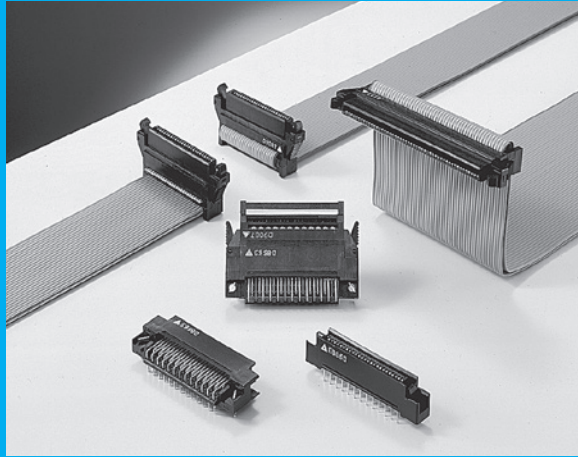


8822E / 8822 SERIES

RoHS
Compliant

1.27mm PITCH CONNECTOR FOR 1.27mm PITCH FLAT CABLE



FEATURES

- ▶ With a completely-independent two-point contact system, a stable contact pressure is maintained at all times.
- ▶ Low insertion and withdrawal force.
- ▶ Can be used with MIL-STD type IDC connectors (KEL 6100, 6200, 6200S, 6230 Series for example).
- ▶ Equipped with the Eject-Lock mechanism, it allows one-handed insertion and release, and the One Touch Lock mechanism for easy handling are available.
- ▶ Wide variations in the number of contacts (13 sizes from 20 to 100 pins) are available.

ORDER CODE

8822 - - 171 - F

① ② ③ ④ ⑤

*Please order in multiples of the quantity per package.

- ① **[Type]** Receptacle (Cable side connector) **8822** : One touch lock **8822E** : Eject lock
- ② **[Number of contacts]** **020** : 20pin **026** : 26pin **030** : 30pin **032** : 32pin **034** : 34pin **036** : 36pin **040** : 40pin **050** : 50pin **052** : 52pin
060 : 60pin **068** : 68pin **080** : 80pin **100** : 100pin
In 8822 series (One Touch Lock type), 36, 80, and 100 pin connectors are not available.
- ③ **[Contact name]** **171**
- ④ **[Plating of contact area]** **Omit** : Au 0.05 μ m (Standard) **D** : Au 0.25 μ m (Upon request)
- ⑤ **[RoHS]** **F** : RoHS compliant

If you would like semi-customized products, please contact your local KEL sales office.

ORDER CODE

883 - - 170 - F

① ② ③ ④ ⑤ ⑥

*Please order in multiples of the quantity per package.

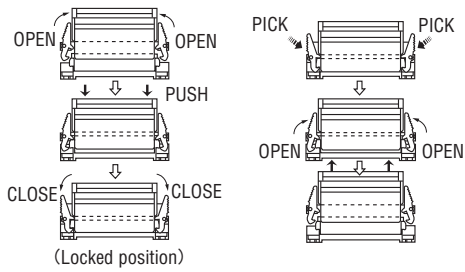
- ① **[Type]** Plug (PCB side connector) **8830** : For 8822 series, without hooks **8831** : For 8822 series, with hooks (L type only)
8830E : For 8822E series, without hooks **8831E** : For 8822E series, with hooks (L type only)
- ② **[Number of contacts]** **020** : 20pin **026** : 26pin **030** : 30pin **032** : 32pin **034** : 34pin **036** : 36pin **040** : 40pin **050** : 50pin **052** : 52pin
060 : 60pin **068** : 68pin **080** : 80pin **100** : 100 pin
In 8830/31 series (One Touch Lock type), 36, 80, and 100 pin connectors are not available.
- ③ **[Contact name]** **170**
- ④ **[Contact tail style]** **S** : Straight **L** : Right angle
- ⑤ **[Plating of contact area]** **Omit** : Au 0.05 μ m (Standard) **D** : Au 0.25 μ m (Upon request)
- ⑥ **[RoHS]** **F** : RoHS compliant

If you would like semi-customized products, please contact your local KEL sales office.

SPECIFICATIONS

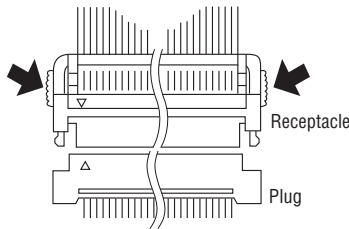
Material and plating		Electrical Characteristics	
Insulator material	Glass-filled Nylon 66 (UL94V-0), Black	Current rating	0.5A per contact
Contact material	Copper alloy	Contact resistance	30m Ω max.
Contact plating	(Contact area) Gold over Nickel (Terminal area) Tin copper over Nickel	Dielectric withstanding voltage	650V AC for 1 minute
		Insulation resistance	1,000M Ω min. at 500V DC
Retention clip material	Copper alloy	Operating temperature	-55°C to +85°C
Retention clip plating	Tin copper over Nickel	Recommended cable	#28 AWG(7/0.127), 1.27mm(50mil) pitch, Flat ribbon cable

8822E series Eject Lock mechanism



The Eject-Lock of 8822E Series is an innovative mechanism that allows one-handed insertion and release. After inserting the connector, for mating, to an unlocked (OPEN state) receptacle, the mechanism automatically locks the connector (CLOSE state). Then, pressing the ejectors on both sides releases the connector.

