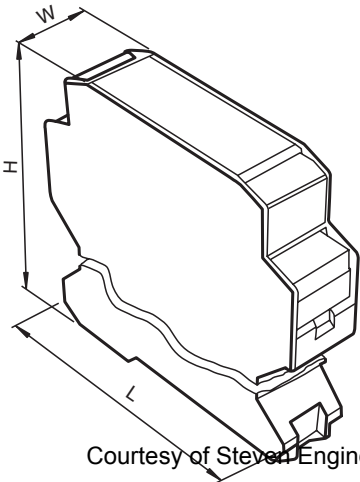
Model number	Inputs per module	Data decoupling	Programming interface
VAS/M-2A8L-KE4-6SE-EV	6	Yes	Ethernet
VAS/M-2A8L-KE4-8SE-C1	8	Yes	USB
VAS-2A8L-KE4-8SE	8		USB

Highlights

- For distributed safety applications as a replacement for small safe PLC solutions
- Can be integrated into existing AS-Interface systems for implementing safety requirements
- Integrated chip card for storing the configuration and for easy device exchange

Brief Description

KE4 safety monitors can be used as a stand-alone solution and can be integrated into an AS-Interface segment to implement local safety logic and safe inputs/outputs.



Accessories	
VAZ-SIMON-USB	USB type A to micro USB plug
VAZ-SW-SIMON+	Software for configuring K30 master monitors/K31 and KE4 safety monitors
VAZ-SW-SUITE	Combined software for configuration, diagnostics, and programming, for masters and safety monitors of type KE4, K20, K30, and K31

G1 Series – Pneumatic Module



Standard Technical Data	
Design	G1
Installation conditions	Field installation
Outputs per module	2
Slave type	Standard slave
Supply inputs	Internal (from AS-i)
Housing length L	102 mm
Housing width W	45 mm
Housing height H	60 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

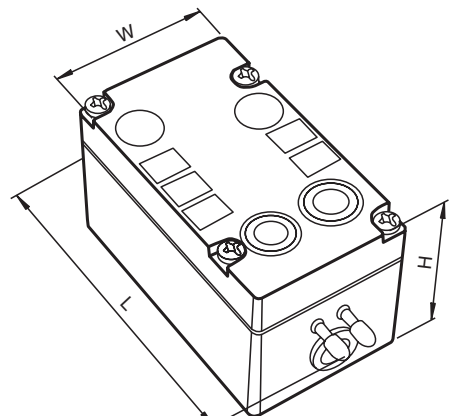
Model number	Inputs per module	UB (min)	UB (max)	Degree of protection	UL
VAA-2EA-G1-ZE/P-S	2	26.5	31.6	IP65	■
VAA-4E2A-G1-ZE/P-S	4	26.5	31.6	IP65	
VAA-4E2A-G1-ZE/PEXT-S	4	24	24	IP65	
VAA-2EA-G1-ZE/P-V2A	2	29.5	31.6	IP67	■

Highlights

- Flat or round cable connection (via standard EMS mounting base, not in scope of delivery)
- Piercing technology for flat cables
- Function indicator for bus and inputs
- Direct connection of pneumatic cylinders

Brief Description

The G1 series is an AS-Interface connecting module with multiple inputs and outputs. The inputs can be connected to both two- and three-wire sensors and mechanical contacts. The connection to the sensors/actuators is made via M12 x 1 screw connections. There is an LED for each channel mounted on the top of the module to indicate the current switching state.



Accessories	
U-G1F	AS-Interface module mounting base for connection to flat cable (AS-Interface)
U-G1FA	AS-Interface module mounting base with addressing socket for connection to flat cable (AS-Interface)
U-G1FF	AS-Interface module mounting base for connection to flat cable (AS-Interface and external auxiliary voltage)
U-G1FFA	AS-Interface module mounting base with addressing socket for connection to flat cable (AS-Interface and external auxiliary voltage)
U-G1P	AS-Interface module mounting base for connection to round cable (AS-Interface)
U-G1PP	AS-Interface module mounting base for connection to round cable (AS-Interface and external auxiliary voltage)
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories



G4 Series



Standard Technical Data	
Design	G4
Installation conditions	Field mounting
Supply inputs	Internal (from AS-i)
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Housing material	Polyamide
Housing length L	102 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

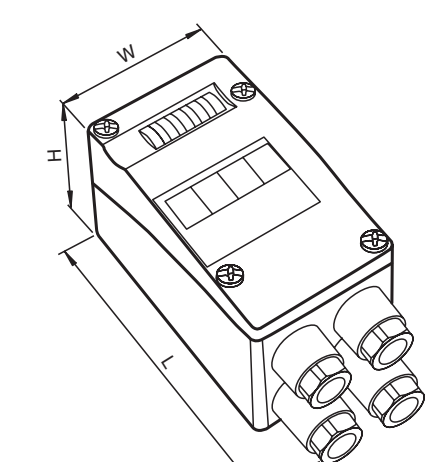
Model number	Inputs per module	Outputs per module	Supply outputs	Slave type	Degree of protection	Width W	Height H
VAA-4E-G4-ZE	4			Standard slave	IP67	45	51
VAA-4E4A-G4-ZE/E2	4	4	External (from AUX)	Standard slave	IP65	90	71
VBA-2E2A-G4-ZE/E2	2	2	External (from AUX)	A/B slave	IP67	45	51
VBA-4E-G4-ZE	4			A/B slave	IP67	45	51
VBA-4E3A-G4-ZE/E2	4	3	External (from AUX)	A/B slave	IP65	90	71
VBA-4E4A-G4-ZE/E2	4	4	External (from AUX)	A/B slave	IP65	90	71

Highlights

- Connection via cable gland and internal spring-cage terminal—this means cables can be made to an exact length
- Simple DIN rail mounting or installation via screw fitting

Brief Description

In the case of the G4 modules, the connecting cables can be cut precisely to length and connected from below via cable glands.



