

# MC4 Connector



## Scope of application

SM series waterproof joints are mainly used for photovoltaic modules, photovoltaic combiner boxes, photovoltaic inverters, etc. in photovoltaic power generation systems. Its waterproof performance reaches IP67, contact resistance is less than 0.5 ohm, easy to disassemble and use, and can effectively prevent insulation aging and arc fire caused by poor contact in the system.

## Environment

The upper limit of ambient air temperature shall not exceed +105°C, and the lower limit of air temperature shall not be lower than -40°C;

The maximum temperature during use shall not exceed +85°C and the minimum temperature shall not be lower than -40°C;

Pollution level: 2;

Safety level: II ;

Protection grade: IP67.

# MC4 CONNECTOR

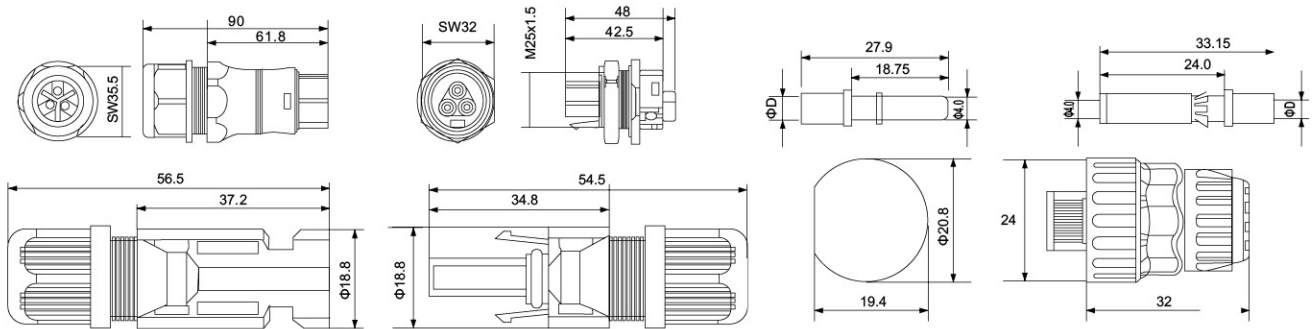
## Model and Meaning

S	M	□	
↓	↓	↓	
Company code	Waterproof Connector	C4: Inverter DC waterproof joint A4: Inverter AC waterproof joint	E4: Inverter Ethernet waterproof connector U4: Inverter USB waterproof connector

## Technical Parameter

	SMC4	SMA4	SME4	SMU4
Rated current	30A(25-6.0mm <sup>2</sup> )	35A	—	1.5
Rated voltage	1000V DC	500V AC	—	150V AC
Test voltage	6000V(50Hz, 1min)	4000V	—	≥ 500V
Connector contact resistance	0.5mΩ	≤ 1mΩ	—	≤ 30mΩ
Connector conductor material	Copper, tin plated	Copper, tin plated	Phosphorus copper tin plating	copper alloy
Connector insulation material	TPE/PA	PA	PA	Thermoplastic
Protection class	IP2*/IP67	IP67	IP68	IP67
Flame retardant grade	UL94-V0	UL94-V0	UL94-V0	UL94-V0
Safe	II	II	II	II
Adaptor diameter	2.5-6.0mm <sup>2</sup>	2.5-10.0mm <sup>2</sup>	7.0mm <sup>2</sup>	—
Insertion force/extraction force	≤ 50N/ ≥ 50N	≤ 50N/ ≥ 50N	—	≤ 35N/10~35N
Connection mode	crimping	crimping	peg graft	Solder connection
Operating temperature range	-40~+90°C	-40~+90°C	-40~+90°C	-40~+90°C

