

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



(figure similar)

optionally with changeable or self-resetting fuses



Figure	Profile cable connection	Connection ⁽¹⁾	Internal fuse ⁽²⁾	Round cable ⁽³⁾	Flat design, montage in cable duct possible ⁽⁴⁾	LED status display	Special function	Article no.
	1 x ASi, 1 x AUX	2 x M12 sockets, 5-poles	4 A, changeable	-	no	yes	-	BWU3087
	1 x ASi, 1 x AUX	2 x M12 sockets, 5-poles	1 A, self-resetting	-	no	yes	-	BWU3117
	1 x ASi, 1 x AUX	2 x M12 sockets, 5-poles	-	-	no	yes	-	BWU3184
	1 x ASi, 1 x AUX	1 x M12 socket, 5-poles	4 A, changeable	-	no	yes	-	BWU3491
	1 x ASi, 1 x AUX	1 x M12 socket, 5-poles	1 A, self-resetting	-	no	yes	-	BWU3492
	1 x ASi, 1 x AUX	1 x M12 socket, 5-poles	-	-	no	yes	-	BWU3493
	1 x ASi, 1 x AUX	1 x M12 socket, 5-poles	-	-	no	no	-	BW3803
	1 x ASi, 1 x AUX	1 x M8 cable socket, straight, 5-poles + 1 x M8 cable socket, straight, 4-poles	8 A slow-blow fuse + 1 A, self-resetting	0,20 m	yes, 19 mm deep	yes	-	BW3276
	1 x ASi, 1 x AUX	1 x M8 snap-in cable socket, straight, 4-poles	4 A slow-blow fuse + 1 A, self-resetting	0,20 m	yes, 19 mm deep	yes	-	BW3681
	1 x ASi, 1 x AUX	1 x round cable / connecting wires 0,5 mm ²	8 A slow-blow fuse	1,3 m	yes, 19 mm deep	yes	-	BW3423
	1 x ASi, 1 x AUX	1 x M12 cable socket, angled, 5-poles	1 A, self-resetting	2 m	yes, 19 mm deep	yes	to connect ASi devices via M12	BW3246
	1 x ASi, 1 x AUX	1 x M12 cable socket, angled, 5-poles	-	2 m	yes, 19 mm deep	no	to connect ASi devices via M12	BWU3183
	1 x ASi, 1 x AUX	1 x M12 cable socket, angled, 5-poles	-	1 m	yes, 19 mm deep	no	to connect ASi devices via M12	BWU3408
	1 x ASi, 1 x AUX	1 x M12 cable socket, straight, 5-poles	-	1 m	yes, 19 mm deep	no	to connect ASi devices via M12	BWU3403
	1 x ASi, 1 x AUX	1 x M12 cable socket, straight, 5-poles	-	0,3 m	yes, 19 mm deep	no	to connect ASi devices via M12	BWU3778
	1 x ASi, 1 x AUX	1 x M12 cable socket, straight, 5-poles	-	0,05 m	yes, 19 mm deep	no	to connect ASi devices via M12	BW3805
	1 x ASi, 1 x AUX	1 x round cable / connecting wires 0,34 mm ²	-	5 m	yes, 19 mm deep	no	-	BW3315
	1 x ASi, 1 x AUX	1 x round cable / connecting wires 0,34 mm ²	-	2 m	yes, 19 mm deep	no	-	BWU3314
	1 x ASi, 1 x AUX	1 x round cable / connecting wires 0,34 mm ²	-	1,3 m	yes, 19 mm deep	no	-	BW3512
	2 x ASi	1 x M12 cable socket, angled, 5-poles	-	2 m	yes, 19 mm deep	no	-	BWU3185
	2 x ASi	1 x M12 cable socket, straight, 5-poles	-	2 m	yes, 19 mm deep	no	-	BWU3247
	2 x ASi	1 x round cable / connecting wires 0,34 mm ²	-	0,25 m	yes, 19 mm deep	no	-	BW3186
	2 x ASi	1 x round cable / connecting wires 0,34 mm ²	-	5 m	yes, 19 mm deep	no	-	BW3524

Figure	Profile cable connection	Connection ⁽¹⁾	Internal fuse ⁽²⁾	Round cable ⁽³⁾	Flat design, montage in cable duct possible ⁽⁴⁾	LED status display	Special function	Article no.
	1 x ASi	1 x M12 cable socket, angled, 5-poles	-	1 m	yes, 19 mm deep	no	-	BWU3407

(1) **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				

(2) **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.

