

DT-E SERIES

RoHS
Compliant

COMPLIANT WITH SATA Rev3.0 REQUIREMENTS, 0.5mm PITCH FLOATING CONNECTOR / TYPE WITH POWER TERMINAL



FEATURES

- ▶ Compatible with high-speed serial transmission equivalent to SATA standard. The transmission characteristics meet all the required standards of SATA Rev3.0. (Differential impedance: 100Ω±15%)
- ▶ With 4 power contacts (6.0A per contact)
- ▶ The floating amount is secured at ±0.7mm in the XY direction.
- ▶ Highly reliable design with effective mating length of 1.5mm.
- ▶ With or without positioning posts.
- ▶ Seven types of signal terminals are available, ranging from 30 to 140 pins.
- ▶ The connection type is stacked mating.
- ▶ Stack heights range from 8mm to 30mm.

ORDER CODE

DT0 **E** - **S** - **T**

① ② ③ ④

*Please order in multiples of the quantity per package.

- ① **[Type]** Receptacle **DT00E** : Without positioning posts **DT01E** : With positioning posts
- ② **[Number of contacts]** **030** : 30pin **040** : 40pin **060** : 60pin **080** : 80pin **100** : 100pin **120** : 120pin **140** : 140pin
- ③ **[Contact tail style]** **S** : Straight
- ④ **[Anti-dust tape]** **T** : With anti-dust tape

ORDER CODE

DT1 **E** - **S** - **T**

① ② ③ ④ ⑤

*Please order in multiples of the quantity per package.

- ① **[Type]** Plug **DT10E** : Without positioning posts **DT11E** : With positioning posts
- ② **[Number of contacts]** **030** : 30pin **040** : 40pin **060** : 60pin **080** : 80pin **100** : 100pin **120** : 120pin **140** : 140pin
- ③ **[Contact tail style]** **S** : Straight
- ④ **[Stacked height]** (DT0□E-□□□S-T Mated situation) **8** : 8mm **10** : 10mm **15** : 15mm **20** : 20mm
(DT0□E-□□□FS-10-T Mated situation) **8** : 18mm **10** : 20mm **15** : 25mm **20** : 30mm
- ⑤ **[Anti-dust tape]** **T** : With anti-dust tape

*For details on DT0□E-□□□FS-10-T, please refer to the separate "DT-E-FS series" catalog.

SPECIFICATIONS

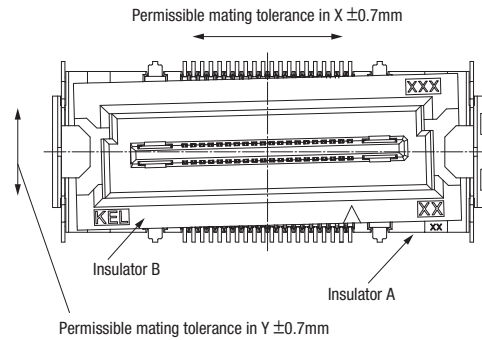
Material and plating		Electrical characteristics	
Insulator material	Glass-filled LCP(UL94V-0), Black	Rated current *1	0.4A per contact (Signal contact)
Signal/Power contact material	Copper alloy		6.0A per contact (Power contact)
Signal/Power contact plating	(Contact area) Gold over Nickel (Terminal area) Gold over Nickel	Contact resistance	80mΩ max. (Signal contact) 20mΩ max. (Power contact)
Retention clip material	Copper alloy	Dielectric withstanding voltage	200V AC for 1 minute
Retention clip plating	Tin over Nickel	Insulation resistance	100MΩ min. at 250V DC
Material of anti-dust tape	Polyimide	Operating temperature*2	-40°C to +105°C

*1 The rated current may be higher than the indicated current capacity depending on the number of contacts and the contact tail style. Please contact our sales representative for details.

*2 If you require a high heat resistant type (125°C compatible product), please contact our sales representative.

