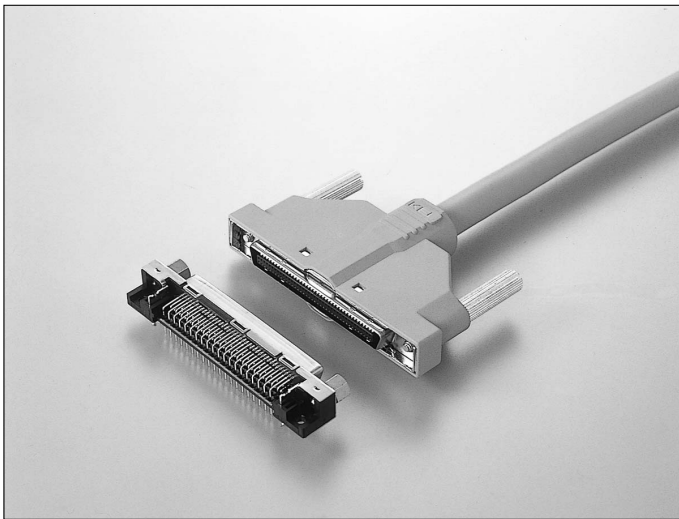


**1mm Pitch 2 Piece Connector for EMI  
Shielded Interface Connector**

# **DJ40/50** SERIES





## FEATURES

- 1mm(0.039") pitch connector for interface connection
- Shell Cover offers excellent EMI protection
- Screw locking mechanism maintains stable mating
- D-shape housing prevents mis-insertion
- 30% smaller than standard 1.27mm pitch connector
- Prepared 80 pin
- Reliable contact design
- Available with or without mounting hooks (Receptacle)
- RoHS compliance

## Outline&Application

### <Outline>

- The DJ40/50 Series are 1mm pitch EMI shielded interface connectors.
- Contact reliability expertise was cultivated through the same proven reliability used in KEL's DJ Series concept for media devices.
- Due to its narrow(1mm) pitch characteristics the DJ40/50 can be best utilized for electric devices by which miniaturization, high-density and multi-functionalization are desired.

### <Application>

- This connector is ideal for office automation, communication, factory automation and medical control device apparatuses.

## SPECIFICATIONS

### ■ Connector

- Insulator material :Glass-filled 66 Nylon (UL 94V-0), Black
- Alignment plate material :[DJ5□ series]  
Glass-filled 66 Nylon (UL 94V-0), Black  
[DJ40 series]  
Glass-filled 6T Nylon (UL 94V-0), Black
- Assembly cover material :[DJ40 series]  
Glass-filled 66 Nylon (UL 94V-0), Black
- Contact material :Copper alloy
- Contact plating :Contact area : Gold over Nickel(0.25μm min.)  
[DJ5□ series]  
Terminal area :Tin copper over Nickel(2μm min.)  
[DJ40 series]  
I.D.C. area : Gold over Nickel(0.05μm min.)
- Shell material :Steel
- Shell plating :Nickel over Copper alloy

### ■ Shield cover &Screw lock

#### [DJ40 series]

- Inner cover material :Steel
- Inner cover plating :Copper over Nickel
- Outer cover material :Glass-filled PPO (UL94V-0), Gray
- Screw lock material :Steel
- Screw lock plating :Nickel

### ■ Mounting hook & Nut

#### [DJ5□ series]

- Mounting hook materials :Phosphor bronze
- Mounting hook plating :Tin copper over Nickel
- Hexagon nut material :Steel
- Hexagon nut plating :Nickel
- Jack post material :Steel
- Jack post plating :Nickel

### ■ Electric specification

- Current rating :0.5A per contact
- Contact resistance :50mΩ max. (Except for the cable resistance)
- Dielectric withstanding voltage :300V AC for 1 minute
- Insulation resistance :1000MΩ min. at 500V DC

● ORDER CODE

● Plug

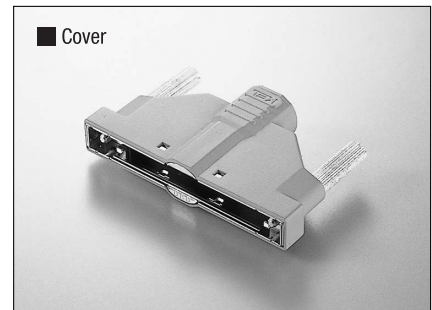


**DJ40-080 B D-F**

- F : RoHS Compliance
- Plating of contact area  
D : Au0.25 $\mu$ m min.
- Cable type  
B : AWG28(7/0.127) Laminated wire
- Number of contacts  
080 : 80 pin
- Series name  
DJ40 : 1mm pitch interface connector  
(Plug, assembly type)

