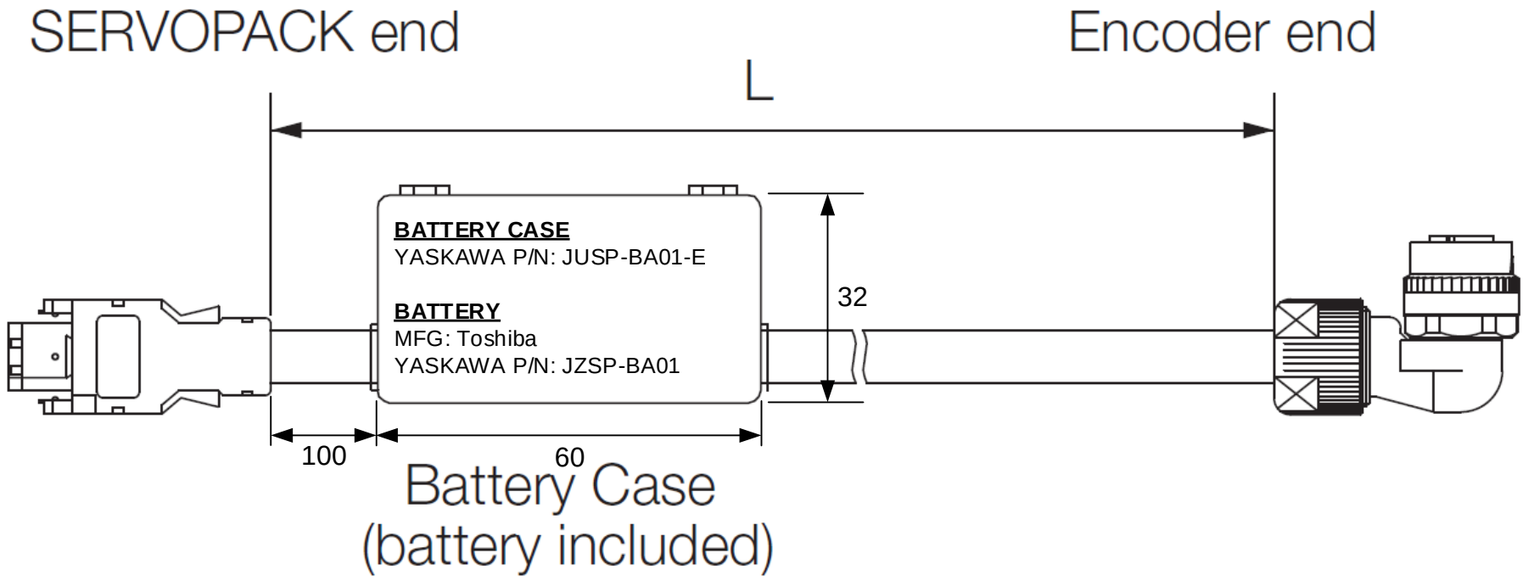
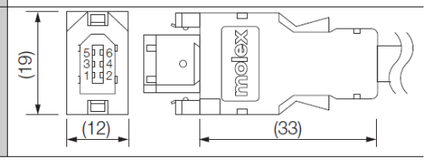
EXTERNAL DIMENSIONS:



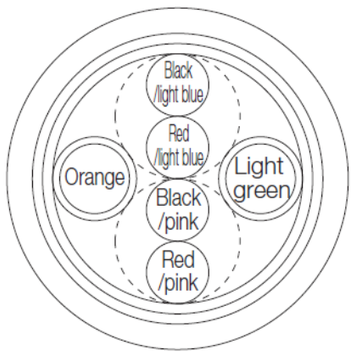
The recommended bend radius is **46mm** or larger for **moving** parts of machines, such as robots. See Page 2 for Precautions for Flexible Cables.

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

SERVOPACK END CONNECTOR

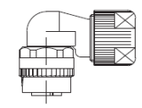
Type	Standard Connector Kit
Inquires	Yaskawa representative
Manufacturer	Molex Incorporated
Order Number	JZSP-CMP9-1-E
Specifications	55100-0670 (soldered) Product specifications: PS-54280
External Dimensions [mm]	

RAW CABLE

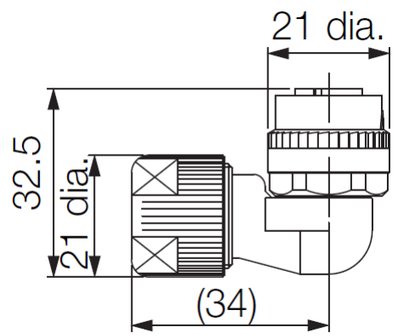
Item	Flexible Cable
Order Number*	JZSP-CSP39-□□-E (maximum length: 20 m)
Specifications	UL20276 (rated temperature: 80°C) AWG22 × 2C + AWG24 × 2P
	AWG22 (0.33 mm^2) Outer diameter of insulating sheath: 1.35 mm
	AWG24 (0.20 mm^2) Outer diameter of insulating sheath: 1.21 mm
Finished Diameter	6.8 mm
Internal Structure and Lead Colors	