Floating structure

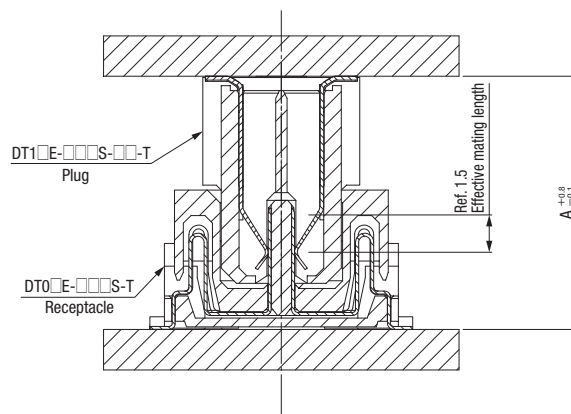
When the connector is mounted on the printed circuit board, a position error in the two directions of horizontal and vertical (XY direction) may occur at both connectors. In addition, if each printed circuit board is fixed to a case by screws after mating connectors, the connectors may have to compensate for the position error because a gap occurs during screwing the printed circuit board. A connector having a tolerance to compensate for such an error or gap caused by vibration is called a floating connector. The DT-E series is a 0.5mm fine pitch connector with $\pm 0.7\text{mm}$ floating structure and ensures sufficient compensation for position errors.



Mating drawing

Unit : mm

Stacked mating



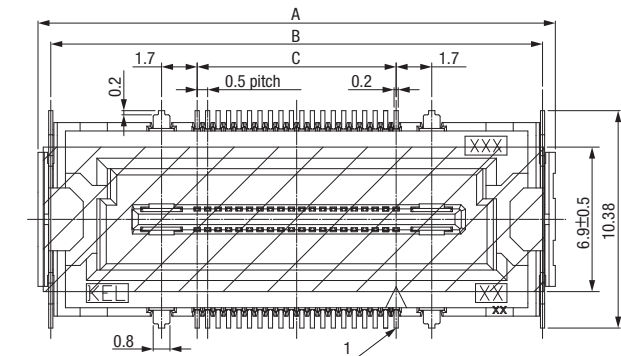
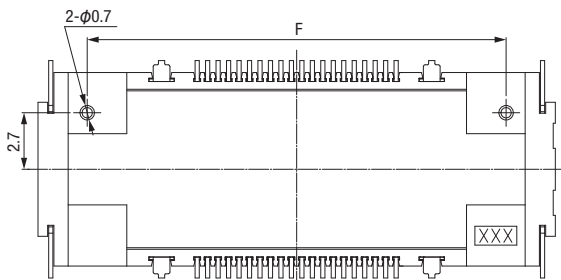
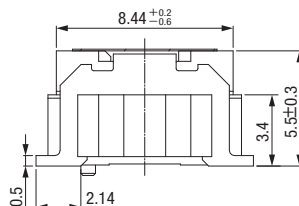
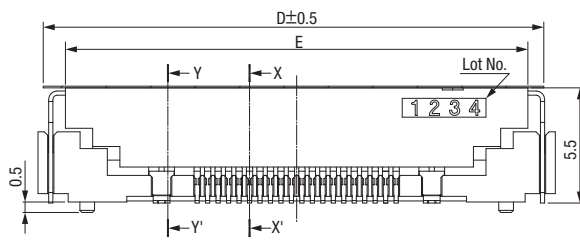
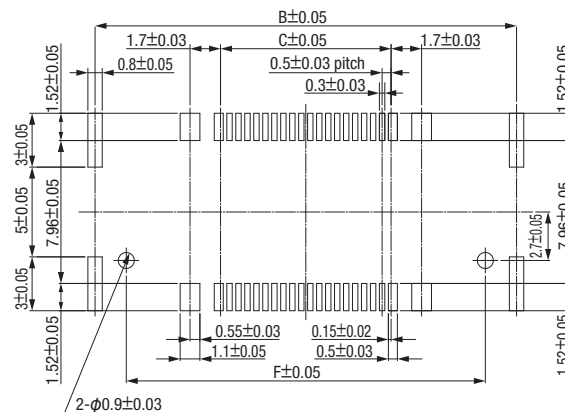
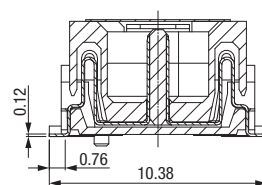
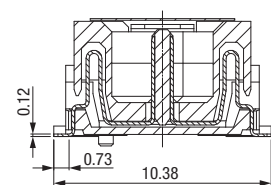
Product table / Dimensions

