Passive Distributor AS-i, IP67

connections for profile cables 1 x AS-i, 2 x AS-i or connections for profile cables for 1 x AS-i + 1 x AUX

(figure similar)

to M8 cable sockets

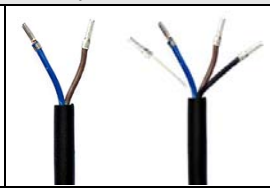
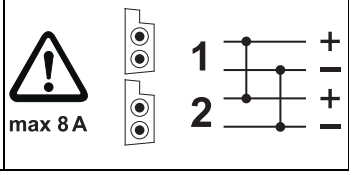
- **to M12 sockets / cable sockets**
- **to connecting wires**
- **to round cable / connecting wires**
- **as profile cable branch**

optionally with changeable or self-resetting fuses

Figure	Type	Flat design, montage in cable duct possible	Internal fuse [1]	Profile cable connection	Connection [2]	Round cable [3]	Protection category	Article no.
	IP67, 35 mm deep	no	4 A, changeable	1 x AS-i, 1 x AUX	2 x M12 sockets, 5-poles	-	IP67	**BWU3087**
	IP67, 35 mm deep	no	1 A, self-resetting	1 x AS-i, 1 x AUX	2 x M12 sockets, 5-poles	-	IP67	**BWU3117**
	IP67, 35 mm deep	no	-	1 x AS-i, 1 x AUX	2 x M12 sockets, 5-poles	-	IP67	**BWU3184**
	IP67, 35 mm deep	no	4 A, changeable	1 x AS-i, 1 x AUX	1 x M12 socket, 5-poles	-	IP67	**BW3491**
	IP67, 35 mm deep	no	1 A, self-resetting	1 x AS-i, 1 x AUX	1 x M12 socket, 5-poles	-	IP67	**BW3492**
	IP67, 35 mm deep	no	-	1 x AS-i, 1 x AUX	1 x M12 socket, 5-poles	-	IP67	**BW3493**
	IP67, 19 mm deep	yes, 19 mm deep	8 A slow-blow fuse + 1 A, self-resetting	1 x AS-i, 1 x AUX	1 x M8 cable socket, straight, 5-poles + 1 x M8 cable socket, straight, 4-poles	0,20 m	IP67	**BW3276**
	IP67, 19 mm deep	yes, 19 mm deep	8 A slow-blow fuse	1 x AS-i, 1 x AUX	1 x round cable / connecting wires	1,3 m	IP67	**BW3423**
	IP67, 19 mm deep	yes, 19 mm deep	1 A, self-resetting	1 x AS-i, 1 x AUX	1 x M12 cable socket, angled, 5-poles	2 m	IP67	**BW3246**
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x AS-i, 1 x AUX	1 x M12 cable socket, angled, 5-poles	2 m	IP67	**BW3183**
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x AS-i, 1 x AUX	1 x M12 cable socket, angled, 5-poles	1 m	IP67	**BW3408**
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x AS-i, 1 x AUX	1 x round cable / connecting wires	5 m	IP67	**BW3315**
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x AS-i, 1 x AUX	1 x round cable / connecting wires	2 m	IP67	**BW3314**
	IP67, 19 mm deep	yes, 19 mm deep	-	2 x AS-i	1 x M12 cable socket, angled, 5-poles	2 m	IP67	**BW3185**
	IP67, 19 mm deep	yes, 19 mm deep	-	2 x AS-i	1 x M12 cable socket, straight, 5-poles	2 m	IP67	**BW3247**
	IP67, 19 mm deep	yes, 19 mm deep	-	2 x AS-i	1 x round cable / connecting wires	0,25 m	IP67	**BW3186**
	IP67, 19 mm deep	yes, 19 mm deep	-	2 x AS-i	1 x round cable / connecting wires	5 m	IP67	**BW3524**
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x AS-i	1 x M12 cable socket, angled, 5-poles	1 m	IP67	**BW3407**
	IP67, 19 mm deep	yes, 19 mm deep	-	2 x AS-i	profile cable branch	-	IP67	**BW3157**

