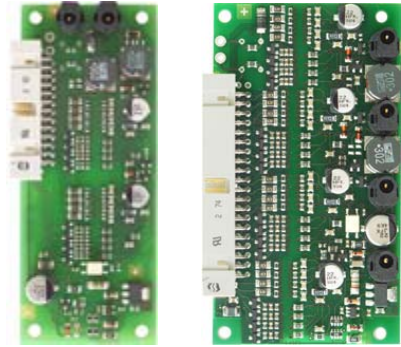




AS-i 3.0 Circuit Board Module 8I/8O
2 x 4I/4O AB Slaves (up to 62 slaves)

AS-i 3.0 Circuit Board Module 16I/16O
4 x 4I/4O AB Slaves (up to 62 slaves)

Special variants on request



(Figure similar)

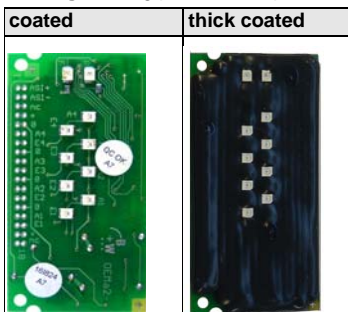
Figure	Circuit board dimensions ⁽¹⁾	Inputs digital	Outputs digital	Connection ⁽²⁾	Coated ⁽³⁾	LED status display ⁽⁴⁾	Input voltage (sensor supply) ⁽⁵⁾	Output voltage (actuator supply) ⁽⁶⁾	AS-i address ⁽⁷⁾	Art.no.
	104 mm x 41 mm	8	8 x electronic	wiring pin, angled	no	yes	out of AS-i	out of AS-i	2 AB slaves	BW1899
	93 mm x 51 mm	16	16 x electronic	wiring pin, angled	no	yes	out of AS-i	out of AS-i	4 AB slave	BW1901

(1) **Circuit board dimensions:** 2 holes for assembly angles.

(2) **Connection:** further connection options are available on request.



(3) **Coating:** coating protects components and circuit boards when touched.



(4) **LED status display:** status of in- and outputs is indicated by LEDs. In addition to that, both AS-i LEDs (PWR green and FAULT red) show - as usual regarding the AS-i slaves - the status of the AS-i slaves. Uaux is indicated by a green LED.

(5) **Input voltage (sensor supply):** inputs are supplied by AS-i or by AUX (auxiliary 24 V power). If supplied by AS-i, inputs shall not be connected to earth or to external potential.

(6) **Output voltage (actuator supply):** outputs are supplied by AS-i or by AUX (auxiliary 24 V power). If supplied by AS-i, outputs shall not be connected to earth or to external potential.

- (7) **AS-i address:** AB Slave (max. 62 AB Slaves/AS-i network), 2 AB slaves (max. 31 modules with 2 AB slaves), Single Slaves (max. 31 Single Slaves/AS-i 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 AS-i Slave profiles.

Article no.	BW1899	Bw1901
Connection		
AS-i / peripheral connection	wiring pins, angled	
Length of connector cable	I/O: max. 1,5 m ⁽¹⁾	
AS-i		
Profile	S-7.A.7, ID1=7 (fixed)	
Address	2 AB slaves	4 AB slaves
Required Master Profile	≥M4	
Since AS-i specification	3.0	
Operating voltage	30 V (18 ... 31,6 V)	
Max. current consumption	≤400 mA	≤500 mA
Max. current consumption without sensor/actuator supply	≤40 mA	≤50 mA
Inputs digital		
Number	8	16
Power supply	out of AS-i	
Input level	U _{in} <0,3 mA low, U _{in} >2 mA high	
Outputs digital		
Number	8	16
Power supply	out of AS-i	
Max. current consumption	70 mA per output, ∑ (outputs) ≤200 mA	
Display		
LED indicators	yes	
Environment		
Applied standards	EN 61 000-6-2 EN 61 000-6-3 EN 60529	
Operating altitude	max. 2000 m	
Ambient temperature	-25 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Protection class	IP00	
Coating	no	
Allowed shock and vibration stress	≤15g, T≤11 ms, 10 ... 55 Hz, 0,5 mm amplitude	
Weight	15 g	
Dimensions (W / H / D in mm)	41 / 104 / 16	51 / 93 / 16

