Digital Modules AS-i, IP67, M12

2 x 2 connectors for profile cable

**2 color LEDs per output,
state (yellow), overload (red)**

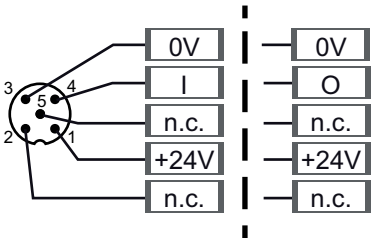
(Figure similar)

Figure	Type	Inputs digital	Outputs digital	M12 connection (1)	Input voltage (sensor supply) (2)	Output voltage (actuator supply) (3)	AS-i connection (4)	AS-i address (5)	Max. output current	Art. no.
	IP67, 4 x M12	2	2 x electronic	single	out of AS-i	out of AUX	AS-i profile cable	1 AB slave	1 A	**BWU3141**
	IP67, 4 x M12	4	–	Y	out of AS-i	–	AS-i profile cable	1 AB slave	–	**BWU2552**
	IP67, 4 x M12	4	–	Y	out of AS-i	–	AS-i via M12	1 AB slave	–	**BWU3077**
	IP67, 4 x M12	4	–	single	out of AS-i	–	AS-i profile cable	1 AB slave	–	**BWU2620**
	IP67, 4 x M12	4	–	single	out of AUX	–	AS-i profile cable	1 AB slave	–	**BWU2725**
	IP67, 4 x M12	4	2 x electronic	mixed	out of AUX	out of AUX	AS-i profile cable	1 AB slave	1 A	**BWU2767**
	IP67, 4 x M12	4	4 x electronic	mixed	out of AS-i	out of AS-i	AS-i profile cable	1 AB slave	120 mA	**BWU3240**
	IP67, 4 x M12	4	4 x electronic	mixed	out of AUX	out of AUX	AS-i profile cable	1 AB slave	500 mA	**BWU2547**
	IP67, 4 x M12	4	4 x electronic	Y	out of AS-i	out of AUX	AS-i profile cable	1 AB slave	500 mA	**BWU2487**
	IP67, 4 x M12	4	4 x electronic	Y	out of AUX	out of AUX	AS-i profile cable	1 AB slave	500 mA	**BWU3032**
	IP67, 4 x M12	–	4 x electronic	Y	–	out of AUX	AS-i profile cable	1 single slave	1 A	**BWU2713**
	IP67, 4 x M12	–	4 x electronic	Y	–	out of AUX	AS-i profile cable	1 AB slave	1 A	**BWU2594**
	IP67, 4 x M12	–	4 x electronic	Y	–	out of AUX, 2A per output	AS-i profile cable	1 AB slave	2 A	**BWU2728**
	IP67, 8 x M12	4	4 x electronic	Y	out of AS-i	out of AUX	AS-i profile cable	1 AB slave	1 A	**BWU2626**
	IP67, 8 x M12	4	4 x electronic	single	out of AS-i	out of AUX	AS-i profile cable	1 AB slave	1A	**BWU2617**
	IP67, 8 x M12	4	4 x electronic	single	out of AS-i	out of AUX	AS-i profile cable	1 single slave	1 A	**BWU2684**
	IP67, 8 x M12	4	4 x electronic	single	out of AUX	out of AUX	AS-i profile cable	1 AB slave	1 A	**BWU2810**
	IP67, 8 x M12	4	4 x electronic	single	out of AUX	out of AUX	AS-i using M12	1 AB slave	1 A	**BWU2645**
	IP67, 8 x M12	8	–	Y	out of AUX	–	AS-i profile cable	2 AB slaves	–	**BWU2770**
	IP67, 8 x M12	8	–	Y	out of AS-i	–	AS-i profile cable	2 AB slaves	–	**BWU2651**
	IP67, 8 x M12	8	–	single	out of AS-i	–	AS-i profile cable	2 AB slaves	–	**BWU2651**
	IP67, 8 x M12	8	8 x electronic	Y	out of AS-i	out of AUX	AS-i profile cable	2 AB slaves	1 A	**BWU2619**
	IP67, 8 x M12	–	8 x electronic	Y	–	out of AUX	AS-i profile cable	2 AB slaves	1 A	**BWU2652**

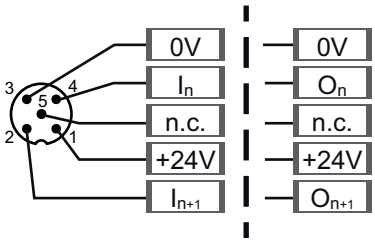
Replacement, AS-i Version 2.0: single slaves (digital) are also working with the first generation AS-i masters.

(1) **M12 wiring:** either as a single–wiring, Y–wiring or mixed-wiring.

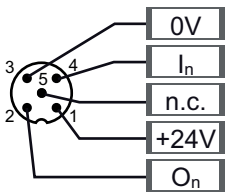
Single-wiring



Y-wiring



Mixed-wiring



(2) I**nput voltage (sensor supply):** inputs are supplied by AS-i or by AUX (auxiliary 24 V power). If supplied by AS-i, inputs shall not be connected to earth or to external potential.

(3) **Output voltage (actuator supply):** outputs are supplied by AS-i or by AUX (auxiliary 24 V power). If supplied by AS-i, outputs shall not be connected to earth or to external potential

(4) **AS-i connection:** the connection to AS-i as well to AUX (auxiliary 24 V power) is made via yellow resp. black AS-i profile cable with piercing technology or via M12 socket (in IP20 via clamps).

