Battery Modular Connectors

Description

The BMC series I 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.

Applications

UPS System
Telecommunication
Forklift Trucks
Wheelchairs
Electric Vehicles
Chargers

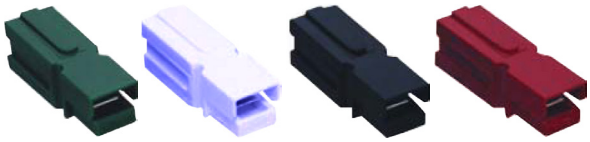
Housing Example : BMC (1) 1S (2)(3) - RED (4)	Contacts Example : BMC 1 (5) AG (6)
(1) BC Battery Modular Connectors (2) 1 Pole Number (3) S Housing Size (4) RED Colour Type	(5) 1 Wire Range (6) AG Contacts Type
Pole Number : 1 : One-pole Housing 2 : Two-pole Housing	Wire Range : 1 : AWG20-16 2 : AWG16-12 3 : AWG14-10
Housing Size : S : Small Size Housing M : Middle Size Housing L : Large Size Housing	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)	Max. 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

75 Amperes Series



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

120 to 180 Amperes Series



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

2-Pole 50 to 350 Amperes Series



Specifications

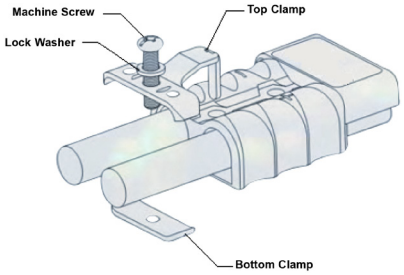
Housing : Polycarbonate (PC)
Spring Material : Stainless Steel

Amperes Series	Contact Barrel Size (AWG)	Current Rating (Amperes)	Voltage Rating (Volts)	Max. 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

Amperes Series	Contact Barrel Size (AWG)	Current Rating (Amperes)	Voltage Rating (Volts)	Max. 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	20	-20°C to 125°C	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

Contacts



Part Number	Description	
BMC5AG	2-Pole	Silver Plated Contact 35A
BMC8AG		Silver Plated Contact 45A
BMC14AG		Silver Plated Contact 50A

Battery Modular Connector Sets of BMC2MS Series

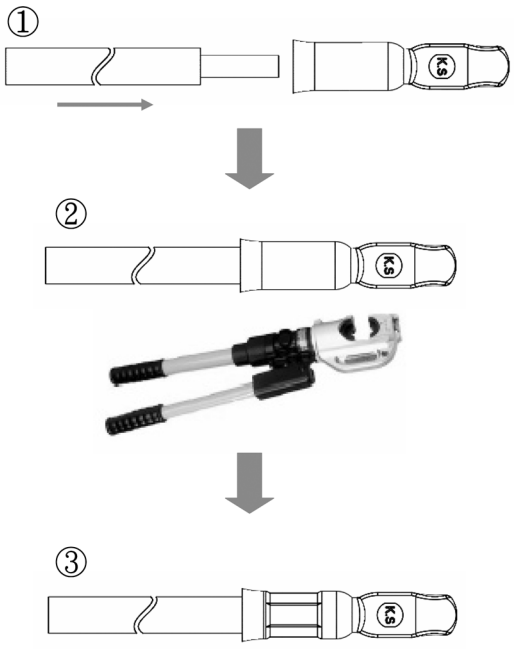
Product List

Part Number	Product	Wire Range	
		mm²	A.W.G
BMCMS14AG	Terminal	14	6
BMCMS22AG		22	4
BMCMS38AG		38	2
Part Number	**Product**	**Colour**	
BMC2MS-RED	Housing	Red	
BMC2MS-GREY		Grey	
BMC2MS-BLUE		Blue	

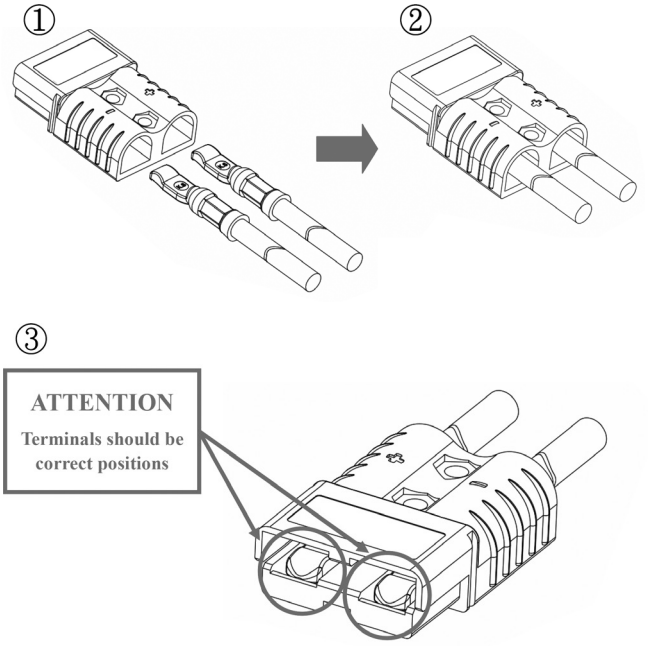
Part Number	Product	Colour
BMC2MS-HD-RED	Handle	Red
BMC2MS-DC1	Dust Cap	Black

Operation Instruction

Terminal Crimping

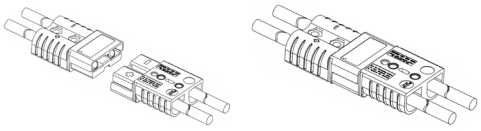


Assemble Terminals into Housing



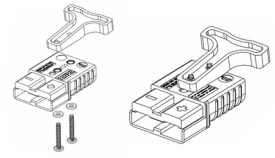
Assemble Connectors

Mate a pair of complete connectors.

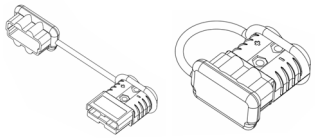


Optional Accessory

Handle



Dust Cap



Part Number Table

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

Description	Part Number
Housing, Black, 80A to 120A Series	BMC1LM-BLACK
Contact, 80A Series, 6 AWG	BMCMS14AG
Contact, 100A Series, 4 AWG	BMCMS22AG
Contact, 120A Series, 2 AWG	BMCMS38AG
Housing, Red, 80A to 175A Series	BMC1L-RED
Housing, Black, 80A to 175A Series	BMC1L-BLACK
Contact, 80A Series, 6 AWG	BMCM14AG
Contact, 125A Series, 4 AWG	BMC22AG
Contact, 150A Series, 2 AWG	BMC38AG
Contact, 175A Series, 1 AWG	BMC60AG
Housing, 2 Pole, 80A to120A Series, Red	BMC2MS-RED
Housing, 2 Pole, 80A to 120A Series, Grey	BMC2MS-GREY
Housing, 2 Pole, 80A to 120A Series, Blue	BMC2MS-BLUE
Cable Clamp, 50A Series	BMC2S-FP
Cable Clamp, 175A Series	BMC2M-FP
Connector Handle, 50A Series	BMC2S-HD-RED
Connector Handle, 80A to 120A Series	BMC2MS-HD-RED
Dust Cover, 50A Series	BMC2S-DC1
Dust Cover, 80A to 120A Series	BMC2MS-DC1

Important Notice : This data sheet and its contents (the “Information”) belong to the members of the AVNET group of companies (the “Group”) or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group’s liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.