

Cable Related

Mitsubishi General-purpose AC Servo MELSERVO-J4/J3/JN Cable

This cable is dedicated for connecting the Mitsubishi General-purpose AC Servo MELSERVO-J4/J3/JN servo amplifier and servo motor.



Features

- Connect cables with a junction. Flexibly support various situations such as separation from machine side devices, such as during transportation or installation, or using long bending life cables in some sections.
- The encoder, power supply and electromagnetic brake cables are manufactured for the MR-J4/J3/JN servo, which are available from Mitsubishi Electric Corp. (1m unit)
 - * We manufacture cables other than the standard length cables sold by Mitsubishi Electric Corp.
- Cables, with your required length, are delivered in short schedule. (Standard delivery is 7 days)
 - * Contact us when large quantities are required.
- Cables can be selected from standard, long bending life^{*1}, ultra-long bending^{*2}, or high twisting products^{*3}.
 - *1 Bending performance 1 million times (measured under prescribed conditions)
 - *2 Bending performance 10 million times (measured under prescribed conditions)
 - *3 Twisting performance 2 million times (measured under prescribed conditions)
- Encoder cables longer than 50m can be manufactured. (Cable lengths up to 100m supported.)
- Compatible with UL Wiring Harness Program.
 - * The Wiring Harness Program is part of the UL Traceability Program, and guarantees UL certification of a processed wire. The UL certification method for harnesses was changed in July 2009. Certification with the Certificate of Materials was eliminated, and instead a label certifying that the cable was manufactured in a UL-registered factory became necessary to ensure UL Certification. Our factory has been certified as a UL-registered factory. A UL label complying with the above program is attached to this product before it is shipped.

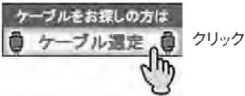
Specifications

Item	Part name
Connector	Mitsubishi Electric Corp. recommended part
Wire specifications	Mitsubishi Electric Corp. recommended wire or equivalent wire
Applicable standards (wire section)	Encoder cable (UL AWM compatible)
	Power, electromagnetic brake cable (UL AWM compatible)

Selecting the cable

- Refer to our website for information on selecting the cable.
- The cable can be selected with the conditions such as motor series, connection method, protection class, etc. (cable length, connector lead direction, bending life).
 - “Top Page → Guide to Related Products → MELSERVO-J4/J3/JN Cables (AC Servo Related)”

<http://www.melco.jp/business/j3cable/bending-cable.html>

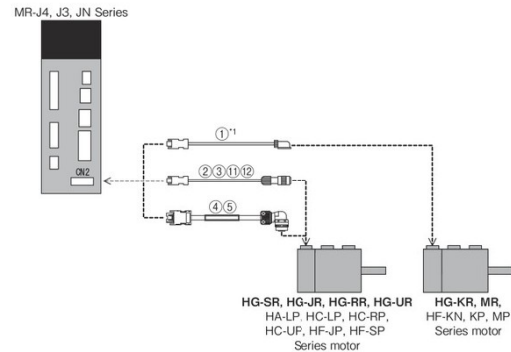


Mitsubishi General-purpose AC Servo
MELSERVO-J4/J3/JN Cable

Wiring Diagrams

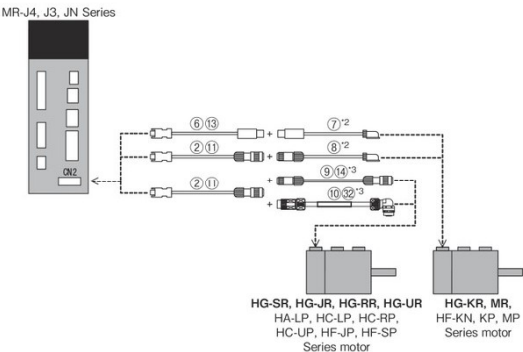
Encoder Cable

① Direct Connection



*1: Please contact us when ① exceeds 10m.

