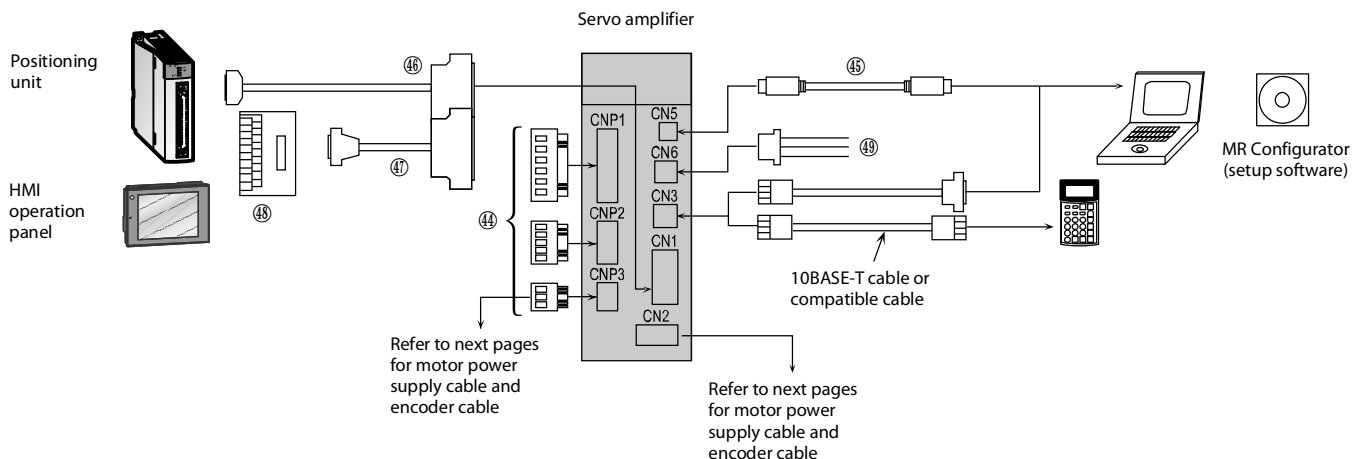
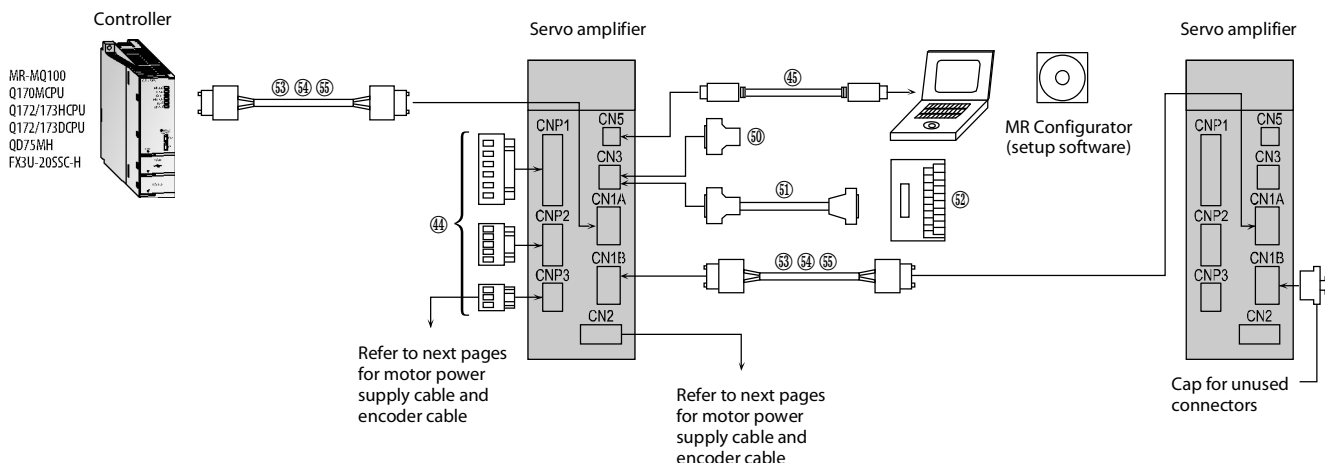


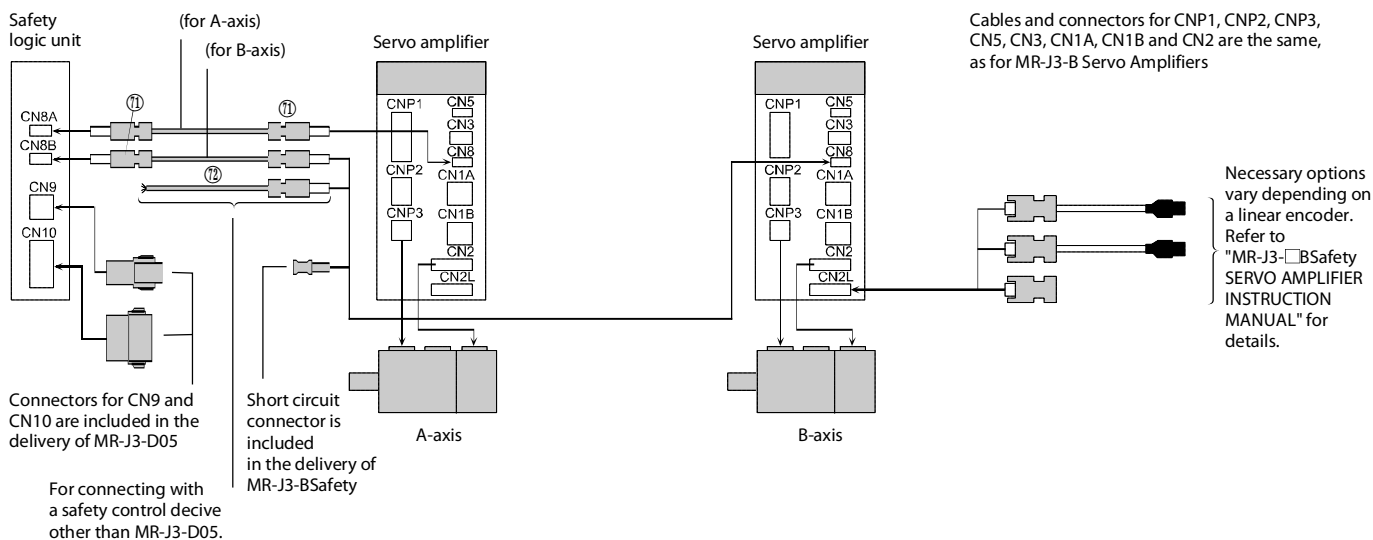
**Cables and Connectors for MR-J3-A Servo Amplifiers**



