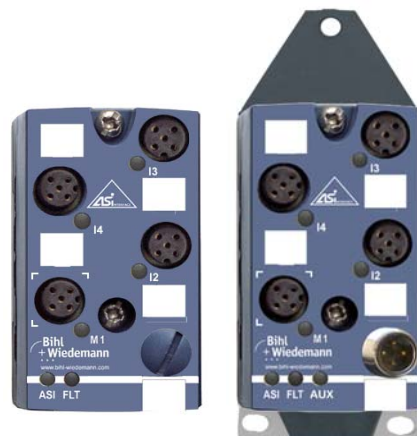


## AS-i 3.0 4I/4O Module for MOVI-SWITCH®

Mixed input/output slave

Protection category IP67



(figure similar)



Figure	Type	Drive <sup>(1)</sup>	Number of drives	Inputs digital	Outputs digital	Input voltage (sensor supply) <sup>(2)</sup>	Output voltage (actuator supply) <sup>(3)</sup>	AS-i connection <sup>(4)</sup>	AS-i address <sup>(5)</sup>	Art. no.
	IP67, 4 x M12	SEW MOVI-SWITCH 1E	1	4	3 x electronic	out of AS-i	out of AS-i	AS-i profile cable	1 single slave	<b>BWU2437</b>
	IP67, 4 x M12	SEW MOVI-SWITCH 1E	1	4	3 x electronic	out of AUX	out of AUX	AS-i using M12	1 single slave	<b>BWU2957</b>

- (1) **Drive:**  
"SEW MOVI-SWITCH® 1E": Motor module to control motor starters MOVI-SWITCH® 1E.
- (2) **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.
- (3) **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
- (4) **AS-i connection:** the connection to AS-i as well to AUX (auxiliary 24 V power) is made via yellow resp. black AS-i profile cable with piercing technology or via M12 socket (in IP20 via clamps).
- (5) **AS-i address:** 1 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.	BWU2437	BWU2957
<b>Connection</b>		
AS-i / AUX connection	profile cable and piercing	M12
Periphery connection	M12	
<b>AS-i</b>		
Profile	S-7.F.E, ID1=7 (default)	
Address	1 single slave	
Voltage	30 V (18 ... 31.6 V)	
Required Master profile	≥M0	
Since AS-i specification	2.0	
Max. current consumption	400 mA	35 mA
Max. current consumption without sensor/ actuator supply	50 mA	35 mA
<b>AUX</b>		
Voltage	–	24 V (18 ... 30 V)
Max. current consumption	–	350 mA
<b>Input</b>		
Number	4	
Power supply	motor fault inputs: out of AS-i sensor inputs: out of AS-i	motor fault inputs: out of AUX sensor inputs: out of AUX
Switching threshold	U <sub>in</sub> < 5 V low, U <sub>in</sub> > 10 V high	
<b>Output</b>		
Number	3	
Power supply	out of AS-i	out of AUX
Max. output current	O1, O3: 10 mA, O4: 350 mA	
Supply of motor	out of AS-i, max. 350 mA	out of AUX, max. 350 mA
Power supply of attached sensors	max. 350 mA	
Sum of supply current	sensors + motor: max. 350 mA	
<b>Display</b>		
LEDs I2, I3, I4 (yellow)	State of inputs I2, I3, I4	
LED M1 (yellow)	State of output O1	
LED ASI (green)	AS-i voltage ON	
LED AUX (green)	–	on: 24 V <sub>DC</sub> AUX off: no 24 V <sub>DC</sub> AUX
LED FLT/FAULT (red)	no data exchange, peripheral fault	
<b>Environment</b>		
Applied standards	EN 61000-6-2 EN 61000-6-4 EN 60529	
Operating temperature	-30 °C ... +55 °C <sup>(1)</sup>	
Storage temperature	-25 °C ... +85 °C	
Housing	plastic, for DIN rail mounting	plastic, for screw mounting
Protection category	IP67	
Max. tolerable shock load	30g, 11 ms, acc. EN 61131-2	
Max. tolerable vibration stress	5 ... 8 Hz 50 mm <sub>pp</sub> /8 ... 500 Hz 6g, acc. EN 61131-2	
Isolation voltage	≥500 V	
Weight	100 g	
Dimensions (B / H / T in mm)	45 / 80 / 42	45 / 116,5 / 47,5

<sup>(1)</sup> Temperature range up to -30°C from Ident.No. ≥16378 (BWU2437); Ident.No. ≥16379 (BWU2957)

