

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 ⁽²⁾ 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			
UL-specifications (UL61010)					
Model ⁽¹⁾		PCB.DBA1-3712		PCB.DBA1-3788	
External protection		The supply source to these devices shall meet the requirements of Class 2 of NEC, or Limited Energy of UL/CSA 61010-1, -2-201 or Limited Power Source of UL/CSA 60950/62368-1.			
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 ⁽³⁾			
Operating altitude		max. 2000 m			
Ambient temperature		-30 °C ... +70 °C			
Storage temperature		-25 °C ... +85 °C			
Intended environment		for indoor use only ⁽⁴⁾			
Housing		plastic, for screw mounting, suitable for cable ducts (≥19 mm installation depth)			
Pollution degree		2			
Protection category		IP67 ⁽⁵⁾ ⁽⁶⁾			
Overvoltage category		II			
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 reference of UL file E227214 "Programmable Controllers "Active Distributor Family""

⁽²⁾ see table "Peripheral fault indication"

⁽³⁾ 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.

⁽⁴⁾ Intended environment according to UL certificate for the use in the USA and Canada.

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

⁽⁶⁾ Manufacturer specification, IP rating not evaluated by UL.

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)

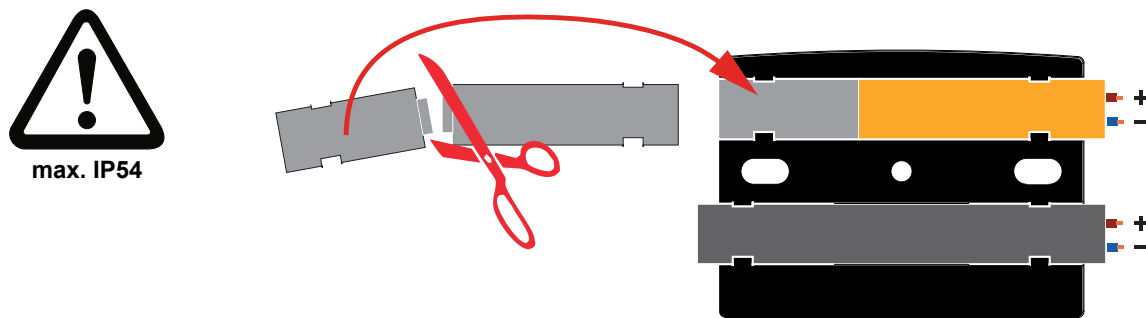
Pin assignment

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)