(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 modules) however only the **one** ASi profile cable is counted.

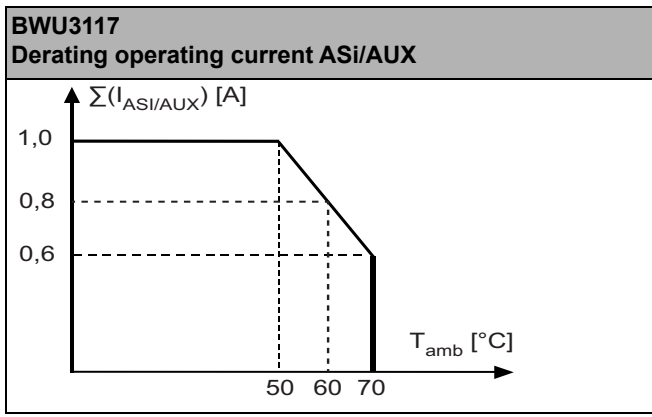
(4) **Flat design, installation in cable duct possible**

Modules with a flat housing design and with cables which exit the sides make these ideal for installation in cable ducts, cable channels, cable troughs, cable rails or cable trays. Please note the respective housing depth for your particular installation.

Article No.	BWU3184	BWU3087	BWU3117
Connection			
Profile cable connection	1 x ASi, 1 x AUX profile cable and piercing technology		
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	
	at +60 °C		
	at +70 °C	$\leq 0,8$ 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.		

Article No.	BWU3184	BWU3087	BWU3117
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		
It can be used with a switched AUX cable, which is passively safe up to SIL3/PLe	no ⁽¹⁾		
Operating altitude	max. 2000 m		
Ambient temperature	-30 °C ... +70 °C ⁽²⁾ ⁽³⁾		
Storage temperature	-25 °C ... +85 °C		
Housing	plastic, for screw mounting		
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	91 g		
Dimensions (W / H / D) in mm	60 / 45 / 35		

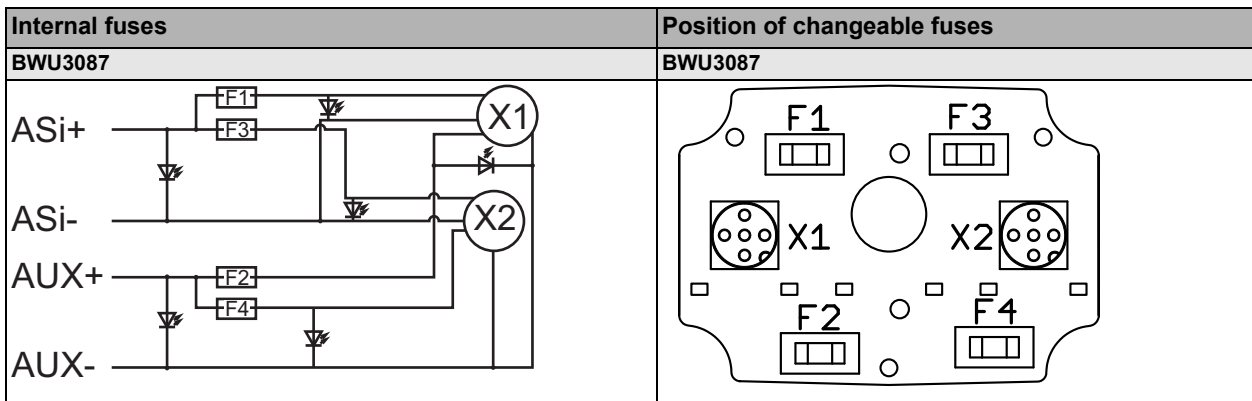
- (1) The passiv distributor is not suitable for use in paths with a passively safe-switched AUX cable, since an exclusion of errors cannot be assumed for the connection of the two ASi and AUX potentials.
If the passiv distributor is supplied from an unswitched AUX cable, this has no influence on the safety consideration for the paths with passively safe-switched AUX cable. In an ASi circuit, paths supplied from a passively safe-switched AUX cable and paths supplied from unswitched AUX potential can be used together.
- (2) Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.
- (3)



