

2 x connectors for profile cable

Periphery connection

- via connecting wires
- M8 cable sockets
- M12 cable sockets



(Figure similar)

Figure	Inputs Safety, SIL 3, Cat. 4	Safety signal inputs	Outputs digital	Input voltage (sensor supply) ⁽¹⁾	Output voltage (actuator supply) ⁽²⁾	Connection ⁽³⁾	ASi address ⁽⁴⁾	Special function	Art. no.
	1 x 2-channels	floating contacts	1 x electronic	out of ASi	out of ASi	2 x round cables/ connecting wires	1 single address	to connect 2 x NC contacts to ASi	BWU3249
	1 x 2-channels	floating contacts	—	out of ASi	—	2 x round cables/ connecting wires	1 single address	to connect cable pull switches to ASi	BWU3600
	1 x 2-channels	OSSDs	2 x electronic	out of AUX	out of AUX	1 x M12 cable socket, straight, 8 poles + 1 x M12 cable socket, straight, 5 poles	1 single address	to connect Leuze MLC530R-SPG + Leuze MLC500T-SPG (operation mode 5) to ASi	BWU3718
	1 x 2-channels	OSSDs	2 x electronic	out of AUX	out of AUX	1 x M12 cable socket, straight, 8 poles + 1 x M12 cable socket, straight, 5 poles	1 single address	to connect Sick deTec4 to ASi	BWU3725
	1 x 2 channels	floating contacts	1 x electronic	out of ASi	out of AUX	1 x round cable/ connecting wires	1 single address	to connect 2 x NC contacts to ASi	BWU3425
	1 x 2 channels	floating contacts	1 x electronic	out of ASi	out of AUX	1 x M12 cable socket, straight, 8 poles	1 single address	—	BWU3750
	1 x 2-channels	OSSDs	2 x electronic	out of AUX	out of AUX	1 x M12 cable socket, straight, 8 poles	1 single address	to connect Leuze MLD530-RT3M (operation mode 5) to ASi	BWU3719
	1 x 2 channels	OSSDs	1 x electronic	out of AUX	out of AUX	1 x M12 cable socket, straight, 8 poles	1 single address	to connect Pilz PSENslock, PSENcode to ASi	BWU3721
	1 x 2 channels	OSSDs	1 x electronic	out of AUX	out of AUX	1 x M12 cable socket, straight, 8 poles	1 single address	to connect Pilz PSENslock, PSENcode to ASi	BWU3488
	1 x 2 channels	OSSDs	1 x electronic	out of AUX	out of AUX	1 x M12 cable socket, straight, 8 poles	1 single address	to connect Schmersal AZM400 / CSS 180 / CSS 30S to ASi	BWU3565
	1 x 2 channels	OSSDs	1 x electronic	out of AUX	out of AUX	1 x M12 cable socket, straight, 8 poles	1 single address	to connect Schmersal AZM200 / AZM201 / AZM300 / MZM100 / RSS 16 to ASi	BWU3635
	1 x 2-channels	OSSDs	1 x electronic	out of AUX	out of AUX	1 x M12 cable socket, angled, 5 poles	1 single address	—	BWU3299
	1 x 2-channels	OSSDs	1 x electronic	out of AUX	out of AUX	1 x M12 cable socket, straight, 5 poles	1 single address	—	BWU3627
	1 x 2 channels	OSSDs	1 x electronic	out of AUX	out of AUX	1 x M12 cable socket, straight, 5 poles	1 single address	to connect Euchner MGB (with SM5/SM8+BWU3377) / Pizzato ST GD110MP-G1T to ASi	BWU3376
	1 x 2-channels	floating contacts	1 x electronic	out of ASi	out of ASi	1 x round cable/ connecting wires	1 single address	to connect 2 x NC contacts to ASi	BWU3599
	1 x 2-channels	floating contacts	1 x electronic	out of ASi	out of ASi	1 x round cable/ connecting wires	1 single address	to connect 2 x NC contacts to ASi	BWU3248
	1 x 2-channels	floating contacts	1 x electronic	out of ASi	out of ASi	1 x M12 cable socket, angled, 8 poles	1 single address	—	BWU3796
	1 x 2-channels	floating contacts	—	out of ASi	—	1 x M8 cable socket, straight, 4 poles	1 single address	to connect Sick RE13-SA84 / RE13-SAC / RE23-SAC / RE23-SA84 to ASi	BWU3553
	1 x 2-channels	floating contacts	—	out of ASi	—	1 x M12 cable socket, angled, 5 poles	1 single address	to connect E-STOP buttons to ASi via M12	BWU3413
	1 x 2-channels	floating contacts	—	out of ASi	—	1 x M12 cable socket, straight, 5 poles	1 single address	to connect E-STOP buttons to ASi via M12	BWU3626
	1 x 2-channels	floating contacts	—	out of ASi	—	1 x round cable/ connecting wires	1 single address	to connect 2 x NC contacts to ASi	BWU3373

