

# Battery Modular Connectors



The BMC series 1 pole & 2 pole connectors are available from 15 to 350 amperes rating for use to 600 Volts continuous AC or DC operation. Based on the colour-management system, the connectors will only mate with the same colour connectors. For preventing mismatching of the power supply system, the different colour housings are selected to identify voltages.

## Applicable Markets

UPS System  
Telecommunication  
Forklift Trucks  
Wheelchairs  
Electric Vehicles  
Chargers

Housing Example :  $\frac{BMC}{(1)} \frac{1S}{(2)(3)} - \frac{RED}{(4)}$

(1) BC -- Battery Modular Connectors  
(2) 1 -- Pole Number  
(3) S -- Housing Size  
(4) RED -- Colour Type

Pole Number : 1 : One-pole Housing  
2 : Two-pole Housing

Housing Size : S : Small Size Housing  
M : Middle Size Housing  
L : Large Size Housing

Contacts Example :  $BMC \frac{1}{(5)} \frac{AG}{(6)}$

(5) 1 -- Wire Range  
(6) AG -- Contacts Type

Wire Range : 1 : AWG20-16  
2 : AWG16-12  
3 : AWG14-10

Contacts Type : AG : Copper-Silver Plated  
ST : Copper-Tin Plated (Reel Type)

## 10 to 45 Amperes Series

(A)



| Contact Barrel Size (AWG) | Current Rating (Amperes) | Voltage Rating (Volts) | Maximum Wire Insulation Diameter (mm) | Contact Retention Force (lbs) | Average Connection / Disconnect (lbs) | Operating Temperature Range °C | Housings (A) |
|---------------------------|--------------------------|------------------------|---------------------------------------|-------------------------------|---------------------------------------|--------------------------------|--------------|
| 20-16                     | 15                       | 600 V                  | 4.45                                  | 25                            | 3                                     | -20°C to 125°C                 | BMC1S-Red    |
| 12-16                     | 30                       |                        |                                       |                               |                                       |                                | BMC1S-Black  |
| 10-14                     | 45                       |                        |                                       |                               |                                       |                                | BMC1S-White  |
| 12-16                     | 30                       |                        |                                       |                               |                                       |                                | BMC1S-Green  |
|                           |                          |                        |                                       |                               |                                       |                                | BMC1S-Blue   |
|                           |                          |                        |                                       |                               |                                       |                                | BMC1S-Brown  |

# Battery Modular Connectors



## 75 Amperes Series



| Contact Barrel Size (AWG) | Current Rating (Amperes) | Voltage Rating (Volts) | Maximum Wire Insulation Diameter (mm) | Contact Retention Force (lbs) | Average Connection / Disconnect (lbs) | Operating Temperature Range °C | Housings    |
|---------------------------|--------------------------|------------------------|---------------------------------------|-------------------------------|---------------------------------------|--------------------------------|-------------|
| 12-10                     | 50                       | 600 V                  | 11                                    | 50                            | 7                                     | -20°C to 125°C                 | BMC1M-Red   |
| 6                         | 75                       |                        |                                       |                               |                                       |                                | BMC1M-Black |
| 8                         | 60                       |                        |                                       |                               |                                       |                                | BMC1M-Green |
|                           |                          |                        |                                       |                               |                                       |                                | BMC1M-Blue  |

## 120 to 180 Amperes Series



| Amperes Series | Contact Barrel Size (AWG) | Current Rating (Amperes) | Voltage Rating (Volts) | Maximum Wire Insulation Diameter (mm) | Contact Retention Force (lbs) | Average Connection / Disconnect (lbs) | Operating Temperature Range °C | Housings     |
|----------------|---------------------------|--------------------------|------------------------|---------------------------------------|-------------------------------|---------------------------------------|--------------------------------|--------------|
| 120            | 6                         | 80                       | 600 V                  | 14.6                                  | 100                           | 8                                     | -20°C to 125°C                 | BMC1LM-Red   |
|                | 2                         | 120                      |                        |                                       |                               |                                       |                                | BMC1LM-Black |
| 180            | 6                         | 80                       |                        | 19.05                                 | 170                           | 20                                    |                                | BMC1L-Red    |
|                | 1/0                       | 175                      |                        |                                       |                               |                                       |                                | BMC1L-Black  |

## 2-Pole 50 to 350 Amperes Series



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| Amperes Series | Contact Barrel Size (AWG) | Current Rating (Amperes) | Voltage Rating (Volts) | Maximum Wire Insulation Diameter (mm) | Contact Retention Force (lbs) | Average Connection / Disconnect (lbs) | Operating Temperature Range °C | Housings    |
|----------------|---------------------------|--------------------------|------------------------|---------------------------------------|-------------------------------|---------------------------------------|--------------------------------|-------------|
| 50             | 12-10                     | 35                       | 600 V                  | 11.18                                 | 50                            | 15                                    | -20°C to 125°C                 | BMC2S-Red   |
|                |                           |                          |                        |                                       |                               |                                       |                                | BMC2S-Black |
| 8              | 45                        | BMC2S-Grey               |                        |                                       |                               |                                       |                                |             |
| 120            | 6                         | 80                       |                        | 14.6                                  | 100                           | 20                                    |                                | BMC2MS-Red  |
|                | 4                         | 100                      |                        |                                       |                               |                                       |                                | BMC2MS-Grey |
|                | 2                         | 120                      |                        |                                       |                               |                                       |                                | BMC2MS-Blue |

