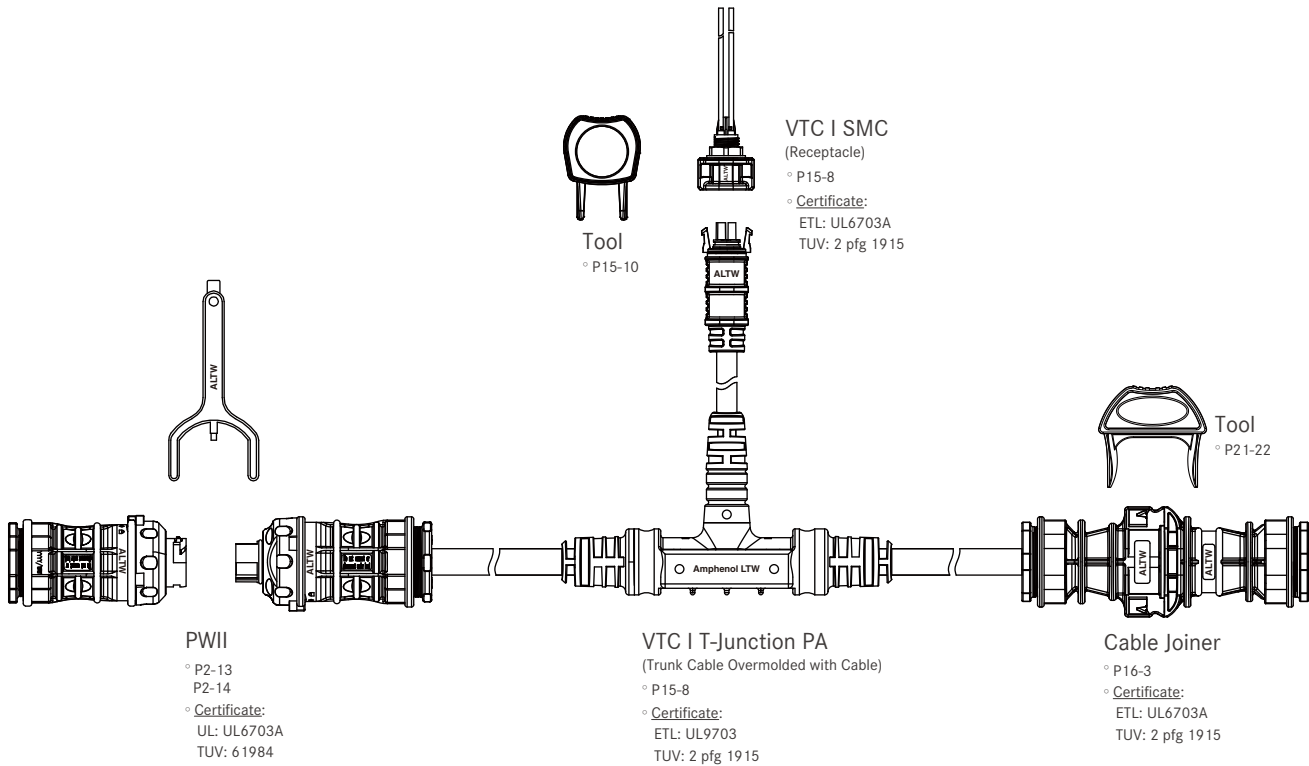




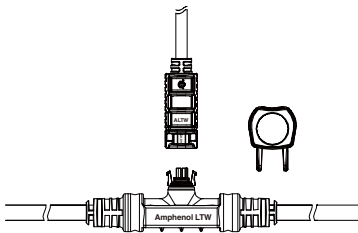
## CATALOGUE

# PV AC Connectors / T-Junction Connector

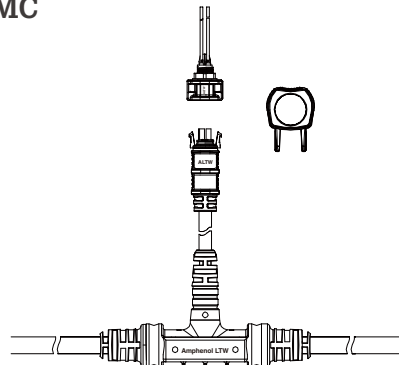
## Range Overview



### > VTC | PT (Trunk Cable with Receptacle) & SMC



### > VTC | PA (Trunk Cable Overmolded with Cable) & SMC



### VTC | SMC

(Overmolded with Cable)