(5) **AS-i address:** 1 AB Slave (max. 62 AB Slaves/AS-i network), 2 AB Slaves (max. 31 modules with 2 AB Slaves), Single Slaves (max. 31 Single Slaves/AS-i network), mixed use allowed.
For modules with two slaves the second slave is turned off as long as the first slave is addressed to address "0".
Upon request, slaves are available with specific AS-i Slave profiles.

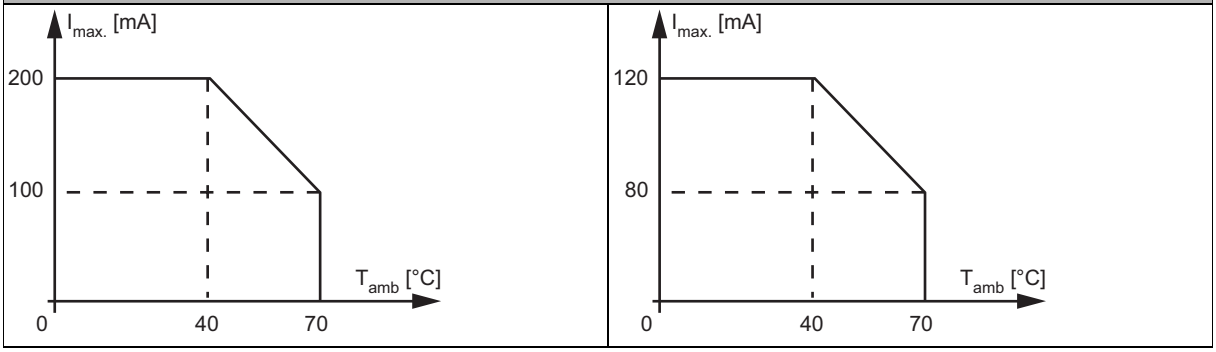
Article No.	BWU2552	BWU3077	BWU2620	BWU2725	BWU2770	BWU2651	BWU2983
General data							
Device type	input						
Connection							
AS-i/AUX connection	profile cable and piercing	M12	profile cable and piercing				
Periphery connection	M12, Y-wiring		M12, single-wiring		M12, Y-wiring		M12, single-wiring
Length of connector cable	unlimited (1)						
AS-i							
Profile	S-0.A.E (ID1=7 default)				slave 1: S-0.A.E (ID1=7 default), slave 2: S-0.A.E (ID1=6 default)		
Address	1 AB slave				2 AB slaves		
Required Master profile	≥M3						
As of AS-i specification	2.1						
Operating voltage	30 V (18 … 31.6 V)						
Max. current consumption	165 mA				60 mA	270 mA	
Max. current consumption without sensor/ actuator supply	45 mA				60 mA	70 mA	
AUX							
Operating voltage	–			24 V (18 … 30 V)		–	
Max. current consumption	–			1 A	3 A	–	
Input							
Number	4				8		
Power supply	out of AS-i			out of AUX		out of AS-i	
Power supply of attached sensors	max. 120 mA (2)			max. 1 A		200 mA (2)	
Switching threshold	U<5 V (low) U>15 V (high)						

Article No.	BWU2552	BWU3077	BWU2620	BWU2725	BWU2770	BWU2651	BWU2983
Display							
LED ASI (green)	on: AS-i voltage on flashing: AS-i voltage on, but peripheral fault (3) or address 0 off: no AS-i voltage				–		
LED FLT/FAULT (red)	on: slave address 0 or slave offline flashing: peripheral fault (3) off: slave online				–		
LED ASI/FLT 1 (red/green)	–				green: slave online red: slave offline yellow/red flashing: address 0 red/green flashing: peripheral fault (3)		
LED ASI/FLT 2 (red/green)	–				green: slave online red: slave offline yellow/red flashing: address 0 red/green flashing: peripheral fault (3) red flashing: slave 2 is switched off, because slave 1 is offline		
LED AUX (green)	–			on: 24 V_{DC} AUX off: no 24 V_{DC} AUX		–	
LEDs I1 ... In (yellow)	state of inputs I1 ... I4				state of inputs I1 ... I8		
Environment							
Applied standards	EN 61000-2 EN 61000-3 EN 61131-2 EN 60529						
Operating altitude	max. 2000 m						
Ambient temperature	-30 °C … +70 °C						
Storage temperature	-30 °C … +85 °C						
Housing	plastic, for DIN rail mounting	plastic, for screw mounting	plastic, for DIN rail mounting		plastic, for screw mounting		
Protection category	IP67						
Maximum tolerable shock and vibration stress	≤15*g*, T≤11 ms 5 ... 500 Hz: 5 Hz, 50 mm_{pp}; 7,6 Hz, 50 mm_{pp}/6*g*; 500 Hz, 6*g*						
Insulation voltage	≥500 V						
Weight	100 g				200 g		
Dimensions (W / H / D) in mm	45 / 80 / 42	45 / 116,5 / 47,5	45 / 80 / 42		60 / 151 / 31		

(1) Loop resistance ≤150 Ω

(2)