(1) loop resistance: ≤150 Ω

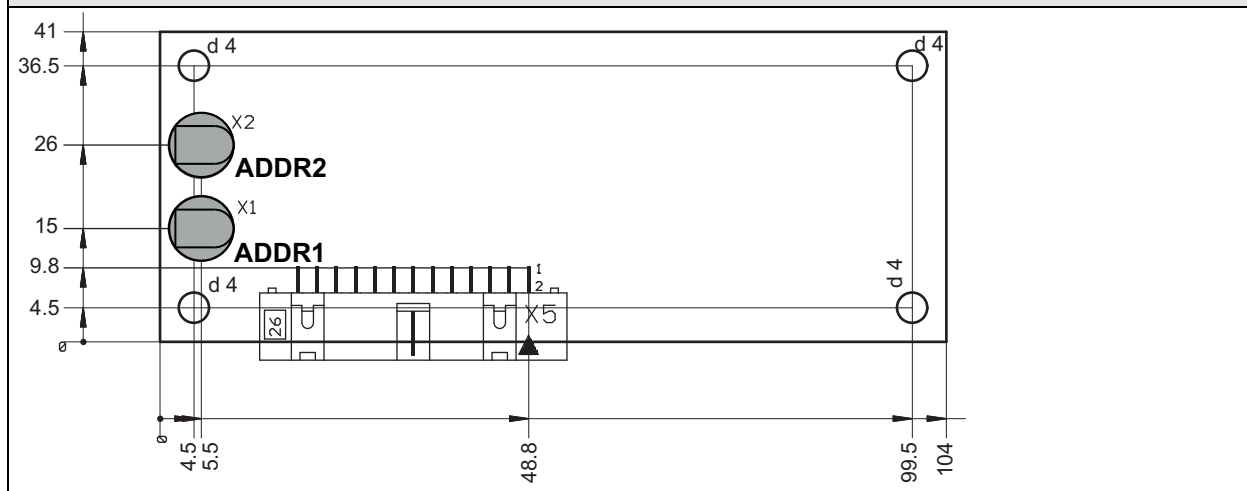
Programming	Bit Setting Digital IO			
	D0	D1	D2	D3
input				
BW1899, BW1901	Slave 1: I1	Slave 1: I2	Slave 1: I3	Slave 1: I4
	Slave 2: I5	Slave 2: I6	Slave 2: I7	Slave 2: I8
BW1901	Slave 3: I9	Slave 3: I10	Slave 3: I11	Slave 3: I12
	Slave 4: I13	Slave 4: I14	Slave 4: I15	Slave 4: I16
output				
BW1899, BW1901	Slave 1: O1	Slave 1: O2	Slave 1: O3	Slave 1: O4
	Slave 2: O5	Slave 2: O6	Slave 2: O7	Slave 2: O8
BW1901	Slave 3: O9	Slave 3: O10	Slave 3: O11	Slave 3: O12
	Slave 4: O13	Slave 4: O14	Slave 4: O15	Slave 4: O16

Programming	Parameter bit			
	P0	P1	P2	P3
BW1899, BW1901	0= off / 1= on (Watchdog)	0= on / 1= off (data input filter 128 μ s)	0= on / 1= off (synchronous I/O mode)	not used

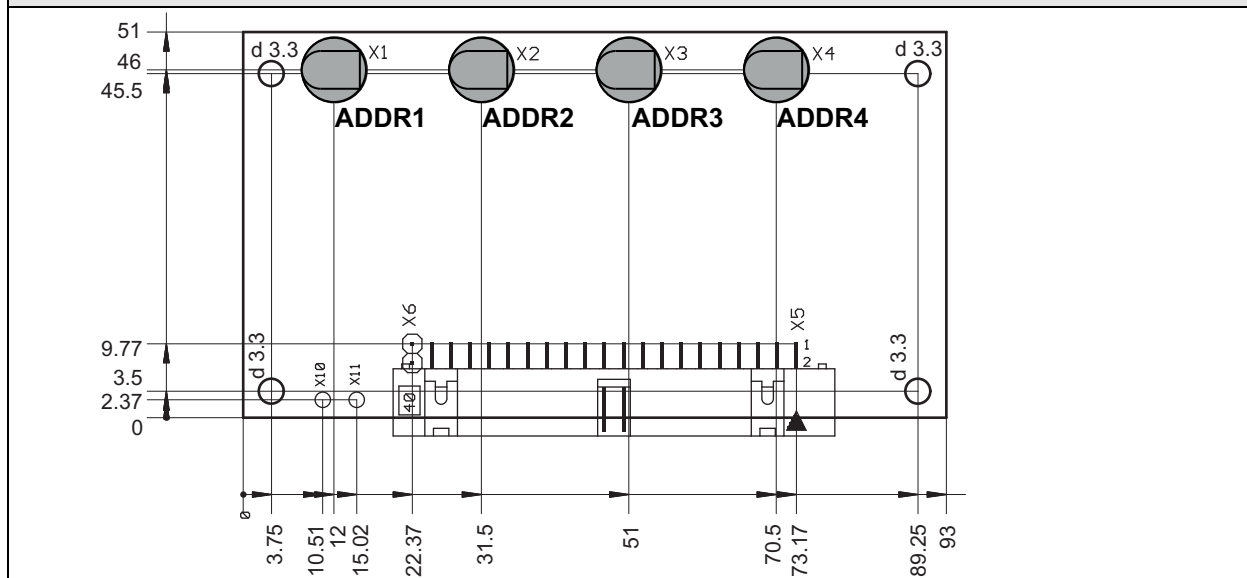
Programming notes	
BW1899, BW1901	Address preset 0, changeable via bus master or programming devices