° P15-9

° Certificate:

ETL: UL6703A

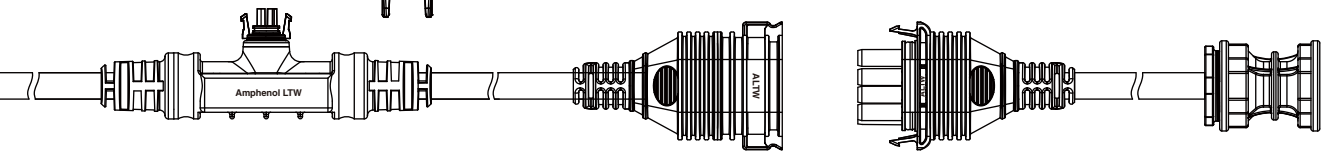
TUV: 2 pfg 1915



Tool  
° P15-10



Tool  
° P15-13



### VTC | T-Junction PT

(Trunk Cable with Receptacle)

° P15-8

° Certificate:

ETL: UL9703

TUV: 2 pfg 1915

### BMC

° P15-13

° Certificate:

ETL: UL6703A

TUV: 2 pfg 1915

### End Cap

° P15-10

° Certificate:

ETL: UL6703A

TUV: 2 pfg 1915

### > SMC | In Line



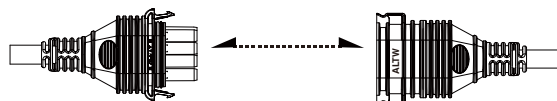
### > SMC | Receptacle to Overmolded with Cable



### > SMC | Receptacle to Receptacle



### > BMC | In Line



\* Design and specification are subject to change without notice.

# Specification

<b>Identifications</b>	VTC I T Junction: PT & PA (For Trunk Cable) VTC I SMC (For Drop or Receptacle) BMC
<b>Description</b>	Cabling System for Micro-inverter
<b>Current Rating / Data</b>	VTC I T Junction: Trunk Range: UL15A~30A / TUV17-25A / 3~4Pin VTC I SMC: 5A / 03~4Pin BMC: UL17A / TUV19A / 3~4Pin
<b>Material</b>	Contacts: Copper Alloy Connector Body: m-PPE
<b>Waterproof Rating</b>	IP67
<b>Temperature Range</b>	Ambient: -40°C ~ +85°C Upper Limited Temperature:+105°C
<b>Contact Resistance</b>	≤ 10mΩ
<b>Insulation Resistance</b>	≥ 100mΩ at DC500V
<b>Durability</b>	500 cycles
<b>Breakdown Voltage</b>	≥ DC6000V / 1 minute
<b>Certificate</b>	VTC I T-Junction: ETL: UL9703, TUV: 2 pfg 1915 VTC I SMC: ETL: UL6703A, TUV: 2 pfg 1915 BMC: ETL: UL6703A, TUV: 2 pfg 1915
<b>Voltage Rating</b>	AC 300V
<b>More to know</b>	Salt Spray Corrosion test: 48H Cable for Trunk: 14~10AWG or 2.5mm <sup>2</sup> ~4mm <sup>2</sup> Cable for Drop: 18AWG or 0.75mm <sup>2</sup> Trunk Cable Pitch: Upon request