Notice BWU3087, BWU3117, BWU3184, BWU3491, BWU3492, BWU3493

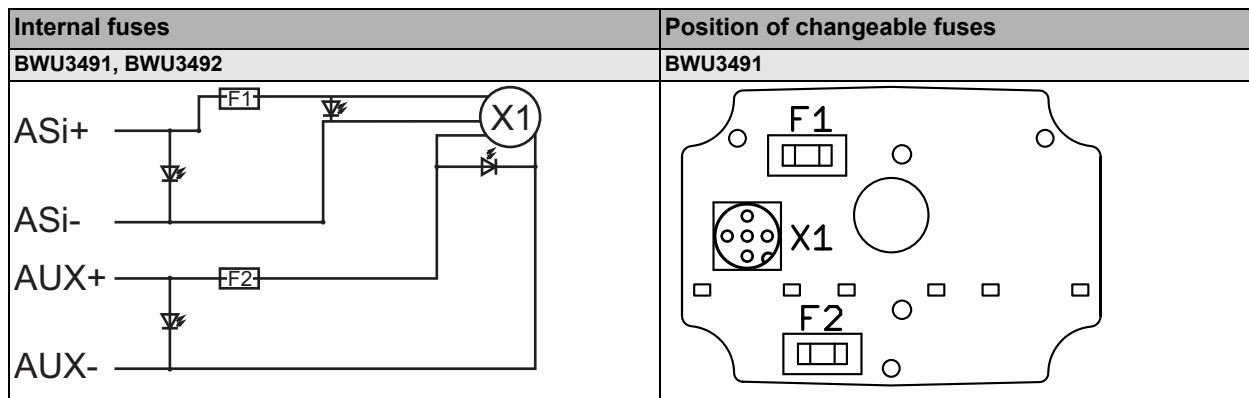
After each opening of the module, such as after replacing a fuse, check for proper function and correct placement of the seals.

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.



Article No.	BW3803	BWU3493	BWU3491	BWU3492
Connection				
Profile cable connection	1 x ASi, 1 x AUX profile cable and piercing technology			
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.		
Environment				
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3			
It can be used with a switched AUX cable, which is passively safe up to SIL3/PLe	no ⁽¹⁾			
Operating altitude	max. 2000 m			
Ambient temperature	-30 °C ... +70 °C ⁽²⁾			
Storage temperature	-25 °C ... +85 °C			
Housing	plastic, for screw mounting			
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	91 g			
Dimensions (W / H / D) in mm	60 / 45 / 28	60 / 45 / 35		

- (1) The passive distributor is not suitable for use in paths with a passively safe-switched AUX cable, since an exclusion of errors cannot be assumed for the connection of the two ASi and AUX potentials.
 If the passive distributor is supplied from an unswitched AUX cable, this has no influence on the safety consideration for the paths with passively safe-switched AUX cable. In an ASi circuit, paths supplied from a passively safe-switched AUX cable and paths supplied from unswitched AUX potential can be used together.
- (2) Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.



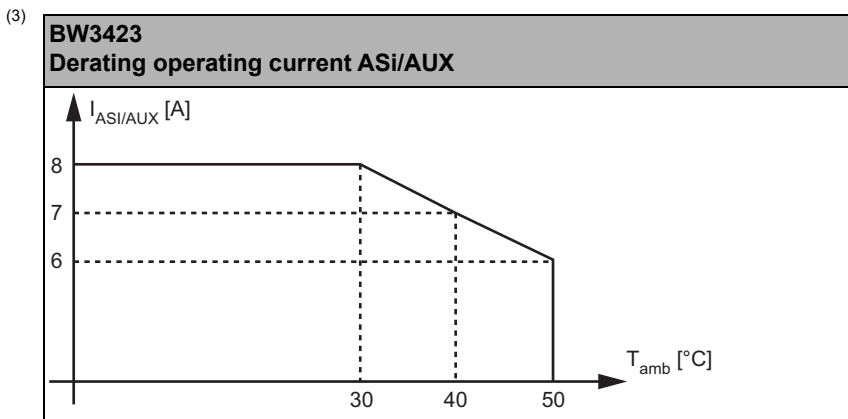
Article No.	BW3246	BW3276	BW3681	BW3423	
Connection					
Profile cable connection	1 x ASi, 1 x AUX profile cable and piercing technology				
Connection	1 x M12 cable socket, angled, 5-poles	1 x M8 cable socket, straight, 5-poles + 1 x M8 cable socket, straight, 4-poles	1 x M8 snap-in cable socket, straight, 4-poles	1 x round cable/connecting wires 0,5 mm ²	
Round cable (L in m)	L1 (ASi1/AUX1): 2,0	L1 (ASi1): 0,20 L2 (AUX1): 0,20	L1 (ASi1/AUX1): 0,20	L1 (ASi1/AUX1): 1,3	
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	
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.				

