CABLINE®-CX II

The simulation of passing PLUG through hinge

Part No. Plug:, 20977-040T-01, 20978-040T-01

Technical Report

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Rev.	ECN	Date	Prepared by	Checked by	Approved by

CABLINE-CX II The simulation of passing PLUG through hinge

1. Purpose

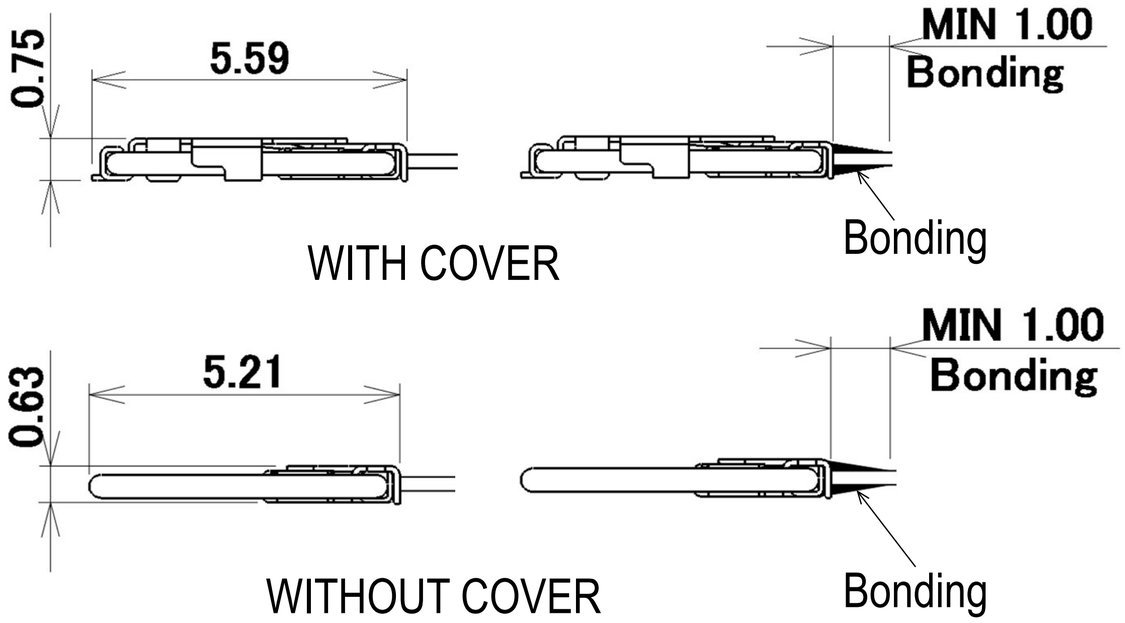
We report the simulation results of the minimum diameter of the hinge that can store the connector(CABLINE-CX II Plug) and cable.

2. Simulation conditions

- Connector : CABLINE-CX II PLUG WITH COVER CABLE ASS'Y (20977-040T-01)
  CABLINE-CX II PLUG WITHOUT COVER CABLE ASS'Y (20978-040T-01)
- Number of pins : 40P
- Cable : MICRO-COAX CABLE AWG#44,46 (See Table.1 for jacket diameter.)
  ※Each simulation is connected to all Pins.
- Bonding : CABLINE-CXII recommends bonding cable outlets.
  Be sure to bend the cable from the end of the bonding.

Table.1 Cable jacket(outer) diameter (mm)

AWG#	Impedance matching	
	45ohm	50ohm
44	0.24	
46	0.22	0.24



3. Simulation result
The simulation results are shown in Table.2 and 3.
※See the next page for details.

Table.2 WITH COVER - minimum hinge inner diameter (mm)

Cable	Size	AWG#44	AWG#46	
	Impedance matching	45ohm	45ohm	50ohm
	Jacket diameter	0.24	0.22	0.24
Minimum hinge inner diameter	Connector 40P	7.35	7.33	7.35

Table.3 WITHOUT COVER - Minimum hinge inner diameter (mm)

Cable	Size	AWG#44	AWG#46	
	Impedance matching	45ohm	45ohm	50ohm
	Jacket diameter	0.24	0.22	0.24
Minimum hinge inner diameter	Connector 40P	6.98	6.96	6.98