## Ordering Information | VTC | T-Junction

1

2

3

4

5

6

**Specification**

>PT Type  
(PT) Trunk Cable with Receptacle

>PA Type  
(PA) Trunk Cable Overmolded with Cable

**Number of Contacts**  
(3) 3 Contacts (4) 4 Contacts

**Cable Style**

>UL : TCER Cable Style	>TUV : EU Cable Style
(10) 10#	(4A) 4mm <sup>2</sup> 1940 Cable
(12) 12#	(4B) 4mm <sup>2</sup> HAR Cable
(14) 14#	(2A) 2.5mm <sup>2</sup> 1940Cable

**Cable pitch**  
(105) 1.05m pitch  
(170) 1.7m pitch  
(205) 2.05m pitch \* More options available

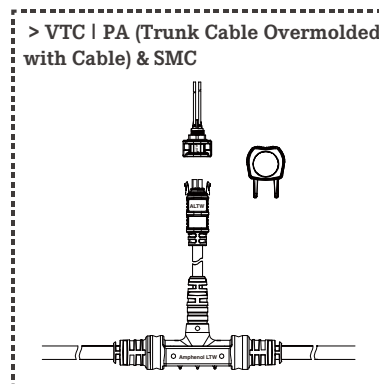
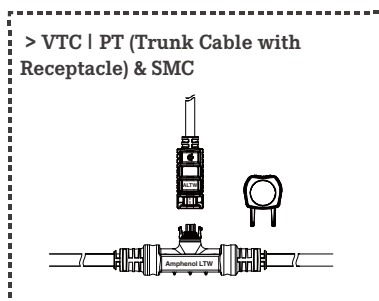
> For Trunk Cable with Receptacle (PT)  
(00) SMC connector  
\* More options available (Upon request)

> For Trunk Cable Overmolded with Cable (PA)  
(□)+(■): (Drop Cable Length) + (Cable type with or without connector)  
EX. (07B) = 0.7m length + 18# without Connector

(□) : Drop Cable Length  
(07) 0.7m length  
(10) 1.0m length  
(15) 1.5m length \* More options available

(■) : Cable type with or without connector

>UL : TCER Cable Style	>TUV : EU Cable Style
(A) 18# With SMC connector	(E) 0.75mm <sup>2</sup> HAR Cable With SMC
(B) 18# Without Connector (Open ended)	(F) 0.75mm <sup>2</sup> HAR Cable Without SMC
(C) 16# Without Connector (Open ended)	(G) 1.0mm <sup>2</sup> HAR CableWithout SMC
(D) 14# Without Connector (Open ended)	(H) 0.75mm <sup>2</sup> 1940 Cable With SMC
	(I) 0.75mm <sup>2</sup> 1940 Cable Without SMC
	(J) 1.0mm <sup>2</sup> 1940 Cable Without SMC



**Number of T-Junctions**  
008, 011, 017, ..., 999 EX. (008) = 8 T-Junctions

## Ordering Information | VTC | SMC

1 — 2 3 4 5 6 — 7 8 9 10

### Specification

(SPS) Solar Power AC (Small size)

### Number of Contacts

(03) 3 Contacts (04) 4 Contacts

### Connector Body (Style)

> Receptacle > Overmolded with Cable  
(R) ALTW Rear Fastened (A) With Strain Relief

### Connector Housing Gender

(M) Male (Plug) (F) Female (Socket)

### Contact Gender

(M) Male (F) Female

### Assemble Style

> Receptacle > Overmolded with Cable  
(C) Crimp Type (With Wire) (M) Overmolded with Cable

### Mating Style

(L) 2 Points Lock (Push & Pull)  
(With Unlocking Tool)

### Backshell

> Receptacle > Overmolded with Cable  
(C) Circular (L) Straight

### Waterproof Rating

(7) IP 67

### More Information

> For Receptacle

001, 002, 003.....