Derating power supply of attached sensors



(3) **See table "Peripheral fault indication"**

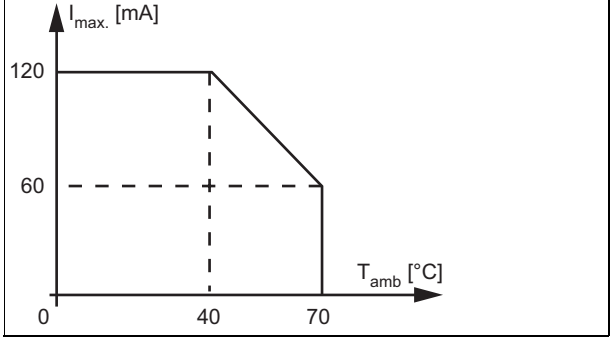
Article No.	BWU3141	BWU2767	BWU2547	BWU3240	BWU2487	BWU3032
General data						
Device type	input / output					
Connection						
AS-i/AUX Connection	profile cable and piercing					
Periphery connection	M12, single-wiring	M12, mixed- wiring			M12, Y-wiring	
Length of connector cable	unlimited (1)					
AS-i						
Profile	S-7.A.7 (ID1=7 fixed)	S-7.A.E (ID1=7 default)	S-7.A.7 (ID1=7 fixed)			
Address	1 AB slave					
Required Master profile	≥M4					
As of AS-i specification	3.0					
Operating voltage	30 V (18 … 31.6 V)					
Max. current consumption	165 mA	35 mA		165 mA		45 mA
Max. current consumption without sensor/ actuator supply	45 mA	35 mA		45 mA		
AUX						
Operating voltage	24 V (18 … 30 V)			–	24 V (18 … 30 V)	
Max. current consumption	2 A	3 A		–	2 A	
Input						
Number	2	4				
Power supply	out of AS-i	out of AUX		out of AS-i		out of AUX
Power supply of attached sensors	max. 120 mA (2)	max. 1 A		120 mA (2) ∑ (in- and outputs) max.120 mA	max. 120 mA (2)	max. 1 A
Switching threshold	U<5 V (low) U>15 V (high)					
Output						
Number	2		4			
Power supply	out of AUX			out of AS-i	out of AUX	
Max. output current	1 A per output (3)	1 A	500 mA per output (6)	120 mA (2) ∑ (in- and outputs) max.120 mA	500 mA per output	

Article No.	BWU3141	BWU2767	BWU2547	BWU3240	BWU2487	BWU3032
Display						
LED ASI (green)	on: AS-i voltage on flashing: AS-i voltage on, but peripheral fault (4) or address 0 off: no AS-i voltage					
LED FLT/FAULT (red)	on: slave address 0 or slave offline flashing: peripheral fault (4) off: slave online					
LED AUX (green)	on: 24 V_{DC} AUX off: no 24 V_{DC} AUX			–	on: 24 V_{DC} AUX off: no 24 V_{DC} AUX	
LEDs I1, I2 (yellow)	state of inputs I1, I2	–				
LEDs I1 / I2 ... In/In+1 (yellow)	–				state of inputs I1 / I2 ... I3 / I4: at least 1 input of input pair is on	
LEDs O1/O2 ... On / On+1 (yellow)	–				state of outputs O1 / O2 ... O3 / O4: at least 1 output of output pair is on	
LEDs I1 / O1 ... (yellow /red)	yellow: state of outputs O1, O2 red: overload	–				
LEDs I1 / O1 ... In / On (gelb)	–	state of inputs/outputs I1 / O1 ...I4 / O4 input **or** output is on (5)			–	
Environment						
Applied standards	EN 61000-2 EN 61000-3 EN 61131-2 EN 60529					
Operating altitude	max. 2000 m					
Ambient temperature	-30 °C … +70 °C					
Storage temperature	-30 °C … +85 °C					
Housing	plastic, for DIN rail mounting					
Protection category	IP67					
Maximum tolerable shock and vibration stress	≤15*g*, T≤11 ms 5 ... 500 Hz: 5 Hz, 50 mm_{pp}; 7,6 Hz, 50 mm_{pp}/6*g*; 500 Hz, 6*g*					
Insulation voltage	≥500 V					
Weight	100 g					
Dimensions (W / H / D) in mm	45 / 80 / 42					

(1) Loop resistance ≤150 Ω

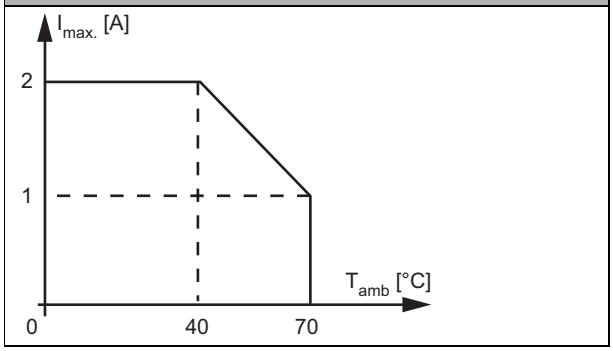
(2)

Derating of power supply of attached sensors



(3)

Derating of output current

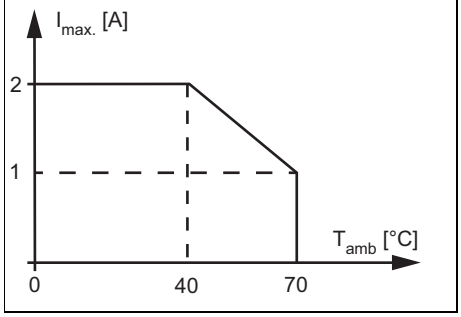


(4) **See table "Peripheral fault indication"**

(5) **BWU2767:** LEDs I3/O3 and I4/O4 are indicating only the state of inputs I3 and I4 in accordance with the factual input/output assignment.