Accessories	
U-G1F	AS-Interface module mounting base for connection to flat cable (AS-Interface)
U-G1FF	AS-Interface module mounting base for connection to flat cable (AS-Interface and external auxiliary voltage)
U-G1P	AS-Interface module mounting base for connection to round cable (AS-Interface)
U-G1PP	AS-Interface module mounting base for connection to round cable (AS-Interface and external auxiliary voltage)
VAZ-G4-B1	M12 stopping plug
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories

G10 Series



Standard Technical Data

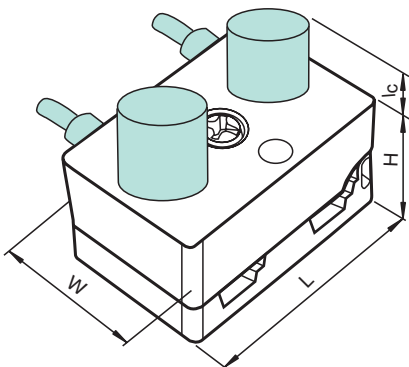
Design	G10
Installation conditions	Field mounting
Slave type	A/B slave
Operating voltage (min)	18.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP67
Housing material	PBT
Housing length L	40.5 mm
Housing width W	27.7 mm
Housing height H	21.5 mm
ECOLAB	■
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Connection type	Inputs per module	Outputs per module	Supply inputs	Supply outputs
VBA-1E1A-G10-ZAL/E2L-1M-2V3-G	M8 connector plug	1	1	External (from AUX)	External (from AUX)
VBA-2A-G10-E2L-1M-2V1-W	M12 connector plug		2		External (from AUX)
VBA-2E-G10-ZAJ-1M-V1-W	M12 connector plug	2		Internal (from AS-i)	
VBA-2E-G10-ZAL-1M-2V31-G	M8 connector plug	2		External (from AUX)	
VBA-2E-G10-ZEJ-0,1M-2V3-G	M8 connector plug	2		Internal (from AS-i)	
VBA-2E-G10-ZEJ-1M-2V1-W	M12 connector plug	2		Internal (from AS-i)	
VBA-2E-G10-ZEJ-2X3M	M12 connector plug	2		Internal (from AS-i)	
VBA-2E1A-G10-ZAL/E2L-1M-2V1-W	M12 connector plug	2	1	External (from AUX)	External (from AUX)
VBA-2E1A-G10-ZAL/E2L-P1	M8 connector plug	2	1	External (from AUX)	External (from AUX)
VBA-2E2A-G10-Z/E2J-1M-V15-G	M12 connector plug	2	2	Internal (from AS-i)	Internal (from AS-i)
VBA-4A-G10-E2J-1M-V15-G	M12 connector plug		4		Internal (from AS-i)

Highlights

- Simple, quick mounting
- One-piece housing concept
- No loose parts—nothing to be mounted or lost
- Can even be mounted in confined spaces
- Perfect wiring optimization right up to the sensor
- Direct connection makes the connection line unnecessary



Brief Description

G10 modules are the perfect solution for connecting distributed I/Os and offer space-saving installation in cable ducts, for example. Thanks to the one-piece housing concept, G10 modules can be installed within seconds and have a direct connection.

Accessories

VAZ-CLAMP-40MM	Stack light connection element with end cover
VAZ-CLAMP-70MM	Stack light connection element with end cover
VAZ-CLAMP-70MM-0,3M-V15-G	Stack light connection element with end cover and M12 connection
VAZ-CLAMP-70MM-90°	Stack light connection element with end cover
VAZ-PK-FK-0,2M-V1-W	Adapter cable G10 module / handheld programming unit

G11 Series – Analog I/O Module



Standard Technical Data

Design	G11
Installation conditions	Field mounting
Slave type	Standard slave
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP68/IP69K
Housing material	PBT
Housing height H	35 mm
Housing diameter D	85 mm
ECOLAB	■
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

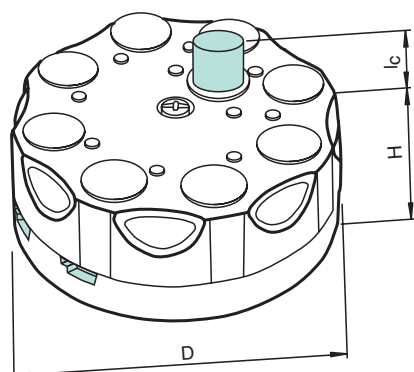
Model number	Inputs per module	Outputs per module	Supply inputs	Supply outputs
VBA-2A-G11-I-F		2		Internal (from AS-i)
VBA-2A-G11-I-V1		2		Internal (from AS-i)
VBA-2A-G11-IL-V1		2		External (from AUX)
VBA-2E-G11-I/U/PT100-F	2 (current: 0/4 mA ... 20 mA; voltage: 0 V ... 10 V; Pt100: -200 °C ... 850 °C)		Internal (from AS-i)/external (from AUX)	
VBA-2E-G11-I/U/PT100-V1	2 (current: 0/4 mA ... 20 mA; voltage: 0 V ... 10 V; Pt100: -200 °C ... 850 °C)		Internal (from AS-i) / external (from AUX)	
VBA-4A-G11-I/U-F		4		Internal (from AS-i) / external (from AUX)
VBA-4E-G11-I-F	4 (current: 0/4 mA ... 20 mA)		Internal (from AS-i) / external (from AUX)	

Highlights

- Sensor connection via M12 plug
- Easy to mount in different designs
- Different module types with the required I/O quantity
- Integrated dual LED for per-channel diagnostics indicator in case of output overload or sensor overload
- The G11 series offers the option of connecting analog sensors

Brief Description

G11 module with innovative sealing concept and compact, round design—especially suitable for applications in mechanical engineering and for harsh process environments



Accessories

V1-G-0,3M-PUR-ABG-V1-W-Y	Cordset
V1-G-42-0,3M-PUR-ABG-V1-W-Y	Cordset
VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VAZ-V1-B3	Stopping plug
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories

G11 Series – Digital I/O Module



Standard Technical Data

Design	G11
Installation conditions	Field mounting
Supply inputs	Internal (from AS-i)
Operating voltage (min)	18 V
Operating voltage (max)	31.6 V
Degree of protection	IP68/IP69K
Housing material	PBT
Housing height H	35 mm
Housing diameter D	85 mm
ECOLAB	■
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

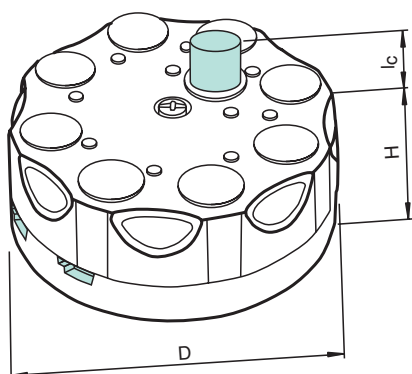
Model number	Inputs per module	Outputs per module	Supply outputs	Slave type
VAA-4E4A-G11-ZAJ/EA2L-F	4	4	External (from AUX)	Standard slave
VAA-4E4A-G11-ZAJ/EA2L-V1	4	4	External (from AUX)	Standard slave
VBA-4E-G11-ZAJ-F	4			A/B slave
VBA-4E-G11-ZAJ-V1	4			A/B slave
VBA-4E4A-G11-ZAJ/EA2L-F	4	4	External (from AUX)	A/B slave
VBA-4E4A-G11-ZAJ/EA2L-V1	4	4	External (from AUX)	A/B slave
VBA-4E4E-G11-ZAJ-F	8			A/B slave