- (1) **Input voltage (sensor supply):** inputs are supplied by ASi or by AUX (auxiliary 24 V power). If supplied by ASi, inputs shall not be connected to earth or to external potential.
- (2) **Output voltage (actuator supply):** outputs are supplied by ASi or by AUX (auxiliary 24 V power). If supplied by ASi, outputs shall not be connected to earth or to external potential
- (3) **Connection:** further connection options are available on request.

M12 cable socket, angled	M12 cable socket, straight	M8 cable socket, straight	round cable / connecting wires	Push in terminals
PUR line: oil resistant				
				

- (4) **ASi address:** 1 AB address (max. 62 AB addresses/ASi network), 2 AB addresses (max. 31 modules with 2 AB addresses), Single addresses (max. 31 Single addresses/ASi network), mixed use allowed.
For modules with two nodes the second node is turned off as long as the first node is addressed to address "0".
Upon request, nodes are available with specific ASi address profiles.

Article No.	BWU3750	BWU3425	BWU3249	BWU3248	BWU3796	BWU3599	BWU3600
General data							
Device type	safe input						
Connection							
ASi/AUX connection	profile cable and piercing						
Periphery connection	1 x M12 cable socket, straight, 8 poles	1 x round cable/ connecting wires	2 x round cables/ connecting wires	1 x round cable/ connecting wires	1 x M12 cable socket, angled, 8 poles	1 x round cable/ connecting wires	2 x round cables/ connecting wires
Round cable	1 m					10 m	
	max. allowed tensile strain 10 N						
ASi							
Profile	S-7.B.0, ID1=F						
Address	1 single address						
Required Master profile	≥M3						
As of ASi specification	2.1						
Operating voltage	30 V (21,6 ... 31.6 V)						
Max. current consumption	100 mA						
Max. current consumption without sensor/ actuator supply	40 mA						
AUX							
Operating voltage	24 V (20 ... 30 V _{DC}) (PELV)		–				
Max. current consumption	max. 1 A		–				
Input							
Number	1 x 2-channels safe input						
Safety signal	floating contacts						
Switching current	35 mA (T = 40 μs), continuously 5 mA at 24 V						
Power supply	out of ASi						
Sensor supply	short-circuit and overload protected according to EN 61131-2						
Power supply of attached sensors	–						
Switching threshold	2 mA, R ≤ 150 Ω						
Output							
Number	1						–
Power supply	out of AUX		out of ASi				–
Output	short-circuit and overload protected according to EN 61131-2						–
Max. output current	1 A		25 mA				–

Article No.	BWU3750	BWU3425	BWU3249	BWU3248	BWU3796	BWU3599	BWU3600
Display							
LED ASI/FLT (red/green)	green: ASi voltage on, ASi node online green/red: ASi voltage on, but ASi node offline green flashing/red: address 0 red/green flashing: peripheral fault ⁽¹⁾ off: no ASi voltage						
LEDs S1, S2 (yellow)	state of inputs S1, S2						
LED O1 (yellow)	state of output O1						–
Environment							
Applied standards	EN ISO 13849-1 PLe cat4 EN ISO 13849-2 EN 62061 SIL3 EN 62026-2 EN 61000-6-2 EN 61000-6-4 EN 60529						
It can be used with a switched AUX cable, which is passively safe up to SIL3/PLe	no ⁽²⁾		yes ⁽⁶⁾				
Operating altitude	max. 2000 m						
Ambient temperature	-30 °C ... +60 °C ⁽³⁾ ⁽⁴⁾						
Storage temperature	-25 °C ... +85 °C						
Housing	plastic, for screw mounting, suitable for cable ducts (installation depth ≥35 mm)		plastic, for screw mounting, suitable for cable ducts (installation depth ≥19 mm)				
Pollution Degree	2						
Protection category	IP67 ⁽⁵⁾						
Tolerable loading referring to humidity	according to EN 61131-2						
Maximum tolerable shock and vibration stress	≤15g, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude						
Insulation voltage	≥500 V						
Weight	100 g						
Dimensions (W / H / D) in mm	60 / 45 / 35		60 / 45 / 19				