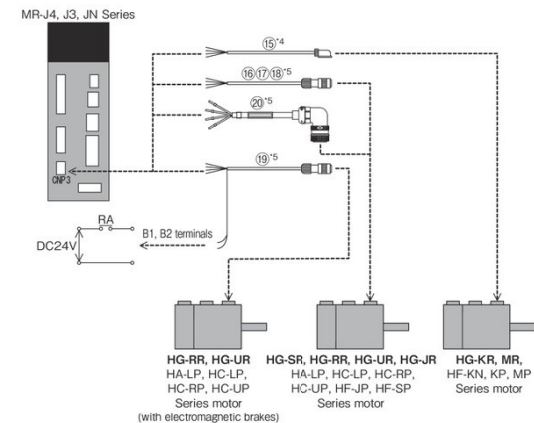
② Relay connection



*2: If ⑦ and ⑧ have a cable length between 2 and 5m, the overall cable length for ⑥ and ⑦, and ② and ⑧ must be 40m or less, and the overall cable length for ⑬ and ⑦, and ⑪ and ⑧ must be 80m or less.
If ⑦ and ⑧ have a cable length of 1m, the overall cable length for ⑥ and ⑦, and ② and ⑧ must be 50m or less, and the overall cable length for ⑬ and ⑦, and ⑪ and ⑧ must be 100m or less.
*3: The overall cable length for ② and ⑨, and ② and ⑩ must be 40m or less.
The overall cable length for ⑪ and ⑭, and ⑫ and ⑬ must be 90m or less.
Note that ② and ⑭, and ⑨ and ⑪ cannot be combined.

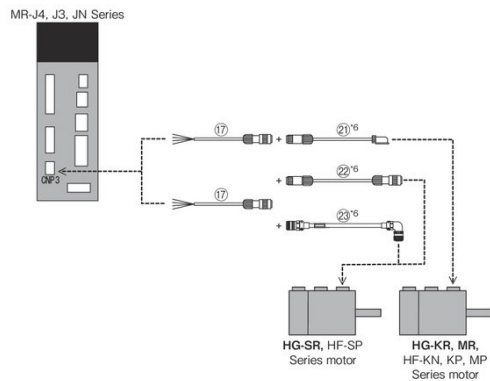
Power Cable

① Direct Connection



*4: Please contact us when ⑮ exceeds 10m.
*5: Please contact us when ⑯, ⑰, ⑱, ⑲ and ⑳ exceed 30m.

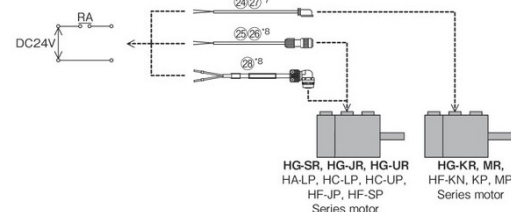
② Relay connection^{*10}



*6: The ⑰ and ⑳, ⑰ and ㉑, and ⑰ and ㉒ combinations and overall cable length will vary according to the motor model.
Refer to "Table of Power Cable Relay Connection Combinations" on page 10 and select the cable.

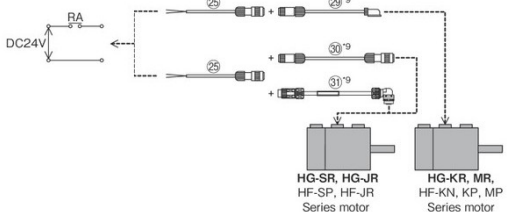
Electromagnetic Brake Cable

① Direct Connection



*7: Please contact us when ㉔ and ㉕ exceed 10m.
*8: Please contact us when ㉖, ㉗ and ㉘ exceed 30m.

② Relay connection^{*10}



*9: The ㉖ and ㉗, ㉖ and ㉘, and ㉖ and ㉙ combinations and overall cable length will vary according to the motor model.
Refer to "Table of Electromagnetic Brake Cable Relay Connection Combinations" on page 10 and select the cable.
*10: Please contact us when connecting any motor not listed above with a junction.