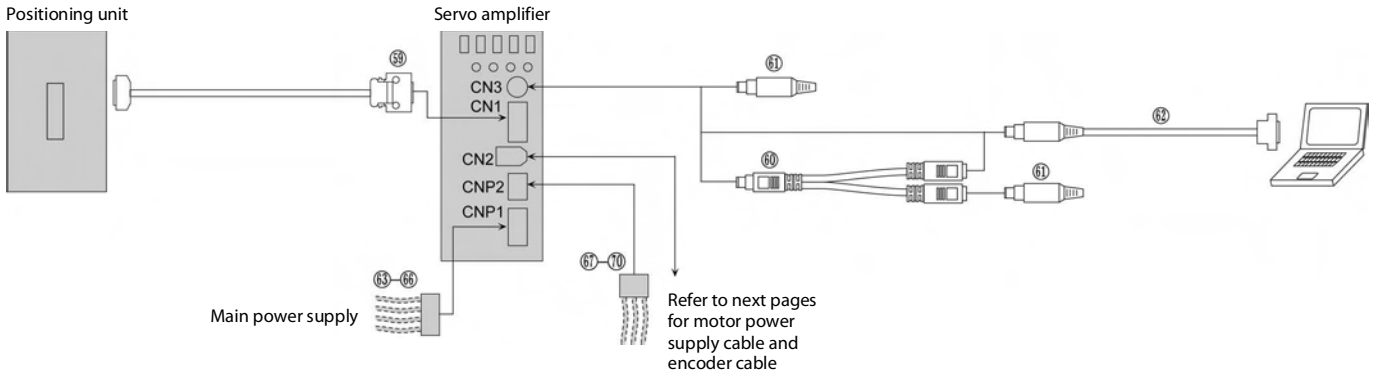
**Cables and Connectors for MR-J3-B Servo Amplifiers**



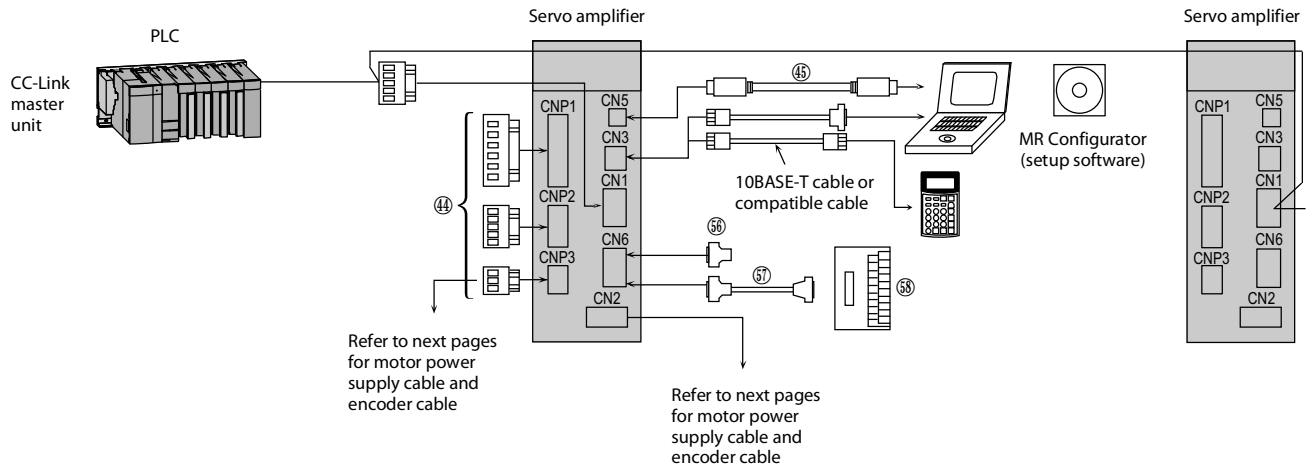
**Cables and Connectors for MR-J3-BSafety and MR-J3-D05**



**Cables and Connectors for MR-E-□A/AG-QW003 Servo Amplifiers**



**Cables and Connectors for MR-J3-T Servo Amplifiers**

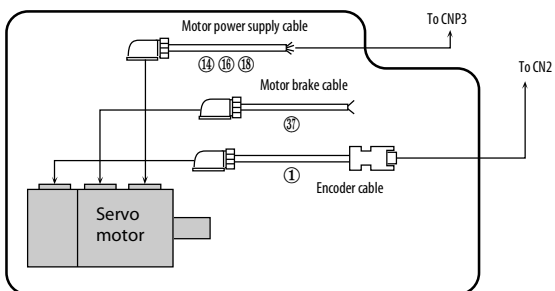


4 OPTIONS AND PERIPHERAL EQUIPMENT

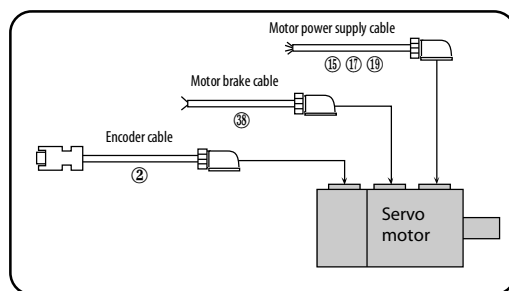
**Cables and Connectors for Servo Motors**