⁽¹⁾ see table "Peripheral fault indication"

⁽²⁾ The module is not suitable for use in paths with a passively safe-switched AUX cable, since an exclusion of errors cannot be assumed for the connection of the two ASi and AUX potentials.
 If the module is supplied from an unswitched AUX cable, this has no influence on the safety consideration for the paths with passively safe-switched AUX cable. In an ASi circuit, paths supplied from a passively safe-switched AUX cable and paths supplied from unswitched AUX potential can be used together.

⁽³⁾ Temperature range up to -30°C from Ident.No. ≥16305 (BWU3249); Ident.No. ≥16306 (BWU3248).

⁽⁴⁾ Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.

⁽⁵⁾ Protection category IP67 can only be achieved, if also the cable connector fulfills IP67.

⁽⁶⁾ The module is suitable for use in passively safe paths as it has no connection to an AUX potential.

Article No.	BWU3373	BWU3413	BWU3626	BWU3553
General data				
Device type	safe input			
Connection				
ASi/AUX connection	profile cable and piercing			
Periphery connection	1 x round cable/ connecting wires	1 x M12 cable socket, angled, 5 poles	1 x M12 cable socket, straight, 5 poles	1 x M8 cable socket, straight, 4 poles
Round cable	0,3 m	1 m,		0,2 m
	max. allowed tensile strain 10 N			
ASi				
Profile	S-0.B.F, ID1=F			
Address	1 single address			
Required Master profile	≥M3			
As of ASi specification	2.1			
Operating voltage	30 V (21,6 ... 31.6 V)			
Max. current consumption	40 mA			
Max. current consumption without sensor/ actuator supply	40 mA			
Input				
Number	1 x 2-channels safe input			
Safety signal	floating contacts			
Switching current	35 mA (T = 40 µs), continuously 5 mA at 24 V			
Power supply	out of ASi			
Sensor supply	short-circuit and overload protected according to EN 61131-2			
Power supply of attached sensors	–			
Switching threshold	2 mA, R ≤ 150 Ω			
Display				
LED ASi/FLT (red/green)	green: ASi voltage on, ASi node online green/red: ASi voltage on, but ASi node offline green flashing/red: address 0 red/green flashing: peripheral fault ⁽¹⁾ off: no ASi voltage			
LEDs S1, S2 (yellow)	state of inputs S1, S2			
Environment				
Applied standards	EN ISO 13849-1 PLe cat4 EN ISO 13849-2 EN 62061 SIL3 EN 62026-2 EN 61000-6-2 EN 61000-6-4 EN 60529			
It can be used with a switched AUX cable, which is passively safe up to SIL3/PLe	yes ⁽²⁾			
Operating altitude	max. 2000 m			
Ambient temperature	-30 °C ... +60 °C ⁽³⁾			
Storage temperature	-25 °C ... +85 °C			
Housing	plastic, for screw mounting, suitable for cable ducts (installation depth ≥19 mm)			
Pollution Degree	2			
Protection category	IP67 ⁽⁴⁾			
Tolerable loading referring to humidity	according to EN 61131-2			
Maximum tolerable shock and vibration stress	≤15g, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude			
Insulation voltage	≥500 V			
Weight	100 g			
Dimensions (W / H / D) in mm	60 / 45 / 19			