(6)

BWU2547: Derating of output current at sensor supply >120 mA



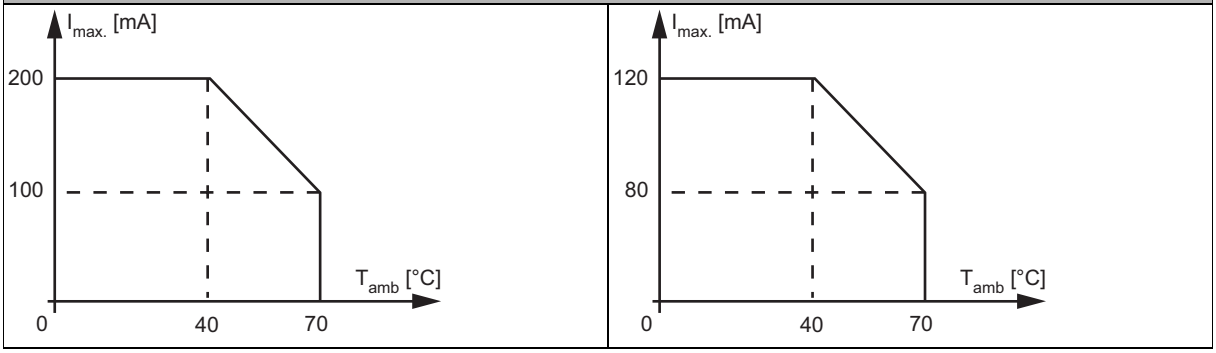
Article No.	BWU2626	BWU2617	BWU2684	BWU2810	BWU2645	BWU2619
General data						
Device type	input / output					
Connection						
AS-i/AUX Connection	profile cable and piercing				M12	profile cable and piercing
Periphery connection	M12, Y-wiring	M12, single-wiring				M12, Y-wiring
Length of connector cable	unlimited (1)					
AS-i						
Profile	S-7.A.7 (ID1=7 fixed)		S-7.0.E (ID1=F default)	S-7.A.7 (ID1=7 fixed)		slave 1: S-7.A.7 (ID1=7 fixed), slave 2: S-7.A.7 (ID1=6 default)
Address	1 AB slave		1 single slave	1 AB slave		2 AB slaves
Required Master profile	≥M4		≥M0	≥M4		
As of AS-i specification	3.0		2.0	3.0		
Operating voltage	30 V (18 … 31.6 V)					
Max. current consumption	165 mA			35 mA		270 mA
Max. current consumption without sensor/ actuator supply	45 mA			35 mA		70 mA
AUX						
Operating voltage	24 V (18 … 30 V)					
Max. current consumption	3 A					6 A
Input						
Number	4					8
Power supply	out of AS-i			out of AUX		out of AS-i
Power supply of attached sensors	max. 120 mA (2)			max. 1 A		max. 200 mA (2)
Switching threshold	U<5 V (low) U>15 V (high)					
Output						
Number	4					8
Power supply	out of AUX					
Max. output current	1 A (∑ 3 A max.)					1 A (∑ 3 A max. for O1-O4 + ∑ 3 A max. for O5-O8) (4)
Display						
LED ASI (green)	on: AS-i voltage on flashing: AS-i voltage on, but peripheral fault (3) or address 0 off: no AS-i voltage					–
LED FLT/FAULT (red)	on: slave address 0 or slave offline flashing: peripheral fault (3) off: slave online					–
LED ASI/FLT 1 (red/green)	–					green: slave online red: slave offline yellow/red flashing: address 0 red/green flashing: peripheral fault (3)

Article No.	BWU2626	BWU2617	BWU2684	BWU2810	BWU2645	BWU2619
LED ASI/FLT 2 (red/green)	–					green: slave online red: slave offline yellow/red flashing: address 0 red/green flashing: peripheral fault (3) red flashing: slave 2 is switched off, because slave 1 is offline
LED AUX (green)	on: 24 V_{DC} AUX off: no 24 V_{DC} AUX					
LEDs I1 / I2 ... In/In+1 (yellow)	–					state of inputs I1 / I2 ... I7 / I8: at least 1 input of input pair is on
LEDs O1/O2 ... On / On+1(yellow)	–					state of outputs O1 / O2 ... O7 / O8: at least 1 output of output pair is on
LEDs I1 ... In (yellow)	state of inputs I1 ... I4					–
LEDs O1 ... On (yellow)	–		state of outputs O1 ... O4	–		–
LEDs O1 ... On (yellow / red)	yellow: state of outputs O1 ... O4 red: overload		–	yellow: state of outputs O1 ... O4 red: overload		–
Environment						
Applied standards	EN 61000-2 EN 61000-3 EN 61131-2 EN 60529					
Operating altitude	max. 2000 m					
Ambient temperature	-30 °C … +70 °C					
Storage temperature	-30 °C … +85 °C					
Housing	plastic, for screw mounting					
Protection category	IP67					
Maximum tolerable shock and vibration stress	≤15*g*, T≤11 ms 5 ... 500 Hz: 5 Hz, 50 mm_{pp}; 7,6 Hz, 50 mm_{pp}/6*g*; 500 Hz, 6*g*					
Insulation voltage	≥500 V					
Weight	200 g					
Dimensions (W / H / D) in mm	60 / 151 / 31					

(1) Loop resistance ≤150 Ω

(2)

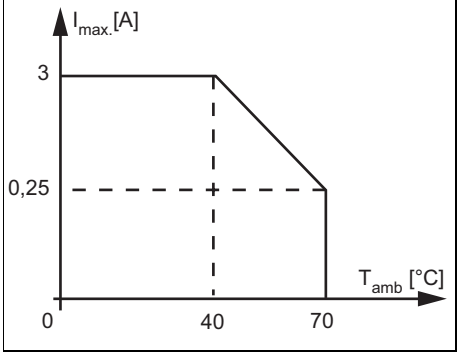
Derating of power supply of attached sensors



(3) **See table "Peripheral fault indication"**

(4)

