

1 x connectors for profile cable

Periphery connection via
4 x M12 cable sockets, straight, 5 poles

1 x connection for ASi addressing device

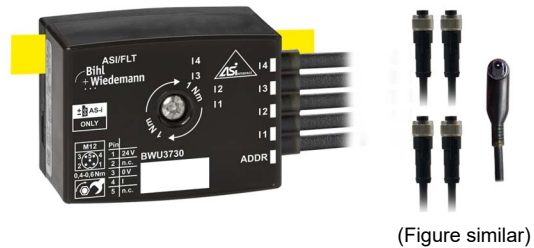


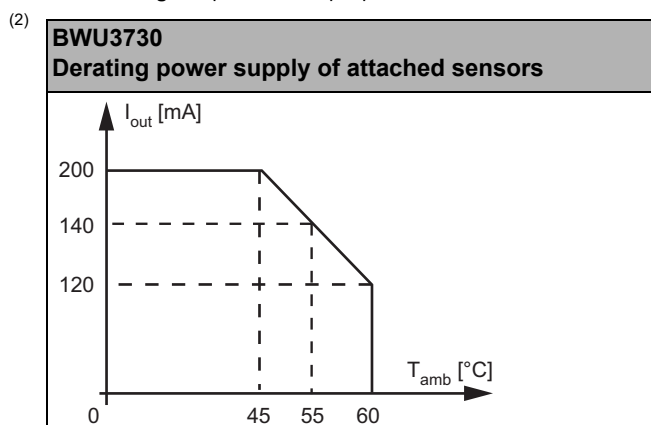
Figure	Inputs digital	Outputs digital	Input voltage (sensor supply) ⁽¹⁾	Output voltage (actuator supply) ⁽²⁾	Connection ⁽³⁾	M8/M12 wiring ⁽⁴⁾	ASi address ⁽⁵⁾	Art. no.
	4	-	out of ASi	-	4 x M12 cable sockets, straight, 5 poles + 1 x ASi addressing cable socket	Single	1 AB address	BWU3730

- (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.
- (4) **M8/M12 wiring:**
Single wiring: 1 input or output per connection.
Y wiring: 2 inputs or outputs per connection.
Mixed wiring: 1 input and 1 output per connection.
- (5) **ASi address:** AB addresses (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.
 Upon request, ASi-3 nodes are available with specific ASi node profiles.
 For modules with two ASi-3 nodes the 2nd ASi-3 node is turned off as long as the 1st ASi-3 node is addressed to address "0".

Article No.		BWU3730
General data		
Device type		input
Connection		
ASi/AUX connection		profile cable and piercing technology
Periphery connection		4 x M12 cable sockets, straight, 5 poles + 1 x ASi addressing cable socket
M12 wiring ⁽¹⁾		single wiring
Round cable		I4: 0,05m I3: 0,15m I2: 0,25m I1: 0,35m ASi addressing cable socket: 0,05 m
		max. allowed tensile strain 10 N
ASi		
Profile		S-0.A.E (ID1=7 default)
Address		1 AB address
Required Master profile		≥M4
As of ASi specification		3.0
Operating voltage		== 30 V _{DC} (18 ... 31.6 V)
Max. current consumption		245 mA
Max. current consumption without sensor/ actuator supply		45 mA
Input		
Number		4
Power supply		out of ASi
Sensor supply		short-circuit and overload protected according to EN 61131-2
Power supply of attached sensors	up to +45 °C	200 mA ⁽²⁾
	at +55 °C	140 mA ⁽²⁾
	at +60 °C	120 mA ⁽²⁾
Switching threshold		U<5 V (low)
		U>15 V (high)
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 ⁽³⁾ off: no ASi voltage
LEDs I1 ... I4 (yellow)		state of inputs I1 ... I4

Article No.	BWU3730
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 ⁽⁴⁾
Operating altitude	max. 2000 m
Ambient temperature	-30 °C ... +60 °C ^{(2) (5)}
Storage temperature	-25 °C ... +85 °C
Intended environment	for indoor use only ⁽⁶⁾
Housing	plastic, for screw mounting, suitable for cable ducts (≥35 mm installation depth)
Pollution degree	2
Protection category	IP54
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 (external - any wire to all surfaces)	3 kV RMS AC for 60 s (Performance Test)
External protection	UL - Class 2 source required
Weight	100 g
Dimensions (W / H / D) in mm	60 / 45 / 35

- (1) **M8/M12 wiring:**
Single wiring: 1 input or output per connection.
Y wiring: 2 inputs or outputs per connection.
Mixed wiring: 1 input and 1 output per connection.



- (3) **see table "Peripheral fault indication"**
- (4) The module is suitable for use in passively safe paths as it has no connection to an AUX potential.
- (5) Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.
- (6) Intended environment according to UL certificate for the use in the USA and Canada.

UL-specifications (UL61010) BWU3730	
Model ⁽¹⁾	PCO.DBA3-3730
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.

(1) See reference of UL file E227214 "Programmable Controllers "Active Distributor Family""

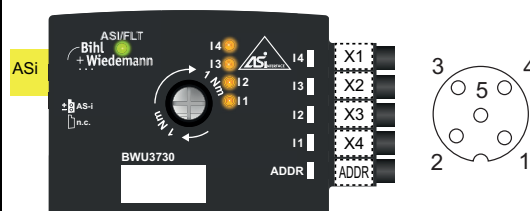
Article no.	Peripheral fault indication		
	Overload sensor supply	-	-
BWU3730	•	-	-

Programming	ASi bit assignment			
	D3	D2	D1	D0
	input			
BWU3730	I4	I3	I2	I1
	parameter bit			
	P3	P2	P1	P0
BWU3730	not used	0= on / 1= off (synchronous I/O mode)	0= on / 1= off (data input filter 128 µs)	not used

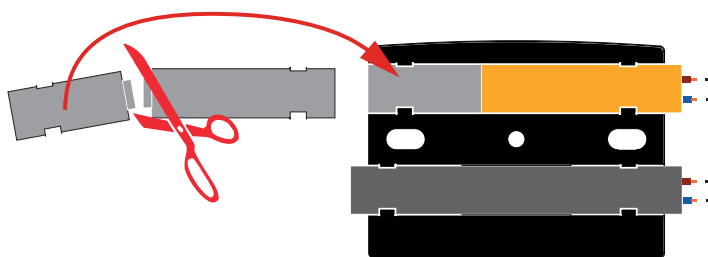
Pin assignment

Signal name	Explanation
Ix	digital input x
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:							
Article no.	M12 Connection	Cable length	Pin1	Pin2	Pin3	Pin4	Pin5
BWU3730	X1	0,05 m	24V _{out of ASi}	n.c.	0V _{out of ASi}	I4	n.c.
	X2	0,15 m	24V _{out of ASi}	n.c.	0V _{out of ASi}	I3	n.c.
	X3	0,25 m	24V _{out of ASi}	n.c.	0V _{out of ASi}	I2	n.c.
	X4	0,35 m	24V _{out of ASi}	n.c.	0V _{out of ASi}	I1	n.c.
	ADDR	0,05 m	connection for ASi-3 addressing plug				



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)