

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 similar)



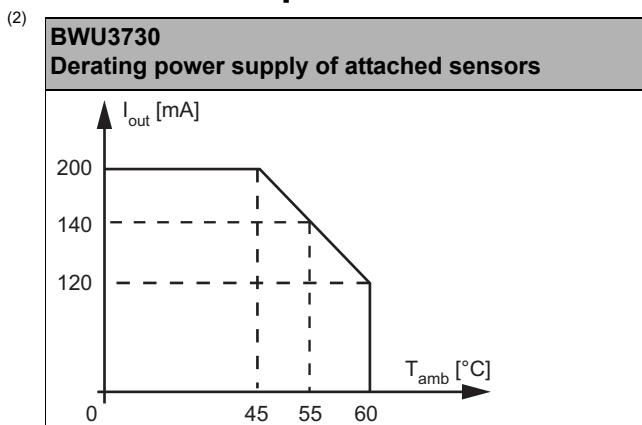
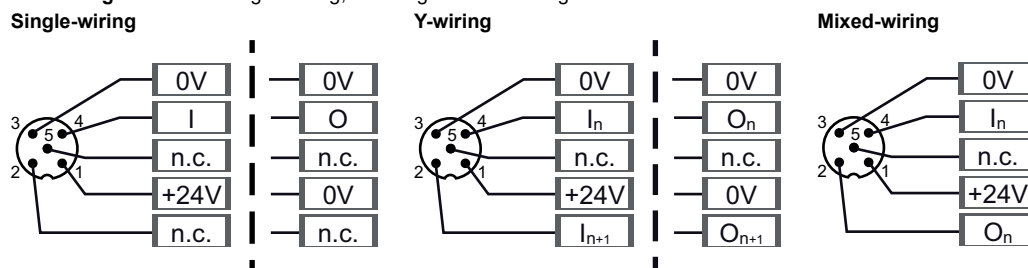
Figure	Type	Inputs digital	Outputs digital	Input voltage (sensor supply) <sup>(1)</sup>	Output voltage (actuator supply) <sup>(2)</sup>	ASi connection <sup>(3)</sup>	Connection <sup>(4)</sup>	ASi address <sup>(5)</sup>	Art. no.
	IP54, depth 35 mm	4	-	out of ASi	-	ASi profile cable	4 x M12 cable sockets, straight, 5 poles + 1 x ASi addressing cable socket	1 AB slave	<b>BWU3730</b>

- (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) **ASi connection:** the connection to ASi as well to AUX (auxiliary 24 V power) is made via yellow resp. black ASi profile cable with piercing technology or via M12 socket (in IP20 via clamps).
- (4) **Connection:** further connection options are available on request.
- (5) **ASi address:** 1 AB slave (max. 62 AB slaves/ASi network), 2 AB slaves (max. 31 modules with 2 AB slaves), Single Slaves (max. 31 Single Slaves/ASi 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 ASi Slave profiles.

<b>Article No.</b>		<b>BWU3730</b>
<b>General data</b>		
Device type		input
<b>Connection</b>		
ASi/AUX connection		profile cable and piercing
Periphery connection		4 x M12 cable sockets, straight, 5 poles + 1 x ASi addressing cable socket
M12 wiring <sup>(1)</sup>		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
<b>ASi</b>		
Profile		S-0.A.E (ID1=7 default)
Address		1 AB slave
Required Master profile		≥M4
As of ASi specification		3.0
Operating voltage		30 V <sub>DC</sub> (18 ... 31.6 V)
Max. current consumption		245 mA
Max. current consumption without sensor/ actuator supply		45 mA
<b>Input</b>		
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 <sup>(2)</sup>
	at +55 °C	140 mA <sup>(2)</sup>
	at +60 °C	120 mA <sup>(2)</sup>
Switching threshold		U<5 V (low) U>15 V (high)
<b>Display</b>		
LED ASi/FLT (red/green)		green: ASi voltage on, slave online red: ASi voltage on, but slave offline yellow/red flashing: address 0 red/green flashing: peripheral fault <sup>(3)</sup> off: no ASi voltage
LEDs I1 ... I4 (yellow)		state of inputs I1 ... I4

<b>Article No.</b>	<b>BWU3730</b>
<b>Environment</b>	
Applied standards	EN 61000-6-2 EN 61000-6-3 EN 61131-2 EN 60529
Passive safety (up to PLe/SIL 3)	yes <sup>(4)</sup>
Operating altitude	max. 2000 m
Ambient temperature	-30 °C ... +60 °C <sup>(2) (5)</sup>
Storage temperature	-25 °C ... +85 °C
Housing	plastic, for screw mounting, suitable for cable ducts (≥35 mm installation depth)
Pollution degree	2
Protection category	IP54
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) **M12 wiring:** either as a single-wiring, Y-wiring or mixed-wiring.



(3) see table "Peripheral fault indication"

(4) Exclusion of errors for the connection of the two ASi and AUX potentials can be assumed in the module. Passive safety for the application can only be achieved if this is ensured for all components used.

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

UL-specifications (UL61010) BWU3730	
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.

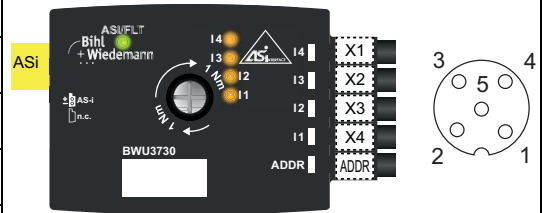
Article no.	Peripheral fault indication		
	Overload sensor supply	-	-
BWU3730	•	-	-

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 $\mu$ s)	not used

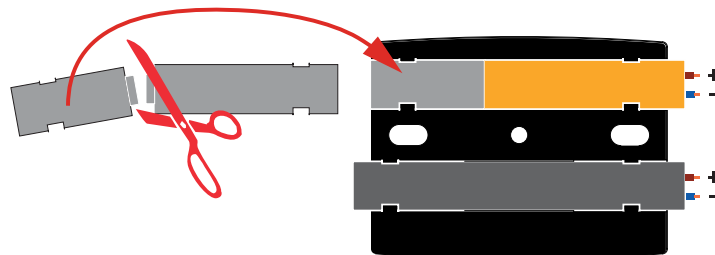
### Pin assignment

Signal name	Explanation
Ix	digital input x
24V <sub>out of ASi</sub>	power supply, out of ASi, positive pole (sensor supply)
0V <sub>out of ASi</sub>	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 addressing device				



### Line termination with sealing profile



### Accessories:

- Sealing profile IP67 (IDC plug), 60 mm (art. no. BW3282)
- ASi addressing cable with M12 connector, connecting cable for handheld ASi address programming devices for the addressing of active distributors (art. no. BW3304)
- ASi addressing cable with COMBICON connector, connecting cable for ASi Master/Gateways for the addressing of active distributors (art. no. BW3305)