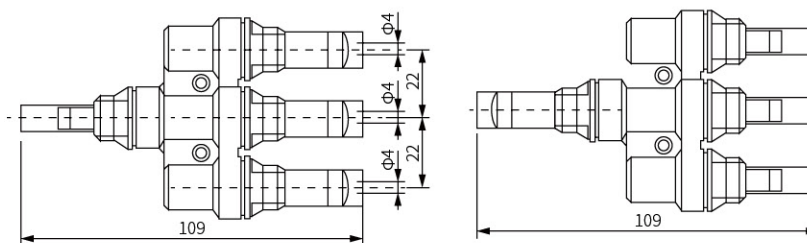
## Shape and mounting dimensions



# Other Connector



Model No.:RMC40-4T

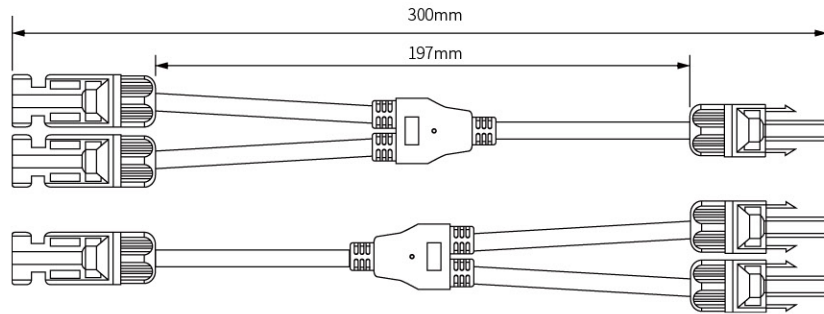


## Technical Parameter

Rated current	40A
Rated voltage	1000/1500V DC
Test voltage	6000V(50Hz,1min)
Overvoltage category/Pollution degree	CAT III /2
Contact resistance of plug connectors	1mΩ
Contact material	Copper,Ag plated
Insulation material	PPO
Degree of protection	IP2*/IP65
Flame class	UL94-V0
Safety class	II
Suitable cable	2.5-6.0mm <sup>2</sup>
Insertion force	≤ 50N
Withdrawal force	≥ 50N
Temperature range	-40° C ~ +110° C

# Other Connector

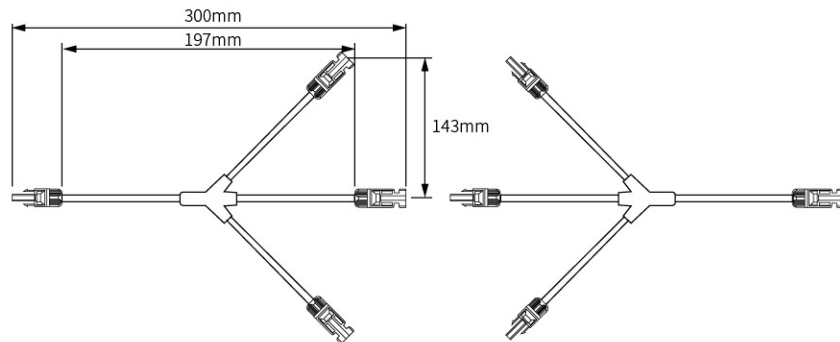
Model No.:RMC40-3T



## Technical Parameter

Rated current	30A
Rated voltage	1000V DC
Test voltage	6000V(50Hz1min)
Overvoltage category/Pollution degree	CAT III /2
Contact resistance of plug connectors	≤ 0.5 mΩ
Contact material	Copper,Ag plated
Insulation material	PPO
Degree of protection	IP2*/IP65
Flame class	UL94-V0
Safety class	II
Suitable cable	2.5-6.0mm <sup>2</sup>
Insertion Withdrawal force	≤ 50N
Temperature range	-40° C ~ +110
Cable length	8cm

Model No.:RMC40-4Y

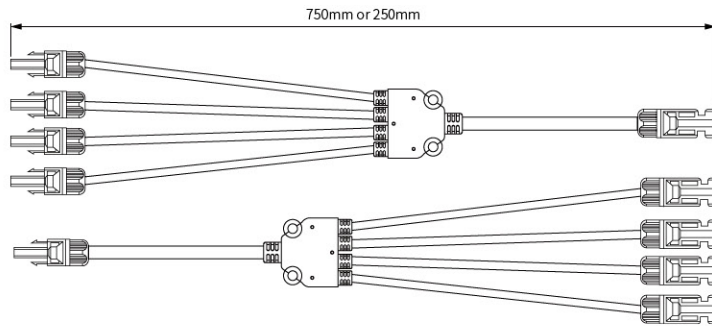


## Technical Parameter

Rated current	30A
Rated voltage	1000V DC
Test voltage	6000V(50Hz,1min)
Overvoltage category/Pollution degree	CAT III /2
Contact resistance of plug connectors	≤ 1mΩ
Contact material	Copper,Ag plated
Insulation material	PPO
Degree of protection	IP2*/IP65
Flame class	UL94-V0
Safety class	II
Suitable cable	2.5-6.0mm <sup>2</sup>
Insertion Withdrawal force	≤ 50N
Temperature range	-40° C~+110C
Cable length	8cm