(1) **Internal fuse**
4 A, changeable: The internal protection is realized via changeable 4 A fuses (slow-blow) for AS-i and AUX. At each M12 connection ≤4 A are available.
1 A, self-resetting: The internal protection is realized via self-resetting 1 A fuses for AS-i and AUX. At each M12 connection ≤1 A are available.
8 A slow-blow fuse + 1 A, self-resetting: The internal protection is realized via one 8 A slow-blow fuse for AUX and via one self-resetting 1 A fuse for AS-i. At each M8 connection (AUX) ≤6 A are available, at each M8 connection (AS-i) ≤1 A are available.

(2) **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 and abrasion resistant, appropriate for conveyor chains				
				

(3) **Cable:** other cable lengths are available on request.
Under normal conditions (no bus termination or repeater), the permissible total length of the **AS-i segment is max. 100 m**. The calculation should take into consideration that the length of the connection cable (**round cable**) for each connected **Passive Distributor** must be **doubled**. In the case of the **Active Distributors** (AS-i slaves) however only the **one** AS-i profile cable is counted.

Article No.		**BWU3184**	**BWU3087**	**BWU3117**
Connection				
Profile cable connection		1 x AS-i, 1 x AUX profile cable and piercing		
Connection		2 x M12 sockets, 5-poles		
Round cable		–		
Operating voltage		10 ... 32 V_{DC} PELV		
Operating current	up to +50 °C	≤4 A at each M12 connection		≤1 A at each M12 connection (3)
	at +60 °C			≤0,8 A at each M12 connection (3)
	at +70 °C			≤0,6 A at each M12 connection (3)
Internal fuse		-	2 x 4 A changeable fuses for AS-i and AUX for each M12 connection	2 x 1 A self-resetting fuses for AS-i and AUX for each M12 connection
UL-specifications (UL61010-1 and UL61010-2-201)				
External protection		An isolated source with a secondary open circuit voltage of ≤30 V_{DC} with a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed.		
Display				
LED ASI1, ASI2 (green)		-	on: AS-i voltage at M12 connection 1, 2 O.K.	
LED AUX1, AUX2 (green)		-	on: AUX voltage at M12 connection 1, 2 O.K.	
LED ASI (green)		on: AS-i voltage at profile cable O.K.		
LED AUX (green)		on: AUX voltage at profile cable O.K.		

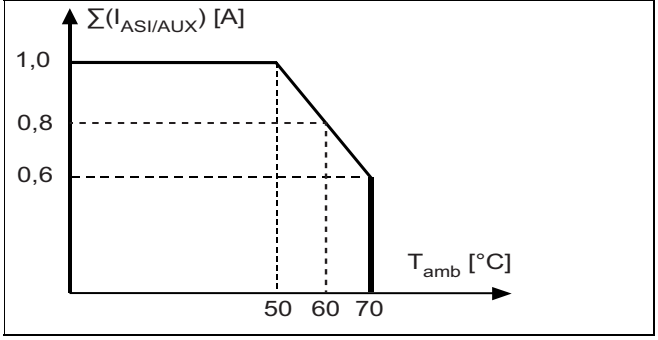
Article No.	BWU3184	BWU3087	BWU3117
Environment			
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3		
Operating altitude	max. 2000 m		
Ambient temperature	-30 °C … +70 °C (1) (3)		
Storage temperature	-25 °C … +85 °C		
Housing	plastic, for screw mounting		
Pollution Degree	2		
Protection category	IP67 (2)		
Tolerable loading referring to humidity	according to EN 61131-2		
Maximum tolerable shock and vibration stress	≤15*g*, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude		
Insulation voltage	≥500 V		
Weight	91 g		
Dimensions (W / H / D) in mm	60 / 45 / 35		

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

(2) Protection category IP67 can only be achieved, if also the cable connector fulfills IP67.