3. Simulation result
Simulation results with AWG #44.

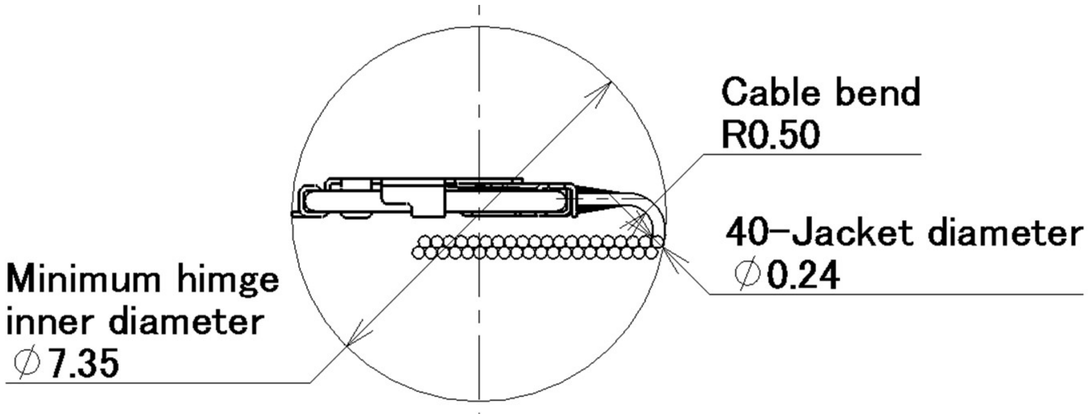


Fig.1 WITH COVER - AWG#44 (45ohm) 40P

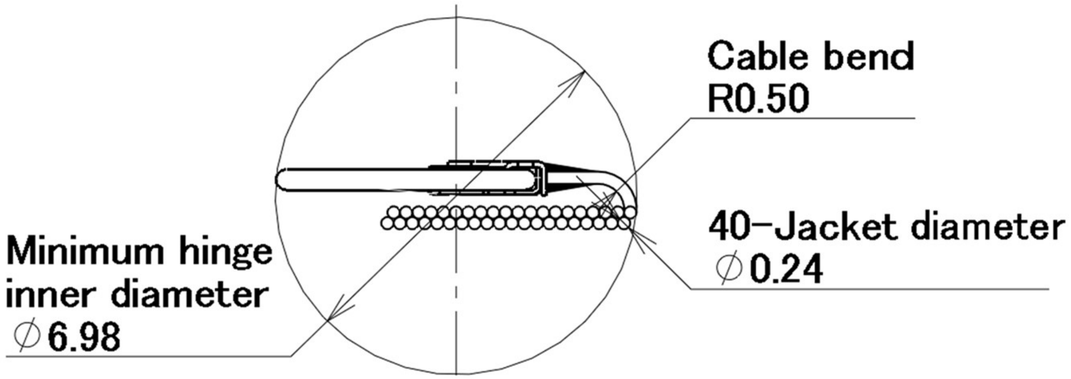


Fig.2 WITHOUT COVER - AWG#44 (45ohm) 40P

3. Simulation result
Simulation results with AWG #46.

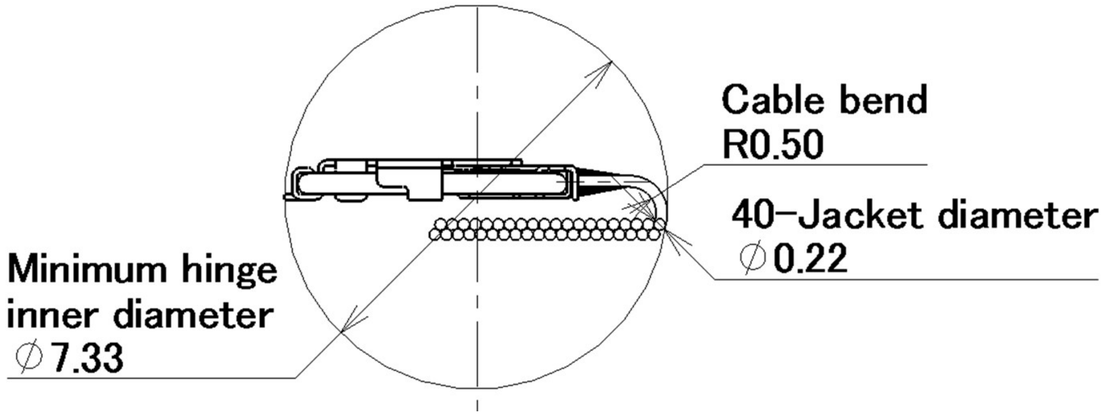