**DJ40-080-CVR**

- Cover
- Number of contacts  
080 : 80 pin
- Series name  
DJ40 : 1mm pitch interface connector  
(Plug, assembly type)



● Receptacle



**DJ50-080 L D-F**

- F : RoHS Compliance
- Plating of contact area  
D : Au0.25 $\mu$ m min.
- Contact tail style  
L : Right angle
- Number of contacts  
080 : 80 pin
- Series name  
DJ50 : With mounting hooks  
DJ51 : Without mounting hooks

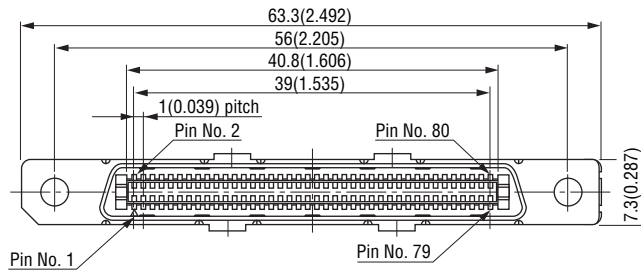
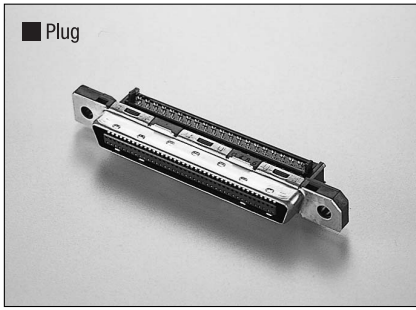
**DJ50-SR-**

- Mounted panel thickness  
1 : No panel(0mm)  
2 : 1mm
- Jack post
- Series name  
DJ50 : For Receptacle

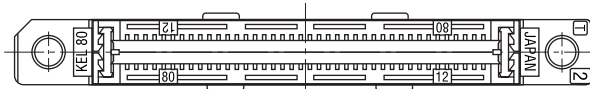
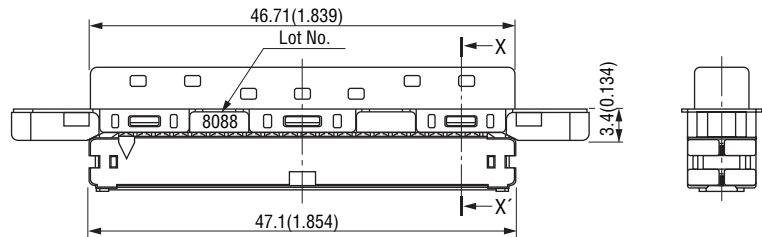
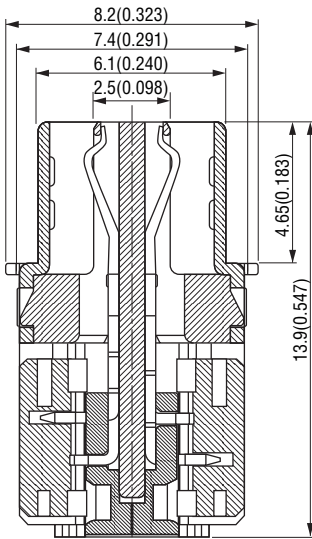


DJ40-080BD-F (Plug)

Unit:mm(inch)