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

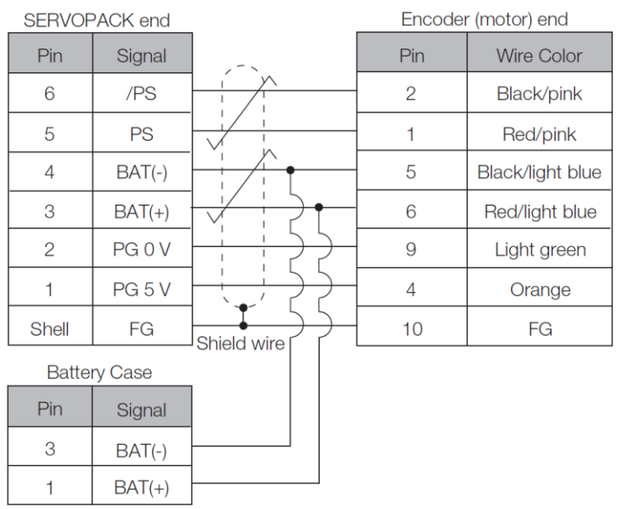
MOTOR END CONNECTOR

Order Number	Specification	External Dimensions	Manufacturer
JZSP-CVP9-2-E	• Plug: CM10-AP10S-M-D • Contacts: Crimped CM10-#22SC(C4)-100 • Applicable cable diameter: 6.0 mm to 9.0 mm		DDK Ltd.

MOTOR END CONNECTOR DIMENSIONS



WIRING SPECIFICATIONS



SERVOPACK end

Pin	Signal
6	/PS
5	PS
4	BAT(-)
3	BAT(+)
2	PG 0 V
1	PG 5 V
Shell	FG

Encoder (motor) end

Pin	Wire Color
2	Black/pink
1	Red/pink
5	Black/light blue
6	Red/light blue
9	Light green
4	Orange
10	FG

Shield wire

Battery Case

Pin	Signal
3	BAT(-)
1	BAT(+)

IMPORTANT NOTES

This cable cannot be used with the SGM7A-70 (7.0 kW).
Use an Encoder Cable with a Straight Connector, such as JZSP-CVP26-xx-E.

ITEM NUMBER	L = Length
JZSP-CVP27-03-E	3000
JZSP-CVP27-05-E	5000
JZSP-CVP27-10-E	10000
JZSP-CVP27-15-E	15000
JZSP-CVP27-20-E	20000

REV	DESCRIPTION	DATE	DRAWN BY
0	Initial Release	Jan. 12, 2021	D. LEE

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YASKAWA

TITLE: SGM7A-15 to -50 (1.5 kW to 5.0 kW) & SGM7G Series Servomotor Encoder Cable, With Battery Case For Absolute Encoder, Away From Load, Flex, Shielded.

ITEM #: JZSP-CVP27-xx-E (xx = See Chart)

SIZE:	REVISION:	PAGE:
-	0	1 of 2

SCALE: NTS | UNITS: mm

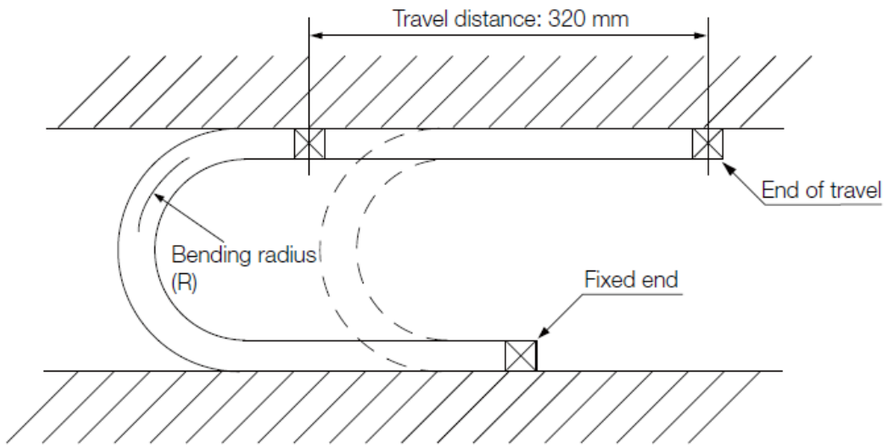
DRAWING #: CAD-JZSP-CVP27-xx-E

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-CVP27-03-E	3000
JZSP-CVP27-05-E	5000
JZSP-CVP27-10-E	10000
JZSP-CVP27-15-E	15000
JZSP-CVP27-20-E	20000

REV	DESCRIPTION	DATE	DRAWN BY
0	Initial Release	Jan. 12, 2021	D. LEE

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YASKAWA

TITLE: SGM7A-15 to -50 (1.5 kW to 5.0 kW) & SGM7G Series Servomotor Encoder Cable, With Battery Case For Absolute Encoder, Away From Load, Flex, Shielded.

ITEM #: JZSP-CVP27-xx-E (xx = See Chart)

SIZE:	REVISION:	PAGE:
-	0	2 of 2

SCALE: NTS | UNITS: mm

DRAWING #: CAD-JZSP-CVP27-xx-E