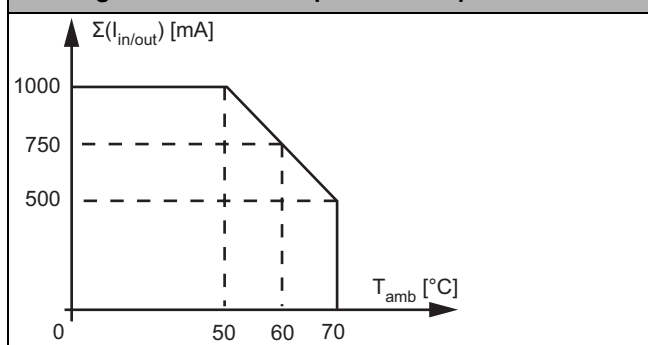
- (1) see table "Peripheral fault indication"
- (2) The module is suitable for use in passively safe paths as it has no connection to an AUX potential.
- (3) Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.
- (4) Protection category IP67 can only be achieved, if also the cable connector fulfills IP67.

Article No.		BWU3718	BWU3725	BWU3719	BWU3299	BWU3376	BWU3627
General data							
Device type		safe input					
Connection							
ASi/AUX connection		profile cable and piercing					
Periphery connection		1 x M12 cable socket, straight, 8 poles + 1 x M12 cable socket, straight, 5 poles		1 x M12 cable socket, straight, 8 poles	1 x M12 cable socket, angled, 5 poles	1 x M12 cable socket, straight, 5 poles	
Round cable		X1, X2: 10 m	X1: 0,5 m; X2: 2,0 m	2 m	1 m		5 m
		max. allowed tensile strain 10 N					
ASi							
Profile		S-7.B.1, ID1=F					
Address		1 single address					
Required Master profile		≥M3					
As of ASi specification		2.1					
Operating voltage		30 V (21,6 ... 31.6 V)					
Max. current consumption		60 mA					
Max. current consumption without sensor/ actuator supply		60 mA					
AUX							
Operating voltage		24 V (20 ... 30 V _{DC}) (PELV)					
Max. current consumption		max. 1 A ⁽¹⁾					
Input							
Number		1 x 2-channels safe input					
Safety signal		OSSDs					
Power supply		out of AUX					
Sensor supply		short-circuit and overload protected according to EN 61131-2					
Power supply of attached sensors	up to +50 °C	750 mA, $\sum(\text{In/Out})$ 1 A ⁽¹⁾					
	at +60 °C	750 mA, $\sum(\text{In/Out})$ 750 mA ⁽¹⁾					
	at +70 °C	500 mA, $\sum(\text{In/Out})$ 500 mA ⁽¹⁾					
Switching threshold safe input		V _{in} >11 V for High-Level, V _{in} <5 V for Low-Level, input current>2,5 mA at 15 V					
Switching threshold standard input		–					
OSSD test pulses		0 ... 50 Hz					
OSSD test pulse width		U _{aux} ≥21,5 V= 0 ... 1 ms test pulses possible U _{aux} ≥17 V= 0 ... 0,8 ms test pulses possible U _{aux} <17 V= 0 ... 0,6 ms					
Start delay		<22 ms					
Output							
Number		2			1		
Power supply		out of AUX					
Output		short-circuit and overload protected according to EN 61131-2					
Max. output current	up to +50 °C	750 mA, $\sum(\text{In/Out})$ 1 A ⁽¹⁾					
	at +60 °C	750 mA, $\sum(\text{In/Out})$ 750 mA ⁽¹⁾					
	at +70 °C	500 mA, $\sum(\text{In/Out})$ 500 mA ⁽¹⁾					

Article No.	BWU3718	BWU3725	BWU3719	BWU3299	BWU3376	BWU3627
Display						
LED ASI/FLT (red/green)	green: ASi voltage on, ASi node online green/red: ASi voltage on, but ASi node offline green flashing/red: address 0 red/green flashing: peripheral fault ⁽²⁾ off: no ASi voltage					
LED AUX (green)	on: 24 V _{DC} AUX off: no 24 V _{DC} AUX					
LEDs S1, S2 (yellow)	state of inputs S1, S2					
LED I1 (yellow)	–					
LED O1, O2 (yellow)	state of outputs O1, O2			state of output O1		
Environment						
Applied standards	EN ISO 13849-1 PLe Kat4 EN ISO13 849-2 EN 62061 SIL 3 EN 62026-2 EN 61000-6-2 EN 61000-6-4 EN 60529					
It can be used with a switched AUX cable, which is passively safe up to SIL3/PLe	no ⁽³⁾					
Operating altitude	max. 2000 m					
Ambient temperature	-30 °C ... +60 °C (up to max. +70 °C) ⁽¹⁾ ⁽⁴⁾					
Storage temperature	-25 °C ... +85 °C					
Housing	plastic, for screw mounting, suitable for cable ducts (installation depth ≥19 mm)					
Pollution Degree	2					
Protection category	IP67					
Tolerable loading referring to humidity	according to EN 61131-2					
Maximum tolerable shock and vibration stress	≤15g, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude					
Insulation voltage	≥500 V					
Weight	100 g					
Dimensions (W / H / D) in mm	60 / 45 / 19					