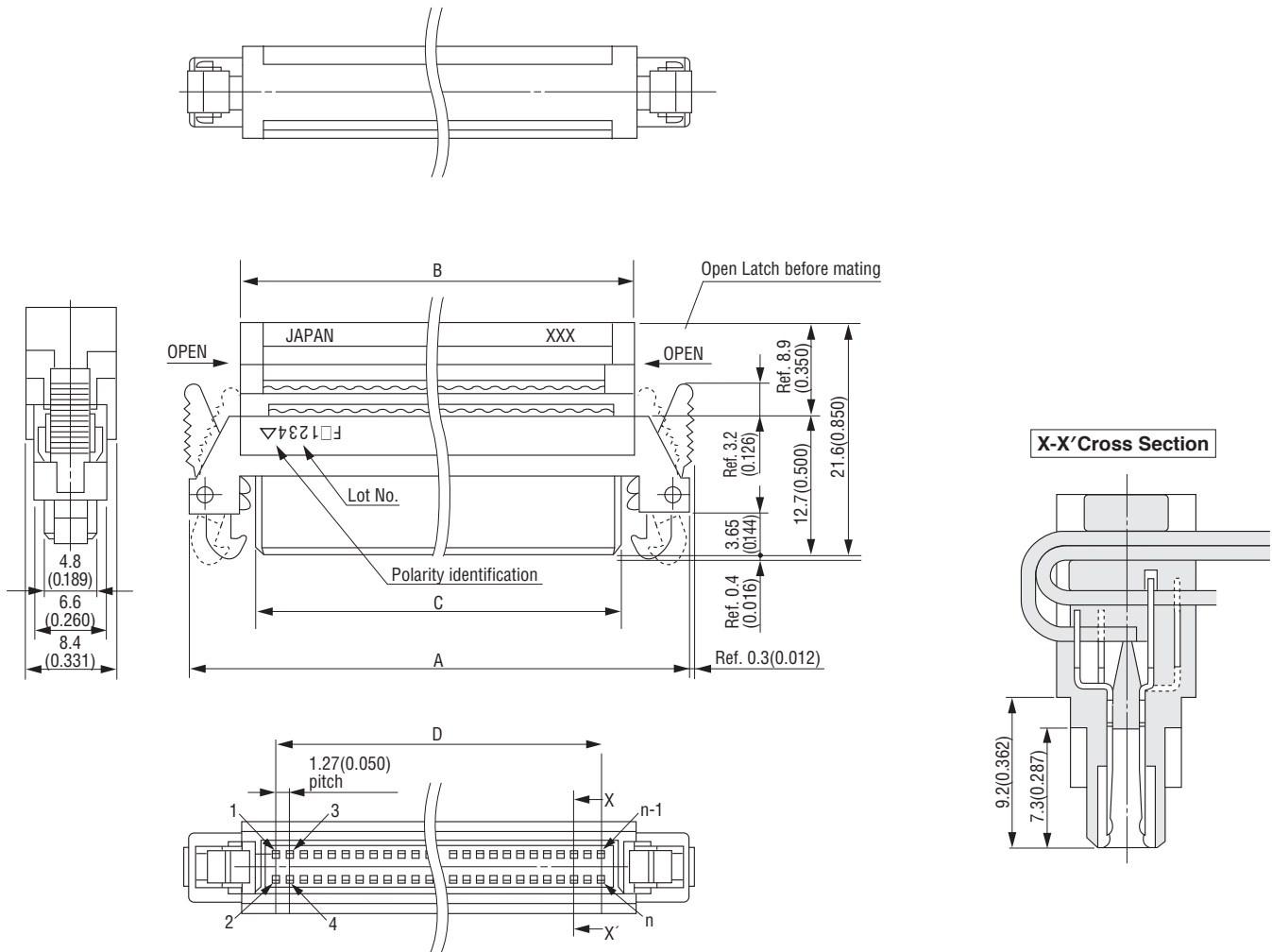
8822 series One touch lock mechanism



The One Touch Lock of 8822 Series is a mechanism that allows insertion/release of the connector with a single operation. It locks the connector by just inserting it to a receptacle for mating. Then, holding the lock springs at both ends of the receptacle with your thumb and forefinger and pressing them slightly unlocks the connector, allowing it to be removed.

8822E-□□□-171□-F (Receptacle, Cable side connector, Eject lock)

Unit : mm(inch)



"n" is number of contacts.

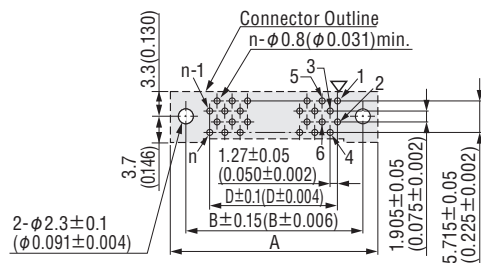
Packaging style
Other

▶ Product Table / Dimensions

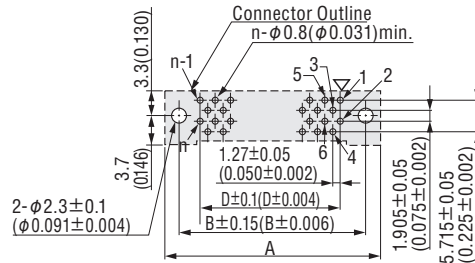
No. of contacts	Part Number	A	B	C	D	Number of packaging
20	8822E-020-171□-F	27.83 (1.096)	17.83 (0.702)	15.43 (0.607)	11.43 (0.450)	80
26	8822E-026-171□-F	31.64 (1.246)	21.64 (0.852)	19.24 (0.757)	15.24 (0.600)	80
30	8822E-030-171□-F	34.18 (1.346)	24.18 (0.952)	21.78 (0.857)	17.78 (0.700)	80
32	8822E-032-171□-F	35.45 (1.396)	25.45 (1.002)	23.05 (0.907)	19.05 (0.750)	80
34	8822E-034-171□-F	36.72 (1.446)	26.72 (1.052)	24.32 (0.957)	20.32 (0.800)	80
36	8822E-036-171□-F	37.99 (1.496)	27.99 (1.102)	25.59 (1.007)	21.59 (0.850)	60
40	8822E-040-171□-F	40.53 (1.596)	30.53 (1.202)	28.13 (1.107)	24.13 (0.950)	60
50	8822E-050-171□-F	46.88 (1.846)	36.88 (1.452)	34.48 (1.357)	30.48 (1.200)	50
52	8822E-052-171□-F	48.15 (1.896)	38.15 (1.502)	35.75 (1.407)	31.75 (1.250)	50
60	8822E-060-171□-F	53.23 (2.096)	43.23 (1.702)	40.83 (1.607)	36.83 (1.450)	50
68	8822E-068-171□-F	58.31 (2.296)	48.31 (1.902)	45.91 (1.807)	41.91 (1.650)	50
80	8822E-080-171□-F	65.93 (2.596)	55.93 (2.202)	53.53 (2.107)	49.53 (1.950)	50
100	8822E-100-171□-F	78.63 (3.096)	68.63 (2.702)	66.23 (2.607)	62.23 (2.450)	50

▶ Printed Circuit Board Layout (Component Side View)