Highlights

- Sensor connection via M12 plug
- Easy to mount in different designs
- Different module types with the required I/O quantity
- Integrated dual LED for per-channel diagnostics indicator in case of output overload or sensor overload

Brief Description

G11 module with innovative sealing concept and compact, round design—especially suitable for applications in mechanical engineering and for harsh process environments



Accessories

VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VAZ-V1-B3	Stopping plug for M12 sockets
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories

G12 Series



Standard Technical Data

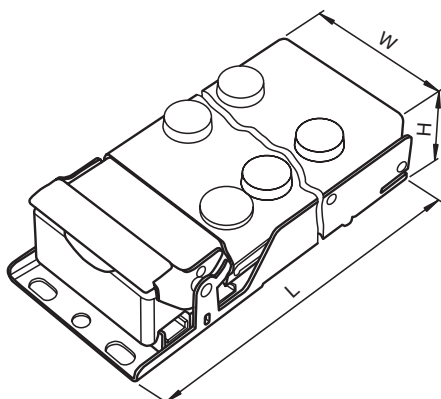
Design	G12
Installation conditions	Field mounting
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP67
Housing material	PBT
Housing width W	57.4 mm
Housing height H	35 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Inputs per module	Outputs per module	Supply inputs	Supply outputs	Slave type	Length L
VAA-4A-G12-EA2L		4		External (from AUX)	Standard slave	118
VAA-4E4A-G12-ZAJ/EA2L	4	4	Internal (from AS-i)	External (from AUX)	Standard slave	151.6
VAA-4E4A-G12-ZAL/EA2L	4	4	External (from AUX)	External (from AUX)	Standard slave	151.6
VBA-2E2A-G12-ZAJ/EA2L	2	2	Internal (from AS-i)	External (from AUX)	A/B slave	118
VBA-2E2A-G12-ZEJ/EA2L	2	2	Internal (from AS-i)	External (from AUX)	A/B slave	118
VBA-4E-G12-ZAJ	4		Internal (from AS-i)		A/B slave	118
VBA-4E-G12-ZAL	4		External (from AUX)		A/B slave	118
VBA-4E-G12-ZEJ	4		Internal (from AS-i)		A/B slave	118
VBA-4E3A-G12-ZAJ/EA2L	4	3	Internal (from AS-i)	External (from AUX)	A/B slave	151.6
VBA-4E4A-G12-XEL	4	4	External (from AUX)	External (from AUX)	A/B slave	118
VBA-4E4A-G12-ZAJ/EA2L	4	4	Internal (from AS-i)	External (from AUX)	A/B slave	151.6
VBA-4E4A-G12-ZAL/EA2L	4	4	External (from AUX)	External (from AUX)	A/B slave	151.6
VBA-4E4A-G12-ZEJ/EA2L	4	4	Internal (from AS-i)	External (from AUX)	A/B slave	151.6
VBA-4E4E-G12-ZAJ	8		Internal (from AS-i)		Double A/B slave	151.6

Highlights

- Sensor connection via M12 plug
- Easy to mount in different designs
- The G12 module offers tool-free mounting
- Different module types with the required I/O quantity
- Integrated dual LED for per-channel diagnostics indicator in case of output overload or sensor overload



Brief Description

G12 module with one-piece housing and tool-free mounting

Accessories

VAZ-CLIP-G12	Lock for G12 module
VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VAZ-V1-B3	Stopping plug for M12 sockets
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories

G16 Series



Standard Technical Data	
Design	G16
Installation conditions	Field mounting
Inputs per module	4
Slave type	A/B slave
Supply inputs	Internal (from AS-i)
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP67
Housing material	PBT
Housing width W	30 mm
Housing height H	29.35 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

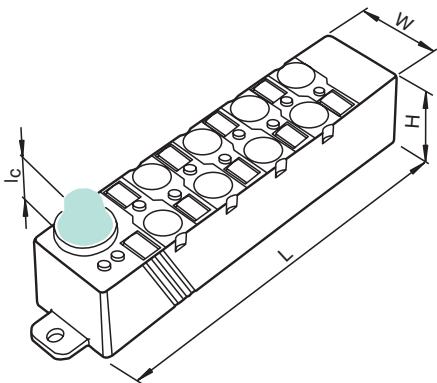
Model number	Outputs per module	Supply outputs	Length L
VBA-4E-G16-ZEJ			103
VBA-4E4A-G16-ZEJ/E2L	4	External (from AUX)	143

Highlights

- Sensor connection via M8 plug
- Easy to mount in different designs
- Different module types with the required I/O quantity
- Integrated dual LED for per-channel diagnostics indicator in case of output overload or sensor overload

Brief Description

G16 compact module with M8 connection—for confined spaces



Accessories	
VAZ-V3-B	Stopping plug
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories

G20 Series



Standard Technical Data	
Design	G20
Installation conditions	Field mounting
Slave type	A/B slave
Supply outputs	External (from AUX)
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP54
Housing length L	54 mm
Housing width W	131.5 mm
Housing height H	27.5 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Connection type	Inputs per module	Outputs per module	Supply inputs
VBA-3E3A-G20-ZEL/E2L-P1	M8 connector plug	3	3	External (from AUX)
VBA-4E3A-G20-ZEL/E2L-P5	M12 connector plug	4	3	External (from AUX)
VBA-4E3A-G20-ZEL/M1L-P2	M8 connector plug	2	2	External (from AUX)
VBA-4E3A-G20-ZEL/M1L-P6	M8 connector plug	2	2	External (from AUX)
VBA-4E4A-G20-ZEJ/M3L-P10	M8 connector plug	2	2	Internal (from AS-i)
VBA-4E4A-G20-ZEJ/M3L-P9	M8 connector plug	2	2	Internal (from AS-i)

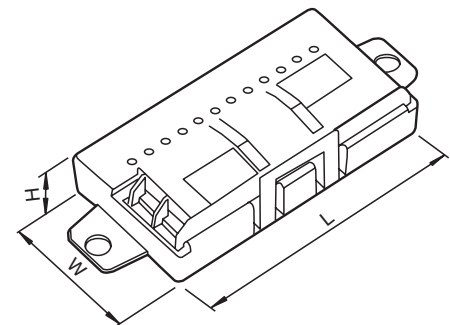
Highlights

- Allows pre-assembly of material handling segments
- /M version controls DC motor rollers: start/stop, speeds, accelerations, direction of rotation

Brief Description

G20 modules are installed without tools and can be integrated into the side wall of the mounting rail.