Part number	A
DT1□E-□□□S-8-T	8
DT1□E-□□□S-10-T	10
DT1□E-□□□S-15-T	15
DT1□E-□□□S-20-T	20

Stacked mating / Product table

Stacked height	Part number		Amount of movement	No. of contacts						
	Receptacle	Plug		30	40	60	80	100	120	140
8mm	DT0□E-□□□S-T	DT1□E-□□□S-8-T	$\pm 0.7\text{mm}$	✓	✓	✓	✓	✓	✓	✓
10mm		DT1□E-□□□S-10-T		✓	✓	✓	✓	✓	✓	✓
15mm		DT1□E-□□□S-15-T		✓	✓	✓	✓	✓	✓	✓
18mm	DT0□E-□□□FS-10-T	DT1□E-□□□S-8-T	$\pm 1.2\text{mm}$	✓	✓	✓	✓	✓	✓	*
20mm	DT0□E-□□□S-T	DT1□E-□□□S-20-T	$\pm 0.7\text{mm}$	✓	✓	✓	✓	✓	✓	✓
		DT1□E-□□□S-10-T		✓	✓	✓	✓	✓	✓	*
25mm	DT0□E-□□□FS-10-T	DT1□E-□□□S-15-T	$\pm 1.2\text{mm}$	✓	✓	✓	✓	✓	✓	*
30mm		DT1□E-□□□S-20-T		✓	✓	✓	✓	✓	✓	*

*If you need this number of contacts, please contact our sales representative.