(3)

BWU3117
Derating operating current AS-i/AUX



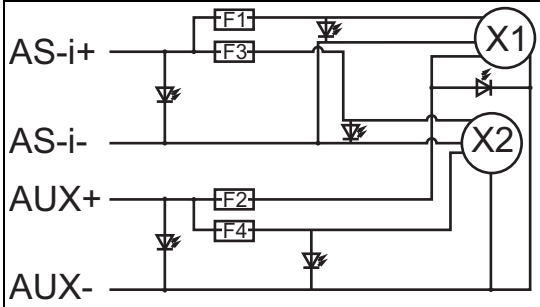
Notice

After each opening of the module, such as after replacing a fuse, check for proper function and correct placement of the seals.

Dirt, damage and/or shifting of the seals can compromise protection of the module against solid particles and liquids so that the specified protection category is no longer guaranteed.

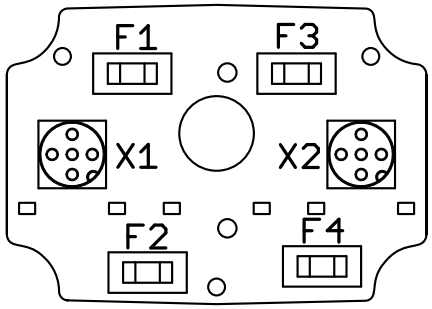
Internal fuses

BWU3087



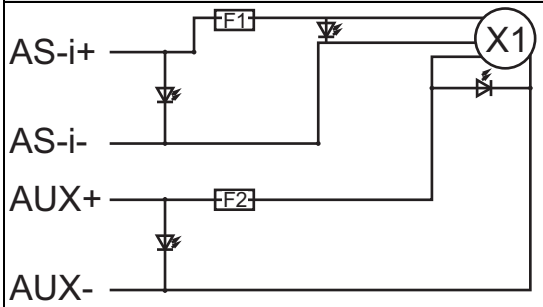
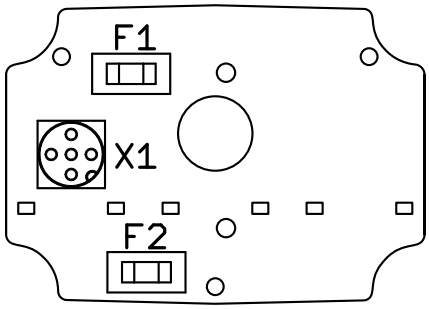
Position of changeable fuses

BWU3087



Article No.		BW3493	BW3491	BW3492
Connection				
Profile cable connection		1 x AS-i, 1 x AUX profile cable and piercing		
Connection		1 x M12 socket, 5-poles		
Round cable		–		
Operating voltage		10 ... 32 V_{DC} PELV		
Operating current	up to +30 °C	≤4 A at each M12 connection		≤1 A at each M12 connection
	at +40 °C			
	at +50 °C			
Internal fuse		–	1 x 4 A changeable fuse for AS-i and AUX for each M12 connection	1 x 1 A self-resetting fuse for AS-i and AUX for each M12 connection
Display				
LED ASI1 (green)		–	on: AS-i voltage at M12 connection 1 O.K.	
LED AUX1 (green)		–	on: AUX voltage at M12 connection 1 O.K.	
LED ASI (green)		on: AS-i voltage at profile cable O.K.		
LED AUX (green)		on: AUX voltage at profile cable O.K.		
Environment				
Applied standards		EN 60529 EN 61000-6-2 EN 61000-6-3		
Operating altitude		max. 2000 m		
Ambient temperature		-30 °C … +70 °C		
Storage temperature		-25 °C … +85 °C		
Housing		plastic, for screw mounting		
Pollution Degree		2		
Protection category		IP67 (1)		
Tolerable loading referring to humidity		according to EN 61131-2		
Maximum tolerable shock and vibration stress		≤15*g*, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude		
Insulation voltage		≥500 V		
Weight		91 g		
Dimensions (W / H / D) in mm		60 / 45 / 35		

(1) Protection category IP67 can only be achieved, if all open M12 sockets are sealed with suitable end caps (see „Accessories“).

