

**Bihl
+ Wiedemann**



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

(5) **ASi address:** AB addresses (max. 62 AB addresses/ASi network), 2 AB addresses (max. 31 modules with 2 AB addresses), Single addresses (max. 31 Single addresses/ASi network), ASi-5 address (max. 62 ASi-5 addresses/ASi network), mixed use allowed. Upon request, ASi-3 nodes are available with specific ASi node profiles. For modules with two ASi-3 nodes the 2nd ASi-3 node is turned off as long as the 1st ASi-3 node is addressed to address "0".

Active Distributor ASi-5, IP67, 1 RGB/RGBW LED Stripe

Article No.		BWU5273
Connection		
ASi/AUX connection		profile cable and piercing technology
Periphery connection		1 x M8 cable socket, straight, 3 poles
Round cable		0,2 m
		max. allowed tensile strain 10 N
ASi		
Address		1 ASi-5 address
Operating voltage		30 V (18 ... 31.6 V)
As of ASi specification		ASi-5
ASi process data width		7 byte ⁽¹⁾
Max. current consumption		35 mA
Max. current consumption without sensor/ actuator supply		35 mA
AUX		
Operating voltage		12 ... 30 V
Max. current consumption		1 A (24 V) / 1,8 A (12 V)
Output		
Number		1 x RGB/RGBW LED stripe
Max. number of LEDs		255
Bytes / LEDs		3 (RGB) or 4 (RGBW)
Actuator supply		5 V out of AUX, short-circuit and overload protected, acc. EN 61131-2
Max. output current	up to +40 °C	2 A out of 5 V
	at +60 °C	1,6 A
	at +70 °C	1,2 A
Display		
LED ASi (green)		on: ASi voltage OK flashing: ASi voltage on, but peripheral fault ⁽²⁾ or address 0 off: no ASi voltage
LED FLT/FAULT (red)		on: ASi voltage 0 or ASi node offline flashing: peripheral fault ⁽²⁾ off: no ASi voltage
LED AUX (green)		AUX supply OK
LED 5 V (green)		on: 5 V actuator supply on flashing: overload/short circuit off: 5 V actuator supply off
Environment		
Applied standards		EN 61000-6-2 EN 61000-6-3 EN 61131-2 EN 60529
Can be used in passively safe paths up to SIL3/PLe		yes ⁽³⁾
Operating altitude		max. 2000 m
Ambient temperature		-30 °C ... +60 °C ⁽⁴⁾
Storage temperature		-25 °C ... +85 °C
Housing		plastic, for screw mounting, suitable for cable ducts (≥35 mm installation depth)
Pollution degree		2
Protection category		IP67 ⁽⁵⁾
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⁾ The ASi-5 process data bandwidth depends on the ASi-5 profile. Further selectable profiles can be found in the hardware catalog of the Bihl+Wiedemann Suite or in the configuration manual.

Active Distributor ASi-5, IP67, 1 RGB/RGBW LED Stripe

- (2) **see table "Peripheral fault indication"**
- (3) 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.
- (4) Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.
- (5) 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
BWU5273	–	•	•

Programming: ASi bit assignment

Profile Nb:	Byte	Bit							
		D7	D6	D5	D4	D3	D2	D1	D0
		Output							
0x820110 (RGB)	0	RL-DIR		RL-CONT	RL	Flash		Mode	Freeze
	1	First (UInt8)							
	2	Last (UInt8)							
	3	Red (UInt8)							
	4	Green (UInt8)							
	5	Blue (UInt8)							
0x820111 (RGBW)	0	RL-DIR		RL-CONT	RL	Flash		Mode	Freeze
	1	First (UInt8)							
	2	Last (UInt8)							
	3	Red (UInt8)							
	4	Green (UInt8)							
	5	Blue (UInt8)							
	6	White (UInt8)							

Legend

Bit-Name	Values	Meaning
FIRST	0-255	First LED in the range to be activated
LAST	0-255	Last LED in the range to be activated
Red	0-255	Intensity of the red color
Green	0-255	Intensity of the green color
Blue	0-255	Intensity of the blue color
White	0-255	Intensity of the white color
Freeze	0	Apply current color values from the cyclic channel
	1	Freeze current color values
MODE	0	The LEDs in the addressed range change their color value, the rest is off
	1	The LEDs in the addressed range change their color value, the rest stays on the last value
FLASH	00	Continuously lit
	01	Flash 1
	10	Flash 2
	11	Flash 3
RL	0	Running light deactivated
	1	Running light activated; running light of the set RGB values from cyclic channel; other parameters are set acyclically
RL-CONT	0	Running light once only
	1	Continuous running light
RL-DIR	00	Running light direction from first LED forwards
	01	Running light direction from last LED backwards
	10	Running light moves back and forth

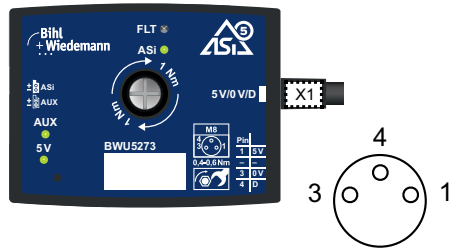
Active Distributor ASi-5, IP67, 1 RGB/RGBW LED Stripe

Pin assignment

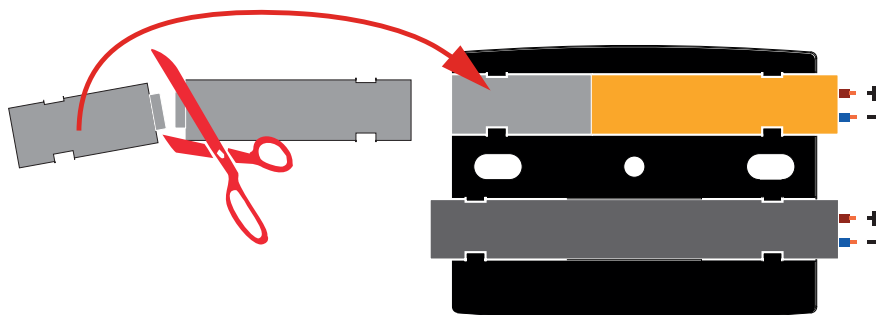
Signal	Description
D _{out}	Communication to control the individual LEDs on the strip
5 V _{ext out}	Power supply, out of external voltage, positive pole (AUX)
0 V _{ext out}	Power supply, out of external voltage, negative pole (AUX, acuator supply)
24 V _{ext in}	External power supply, input, positive pole
0 V _{ext in}	External power supply, input, negative pole
ASi +, ASi -	Connection to ASi bus
n.c. (not connected)	Not connected

Connections: round cable/connecting wires 0,5 mm²

Artikel Nr.	Anschluss	Pin1	Pin2	Pin3	Pin4
BWU5273	X1	5 V _{ext out}	—	0 V _{ext out}	D _{out}



Line termination with sealing profile



Accessories:

- Sealing profile IP67 (IDC plug), 60 mm (art. no. BW3282)
- ASi-5/ASi-3 Address Programming Device (art. no. BW4925)