X-X' Cross Section



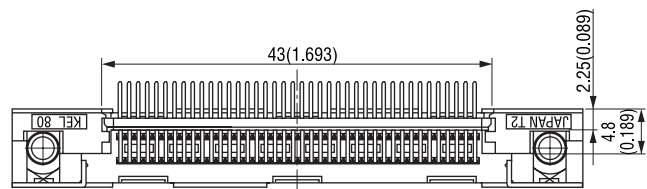
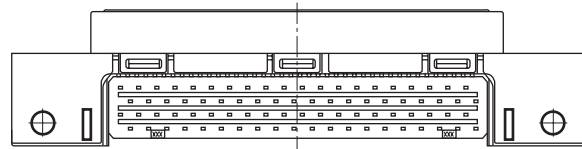
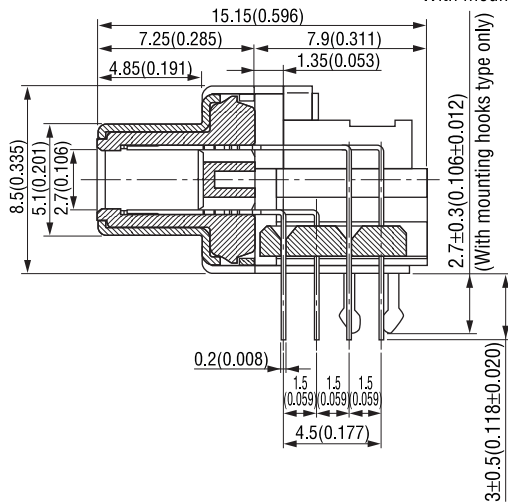
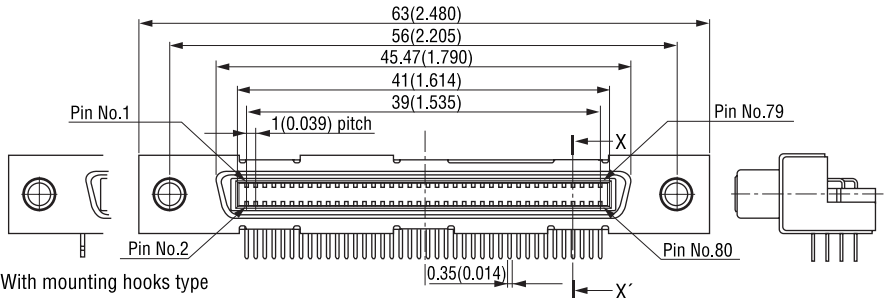
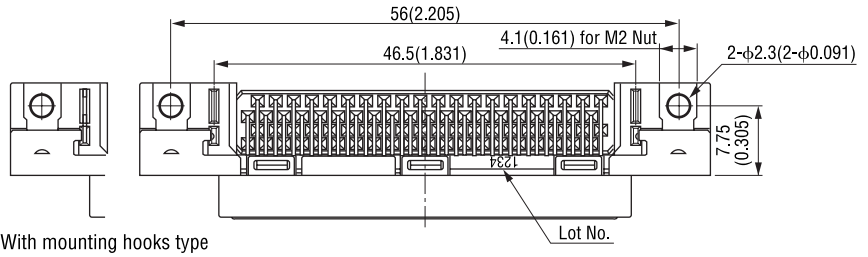
Packaging style
Pipe

Product Table

No. of contacts	Part Number	Number of packaging
80	DJ40-080BD-F	8

DJ5□-080LD-F (Receptacle)

Unit : mm(inch)

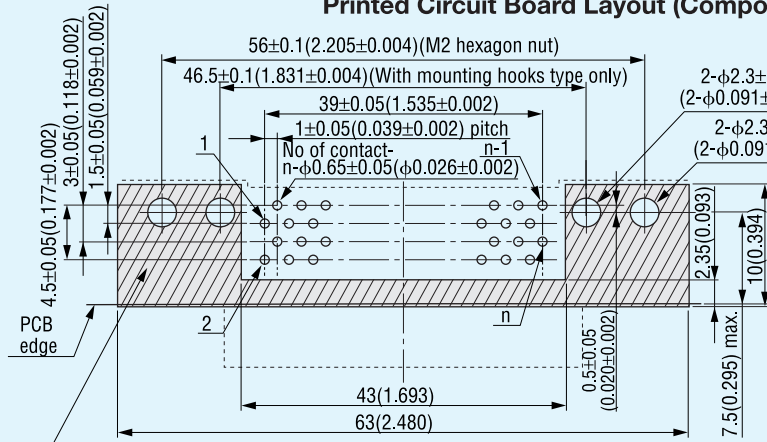


■ Product Table

No. of contacts	Part Number	Number of packaging
80	DJ5□-080LD-F	8

Packaging style
Pipe

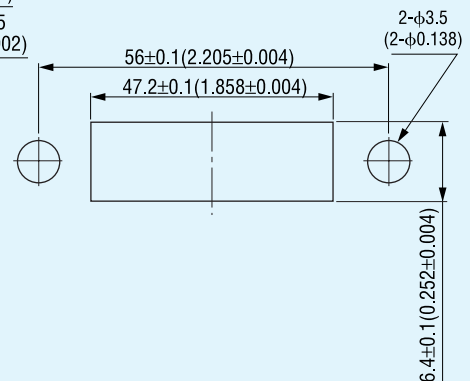
Printed Circuit Board Layout (Component Side View)

