

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 <sup>(1)</sup>	Internal fuse <sup>(2)</sup>	Profile cable connection	Connection <sup>(3)</sup>	Round cable <sup>(4)</sup>	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	<b>BWU3087</b>
	IP67, 35 mm deep	no	1 A, self-resetting	1 x ASi, 1 x AUX	2 x M12 sockets, 5-poles	-	IP67	<b>BWU3117</b>
	IP67, 35 mm deep	no	-	1 x ASi, 1 x AUX	2 x M12 sockets, 5-poles	-	IP67	<b>BWU3184</b>
	IP67, 35 mm deep	no	4 A, changeable	1 x ASi, 1 x AUX	1 x M12 socket, 5-poles	-	IP67	<b>BWU3491</b>
	IP67, 35 mm deep	no	1 A, self-resetting	1 x ASi, 1 x AUX	1 x M12 socket, 5-poles	-	IP67	<b>BWU3492</b>
	IP67, 35 mm deep	no	-	1 x ASi, 1 x AUX	1 x M12 socket, 5-poles	-	IP67	<b>BWU3493</b>
	IP67, 28 mm deep	no	-	1 x ASi, 1 x AUX	1 x M12 socket, 5-poles	-	IP67	<b>BW3803</b>
	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	<b>BW3276</b>

Figure	Type	Flat design, montage in cable duct possible <sup>(1)</sup>	Internal fuse <sup>(2)</sup>	Profile cable connection	Connection <sup>(3)</sup>	Round cable <sup>(4)</sup>	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) 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.

**(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) 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				

# Passive Distributor ASi, IP67

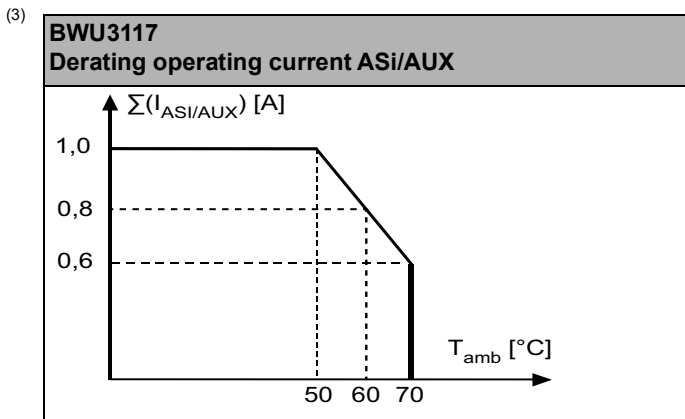
(4) **Cable:** other cable lengths are available on request.

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.

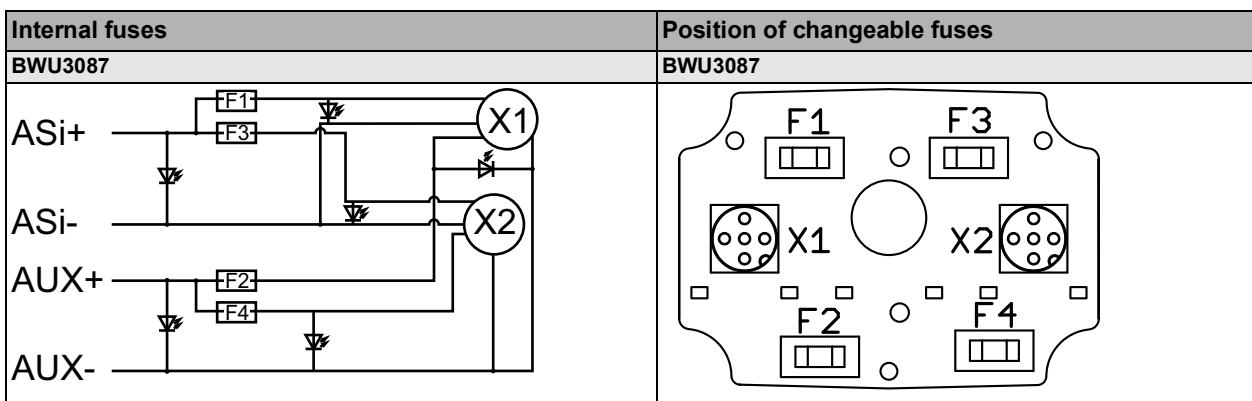
Article No.	BWU3184	BWU3087	BWU3117
<b>Connection</b>			
Profile cable connection	1 x ASi, 1 x AUX profile cable and piercing		
Connection	2 x M12 sockets, 5-poles		
Round cable	-		
Operating voltage	10 ... 32 V <sub>DC</sub> PELV		
Operating current	up to +50 °C	≤4 A at each M12 connection	
	at +60 °C	≤1 A at each M12 connection <sup>(3)</sup>	
	at +70 °C	≤0,8 A at each M12 connection <sup>(3)</sup>	
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
<b>UL-specifications (UL61010-1 and UL61010-2-201)</b>			
External protection	An isolated source with a secondary open circuit voltage of ≤30 V <sub>DC</sub> with a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed.		
<b>Display</b>			
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.		
<b>Environment</b>			
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3		
Can be used in passively safe paths up to SIL3/PLe	no <sup>(1)</sup>		
Operating altitude	max. 2000 m		
Ambient temperature	-30 °C ... +70 °C <sup>(2)(3)</sup>		
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 passive distributor is not suitable for use in passively safe paths because an exclusion of errors cannot be assumed for the connection of the two potentials, ASi and AUX..

