

# Active Distributor AS-i, IP67, M12, 3I/4O



2 x connectors for profile cable

Periphery connection via  
1 x round cable/connecting wires +  
2 x M12 cable sockets, straight, 5 poles

For SEW MOVIMOT with binary control



(figure similar)



Figure	Type	Number of Drives	Inputs digital	Outputs digital	Input voltage (sensor supply) (1)	Output voltage (actuator supply) (2)	AS-i connection (3)	Connection (4)	AS-i address (5)	Special function	Art. no.
	IP67, depth 35 mm	1	3	4x electronic	out of AUX	out of AUX	AS-i profile cable	1 x round cable/connecting wires + 2 x M12 cable sockets, straight, 5 poles	1 AB slave	for connecting SEW MOVIMOT to AS-i	<b>BWU3605</b>

- (1) **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.
- (2) **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
- (3) **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).
- (4) **Connection:** further connection options are available on request.

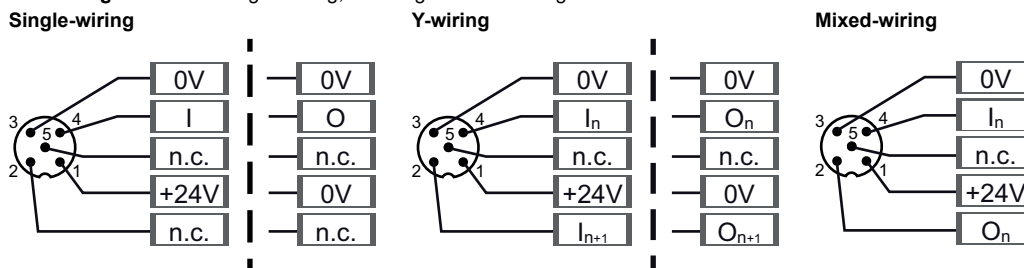
M12 cable socket, angled	M12 cable socket, straight	M8 cable socket, straight	round cable / connecting wires	Push in terminals
PUR line, oil resistant				

- (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.

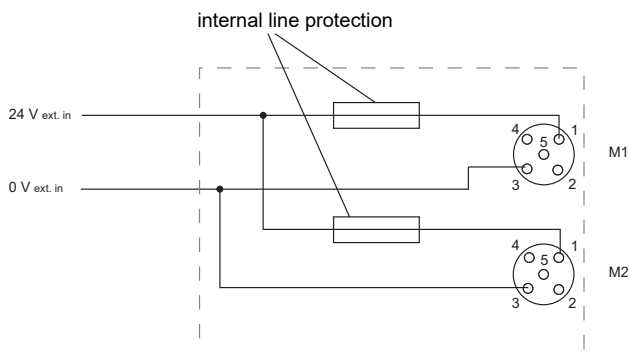
<b>Article No.</b>		<b>BWU3605</b>
<b>General data</b>		
Device type		input/output
<b>Connection</b>		
AS-i/AUX connection		profile cable and piercing
Periphery connection		1 x round cable/connecting wires + 2 x M12 cable sockets, straight, 5 poles
M12 wiring <sup>(1)</sup>		Single wiring (I2, I3)
Length of connector cable		2 m; max. allowed tensile strain 10 N
<b>AS-i</b>		
Profile		S-7.A.7 (ID1=7 fixed)
Address		1 AB Slave
Required Master profile		≥M4
As of AS-i specification		3.0
Operating voltage		30 V (18 ... 31.6 V)
Max. current consumption		45 mA
Max. current consumption without sensor/ actuator supply		45 mA
<b>AUX</b>		
Operating voltage		24 V (18 ... 30 V)
Max. current consumption		3 A
<b>Input</b>		
Number		3
Power supply		out of AUX
Line protection fuse		yes 5 A <sup>(2)</sup> slow blow fuse UL certified
Power supply of attached sensors	up to +40 °C	1 A, $\sum (In/Out) \leq 3 A$ <sup>(3)</sup>
	at +55 °C	1 A, $\sum (In/Out) \leq 2 A$ <sup>(3)</sup>
	at +60 °C	1 A, $\sum (In/Out) \leq 1,5 A$ <sup>(3)</sup>
Switching threshold		U < 5 V (low) U > 15 V (high)
<b>Output</b>		
Number		4
Power supply		out of AUX
Output		short-circuit and overload protected according to EN 61131-2
Max. output current	up to +40 °C	1 A per output, $\sum (In/Out) \leq 3 A$ <sup>(3)</sup>
	at +55 °C	1 A per output, $\sum (In/Out) \leq 2 A$ <sup>(3)</sup>
	at +60 °C	1 A per output, $\sum (In/Out) \leq 1,5 A$ <sup>(3)</sup>
Safe disconnection of output voltage		yes up to PLe
<b>Display</b>		
LED ASI/FLT (red/green)		green: AS-i voltage on, slave online red: AS-i voltage on, but slave offline yellow/red flashing: address 0 red/green flashing: peripheral fault <sup>(4)</sup> off: no AS-i 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 ... I3
LED O1 ... On (yellow)		state of outputs O1 ... O4