## Accessories - Connector Cable Clamps



BMC2S-FP for 2S (50 Amperes) Series  
BMC2M-FP for 2M (175 Amperes) Series

## Accessories - Connector Handles

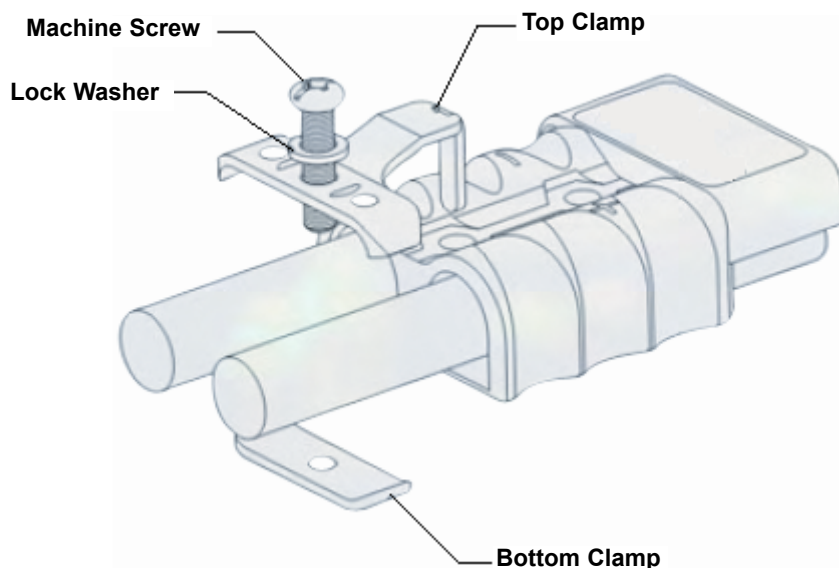


BMC2S-HD-Red for 2S (50 Amperes) Series  
BMC2MS-HD-Red for 2MS (120 Amperes) Series

## Accessories - Connector Dust Cover



BMC2S-DC1 for 2S (50 Amperes) Series  
BMC2MS-DC1 for 2MS (120 Amperes) Series



# Battery Modular Connectors



## Part Number Table

| Description                  | Part Number |
|------------------------------|-------------|
| Housing, Red, 15 A to 45 A   | BMC1S-RED   |
| Housing, Black, 15 A to 45 A | BMC1S-BLACK |
| Housing, White, 15 A to 45 A | BMC1S-WHITE |
| Housing, Green, 15 A to 45 A | BMC1S-GREEN |
| Housing, Blue, 15 A to 45 A  | BMC1S-BLUE  |
| Contact, 15 A                | BMC1AG      |
| Contact, 30 A                | BMC2AG      |
| Housing, Red, 50 A to 75 A   | BMC1M-RED   |
| Housing, Black, 50 to 75 A   | BMC1M-BLACK |
| Housing, Green, 50 to 75 A   | BMC1M-GREEN |
| Housing, Blue, 50 to 75 A    | BMC1M-BLUE  |
| Contact, 50 A                | BMC5AG      |
| Contact, 60 A                | BMC8AG      |
| Contact, 75 A                | BMC14AG     |
| Housing, Red, 50 A, 2 Pole   | BMC2S-RED   |
| Housing, Black, 50 A, 2 Pole | BMC2S-BLACK |
| Housing, Grey, 50 A, 2 Pole  | BMC2S-GREY  |
| Housing, Brown, 15 A to 45 A | BMC1S-BROWN |
| Housing, Red, 80-120 A       | BMC1LM-RED  |

| Description                     | Part Number   |
|---------------------------------|---------------|
| Housing, Black, 80-120 A        | BMC1LM-BLACK  |
| Contact, 80 A, 6 AWG            | BMCMS14AG     |
| Contact, 100 A, 4 AWG           | BMCMS22AG     |
| Contact, 120 A, 2 AWG           | BMCMS38AG     |
| Housing, Red, 80-175 A          | BMC1L-RED     |
| Housing, Black, 80-175 A        | BMC1L-BLACK   |
| Contact, 80 A, 6 AWG            | BMCM14AG      |
| Contact, 125 A, 4 AWG           | BMC22AG       |
| Contact, 150 A, 2 AWG           | BMC38AG       |
| Contact, 175 A, 1 AWG           | BMC60AG       |
| Housing, 2 Pole, 80-120 A, Red  | BMC2MS-RED    |
| Housing, 2 Pole, 80-120 A, Grey | BMC2MS-GREY   |
| Housing, 2 Pole, 80-120 A, Blue | BMC2MS-BLUE   |
| Cable Clamp, 50 A               | BMC2S-FP      |
| Cable Clamp, 175 A              | BMC2M-FP      |
| Connector Handle, 50 A          | BMC2S-HD-RED  |
| Connector Handle, 80-120 A      | BMC2MS-HD-RED |
| Dust Cover, 50 A                | BMC2S-DC1     |
| Dust Cover, 80-120 A            | BMC2MS-DC1    |

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