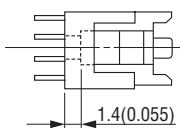
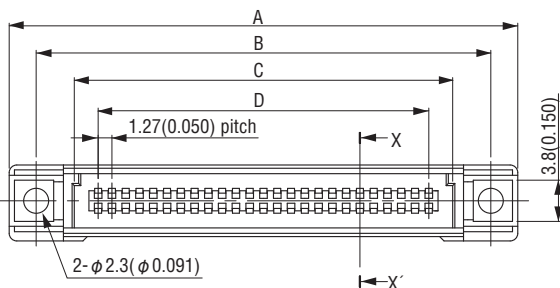
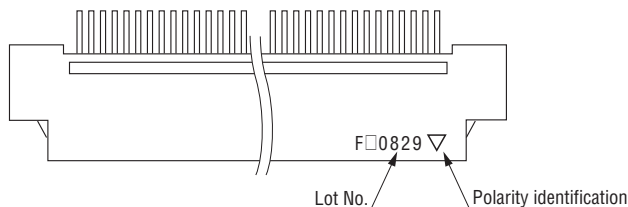
For 20,32,36,40,52,60,68,80,100 pins



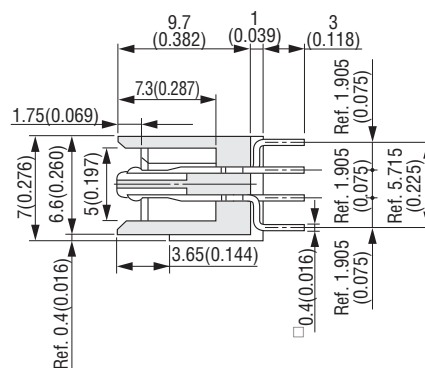
For 26,30,34,50 pins



Recommended PCB Thickness $t=1.6 \pm_{-0.1}^{+0.2}$ (0.063 $\pm_{-0.004}^{+0.008}$)
 ▽=Polarity identification "n" is number of contacts.



X-X' Cross Section

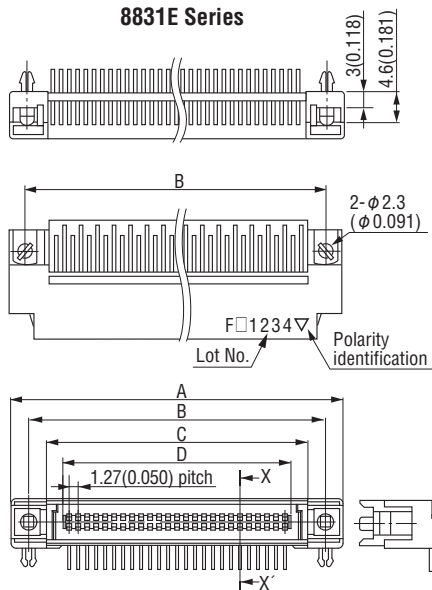
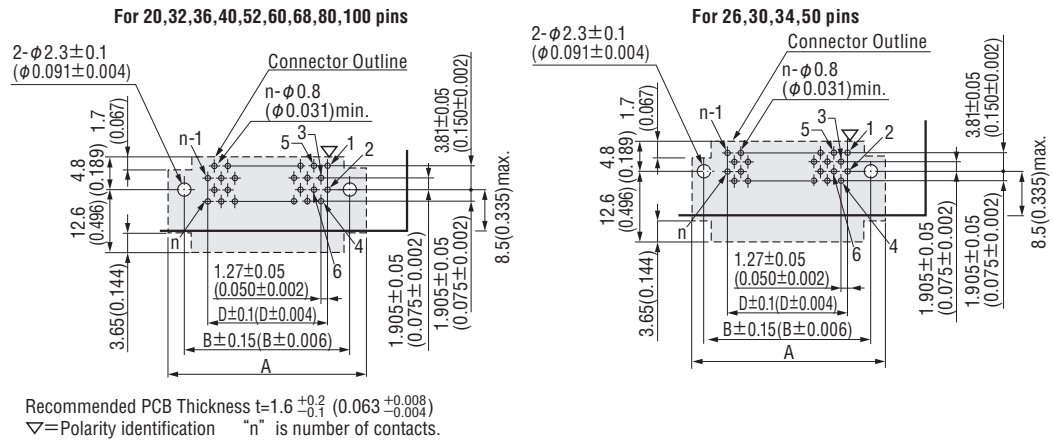
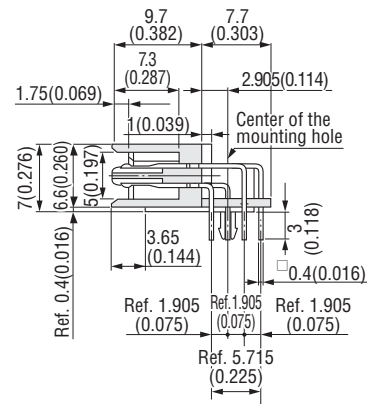


Packaging style

Pipe

▶ Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	Number of packaging
20	8830E-020-170S□-F	27.83 (1.096)	22.86 (0.900)	15.83 (0.623)	11.43 (0.450)	18
26	8830E-026-170S□-F	31.64 (1.246)	26.67 (1.050)	19.64 (0.773)	15.24 (0.600)	16
30	8830E-030-170S□-F	34.18 (1.346)	29.21 (1.150)	22.18 (0.873)	17.78 (0.700)	14
32	8830E-032-170S□-F	35.45 (1.396)	30.48 (1.200)	23.45 (0.923)	19.05 (0.750)	14
34	8830E-034-170S□-F	36.72 (1.446)	31.75 (1.250)	24.72 (0.973)	20.32 (0.800)	13
36	8830E-036-170S□-F	37.99 (1.496)	33.02 (1.300)	25.99 (1.023)	21.59 (0.850)	13
40	8830E-040-170S□-F	40.53 (1.596)	35.56 (1.400)	28.53 (1.123)	24.13 (0.950)	12
50	8830E-050-170S□-F	46.88 (1.846)	41.91 (1.650)	34.88 (1.373)	30.48 (1.200)	10
52	8830E-052-170S□-F	48.15 (1.896)	43.18 (1.700)	36.15 (1.423)	31.75 (1.250)	10
60	8830E-060-170S□-F	53.23 (2.096)	48.26 (1.900)	41.23 (1.623)	36.83 (1.450)	9
68	8830E-068-170S□-F	58.31 (2.296)	53.34 (2.100)	46.31 (1.823)	41.91 (1.650)	8
80	8830E-080-170S□-F	65.93 (2.596)	60.96 (2.400)	53.93 (2.123)	49.53 (1.950)	7
100	8830E-100-170S□-F	78.63 (3.096)	73.66 (2.900)	66.63 (2.623)	62.23 (2.450)	6