**For HF-KE servo motor series: encoder cable length ≤ 10 m**

Cables leading in the direction of the motor shaft

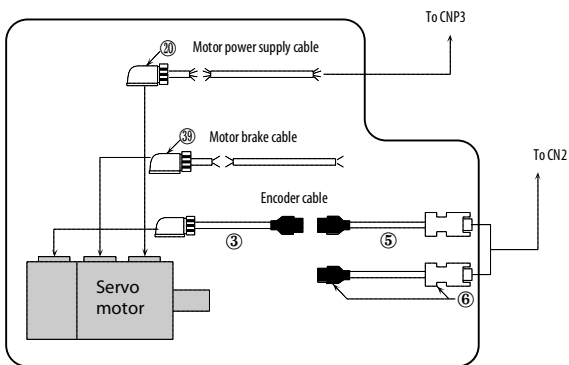


Cables leading in the opposite direction of the motor shaft

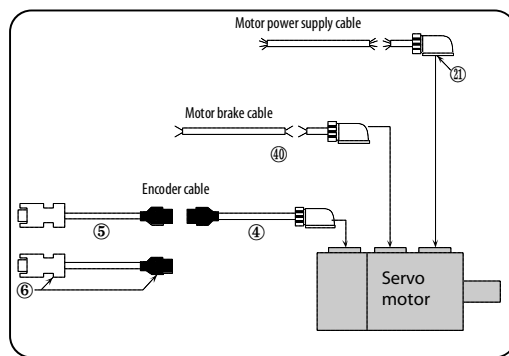


**For HF-KE servo motor series: encoder cable length > 10 m**

Cables leading in the direction of the motor shaft

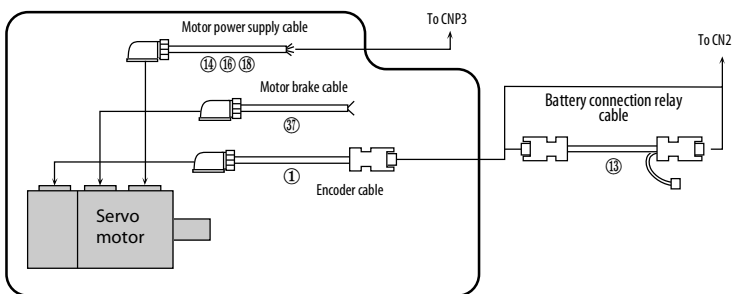


Cables leading in the opposite direction of the motor shaft

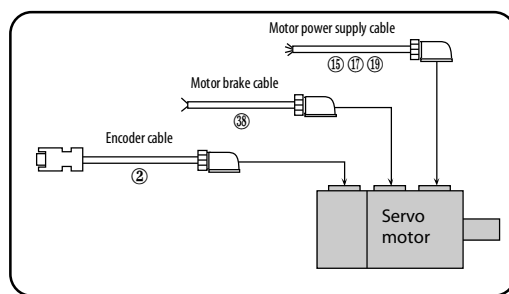


**For HF-KP/HF-MP servo motor series: encoder cable length ≤ 10 m**

Cables leading in the direction of the motor shaft

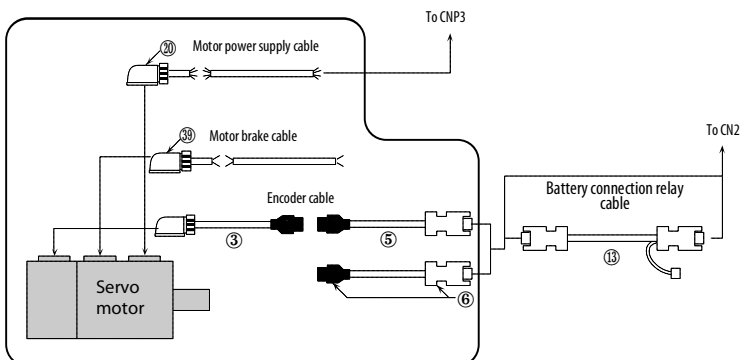


Cables leading in the opposite direction of the motor shaft

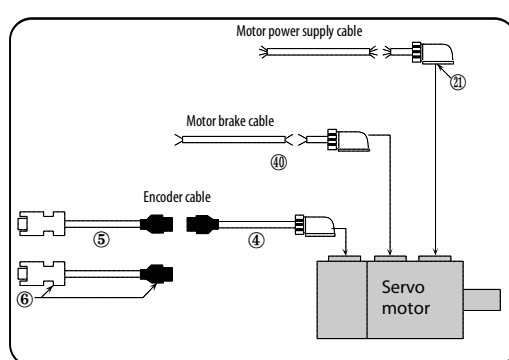


**For HF-KP/HF-MP servo motor series: encoder cable length > 10 m**

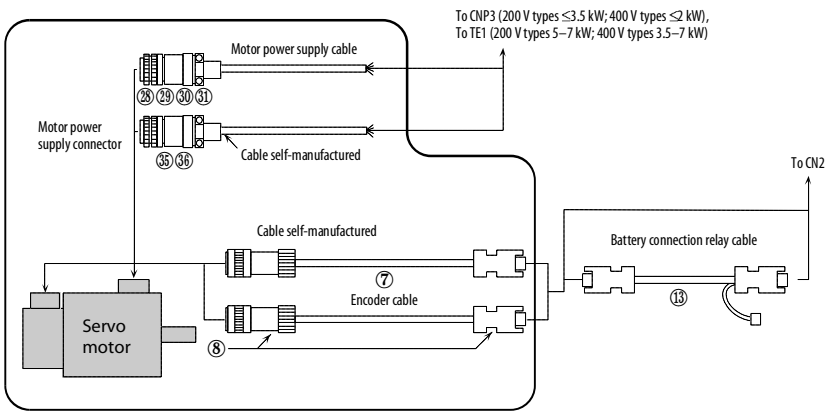
Cables leading in the direction of the motor shaft



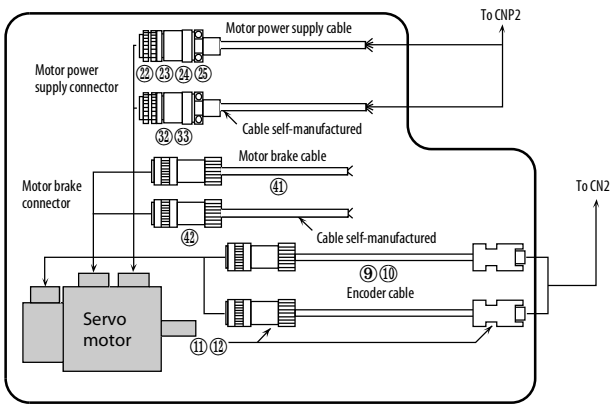
Cables leading in the opposite direction of the motor shaft