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



**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.



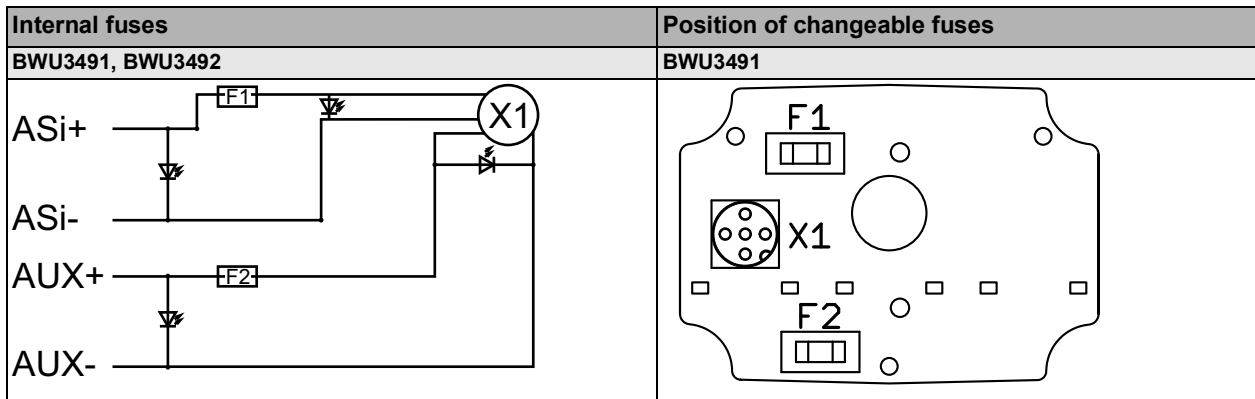
Article No.	BW3803	BWU3493	BWU3491	BWU3492
<b>Connection</b>				
Profile cable connection	1 x ASi, 1 x AUX profile cable and piercing			
Connection	1 x M12 socket, 5-poles			
Round cable	-			
Operating voltage	10 ... 32 V <sub>DC</sub> PELV			
Operating current	up to +30 °C	≤4 A at each M12 connection		≤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	
<b>Display</b>				
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.		
<b>UL-specifications (UL61010-1 and UL61010-2-201)</b>				
External protection	-	An isolated source with a secondary open circuit voltage of ≤30 V <sub>DC</sub> with a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed.		

# Passive Distributor ASi, IP67

Article No.	BW3803	BWU3493	BWU3491	BWU3492
<b>Environment</b>				
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3			
Can be used in passively safe paths up to SIL3/PLe	no <sup>(1)</sup>			
Operating altitude	max. 2000 m			
Ambient temperature	-30 °C ... +70 °C <sup>(2)</sup>			
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 passively safe paths because an exclusion of errors cannot be assumed for the connection of the two potentials, ASi and AUX.