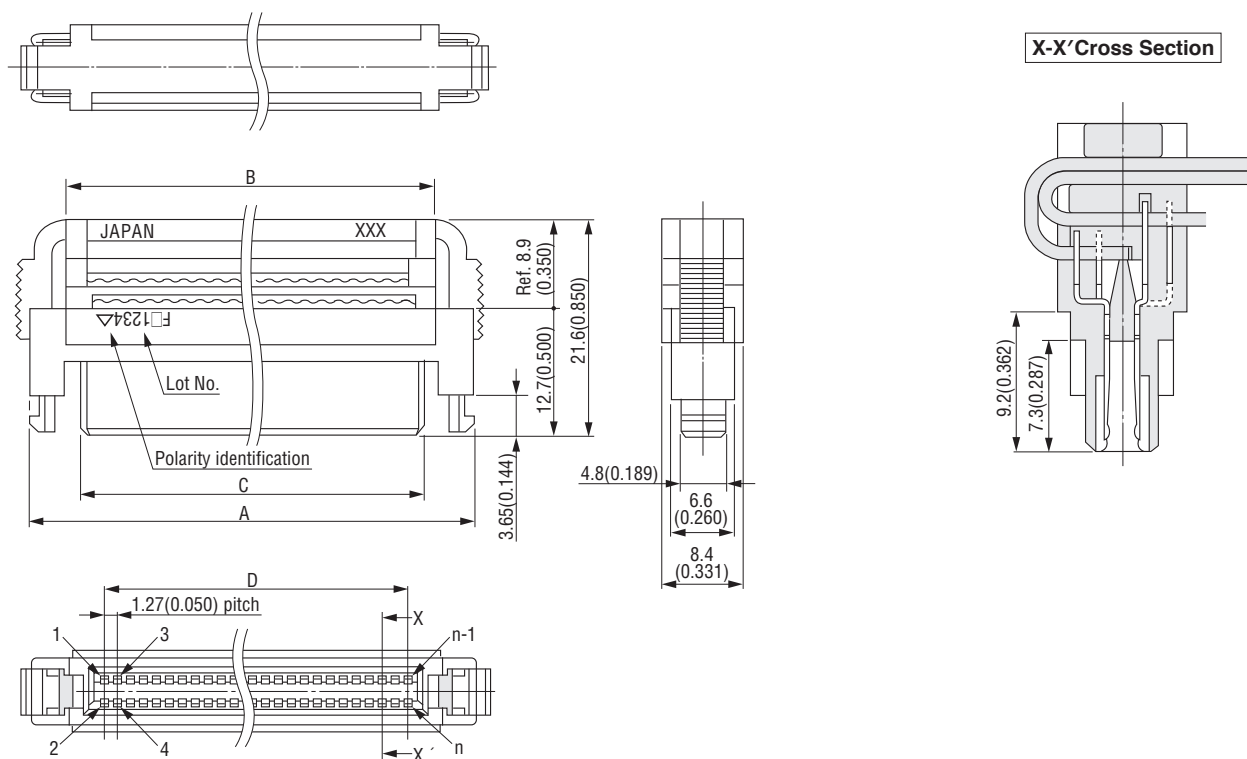
▶ Printed Circuit Board Layout (Component Side View)

X-X' Cross Section


Packaging style

Pipe

▶ Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	Number of packaging
20	8830E 8831E-020-170L□-F	27.83 (1.096)	22.86 (0.900)	15.83 (0.623)	11.43 (0.450)	18
26	8830E 8831E-026-170L□-F	31.64 (1.246)	26.67 (1.050)	19.64 (0.773)	15.24 (0.600)	16
30	8830E 8831E-030-170L□-F	34.18 (1.346)	29.21 (1.150)	22.18 (0.873)	17.78 (0.700)	14
32	8830E 8831E-032-170L□-F	35.45 (1.396)	30.48 (1.200)	23.45 (0.923)	19.05 (0.750)	14
34	8830E 8831E-034-170L□-F	36.72 (1.446)	31.75 (1.250)	24.72 (0.973)	20.32 (0.800)	13
36	8830E 8831E-036-170L□-F	37.99 (1.496)	33.02 (1.300)	25.99 (1.023)	21.59 (0.850)	13
40	8830E 8831E-040-170L□-F	40.53 (1.596)	35.56 (1.400)	28.53 (1.123)	24.13 (0.950)	12
50	8830E 8831E-050-170L□-F	46.88 (1.846)	41.91 (1.650)	34.88 (1.373)	30.48 (1.200)	10
52	8830E 8831E-052-170L□-F	48.15 (1.896)	43.18 (1.700)	36.15 (1.423)	31.75 (1.250)	10
60	8830E 8831E-060-170L□-F	53.23 (2.096)	48.26 (1.900)	41.23 (1.623)	36.83 (1.450)	9
68	8830E 8831E-068-170L□-F	58.31 (2.296)	53.34 (2.100)	46.31 (1.823)	41.91 (1.650)	8
80	8830E 8831E-080-170L□-F	65.93 (2.596)	60.96 (2.400)	53.93 (2.123)	49.53 (1.950)	7
100	8830E 8831E-100-170L□-F	78.63 (3.096)	73.66 (2.900)	66.63 (2.623)	62.23 (2.450)	6