001 is US Spec, 002 is EU Spec

> For Overmolded with Cable

(□)+(■) : Cable Type + Cable Length

EX. (T01) = US Cable For TCER 18# Cable + 1M

(□) : Cable Type

(T) US Cable For TCER 18# Cable

(D) EU Cable For HAR 0.75mm<sup>2</sup> Cable

(E) EU Cable For 1940 0.75mm<sup>2</sup> Cable

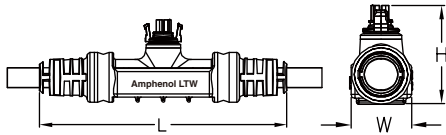
(■) : Cable Length

From 1M to 99M

EX. (01) = 1M

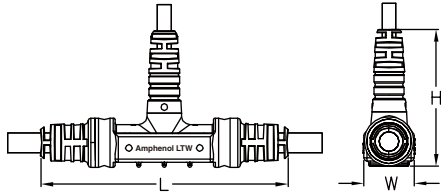
## Physical Dimension

### ⌵ VTC | PT



AMP \ Dimension	L	H	W
30A (UL TCER 10#)	150.0	50.1	30.6
20A (UL TCER 12#)	150.0	50.1	30.6
15A (UL TCER 14#)	150.0	50.1	30.6
25A (TUV 2pfg 1915 4mm <sup>2</sup> )	150.0	50.1	30.6
17A (TUV 2pfg 1915 2.5mm <sup>2</sup> )	150.0	50.1	30.6

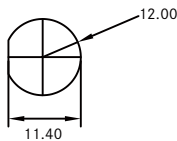
### ⌵ VTC | PA



AMP \ Dimension	L	H	W
30A (UL TCER 10#)	150.0	83.0	30.6
20A (UL TCER 12#)	150.0	83.0	30.6
15A (UL TCER 14#)	150.0	83.0	30.6
25A (TUV 2pfg 1915 4mm <sup>2</sup> )	150.0	83.0	30.6
17A (TUV 2pfg 1915 2.5mm <sup>2</sup> )	150.0	83.0	30.6

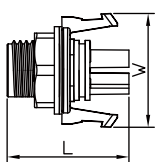
### ⌵ SMC | Receptacle

Panel Cut-Out

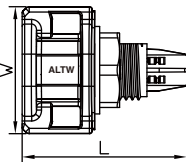


Connector Dimension

(A) Male



(B) Female

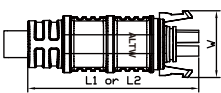


AMP \ Dimension	L		W	
Connector Gender	(B)	(A)	(B)	(A)
5A (SPS)	33.10	24.50	25.56	22.91

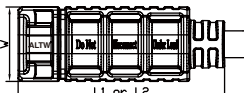
\* Maximum Panel Thickness: 4.0mm

### ⌵ SMC | Overmolded with Cable

(A) Male



(B) Female



AMP \ Dimension	L 1		L2		W	
Connector Gender	(B)	(A)	(B)	(A)	(B)	(A)
5A (SPS)	70.85	58.70	80.85	68.70	25.56	22.91



\* Design and specification are subject to change without notice.

## Contact Configuration

### └ VTC I T-Junction

	VTC (Output)			
	3Pin		4Pin	
	US	EU	US	EU
10#	●		●	
12#	●		●	
14#	●		●	
4.0mm		●		
2.5mm		●		

### └ VTC I SMC

	SPS (Input)	
	5A	
	MM or FF	MF or FM
3 Contacts		
		R   C
4 Contacts		
		R   C

**R:** receptacle  
**C:** overmolded with cable

● 5A

**Number of Contacts :**

**2**

Ex.3 contacts (03)

**Connector (Housing) Gender:**

**4**

Male(M) or Female(F)

**Contact Gender:**

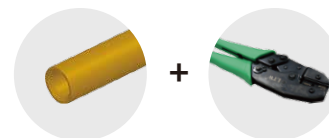
**5**

Male(M) or Female(F)

**More to Choose:**

**6**

● Crimped (C)