Fig.3 WITH COVER - AWG#46 (45ohm) 40P

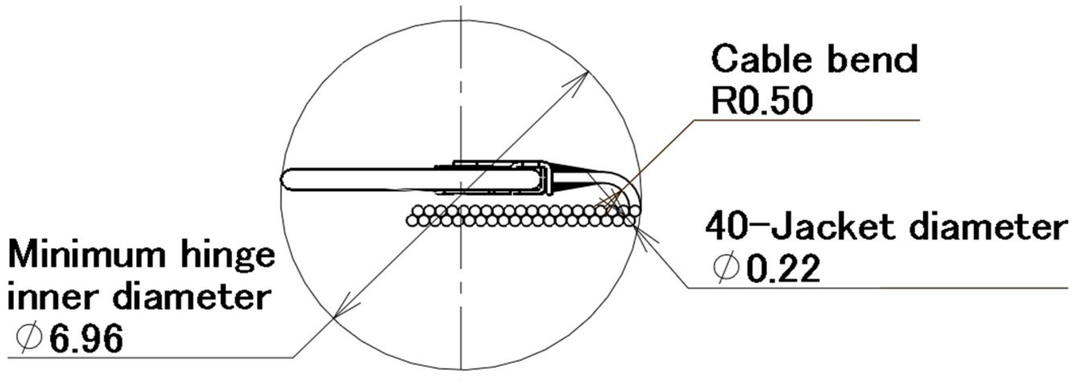


Fig.4 WITHOUT COVER - AWG#46 (45ohm) 40P

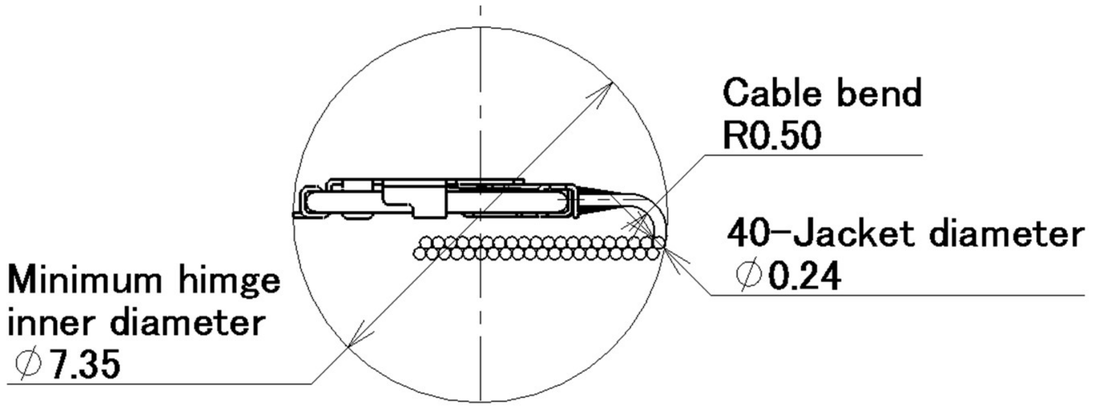


Fig.5 WITH COVER - AWG#46 (50ohm) 40P

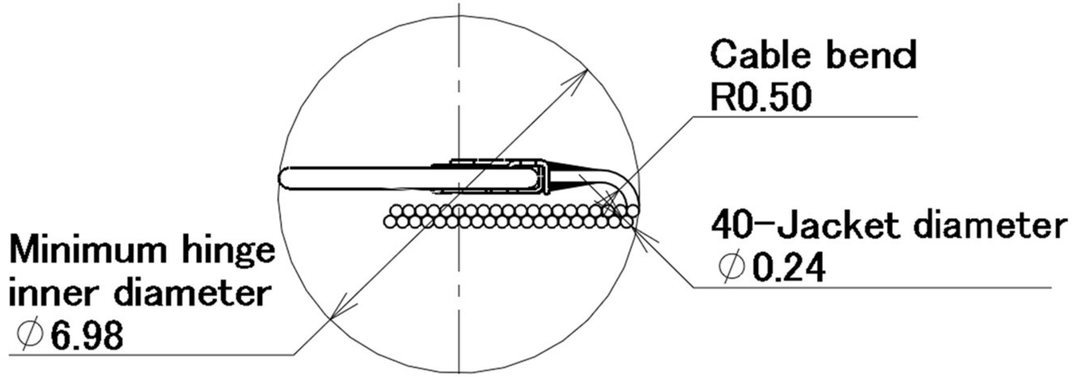


Fig.6 WITHOUT COVER - AWG#46 (50ohm) 40P

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