Cable Related

List of Products

Encoder Cable

Standard products

Connection type	Applicable motor	Connector place	Connector type (*18)	Model (*12)	Cable length [m] (*13)	Protective structure (*14)	Wiring diagram
Direct connection type	HG-KR/MR Series HF-KN/KP/MP Series	—	Angle	SC-J3ENCBL□M■L	1 to 9 (*1)	IP65	①
	HG-KR(*11), MR(*11), HF-KN(*11), HF-KP(*11), HF-MP(*11), HG-SR, HF-SP, HG-JR53(4) to 903(4), HF-JP53(4) to 903(4), HG-RR, HG-UR For HC-LP, HC-RP, HC-UP, HA-LP	—	Straight	SC-J3ENSCBL□M■L	1 to 50	IP67	②
	HF-JP11K1M(4), 15K1M(4)	—	Straight	SC-ENECBL□M■L	1 to 50	IP67	③
		—	Angle	SC-ENECBL□M■H	1 to 50	IP67	⑤
	HG-SR, HG-RR, HG-UR Series HG-JR53(4) to 903(4) HF-SP, HC-LP, HC-RP, HC-UP, HA-LP Series HF-JP53(4) to 903(4)	—	Angle	SC-J3ENSCBL□M■L	1 to 50	IP67	④
Junction type	HG-KR/MR Series HF-KN/KP/MP Series	Amplifier side	Straight	SC-EXCBL□M■L (*16)	1 to 50	IP20	⑥
		Motor side	Angle	SC-J3CBL□M■L	1 to 5 (*2)	IP20	⑦
			Angle	SC-J3SCBL□M■L	1 to 5 (*2)	IP65	⑧
	HG-SR, HG-RR, HG-UR Series HG-JR53(4) to 903(4) HF-SP, HC-LP, HC-RP, HC-UP, HA-LP Series HF-JP53(4) to 903(4)	Motor side	Straight	SC-J3ENSCBL□M■L	1 to 39 (*3)	IP67	⑨
			Angle	SC-J3ENSCBL□M■H	1 to 39 (*3)	IP67	⑩

Long bending life products

Connection type	Applicable motor	Connector place	Connector type (*18)	Model (*12)	Cable length [m] (*13)	Protective structure (*14)	Wiring diagram
Direct connection type	HG-KR/MR Series HF-KN/KP/MP Series	—	Angle	SC-J3ENCBL□M■H	1 to 9 (*1)	IP65	①
	HG-KR(*11), MR(*11), HF-KN(*11), HF-KP(*11), HF-MP(*11), HG-SR, HF-SP, HG-JR53(4) to 903(4), HF-JP53(4) to 903(4), HG-RR, HG-UR For HC-LP, HC-RP, HC-UP, HA-LP用	—	Straight	SC-J3ENSCBL□M■H	1 to 49	IP67	②
	HF-JP11K1M(4), 15K1M(4)	—	Straight	SC-ENECBL□M■H	1 to 49	IP67	③
		—	Angle	SC-ENECBL□M■L	1 to 50	IP67	⑤
	HG-JR601(4) to 37K1(4) HG-JR701M(4) to 55K1M(4)	—	Straight	SC-ENECBL□M■HATH	1 to 50	IP67	③
Junction type	HG-SR, HG-RR, HG-UR Series HG-JR53(4) to 903(4) HF-SP, HC-LP, HC-RP, HC-UP, HA-LP Series HF-JP53(4) to 903(4)	Amplifier side	Straight	SC-EXCBL□M■H (*16)	1 to 49	IP20	⑥
		Motor side	Angle	SC-J3CBL□M■H	1 to 5 (*2)	IP20	⑦
			Angle	SC-J3SCBL□M■H	1 to 5 (*2)	IP65	⑧
	HG-SR, HG-RR, HG-UR Series HG-JR53(4) to 903(4) HF-SP, HC-LP, HC-RP, HC-UP, HA-LP Series HF-JP53(4) to 903(4)	Motor side	Straight	SC-J3ENSCBL□M■H	1 to 39 (*3)	IP67	⑨
			Angle	SC-J3ENSCBL□M■H	1 to 39 (*3)	IP67	⑩

Long distance cable^{*17}

Connection type	Applicable motor	Connector place	Connector type (*18)	Model (*12)	Cable length [m]	Protective structure (*14)	Wiring diagram
Direct connection type	HG-KR(*11), MR(*11), HF-KN(*11), HF-KP(*11), HF-MP(*11), HG-SR, HF-SP, HG-JR53(4) to 903(4), HF-JP53(4) to 903(4), HG-RR, HG-UR For HC-LP, HC-RP, HC-UP, HA-LP用	—	Straight	SC-J3ENS4CBL□M■H (*16)	1 to 100 (*17)	IP67	⑪
	HF-JP11K1M(4), 15K1M(4)	—	Straight	SC-ENEC4CBL□M■H (*16)	1 to 100	IP67	⑫
		—	Angle	SC-ENEC4CBL□M■H	1 to 100	IP67	⑫
	HG-JR601(4) to 37K1(4) HG-JR701M(4) to 55K1M(4)	—	Straight	SC-ENEC4CBL□M■HATH	1 to 85	IP67	⑬
	HG-SR, HG-RR, HG-UR Series HG-JR53(4) to 903(4) HF-SP, HC-LP, HC-RP, HC-UP, HA-LP Series HF-JP53(4) to 903(4)	—	Angle	SC-J3ENS4CBL□M■H	1 to 100 (*17)	IP67	④
Junction type	HG-KR/MR Series HF-KN/KP/MP Series	Amplifier side	Straight	SC-EX4CBL□M■H (*16)	1 to 100	IP20	⑬
	HG-SR, HG-RR, HG-UR Series HG-JR53(4) to 903(4) HF-SP, HC-LP, HC-RP, HC-UP, HA-LP Series HF-JP53(4) to 903(4)	Motor side	Straight	SC-J3ENS4CBL□M■H (*16)	1 to 85 (*3)	IP67	⑭
			Angle	SC-J3ENS4CBL□M■H (*16)	1 to 85 (*3)	IP67	⑮