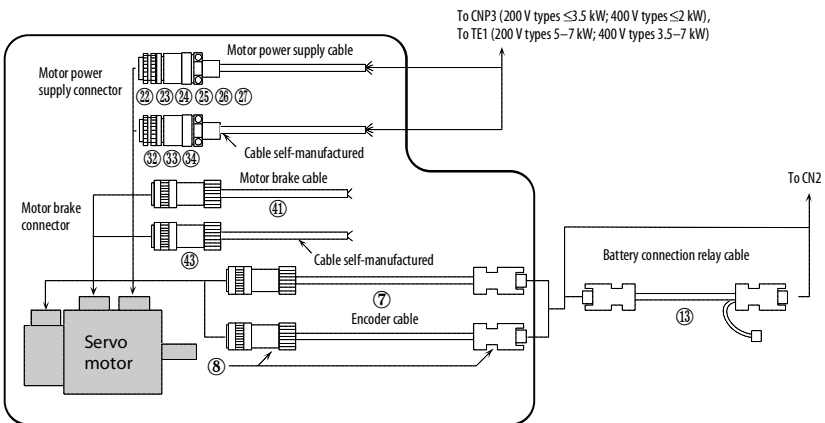
**For HC-RP servo motor series**



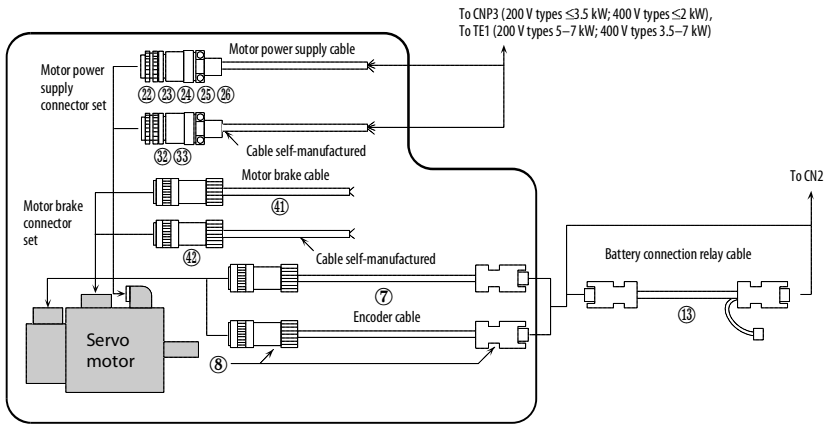
**For HF-SE motor series**



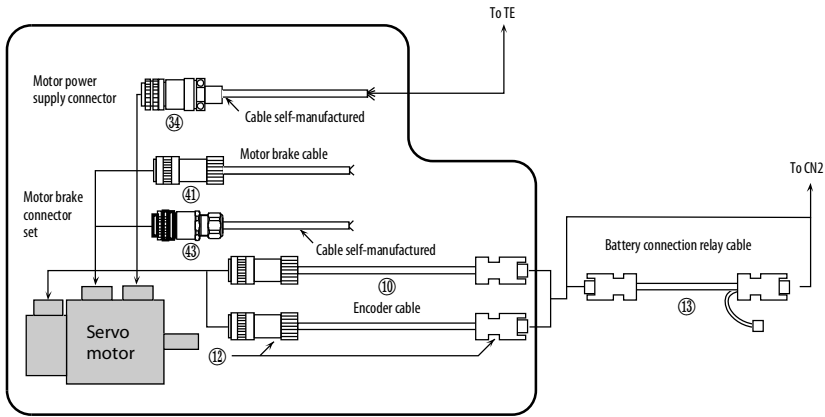
**For HF-SP servo motor series**



For HF-JP servo motor series ≤ 5 kW



For HF-JP servo motor series 11 kW and 15 kW





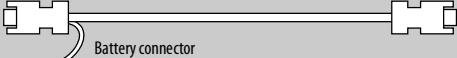

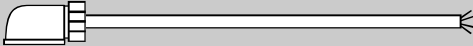
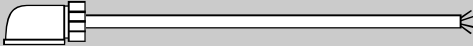
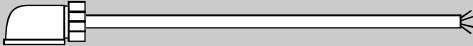
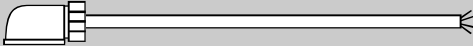
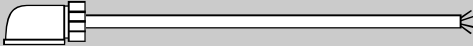
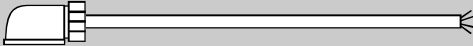
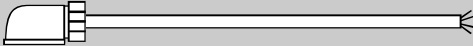
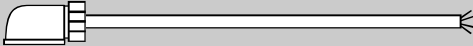





**Cables and Connectors for Servo amplifier (general)**

Item	Description	Model	Protection	Length	Art. no.		
①	Encoder cable for HF-KP/HF-MP/HF-KE series Lead out in direction of motor shaft	Encoder connector (Tyco Electronics AMP) 1674320-1	Amplifier connector 36210-0100PL (receptacle, 3 M) 36310-3200-008 (shell kit, 3 M), or 54599-1019 (connector set, Molex)	MR-J3ENCBL□M-A1-H □=cable length: 2, 5, 10 m ①	IP65	2 m 5 m 10 m	160312 161547 161548
				MR-J3ENCBL□M-A1-L □=cable length: 2, 5, 10 m ①	IP65	2 m 5 m 10 m	161549 161550 161551
②	Encoder cable for HF-KP/HF-MP/HF-KE series Lead out in opposite direction of motor shaft			MR-J3ENCBL□M-A2-H □=cable length: 2, 5, 10 m ①	IP65	2 m 5 m 10 m	160230 161552 161553
				MR-J3ENCBL□M-A2-L □=cable length: 2, 5, 10 m ①			
③	Motor-side encoder cable for HF-KP/HF-MP/HF-KE series Lead out in direction of motor shaft	Encoder connector (Tyco Electronics AMP) 1674320-1	Junction connector (Tyco Electronics AMP) 1473226-1 (with ring) 1-172169-9 (housing) 316454-1 (cable clamp)	MR-J3JCBLO3M-A1-L Cable length: 0.3m ①	IP20	0.3 m	161557
				MR-J3JCBLO3M-A2-L Cable length: 0.3m ①			
④	Motor-side encoder cable for HF-KP/HF-MP/HF-KE series Lead out in opposite direction of motor shaft						
MR-EKCBL□M-L □=cable length: 20, 30 m ①	IP20	20 m 30 m	161561 161562				
⑥				Junction connector, amplifier connector ② for HF-KP/HF-MP/HF-KE series	Junction connector (Tyco Electronics AMP) 1-172161-9 (housing) 170359-1 (connector pin) MTI-0002 (cable clamp, TOA ELECTRIC INDUSTRIAL)	Amplifier connector 54599-1019 (connector set, Molex), or 36210-0100PL (receptacle, 3 M) 36310-3200-008 (shell kit, 3 M)	MR-ECNM
	<Applicable cable example> Wire size: 0.3 mm <sup>2</sup> (AWG22) Completed cable outer diameter: φ 8.2 mm Crimping tool (91529-1) is required.	Use these in combination of ③ or ④.					
⑦	Encoder cable for HF-SP/HC-RP/HF-JP/HA-LP series	Encoder connector (DDK) <For 10 m or shorter cable> CM10-SP10S-M (straight plug) CM10-#225C(C1)-100 (socket contact)	Amplifier connector 36210-0100PL (receptacle, 3 M) 36310-3200-008 (shell kit, 3 M), or 54599-1019 (connector set, Molex)	MR-J3ENSCL□M-H □=cable length: 2, 5, 10, 20, 30 m ①	IP67	2 m 5 m 10 m 20 m 30 m	160226 161563 161564 161565 161566
				MR-J3ENSCL□M-L □=cable length: 2, 5, 10, 20, 30 m ①			
⑧	Encoder connector set for HF-SP/HC-RP/HF-JP/HA-LP series	Encoder connector (DDK) CM10-SP10S-M (straight plug) CM10-#225C(S1)-100 (socket contact)	Amplifier connector 36210-0100PL (receptacle, 3 M) 36310-3200-008 (shell kit, 3 M), or 54599-1019 (connector set, Molex)	MR-J3SCNS	IP67	—	161576
⑨	Encoder cable for HF-SE series	Encoder connector (DDK) D/MS3057-12A (cable clamp) D/MS3106B20-29S (straight plug)	Amplifier connector 36210-0100PL (receptacle, 3M) 36310-3200-008 (shell kit, 3M), or 54599-1019 (connector set, Molex)	MR-ESCBL□M-H □=cable length 2, 5, 10, 20, 30 m ①	IP20	2 m 5 m 10 m 20 m 30 m	210952 210953 210954 210955 210956
				MR-ESCBL□M-L □=cable length 2, 5, 10, 20, 30 m ①			
⑩		Encoder connector (DDK) D/MS3106A-29S (D190) (plug) CE02-20BS-S-D (backshell, straight) CE3057-12A-3-D (cable clamp)	Amplifier connector 36210-0100PL (receptacle, 3M) 36310-3200-008 (shell kit, 3M), or 54599-1019 (connector set, Molex)	MR-ENECBL□M-H □=cable length 2, 5, 10, 20, 30 m ①	IP67	2 m 5 m 10 m 20 m 30 m	210961 210962 210963 210964 210965

Notes:  
 ① -H and -L indicate a bending life. -H indicates a long bending life, and -L indicates a standard bending life.  
 ② Refer to the MR-J3 users manual for details on manufacturing the cable.