Passive Distributor ASi, IP67

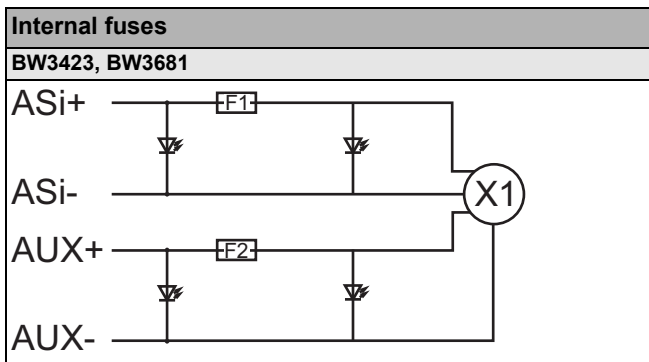
Article No.	BW3246	BW3276	BW3681	BW3423
Environment				
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3			
It can be used with a switched AUX cable, which is passively safe up to SIL3/PLe	no ⁽¹⁾			
Operating altitude	max. 2000 m			
Ambient temperature	-30 °C ... +55 °C ⁽²⁾		-30 °C ... +50 °C ⁽²⁾	
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		IP67 ⁽⁴⁾	
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) The passiv distributor is not suitable for use in paths with a passively safe-switched AUX cable, since an exclusion of errors cannot be assumed for the connection of the two ASi and AUX potentials.
If the passiv distributor is supplied from an unswitched AUX cable, this has no influence on the safety consideration for the paths with passively safe-switched AUX cable. In an ASi circuit, paths supplied from a passively safe-switched AUX cable and paths supplied from unswitched AUX potential can be used together.

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



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



Article No.	BW3186	BW3524	BWU3247	BWU3185
Connection				
Profile cable connection	2 x ASi profile cable and piercing technology (internally bridged)			
Connection	1 x round cable / connecting wires 0,34 mm ²		1 x M12 cable socket, straight, 5-poles	1 x M12 cable sock- et, angled, 5-poles
Round cable (L in m)	L1 (ASi): 0,25	L1 (ASi): 5,0	L1 (ASi): 2,0	
	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	-			
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			
It can be used with a switched AUX cable, which is passively safe up to SIL3/PLe	yes ⁽¹⁾			
Operating altitude	max. 2000 m			
Ambient temperature	-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 ⁽³⁾		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	190 g	75 g	
Dimensions (W / H / D) in mm	60 / 45 / 19			

(1) The passive distributor is suitable for use in passive safe paths as it has no connection to an AUX potential.

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

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

Article No.	BWU3407	BWU3408	BWU3183	BWU3403	BWU3778
Connection					
Profile cable connection	1 x ASi profile cable and piercing technolo- gy		1 x ASi, 1 x AUX profile cable and piercing technology		
Connection	1 x M12 cable socket, angled, 5-poles			1 x M12 cable socket, straight, 5-poles	
Round cable (L in m)	L1 (ASi): 1,0	L1 (ASi/AUX): 1,0	L1 (ASi/AUX): 2,0	L1 (ASi/AUX): 1,0	L1 (ASi/AUX): 0,3
	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	BWU3403	BWU3778
Environment					
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3				
It can be used with a switched AUX cable, which is passively safe up to SIL3/PLe	yes ⁽¹⁾	no ⁽³⁾			
Operating altitude	max. 2000 m				
Ambient temperature	-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				
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) The passive distributor is suitable for use in passive safe paths as it has no connection to an AUX potential.

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

(3) The passive distributor is not suitable for use in paths with a passively safe-switched AUX cable, since an exclusion of errors cannot be assumed for the connection of the two ASi and AUX potentials.
If the passive distributor is supplied from an unswitched AUX cable, this has no influence on the safety consideration for the paths with passively safe-switched AUX cable. In an ASi circuit, paths supplied from a passively safe-switched AUX cable and paths supplied from unswitched AUX potential can be used together.