Ultra-long bending products

Connection type	Applicable motor	Connector place	Connector type (*18)	Model (*12)	Cable length [m]	Protective structure (*14)	Wiring diagram
Direct connection type	HG-KR/MR Series HF-KN/KP/MP Series	—	Angle	SC-J3ENCBL□M■S	1 to 10	IP65	—
	HG-KR(*11), MR(*11), HF-KN(*11), KP(*11), MP(*11), HG-SR, HG-RR, HG-UR Series HG-JR53(4) to 903(4) HF-SP, HC-LP, HC-RP, HC-UP, HA-LP Series HF-JP53(4) to 903(4)	—	Straight	SC-J3ENSCBL□M■S	1 to 20	IP67	—
		—	Angle	SC-J3ENSCBL□M■S	1 to 20	IP67	—
Junction type	HG-KR/MR Series HF-KN/KP/MP Series	Amplifier side	Straight	SC-EKCB□M■S	1 to 20	IP20	—
		Motor side	Angle	SC-J3J2CBL□M■S	1 to 3	IP20	—
			Angle	SC-J3J2CBL□M■S	1 to 3	IP65	—

High twisting products

Connection type	Applicable motor	Connector place	Connector type (*18)	Model (*12)	Cable length [m]	Protective structure (*14)	Wiring diagram
Direct connection type	HG-KR/MR Series HF-KN/KP/MP Series	—	Angle	SC-J3ENCBL□M■N	1 to 5	IP65	—
Junction type	HG-KR/MR Series HF-KN/KP/MP Series	Motor side	Angle	SC-J3J2CBL□M■N	1 to 3	IP20	—
			Angle	SC-J3J2CBL□M■N	1 to 3	IP65	—

*1 to 10: Same as the notes for the wiring diagrams.

*11: When using for the HG-KR, HG-MR, HF-KN, HF-KP or HF-MP Series, use in combination with SC-J3JSCBL□M■L or SC-J3JSCBL□M■H.

*12: The square □ in the model indicates the cable length. The black square ■ in the model is "A1", "A2", "A3" or "A4". "A1" indicates motor load-side lead, "A2" indicates opposite to load-side lead, "A3" indicates shaft left side lead, and "A4" indicates shaft right side lead.

"H", "L", "S" or "N" at the end of the model indicates the bending life. "H" is a long bending life product, "L" is a standard product, "S" is an ultra-long bending product, and "H" is a high twisting product.

*13: The Mitsubishi Electric Corp. standard length cables are not sold. Standard length: Standard product (0.3, 2, 5, 10, 20, 30m) / long bending life product (2, 5, 10, 20, 30, 40, 50m).

*14: The listed protective structure indicates the dust-proof and waterproof level when joined to the connector section. If the servo amplifier or servo motor's protective structure is different from the listed value, the overall protective structure will depend on the lower level.

*15: Contact us for information on cables for motors not listed above.

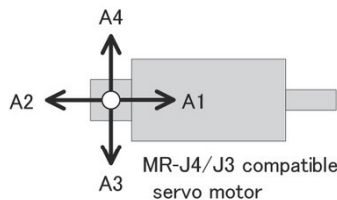
*16: The 30m and longer cable is a 4-core cable. The servo amplifier's parameters must be set to use this type of cable. Refer to the Servo Amplifier Technical Documents issued by Mitsubishi Electric Corp. for details.

*17: The long distance cable can be manufactured in 5m units.