## Find Our Standard Products

### ▮ VTC (PT) and SMC (Overmolded with Cable)

## SMC : Overmolded with cable

	Cable type <b>10</b>	AMP (Code)	Contacts <b>2</b>	Female Connector (F) Male Contacts (M)	
US (UL TC-ER cable)	TCER 18# cable ( <b>T</b> )	5A(SPS)	03,04	SPS- <b>2</b> AFMM-LL7T**	
EU (TUV 2pfg1940 cable)	HAR 0.75 mm <sup>2</sup> cable ( <b>D</b> )		03	03	SPS-03AFMM-LL7 <b>10</b> **
	1940 0.75 mm <sup>2</sup> cable ( <b>E</b> )				

## (PT) Trunk Cable with Receptacle

	Wire Size <b>3</b>	Contacts <b>2</b>	T-Junction Pitch <b>4</b>	Number of T-Junction <b>6</b>	P/N
US (UL TCER cable)	10# (30A) ( <b>10</b> ) 12# (20A) ( <b>12</b> ) 14# (15A) ( <b>14</b> )	03,04	1.05M ( <b>105</b> ) 1.7M ( <b>170</b> ) 2.05M ( <b>205</b> )	001 : 075	PT- <b>2 3 4</b> -00- <b>6</b>
EU (TUV 2pfg1940 cable)	4mm <sup>2</sup> ( <b>4A /4B</b> ) (25A) 2.5mm <sup>2</sup> ( <b>2A</b> ) (17A)	03			PT-3- <b>3 4</b> -00- <b>6</b>

### ▮ VTC (PA) and SMC (Receptacle)

SMC : Receptacle


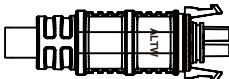



	AMP (Code)	Contacts 2	Female Connector (F) Male Contacts (M)
US (UL TC-ER Cable)	5A (SPS)	03,04	SPS- 2 RFMC-LC7001
EU (TUV 2pfg1940 Cable)		03	SPS- 2 RFMC-LC7002

(PA) Trunk Cable Overmolded With Cable



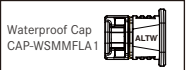


	Wire Size 3	Contacts 2	T-Junction Pitch 4	Number of T-Junction 6	Drop Cable Length + Cable type 5	P / N
US (UL TCER cable)	10# (30A) (10) 12# (20A) (12) 14# (15A) (14)	03,04	1.05M (105) 1.7M (170) 2.05M (205)	001 : 075	0.7M (07) 1.0M (10) 1.5M (15)	18#with SMC Con 18#without Conn. 16#without Conn. 14#without Conn. PA- 2 3 4 5 6
EU (TUV 2pfg1940 Cable)	4mm² (4A/4B) (25A) 2.5mm² (2A) (17A)	03				0.75mm² with SMC Conn. 0.75mm² without Cor 1.0mm² without Con PA-3 3 4 5 6

\* Design and specification are subject to change without notice.


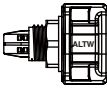

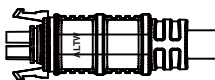

## └ SMC > In-line

<ul style="list-style-type: none"> <li>• Male Connector (Housing)</li> <li>• Female Contacts</li> <li>• Safety Lock (Unlock tool needed)</li> </ul> 			Overmolded with Cable ----->	Overmolded with Cable
			  **cable length:01-99m	  **cable length:01-99m
AMP (Code)	Contacts <b>2</b>	Cable type <b>10</b>	Male Connector (M) Female Contacts (F)	Female Connector (F) Male Contacts (M)
5A(SPS)	03,04	T-TCER 18# cable (US)	SPS- <b>2</b> AMFM-LL7T**	SPS- <b>2</b> AFMM-LL7T**
	03	D-HAR 0.75mm <sup>2</sup> Cable (EU)	SPS-03AMFM-LL7 <b>10</b> **	SPS-03AFMM-LL7 <b>10</b> **
		E-1940 0.75mm <sup>2</sup> Cable (EU)		