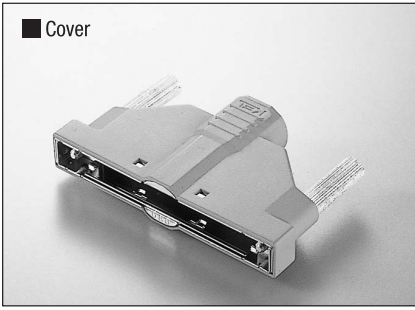
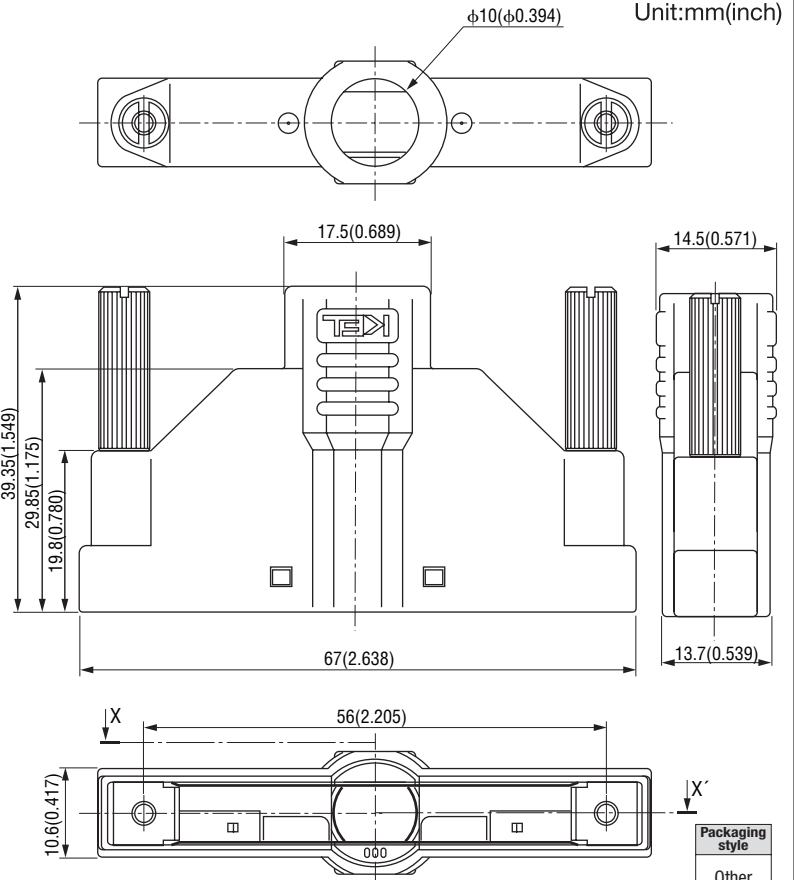
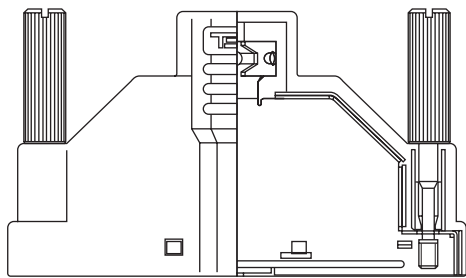


Recommended PCB Thickness  $t=1.6\pm 0.2(0.063\pm 0.008)$   
 "n" is number of contact.