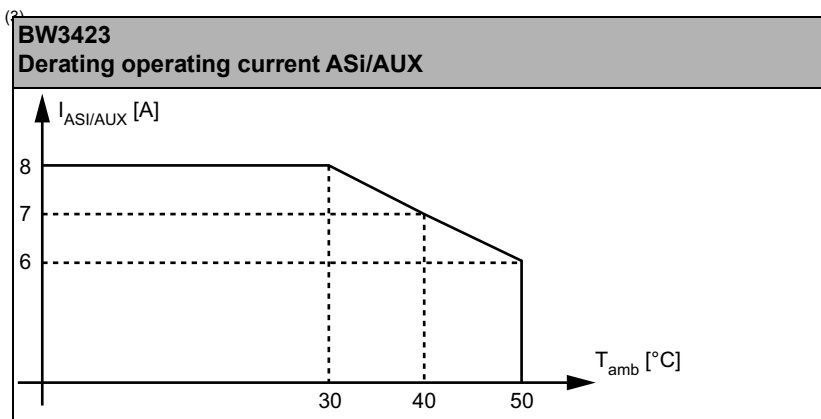
(2) Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.



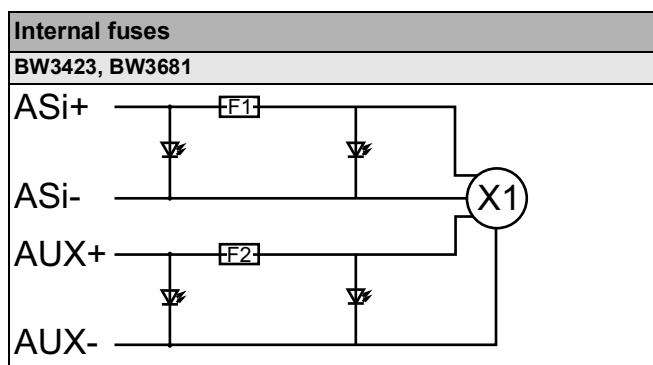
Article No.		BW3246	BW3276	BW3681	BW3423
<b>Connection</b>					
Profile cable connection		1 x ASi, 1 x AUX profile cable and piercing			
Connection		1 x M12 cable socket, angled, 5-poles	1 x M8 cable socket, straight, 5-poles + 1 x M8 cable socket, straight, 4-poles	1 x M8 snap-in cable socket, straight, 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 <sub>DC</sub> 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 <sup>(3)</sup>
	at +40 °C				≤7 A at each round cable/connecting wire <sup>(3)</sup>
	at +50 °C				≤6 A at each round cable/connecting wire <sup>(3)</sup>
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
<b>Display</b>					
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.			
<b>Environment</b>					
Applied standards		EN 60529 EN 61000-6-2 EN 61000-6-3			
Can be used in passively safe paths up to SIL3/PLe		no <sup>(1)</sup>			
Operating altitude		max. 2000 m			
Ambient temperature		-30 °C ... +55 °C <sup>(2)</sup>			-30 °C ... +50 °C <sup>(2)</sup>
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 <sup>(4)</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		75 g			100 g
Dimensions (W / H / D) in mm		60 / 45 / 19			

<sup>(1)</sup> The passive distributor is not suitable for use in passively safe paths because an exclusion of errors cannot be assumed for the connection of the two potentials, ASi and AUX.

<sup>(2)</sup> 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.	BWU3157	BW3186	BW3524	BWU3247	BWU3185	BWU4242
<b>Connection</b>						
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 <sub>DC</sub> 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	–					
<b>UL-specifications (UL61010-1 and UL61010-2-201)</b>						
External protection	An isolated source with a secondary open circuit voltage of ≤30 V <sub>DC</sub> with a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed.					–
<b>Environment</b>						
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3					
Can be used in passively safe paths up to SIL3/PLe	yes <sup>(1)</sup>					
Operating altitude	max. 2000 m					
Ambient temperature	-30 °C ... +70 °C <sup>(2)</sup>					
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 <sup>(3)</sup>			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	BW3911	BWU3403	BWU3778
<b>Connection</b>						
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 <sub>DC</sub> PELV					
Operating current	≤4 A at each connection					
Internal fuses	–					



# Passive Distributor ASi, IP67

Article No.	BWU3407	BWU3408	BWU3183	BW3911	BWU3403	BWU3778
<b>UL-specifications (UL61010-1 and UL61010-2-201)</b>						
External protection	An isolated source with a secondary open circuit voltage of $\leq 30 V_{DC}$ with a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed.					
<b>Environment</b>						
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3					
Can be used in passively safe paths up to SIL3/PLe	yes <sup>(1)</sup>	no <sup>(3)</sup>				
Operating altitude	max. 2000 m					
Ambient temperature	-30 °C ... +70 °C <sup>(2)</sup>					
Storage temperature	-25 °C ... +85 °C					
Housing	plastic, for screw mounting, suitable for cable ducts (installation depth $\geq 19$ mm)					
Pollution Degree	2					
Protection category	IP67					
Tolerable loading referring to humidity	according to EN 61131-2					
Maximum tolerable shock and vibration stress	$\leq 15g$ , $T \leq 11$ ms 10 ... 55 Hz, 0,5 mm amplitude					
Insulation voltage	$\geq 500$ 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.

