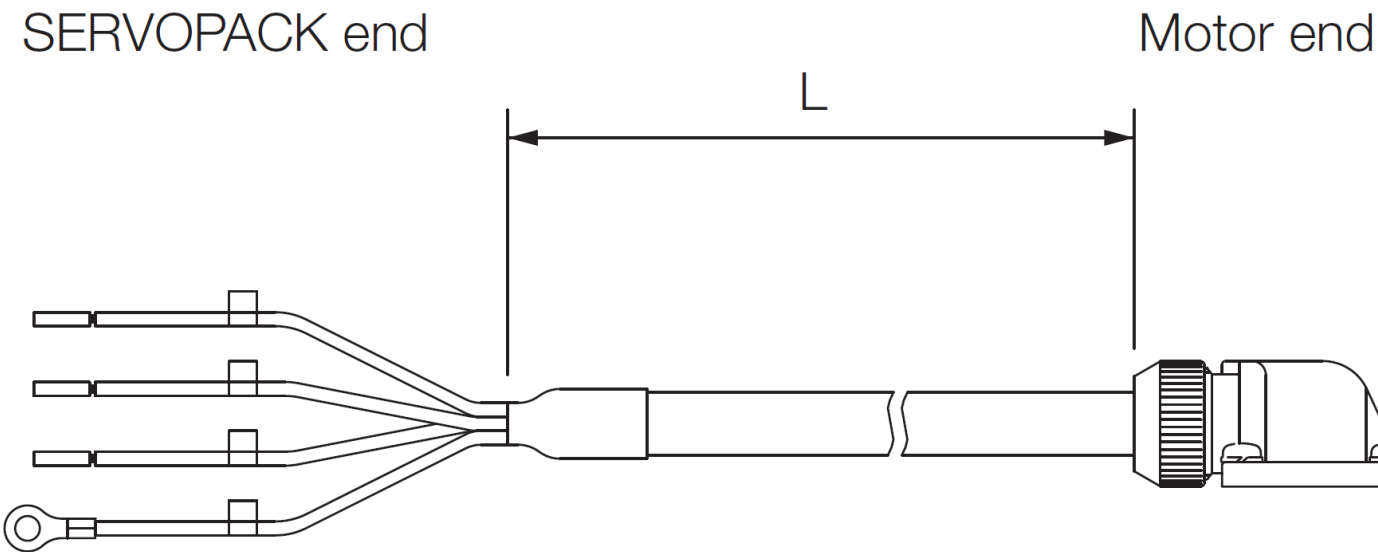


EXTERNAL DIMENSIONS:



The recommended bend radius is **90mm** or larger for **moving** parts of machines, such as robots. See [Page 2](#) for Precautions for Flexible Cables.

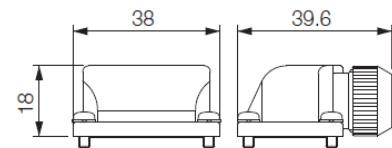
The recommended bend radius is **15mm** or larger for **fixed** installations.

MOTOR END CONNECTOR

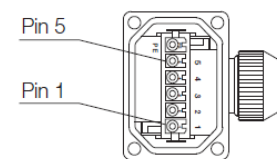
Item		Description
Order Number		JZSP-CVM9-1-E
Manufacturer		Japan Aviation Electronics Industry, Ltd.
User Instructions		JABL-50020
Components	Plug	JNYFX06SJ3
	Contacts	ST-TMH-S-C1B
Applicable Wire Sizes		AWG18 to AWG22
Applicable Cable Diameter		6.9 mm to 8.3 mm
Outer Diameter of Insulating Sheath		1.3 mm to 1.8 mm
Mounting Screws		M3 pan-head screws
Crimping Tool*	Hand Tool	CT170-14-TMH5B

* A Crimping Tool is required. Contact the connector manufacturer for details.

External Dimensions [mm]



● Pin layout



RAW CABLE

Item	For Servomotors without Holding Brakes (4 Wires)
Order Number*	JZSP-CVM29-□□-E (maximum length: 50 m)
Specifications	UL2586 (rated temperature:105°C) AWG20 × 4C
	Power lines: AWG20 (0.52 mm ²) Outer diameter of insulating sheath: 1.77 mm
Finished Diameter	7.3 mm ±0.3 mm
Internal Structure and Lead Colors	

* Replace the boxes (□□) in the order number with the cable length (03, 05, 10, 15, 20, 30, 40, or 50).

NOTES:

1. If the length of the Servomotor Main Circuit Cable exceeds 20 m, the intermittent duty zone in the torque-motor speed characteristics will become smaller because the voltage drop increases.