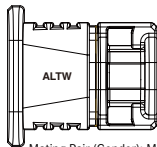
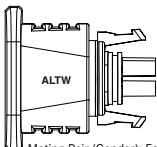
## └ SMC > Receptacle and Mating Pair

<ul style="list-style-type: none"> <li>• Male Connector (Housing)</li> <li>• Female Contacts</li> <li>• Safety Lock (Unlock tool needed)</li> </ul> 			Receptacle ----->	Overmolded with Cable
			  **cable length:01-99m	  **cable length:01-99m
AMP (Code)	Contacts <b>2</b>	Cable type <b>10</b>	Male Connector (M) Female Contacts (F)	Female Connector (F) Male Contacts (M)
5A(SPS)	03,04	T-TCER 18# wire (US)	SPS- <b>2</b> RMFC-LC7001	SPS- <b>2</b> AFMM-LL7T**
	03	D-HAR 0.75mm <sup>2</sup> wire (EU)	SPS-03RMFC-LC7002	SPS-03AFMM-LL7 <b>10</b> **
		E-1940 0.75mm <sup>2</sup> wire (EU)		

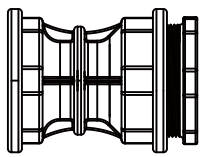
## SMC > Receptacle and Mating Pair

<ul style="list-style-type: none"> <li>Female Connector (Housing)</li> <li>Male Contacts</li> <li>Safety Lock (Unlock tool needed) </li> </ul>			<b>Receptacle</b>  	<b>Overmolded with Cable</b>   **cable length:01-99m
AMP (Code)	Contacts <b>2</b>	Cable type <b>10</b>	Female Connector (F) Male Contacts (M)	Male Connector (M) Female Contacts (F)
5A(SPS)	03,04	T-TCER 18# wire (US)	SPS- <b>2</b> RFMC-LC7001	SPS- <b>2</b> AMFM-LL7T**
	03	D-HAR 0.75mm <sup>2</sup> wire (EU)	SPS-03RFMC-LC7002	SPS-03AMFM-LL7 <b>10</b> **
		E-1940 0.75mm <sup>2</sup> wire (EU)		

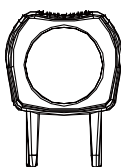
## Accessories > Waterproof Cap

 Mating Pair (Gender): Male Connector  Mating Pair (Gender): Female Connector				
Size	Mating Pair	Mating Pair (Gender)	Mating Style	Part Number
SMC	Receptacle and Overmolded with Cable	Male Connector	2 point lock bayonet	CAP-WSMMFLA 1
	Receptacle and Overmolded with Cable	Female Connector	2 point lock bayonet	CAP-WSMMLA 1

## Accessories > End-Cap

	
Cable OD.	Part Number
16~12mm	CAP-WTCASMA 1
12~10mm	CAP-WTCASMA2
10~08mm	CAP-WTCASMA3

