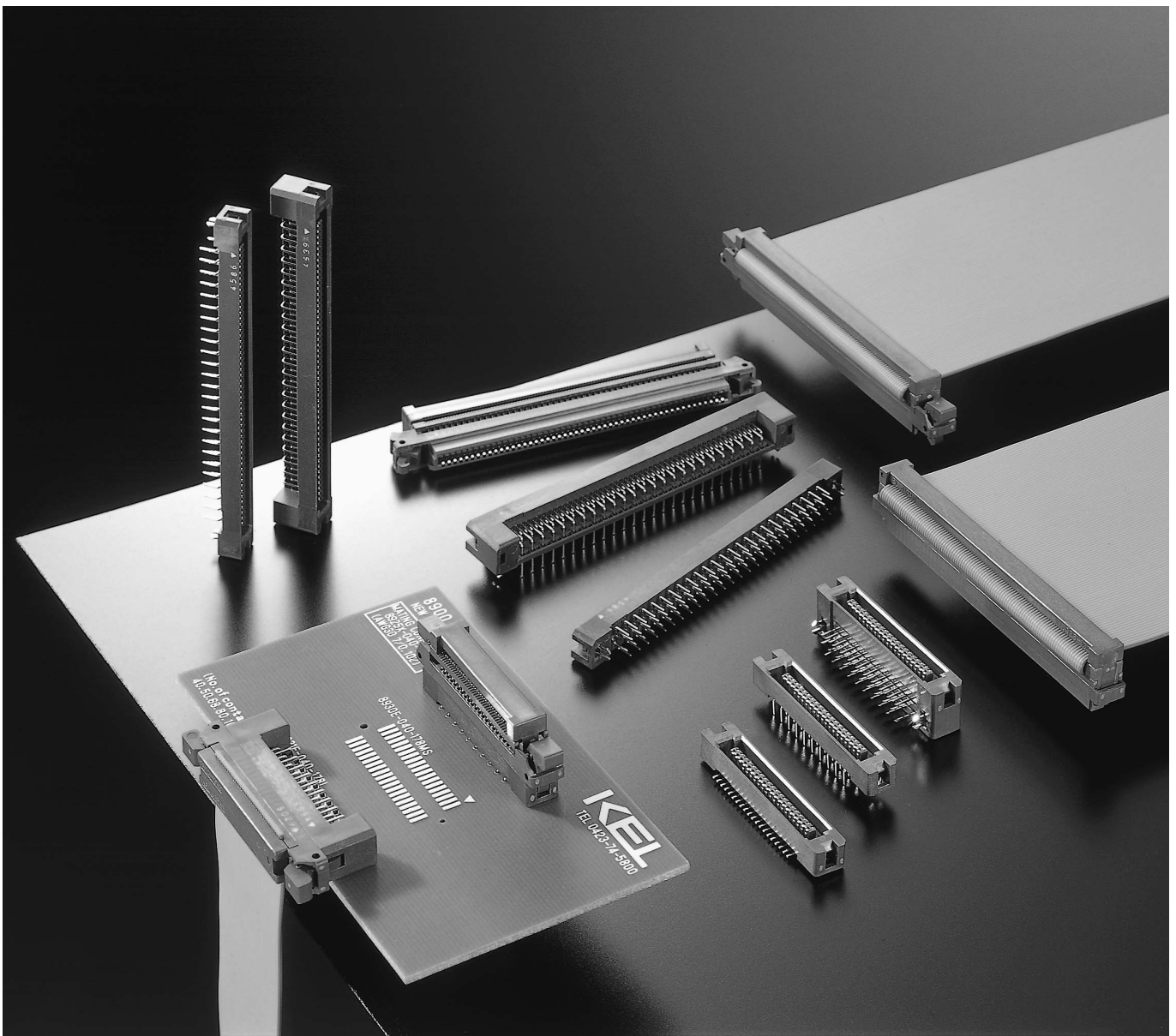
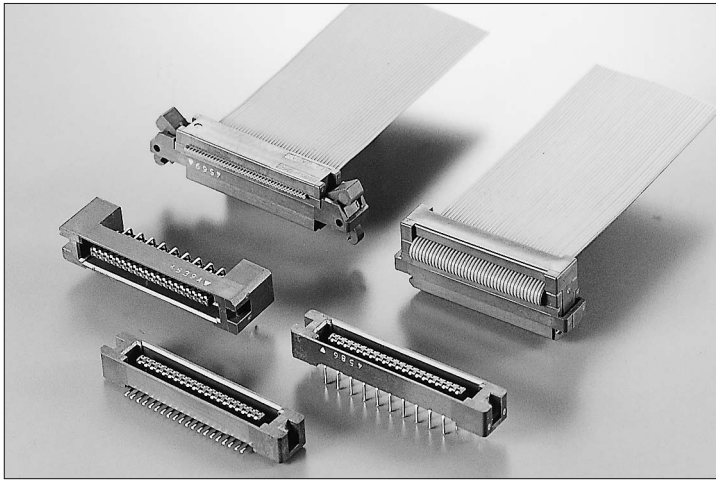