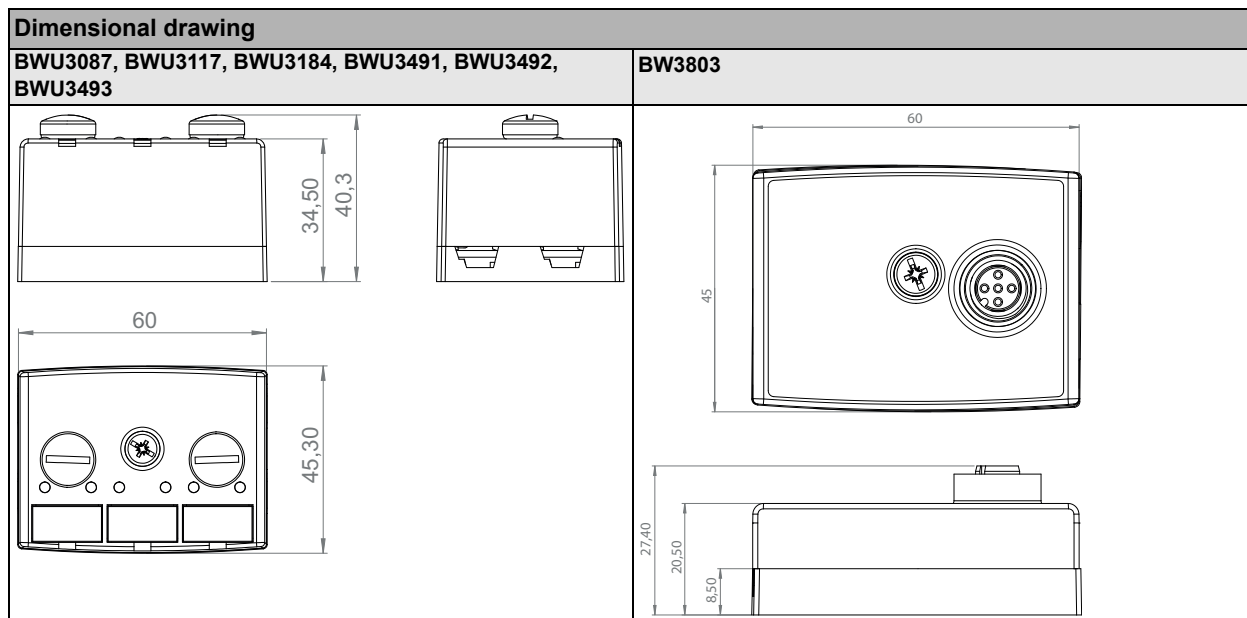
Article No.	BW3805	BW3512	BWU3314	BW3315
Connection				
Profile cable connection	1 x ASi, 1 x AUX profile cable and piercing technology			
Connection	1 x M12 cable socket, straight, 5-poles	1 x round cable /connecting wires 0,34 mm ²		
Round cable (L in m)	L1 (ASi/AUX): 0,05	L1 (ASi/AUX): 1,3	L1 (ASi/AUX): 2,0	L1 (ASi/AUX): 5,0
	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.		