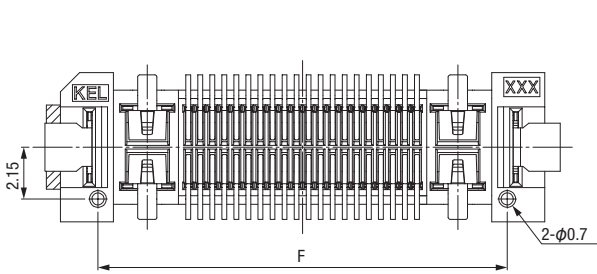
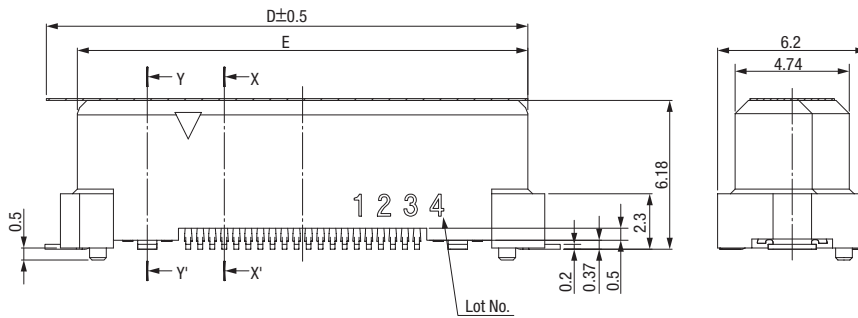
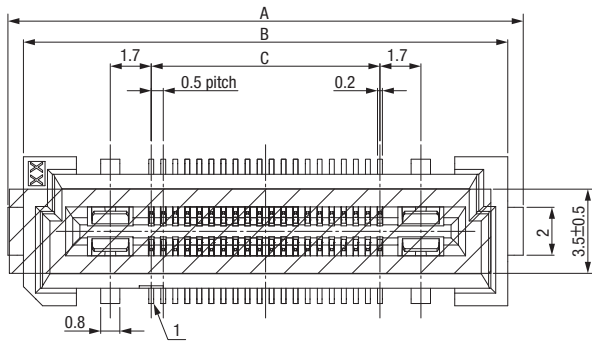
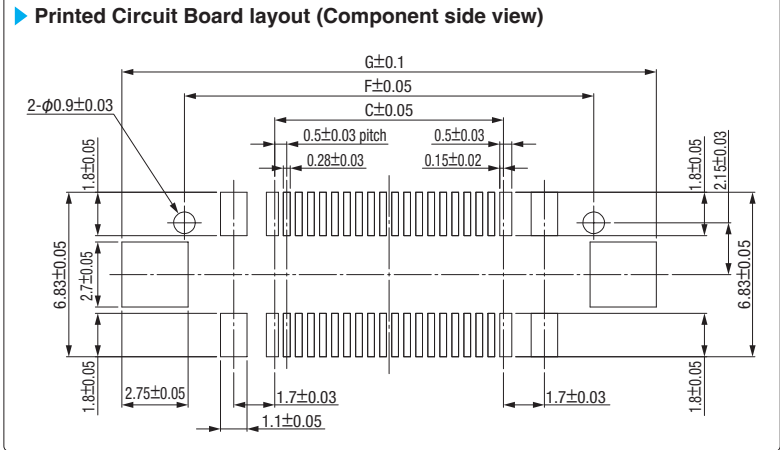

▶ Printed Circuit Board layout (Component side view)

X-X' Cross section

Y-Y' Cross section

 Packaging style
 Embossed tape

▶ Product table / Dimensions

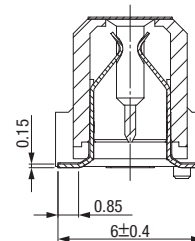
No. of contacts	Part number	A	B	C	D	E	F	No. of packaging
30	DT0□E-030S-T	22.2	20.98	7.0	21.4	19.58	17.5	820
40	DT0□E-040S-T	24.7	23.48	9.5	23.9	22.08	20.0	820
60	DT0□E-060S-T	29.7	28.48	14.5	28.9	27.08	25.0	820
80	DT0□E-080S-T	34.7	33.48	19.5	33.9	32.08	30.0	820
100	DT0□E-100S-T	39.7	38.48	24.5	38.9	37.08	35.0	820
120	DT0□E-120S-T	44.7	43.48	29.5	43.9	42.08	40.0	820
140	DT0□E-140S-T	49.7	48.48	34.5	48.9	47.08	45.0	820

DT1□E-□□□S-8-T (Plug, Straight, With power contacts)