BWU2619
Derating output current



Article No.	BWU2713	BWU2594	BWU2728	BWU2652
General data				
Device type	output			
Connection				
AS-i/AUX Connection	profile cable and piercing			
Periphery connection	M12, Y-wiring			
Length of connector cable	unlimited (1)			
AS-i				
Profile	S-7.F.E (ID1=F default)	S-7.A.7 (ID1=7 fixed)		slave 1: S-7.A.7 (ID1=7 fixed), slave 2: S-7.A.7 (ID1=6 default)
Address	1 single slave	1 AB slave		2 AB slaves
Required Master profile	≥M0	≥M4		
As of AS-i specification	2.0	3.0		
Operating voltage	30 V (18 … 31.6 V)			
Max. current consumption	35 mA			60 mA
Max. current consumption without sensor/ actuator supply	35 mA			60 mA
AUX				
Operating voltage	24 V (18 … 30 V)			
Max. current consumption	3 A		8 A	6 A
Output				
Number	4			8
Power supply	out of AUX			
Max. output current	1 A (∑ 3 A max.)		2 A per output (3), (4)	1 A (∑ 3 A max. for O1-O4 + ∑ 3 A max. for O5-O8)

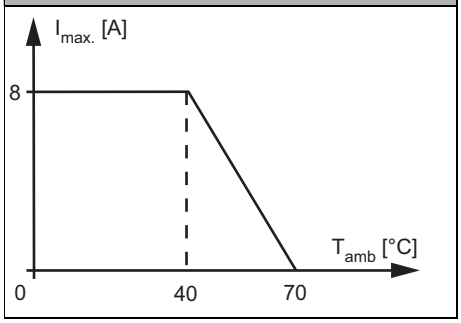
Article No.	BWU2713	BWU2594	BWU2728	BWU2652
Display				
LED ASI (green)	on: AS-i voltage on flashing: AS-i voltage on, but peripheral fault (2) or address 0 off: no AS-i voltage			–
LED FLT/FAULT (red)	on: slave address 0 or slave offline flashing: peripheral fault (2) off: slave online			–
LED ASI/FLT 1 (red/green)	–			green: slave online red: slave offline yellow/red flashing: address 0 red/green flashing: peripheral fault (2)
LED ASI/FLT 2 (red/green)	–			green: slave online red: slave offline yellow/red flashing: address 0 red/green flashing: peripheral fault (2) red flashing: slave 2 is switched off, because slave 1 is offline
LED AUX (green)	on: 24 V_{DC} AUX off: no 24 V_{DC} AUX			
LEDs O1 ... On (yellow /red)	yellow: state of outputs O1 ... O4 red: overload			yellow: state of outputs O1 ... O8 red: overload
Environment				
Applied standards	EN 61000-2 EN 61000-3 EN 61131-2 EN 60529			
Operating altitude	max. 2000 m			
Ambient temperature	-30 °C … +70 °C			
Storage temperature	-30 °C … +85 °C			
Housing	plastic, for DIN rail mounting			plastic, for screw mounting
Protection category	IP67			
Maximum tolerable shock and vibration stress	≤15*g*, T≤11 ms 5 ... 500 Hz: 5 Hz, 50 mm_{pp}; 7,6 Hz, 50 mm_{pp}/6*g*; 500 Hz, 6*g*			
Insulation voltage	≥500 V			
Weight	100 g			200 g
Dimensions (W / H / D) in mm	45 / 80 / 42			60 / 151 / 31

(1) Loop resistance ≤150 Ω

(2) **See table "Peripheral fault indication"**

(3)

BWU2728: Derating output current



(4) To power consumers whose current draw is greater than 2A, two or more outputs can be combined with each other. The data bits of the bundled outputs must be set at the same time.

Article no.	Peripheral fault indication		
	Overload sensor supply	Output short circuited	AUX voltage missing
BWU2487	●	–	–
BWU2547	–	–	●
BWU2552	●	–	–
BWU2594	●	●	●
BWU2617	●	●	–
BWU2619	●	●	–
BWU2620	●	–	–
BWU2626	●	●	–
BWU2645	●	●	–
BWU2651	●	–	–
BWU2983	●	–	–
BWU2652	●	●	●
BWU2684	●	●	–
BWU2713	●	●	●
BWU2725	●	–	●
BWU2728	●	●	●
BWU2767	●	–	●
BWU2770	●	–	●
BWU2810	●	●	–
BWU3032	●	–	–
BWU3077	●	–	–
BWU3141	●	●	●
BWU3240	●	–	–

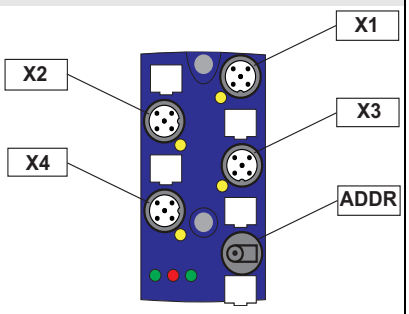
Programming	AS-i bit assignment			
Bit	D0	D1	D2	D3
	input			
BWU2487 / BWU2547 / BWU2552 / BWU2617 / BWU2620 / BWU2626 / BWU2645 / BWU2684 / BWU2725 / BWU2767 / BWU2810 / BWU3032 / BWU3077 / BWU3240	I1	I2	I3	I4
BWU3141	I1	I2	–	–
BWU2619 / BWU2651 / BWU2770 / BWU2983	slave 1: I1	slave 1: I2	slave 1: I3	slave 1: I4
	slave 2: I5	slave 2: I6	slave 2: I7	slave 2: I8
	output			
BWU2487 / BWU2547 / BWU2594 / BWU2617 / BWU2626 / BWU2645 / BWU2684 / BWU2713 / BWU2728 / BWU2767 / BWU2810 / BWU3032 / BWU3240	O1	O2	O3	O4
BWU3141	O1	O2	–	–
BWU2619 / BWU2652	slave 1: O1	slave 1: O2	slave 1: O3	slave 1: O4
	slave 2: O5	slave 2: O6	slave 2: O7	slave 2: O8
	parameter bit			
	P0	P1	P2	P3
BWU2652	not used, Watchdog always on	–	0= on / 1= off (synchronous I/O mode)	not used
BWU2594 / BWU2713	0= off / 1= on (Watchdog)			
BWU2728		0= off / 1= on (peripheral fault, if AUX missing)		
BWU2487 / BWU2547 / BWU2617 / BWU2626 / BWU2645 / BWU2684 / BWU2767 / BWU2810 / BWU3032 / BWU3141 / BWU3240		0= on / 1= off (data input filter 128µs)		
BWU2552 / BWU2620 / BWU2651 / BWU2725 / BWU2770 / BWU2983 / BWU3077	0= off / 1= on (peripheral fault)			
BWU2619	not used, Watchdog always on			