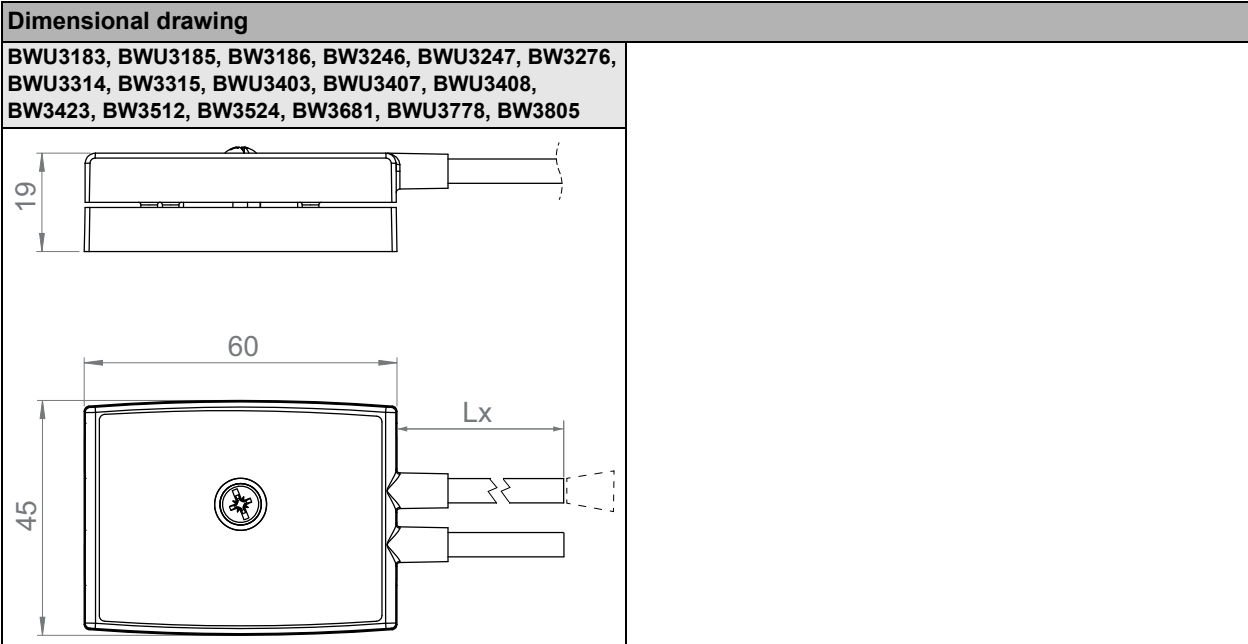
Article No.	BW3805	BW3512	BWU3314	BW3315
Environment				
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3			
It can be used with a switched AUX cable, which is passively safe up to SIL3/PLe	no ⁽¹⁾			
Operating altitude	max. 2000 m			
Ambient temperature	-30 °C ... +70 °C ⁽²⁾			
Storage temperature	-25 °C ... +85 °C			
Housing	plastic, for screw mounting, suitable for cable ducts (installation depth ≥19 mm)			
Pollution Degree	2			
Protection category	IP67	IP67 ⁽³⁾		
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) The passiv distributor is not suitable for use in paths with a passively safe-switched AUX cable, since an exclusion of errors cannot be assumed for the connection of the two ASi and AUX potentials.
If the passiv distributor is supplied from an unswitched AUX cable, this has no influence on the safety consideration for the paths with passively safe-switched AUX cable. In an ASi circuit, paths supplied from a passively safe-switched AUX cable and paths supplied from unswitched AUX potential can be used together.

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

(3) 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, BWU3778, BW3805	X1	ASi +	AUX -	ASi -	AUX +	n.c.	

Connections: M12							
Article No.	M12 connection	Pin1	Pin2	Pin3	Pin4	Pin5	
BWU3185, BWU3247	X1	ASi +	n.c.	ASi -	n.c.	n.c.	
BWU3407	X1	ASi +	n.c.	ASi -	n.c.	n.c.	

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+	

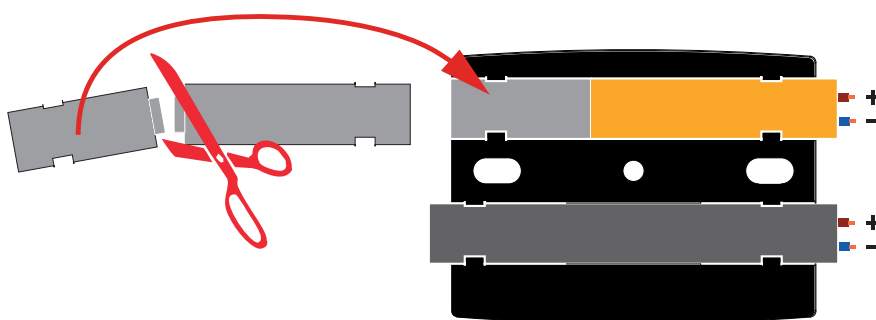
Connections: M8							
Article No.	M8 connection	Pin1	Pin2	Pin3	Pin4	Pin5	
BW3276	X1	ASi+	ASi+	ASi-	ASi-	-	
	X2	AUX+	AUX+	AUX-	AUX-	n.c.	

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

Line termination with sealing profile



max. IP54



Accessories:

- Sealing profile IP67 (IDC plug), 60 mm (article no. BW3282)