Internal fuses	Position of changeable fuses
BW3491, BW3492	**BW3491**
	

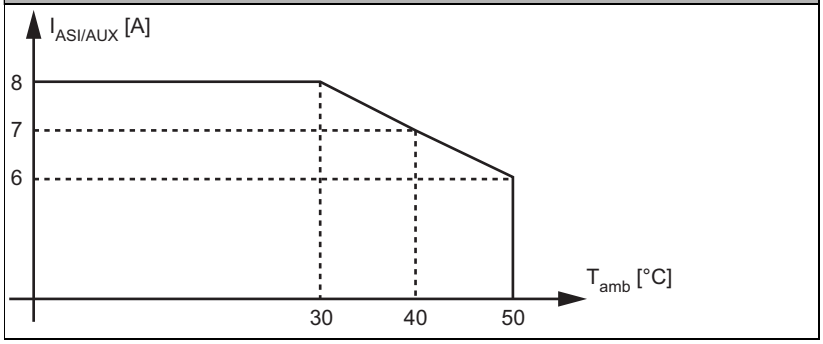
Article No.		BW3246	BW3276	BW3423
Connection				
Profile cable connection		1 x AS-i, 1 x AUX profile cable and piercing		
Connection		1 x M12 cable socket, angled, 5-poles	1 x M8 cable socket, straight, 5-poles + 1 x M8 cable socket, straight, 4-poles	1 x round cable/connecting wires
Round cable		2 m	0,20 m	1,3 m
		max. allowed tensile strain 10 N		
Operating voltage		10 ... 32 V_{DC} PELV		
Operating current	up to +30 °C	≤1 A at each M12 connection	≤6 A at each M8 connection (AUX) ≤1 A at each M8 connection (AS-i)	≤8 A at each round cable/connecting wire (3)
	at +40 °C			≤7 A at each round cable/connecting wire (3)
	at +50 °C			≤6 A at each round cable/connecting wire (3)
Internal fuse		2 x 1 A self-resetting fuses for AS-i and AUX for each M12 connection	1 x 8 A slow-blow fuse for AUX + 1 x 1 A self-resetting fuse for AS-i	2 x 8 A slow-blow fuses for AS-i and AUX
Display				
LED ASI1, ASI2 (green)		on: AS-i voltage at M12 connection 1 O.K.	on: AS-i voltage at M8 connection 1 O.K.	on: AS-i voltage at round cable O.K.
LED AUX1, AUX2 (green)		on: AUX voltage at M12 connection 1 O.K.	on: AUX voltage at M8 connection 1 O.K.	on: AUX voltage at round cable O.K.
LED ASI (green)		on: AS-i voltage at profile cable O.K.		
LED AUX (green)		on: AUX voltage at profile cable O.K.		
Environment				
Applied standards		EN 60529 EN 61000-6-2 EN 61000-6-3		
Operating altitude		max. 2000 m		
Ambient temperature		-30 °C … +55 °C (1)		-30 °C … +50 °C (1)
Storage temperature		-25 °C … +85 °C		
Housing		plastic, for screw mounting, suitable for cable ducts (installation depth ≥19 mm)		
Pollution Degree		2		
Protection category		IP67 (2)		
Tolerable loading referring to humidity		according to EN 61131-2		
Maximum tolerable shock and vibration stress		≤15*g*, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude		
Insulation voltage		≥500 V		
Weight		91 g		
Dimensions (W / H / D) in mm		60 / 45 / 35		

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

(2) Protection category IP67 can only be achieved, if also the cable connector fulfills IP67.