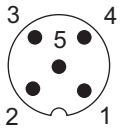
Pin assignment

Signal name	Explanation
Ix	digital input x
Ox	digital output x
$24V_{ext\ out}$	power supply, out of external voltage, positive pole (AUX, actuator supply)
$0V_{ext\ out}$	power supply, out of external voltage, negative pole (AUX, actuator supply)
$24V_{out\ of\ AS\text{-}i}$	power supply, out of AS-i, positive pole (sensor supply)
$0V_{out\ of\ AS\text{-}}$	power supply, out of AS-i, negative pole (sensor supply)
AS-i+, AS-i-	connection to AS-i bus
n.c. (not connected)	not connected

Connections

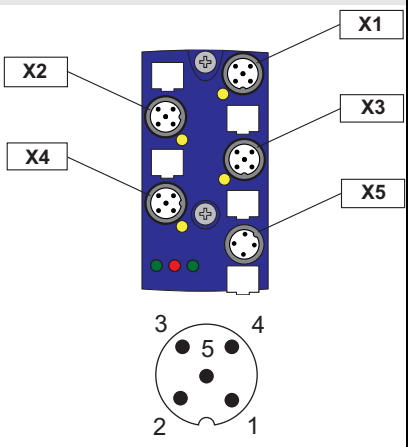
Article no.	M12 connection	Marking	Pin1	Pin2	Pin3	Pin4	Pin5
BWU3141	**X1**	I1	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I1	n.c.
	X2	O1	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O1	n.c.
	X3	I2	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I2	n.c.
	X4	O2	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O2	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU2487	**X1**	I1/I2	24 $V_{out\ of\ AS\text{-}i}$	I2	0 $V_{out\ of\ AS\text{-}i}$	I1	n.c.
	X2	O1/O2	24 $V_{ext\ out}$	O2	0 $V_{ext\ out}$	O1	n.c.
	X3	I3/I4	24 $V_{out\ of\ AS\text{-}i}$	I4	0 $V_{out\ of\ AS\text{-}i}$	I3	n.c.
	X4	O3/O4	24 $V_{ext\ out}$	O4	0 $V_{ext\ out}$	O3	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU3032	**X1**	I1/I2	24 $V_{ext\ out}$	I2	0 $V_{ext\ out}$	I1	n.c.
	X2	O1/O2	24 $V_{ext\ out}$	O2	0 $V_{ext\ out}$	O1	n.c.
	X3	I3/I4	24 $V_{ext\ out}$	I4	0 $V_{ext\ out}$	I3	n.c.
	X4	O3/O4	24 $V_{ext\ out}$	O4	0 $V_{ext\ out}$	O3	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU2547	**X1**	I1/O1	24 $V_{ext\ out}$	O1	0 $V_{ext\ out}$	I1	n.c.
	X2	I2/O2	24 $V_{ext\ out}$	O2	0 $V_{ext\ out}$	I2	n.c.
	X3	I3/O3	24 $V_{ext\ out}$	O3	0 $V_{ext\ out}$	I3	n.c.
	X4	I4/O4	24 $V_{ext\ out}$	O4	0 $V_{ext\ out}$	I4	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU2767	**X1**	I1/O1	24 $V_{ext\ out}$	O1	0 $V_{ext\ out}$	I1	n.c.
	X2	I2/O2	24 $V_{ext\ out}$	O2	0 $V_{ext\ out}$	I2	n.c.
	X3	I3	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I3	n.c.
	X4	I4	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I4	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU2594 BWU2713 BWU2728	**X1**	O1	0 $V_{ext\ out}$	O2	0 $V_{ext\ out}$	O1	n.c.
	X2	O2	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O2	n.c.
	X3	O3	0 $V_{ext\ out}$	O4	0 $V_{ext\ out}$	O3	n.c.
	X4	O4	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O4	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU2552	**X1**	I1	24 $V_{out\ of\ AS\text{-}i}$	I2	0 $V_{out\ of\ AS\text{-}i}$	I1	n.c.
	X2	I2	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I2	n.c.
	X3	I3	24 $V_{out\ of\ AS\text{-}i}$	I4	0 $V_{out\ of\ AS\text{-}i}$	I3	n.c.
	X4	I4	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I4	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					