*18: Refer to the following drawings for the lead direction of the angle connector. When using the motor load-side lead "A1", the cable could interfere with the motor body or mounting flange.

The HG-KR/MR Series and HF-KN/KP/MP Series is available only with the "A1" or "A2" direction.

*19: The combination and overall cable length vary according to the motor model. Refer to our website for details. (<http://www.melsc.co.jp/business/>)



A1: Motor load-side lead
A2: Opposite to load-side lead
A3: Shaft left side lead
A4: Shaft right side lead

* View from cable insertion direction

Mitsubishi General-purpose AC Servo MELSERVO-J4/J3/JN Cable

Power Cable

Standard products

Connection type	Applicable motor (*15)	Connector place	Connector type (*18)	Model (*12)	Cable length (m)	Protective structure (*14)	Wiring diagram
Direct connection type	HG-KR/MR Series HF-KN/KP/MP Series	—	Angle	SC-PWS1CBL□M■L	1 to 9 (*4) (*13)	IP65	⑮
				SC-PWS3CBL□M■L (with shield)	1 to 10	IP65	⑮
	HG-UR72 HC-LP52, 102 HC-UP72	—	Straight	SC-PWC1CBL□M■ML	1 to 30 (*5)	IP67	⑯
				SC-PWC1CBL□M■ML	1 to 30	—	—
	HG-RR103, 153/HG-UR152 HC-LP152/HC-RP103, 153/ HC-UP152	—	Straight	SC-PWC1CBL□M■L	1 to 30 (*5)	IP67	⑯
				SC-PWC1CBL□M■L	1 to 30	—	—
	HG-RR203, HC-RP203	—	Straight	SC-PWC1CBL□M■LL	1 to 30 (*5)	IP67	⑯
				SC-PWC1CBL□M■LL	1 to 30	—	—
	HG-UR202 HC-LP202/HC-UP202	—	Straight	SC-PWC2CBL□M■L	1 to 30 (*5)	IP67	⑯
				SC-PWC2CBL□M■L	1 to 30	—	—
	HG-RR353, 503/HG-UR352, 502 HA-LP502/HC-LP302/ HC-RP353, 503/HC-UP352, 502	—	Straight	SC-PWC2CBL□M■LL	1 to 30 (*5)	IP67	⑯
				SC-PWC2CBL□M■LL	1 to 30	—	—
	HG-SR421, 7024/HG-JR6014, 701M4, 7034, 8014, 9034, HF-SP421, 7024/ HF-JP7034, 9034	—	Straight	SC-PWC3CBL□M■ML	1 to 30	IP67	—
				SC-PWC3CBL□M■ML	1 to 30	—	—
	HG-SR702/HG-JR601, 701M, 703, 11K1M4, 12K14 HA-LP702/HF-SP702/ HF-JP703, 11K1M4	—	Straight	SC-PWC3CBL□M■L	1 to 30 (*5)	IP67	⑯
				SC-PWC3CBL□M■L	1 to 30	—	—