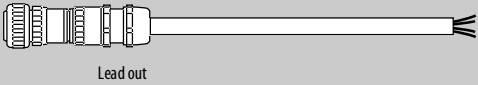
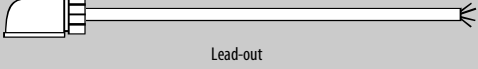
**Cables and Connectors for Servo amplifier (general)**

Item	Description	Model	Protection	Length	Art. no.	
Select one for connecting the encoder to CN2	⑪ Encoder connector (DDK) D/MS3057-12A (cable clamp) D/MS3106B20-29S (straight plug) 	Amplifier connector 36210-0100PL (receptacle, 3M) 36310-3200-008 (shell kit, 3M), or 54599-1019 (connector set, Molex) 	MR-ECNS	IP20	—	210138
	⑫ Encoder connector (DDK) D/MS3106A-29S (D190) (plug) CE02-20BS-S-D (backshell, straight) CE3057-12A-3-D (cable clamp) 	Amplifier connector 36210-0100PL (receptacle, 3M) 36310-3200-008 (shell kit, 3M), or 54599-1019 (connector set, Molex) 	MR-ENECS	IP65 IP67	—	210966
	⑬ Battery connection relay cable  Amplifier CN2 connector ② (3 M or an equivalent product) 36210-0100PL (receptacle) 36310-3200-008 (shell kit) Battery connector (HIROSE ELECTRIC)DF3-2EP-2C (plug) DF3-EP2428PCA (Crimping terminal for plug) 2 pcs. Not required when the servo system is used in incremental mode. Refer to the section "Battery and special cables" for details.	Junction connector (3 M) 36110-3000FD (plug) 36310-F200-008 (shell kit) 	MR-J3BTCBL03M Cable length: 0.3 m	—	0.3 m	160327
Select one for the motor power supply	⑭ Power supply cable for HF-KP/HF-MP/HF-KE series Lead out in direction of motor shaft, unshielded.	 Motor power supply connector (Japan Aviation Electronics Industry) JN4FT04S1-R (plug) ST-TMH-S-C1B-100-(A534G) (socket contact)	MR-PWS1CBL□M-A1-H □=cable length: 2, 5, 10 m ① MR-PWS1CBL□M-A1-L □=cable length: 2, 5, 10 m ①	IP65	2 m 5 m 10 m	160227 161592 161593
	⑮ Power supply cable for HF-KP/HF-MP/HF-KE series Lead out in opposite direction of motor shaft, unshielded.	 Motor power supply connector (Japan Aviation Electronics Industry) JN4FT04S1-R (plug) ST-TMH-S-C1B-100-(A534G) (socket contact)	MR-PWS1CBL□M-A2-H □=cable length: 2, 5, 10 m ① MR-PWS1CBL□M-A2-L □=cable length: 2, 5, 10 m ①	IP65	2 m 5 m 10 m	160228 161597 161598
	⑯ Power supply cable for HF-KP/HF-MP/HF-KE series Lead out in direction of motor shaft, shielded.	 Motor power supply connector (Japan Aviation Electronics Industry) JN4FT04S1-R (plug) ST-TMH-S-C1B-100-(A534G) (socket contact)	MR-PWS3CBL□M-A1-L □=cable length: 2, 5, 10 m ①	IP65	2 m 5 m 10 m	210799 210800 210801
	⑰ Power supply cable for HF-KP/HF-MP/HF-KE series Lead out in opposite direction of motor shaft, shielded.	 Motor power supply connector (Japan Aviation Electronics Industry) JN4FT04S1-R (plug) ST-TMH-S-C1B-100-(A534G) (socket contact)	MR-PWS3CBL□M-A2-L □=cable length: 2, 5, 10 m ①	IP65	2 m 5 m 10 m	210802 210803 210804
	⑱ Power supply cable for HF-KP/HF-MP/HF-KE series Lead out in direction of motor shaft, shielded, power chain.	 Motor power supply connector (Japan Aviation Electronics Industry) JN4FT04S1-R (plug) ST-TMH-S-C1B-100-(A534G) (socket contact)	PWS007N-□0-A1 □=cable length: 2, 5, 10 m	IP65	2 m 5 m 10 m	220009 220010 220012
	⑲ Power supply cable for HF-KP/HF-MP/HF-KE series Lead out in opposite direction of motor shaft, shielded, power chain.	 Motor power supply connector (Japan Aviation Electronics Industry) JN4FT04S1-R (plug) ST-TMH-S-C1B-100-(A534G) (socket contact)	PWS007N-□0-A2 □=cable length: 2, 5, 10 m	IP65	2 m 5 m 10 m	220002 220005 220007
	⑳ Power supply cable for HF-KP/HF-MP/HF-KE series Lead out in direction of motor shaft.	 Motor power supply connector (Japan Aviation Electronics Industry) JN4FT04S1-R (plug) ST-TMH-S-C1B-100-(A534G) (socket contact)	MR-PWS2CBL03M-A1-L Cable length: 0.3 m ①	IP55	0.3 m	161602
	㉑ Power supply cable for HF-KP/HF-MP/HF-KE series Lead out in opposite direction of motor shaft.	 Motor power supply connector (Japan Aviation Electronics Industry) JN4FT04S1-R (plug) ST-TMH-S-C1B-100-(A534G) (socket contact)	MR-PWS2CBL03M-A2-L Cable length: 0.3 m ①	IP55	0.3 m	161603
	㉒ Power supply cable for HF-SE52, HF-SP52, HF-SP524-1524, HF-JP53-73, HF-JP534-1034	Motor power supply connector (DDK) CE05-6A18-10SD-D-BSS (straight plug) CE3057-10A-1-D (cable clamp) 	PCS015N-□.0-0C4 □=cable length: 2, 5, 10, 20, 30 m	IP67	2 m 5 m 10 m 20 m 30 m	202275 202276 202277 202278 202279
	㉓ Power supply cable for HF-SE102, HF-SP102, HF-JP103-203, HF-JP1534-3534	Motor power supply connector (DDK) CE05-6A18-10SD-D-BSS (straight plug) CE3057-10A-1-D (cable clamp) 	PCS025N-□.0-0C4 □=cable length: 2, 5, 10, 20, 30 m	IP67	2 m 5 m 10 m 20 m 30 m	202280 202281 202282 202283 202294
	㉔ Power supply cable for HF-SE152, HF-SP152, HF-JP5034	Motor power supply connector (DDK) CE05-6A18-10SD-D-BSS (straight plug) CE3057-10A-1-D (cable clamp) 	PCS040N-□.0-0C4 □=cable length: 2, 5, 10, 20, 30 m	IP67	2 m 5 m 10 m 20 m 30 m	202295 202296 202297 202298 202299

Notes:

- ① -H and -L indicate a bending life. -H indicates a long bending life, and -L indicates a standard bending life.
- ② The battery connection relay cable has a built-in diode. **Only this cable must be used.**