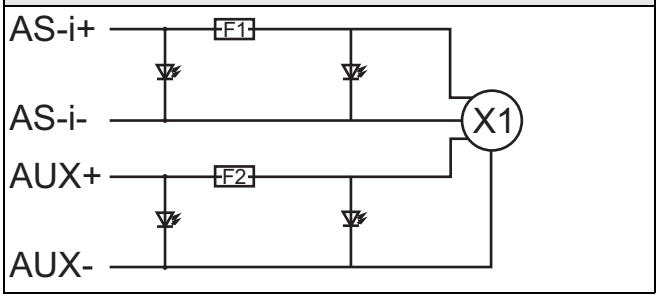
(3)

BW3423
Derating operating current AS-i/AUX



Internal fuses

BW3423



Article No.	BW3157	BW3186	BW3247	BW3185	BW3407
Connection					
Profile cable connection	2 x AS-i profile cable and piercing				1 x AS-i profile cable and piercing
Connection	profile cable branch	1 x round cable / connecting wires	1 x M12 cable socket, straight, 5-poles	1 x M12 cable socket, angled, 5-poles	
Round cable	–	0,25 m	2 m		1 m
		max. allowed tensile strain 10 N			
Operating voltage	10 ... 32 V_{DC} PELV				
Operating current	profile cable and piercing (cable branch): ≤8 A				–
	–	≤4 A at each round cable / connecting wires	≤4 A at each M12 connection		
Internal fuses	–				

Article No.	BW3157	BW3186	BW3247	BW3185	BW3407
Environment					
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3				
Operating altitude	max. 2000 m				
Ambient temperature	-30 °C … +70 °C	-30 °C … +70 °C (2)			
Storage temperature	-25°C … +85 °C				
Housing	plastic, for screw mounting, suitable for cable ducts (installation depth ≥19 mm)				
Pollution Degree	2				
Protection category	IP67 (1)				
Tolerable loading referring to humidity	according to EN 61131-2				
Maximum tolerable shock and vibration stress	≤15*g*, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude				
Insulation voltage	≥500 V				
Weight	75 g				
Dimensions (W / H / D) in mm	60 / 45 / 19				

(1) Protection category IP67 can only be achieved, if also the cable connector fulfills IP67.

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

Article No.	BW3524
Connection	
Profile cable connection	2 x AS-i profile cable and piercing
Connection	1 x round cable / connecting wires
Round cable	5 m
	max. allowed tensile strain 10 N
Operating voltage	10 ... 32 V_{DC} PELV
Operating current	profile cable and piercing (cable branch): ≤8 A
	≤4 A at each round cable / connecting wires
Environment	
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3
Operating altitude	max. 2000 m
Ambient temperature	30 °C … +70 °C (1)
Storage temperature	-25°C … +85 °C
Housing	plastic, for screw mounting, suitable for cable ducts (installation depth ≥19 mm)
Pollution Degree	2
Protection category	IP67 (2)
Maximum tolerable shock and vibration stress	≤15*g*, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude
Insulation voltage	≥500 V
Weight	75 g
Dimensions (W / H / D) in mm	60 / 45 / 19

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

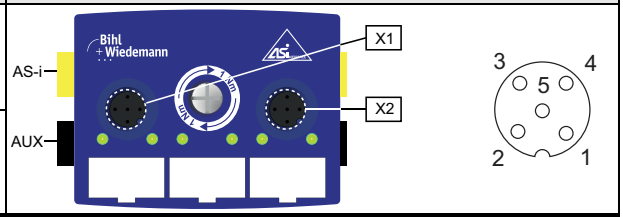
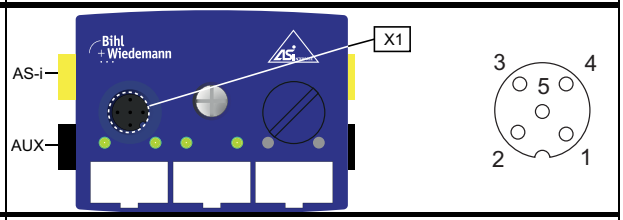
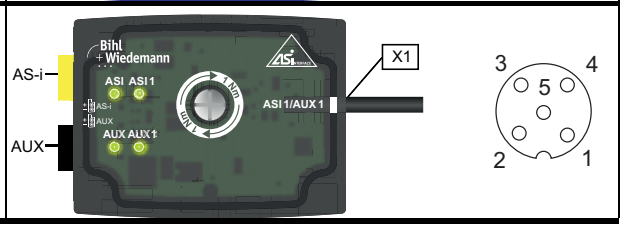
(2) Protection category IP67 can only be achieved, if also the cable connector fulfills IP67.