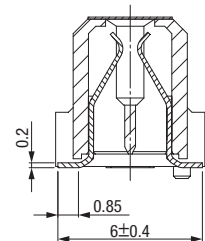
Unit : mm



X-X' Cross section



Y-Y' Cross section

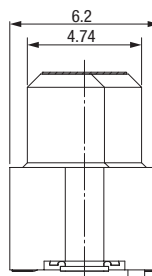
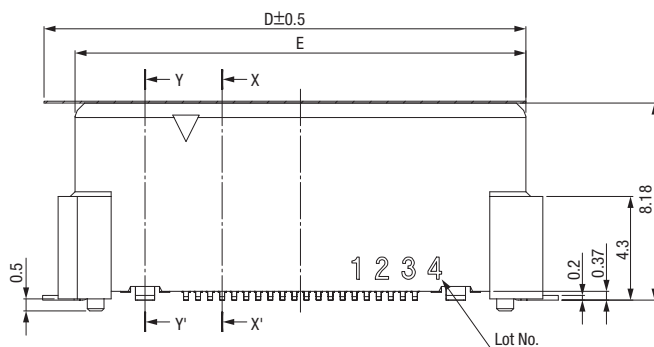
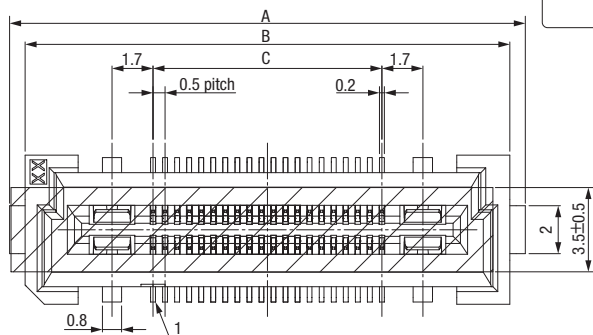
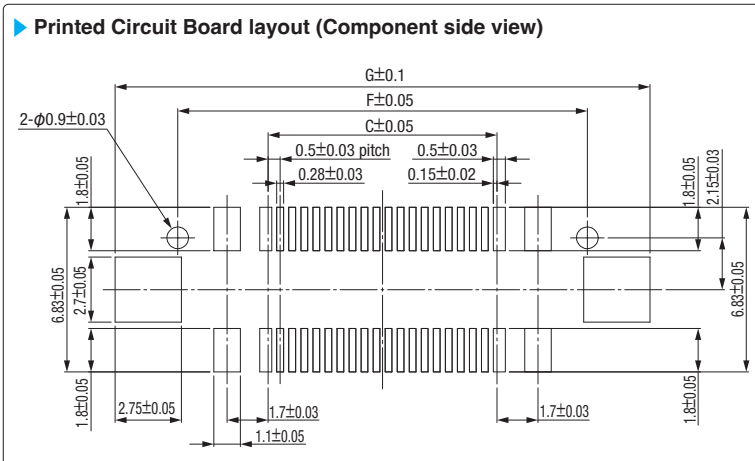


Packaging style

Embossed tape

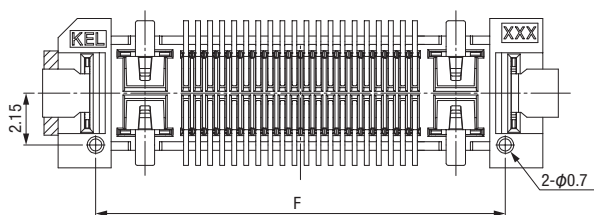
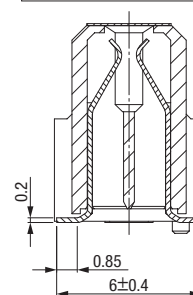
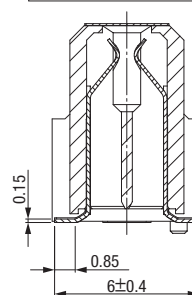
▶ Product table / Dimensions

No. of contacts	Part number	A	B	C	D	E	F	G	No. of packaging
30	DT1□E-030S-8-T	18.9	17.62	7.0	17.5	16.22	14.5	19.7	750
40	DT1□E-040S-8-T	21.4	20.12	9.5	20.0	18.72	17.0	22.2	750
60	DT1□E-060S-8-T	26.4	25.12	14.5	25.0	23.72	22.0	27.2	750
80	DT1□E-080S-8-T	31.4	30.12	19.5	30.0	28.72	27.0	32.2	750
100	DT1□E-100S-8-T	36.4	35.12	24.5	35.0	33.72	32.0	37.2	750
120	DT1□E-120S-8-T	41.4	40.12	29.5	40.0	38.72	37.0	42.2	750
140	DT1□E-140S-8-T	46.4	45.12	34.5	45.0	43.72	42.0	47.2	750



