

connections for profile cables 1 x ASi, 2 x ASi or
connections for profile cables for 1 x ASi + 1 x AUX

- to M8 cable sockets
- to M8 snap-in cable sockets
- to M12 sockets / cable sockets
- to connecting wires
- to round cable / connecting wires
- as profile cable branch



(figure similar)

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 ASi, 1 x AUX	2 x M12 sockets, 5-poles	-	IP67	BWU3087
	IP67, 35 mm deep	no	1 A, self-resetting	1 x ASi, 1 x AUX	2 x M12 sockets, 5-poles	-	IP67	BWU3117
	IP67, 35 mm deep	no	-	1 x ASi, 1 x AUX	2 x M12 sockets, 5-poles	-	IP67	BWU3184
	IP67, 35 mm deep	no	4 A, changeable	1 x ASi, 1 x AUX	1 x M12 socket, 5-poles	-	IP67	BWU3491
	IP67, 35 mm deep	no	1 A, self-resetting	1 x ASi, 1 x AUX	1 x M12 socket, 5-poles	-	IP67	BWU3492
	IP67, 35 mm deep	no	-	1 x ASi, 1 x AUX	1 x M12 socket, 5-poles	-	IP67	BWU3493
	IP67, 28 mm deep	no	-	1 x ASi, 1 x AUX	1 x M12 socket, 5-poles	-	IP67	BW3803
	IP67, 19 mm deep	yes, 19 mm deep	8 A slow-blow fuse + 1 A, self-resetting	1 x ASi, 1 x AUX	1 x M8 cable socket, straight, 5-poles + 1 x M8 cable socket, straight, 4-poles	0,20 m	IP67	BW3276

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, 19 mm deep	yes, 19 mm deep	4 A slow-blow fuse + 1 A, self-resetting	1 x ASI, 1 x AUX	1 x M8 snap-in cable socket, straight, 4-poles	0,20 m	IP67	BW3681
	IP67, 19 mm deep	yes, 19 mm deep	8 A slow-blow fuse	1 x ASI, 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 ASI, 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 ASI, 1 x AUX	1 x M12 cable socket, angled, 5-poles	2 m	IP67	BWU3183
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x ASI, 1 x AUX	1 x M12 cable socket, angled, 5-poles	1 m	IP67	BWU3408
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x ASI, 1 x AUX	1 x M12 cable socket, straight, 5-poles	2 m	IP67	BW3911
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x ASI, 1 x AUX	1 x M12 cable socket, straight, 5-poles	1 m	IP67	BWU3403
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x ASI, 1 x AUX	1 x M12 cable socket, straight, 5-poles	0,3 m	IP67	BWU3778
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x ASI, 1 x AUX	1 x M12 cable socket, straight, 5-poles	0,05 m	IP67	BW3805
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x ASI, 1 x AUX	1 x round cable / connecting wires	5 m	IP67	BW3315
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x ASI, 1 x AUX	1 x round cable / connecting wires	2 m	IP67	BWU3314
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x ASI, 1 x AUX	1 x round cable / connecting wires	1,3 m	IP67	BW3512
	IP67, 19 mm deep	yes, 19 mm deep	-	2 x ASI	1 x M12 cable socket, angled, 5-poles	2 m	IP67	BWU3185
	IP67, 19 mm deep	yes, 19 mm deep	-	2 x ASI	1 x M12 cable socket, angled, 5-poles	1 m	IP67	BWU4242
IP67, 19 mm deep	yes, 19 mm deep	-	2 x ASI	1 x M12 cable socket, straight, 5-poles	2 m	IP67	BWU3247	
IP67, 19 mm deep	yes, 19 mm deep	-	2 x ASI	1 x round cable / connecting wires	0,25 m	IP67	BW3186	
	IP67, 19 mm deep	yes, 19 mm deep	-	2 x ASI	1 x round cable / connecting wires	5 m	IP67	BW3524
	IP67, 19 mm deep	yes, 19 mm deep	-	1 x ASI	1 x M12 cable socket, angled, 5-poles	1 m	IP67	BWU3407
	IP67, 19 mm deep	yes, 19 mm deep	-	2 x ASI	profile cable branch	-	IP67	BWU3157

(1) Internal fuse

4 A, changeable: The internal protection is realized via changeable 4 A fuses (slow-blow) for ASI 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 ASI 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 ASI. At each M8 connection (AUX) ≤ 6 A are available, at each M8 connection (ASI) ≤ 1 A are available.