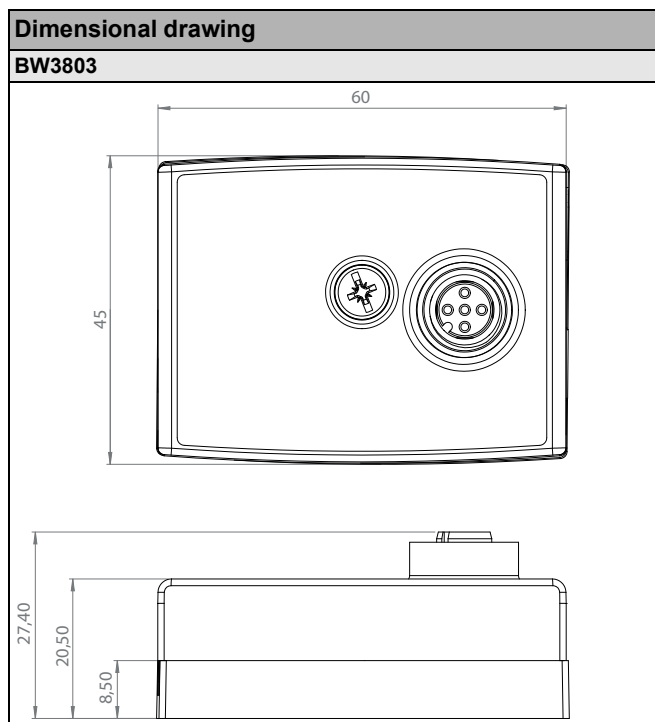
(2) Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.

(3) The passive distributor is not suitable for use in passively safe paths because an exclusion of errors cannot be assumed for the connection of the two potentials, ASi and AUX.

Article No.	BW3805	BW3512	BWU3314	BW3315
<b>Connection</b>				
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	$\leq 4$ A at each connection			
Internal fuses	-			
<b>UL-specifications (UL61010-1 and UL61010-2-201)</b>				
External protection	-	An isolated source with a secondary open circuit voltage of $\leq 30 V_{DC}$ 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
<b>Environment</b>				
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3			
Can be used in passively safe paths up to SIL3/PLe	no <sup>(1)</sup>			
Operating altitude	max. 2000 m			
Ambient temperature	-30 °C ... +70 °C <sup>(2)</sup>			
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 <sup>(3)</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	75 g			190 g
Dimensions (W / H / D) in mm	60 / 45 / 19			

- (1) The passive distributor is not suitable for use in passively safe paths because an exclusion of errors cannot be assumed for the connection of the two potentials, ASi and AUX.
- (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, 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.	

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.	

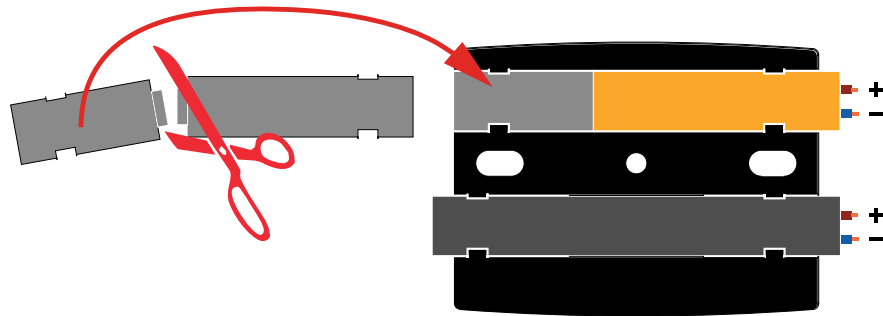
Connections: M8 snap-in cable socket						
Article No.	M8 connection	Pin1	Pin2	Pin3	Pin4	
BW3681	X1	ASi+	AUX1-	ASi-	AUX1+	

Connections: profile cable branch		
BWU3157		

## Line termination with sealing profile



max. IP54



### Accessories:

- Universal protection cap ASi-5/ASi-3 for M12 sockets, IP67 (art. no. BW4056)
- Sealing profile IP67 (IDC plug), 60 mm (article no. BW3282)