Accessories	
VAZ-G20-MH	Mounting aid
VAZ-PK/G20-1M-V1-G	Adapter cable G20 module / handheld programming unit
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories



CB10 Series



Standard Technical Data	
Design	CB
Installation conditions	Switch cabinet mounting
Inputs per module	4
Outputs per module	4
Slave type	A/B slave
Supply inputs	Internal (from AS-i)
Supply outputs	Internal (from AS-i)
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP20
Housing material	Polyamide
Housing length L	39.5 mm
Housing width W	36 mm
Housing height H	10 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

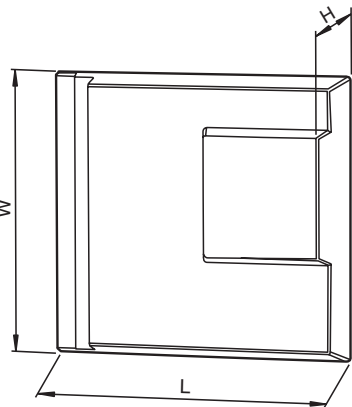
Model number	Input
VBA-4E4A-CB10-ZEJ/E0J-FL	Four inputs for mechanical contacts or three-wire sensors (PNP), DC
VBA-4E4A-CB10-ZJ/E1J-FL	Four inputs for mechanical contacts

Highlights

- Integrated communication monitoring function
- Version with inputs for mechanical contacts or three-wire sensors
- Short-circuit-proof and overload-proof outputs
- Supply of inputs and outputs from AS-Interface
- Function indicator for bus, inputs and outputs
- Connection via stranded wires

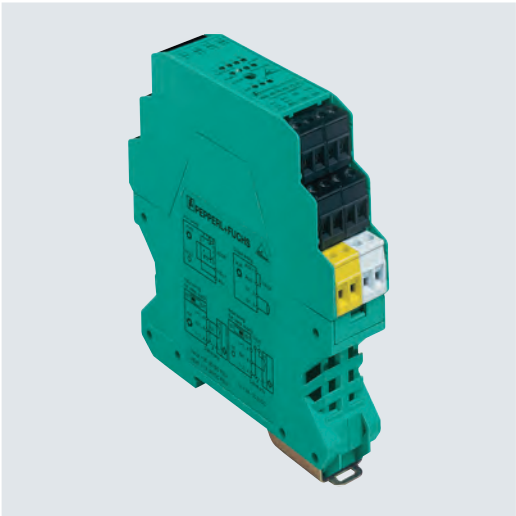
Brief Description

The AS-Interface connecting module is ideally suited for the integration of customer-specific electronics, e.g., illuminated buttons or LED lights. The printed circuit board is supplied completely from the AS-Interface. The inputs and outputs are short-circuit and overload-proof. The indicator and operating elements as well as the AS-Interface are connected via stranded cable. Output overload is signaled to the AS-Interface master via the "peripheral fault" function. Communication via AS-Interface remains active. Communication monitoring is built in. This function disconnects the outputs from the power supply when no communication is taking place on the AS-Interface line.





KE Series



Standard Technical Data	
Design	KE
Installation conditions	Switch cabinet mounting
Inputs per module	4
Supply inputs	Internal (from AS-i)/external (from AUX)
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP20
Housing material	Polyamide
Housing length L	102 mm
Housing width W	22.5 mm
Housing height H	99 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

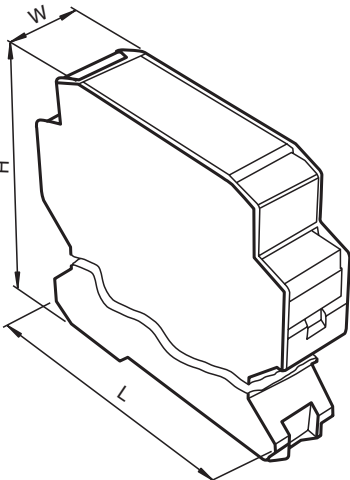
Model number	Outputs per module	Supply outputs	Slave type
VAA-4E4A-KE-ZEJQ/E2L	4	External (from AUX)	Standard slave
VBA-4E-KE-ZEJQ			A/B slave
VBA-4E3A-KE-ZEJQ/E2L	3	External (from AUX)	A/B slave
VBA-4E4A-KE-ZEJQ/E2L	4	External (from AUX)	A/B slave

Highlights

- 24 terminal connections
- Up to four inputs and four outputs

Brief Description

The switch cabinet modules from the KE series are available in different sizes and with different numbers of terminal connections. Color-coded and removable terminals guarantee fast and error-free replacement.



Accessories	
VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories

KE1 Series



Standard Technical Data	
Design	KE1
Installation conditions	Switch cabinet mounting
Inputs per module	4
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP20
Housing material	Polyamide
Housing length L	99.6 mm
Housing width W	22.5 mm
Housing height H	48.5 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

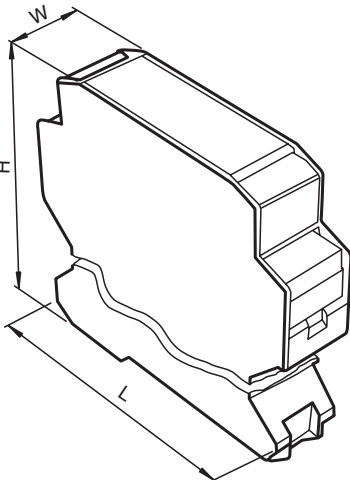
Model number	Connection type	Outputs per module	Supply inputs	Supply outputs	Slave type
VAA-4E4A-KE1-Z/E2	Plug-in spring terminals	4	External (from AUX)	External (from AUX)	Standard slave
VAA-4E4A-KE1-Z/E2-TL	Plug-in spring terminals	4	External (from AUX)	External (from AUX)	Standard slave
VBA-4E-KE1-Z	Plug-in screw terminals		Internal (from AS-i)		A/B slave
VBA-4E2A-KE1-Z/E2	Plug-in screw terminals	2	Internal (from AS-i)	External (from AUX)	A/B slave
VBA-4E4A-KE1-Z/E2	Plug-in spring terminals	4	External (from AUX)	External (from AUX)	A/B slave

Highlights

- Fits perfectly even in very flat switch boxes with 50-mm installation dimensions
- Easy mounting by snapping onto standard rails
- LED indicators for diagnostics and all inputs/outputs

Brief Description

KE1 modules can also be easily installed in flat switch boxes.