4 A slow-blow fuse + 1 A, self-resetting: The internal protection is realized via one 4 A slow-blow fuse for AUX and via one self-resetting 1 A fuse for ASI. At each M8 connection (AUX) ≤ 4 A are available, at each M8 connection (ASI) ≤ 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 resistant				

(3) Cable: other cable lengths are available on request.

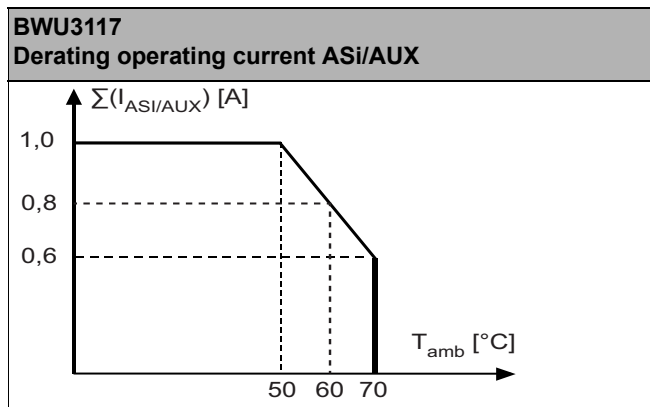
Under normal conditions (no bus termination or repeater), the permissible total length of the **ASI segment is max. 100 m**. The calculation should take into consideration that the length of the connection cable (**round cable**) for each connected **Passive Distributor** must be **doubled**. In the case of the **Active Distributors** (ASI slaves) however only the **one** ASI profile cable is counted.

Article No.	BWU3184		BWU3087		BWU3117	
Connection						
Profile cable connection			1 x ASi, 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 ASi and AUX for each M12 connection		2 x 1 A self-resetting fuses for ASi 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: ASi 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: ASi 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 ⁽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			≤15g, 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)



	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	Position of changeable fuses
BWU3087	BWU3087

Article No.	BW3803	BWU3493	BWU3491	BWU3492
Connection				
Profile cable connection	1 x ASi, 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 ASi and AUX for each M12 connection		1 x 1 A self-resetting fuse for ASi and AUX for each M12 connection
Display				
LED ASi1 (green)	-	on: ASi voltage at M12 connection 1 O.K.		
LED AUX1 (green)	-	on: AUX voltage at M12 connection 1 O.K.		
LED ASi (green)	-	on: ASi voltage at profile cable O.K.		
LED AUX (green)	-	on: AUX voltage at profile cable O.K.		
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.		

Article No.	BW3803	BWU3493	BWU3491	BWU3492
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	≤15g, 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 / 28		60 / 45 / 35	

