

## ASi Motor Module for Lenze Smart Motor, 4I/3O

2 x connectors for profile cable



(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>	ASi connection <sup>(4)</sup>	Connection <sup>(5)</sup>	ASi address <sup>(6)</sup>	Art. no.
	IP67, depth 35 mm	Lenze Smart Motor	1	4	3 x electronic	out of AUX	out of AUX	ASi profile cable	1 x M12 cable socket, straight, 8 poles + 2 x cable sockets, straight, 5 poles	1 AB address	<b>BWU4740</b>

- (1) **Drive:**  
**Lenze Smart Motor:** Motor module to control Lenze Smart motors and to control additional sensors.
- (2) **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.
- (3) **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
- (4) **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).
- (5) **Connection:** further connection options are available on request.

M12 cable socket, angled	M12 cable socket, straight	M8 cable socket, straight	round cable / connecting wires	Profile cable branch
PUR line, oil resistant				

- (6) **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.

<b>Article No.</b>	<b>BWU4740</b>
<b>Connection</b>	
ASi/AUX connection	profile cable and piercing
Periphery connection	Motor: 1 x M12 cable socket, straight, 8 poles sensors: 2 x M12 cable sockets, straight, 5 poles
Length of connector cable	X2, I2: 2 m I3/I4: 0,3 m
	max. allowed tensile strain 10 N
<b>ASi</b>	
Profile	S-7.A.E
Adresse	1 AB address
Required Master profile	≥M4
As of ASi specification	3.0
Operating voltage	30 V (18 ... 31.6 V)
Max. current consumption	35 mA
Max. current consumption without sensor/ actuator supply	35 mA
<b>AUX</b>	
Operating voltage	24 V (18 ... 30 V)
Max. current consumption	max. 2,5 A
<b>Input</b>	
Number	4
Power supply	out of AUX
Sensor supply	short-circuit and overload protected according to EN 61131-2
Power supply of attached sensors	max. 1 A
Switching threshold	U < 5 V (low) U > 15 V (high)
<b>Output</b>	
Number	3
Power supply	out of AUX
Output	short-circuit and overload protected according to EN 61131-2
Max. output current	500 mA per output
<b>Display</b>	
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 alternating flashing/red flashing: peripheral fault <sup>(1)</sup> off: no ASi voltage
LED AUX (green)	on: 24 V <sub>DC</sub> AUX off: no 24 V <sub>DC</sub> AUX
LED I1 ... In (yellow)	state of inputs I1 ... I4
LED O1 ... On (yellow)	state of outputs O1 ... O3

<b>Article No.</b>	<b>BWU4740</b>
<b>Environment</b>	
Applied standards	EN 61000-2 EN 61000-3 EN 61131-2 EN 60529
Can be used in passively safe paths up to SIL3/PLe	yes <sup>(2)</sup>
Operating altitude	max. 2000 m
Ambient temperature	-30 °C ... +60 °C <sup>(3)</sup>
Storage temperature	-25 °C ... +85 °C
Housing	plastic, screw mounting, suitable for cable ducts (installation depth ≥35mm)
Pollution Degree	2
Protection category	IP67
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	100 g
Dimensions (W / H / D) in mm	60 / 45 / 35

(1) see table "Peripheral fault indication"

(2) The module is suitable for use in passively safe paths because an exclusion of errors can be assumed for the connection of the two potentials, ASi and AUX.

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

Article no.	Peripheral fault indication		
	Overload sensor supply	Output short circuited	AUX voltage missing
BWU4740	•	-	•

Programming	Parameter bit			
	D3	D2	D1	D0
	Input			
BWU4740	I4	I3	I2	I1
	Output			
BWU4740	-	O3	O2	O1
	Parameter bit			
	P3	P2	P1	P0
BWU4740	not used	0= on / 1= off (synchronous I/O mode)	0= on / 1= off (data input filter 128µs)	0= off / 1= on (Watchdog)

## Pin assignment

Signal name	Explanation
Ix	digital input x
Ox	digital output x
24V <sub>ext out</sub>	power supply, out of external voltage, positive pole (AUX, actuator supply)
0V <sub>ext out</sub>	power supply, out of external voltage, negative pole (AUX, actuator supply)
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.	Mark	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6	Pin7	Pin8
BWU4740	X2 <sup>(1)</sup>	24 V <sub>ext.out</sub>	I1	0 V <sub>ext.out</sub>	O1	O2	O3	n.c.	0 V <sub>e</sub> xt.out
	I2	24 V <sub>ext.out</sub>	n.c.	0 V <sub>ext.out</sub>	I2	n.c.	–	–	–
	I3/4	24 V <sub>ext.out</sub>	I4	0 V <sub>ext.out</sub>	I3	n.c.	–	–	–

<sup>(1)</sup> 8 pole connection to X2 of Lenze Smart Motor

### Accessories:

- Sealing profile IP67 (IDC plug), 60 mm (art. no. BW3282)
- ASi-5/ASi-3 Address Programming Device (art. no. BW4708)
- Diagnostic Software (art. no. BW2902)