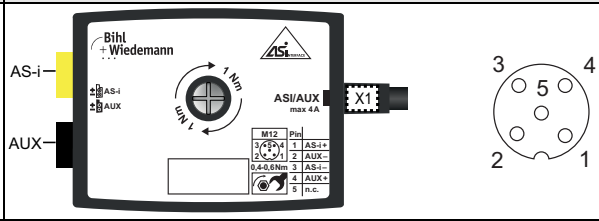
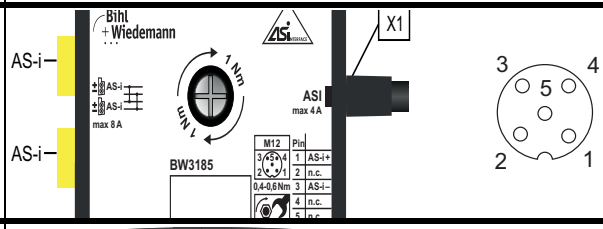
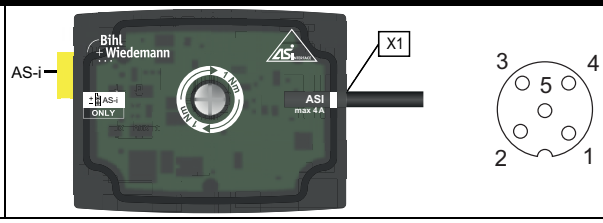
Article No.	BW3408	BW3183	BW3314	BW3315
Connection				
Profile cable connection	1 x AS-i, 1 x AUX profile cable and piercing			
Connection	1 x M12 cable socket, angled, 5-poles		1 x round cable /connecting wires	
Round cable	1 m	2 m		5 m
	max. allowed tensile strain 10 N			
Operating voltage	10 ... 32 V_{DC} PELV			
Operating current	≤4 A at each M12 connection			
Internal fuses	–			
Environment				
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3			
Operating altitude	max. 2000 m			
Ambient temperature	-30 °C … +70 °C (1)			
Storage temperature	-25 °C … +85 °C			
Housing	plastic, for screw mounting, suitable for cable ducts (installation depth ≥19 mm)			
Pollution Degree	2			
Protection category	IP67 (2)			
Tolerable loading referring to humidity	according to EN 61131-2			
Maximum tolerable shock and vibration stress	≤15*g*, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude			
Insulation voltage	≥500 V			
Weight	75 g			190 g
Dimensions (W / H / D) in mm	60 / 45 / 19			

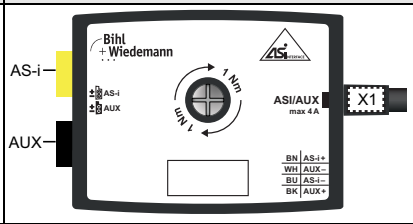
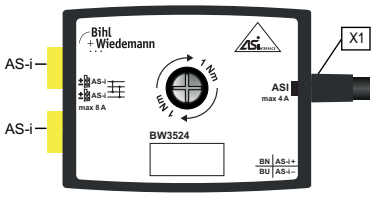
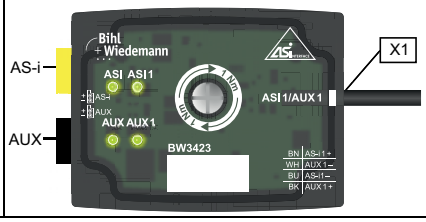
(1) Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.

(2) Protection category IP67 can only be achieved, if also the cable connector fulfills IP67.