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

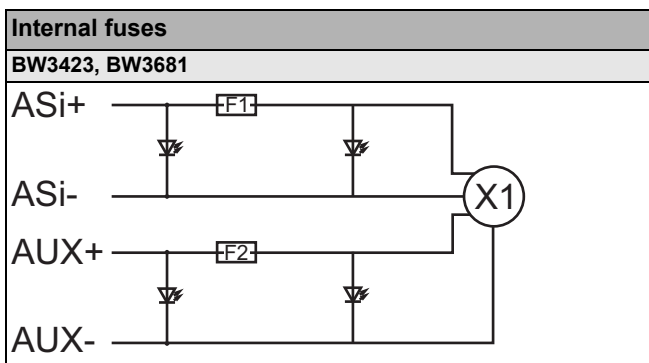
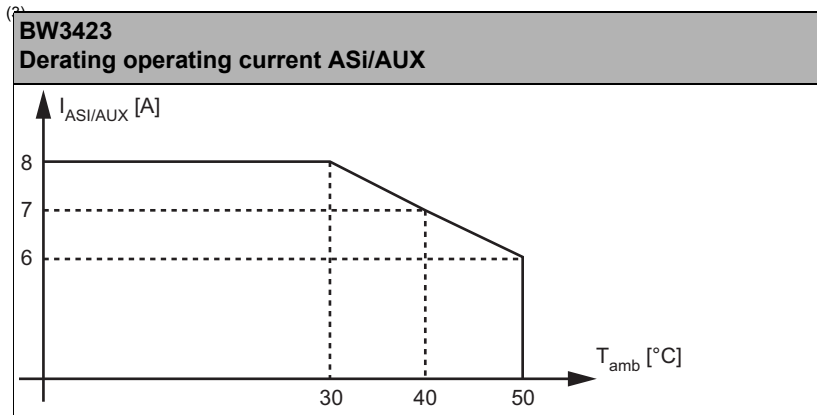
Internal fuses	Position of changeable fuses
BWU3491, BWU3492	BWU3491

Article No.	BW3246	BW3276	BW3681	BW3423	
Connection					
Profile cable connection	1 x ASi, 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 M8 snap-in 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 (ASi)	≤4 A at each M8 connection (AUX) ≤1 A at each M8 connection (ASi)	≤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 ASi and AUX for each M12 connection	1 x 8 A slow-blow fuse for AUX + 1 x 1 A self-resetting fuse for ASi	1 x 4 A slow-blow fuse for AUX (F2)+ 1 x 1 A self-resetting fuse for ASi (F1)	2 x 8 A slow-blow fuses for ASi and AUX	

Article No.	BW3246	BW3276	BW3681	BW3423
Display				
LED ASi1, ASi2 (green)	on: ASi voltage at M12 connection 1 O.K.	on: ASi voltage at M8 connection 1 O.K.		on: ASi 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: ASi 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	≤15g, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude			
Insulation voltage	≥500 V			
Weight	75 g			100 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.	BWU3157	BW3186	BW3524	BWU3247	BWU3185	BWU4242
Connection						
Profile cable connection	2 x ASi 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	5 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 / con- necting wires		≤4 A at each M12 connection		
Internal fuses	–					
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.					–
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	≤15g, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude					
Insulation voltage	≥500 V					
Weight	75 g	190 g	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.	BWU3407	BWU3408	BWU3183	BW3911	BWU3403	BWU3778
Connection						
Profile cable connection	1 x ASi profile cable and piercing	1 x ASi, 1 x AUX profile cable and piercing				
Connection	1 x M12 cable socket, angled, 5-poles			1 x M12 cable socket, straight, 5-poles		
Round cable	1 m	2 m		1 m	0,3 m	
max. allowed tensile strain 10 N						
Operating voltage	10 ... 32 V _{DC} PELV					
Operating current	≤4 A at each connection					
Internal fuses	–					
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.					

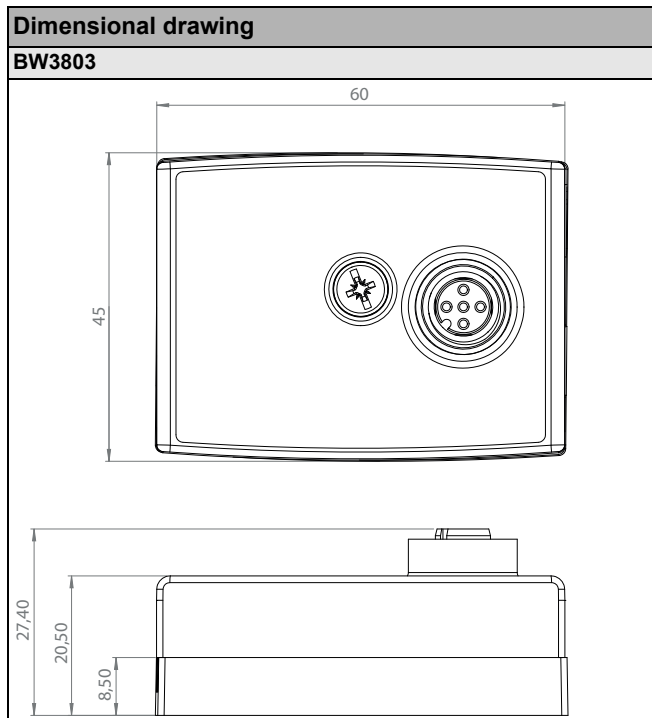
Article No.	BWU3407	BWU3408	BWU3183	BW3911	BWU3403	BWU3778
Environment						
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3					
Operating altitude	max. 2000 m					
Ambient temperature	-30 °C ... +70 °C ⁽¹⁾					
Storage temperature	-25 °C ... +85 °C					
Housing	plastic, for screw mounting, suitable for cable ducts (installation depth ≥19 mm)					
Pollution Degree	2					
Protection category	IP67					
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	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.