Dimensional drawings

BW1899



BW1901

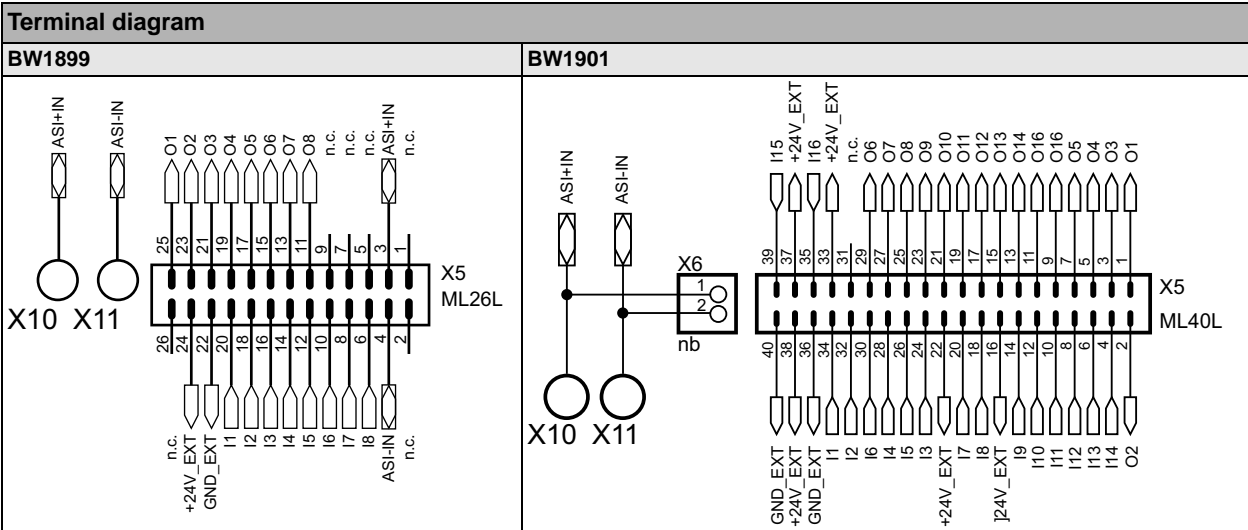


Connections:	
AS-i +IN, AS-i -IN	connection to the AS-i bus
I1 - I16	inputs
O1 - O16	outputs
24 V_EXT, GND_EXT	output for 24 V power supply for the inputs
ADDR1 - ADDR4	connection for AS-i addressing device, slave 1-4
n.c.	not connected



Notice

You shall not connect wiring with connections marked **n.c. (not connected)**.



	BW1899	BW1901
X10	ASI+IN	ASI+IN
X11	ASI-IN	ASI-IN
1	n.c.	O1
2	n.c.	O2
3	ASI+IN	O3
4	ASI-IN	I14
5	n.c.	O4
6	I8	I13
7	n.c.	O5
8	I7	I12
9	n.c.	O16
10	I6	I11
11	O8	O15
12	I5	I10
13	O7	O14
14	I4	I9
15	O6	O13
16	I3	+24V_EXT
17	O5	O12
18	I2	I8
19	O4	O11

	BW1899	BW1901
20	I1	I7
21	O3	O10
22	GND_EXT	+24V_EXT
23	O2	O9
24	+24V_EXT	I3
25	O1	O8
26	n.c.	I5
27		O7
28		I4
29		O6
30		I6
31		n.c.
32		I2
33		+24V_EXT
34		I1
35		I16
36		GND_EXT
37		+24V_EXT
38		+24V_EXT
39		I15
40		GND_EXT