■ Panel cut out

Mounted panel thickness: 1mm



**DJ40-080-CVR (Cover)**
**Cover**

**X-X' Cross Section**

**Product Table**

No. of contacts	Part Number	Number of packaging
80	DJ40-080-CVR	20

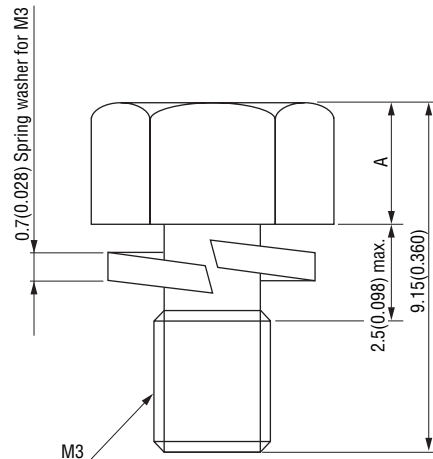
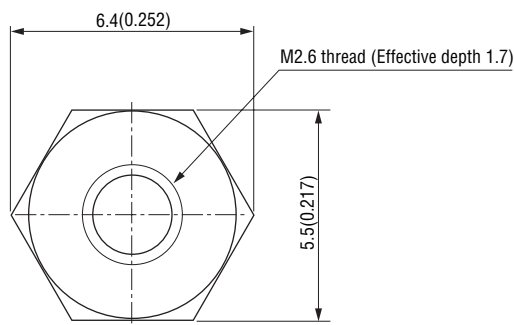
Packaging style
Other

**DJ50-SR-□ (Jack post)**
**Jack post**

**Product Table / Dimensions**

Part Number	Mounted panel thickness	A	Number of packaging
DJ50-SR-1	0 (No panel)	4.2(0.165)	200
DJ50-SR-2	1 (0.039)	3.2(0.126)	200

Packaging style
Other



### DJ40 Series Harness Wiring Diagram

#### ORDER CODE

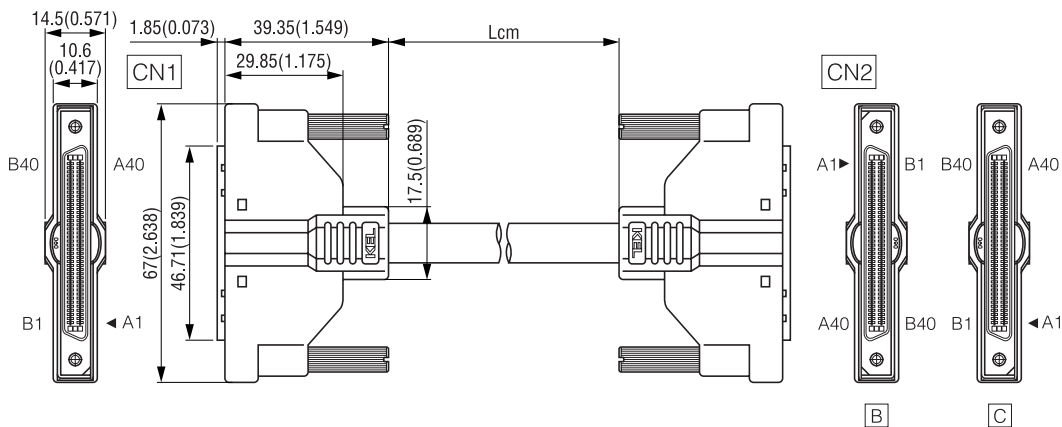
**DJ40-080 B D-XXX X-X X**

- Wiring identifier  
H : Standard wiring  
J : Sub-standard wiring
- Connector direction  
B : Standard  
C : Sub-standard
- Wiring method  
W : Double  
S : Single
- ★ When ordering single-wired products, please specify the order quantity as an even number.
- Cable Length  
L dimensions (cm)
- Contact plating thickness  
D : 0.25 $\mu$ m min.
- Compatible Cable  
B : AWG28 (7/0.127) Fused cable
- Number of contacts  
080 : 80pin
- Series name  
DJ40 : 1mm pitch I/O connector plug, pleasure welded type

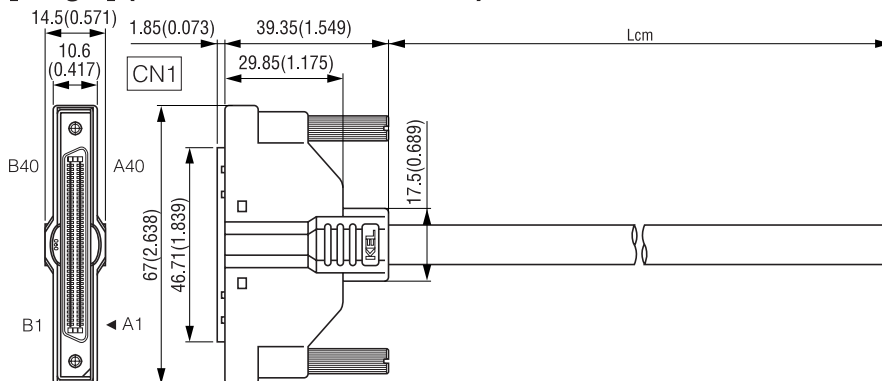
#### Harness Diagram

Unit : mm(inch)