Article No.	BW3805	BW3512	BWU3314	BW3315
Connection				
Profile cable connection	1 x ASI, 1 x AUX profile cable and piercing			
Connection	1 x M12 cable socket, straight, 5-poles	1 x round cable /connecting wires		
Round cable	0,05 m	1,3 m	2 m	5 m
	max. allowed tensile strain 10 N			
Operating voltage	10 ... 32 V _{DC} PELV			
Operating current	≤4 A at each connection			
Internal fuses	-			
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.		
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	≤15g, 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	ASi +	AUX -	ASi -	AUX +	n.c.	
	X2	ASi +	AUX -	ASi -	AUX +	n.c.	
BWU3491, BWU3492, BWU3493	X1	ASi +	AUX -	ASi -	AUX +	n.c.	
BW3803	X1	ASi +	AUX -	ASi -	AUX +	n.c.	
BW3246	X1	ASi +	AUX -	ASi -	AUX +	n.c.	
BWU3183, BWU3403, BWU3408, BWU3778, BW3805, BW3911	X1	ASi +	AUX -	ASi -	AUX +	n.c.	
BWU3185, BWU3247 BWU4242	X1	ASi +	n.c.	ASi -	n.c.	n.c.	
BWU3407	X1	ASi +	n.c.	ASi -	n.c.	n.c.	

Passive Distributor ASi, IP67

Connections: round cable/connecting wires						
Article No.	round cable/ connecting wires	Brown (BN)	White (WH)	Blue (BU)	Black (BK)	
BWU3314, BW3315, BW3512	X1	ASi+	AUX -	ASi-	AUX +	
BW3186, BW3524	X1	ASi+	-	ASi-	-	
BW3423	X1	ASi+	AUX-	ASi-	AUX+	

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

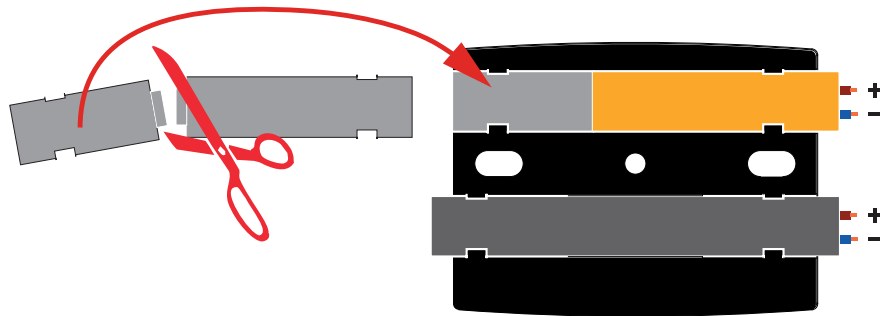
Connections: M8 snap-in cable socket						
Article No.	M8 connection	Pin1	Pin2	Pin3	Pin4	
BW3681	X1	ASi+	AUX1-	ASi1-	AUX1+	

Connections: profile cable branch			
BWU3157	 max 8 A		

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)