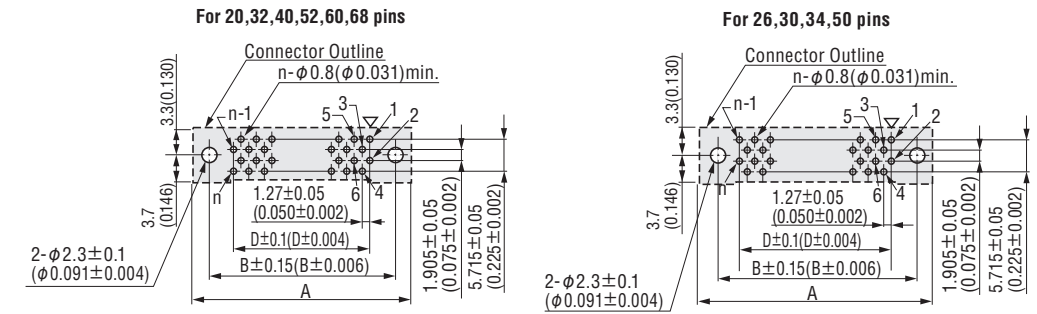


"n" is number of contacts

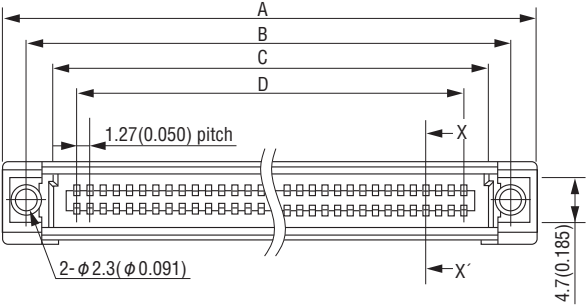
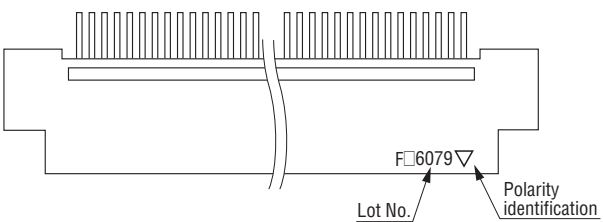
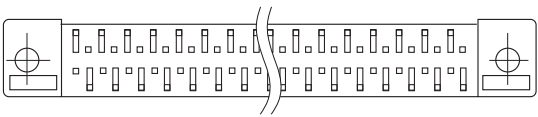
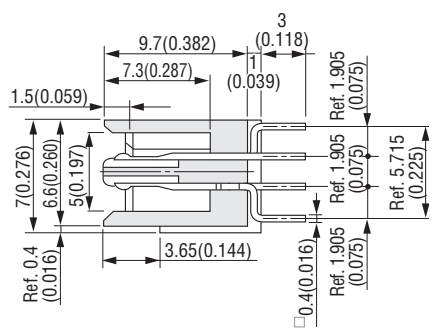
Packaging style
Other

► Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	Number of packaging
20	8822-020-171□-F	25.43 (1.001)	17.83 (0.702)	15.43 (0.607)	11.43 (0.450)	80
26	8822-026-171□-F	29.24 (1.151)	21.64 (0.852)	19.24 (0.757)	15.24 (0.600)	80
30	8822-030-171□-F	31.78 (1.251)	24.18 (0.952)	21.78 (0.857)	17.78 (0.700)	80
32	8822-032-171□-F	33.05 (1.301)	25.45 (1.002)	23.05 (0.907)	19.05 (0.750)	80
34	8822-034-171□-F	34.32 (1.351)	26.72 (1.052)	24.32 (0.957)	20.32 (0.800)	80
40	8822-040-171□-F	38.13 (1.501)	30.53 (1.202)	28.13 (1.107)	24.13 (0.950)	60
50	8822-050-171□-F	44.48 (1.751)	36.88 (1.452)	34.48 (1.357)	30.48 (1.200)	50
52	8822-052-171□-F	45.75 (1.801)	38.15 (1.502)	35.75 (1.407)	31.75 (1.250)	50
60	8822-060-171□-F	50.83 (2.001)	43.23 (1.702)	40.83 (1.607)	36.83 (1.450)	50
68	8822-068-171□-F	55.91 (2.201)	48.31 (1.902)	45.91 (1.807)	41.91 (1.650)	50

▶ Printed Circuit Board Layout (Component Side View)


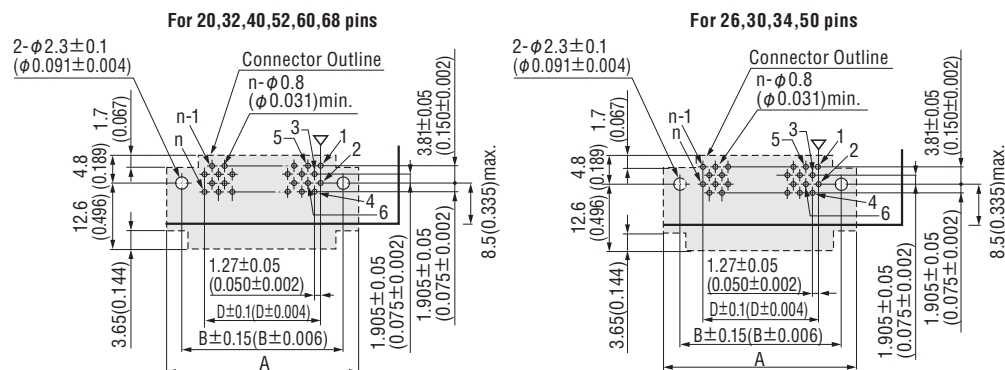
Recommended PCB Thickness $t=1.6^{+0.2}_{-0.1}$ (0.063^{+0.008}_{-0.004})
 ▽=Polarity identification "n" is number of contacts.


X-X' Cross Section


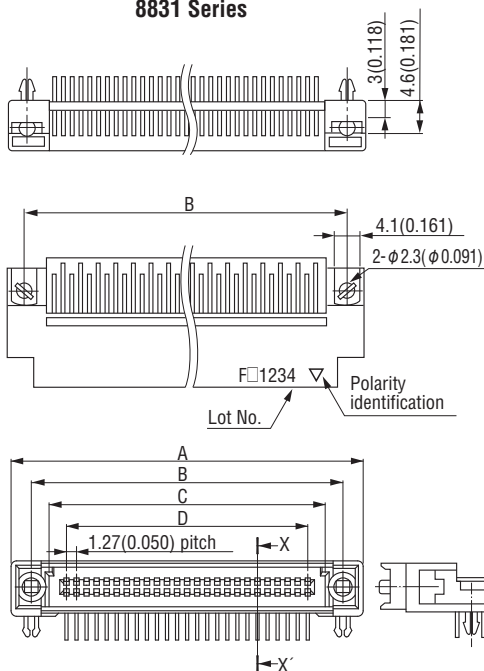
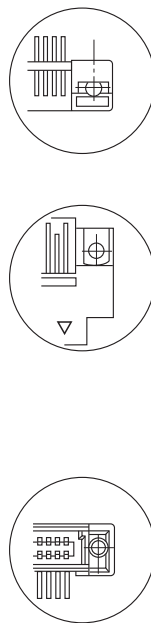
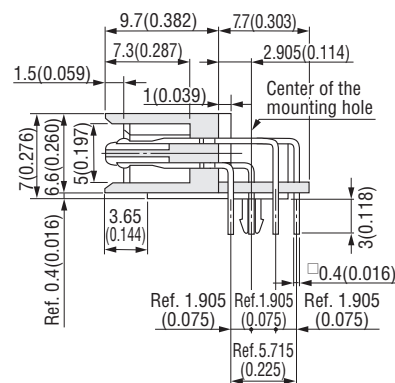
Packaging style
Pipe

