

2 x connectors for profile cable

Periphery connection via
1 x M12 cable socket, straight, 5 poles



(Figure similar)

Figure	Inputs digital	Outputs digital	Input voltage (sensor supply) ⁽¹⁾	Output voltage (actuator supply) ⁽²⁾	Connection ⁽³⁾	ASi address ⁽⁴⁾	Special function	Art. no.
	-	4 x electronic	-	out of AUX	1 x round cable M12 cable socket, straight, 5-pole	1 AB address	-	BWU3712 BWU3788

- (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 and abrasion resistant, appropriate for conveyor chains				

- (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 ASi nodes the second ASi node is turned off as long as the first ASi node is addressed to address "0".
Upon request, ASi nodes are available with specific ASi address profiles.

Article No.	BWU3712	BWU3788
General data		
Device type	output	
Connection		
ASi /AUX connection	profile cable and piercing	
Periphery connection	1 x round cable/ M12 cable socket, straight	
Round cable	3 m	5 m
	allowed tensile strain 10 N	
ASi		
Profile	S-7.A.7 (ID1=7 fixed)	
Address	1 AB address	
Required Master profile	≥M4	
As of ASi specification	3	
Operating voltage	30 V (18 ... 31.6 V)	
Max. current consumption	35 mA	
Max. current consumption without sensor/ actuator supply	35 mA	
AUX		
Operating voltage	24 V (18 ... 30 V _{DC})	
Max. current consumption	1 A	

Article No.	BWU3712		BWU3788	
Output				
Number	4			
Power supply	out of AUX			
Max. output current	up to +50 °C	250 mA per output, Σ (Out) 1 A		
	at +60 °C			
	at +70 °C			
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 green/red flashing: peripheral fault ⁽¹⁾ off: no ASi voltage			
LED AUX (green)	on: 24 V _{DC} AUX off: no 24 V _{DC} AUX			
LED O1 ...On (yellow)	state of outputs O1 ... O4			
Environment				
Applied standards	EN 61000-6-2 EN 61000-6-3 EN 61131-2 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 ... +70 °C			
Storage temperature	-25 °C ... +85 °C			
Housing	plastic, for screw mounting, suitable for cable ducts (≥19 mm installation depth)			
Pollution degree	2			
Protection category	IP67 ⁽³⁾			
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	160 g			220 g
Dimensions (W / H / D) in mm	60 / 45 / 19			

⁽¹⁾ see table "Peripheral fault indication"

⁽²⁾ BWU3712 from Ident. No. ≥19069, BWU3788 from Ident. No. ≥19070; The module is suitable for use in paths with a passively safe-switched AUX cable, since an exclusion of errors can be assumed for the connection of the two ASi and AUX potentials.

⁽³⁾ Protection category IP67 can only be achieved, if also the cable connector fulfills IP67

UL-specifications (UL61010)	
BWU3712, BWU3788	
External protection	An isolated source with a secondary open circuit voltage of ≤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.

Article no.	Peripheral fault indication		
	Overload sensor supply	Output short circuited	AUX voltage missing
BWU3712	-	•	•
BWU3788	-	•	•

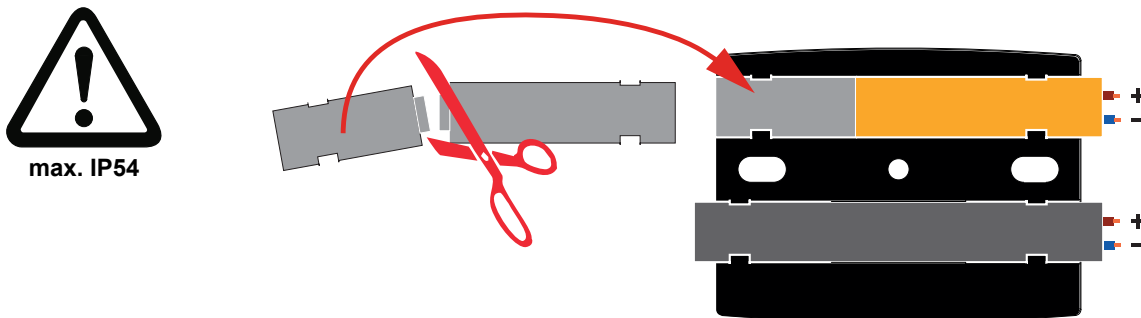
Programming	ASi bit assignment			
	parameter bit			
	P3	P2	P1	P0
BWU3712, BWU3788	not used	0= on / 1= off (synchronous I/O mode)	not used	0= off / 1= on (Watchdog)

Pin assignment

Signal name	Explanation
Ox	digital output x
0V _{ext out}	power supply, out of external voltage, negative pole (AUX, actuator supply)
ASi +, ASi -	connection to ASi bus
n.c. (not connected)	not connected

Connections: M12 cable socket, straight, 5 poles						
Artikel Nr.	M12 connection	Pin1	Pin2	Pin3	Pin4	Pin5
BWU3712, BWU3788	X1	O1	O2	O3	O4	0 V ext out
	The reference potential of sensors/actors has to be connected with the reference potential of the active distributor (AUX).					

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)