X-X' Cross section

Y-Y' Cross section

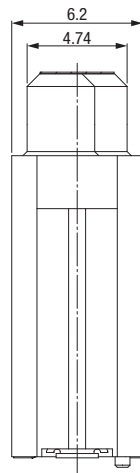
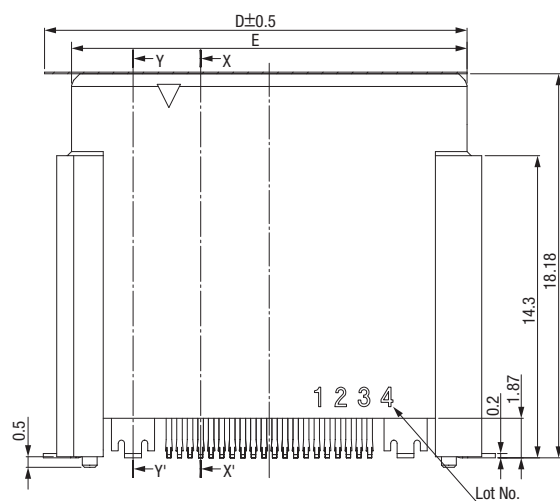
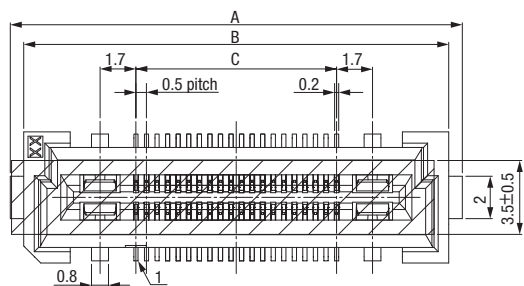
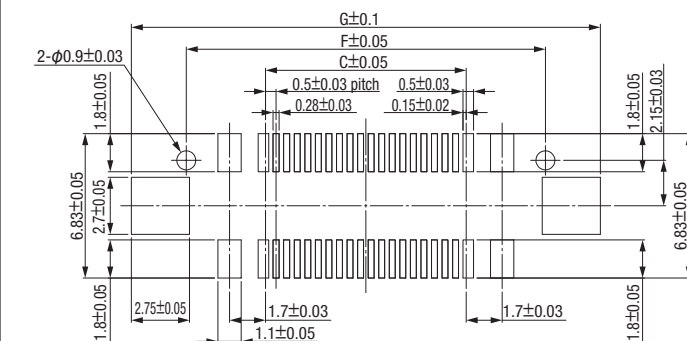
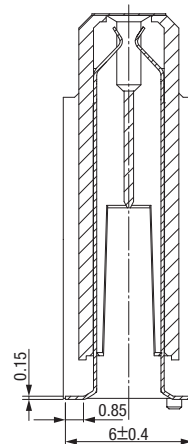
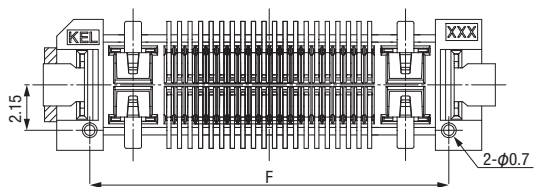
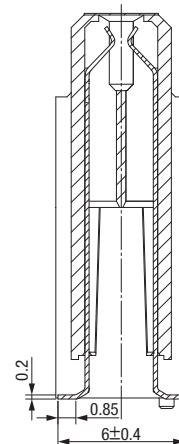