▶ Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	Number of packaging
20	8830-020-170S□-F	25.43 (1.001)	20.32 (0.800)	15.83 (0.623)	11.43 (0.450)	20
26	8830-026-170S□-F	29.24 (1.151)	24.13 (0.950)	19.64 (0.773)	15.24 (0.600)	17
30	8830-030-170S□-F	31.78 (1.251)	26.67 (1.050)	22.18 (0.873)	17.78 (0.700)	16
32	8830-032-170S□-F	33.05 (1.301)	27.94 (1.100)	23.45 (0.923)	19.05 (0.750)	15
34	8830-034-170S□-F	34.32 (1.351)	29.21 (1.150)	24.72 (0.973)	20.32 (0.800)	14
40	8830-040-170S□-F	38.13 (1.501)	33.02 (1.300)	28.53 (1.123)	24.13 (0.950)	13
50	8830-050-170S□-F	44.48 (1.751)	39.37 (1.550)	34.88 (1.373)	30.48 (1.200)	11
52	8830-052-170S□-F	45.75 (1.801)	40.64 (1.600)	36.15 (1.423)	31.75 (1.250)	11
60	8830-060-170S□-F	50.83 (2.001)	45.72 (1.800)	41.23 (1.623)	36.83 (1.450)	10
68	8830-068-170S□-F	55.91 (2.201)	50.80 (2.000)	46.31 (1.823)	41.91 (1.650)	9

Printed Circuit Board Layout (Component Side View)


Recommended PCB Thickness $t=1.6^{+0.2}_{-0.1}$ (0.063 $^{+0.008}_{-0.004}$)
 ∇ =Polarity identification "n" is number of contacts.

8831 Series

8830 Series

X-X' Cross Section


Packaging style

Pipe

Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	Number of packaging
20	8830 8831-020-170L□-F	25.43 (1.001)	20.32 (0.800)	15.83 (0.623)	11.43 (0.450)	20
26	8830 8831-026-170L□-F	29.24 (1.151)	24.13 (0.950)	19.64 (0.773)	15.24 (0.600)	17
30	8830 8831-030-170L□-F	31.78 (1.251)	26.67 (1.050)	22.18 (0.873)	17.78 (0.700)	16
32	8830 8831-032-170L□-F	33.05 (1.301)	27.94 (1.100)	23.45 (0.923)	19.05 (0.750)	15
34	8830 8831-034-170L□-F	34.32 (1.351)	29.21 (1.150)	24.72 (0.973)	20.32 (0.800)	14
40	8830 8831-040-170L□-F	38.13 (1.501)	33.02 (1.300)	28.53 (1.123)	24.13 (0.950)	13
50	8830 8831-050-170L□-F	44.48 (1.751)	39.37 (1.550)	34.88 (1.373)	30.48 (1.200)	11
52	8830 8831-052-170L□-F	45.75 (1.801)	40.64 (1.600)	36.15 (1.423)	31.75 (1.250)	11
60	8830 8831-060-170L□-F	50.83 (2.001)	45.72 (1.800)	41.23 (1.623)	36.83 (1.450)	10
68	8830 8831-068-170L□-F	55.91 (2.201)	50.80 (2.000)	46.31 (1.823)	41.91 (1.650)	9

CABLE ASSEMBLY / PIN ASSIGNMENT

ORDER CODE

8822 - **171** **F** -

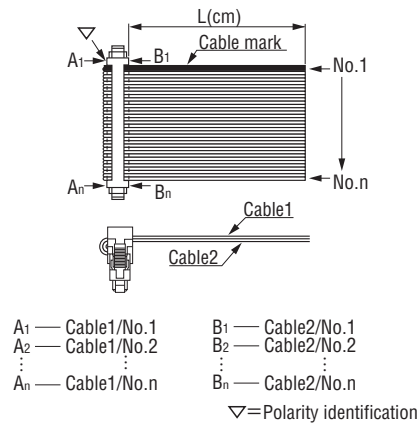
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- | | |
|---|---|
| ① [Type] Receptacle 8822E : Eject lock 8822 : One touch lock | ④ [Plating of contact area] Omit : Au 0.05 μm (Standard)
D : Au 0.25 μm (Upon request) |
| ② [No. of contacts] 020 : 20pin 026 : 26pin 030 : 30pin
032 : 32pin 034 : 34pin 036 : 36pin 040 : 40pin 050 : 50pin
052 : 52pin 060 : 60pin 068 : 68pin 080 : 80pin 100 : 100pin
In 8822 series (One Touch Lock type), 36, 80, and 100 pin connectors are not available. | ⑤ [RoHS] F : RoHS Compliant |
| ③ [Contact name] 171 | ⑥ [Cable length (cm)] L : Dimension (3cm min.) (Example: 013=13cm) |
| | ⑦ [Cable type] Omit : Flat cable * S : Intermittent bonded cable * T : Twist&Flat cable |
| | ⑧ [Wiring code] AA, AC, BB, BD, AO, CO |
| | ⑨ [BB-wired products] Omit : Twist type C : Through type |

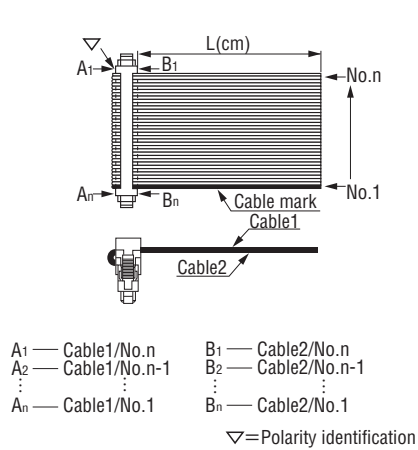
*BB and BD codes are available for only intermittent bonded and Twist&Flat cables. *If you would like semi-customized products, please contact your local KEL sales office.

▶ Cable assemblies

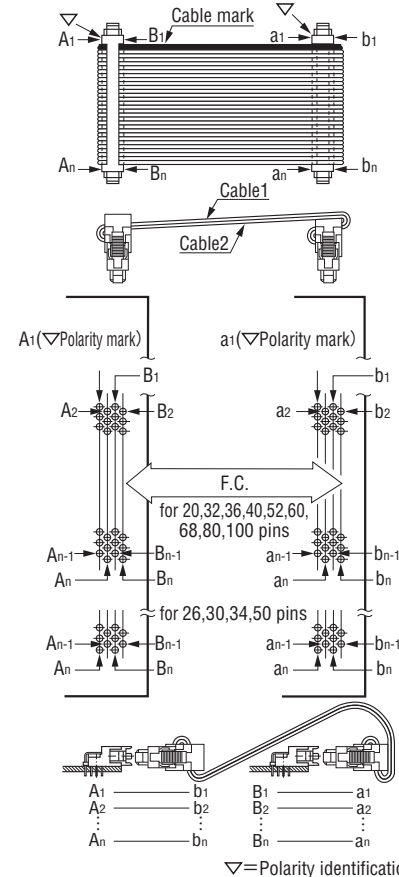
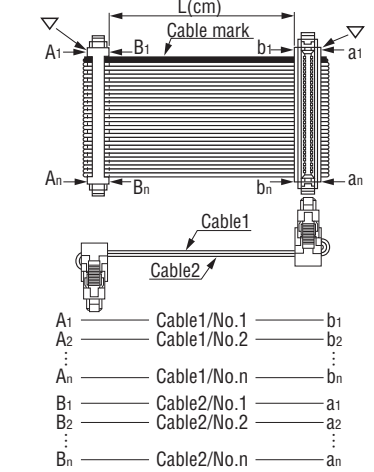
8822□-□□□-171□F-□□□ □-AO