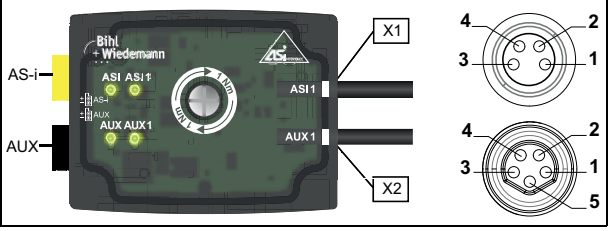
Connections: M12

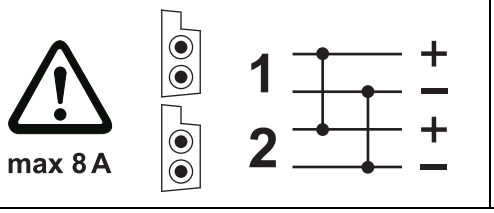
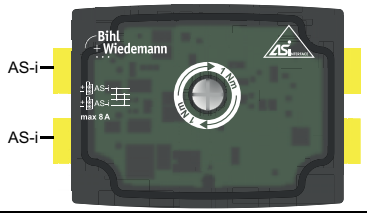
Article No.	M12 connection	Pin1	Pin2	Pin3	Pin4	Pin5	
BWU3087, BWU3117, BWU3184	**X1**	AS-i +	AUX -	AS-i -	AUX +	n.c.	
	X2	AS-i +	AUX -	AS-i -	AUX +	n.c.	
BW3491, BW3492, BW3493	**X1**	AS-i +	AUX -	AS-i -	AUX +	n.c.	
BW3246	**X1**	AS-i +	AUX -	AS-i -	AUX +	n.c.	

Connections: M12							
Article No.	**M12 connection**	**Pin1**	**Pin2**	**Pin3**	**Pin4**	**Pin5**	
BW3183, BW3408	**X1**	AS-i +	AUX -	AS-i -	AUX +	n.c.	
BW3185, BW3247	**X1**	AS-i +	n.c.	AS-i -	n.c.	n.c.	
BW3407	**X1**	AS-i +	n.c.	AS-i -	n.c.	n.c.	

Connections: round cable/connecting wires						
Article No.	**round cable/ connecting wires**	**Brown (BN)**	**White (WH)**	**Blue (BU)**	**Black (BK)**	
BW3314, BW3315	**X1**	AS-i+	AUX -	AS-i-	AUX +	
BW3186, BW3524	**X1**	AS-i+	-	AS-i-	-	
BW3423	**X1**	AS-i+	AUX-	AS-i-	AUX+	

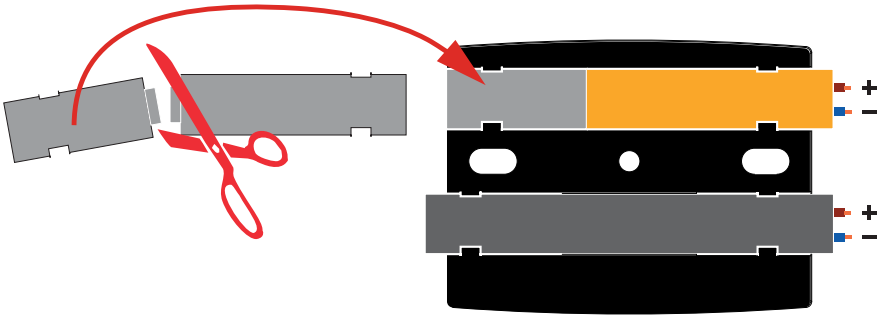
Passive Distributor AS-i, IP67

Connections: M8							
Article No.	M8 connection	Pin1	Pin2	Pin3	Pin4	Pin5	
BW3276	X1	AS-i+	AS-i+	AS-i-	AS-i-	–	
	X2	AUX+	AUX+	AUX-	AUX-	n.c.	

Connections: profile cable branch		
BW3157		

Line termination with sealing profile

max. IP54



Accessories:

- **Protection caps for unused M12 sockets (article no. BW2368)**
- **Sealing profile IP67 (IDC plug), 60 mm (article no. BW3282)**