**Cables and Connectors for Servo amplifier (general)**

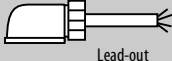
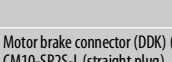







Item	Description	Model	Protection	Length	Art. no.	
Select one for the motor power supply	②⑤ Power supply cable for HF-SE202, HF-SP202, HF-SP3524, HF-JP353	PCS040N-□.0-0C5 □=cable length: 2, 5, 10, 20, 30 m	IP67	2 m 5 m 10 m 20 m 30 m	202300 202301 202302 202303 202304	
	②⑥ Power supply cable for HF-SP352-502, HF-SP5024, HF-JP503	PCS060N-□.0-0C5 □=cable length: 2, 5, 10, 20, 30 m	IP67	2 m 5 m 10 m 20 m 30 m	202468 202469 202470 202471 202472	
	②⑦ Power supply cable for HF-SP702, HF-SP7024	PCS100N-□.0-0C3 □=cable length: 2, 5, 10, 20, 30 m	IP67	2 m 5 m 10 m 20 m 30 m	150771 150772 150819 150821 150822	
	②⑧ Power supply cable for HC-RP103-203	PCS040N-□.0-0C1 □=cable length: 2, 5, 10, 20, 30 m	IP67	2 m 5 m 10 m 20 m 30 m	150734 150735 150737 150738 150739	
	②⑨ Power supply cable for HC-RP353-503	PCS060N-□.0-0C2 □=cable length: 2, 5, 10, 20, 30 m	IP67	2 m 5 m 10 m 20 m 30 m	150757 150758 150760 150761 150762	
	③⑩ Power supply cable with integrated brake cable for HC-RP103B-203B ③	PCS040B-□.0-C1 □=cable length: 2, 5, 10, 20, 30 m	IP67	2 m 5 m 10 m 20 m 30 m	150741 150742 150744 150745 150746	
	③⑪ Power supply cable with integrated brake cable for HC-RP353B-503B ③	PCS060B-□.0-C2 □=cable length: 2, 5, 10, 20, 30 m	IP67	2 m 5 m 10 m 20 m 30 m	150764 150765 150766 150767 150768	
	③⑫ Motor power supply connector set (motor side) for HF-SE52-152, HF-SP52-152, HF-SP524-1024, HF-JP53-203, HF-JP534-5034	Motor power supply connector (DDK) CE05-6A18-10SD-D-BSS (plug) (straight) CE3057-10A-1-D (cable clamp)   Lead out	MR-PWCNS4 (Straight type)	IP67	—	161573
	③⑬ Motor power supply connector set (motor side) for HF-SE202, HF-SP202-502, HF-SP2024-5024, HF-JP353-503	Motor power supply connector (DDK) CE05-6A22-22SD-D-BSS (plug) (straight) CE3057-12A-1-D (cable clamp) <Applicable cable example> Wire size: 5.5 mm <sup>2</sup> (AWG10) to 8 mm <sup>2</sup> (AWG8) Completed cable outer diameter: φ12.5 to 16 mm	MR-PWCNS5 (Straight type)	IP67	—	161574
	③⑭ Motor power supply connector set (motor side) for HP-SP702, HF-SP7024	Motor power supply connector (DDK) CE05-6A32-17SD-D-BSS (plug) (straight) CE3057-20A-1-D (cable clamp) <Applicable cable example> Wire size: 14 mm <sup>2</sup> (AWG6) to 22 mm <sup>2</sup> (AWG4) Completed cable outer diameter: φ22 to 23.8 mm	MR-PWCNS3 (Straight type)	IP67	—	136358
③⑮ Motor power supply connector set (motor side) for HC-RP103-203	Motor power supply connector (DDK) CE05-6A22-23SD-D-BSS (plug) (straight) CE3057-12A-2-D (cable clamp) <Applicable cable example> Wire size: 2 mm <sup>2</sup> (AWG14) to 3.5 mm <sup>2</sup> (AWG12) Completed cable outer diameter: φ9.5 to 13 mm	MR-PWCNS1 (Straight type)	IP67	—	64036	
③⑯ Motor power supply connector set (motor side) for HC-RP353-503	Motor power supply connector (DDK) CE05-6A24-10SD-D-BSS (plug) (straight) CE3057-16A-2-D (cable clamp) <Applicable cable example> Wire size: 5.5 mm <sup>2</sup> (AWG10) to 8 mm <sup>2</sup> (AWG8) Completed cable outer diameter: φ13 to 15.5 mm	MR-PWCNS2 (Straight type)	IP67	—	64035	
Select one for the motor electro-magnetic brake	③⑰ Brake cable for HF-KP/HF-MP/HF-KE series Lead out in direction of motor shaft.	Motor power supply connector (Japan Aviation Electronics Industry) JN4FT04S11-R (plug) ST-TMH-S-C1B-100-(A534G) (socket contact)	MR-BKS1CBL□M-A1-H□ =cable length: 2, 5, 10 m ①	IP65	2 m 5 m 10 m	161604 161605 161606
	③⑱ Brake cable for HF-KP/HF-MP/HF-KE series Lead out in opposite direction of motor shaft.	 Lead-out	MR-BKS1CBL□M-A1-L□ =cable length: 2, 5, 10 m ①	IP65	2 m 5 m 10 m	161607 161608 161609
			MR-BKS1CBL□M-A2-H□ =cable length: 2, 5, 10 m ①	IP65	2 m 5 m 10 m	160311 161610 161611
		MR-BKS1CBL□M-A2-L□ =cable length: 2, 5, 10 m ①	IP65	2 m 5 m 10 m	161612 161613 161614	

Notes:

- ① -H and -L indicate a bending life. -H indicates a long bending life, and -L indicates a standard bending life.
- ② The connector type terminal blocks are available for 200 V 3.5 kw or smaller and 400 V 2 kW or smaller servo amplifiers. For 200 V 5 kw or larger and 400 V 3.5 kW or larger, screw type connector blocks are used.
- ③ The HC-RP motors with brake don't have an additional connector for brake. The contacts for brake are inside the power connector.


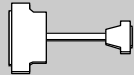
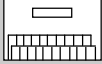


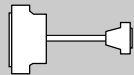
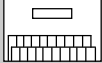



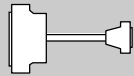
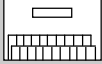

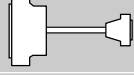
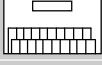