Accessories	
VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories



KE2 Series



Standard Technical Data	
Design	KE2
Installation conditions	Switch cabinet mounting
Inputs per module	4
Outputs per module	4
Slave type	Standard slave
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP20
Housing material	Polyamide
Housing length L	99 mm
Housing width W	22.5 mm
Housing height H	85 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

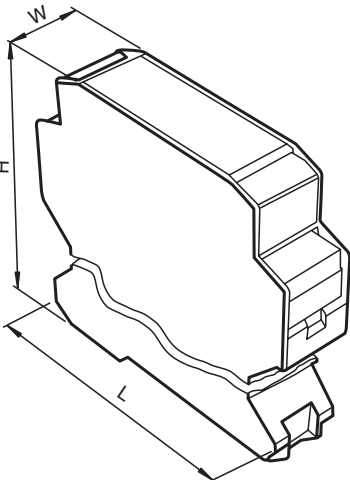
Model number	
VAA-4E4A-KE2-DK	

Highlights

- Module for bidirectional data exchange between two AS-Interface circuits
- Two AS-Interface connections
- Four inputs/four outputs per slave (internally connected)
- Housing with removable terminals
- Function indicator for all outputs
- Communication Monitoring
- Addressing via two sockets in the front panel

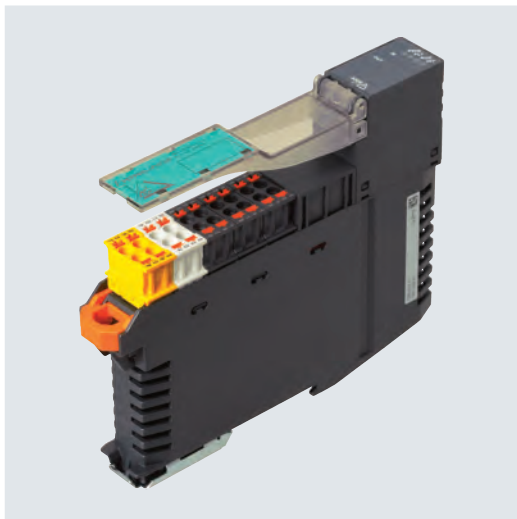
Brief Description

The data coupler interface module is used to exchange data between two AS-Interface circuits. The data coupler consists of two 4E4A slaves in one housing. The output bits of AS-Interface circuit 1 are represented on AS-Interface circuit 2 as input bits and vice versa. This means that data exchange can be carried out bidirectionally without having to transfer the data via a higher-level controller, which is especially advantageous for time-critical applications. The two integrated AS-Interface slaves are independent of each other in terms of addressing. There are two front address sockets for this purpose.



Accessories	
VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories

KE5 Series – Analog I/O Module



Standard Technical Data	
Design	KE5
Installation conditions	Switch cabinet mounting
Slave type	Standard slave
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP20
Housing material	Polyamide
Housing length L	124 mm
Housing width W	18.9 mm
Housing height H	100 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

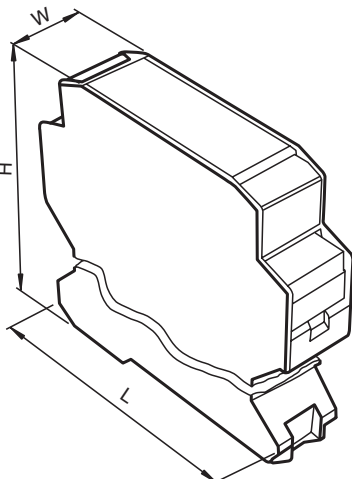
Model number	Inputs per module	Outputs per module	Supply inputs	Supply outputs
VBA-2A-KE5-IL/UL		2		External (from AUX)
VBA-2E-KE5-IJL/UJL	2		Internal (from AS-i) / external (from AUX)	
VBA-4A-KE5-IJL/UJL		4		Internal (from AS-i) / external (from AUX)
VBA-4E-KE5-IL	4		External (from AUX)	

Highlights

- Time-saving front connection
- Backlit, multi-color numeric display with per-channel diagnostic function
- Compact housing requires up to 50 % less space
- Clear terminal identification in the front panel
- Sensor supply can be selected from ASi or external supply

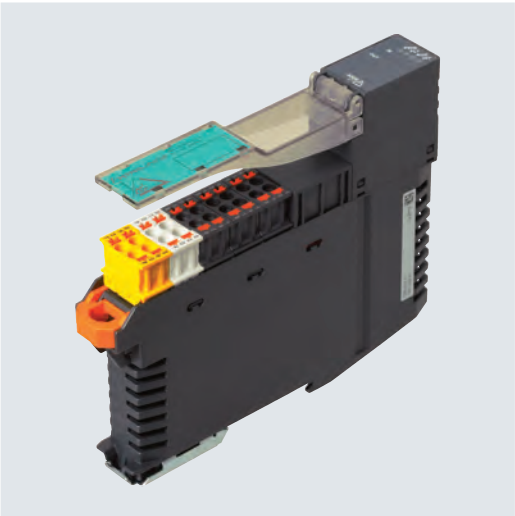
Brief Description

In particular, the KE5 module with front connection and cable connection from below offers time-saving and space-saving installation. The product family offers individually removable, coded terminals and a per-channel diagnostics indicator with dual LEDs on the affected input/output. This simplifies diagnostics in the event of a fault.



Accessories	
VAZ-BRIDGE-BU/ BN60MM/0,75-100	Bridge
VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories

KE5 Series – Digital I/O Module



Standard Technical Data	
Design	KE5
Installation conditions	Switch cabinet mounting
Inputs per module	4
Supply inputs	Internal (from AS-i) / external (from AUX)
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP20
Housing material	Polyamide
Housing length L	124 mm
Housing width W	18.9 mm
Housing height H	100 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

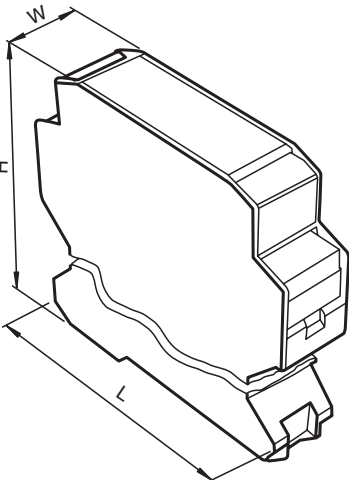
Model number	Outputs per module	Supply outputs	Slave type
VAA-4E4A-KE5-ZEJQ/E2L	4	External (from AUX)	Standard slave
VAA-4E4A-KE5-ZEJQ/R	4		Standard slave
VBA-4E-KE5-ZEJQ			A/B slave
VBA-4E4A-KE5-ZEJQ/E2L	4	External (from AUX)	A/B slave
VBA-4E4A-KE5-ZEJQ/R	4		A/B slave

Highlights

- Housing with push-in connection technology and mechanically coded terminal blocks
- Housing width W 19 mm, installation in the switch cabinet on DIN mounting rail
- Sensors supplied either externally or from the module
- Function indicator for the bus, external auxiliary voltage, internal sensor supply, inputs and outputs
- Per-channel red LED indicator for output overload

Brief Description

In particular, the KE5 module with front connection and cable connection from below offers time-saving and space-saving installation. The product family offers individually removable, coded terminals and a per-channel diagnostics indicator with dual LEDs on the affected input/output. This simplifies diagnostics in the event of a fault.