	HG-JR801, 903, 11K1M, 12K1, 15K1M4 HF-JP903, 11K1M, 15K1M4	—	Straight	SC-PWC3CBL□M■LL	1 to 30	IP67	—
				SC-PWC3CBL□M■LL	1 to 30	—	—
	HG-SR51, 52 (4), 81, 102 (4), HG-JR53 (4), 73 (4), 103 (4), HF-SP51, 52 (4), 81, 102 (4), HF-JP53 (4), 73 (4), 103 (4)	—	Straight	SC-PWC4CBL□M■ML	1 to 30 (*5)	IP67	⑰
				SC-PWC4CBL□M■ML	1 to 30	⑳	—
	HG-SR152 (4)/HG-JR153 (4), 203 (4), 3534, HF-SP152 (4), HF-JP153 (4), 203 (4), 3534	—	Straight	SC-PWC4CBL□M■L	1 to 30 (*5)	IP67	⑰
				SC-PWC4CBL□M■L	1 to 30	⑳	—
	HG-JR5034/HF-JP5034	—	Straight	SC-PWC4CBL□M■LL	1 to 30 (*5)	IP67	⑰
				SC-PWC4CBL□M■LL	1 to 30	⑳	—
	HG-SR121, 201, 202 (4), 3524 HF-SP121, 201, 202 (4), 3524	—	Straight	SC-PWC5CBL□M■ML	1 to 30 (*5)	IP67	⑱
				SC-PWC5CBL□M■ML	1 to 30	⑳	—
	HG-SR301, 352, 5024/HG-JR353, HF-SP301, 352, 5024/ HF-JP353	—	Straight	SC-PWC5CBL□M■L	1 to 30 (*5)	IP67	⑱
				SC-PWC5CBL□M■L	1 to 30	⑳	—
	HG-SR502/HG-JR503 HF-SP502/HF-JP503	—	Straight	SC-PWC5CBL□M■LL	1 to 30 (*5)	IP67	⑱
				SC-PWC5CBL□M■LL	1 to 30	⑳	—
	HG-UR72B HC-LP52B, 102B/HC-UP72B	—	Straight	SC-PWBK1CBL□M■ML	1 to 30 (*5)	IP67	⑲
				SC-PWBK1CBL□M■ML	1 to 30	—	—
	HG-RR103B, 153B/HG-UR152B HC-LP152B/HC-RP103B, 153B/ HC-UP152B	—	Straight	SC-PWBK1CBL□M■L	1 to 30 (*5)	IP67	⑲
				SC-PWBK1CBL□M■L	1 to 30	—	—
	HG-RR203B, HC-RP203B	—	Straight	SC-PWBK1CBL□M■LL	1 to 30 (*5)	IP67	⑲
				SC-PWBK1CBL□M■LL	1 to 30	—	—
	HG-RR353B, 503B HC-RP353B, 503B	—	Straight	SC-PWBK2CBL□M■L	1 to 30 (*5)	IP67	⑲
				SC-PWBK2CBL□M■L	1 to 30	—	—
Junction type (*10)	HG-KR/MR Series HF-KN/KP/MP Series	Motor side	Angle	SC-PWS1JCB□M■L	(*6)	IP65	㉑
		Amplifier side	Straight	SC-PWS4CBL□M■LL		IP20	—
		Motor side	Angle	SC-PWS4JCB□M■L			
		Amplifier side	Straight	SC-PWS5CBL□M■LL		IP65	—
	HG-SR51, 52, 524, 1024 For HF-SP51, 52, 524, 1024	Motor side	Straight	SC-PWC4JCB□M■L	(*6)	IP67	㉒
		Angle	SC-PWC4JCB□M■L			㉓	—
	HG-SR102, 152, 81, 1524 For HF-SP102, 152, 81, 1524	Motor side	Straight	SC-PWC4JCB□M■L	(*6)	IP67	㉒
		Angle	SC-PWC4JCB□M■LL			㉓	—