WIRING SPECIFICATIONS

SERVOPACK Leads		Servomotor Connector	
Wire Color	Signal	Signal	Pin
Green/yellow	FG	FG	PE
-	-	-	5
-	-	-	4
Red	Phase U	Phase U	3
White	Phase V	Phase V	2
Blue	Phase W	Phase W	1

ITEM NUMBER	L = Length
JZSP-CVM21-03-E	3000
JZSP-CVM21-05-E	5000
JZSP-CVM21-10-E	10000
JZSP-CVM21-15-E	15000
JZSP-CVM21-20-E	20000
JZSP-CVM21-30-E	30000
JZSP-CVM21-40-E	40000
JZSP-CVM21-50-E	50000

REV	DESCRIPTION	DATE	DRAWN BY
1	Added 20m note	Jan. 20, 2021	D. LEE
0	Initial Release	Sept. 3, 2020	D. LEE

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SCALE: NTS

UNITS: mm

YASKAWA

TITLE:SGM7G -03 TO -05. 300W TO 450W
Servomotor Power Cable, No Brake,
Away From Load, Flex, Non-Shielded

ITEM #:
JZSP-CVM21-xx-E (xx = See Chart)

SIZE: -	REVISION: 1	PAGE: 1 of 2
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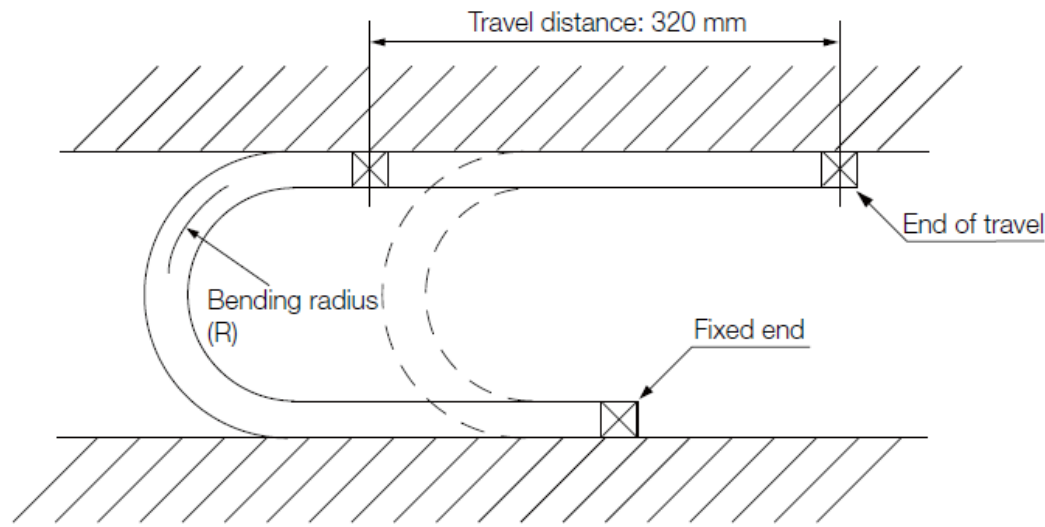
DRAWING #:
CAD-JZSP-CVM21-xx-E

Precautions for Flexible Cables

The Flexible Cables have a service life of 10,000,000 operations minimum when used at the recommended bending radius (R) or larger under the following test conditions. The service life of a Flexible Cable is reference data under the following test conditions. The service life of a Flexible Cable greatly depends on the amount of mechanical shock, how the cable is attached, and how the cable is secured.

◆ Test Conditions

- One end of the cable is repeatedly moved forward and backward for 320 mm using the test equipment shown in the following figure.
- The fixed end is connected to a non-moving part, the moving end is connected to the moving part, and the number of cable return operations until a lead wire breaks are counted. One round trip is counted as one bend.



Note: The service life of a Flexible Cable indicates the number of bends while the lead wires are electrically charged for which no cracks or damage that affects the performance of the cable sheathing occurs. Breaking of the shield wire is not considered.

- Straighten out the Flexible Cable when you connect it. If the cable is connected while it is twisted, it will break faster. Check the indication on the cable surface to make sure that the cable is not twisted.
- Do not secure the portions of the Flexible Cable that move. Stress will accumulate at the point that is secured, and the cable will break faster. Secure the cable in as few locations as possible.
- If a Flexible Cable is too long, looseness will cause it to break faster. If the Flexible Cable is too short, stress at the points where it is secured will cause it to break faster. Adjust the cable length to the optimum value.
- Do not allow Flexible Cables to interfere with each other. Interference will restrict the motion of the cables, causing them to break faster. Separate the cables sufficiently, or provide partitions between them when wiring.

ITEM NUMBER	L = Length
JZSP-CVM21-03-E	3000
JZSP-CVM21-05-E	5000
JZSP-CVM21-10-E	10000
JZSP-CVM21-15-E	15000
JZSP-CVM21-20-E	20000
JZSP-CVM21-30-E	30000
JZSP-CVM21-40-E	40000
JZSP-CVM21-50-E	50000

REV	DESCRIPTION	DATE	DRAWN BY
1	Added 20m note	Jan. 20, 2021	D. LEE
0	Initial Release	Sept. 3, 2020	D. LEE

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YASKAWA

TITLE:SGM7G -03 TO -05. 300W TO 450W
Servomotor Power Cable, No Brake,
Away From Load, Flex, Non-Shielded

ITEM #:
JZSP-CVM21-xx-E (xx = See Chart)

SIZE: -	REVISION: 1	PAGE: 2 of 2
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DRAWING #:
CAD-JZSP-CVM21-xx-E

SCALE: NTS

UNITS: mm