IDC for 25 mil(0.635mm) flat cable with  
One-touch locking ejector system.  
50mil(1.27mm) PITCH 2PIECE CONNECTOR

# 8925(E) SERIES





**FEATURES**

- Mating process is reliable and self-aligning
- Low insertion and withdrawal force
- Insulator protects contacts from damage
- Mating height is only 11.8mm (8925R)
- Ability to make “daisy chain” cable assemblies
- Cable connector (Receptacle) is able to mate with 8913 series
- One-touch locking ejector system (8925E and 8925R series)
- Board connector variations: Straight, Right angle and SMT
- RoHS compliance

**SPECIFICATIONS**

- Insulator : Receptacle (8925E/8925R/8925); Glass-filled Nylon 66 (UL 94V-0), Brown  
 Plug (8930E/8931E); Glass-filled PPS (UL 94V-0), Brown
- Contact material : Copper alloy
- Plating : Contact area ; 0.05μm min. Gold over Nickel  
 Terminal area ; Gold over Nickel
- Current rating : 0.5A per contact
- Contact resistance : 40mΩ max.
- Dielectric withstanding voltage : 300V AC for 1 minute
- Insulation resistance : 1,000MΩ min. at 250V DC
- Flat cable : #30 AWG (7/0.102), 0.635mm (25mil) pitch
- Insulation force(max.): 20 pin / 1.9kg, 30 pin / 2.9kg  
 40 pin / 3.8kg, 50 pin / 4.8kg  
 60 pin / 5.7kg, 68 pin / 6.5kg  
 80 pin / 7.6kg, 100 pin / 9.5kg
- Withdrawal force(min.): 20 pin / 0.3kg, 30 pin / 0.4kg  
 (w / o locking force) 40 pin / 0.6kg, 50 pin / 0.7kg  
 60 pin / 0.9kg, 68 pin / 1.0kg  
 80 pin / 1.2kg, 100 pin / 1.5kg
- Operating temperature : -55°C to +85°C

**ORDER CODE**

■RECEPTACLE(For Cable)

**8925** - [ ] - **179** - **F**

- Series name  
 8925 : Non ejector type, With strain relief (Except 20, 30, 60 pins)  
 8925E : Ejector type, With strain relief  
 8925R : Ejector type, Without strain relief
- Number of contacts  
 020 : 20 pin 030 : 30 pin  
 040 : 40 pin 050 : 50 pin  
 060 : 60 pin 068 : 68 pin  
 080 : 80 pin 100 : 100 pin
- Contact name
- F : RoHS Compliance

■PLUG(For PCB)