**Cables and Connectors for Servo amplifier (type specific)**

Item	Description	Model	Protection	Length	Art. no.	
Select one for the motor electro-magnetic brake	39 Brake cable for HF-KP/HF-MP/HF-KE series Lead out in direction of motor shaft 	Motor power supply connector (Japan Aviation Electronics Industry) JN4FT04S1J-R (plug) ST-TMH-S-C1B-100-(A534G) (socket contact)	MR-BKS2CBL03M-A1-L Cable length: 0.3 m ①	IP55	0.3 m	161615
	40 Brake cable for HF-KP/HF-MP/HF-KE series Lead out in opposite direction of motor shaft 		MR-BKS2CBL03M-A2-L Cable length: 0.3 m ①	IP55	0.3 m	161616
	41 Brake cable for HF-SE/HF-SP/HF-JP series 	Motor brake connector (DDK) (soldered type) CM10-SP2S-L (straight plug), CM10-#225C (S2)-100 (socket contact)	BCS015S-...J0-BKS1 □=cable length: 2, 5, 10, 20, 30 m	IP67	2 m 5 m 10 m 20 m 30 m	202249 202250 202251 202252 202253
	42 Brake connector for HF-SE/HF-SP/HF-JP series 	Motor brake connector (DDK) (soldered type) CM10-SP2S-L (straight plug), CM10-#225C (S2)-100 (socket contact) <Applicable cable example> Wire size: 1.25 mm <sup>2</sup> (AWG16) or smaller Completed cable outer diameter: φ9.0 to 11.6 mm	MR-BKCN51 (Straight type)	IP67	—	161575
	43 Brake connector for HA-LP11K24B, 15K24B, 22K24B, HF-JP11K1M4B, 15K1M4B 	Motor brake connector D/MS3106A10SL-4S (D190) (plug, DDK) YS010-5 to 8 (cable connector (straight), Daiwa Dengyo) <Applicable cable example> Wire size: 0.3 mm <sup>2</sup> (AWG22) to 1.25 mm <sup>2</sup> (AWG16) Completed cable outer diameter: φ5 to 8.3 mm	MR-BKCN (Straight type)	IP65	—	64034
For CNP1, CNP2, CNP3	For 1 kW or smaller (200 VAC) 	CNP1 connector 54928-0670 (connector) (Molex or an equivalent product) CNP2 connector 54927-0520 (connector) (Molex or an equivalent product) CNP3 connector 54928-0370 (connector) (Molex or an equivalent product) Insertion tool 54932-0000 (Molex or an equivalent product) <Applicable cable example> Wire size: 0.14 mm <sup>2</sup> (AWG26) to 2.5 mm <sup>2</sup> (AWG14) Completed cable outer diameter: up to φ3.8 mm	(Standard accessory: Insertion type) ②	—	on request	
	For 2 kW, 3.5 kW (200 VAC) 	CNP1 connector PC4/6-STF-7.62-CRWH (connector) (PHOENIX or an equivalent product) CNP2 connector 54927-0520 (connector) (Molex or an equivalent product) CNP3 connector PC4/3-STF-7.62-CRWH (connector) (PHOENIX or an equivalent product) Insertion tool 54932-0000 (Molex or an equivalent product) <Applicable cable example> Wire size: 0.2 mm <sup>2</sup> (AWG24) to 5.5 mm <sup>2</sup> (AWG10) Completed cable outer diameter: up to φ5mm			on request	
	For 2 kW or smaller (400 VAC) 	CNP1 connector 721-207/026-000 (plug) (WAGO or an equivalent product) CNP2 connector 721-205/026-000 (plug)(WAGO or an equivalent product) CNP3 connector 721-203/026-000 (plug)(WAGO or an equivalent product) Insertion tool 231-131(WAGO or an equivalent product) <Applicable cable example> Wire size: 0.08 mm <sup>2</sup> (AWG28) to 2 mm <sup>2</sup> (AWG14) Completed cable outer diameter: up to φ4.1 mm			on request	
For CNS	45 USB cable 	Amplifier connector mini-B connector (5 pins) Personal computer connector A connector	MR-J3USBCBL3M Cable length: 3 m	—	3 m	160229

Notes:  
 ① -H and -L indicate a bending life. -H indicates a long bending life, and -L indicates a standard bending life.  
 ② The connector type terminal blocks are available for 200 V 3.5 kW or smaller and 400 V 2 kW or smaller servo amplifiers.  
 For 200 V 5 kW or larger and 400 V 3.5 kW or larger, screw type connector blocks are used.

**Cables and Connectors for Servo amplifier (type specific)**


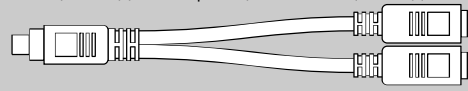


















Item	Description	Model	Protection	Length	Art. no.	
<b>Servo amplifier series MR-J3-A</b>						
④⑥	CN1 connector 	Amplifier connector (3 M or an equivalent product) 10150-3000PE (connector) 10350-52F0-008 (shell kit)	MR-J3CN1	—	—	160225
For CN1	④⑦ Cable for junction terminal block TB-50-EG 	Amplifier connector (3 M or an equivalent product) 10150-6000EL (connector) 10350-3210-000 (shell kit) ③	Junction terminal block connector (3 M) D7950-B500FL (connector)	MR-J2M-CN1TBL□M □=cable length: 0.5, 1m	—	0.5 m 1 m 146794 189864
	④⑧ Junction terminal block 		TB-50-EG	—	—	212033
For CN6	④⑨ Monitor cable 		MR-J3CN6CBL1M cable length: 1 m	—	1 m	161578
<b>Servo amplifier series MR-J3-B</b>						
⑤⑩	Input/output signal connector 	Amplifier connector (3M or an equivalent product) 10120-3000PE (connector) 10320-52F0-008 (shell kit) ④	MR-J2CN1	—	—	55912
For CN3	⑤⑪ Cable for junction terminal block TB-20-EG 	Amplifier connector (3M or an equivalent product) 10120-3000PE (connector) 10320-52F0-008 (shell kit) ④	Junction terminal block connector (3 M) 3421-6020 (connector)	MR-J3TBL-CN3-□M-EG □=cable length: 0.5, 1 m	—	0.5 m 1 m 212096 212095
	⑤⑫ Junction terminal block 		TB-20-EG	—	—	212032
For CN1A For CN1B	⑤⑬ SSCNET III cable (standard) 	Connector: PF-2D103 (Japan Aviation Electronics Industry)	Connector: PF-2D103 (Japan Aviation Electronics Industry)	MR-J3BUS□M □=cable length: 0.15, 0.3, 0.5, 1, 3 m	—	0.15 m 0.3 m 0.5 m 1 m 3 m 161579 161580 161581 161582 161583
	⑤⑭ SSCNET III cable (long flex) 			MR-J3BUS□M-A □=cable length: 5, 10, 20 m	—	5 m 10 m 20 m 161584 161585 161586
				MR-J3BUS□M-B □=cable length: 30, 40, 50 m	—	30 m 40 m 50 m 161587 161588 161589
<b>Servo amplifier series MR-J3-T</b>						
⑤⑮	CN6 connector 	Amplifier connector (3 M or an equivalent product) 10126-3000PE (connector) 10326-52F0-008 (shell kit)	MR-J2CMP2	—	—	149764
For CN6	⑤⑯ Cable for junction terminal block TB-26-EG 	Amplifier connector (3 M or an equivalent product) 10126-3000PE (connector) 10326-52F0-008 (shell kit)	Junction terminal block connector (3 M) 3399-6030 (connector)	MR-ESTBL-CN1-□M-EG □=cable length: 0.5, 1 m	—	0.5 m 1 m 215135 215137
	⑤⑰ Junction terminal block 		TB-26-EG	—	—	215134
For CN20	⑤⑱ Input/output signal connector 	Amplifier connector (3 M or an equivalent product) 10120-3000PE (connector) 10320-52F0-008 (shell kit) ④	MR-J2CN1	—	—	55912
	⑤⑲ Cable for junction terminal block TB-20-EG 	Amplifier connector (3M or an equivalent product) 10120-3000PE (connector) 10320-52F0-008 (shell kit) ④	Junction terminal block connector (3 M) 3421-6020 (connector)	MR-J3TBL-CN3-□M-EG □=cable length: 0.5, 1 m	—	0.5 m 1 m 212096 212095
	⑤⑳ Junction terminal block 		TB-20-EG	—	—	212032
For CN10	④⑥ Input/output signal connector 	Amplifier connector (3 M or an equivalent product) 10150-3000PE (connector) 10350-52F0-008 (shell kit)	MR-J3CN1	—	—	160225
	④⑦ Cable for junction terminal block TB-50-EG 	Amplifier connector (3 M or an equivalent product) 10150-6000EL (connector) 10350-3210-000 (shell kit) ③	Junction terminal block connector (3 M) D7950-B500FL (connector)	MR-J2M-CN1TBL□M □=cable length: 0.5, 1 m	—	0.5 m 1 m 146794 189864
	⑤⑱ Junction terminal block 		TB-50-EG	—	—	212032