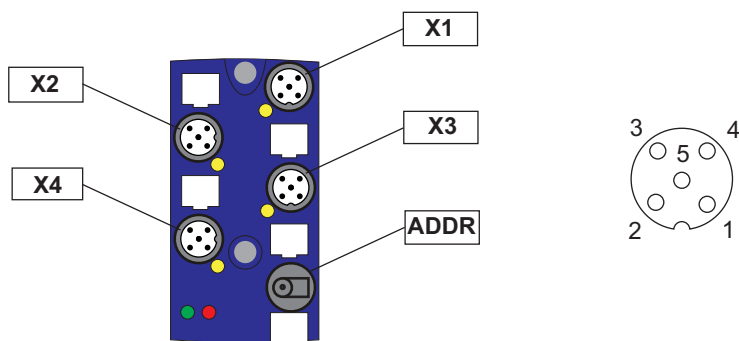
Programming	Bit setting
<b>Parameter bit</b>	
<b>P0</b>	0 = off/ 1 = on (watchdog)
<b>P1</b>	0 = on/ 1 = off (data input filter 128µs)
<b>P2</b>	0 = on/ 1 = off (synchronous data I/O mode)
<b>P3</b>	not used

## Pin assignment

Signal name	Explanation
I <sub>x</sub>	Digital input x
24 V <sub>ext out</sub>	Power supply, out of external voltage, positive pole (AUX, actuator supply)
0 V <sub>ext out</sub>	Power supply, out of external voltage, negative pole (AUX, actuator supply)
24 V <sub>ext in</sub>	Input voltage, positive pole (AUX+)
0 V <sub>ext in</sub>	Input voltage, negative pole (AUX-)
AS-i+	AS-i network, positive potential
AS-i-	AS-i network, negative potential
24 V <sub>out of AS-i</sub>	Power supply, out of AS-i, positive pole (sensor supply)
0 V <sub>out of AS-i</sub>	Power supply, out of AS-i, negative pole (sensor supply)
n.c.	not connected

## Connections

Article no.	M12 Connection	Marking	Pin1	Pin2	Pin3	Pin4	Pin5
BWU2437	X1	I3 (Input 3)	24 V <sub>out of AS-i</sub>	n.c.	0 V <sub>out of AS-i</sub>	I3	n.c.
	X2	I4 (Input 4)	24 V <sub>out of AS-i</sub>	n.c.	0 V <sub>out of AS-i</sub>	I4	n.c.
	X3	I2 (Input 2)	24 V <sub>out of AS-i</sub>	n.c.	0 V <sub>out of AS-i</sub>	I2	n.c.
	X4	M1 (Motor 1)	O4 (0: 0 V; 1: 24 V)	O1 (0: 0 V; 1: 24 V)	0 V <sub>out of AS-i</sub>	I1 (0: 0 V; 1: 24 V)	O3 (0: 0 V; 1: 24 V)
	ADDR (dummy plug)	connection for AS-i addressing device					



Connections							
Article no.	M12 Connection	Marking	Pin1	Pin2	Pin3	Pin4	Pin5
BWU2957	X1	I3 (Input 3)	24 V <sub>ext out</sub>	n.c.	0 V <sub>ext out</sub>	I3	n.c.
	X2	I4 (Input 4)	24 V <sub>ext out</sub>	n.c.	0 V <sub>ext out</sub>	I4	n.c.
	X3	I2 (Input 2)	24 V <sub>ext out</sub>	n.c.	0 V <sub>ext out</sub>	I2	n.c.
	X4	M1 (Motor 1)	O4 (0: 0 V; 1: 24 V)	O1 (0: 0 V; 1: 24 V)	0 V <sub>ext out</sub>	I1 (0: 0 V; 1: 24 V)	O3 (0: 0 V; 1: 24 V)
	X5	AS-i / AUX	AS-i+	0 V <sub>ext in</sub>	AS-i-	24 V <sub>ext in</sub>	-

The diagram shows the physical module with five M12 sockets labeled X1 through X5. X1, X2, and X3 are at the top, X4 is in the middle, and X5 is at the bottom. To the right, a circular 5-pin connector is shown with pins numbered 1 to 5. Pin 1 is at the bottom, pin 2 is on the left, pin 3 is at the top-left, pin 4 is at the top-right, and pin 5 is at the top.

### Accessories:

- AS-i substructure module for 4-channel module in 45 mm-housing (art. no. BW2349)
- AS-i substructure module (CNOMO) 4-channel module in 45 mm-housing (art. no. BW2350)
- Passive Distributor AS-i/24 V to M12, 2 m line (article no. BW1974)
- Protection caps for unused M12 sockets (article no. BW2368)