##### [Double] (DJ40-080 BD-XXX W-XX)



##### [Single] (DJ40-080 BD-XXX S-BX)



### DJ40/50 Series Wiring Table

#### [ Standard wiring table ]

Wire No.	Twist No.	Wire Color	Mark Color	Marking	CN1 Pin No.	CN2 Pin No.
1	1	Orange	Red		A1	A1
2	1	Orange	Black		A2	A2
3	2	Gray	Red		A3	A3
4	2	Gray	Black		A4	A4
5	3	White	Red		A5	A5
6	3	White	Black		A6	A6
7	4	Yellow	Red		A7	A7
8	4	Yellow	Black		A8	A8
9	5	Pink	Red		A9	A9
10	5	Pink	Black		A10	A10
11	6	Orange	Red		A11	A11
12	6	Orange	Black		A12	A12
13	7	Gray	Red		A13	A13
14	7	Gray	Black		A14	A14
15	8	White	Red		A15	A15
16	8	White	Black		A16	A16
17	9	Yellow	Red		A17	A17
18	9	Yellow	Black		A18	A18
19	10	Pink	Red		A19	A19
20	10	Pink	Black		A20	A20

Wire No.	Twist No.	Wire Color	Mark Color	Marking	CN1 Pin No.	CN2 Pin No.
1	1	Orange	Red		A21	A21
2	1	Orange	Black		A22	A22
3	2	Gray	Red		A23	A23
4	2	Gray	Black		A24	A24
5	3	White	Red		A25	A25
6	3	White	Black		A26	A26
7	4	Yellow	Red		A27	A27
8	4	Yellow	Black		A28	A28
9	5	Pink	Red		A29	A29
10	5	Pink	Black		A30	A30
11	6	Orange	Red		A31	A31
12	6	Orange	Black		A32	A32
13	7	Gray	Red		A33	A33
14	7	Gray	Black		A34	A34
15	8	White	Red		A35	A35
16	8	White	Black		A36	A36
17	9	Yellow	Red		A37	A37
18	9	Yellow	Black		A38	A38
19	10	Pink	Red		A39	A39
20	10	Pink	Black		A40	A40

Wire No.	Twist No.	Wire Color	Mark Color	Marking	CN1 Pin No.	CN2 Pin No.
1	1	Orange	Red		B1	B1
2	1	Orange	Black		B2	B2
3	2	Gray	Red		B3	B3
4	2	Gray	Black		B4	B4
5	3	White	Red		B5	B5
6	3	White	Black		B6	B6
7	4	Yellow	Red		B7	B7
8	4	Yellow	Black		B8	B8
9	5	Pink	Red		B9	B9
10	5	Pink	Black		B10	B10
11	6	Orange	Red		B11	B11
12	6	Orange	Black		B12	B12
13	7	Gray	Red		B13	B13
14	7	Gray	Black		B14	B14
15	8	White	Red		B15	B15
16	8	White	Black		B16	B16
17	9	Yellow	Red		B17	B17
18	9	Yellow	Black		B18	B18
19	10	Pink	Red		B19	B19
20	10	Pink	Black		B20	B20

Wire No.	Twist No.	Wire Color	Mark Color	Marking	CN1 Pin No.	CN2 Pin No.
1	1	Orange	Red		B21	B21
2	1	Orange	Black		B22	B22
3	2	Gray	Red		B23	B23
4	2	Gray	Black		B24	B24
5	3	White	Red		B25	B25
6	3	White	Black		B26	B26
7	4	Yellow	Red		B27	B27
8	4	Yellow	Black		B28	B28
9	5	Pink	Red		B29	B29
10	5	Pink	Black		B30	B30
11	6	Orange	Red		B31	B31
12	6	Orange	Black		B32	B32
13	7	Gray	Red		B33	B33
14	7	Gray	Black		B34	B34
15	8	White	Red		B35	B35
16	8	White	Black		B36	B36
17	9	Yellow	Red		B37	B37
18	9	Yellow	Black		B38	B38
19	10	Pink	Red		B39	B39
20	10	Pink	Black		B40	B40