Notes:

- ③ The connector and the shell kit are press bonding type. Models for soldered type are 10120-3000PE (connector) and 10350-52F0-008 (shell kit).
- ④ The connector and the shell kit are soldered type. Models for press bonding type are 10120-6000EL (connector) and 10320-3210-000 (shell kit).
- ⑤ CN10 and CN20 are only available with extension I/O unit MR-J3-D01.

Encoder cables, battery connection relay cable, power supply cables, brake cables, USB cable and servo amplifier power supply connector set from ① to ④⑨ are same for the servo amplifier series MR-ES, MR-J3-A, MR-J3-B and MR-J3-T.

**Cables and Connectors for Servo amplifier (type specific)**

Item	Description	Model	Protection	Length	Art. no.
<b>Servo amplifier series MR-E Super</b>					
For CN1	⑤⑨ CN1 connector 	Amplifier-side connector (3M or an equivalent product) 10126-3000PE (connector) 10326-52F0-008 (shell kit)	MR-ECN1 (Unit: 20 pcs/box) MR-J2CMP (Unit: 1pcs/box)	—	— — 170158 149764
	⑥⑩ Analog monitor/ RS-232C branch cable 	RS-232C option connector (Marushin electric mfg. or an equivalent product) MP371/6 (connector) (mini-DIN 6-pin male) Analog monitor connector (Marushin electric mfg. or an equivalent product) MJ372/6 (connector) (mini-DIN 6-pin female)	MR-E3CBL15-P	—	— — 210968
For CN3	⑥① Analog monitor RS-232C connector 	Analog monitor, RS-232C option connector (Marushin electric mfg. or an equivalent product) MP371/6 (connector) (mini-DIN 6-pin male)	MR-ECN3 (Unit: 20 pcs/box)	—	— — 210967
	⑥② Personal computer communication cable 	RS-232C option connector (Marushin electric mfg. or an equivalent product) MP371/6 (connector) (mini-DIN 6-pin male) DOS/V personal computer connector (Japan Aviation Electronics Industry) DE-9SF-N (connector) DE-C1-J6-S6R (case)	QC30R2 Cable length: 3m	—	3 m — 128424
	⑥③ Amplifier power supply connector set (press bonding type) for MR-E-10A/AG to 100A/AG-QW003 	Connector 51240-0600 (Molex or an equivalent product) Terminal 56125-0128 (Molex or an equivalent product) 	MR-ECNP1-A (Unit: 20 pcs/box)	—	— — 170159
Amplifier power supply connectors (for CNP1)	⑥④ Amplifier power supply connector (insertion type) for MR-E-10A/AG to 100A/AG-QW003 	Connector 54927-0610 (Molex or an equivalent product)	MR-ECNP1-B (Unit: 20 pcs/box)	—	— — 210612
	⑥⑤ Amplifier power supply connector set (press bonding type) for MR-E-200A/AG-QW003 	Connector 54241-0600 (Molex or an equivalent product) Terminal 56125-0128 (Molex or an equivalent product) 	MR-ECNP1-A1 (Unit: 20 pcs/box)	—	— — 210613
	⑥⑥ Amplifier power supply connector (insertion type) for MR-E-200A/AG-QW003 	Connector 54928-0610 (Molex or an equivalent product)	MR-ECNP1-B1 (Unit: 20 pcs/box)	—	— — 210624
Motor power supply connectors (for CNP2)	⑥⑦ Motor power supply connector set (amplifier side) for MR-E-10A/AG to 100A/AG-QW003 (press bonding type) 	Connector 51240-0300 (Molex or an equivalent product) Terminal 56125-0128 (Molex or an equivalent product) 	MR-ECNP2-A (Unit: 20 pcs/box)	—	— — 213133
	⑥⑧ Motor power supply connector (amplifier side) for MR-E-10A/AG to 100A/AG-QW003 (insertion type) 	Connector 54927-0310 (Molex or an equivalent product)	MR-ECNP2-B (Unit: 20 pcs/box)	—	— — 210969
	⑥⑨ Motor power supply connector set (amplifier side) for MR-E-200A/AG-QW003 (press bonding type) 	Connector 54241-0300 (Molex or an equivalent product) Terminal 56125-0128 (Molex or an equivalent product) 	MR-ECNP2-A1 (Unit: 20 pcs/box)	—	— — 210970
	⑦⑩ Motor power supply connector (amplifier side) for MR-E-200A/AG-QW003 (insertion type) 	Connector 54928-0310 (Molex or an equivalent product)	MR-ECNP2-B1 (Unit: 20 pcs/box)	—	— — 210140
⑥④ + ⑥⑧	MR-E-10A/AG to 100A/AG 	Connector Set CNP1 + CNP2 (insertion type)	MR-ECNP-SET-B	—	— — 217356
⑥⑥ + ⑦⑩	MR-E-200A/AG 	Connector Set CNP1 + CNP2 (insertion type)	MR-ECNP-SET-B1	—	— — 217357
<b>Safety option card MR-J3-D05</b>					
For CN8	⑦① STO cable (for MR-J3-D05) 	Safety logic unit connector (Tyco Electronics) 2013595-1 (connector set) Amplifier connector (Tyco Electronics) 2013951-1 (connector set)	MR-D05UDL_□M □ = cable length: 0.3, 1, 3 m	—	0.3 m 1 m 3 m 227983 227984 227985
	⑦② STO cable (for safety control device other than MR-J3-D05) 	Safety logic unit connector (Tyco Electronics) 2013595-1 (connector set)	MR-D05UDL3M-B Cable length: 3 m	—	3 m — 227986

Note:

① Use this STO cable (MR-D05UDL3M-B) when connecting with a safety control device other than MR-J3-D05.