Accessories	
VAZ-BRIDGE-BU/BN60MM/0,75-100	Bridge
VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories

Safety at Work G10 Series



Standard Technical Data	
Design	G10
Installation conditions	Field mounting
Inputs per module	2
Outputs per module	1
Slave type	Safety slave
Supply inputs	Internal (from AS-i)
Supply outputs	Internal (from AS-i)
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP67
Housing material	PBT
Housing length L	40.5 mm
Housing width W	27.7 mm
Housing height H	21.5 mm
ECOLAB	
UL	

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

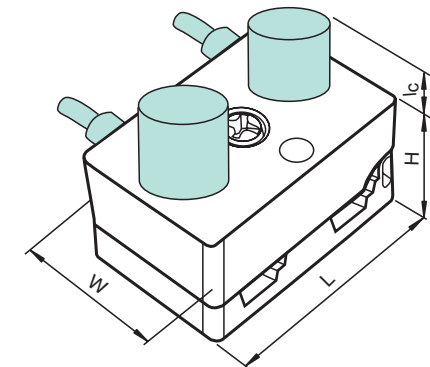
Model number	Connection type
VAA-2E1A-G10-SAJ/EA2J-1M	Cable with open wire ends
VAA-2E1A-G10-SAJ/EA2J-2M-V1-G	M12 connector socket
VAA-2E1A-G10-SAJ/EA2J-2X1M	Cable with open wire ends and separate cable for the electronic output

Highlights

- Connection of contact-related safety switches, e.g., emergency stop buttons
- Safe modules with two secure inputs and one standard output
- Applications up to PLe
- Modular safety solution
- Ultra-compact enclosure:
- IP67 protection

Brief Description

The G10 safety module simply disappears into the cable duct and allows direct connection of safety devices up to performance level e (PLe). Magnet, position, key, and cable pull switches are fully integrated into AS-Interface Safety. The same applies to emergency stop buttons, door locks, and even light grids with relay output. Simply insert the ribbon cable, close it, and tighten the screw—and you're ready! Fast, simple, modular, and without complicated parallel cabling.



Accessories	
VAZ-2E1A-F85A-S	Emergency stop button
VAZ-PK-FK-0,2M-V1-W	Adapter cable G10 module / handheld programming unit
VAZ-V1-B3	Stopping plug for M12 sockets
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories



Safety at Work G12 Series



Standard Technical Data	
Design	G12
Installation conditions	Field mounting
Inputs per module	2
Outputs per module	2
Slave type	Safety slave
Supply inputs	Internal (from AS-i)
Supply outputs	External (from AUX)
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP67
SIL	3
Housing material	PBT
Housing length L	118 mm
Housing width W	57.4 mm
Housing height H	35 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	
VAA-2E2A-G12-SAJ/EA2L	

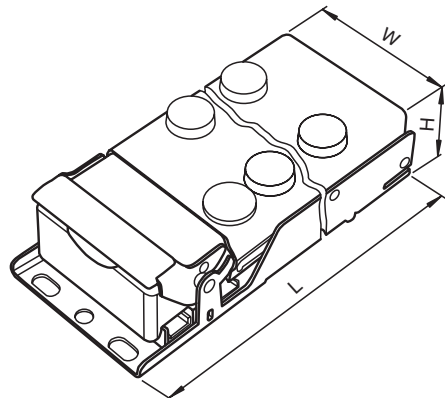
Highlights

- A/B slave with extended addressing capability for up to 62 slaves
- Safe modules with two secure inputs and two standard outputs
- One-piece housing with stainless steel base
- Flat cable connection with piercing technology, variable flat cable routing
- Communication monitoring, configurable
- DIN rail mounting

Brief Description

The G12 safety module enables connection of all contact-type safety switches and offers additional standard outputs.

Accessories	
VAZ-CLIP-G12	AS-Interface accessories
VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VAZ-V1-B3	Stopping plug
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories



Safety at Work KE1 Series



Standard Technical Data	
Design	KE1
Installation conditions	Switch cabinet mounting
Inputs per module	2
Slave type	Safety slave
Operating voltage (max)	31.6 V
Degree of protection	IP20
SIL	3
Housing material	Polyamide
Housing length L	48.5 mm
Housing width W	22.5 mm
Housing height H	99.6 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

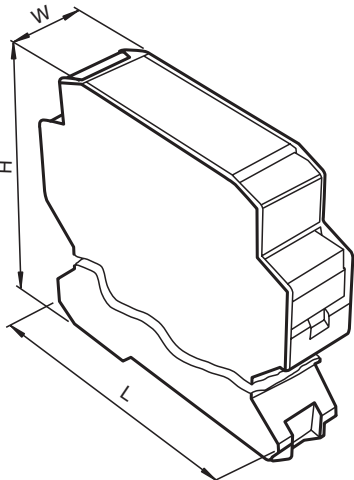
Model number	Connection type	Inputs suitable for	Outputs per module	Supply inputs	Supply outputs	UB (min)
VAA-2E-KE1-S	Plug-in screw terminals	Mechanical contacts		Internal (from AS-i)		26.5
VAA-2E2A-KE1-SE	Plug-in screw terminals	OSSD	2	External (from AUX)	External (from AUX)	22
VAA-2E2A-KE1P-S/E2	Plug-in spring terminals	Mechanical contacts	2	Internal (from AS-i)	External (from AUX)	26.5

Highlights

- Housing with removable terminals
- Communication Monitoring
- Power supply of the inputs from the module
- Addressing socket
- Inputs for two-wire sensors and mechanical contacts
- Function indicator for the bus, external auxiliary voltage, inputs, and outputs

Brief Description

All contact-related safety switches can also be connected in the low-profile, safe KE1 module in IP20. A version is also available for the connection of electronic protective equipment in this housing.