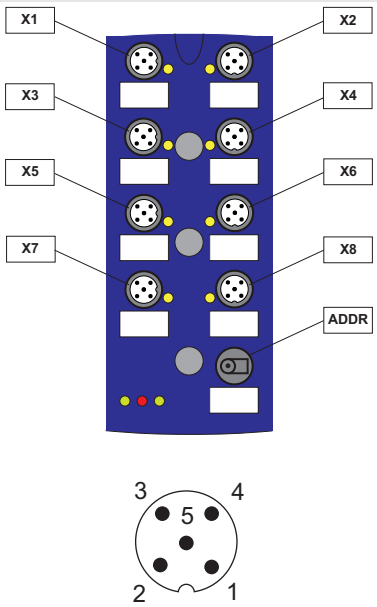
Connections

Article no.	M12 connection	Marking	Pin1	Pin2	Pin3	Pin4	Pin5
BWU2620	**X1**	I1	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I1	n.c.
	X2	I2	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I2	n.c.
	X3	I3	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I3	n.c.
	X4	I4	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I4	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU2725	**X1**	I1	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I1	n.c.
	X2	I2	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I2	n.c.
	X3	I3	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I3	n.c.
	X4	I4	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I4	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU3077	**X1**	I1	24 $V_{out\ of\ AS\text{-}i}$	I2	0 $V_{out\ of\ AS\text{-}i}$	I1	n.c.
	X2	I2	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I2	n.c.
	X3	I3	24 $V_{out\ of\ AS\text{-}i}$	I4	0 $V_{out\ of\ AS\text{-}i}$	I3	n.c.
	X4	I4	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I4	n.c.
	X5	AS-i	AS-i+	n.c.	AS-i-	n.c.	–
BWU3240	**X1**	I1/O1	24 $V_{out\ of\ AS\text{-}i}$	O1	0 $V_{out\ of\ AS\text{-}i}$	I1	n.c.
	X2	I2/O2	24 $V_{out\ of\ AS\text{-}i}$	O2	0 $V_{out\ of\ AS\text{-}i}$	I2	n.c.
	X3	I3/O3	24 $V_{out\ of\ AS\text{-}i}$	O3	0 $V_{out\ of\ AS\text{-}i}$	I3	n.c.
	X4	I4/O4	24 $V_{out\ of\ AS\text{-}i}$	O4	0 $V_{out\ of\ AS\text{-}i}$	I4	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					



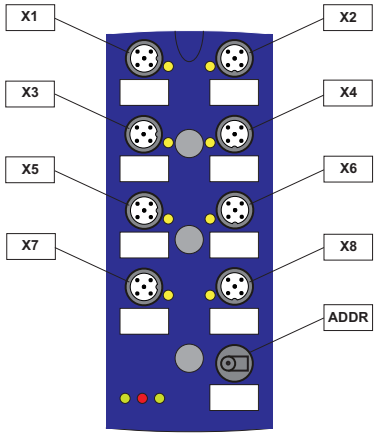
Connections

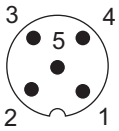
Article no.	M12 connection	Marking	Pin1	Pin2	Pin3	Pin4	Pin5
BWU2617 BWU2684	**X1**	I1	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I1	n.c.
	X2	I2	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I2	n.c.
	X3	I3	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I3	n.c.
	X4	I4	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I4	n.c.
	X5	O1	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O1	n.c.
	X6	O2	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O2	n.c.
	X7	O3	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O3	n.c.
	X8	O4	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O4	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU2619	**X1**	I1/I2	24 $V_{out\ of\ AS\text{-}i}$	I2	0 $V_{out\ of\ AS\text{-}i}$	I1	n.c.
	X2	I3/I4	24 $V_{out\ of\ AS\text{-}i}$	I4	0 $V_{out\ of\ AS\text{-}i}$	I3	n.c.
	X3	I5/I6	24 $V_{out\ of\ AS\text{-}i}$	I6	0 $V_{out\ of\ AS\text{-}i}$	I5	n.c.
	X4	I7/I8	24 $V_{out\ of\ AS\text{-}i}$	I8	0 $V_{out\ of\ AS\text{-}i}$	I7	n.c.
	X5	O1/O2	0 $V_{ext\ out}$	O2	0 $V_{ext\ out}$	O1	n.c.
	X6	O3/O4	0 $V_{ext\ out}$	O4	0 $V_{ext\ out}$	O3	n.c.
	X7	O5/O6	0 $V_{ext\ out}$	O6	0 $V_{ext\ out}$	O5	n.c.
	X8	O7/O8	0 $V_{ext\ out}$	O8	0 $V_{ext\ out}$	O7	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					

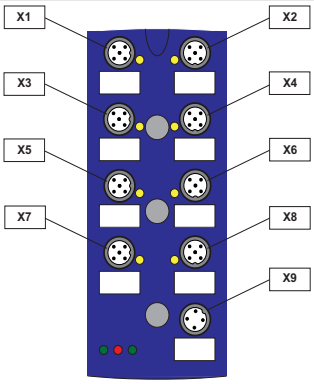
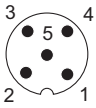