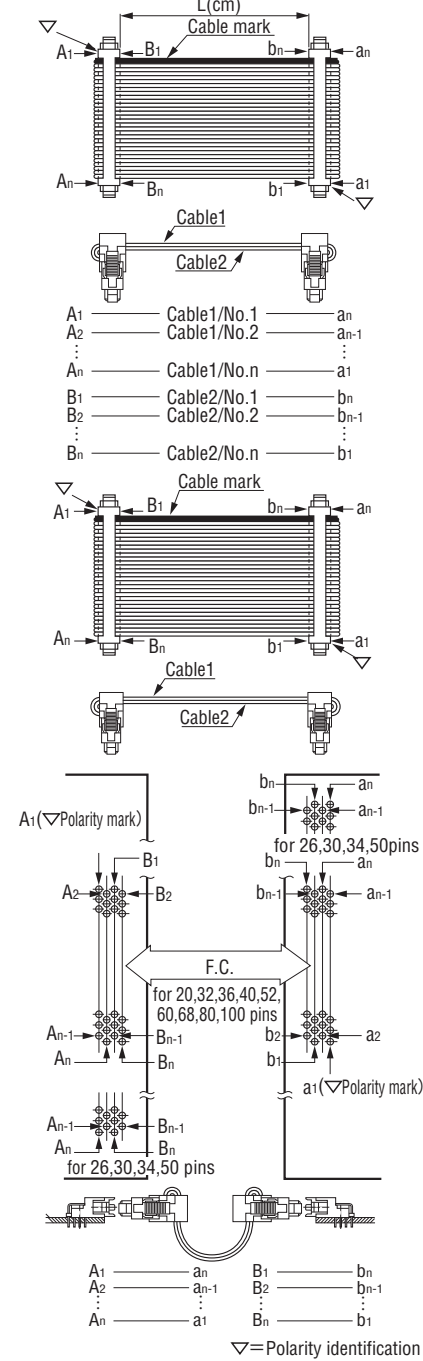
8822□-□□□-171□F-□□□ □-CO



8822□-□□□-171□F-□□□ □-AA



8822□-□□□-171□F-□□□ □-AC



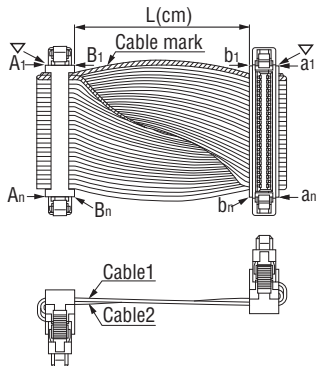
* Intermittent bonded and Twist&Flat cable have a restriction on cable length (L dimension) because they are terminated at the fused part.

* For AO and CO codes, orders are accepted in even quantities. * Harness end has an extra cable of approximate 1mm beyond the connector edge.

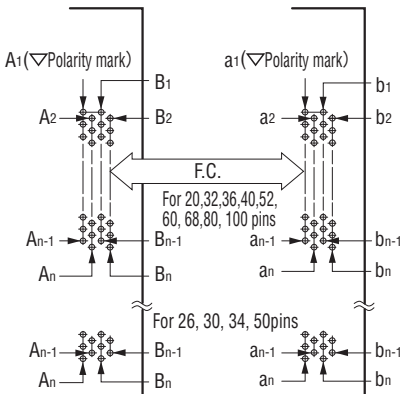
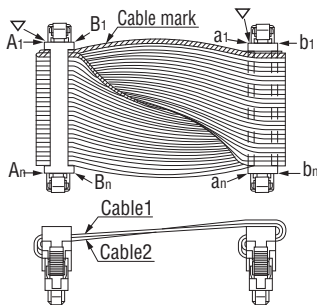
Note: Please be careful when trimming the cable after terminating the 8822E/8822 Series, to protect against the flat ribbon cable that extends beyond the edge of the cable connector body touching the PCB and creating a short circuit. (When used with Right angle Plug connector)

► Cable assemblies

8822□-□□□-171□F-□□□ □-BB
(Twist type)



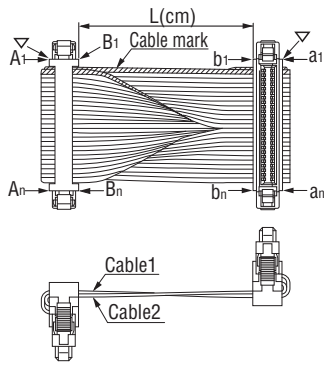
- A1 ——— ble1/No.1 ——— a1
- A2 ——— Cable1/No.2 ——— a2
- ⋮ ——— ——— ⋮
- An ——— Cable1/No.n ——— an
- B1 ——— Cable2/No.1 ——— b1
- B2 ——— Cable2/No.2 ——— b2
- ⋮ ——— ——— ⋮
- Bn ——— Cable2/No.n ——— bn



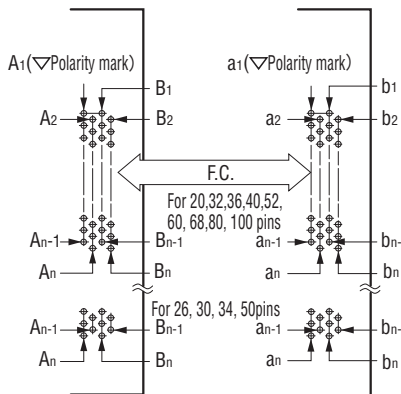
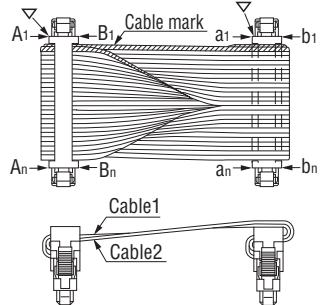
- A1 ——— a1 B1 ——— b1
- A2 ——— a2 B2 ——— b2
- ⋮ ——— ⋮ ⋮ ——— ⋮
- An ——— an Bn ——— bn