#### [ Sub-Standard wiring table ]

Wire No.	Twist No.	Wire Color	Mark Color	Marking	CN1 Pin No.	CN2 Pin No.
1	1	Orange	Red		A1	A1
2	1	Orange	Black		B1	B1
3	2	Gray	Red		A2	A2
4	2	Gray	Black		B2	B2
5	3	White	Red		A3	A3
6	3	White	Black		B3	B3
7	4	Yellow	Red		A4	A4
8	4	Yellow	Black		B4	B4
9	5	Pink	Red		A5	A5
10	5	Pink	Black		B5	B5
11	6	Orange	Red		A6	A6
12	6	Orange	Black		B6	B6
13	7	Gray	Red		A7	A7
14	7	Gray	Black		B7	B7
15	8	White	Red		A8	A8
16	8	White	Black		B8	B8
17	9	Yellow	Red		A9	A9
18	9	Yellow	Black		B9	B9
19	10	Pink	Red		A10	A10
20	10	Pink	Black		B10	B10

Wire No.	Twist No.	Wire Color	Mark Color	Marking	CN1 Pin No.	CN2 Pin No.
1	1	Orange	Red		A11	A11
2	1	Orange	Black		B11	B11
3	2	Gray	Red		A12	A12
4	2	Gray	Black		B12	B12
5	3	White	Red		A13	A13
6	3	White	Black		B13	B13
7	4	Yellow	Red		A14	A14
8	4	Yellow	Black		B14	B14
9	5	Pink	Red		A15	A15
10	5	Pink	Black		B15	B15
11	6	Orange	Red		A16	A16
12	6	Orange	Black		B16	B16
13	7	Gray	Red		A17	A17
14	7	Gray	Black		B17	B17
15	8	White	Red		A18	A18
16	8	White	Black		B18	B18
17	9	Yellow	Red		A19	A19
18	9	Yellow	Black		B19	B19
19	10	Pink	Red		A20	A20
20	10	Pink	Black		B20	B20

Wire No.	Twist No.	Wire Color	Mark Color	Marking	CN1 Pin No.	CN2 Pin No.
1	1	Orange	Red		A21	A21
2	1	Orange	Black		B21	B21
3	2	Gray	Red		A22	A22
4	2	Gray	Black		B22	B22
5	3	White	Red		A23	A23
6	3	White	Black		B23	B23
7	4	Yellow	Red		A24	A24
8	4	Yellow	Black		B24	B24
9	5	Pink	Red		A25	A25
10	5	Pink	Black		B25	B25
11	6	Orange	Red		A26	A26
12	6	Orange	Black		B26	B26
13	7	Gray	Red		A27	A27
14	7	Gray	Black		B27	B27
15	8	White	Red		A28	A28
16	8	White	Black		B28	B28
17	9	Yellow	Red		A29	A29
18	9	Yellow	Black		B29	B29
19	10	Pink	Red		A30	A30
20	10	Pink	Black		B30	B30

Wire No.	Twist No.	Wire Color	Mark Color	Marking	CN1 Pin No.	CN2 Pin No.
1	1	Orange	Red		A31	A31
2	1	Orange	Black		B31	B31
3	2	Gray	Red		A32	A32
4	2	Gray	Black		B32	B32
5	3	White	Red		A33	A33
6	3	White	Black		B33	B33
7	4	Yellow	Red		A34	A34
8	4	Yellow	Black		B34	B34
9	5	Pink	Red		A35	A35
10	5	Pink	Black		B35	B35
11	6	Orange	Red		A36	A36
12	6	Orange	Black		B36	B36
13	7	Gray	Red		A37	A37
14	7	Gray	Black		B37	B37
15	8	White	Red		A38	A38
16	8	White	Black		B38	B38
17	9	Yellow	Red		A39	A39
18	9	Yellow	Black		B39	B39
19	10	Pink	Red		A40	A40
20	10	Pink	Black		B40	B40

● Specifications and dimensions are subject to change without notice.