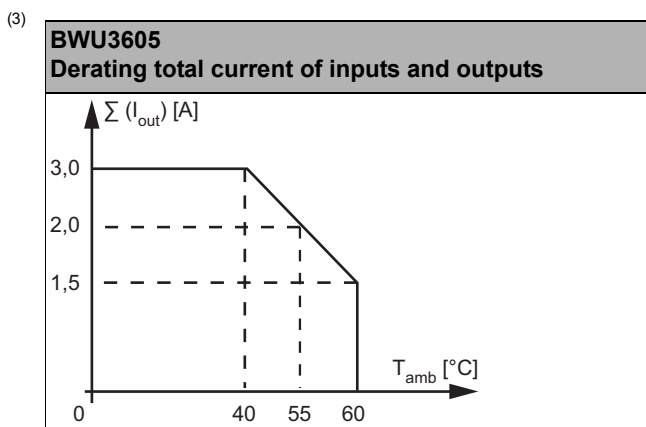
<b>Article No.</b>	<b>BWU3605</b>
<b>Environment</b>	
Applied standards	EN ISO 13849-1 PLe EN ISO13849-2 EN 62026-2 EN 61000-6-2 EN 61000-6-3 EN 61131-2 EN 60529
Passive safety (up to PLe/SIL 3)	yes <sup>(5)</sup>
Operating altitude	max. 2000 m
Ambient temperature	-30 °C ... +60 °C <sup>(3) (6)</sup>
Storage temperature	-25 °C ... +85 °C
Housing	plastic, screw mounting, suitable for cable ducts (installation depth ≥35mm)
Pollution Degree	2
Protection category	IP67 <sup>(7)</sup>
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) **M12 wiring:** either as a single-wiring, Y-wiring or mixed-wiring.



(2) In the motor module UL approved fuses are placed before the sensor supply connections. A short circuit in the sensor causes this fuse to blow, protecting the connection cable between the module and sensors. After blowing the fuse the module is no longer functional and needs to be replaced.





- (4) see table "Peripheral fault indication"
- (5) 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.
- (6) Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.
- (7) Protection category IP67 can only be achieved, if also the cable connector fulfills IP67

Article no.	Peripheral fault indication		
	Overload sensor supply	Output short circuited	AUX voltage missing
BWU3605	•	•	•

Programming	Parameter bit			
	D0	D1	D2	D3
	input			
BWU3605	I1	I2	I3	–
	output			
BWU3605	O1	O2	O3	O4
	parameter bit			
	P0	P1	P2	P3
BWU3605	0= off / 1= on (Watchdog)	0= off / 1= on (peripheral fault, if AUX missing)	0= on / 1= off (synchronous I/O mode)	not used

### Pin assignment

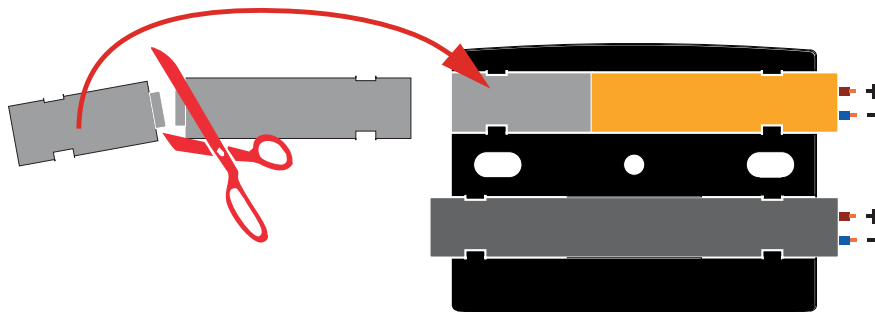
Signal name	Explanation
Ix	digital input x
Ox	digital output x
24V <sub>ext out</sub>	power supply, out of external voltage, positive pole (AUX, actuator supply)
0V <sub>ext out</sub>	power supply, out of external voltage, negative pole (AUX, actuator supply)
24V <sub>out of AS-i</sub>	power supply, out of AS-i, positive pole (sensor supply)
0V <sub>out of AS-i</sub>	power supply, out of AS-i, negative pole (sensor supply)
AS-i+, AS-i-	connection to AS-i bus
n.c. (not connected)	not connected

Connections:										
Article no.	Connect- ing wires	WH	BN	GN	YE	GY	PK	BU	RD	
BWU3605	X1	I1 (K1b)	O1 (24 V)	O2 (R)	O3 (L)	O4 (f1/f2)	24 V ext out (K1a)	0 V ext out	n.c.	
	M12 connection	Pin1 (BN)	Pin2 (WH)	Pin3 (BU)	Pin4 (BK)	Pin5 (--)				
	X2	24 V ext out	n.c.	0 V ext out	I3	n.c.	-			
	X3	24 V ext out	n.c.	0 V ext out	I2	n.c.	-			

### Line termination with sealing profile



max. IP54



### Accessories:

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