(1)

BWU3299, BWU3376, BWU3627, BWU3718, BWU3719, BWU3725
Derating total current of inputs and outputs



(2) see table "Peripheral fault indication"

(3) The module is not suitable for use in paths with a passively safe-switched AUX cable, since an exclusion of errors cannot be assumed for the connection of the two ASi and AUX potentials.

If the module is supplied from an unswitched AUX cable, this has no influence on the safety consideration for the paths with passively safe-switched AUX cable. In an ASi circuit, paths supplied from a passively safe-switched AUX cable and paths supplied from unswitched AUX potential can be used together.

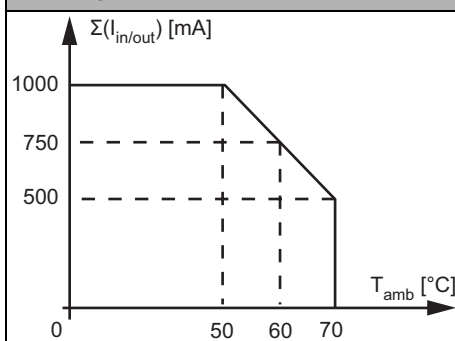
(4) Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.

Article No.		BWU3721	BWU3488	BWU3565	BWU3635
General data					
Device type		safe input			
Connection					
ASi/AUX connection		profile cable and piercing			
Periphery connection		1 x M12 cable socket, straight, 8 poles			
Round cable		5 m	1 m		
		max. allowed tensile strain 10 N			
ASi					
Profile		S-7.B.1, ID1=F			
Address		1 single address			
Required Master profile		≥M3			
As of ASi specification		2.1			
Operating voltage		30 V (21,6 ... 31.6 V)			
Max. current consumption		60 mA			
Max. current consumption without sensor/ actuator supply		60 mA			
AUX					
Operating voltage		24 V (20 ... 30 V _{DC}) (PELV)			
Max. current consumption		max. 1 A ⁽¹⁾			
Input					
Number		1 x 2-channels safe input + 1 x standard input			
Safety signal		OSSDs			
Power supply		out of AUX			
Sensor supply		short-circuit and overload protected according to EN 61131-2			
Power supply of attached sensors	up to +50 °C	750 mA, $\Sigma(\text{In/Out})$ 1 A ⁽¹⁾			
	at +60 °C	750 mA, $\Sigma(\text{In/Out})$ 750 mA ⁽¹⁾			
	at +70 °C	500 mA, $\Sigma(\text{In/Out})$ 500 mA ⁽¹⁾			
Switching threshold safe input		V _{in} >11 V for High-Level, input current>2,5 mA at 15 V			
Switching threshold standard input		U<5 V (low) U>15 V (high) (data bit inverted)			
OSSD test pulses		0 ... 50 Hz			
OSSD test pulse width		U _{aux} ≥21,5 V= 0 ... 1 ms test pulses possible U _{aux} ≥17 V= 0 ... 0,8 ms test pulses possible U _{aux} <17 V= 0 ... 0,6 ms			
Start delay		<22 ms			
Output					
Number		1			
Power supply		out of AUX			
Output		short-circuit and overload protected according to EN 61131-2			
Max. output current	up to +50 °C	750 mA, $\Sigma(\text{In/Out})$ 1 A ⁽¹⁾			
	at +60 °C	750 mA, $\Sigma(\text{In/Out})$ 750 mA ⁽¹⁾			
	at +70 °C	500 mA, $\Sigma(\text{In/Out})$ 500 mA ⁽¹⁾			
Display					
LED ASi/FLT (red/green)		green: ASi voltage on, ASi node online green/red: ASi voltage on, but ASi node offline green flashing/red: address 0 red/green flashing: peripheral fault ⁽²⁾ off: no ASi voltage			
LED AUX (green)		on: 24 V _{DC} AUX off: no 24 V _{DC} AUX			
LEDs S1, S2 (yellow)		state of inputs S1, S2			
LED I1 (yellow)		state of input I1			
LED O1, O2 (yellow)		state of output O1			