Accessories	
VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories



Safety at Work KE3 Series



Standard Technical Data	
Design	KE3
Installation conditions	Switch cabinet mounting
Operating voltage (min)	26.5 V
Operating voltage (max)	31.6 V
Degree of protection	IP20
SIL	3
Housing material	Polyamide
Housing length L	107 mm
Housing width W	22.5 mm
Housing height H	99 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

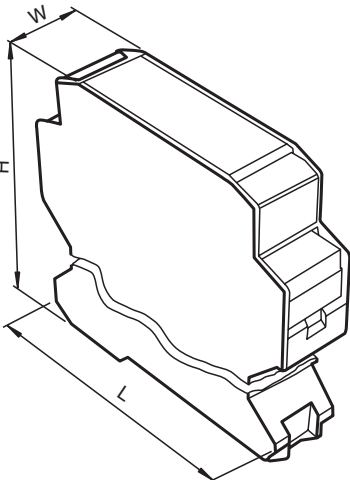
Model number	Inputs per module	Outputs per module	Supply inputs	Supply outputs	Slave type
VBA-4E1A-KE3-ZEJ/SR	4	1	Internal (from AS-i)	Internal (from AS-i)	A/B slave
VBA-4E2A1A-KE3-ZEL/E2L/SEL	3	2	External (from AUX)	External (from AUX)	Standard slave

Highlights

- Multiple secure output modules grouped into one release circuit
- Two galvanically isolated contact sets
- Four conventional inputs, one of which can be switched as a contactor feedback circuit
- SIL3 (IEC 61508)
- Addressing socket
- Assigns a complete address for the safe output and one A/B address for the four inputs

Brief Description

The safe KE3 output module contains a safe relay output. This safe output can be used to safely switch off several downstream outputs together for operation-related switching.



Accessories	
VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VBP-HH1-V3.0-KIT	AS-Interface handheld with accessories

Safety at Work KE4 Series



Standard Technical Data

Design	KE4
Installation conditions	Switch cabinet mounting
Operating voltage (min)	18 V
Operating voltage (max)	31.6 V
Degree of protection	IP20
Housing material	Polyamide
Housing length L	113 mm
Housing width W	22.5 mm
Housing height H	99 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

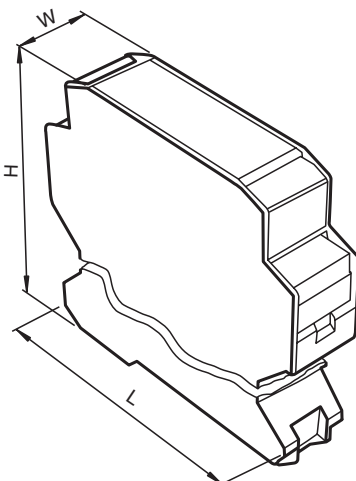
Model number	Inputs per module	Outputs per module	Supply inputs	Supply outputs	Slave type	SIL
VBA-2E-KE4-ENC-S	2				A/B slave	3
VBA-2E2A-KE4-ENC/SSI-S	8	2		External (from AUX)	A/B slave	3
VBA-8E8A8A-KE4-ZEL/E2L/SEL	8	8	External (from AUX)	External (from AUX)	Standard slave	

Highlights

- Two integrated, secure outputs (OSSDs)
- Eight logical, secure, switchable output groups
- Can be extended via the AS-Interface port
- Configurable muting, timer and logic functions using SIMON+ software
- Integrated data decoupling

Brief Description

The KE4 speed module can safely monitor the secure position, position-dependent velocities, standstill, a speed band or a direction of rotation for up to two axes.



Accessories

RVS58S-*****Z	Incremental rotary encoder
Safe Speed Monitor	Speed monitor
VAZ-2T-KE4-ENC-2V45	AS-Interface for rotation speed monitor adapter module
VAZ-ENC-1,5M-PVC	Connection cable
VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VAZ-SW-SIMON+	Configuration software
VAZ-SW-SUITE	Configuration software

Door Monitoring



Standard Technical Data

Slave type	Safety slave
Operating voltage (max)	31.6 V

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Type	Connection type	Inputs per module	Outputs per module	Supply inputs	Supply outputs	UB (min)	SIL	Degree of protection	Length L	Width W	Height H	UL
VAA-1E-IEI3-READER1-S-V31	RFID monitoring	M8 connector plug				Internal (from AS-i)	18	3	IP65	40	29.5		
VAA-2E-IER2-S-1M-V1	Mechanical monitoring	M12 connector plug					26.5	3	IP67	36	26.2		■
VAA-2E2A-IM1-J-S-V1	Locking	M12 connector plug	2		Internal (from AS-i)		26.5		IP67	123	40	42	■
VAA-2E3A-LIM1-PL-J-S-V1	Guard locking	M12 connector plug	2	1	Internal (from AS-i)	Internal (from AS-i)	26.5		IP67	190	40	42	
VAA-2E3A-LIM1-PL-L-S-V1	Guard locking	M12 connector plug	2	1	Internal (from AS-i)	External (from AUX)	26.5		IP67	190	40	42	■
VAA-2E3A-LIM1-PU-J-S-V1	Guard locking	M12 connector plug	2	1	Internal (from AS-i)	Internal (from AS-i)	26.5		IP67	190	40	42	
VAA-2E3A-LIM1-PU-L-S-V1	Guard locking	M12 connector plug	2	1	Internal (from AS-i)	External (from AUX)	26.5		IP67	190	40	42	■

Highlights

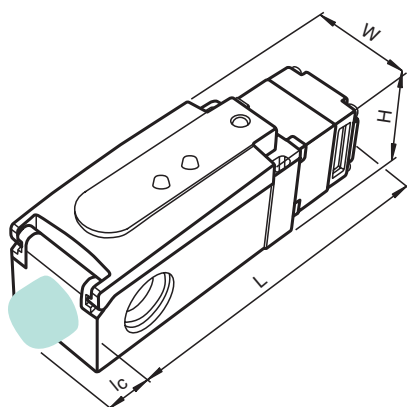
- Mechanical locking or mechanical guard locking
- Choice of power supply from AS-Interface or from AUX
- Robust steel head guarantees long service life
- Multi-position actuator head provides flexibility, allowing an approach from any direction
- Slim, 40 mm wide device
- Coded mechanical actuator
- Connection via M12 plug

Brief Description

In accordance with EN 1088, the correct function of moveable protective devices has to be assured by the use of products that have force-guided contacts. The machine builder is required to prepare a risk analysis in accordance with EN 1050 and take appropriate measures to avoid potential danger. Safety switches are frequently used as locking or guard locking devices. Locking devices monitor the protective device for the "open" position and "lock" the control system when necessary. Guard locking devices prevent protective doors from being opened easily. This function is often employed to avoid unintentional interruption of a process, or to bring an active plant to a standstill before access to is possible. Often, actuators and safety switches are two separate components, and they are typically Type 2 devices.