▽=Polarity identification

8822□-□□□-171□F-□□□ □-BBC
(Through type)



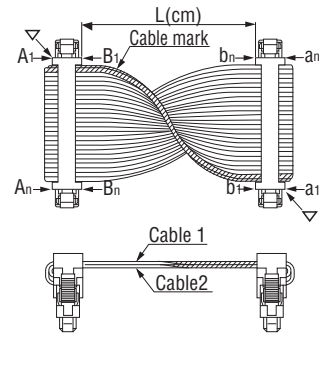
- A1 ——— Cable1/No.1 ——— a1
- A2 ——— Cable1/No.2 ——— a2
- ⋮ ——— ——— ⋮
- An ——— Cable1/No.n ——— an
- B1 ——— Cable2/No.1 ——— b1
- B2 ——— Cable2/No.2 ——— b2
- ⋮ ——— ——— ⋮
- Bn ——— Cable2/No.n ——— bn



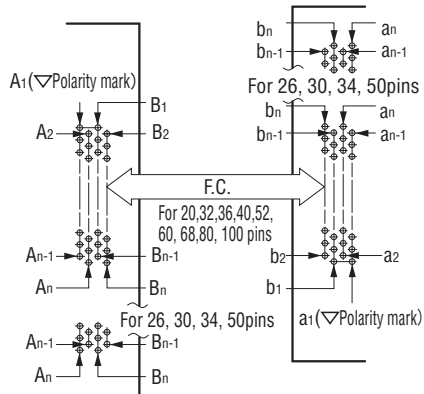
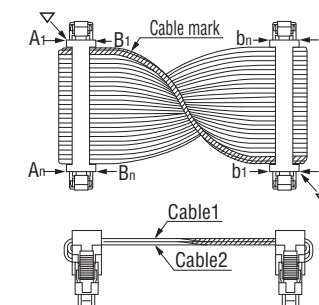
- A1 ——— a1 B1 ——— b1
- A2 ——— a2 B2 ——— b2
- ⋮ ——— ⋮ ⋮ ——— ⋮
- An ——— an Bn ——— bn

▽=Polarity identification

8822□-□□□-171□F-□□□ □-BD



- A1 ——— Cable1/No.1 ——— a1
- A2 ——— Cable1/No.2 ——— a2
- ⋮ ——— ——— ⋮
- An ——— Cable1/No.n ——— an
- B1 ——— Cable2/No.1 ——— b1
- B2 ——— Cable2/No.2 ——— b2
- ⋮ ——— ——— ⋮
- Bn ——— Cable2/No.n ——— bn



- A1 ——— a1 B1 ——— b1
- A2 ——— a2 B2 ——— b2
- ⋮ ——— ⋮ ⋮ ——— ⋮
- An ——— an Bn ——— bn

▽=Polarity identification

* Intermittent bonded and Twist&Flat cable have a restriction on cable length (L dimension) because they are terminated at the fused part.

* Harness end has an extra cable of approximate 1mm beyond the connector edge.

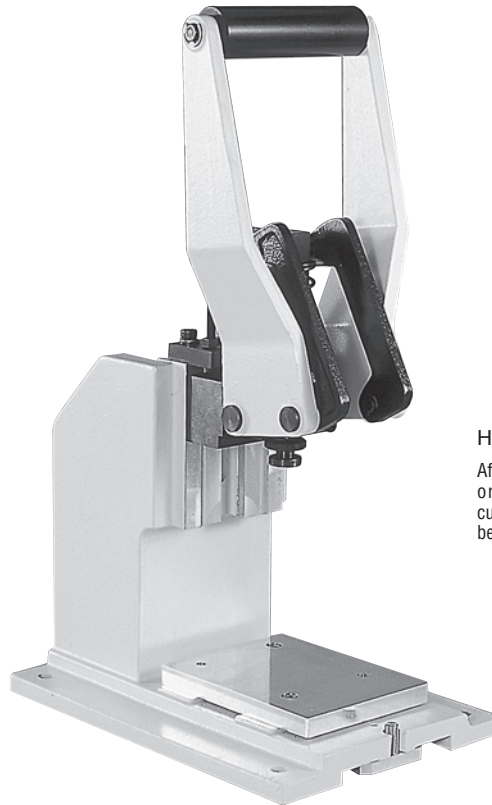
Note: Please be careful when trimming the cable after terminating the 8822E/8822 Series, to protect against the flat ribbon cable that extends beyond the edge of the cable connector body touching the PCB and creating a short circuit. (When used with Right angle Plug connector)

Cable assembly tools

A smooth procedure from cutting of a flat cable to terminal connection to a connector can be achieved.

A hand press (HP-12), cable terminator, and termination equipment, which are designed to be user-friendly and to achieve advanced workability, can be utilized for more speedy and reliable insulation displacement connection between a flat cable and receptacle-side connector (8822E/8822 Series).

The cable terminator and termination equipment can be easily replaced on a plate of the hand press. By attaching a relevant accessory, a series of tasks, such as those "from cutting of a cable to terminal connection to a connector" can be efficiently completed.



Hand press (HP-12)

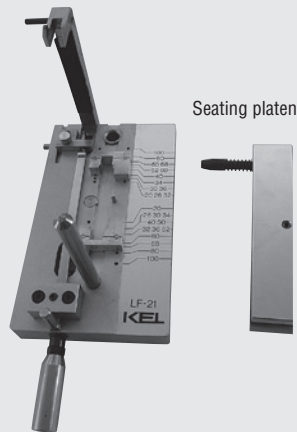
After mounting the cable terminator or termination equipment, both cutting and terminal connection can be operated by the handle.

◆ Locating fixture for HP-12

Termination equipment(LF-21)

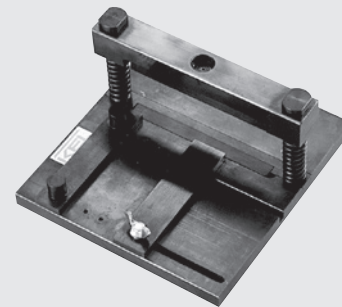
It is to be mounted on the plate of a hand press to facilitate the insulation displacement connection between a cable and connector (for 8822E/8822 Series).

* The termination equipment (LF-21) is supplied in combination with a seating platen.



Cable terminator(CT-15)

It is to be mounted on the plate of a hand press to cut a flat cable.



* Configuration of the termination equipment and cable terminator illustrated above may be changed due to their modifications.