Article No.	BWU3721	BWU3488	BWU3565	BWU3635
Environment				
Applied standards	EN ISO 13849-1 PLe Kat4 EN ISO13 849-2 EN 62061 SIL 3 EN 62026-2 EN 61000-6-2 EN 61000-6-4 EN 60529			
It can be used with a switched AUX cable, which is passively safe up to SIL3/PLe	no ⁽³⁾			
Operating altitude	max. 2000 m			
Ambient temperature	-30 °C ... +60 °C (up to max. +70 °C) ⁽¹⁾ ⁽⁴⁾			
Storage temperature	-25 °C ... +85 °C			
Housing	plastic, for screw mounting, suitable for cable ducts (installation depth ≥19 mm)			
Pollution Degree	2			
Protection category	IP67			
Tolerable loading referring to humidity	according to EN 61131-2			
Maximum tolerable shock and vibration stress	≤15g, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude			
Insulation voltage	≥500 V			
Weight	100 g			
Dimensions (W / H / D) in mm	60 / 45 / 19			

(1)

BWU3488, BWU3565, BWU3635, BWU3721 Derating total current of inputs and outputs



(2) see table "Peripheral fault indication"

(3) The module is not suitable for use in paths with a passively safe-switched AUX cable, since an exclusion of errors cannot be assumed for the connection of the two ASi and AUX potentials.

If the module is supplied from an unswitched AUX cable, this has no influence on the safety consideration for the paths with passively safe-switched AUX cable. In an ASi circuit, paths supplied from a passively safe-switched AUX cable and paths supplied from unswitched AUX potential can be used together.

(4) Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.

Article no.	Peripheral fault indication		
	Overload sensor supply	Output short circuited	AUX voltage missing
BWU3248	–	•	–
BWU3249	–	•	–
BWU3299	–	•	•
BWU3373	–	–	–
BWU3376	–	•	•
BWU3413	–	–	–
BWU3425	–	•	•
BWU3488	–	•	•
BWU3553	–	–	–
BWU3565	–	•	•
BWU3599	–	•	–
BWU3600	–	–	–
BWU3626	–	–	–
BWU3627	–	•	•
BWU3635	–	•	•
BWU3718	•	•	•
BWU3719	•	•	•
BWU3721	–	•	•
BWU3725	•	•	•
BWU3750	–	•	•
BWU3796	–	•	–

UL-specifications (UL61010)

BWU3248, BWU3249, BWU3299, BWU3373, BWU3376, BWU3413, BWU3425, BWU3488, BWU3553, BWU3565, BWU3599, BWU3600, BWU3626, BWU3627, BWU3635, BWU3718, BWU3719, BWU3721, BWU3750, BWU3796

External protection	An isolated source with a secondary open circuit voltage of $\leq 30 V_{DC}$ with a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed.
In general	UL mark does not provide UL certification for any functional safety rating or aspects of the above devices.

Programming	ASi bit assignment			
	D3	D2	D1	D0
	safe input			
BWU3248, BWU3249, BWU3373, BWU3413, BWU3425, BWU3553, BWU3599, BWU3600, BWU3626, BWU3750, BWU3796,	S2	S2	S1	S1
BWU3299, BWU3376, BWU3488, BWU3565, BWU3627, BWU3635, BWU3718, BWU3719, BWU3721, BWU3725	OSSD2	OSSD2	OSSD1	OSSD1
	output			
BWU3248, BWU3249, BWU3299, BWU3376, BWU3425, BWU3488, BWU3599, BWU3565, BWU3627, BWU3635, BWU3721, BWU3750, BWU3796	–	–	–	O1
BWU3718, BWU3719, BWU3725	–	–	O2	O1