Packaging style

Embossed tape

▶ Product table / Dimensions

No. of contacts	Part number	A	B	C	D	E	F	G	No. of packaging
30	DT1□E-030S-10-T	18.9	17.62	7.0	17.5	16.22	14.5	19.7	600
40	DT1□E-040S-10-T	21.4	20.12	9.5	20.0	18.72	17.0	22.2	600
60	DT1□E-060S-10-T	26.4	25.12	14.5	25.0	23.72	22.0	27.2	600
80	DT1□E-080S-10-T	31.4	30.12	19.5	30.0	28.72	27.0	32.2	600
100	DT1□E-100S-10-T	36.4	35.12	24.5	35.0	33.72	32.0	37.2	600
120	DT1□E-120S-10-T	41.4	40.12	29.5	40.0	38.72	37.0	42.2	600
140	DT1□E-140S-10-T	46.4	45.12	34.5	45.0	43.72	42.0	47.2	600

▶ Printed Circuit Board layout (Component side view)

X-X' Cross section

Y-Y' Cross section


Packaging style

Embossed tape

▶ Product table / Dimensions

No. of contacts	Part number	A	B	C	D	E	F	G	No. of packaging
30	DT1□E-030S-20-T	18.9	17.62	7.0	17.5	16.22	14.5	19.7	260
40	DT1□E-040S-20-T	21.4	20.12	9.5	20.0	18.72	17.0	22.2	260
60	DT1□E-060S-20-T	26.4	25.12	14.5	25.0	23.72	22.0	27.2	260
80	DT1□E-080S-20-T	31.4	30.12	19.5	30.0	28.72	27.0	32.2	260
100	DT1□E-100S-20-T	36.4	35.12	24.5	35.0	33.72	32.0	37.2	260
120	DT1□E-120S-20-T	41.4	40.12	29.5	40.0	38.72	37.0	42.2	260
140	DT1□E-140S-20-T	46.4	45.12	34.5	45.0	43.72	42.0	47.2	260

Please contact our sales representative.

KEL Company Profile

Trade Name: KEL CORPORATION

Established : July 23, 1962

Total Capital: 1,617 Million Yen

President : Akira Kasuga

Head Office : 6-17-7 Nagayama, Tama,

Address Tokyo 206-0025, Japan

URL : www.kel.jp

Factories

- Yamanashi Factory (Nishi-Yatsushiro, Yamanashi)
- Nagano Factory (Kita-azumi, Nagano)
- Minami-Alps Factory (Minami-Alps, Yamanashi)

B.C.E. s.r.l.

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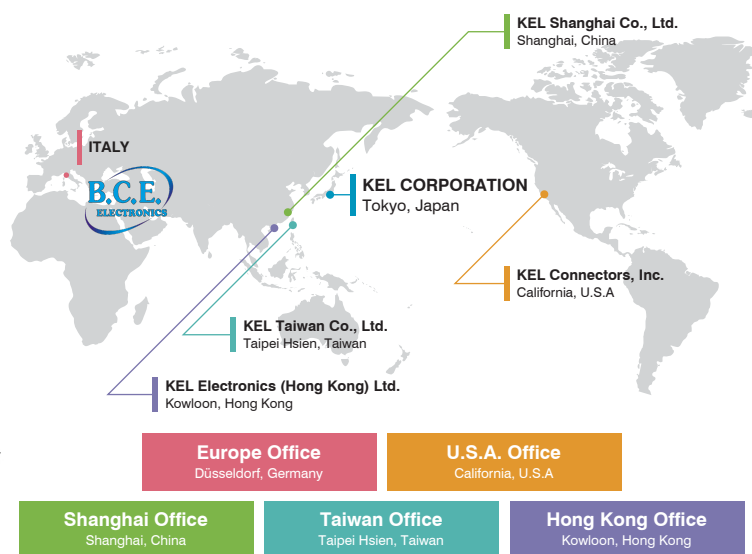
www.bce.it - E-mail: bce@bce.it

www.kel.jp

KEL provides the products from a connector to a rack.

KEL CORPORATION

Global Network



More Information
https://www.kel.jp/feature/floating_lp_2



B.C.E. S.r.l.

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