Mitsubishi General-Purpose AC Servo

No. 10-14E

Sales and Service

Release of MR-J3W Series Spring Clamp Connector Set for Main Circuit (Option)

Thank you for your continued patronage of the Mitsubishi general-purpose AC servo and FA products. MR-J3W series spring clamp connector sets for main circuit have been added to the connector sets for main circuit. An open tool enclosed in the set will provide the ease of cable connection.

1. Applicable Models for Connector Set (Option)

MR-J3W-□B servo amplifier

☐: Servo amplifier rated output symbol 22/44/77

2. Description

For MR-J3W series servo amplifiers, two types of connector sets (option) (for 1 servo amplifier, and for 10 servo amplifiers) have been released.

Model name	MR-J3WCNP123-SP (For 1 servo amplifier, 2 axes)	MR-J3WCNP123-SP-10P (For 10 servo amplifiers, 20 axes)	
Description	CNP1 connector (For main circuit power supply): 1 CNP2 connector (For control circuit/regenerative option): 2 CNP3A/CNP3B connector (For motor power supply): 2 Open tool: 1	CNP1 connector (For main circuit power supply): 10 CNP2 connector (For control circuit/regenerative option): 20 CNP3A/CNP3B connector (For motor power supply): 20 Open tool: 10	

3. Release Schedule

June 2010

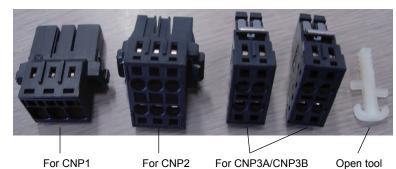


Figure 1. Spring clamp connector sets for main circuit (MR-J3WCNP123-SP)

4. Others

When connecting multiple cables, a crimping connector may be better than a spring clamp connector because the cables can be connected using an automatic crimping tool. Select a connector depending on your requirements.

Date of ssue	July 2010	Title	Connector Set for Main Circuit (Option)	Mitsubishi Electric Corp., Nagoya Works 5-1-14 Yada-minami, Higashi-ku, Nagoya 461-8670 Tel.: +81 (52) 721-2111 Main line
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<Reference>

Connection method of the spring clamp connector for main circuit

1) Strip off the cable sheath. Refer to the following table.1 for the strip-off length of the cable sheath. The strip-off length of the cable sheath may differ depending on the cable type. Determine the appropriate strip-off length depending on the situation.

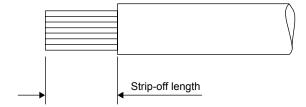
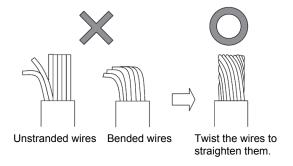


Table1. Strip-off length of the cable sheath

Connector name	Connector symbol	Applicable cable size (Note)	Strip-off length	Open tool
CNP1 connector (For main circuit power supply)	CNP1	AWG16 to AWG14	11.5mm	For CNP1 (large size)
CNP2 connector (For control circuit/regenerative option)	CNP2	AWG16 to AWG14	9mm	For others (small size)
CNP3A/CNP3B connector (For motor power supply)	CNP3A/CNP3B	AWG19 to AWG14	9mm	For others (small size)

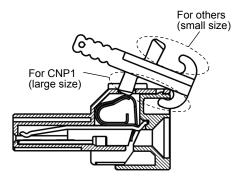
Note. Two cables cannot be connected together.

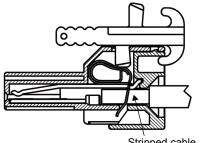
Twist the wires lightly as shown in the right figure to straighten them.



2) Insert the enclosed open tool as shown in the right figure, and push the open tool down to open the spring hole. (The open tool includes the parts for the CNP1 (large size) and parts for others (small size).) Hold the open tool down, and then insert the stripped cable into the cable insertion hole. Check the insertion depth so that the cable sheath does not get caught by the spring.







Stripped cable

Figure of cable connection operation (CNP1 connector (For main circuit power supply))

3) Release the open tool, and lock the cable. Pull the cable lightly, and check that the cable is connected firmly.