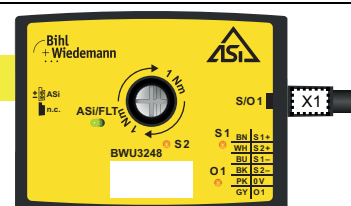
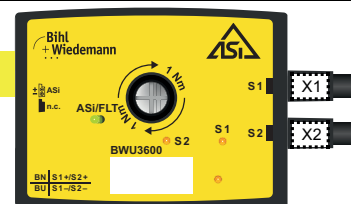
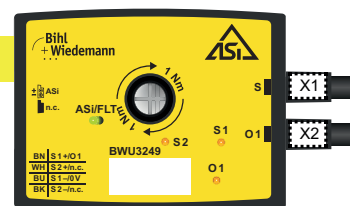
Programming	ASi bit assignment			
	parameter bit			
	P3	P2	P1	P0
BWU3425, BWU3750	not used	not used	0= off / 1= on (peripheral fault if AUX voltage missing)	0= off / 1= on (Watchdog)
BWU3248, BWU3249, BWU3299, BWU3376, BWU3599, BWU3600, BWU3627, BWU3718, BWU3719, BWU3725, BWU3796			not used	
BWU3488, BWU3565, BWU3635, BWU3721			l1 (inverted) ⁽¹⁾	
BWU3373, BWU3413, BWU3553, BWU3626			not used	not used

(1) Parameter bit 1 should not be changed from default 1 to 0, otherwise the input cannot be read.

Pin assignment

Signal name	Explanation
Sx +, Sx -	safe input x
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 ASi}	power supply, out of ASi, positive pole (sensor supply)
0V _{out of ASi}	power supply, out of ASi, negative pole (sensor supply)
ASi +, ASi -	connection to ASi bus
n.c. (not connected)	not connected

Connections: round cable/connecting wires											
Article no.	connec.	BN	WH	BU	BK	PK	GY	RD	GN	YE	OG
BWU3249	X1	S1+	S2+	S1-	S2-						
	X2	O1	n.c.	0 V out of ASi	n.c.						
BWU3600	X1	S1+	S1-								
	X2	S2+	S2-								
BWU3248 BWU3599	X1	S1+	S2+	S1-	S2-	0 V out of ASi	O1				



Connections: round cable/connecting wires											
Article no.	connec.	BN	WH	BU	BK	PK	GY	RD	GN	YE	OG
BWU3425	X1	S1+	S2+	S1-	S2-	0 V _{ext} out	O1	–	–	–	–
BWU3373	X1	S1+	S2+	S1-	S2-	–	–	–	–	–	–

Connections: M8 cable sockets, straight, 4 poles					
Article no.	M8 connection	Pin1	Pin2	Pin3	Pin4
BWU3553	X1	S1+	S1-	S2+	S2-

Connections: M12 cable sockets, straight/angled, 5 poles						
Article no.	M12 connection	Pin1	Pin2	Pin3	Pin4	Pin5
BWU3299 BWU3376 BWU3627	X1	24 V _{ext} out	OSSD2	0 V _{ext} out	OSSD1	O1
BWU3413 BWU3626	X1	S1+	S1-	S2+	S2-	n.c.

Connections: M12 cable sockets, straight, 8 poles

Article no.	connec.	Pin1 (WH)	Pin2 (BN)	Pin3 (GN)	Pin4 (YE)	Pin5 (GY)	Pin6 (PK)	Pin7 (BU)	Pin8 (RD)	
BWU3488 BWU3721	X1	24 V ₁ ext out ⁽¹⁾	24 V ₂ ext out ⁽¹⁾	OSSD 1	OSSD 2	I1 ⁽⁵⁾	24 V ₃ ext out ⁽¹⁾	0 V ext out	O1	
BWU3565	X1	24 V ₁ ext out	O1 ⁽³⁾	0 V ₂ ext out ⁽⁴⁾	OSSD 1	I1 ⁽⁵⁾	0 V ₃ ext out ⁽⁴⁾	OSSD 2	O1 ⁽³⁾	
BWU3635	X1	24 V ₁ ext out ⁽¹⁾	24 V ₂ ext out ⁽¹⁾	0 V ext out	OSSD 2	I1 ⁽⁵⁾	24 V ₃ ext out ⁽¹⁾	OSSD 1	O1	
BWU3719	X1	O1 ⁽²⁾	0 V ext out	24 V ext out	O1 ⁽²⁾	OSSD 2	OSSD 1	24 V ext out	O2	
BWU3750	X1	S1+	S1-	S2+	S2-	O1	0 V ext out	n.c.	n.c.	
BWU3796	X1	S1+	S1-	S2+	S2-	0 V out of ASi	O1	n.c.	n.c.	