Accessories

V31-GM-1M-PUR-V1-G	Cordset, M8 to M12, 4-pin, PUR cable
V31-GM-2M-PUR-V1-G	Cordset, M8 to M12, 4-pin, PUR cable
V31-GM-3M-PUR-V1-G	Cordset, M8 to M12, 4-pin, PUR cable
VAZ-IEI3-TAG1-S	Actuators for noncontact AS-Interface safety switches
VAZ-IER2-ACTUATOR2-S	Actuators for noncontact AS-Interface reed safety switches
VAZ-IM1-90°-BOLT-S	Actuator angled, for AS-Interface safety switches
VAZ-IM1-BASE-BOLT-S	Latch for mechanical safety switches (LIM1 and IM1)
VAZ-IM1-BASE-S	Switch mount for mechanical safety switches (LIM1 and IM1)





Handheld Programming Unit



For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

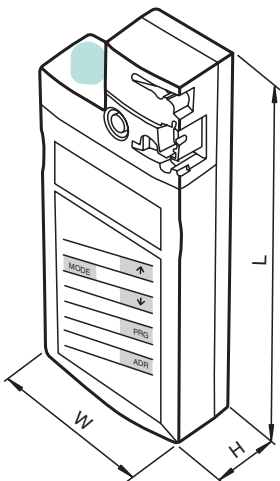
Model number	Connection	Extra
VBP-HH1-V3.0-110V	Charger plug, 120 V AC, in the scope of delivery	
VBP-HH1-V3.0-KIT	Charger plug, 230 V AC, in the scope of delivery	
VBP-HH1-V3.0-V1	Charger plug, 230 V AC, in the scope of delivery	Additional M12 connector for external voltage supply for AS-Interface and AUX

Highlights

- Addressing and parameterization of AS-Interface slave
- Displaying the assigned slave addresses and the status of the inputs
- Setting outputs at the AS-Interface slave
- Also supports Profile S-7.7.A.7 (Spec 3.0) as well as S-0.B and S-7.B (AS-Interface Safety at Work)
- The slave connection is short-circuit-proof and overload-proof
- Battery charger in scope of delivery

Brief Description

With the AS-Interface handheld programming device, AS-Interface nodes in the network can be addressed especially easily and quickly. It can also be used for diagnostics, parameterization, reading inputs, and setting outputs.



Accessories	
V1S-TEE-V1/V1S	T-splitter, M12 plug to M12 plug/socket
VAZ-PK-1,5M-V1-G	Adapter cable module/handheld programming unit
VAZ-PK-FK-0,2M-V1-W	Adapter cable G10 module / handheld programming unit
VAZ-PK/G20-1M-V1-G	Adapter cable G20 module / handheld programming unit

Stack Lights

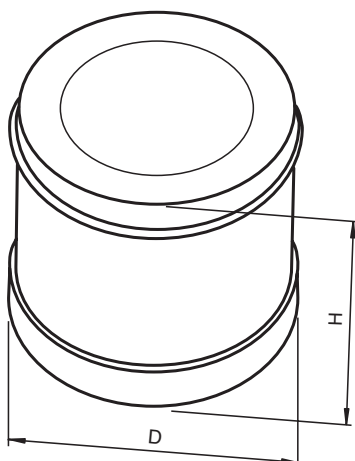


Standard Technical Data

Design	Other
Operating voltage (min)	24 V
Operating voltage (max)	24 V

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Type	Degree of protection	Height H	Diameter D	UL
VAZ-HORN-40MM-85DBA-2TONE	Acoustic (siren)	IP66	44	40	■
VAZ-LED-40MM-CLD-BU	Blue LED	IP66	59	40	■
VAZ-LED-40MM-CLD-GN	Green LED	IP66	59	40	■
VAZ-LED-40MM-CLD-RD	Red LED	IP66	59	40	■
VAZ-LED-40MM-CLD-WH	White LED	IP66	59	40	■
VAZ-LED-40MM-CLD-YE	Yellow LED	IP66	59	40	■
VAZ-HORN-70MM-0..100DBA-8TONE	Acoustic (siren)	IP65	72	70	■
VAZ-HORN-70MM-105DBA	Acoustic (buzzer)	IP65	54	70	■
VAZ-HORN-70MM-85DBA	Acoustic (buzzer)	IP65	72	70	■
VAZ-LAMP-70MM-BU	Blue lamp	IP65	65	70	■
VAZ-LAMP-70MM-CL	Clear lamp	IP65	65	70	■
VAZ-LAMP-70MM-GN	Green lamp	IP65	65	70	■
VAZ-LAMP-70MM-RD	Red lamp	IP65	65	70	■
VAZ-LAMP-70MM-YE	Yellow lamp	IP65	65	70	■
VAZ-LED-70MM-BU	Blue LED	IP65	70	70	■
VAZ-LED-70MM-CL	Clear LED	IP65	70	70	■
VAZ-LED-70MM-GN	Green LED	IP65	70	70	■
VAZ-LED-70MM-LM	Yellow LED	IP65	70	70	■
VAZ-LED-70MM-RD	Red LED	IP65	70	70	■
VAZ-LED-70MM-YE	Yellow LED	IP65	70	70	■



Accessories

VAZ-CLAMP-40MM	Stack light connection element with end cover
VAZ-CLAMP-40MM-IO	Stack light connection element IO-Link with cover
VAZ-CLAMP-70MM	Stack light connection element with end cover
VAZ-CLAMP-70MM-90°	Stack light connection element with end cover
VAZ-LAMP-70MM-BULB-5W/24V	Bulb for stack light permanent light element

Cable



For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Cable length [m]	Cable material	Cable color	Core cross section [mm²]	Ambient temperature (min)	Ambient temperature (max)	UL
VAZ-FK-PUR-BK-2,5MM	100	PUR	Black	2.5	-40	80	■
VAZ-FK-PUR-BK-SUP	100	PUR	Black	1.5	-40	80	■
VAZ-FK-R-BK	100	TPE	Black	1.5			■
VAZ-FK-R-YE	100	TPE	Yellow	1.5			■
VAZ-FK-S-BK	100	EPDM	Black	1.5			
VAZ-FK-S-BK-2,5MM	100	EPDM	Black	2.5			
VAZ-FK-S-BK-2,5MM-500M	500	EPDM	Black	2.5			
VAZ-FK-S-BK-500M	500	EPDM	Black	1.5			
VAZ-FK-S-BK-SUP	100	EPDM	Black	1.5			
VAZ-FK-S-BK-SUP-500M	100	EPDM	Black	1.5			
VAZ-FK-S-YE	100	EPDM	Yellow	1.5			
VAZ-FK-S-YE-500M	500	EPDM	Yellow	1.5			
VAZ-FK-S-YE-SAFETY	100	EPDM	Black	1.5			

Accessories	
VAZ-FK-ED3	AS-Interface end seal for flat cable