## Accessories > Tool

	
Size	Part Number
SMC	ULT-SSMC-01

# Ordering Information | BMC

1 — 2 3 4 5 6 — 7 8 9 10

## Specification

**(SPB)** Solar Power For Big MC  
 (17A: UL US Market ; 19A: TUV EU Market)

## Number of Contacts

**(3)** 3 Contacts **(4)** 4 Contacts

## Connector Body (Style)

> Overmolded with Cable

**(A)** With Strain Relief

## Connector Housing Gender

**(M)** Male (Plug) **(F)** Female (Socket)

## Contact Gender

**(M)** Male **(F)** Female

## Assemble Style

> Overmolded with Cable

**(M)** Overmolded with Cable

## Mating Style

**(L)** 2 Points Lock (Push & Pull)  
 (With Unlocking Tool)

## Backshell

> Overmolded with Cable

**(L)** Straight

## Waterproof Rating

**(7)** IP 67

## More Information

> For Overmolded with Cable

☐ + ☒ : Cable Type + Cable Length

EX. (C01) = EU Cable For HAR 4mm<sup>2</sup> Cable + 1M

☐ : Cable Type

☒ : Cable Length

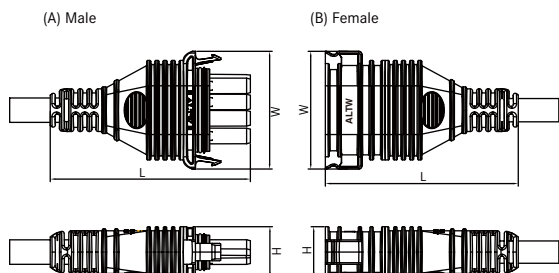
**(R)** UL Cable For TCER 12# Cable From 1M to 99M

**(C)** EU Cable For HAR 4mm<sup>2</sup> Cable EX. (01) = 1M

**(L)** EU Cable For 1940 4mm<sup>2</sup> Cable

## Physical Dimension

### └ BMC | Overmolded with Cable






Connector Gender	L		W		H	
	(B)	(A)	(B)	(A)	(B)	(A)
17A (SPB)	94.95	98.5	58.0	58.0	25.0	25.0
19A (SPB)	94.95	98.5	58.0	58.0	25.0	25.0

\* 17A: Comply to UL standard for USA  
19A: Comply to TUV standard for Europe

Dimensions are shown in millimeters

## Contact Configuration

### └ BMC

	SPB (Output)			
	17A		19A	
	MM or FF	MM or FF	MM or FF	MM or FF
3 Contacts				
	C			C
4 Contacts				
	C			

\* 17A: Comply to UL standard for USA  
19A: Comply to TUV standard for Europe

**Number of Contacts :**

2

Ex.3 contacts (03)

**Connector (Housing) Gender:**

4

Male(M) or Female(F)

• For BMC & SMC

**Contact Gender:**

5

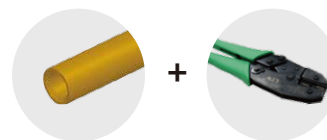
Male(M) or Female(F)

• For BMC & SMC

**More to Choose:**


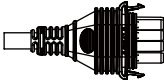

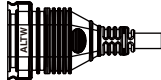

6

• Crimped (C)

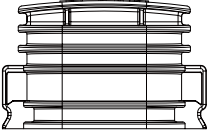



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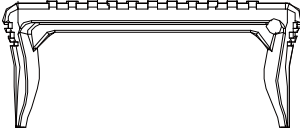
### └ BMC > Receptacle and Mating Pair

<ul style="list-style-type: none"> <li>• Male Connector (Housing)</li> <li>• Female Contacts</li> <li>• Safety Lock (Unlock tool needed) </li> </ul>			<b>Receptacle</b>   **cable length:01-99m	<b>Overmolded with Cable</b>   **cable length:01-99m
AMP (Code)	Contacts 2	Cable type 10	Male Connector (M) Female Contacts (F)	Female Connector (F) Male Contacts (M)
17A(SPB)	03,04	R-TCER 12# cable (US)	SPB-2 AMFM-LL7R**	SPB-2 AFMM-LL7R**
19A(SPB)	03	C-HAR 4.0 mm <sup>2</sup> cable (EU)	SPB-03AMFM-LL7 10 **	SPB-03AFMM-LL7 10 **
		L-1940 4.0 mm <sup>2</sup> cable (EU)		

### └ Accessories > Waterproof Cap

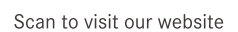
 Mating Pair (Gender): Male Connector					 Mating Pair (Gender): Female Connector				
Size	Mating Pair	Mating Pair (Gender)	Mating Style	Part Number					
BMC	Receptacle and Overmolded with Cable	Male Connector	2 point lock bayonet	CAP-WBMCFLD 1					
	Receptacle and Overmolded with Cable	Female Connector	2 point lock bayonet	CAP-WBMCMLD 1					

### └ Accessories > Tool

	
Size	Part Number
BMC	ULT-SBMC01

\* Design and specification are subject to change without notice.

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