(1) Pin1/Pin2/Pin6 are internally bridged.

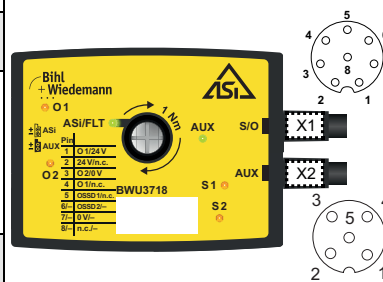
(2) Pin1/Pin4 are internally bridged.

(3) Pin2/Pin8 are internally bridged.

(4) Pin3/Pin6 are internally bridged.

(5) Data bit inverted.

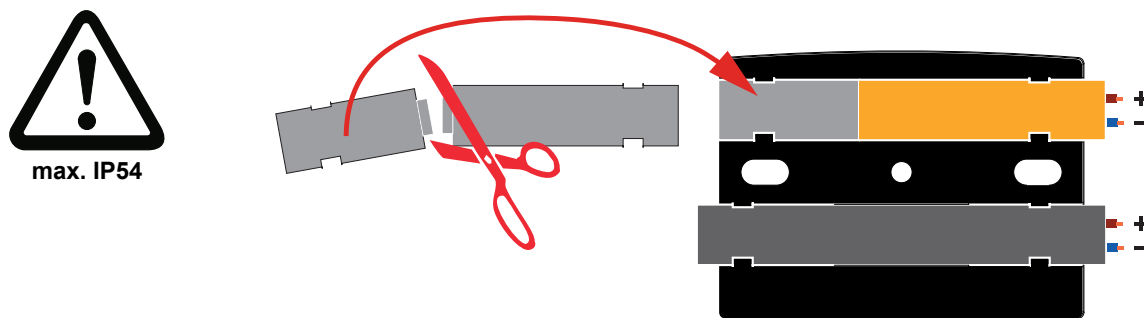
Connections: M12 cable socket, straight, 8 poles + M12 cable socket, straight, 5 poles										
Article no.	connec	Pin1 (WH)	Pin2 (BN)	Pin3 (GN)	Pin4 (YE)	Pin5 (GY)	Pin6 (PK)	Pin7 (BU)	Pin8 (RD)	
BWU3718	X1	O1 (1)	24 V ext out	O2	O1 (1)	OSSD 1	OSSD 2	0 V ext out	n.c.	
	connec	Pin1 (BN)	Pin2 (WH)	Pin3 (BU)	Pin4 (BK)	Pin5 (GY)				
	X2	24 V ext out	n.c.	0 V ext out	n.c.	n.c.	—			
BWU3725	connec	Pin1 (WH)	Pin2 (BN)	Pin3 (GN)	Pin4 (YE)	Pin5 (GY)	Pin6 (PK)	Pin7 (BU)	Pin8 (RD)	
	X1	O1	24 V ext out	n.c.	O2	OSSD 1	OSSD 2	0 V ext out	bridged to Pin X2,5 (2)	
	connec	Pin1 (BN)	Pin2 (WH)	Pin3 (BU)	Pin4 (BK)	Pin5 (GY)				
	X2	24 V ext out	n.c.	0 V ext out	n.c.	bridged to Pin X1,8 (2)	—			



(1) Pin1/Pin4 are internally bridged.

(2) From Ident.No. ≥18324.

Line termination with sealing profile



Accessories:

- Sealing profile IP67 (IDC plug), 60 mm (art. no. BW3282)
- ASi-5/ASi-3 Address Programming Device (art. no. BW4925)
- Bihl+Wiedemann Safety Suite License - Safety Software for Configuration, Diagnostics and Commissioning (art. no. BW2916)