Long bending life products

Connection type	Applicable motor (*15)	Connector place	Connector type (*18)	Model (*12)	Cable length (m)	Protective structure (*14)	Wiring diagram
Direct connection type	HG-KR/MR Series HF-KN/KP/MP Series	—	Angle	SC-PWS1CBL□M■H	1 to 9 (*4) (*13)	IP65	⑮
				SC-PWS3CBL□M■H (with shield)	1 to 10	IP65	⑮
	HG-UR72 HC-LP52, 102 HC-UP72	—	Straight	SC-PWC1CBL□M■MH	1 to 30 (*5)	IP67	⑯
				SC-PWC1CBL□M■MH	1 to 30	—	—
	HG-RR103, 153/HG-UR152 HC-LP152/HC-RP103, 153/ HC-UP152	—	Straight	SC-PWC1CBL□M■H	1 to 30 (*5)	IP67	⑯
				SC-PWC1CBL□M■H	1 to 30	—	—
	HG-RR203, HC-RP203	—	Straight	SC-PWC1CBL□M■LH	1 to 30 (*5)	IP67	⑯
				SC-PWC1CBL□M■LH	1 to 30	—	—
	HG-UR202 HC-LP202/HC-UP202	—	Straight	SC-PWC2CBL□M■H	1 to 30 (*5)	IP67	⑯
				SC-PWC2CBL□M■H	1 to 30	—	—
	HG-RR353, 503/HG-UR352, 502 HA-LP502/HC-LP302/ HC-RP353, 503/HC-UP352, 502	—	Straight	SC-PWC2CBL□M■LH	1 to 30 (*5)	IP67	⑯
				SC-PWC2CBL□M■LH	1 to 30	—	—
	HG-SR421, 7024/HG-JR6014, 701M4, 7034, 8014, 9034, HF-SP421, 7024/ HF-JP7034, 9034	—	Straight	SC-PWC3CBL□M■MH	1 to 30	IP67	—
				SC-PWC3CBL□M■MH	1 to 30	—	—
	HG-SR702/HG-JR601, 701M, 703, 11K1M4, 12K14 HA-LP702/HF-SP702/ HF-JP703, 11K1M4	—	Straight	SC-PWC3CBL□M■H	1 to 30 (*5)	IP67	⑯
				SC-PWC3CBL□M■H	1 to 30	—	—
	HG-JR801, 903, 11K1M, 12K1, 15K1M4 HF-JP903, 11K1M, 15K1M4	—	Straight	SC-PWC3CBL□M■LH	1 to 30	IP67	—
				SC-PWC3CBL□M■LH	1 to 30	—	—
	HG-SR51, 52 (4), 81, 102 (4), HG-JR53 (4), 73 (4), 103 (4), HF-SP51, 52 (4), 81, 102 (4), HF-JP53 (4), 73 (4), 103 (4)	—	Straight	SC-PWC4CBL□M■MH	1 to 30 (*5)	IP67	⑰
				SC-PWC4CBL□M■MH	1 to 30	⑳	—
	HG-SR152 (4)/HG-JR153 (4), 203 (4), 3534, HF-SP152 (4), HF-JP153 (4), 203 (4), 3534	—	Straight	SC-PWC4CBL□M■H	1 to 30 (*5)	IP67	⑰
				SC-PWC4CBL□M■H	1 to 30	⑳	—
	HG-JR5034/HF-JP5034	—	Straight	SC-PWC4CBL□M■LH	1 to 30 (*5)	IP67	⑰
				SC-PWC4CBL□M■LH	1 to 30	⑳	—
	HG-SR121, 201, 202 (4), 3524 HF-SP121, 201, 202 (4), 3524	—	Straight	SC-PWC5CBL□M■MH	1 to 30 (*5)	IP67	⑱
				SC-PWC5CBL□M■MH	1 to 30	⑳	—
	HG-SR301, 352, 5024/HG-JR353, HF-SP301, 352, 5024/ HF-JP353	—	Straight	SC-PWC5CBL□M■H	1 to 30 (*5)	IP67	⑱
				SC-PWC5CBL□M■H	1 to 30	⑳	—
	HG-SR502/HG-JR503 HF-SP502/HF-JP503	—	Straight	SC-PWC5CBL□M■LH	1 to 30 (*5)	IP67	⑱
				SC-PWC5CBL□M■LH	1 to 30	⑳	—
	HG-UR72B HC-LP52B, 102B/HC-UP72B	—	Straight	SC-PWBK1CBL□M■MH	1 to 30 (*5)	IP67	⑲
				SC-PWBK1CBL□M■MH	1 to 30	—	—
	HG-RR103B, 153B/HG-UR152B HC-LP152B/HC-RP103B, 153B/ HC-UP152B	—	Straight	SC-PWBK1CBL□M■MH	1 to 30 (*5)	IP67	⑲
				SC-PWBK1CBL□M■MH	1 to 30	—	—
	HG-RR203B, HC-RP203B	—	Straight	SC-PWBK1CBL□M■LH	1 to 30 (*5)	IP67	⑲
				SC-PWBK1CBL□M■LH	1 to 30	—	—
	HG-RR353B, 503B HC-RP353B, 503B	—	Straight	SC-PWBK2CBL□M■H	1 to 30 (*5)	IP67	⑲
				SC-PWBK2CBL□M■H	1 to 30	—	—
Junction type (*10)	HG-KR/MR Series HF-KN/KP/MP Series	Motor side	Angle	SC-PWS1JCB□M■H	(*6)	IP65	㉑
		Amplifier side	Straight	SC-PWS4CBL□M■LH		IP20	—
		Motor side	Angle	SC-PWS4JCB□M■H			
		Amplifier side	Straight	SC-PWS5CBL□M■LH		IP65	—
	HG-SR51, 52, 524, 1024 For HF-SP51, 52, 524, 1024	Motor side	Straight	SC-PWC4JCB□M■H	(*6)	IP67	㉒
		Angle	SC-PWC4JCB□M■H			㉓	—
	HG-SR102, 152, 81, 1524 For HF-SP102, 152, 81, 1524	Motor side	Straight	SC-PWC4JCB□M■LH	(*6)	IP67	㉒
		Angle	SC-PWC4JCB□M■LH			㉓	—