Connections

Article no.	M12 connection	Marking	Pin1	Pin2	Pin3	Pin4	Pin5
BWU2626	**X1**	I1	24 $V_{out\ of\ AS\text{-}i}$	I2	0 $V_{out\ of\ AS\text{-}i}$	I1	n.c.
	X2	I2	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I2	n.c.
	X3	I3	24 $V_{out\ of\ AS\text{-}i}$	I4	0 $V_{out\ of\ AS\text{-}i}$	I3	n.c.
	X4	I4	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I4	n.c.
	X5	O1	0 $V_{ext\ out}$	O2	0 $V_{ext\ out}$	O1	n.c.
	X6	O2	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O2	n.c.
	X7	O3	0 $V_{ext\ out}$	O4	0 $V_{ext\ out}$	O3	n.c.
	X8	O4	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O4	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU2651	**X1**	I1	24 $V_{out\ of\ AS\text{-}i}$	I2	0 $V_{out\ of\ AS\text{-}i}$	I1	n.c.
	X2	I2	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I2	n.c.
	X3	I3	24 $V_{out\ of\ AS\text{-}i}$	I4	0 $V_{out\ of\ AS\text{-}i}$	I3	n.c.
	X4	I4	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I4	n.c.
	X5	I5	24 $V_{out\ of\ AS\text{-}i}$	I6	0 $V_{out\ of\ AS\text{-}i}$	I5	n.c.
	X6	I6	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I6	n.c.
	X7	I7	24 $V_{out\ of\ AS\text{-}i}$	I8	0 $V_{out\ of\ AS\text{-}i}$	I7	n.c.
	X8	I8	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I8	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU2983	**X1**	I1	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I1	n.c.
	X2	I2	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I2	n.c.
	X3	I3	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I3	n.c.
	X4	I4	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I4	n.c.
	X5	I5	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I5	n.c.
	X6	I6	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I6	n.c.
	X7	I7	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I7	n.c.
	X8	I8	24 $V_{out\ of\ AS\text{-}i}$	n.c.	0 $V_{out\ of\ AS\text{-}i}$	I8	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU2652	**X1**	O1	0 $V_{ext\ out}$	O2	0 $V_{ext\ out}$	O1	n.c.
	X2	O2	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O2	n.c.
	X3	O3	0 $V_{ext\ out}$	O4	0 $V_{ext\ out}$	O3	n.c.
	X4	O4	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O4	n.c.
	X5	O5	0 $V_{ext\ out}$	O6	0 $V_{ext\ out}$	O5	n.c.
	X6	O6	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O6	n.c.
	X7	O7	0 $V_{ext\ out}$	O8	0 $V_{ext\ out}$	O7	n.c.
	X8	O8	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O8	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					
BWU2770	**X1**	I1	24 $V_{ext\ out}$	I2	0 $V_{ext\ out}$	I1	n.c.
	X2	I2	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I2	n.c.
	X3	I3	24 $V_{ext\ out}$	I4	0 $V_{ext\ out}$	I3	n.c.
	X4	I4	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I4	n.c.
	X5	I5	24 $V_{ext\ out}$	I6	0 $V_{ext\ out}$	I5	n.c.
	X6	I6	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I6	n.c.
	X7	I7	24 $V_{ext\ out}$	I8	0 $V_{ext\ out}$	I7	n.c.
	X8	I8	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I8	n.c.
	ADDR (dummy plug)	connection for AS-i addressing device					

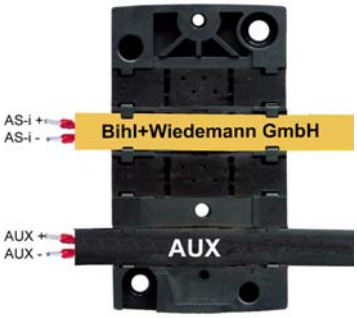




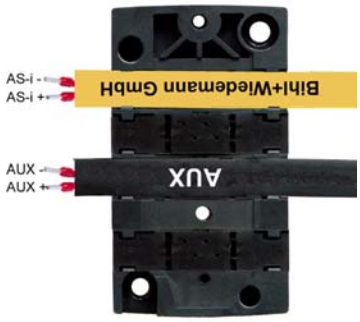
Connections								
Article no.	**M12 connection**	**Marking**	**Pin1**	**Pin2**	**Pin3**	**Pin4**	**Pin5**	
BWU2810	**X1**	I1	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I1	n.c.	
	X2	I2	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I2	n.c.	
	X3	I3	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I3	n.c.	
	X4	I4	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I4	n.c.	
	X5	O1	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O1	n.c.	
	X6	O2	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O2	n.c.	
	X7	O3	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O3	n.c.	
	X8	O4	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O4	n.c.	
	ADDR (dummy plug)	connection for AS-i addressing device						
BWU2645	**X1**	I1	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I1	n.c.	
	X2	I2	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I2	n.c.	
	X3	I3	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I3	n.c.	
	X4	I4	24 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	I4	n.c.	
	X5	O1	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O1	n.c.	
	X6	O2	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O2	n.c.	
	X7	O3	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O3	n.c.	
	X8	O4	0 $V_{ext\ out}$	n.c.	0 $V_{ext\ out}$	O4	n.c.	
	X9	AS-i	AS-i+	0 $V_{ext\ in}$	AS-i-	24 $V_{ext\ in}$	–	

Mounting according to cable direction

IP67



ordinary

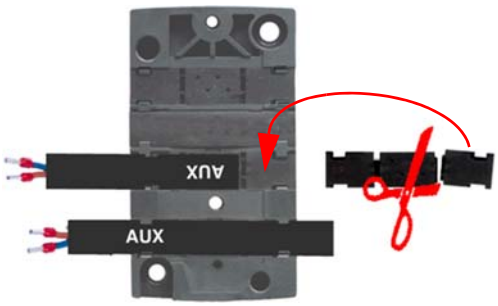


turned

Line termination with sealing profiles / as junction

IP54

max. 8A



Accessories:

- **AS-i substructure module for 4 channel module in 45 mm housing (art. no. BW2349)**
- **AS-i substructure module (CNOMO) for 4 channel module in 45 mm housing (art. no. BW2350)**
- **AS-i substructure module (CNOMO) for 8 channel module in 60 mm housing (art. no. BW2351)**
- **Protection caps for unused M12 sockets (art. no. BW2368)**