# Other Connector

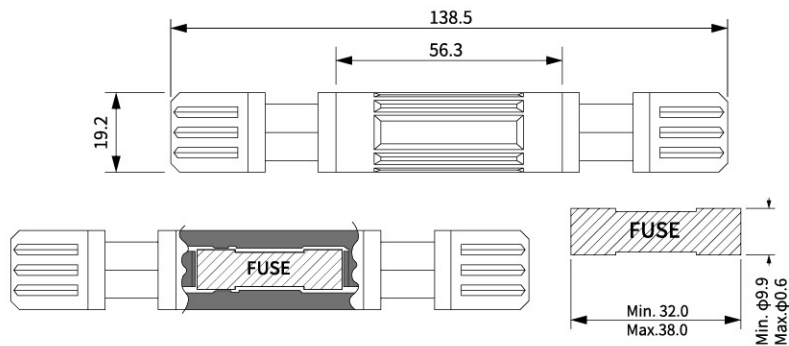
Model No.:RMC40-5Y



## Technical Parameter

Rated current	30A
Rated voltage	1000V DC
Test voltage	6000V(50Hz1min)
Overvoltage category/Pollution degree	CAT III /2
Contact resistance of plug connectors	$\leq 0.5m\Omega$
Contact material	opperAg plated
Insulation material	PPO
Degree of protection	IP2*/IP65
Flame class	UL94-V0
Safety class	II
Suitable cable	2.5-6.0mm <sup>2</sup>
Insertion Withdrawal force	$\leq 50N$
Temperature range	-40C~+110° C
Cable length	8cm

Model No.:RR1500-MC40

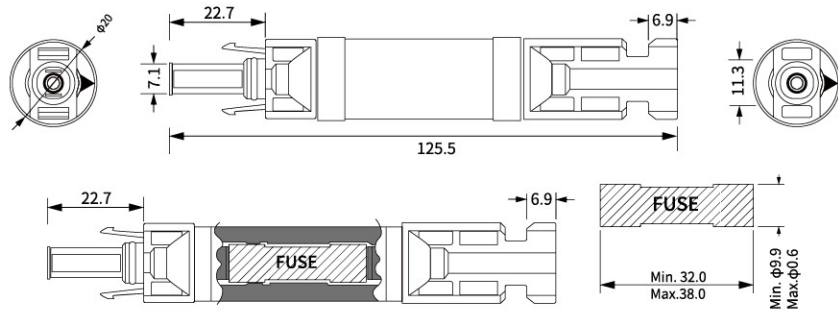


## Technical Parameter

Rated current	2A 5A 10A15A 20A 25A 30A(According to the FUSE)
Rated voltage	1500V DC
Test voltage	6000V(50Hz,1min)
Overvoltage category/Pollution degree	CAT III /2
Contact resistance of plug connectors	$\leq 1 m\Omega$
Contact material	Copper,Ag plated
Insulation material	PPO
Degree of protection	IP2*/IP67
Flame class	UL94-V0
Safety class	II
Suitable cable	2.5mm <sup>2</sup> ~10.0mm <sup>2</sup> /14AWG~8AWG
Insertion force	$\leq 50N$
Withdrawal force	$\geq 50N$
Temperature range	-40° C~+125° C

# Other Connector

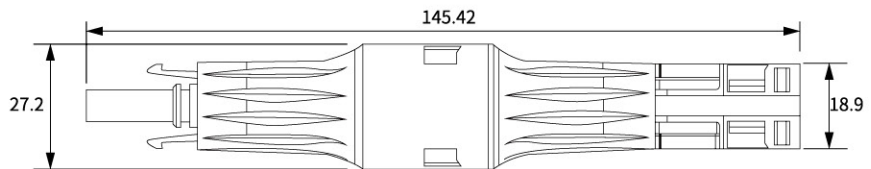
Model No.:MC40-1000



## Technical Parameter

Rated current	2A 5A 10A 15A 20A 25A 30A(According to the FUSE)
Rated voltage	1000V DC
Test voltage	6000V(50Hz,1min)
Overvoltage category/Pollution degree	CAT III /2
Contact resistance of plug connectors	≤ 1 mΩ
Contact material	Copper,Ag plated
Insulation material	PPO
Degree of protection	IP2*/IP67
Flame class	UL94-V0
Safety class	II
Suitable cable	2.5mm <sup>2</sup> ~10.0mm <sup>2</sup> /14AWG~8AWG
Insertion force	≤ 50N
Withdrawal force	≥ 50N
Temperature range	-40° C~+125° C

Model No.:RMC40-1500



## Technical Parameter

Rated current	2A 5A 10A 15A 20A 25A 30A 32A 35A 40A (According to the FUSE)
Rated voltage	1500V DC
Test voltage	6000V(50Hz,1min)
Overvoltage category/Pollution degree	CAT III /2
Contact resistance of plug connectors	≤ 1 mΩ
Contact material	Copper,Ag plated
Insulation material	PPO
Degree of protection	IP2*/IP67
Flame class	UL94-V0
Safety class	II
Suitable cable	2.5mm <sup>2</sup> ~10.0mm <sup>2</sup> /14AWG~8AWG
Insertion force	≤ 50N
Withdrawal force	≥ 50N
Temperature range	-40° C~+125° C