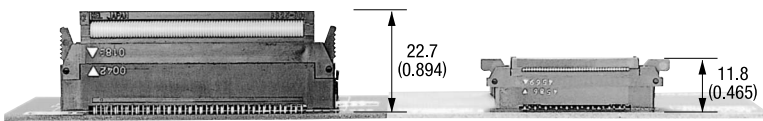
**893** [E] - [ ] - **178** [ ] - **F**

- Series name  
 8930E : SMT  
 8931E : Through hole, With hooks
- Number of contacts  
 020 : 20 pin  
 030 : 30 pin  
 040 : 40 pin  
 050 : 50 pin  
 060 : 60 pin  
 068 : 68 pin  
 080 : 80 pin  
 100 : 100 pin
- Contact tail style  
 S : Straight, Through hole  
 L : Right angle, Through hole  
 MS : Straight, SMT (8930E)
- Contact name
- F : RoHS Compliance

**PRODUCT CONCEPT AND FEATURES**

**Standard Type**

**Low Profile Type**



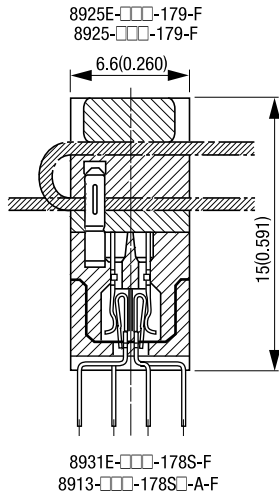
**8825E / 8830E**

**8925R / 8930E**

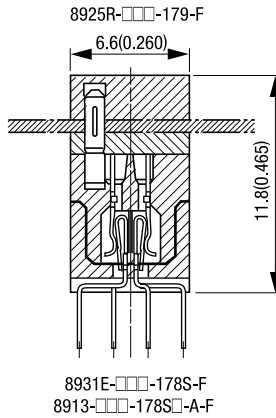
- The 8925(E/R) series uses the same proven contact design as the 8900 series of board-to-board connectors. In addition, this low profile IDC connector system features a new locking ejector mechanism. The 8925R/8930E series has a mated height of 11.8mm which is significantly less than previous IDC connector systems. (KEL 8825E/8830E series)

## Mating Variations

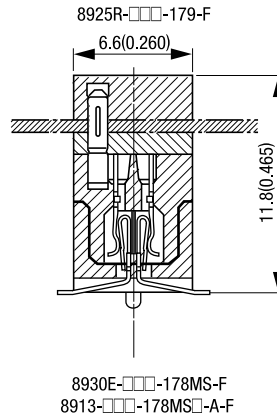
Unit:mm(inch)



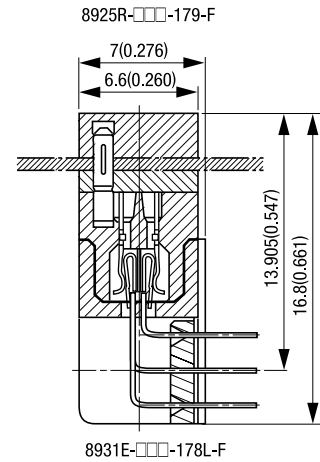
With Strain Relief



Without Strain Relief



Without Strain Relief



Without Strain Relief

## 8925(E) Series Mating Combination

PLUG CONNECTOR	RECEPTACLE CONNECTOR		
	8925-□□-179-F	8925E-□□-179-F	8925R-□□-179-F
8911-□□-178S□-A-F	No	No	No
8911-□□-178S□-C-F	No	No	No
8913-□□-178S□-A-F	△ Mated height:15(0.591)	□ Mated height:15(0.591)	□ Mated height:11.8(0.465)
8913-□□-178S□-C-F	△ Mated height:17(0.669)	□ Mated height:17(0.669)	□ Mated height:13.8(0.543)
8911-□□-178L□-F	No	No	No
8913-□□-178MS□-A-F	△ Mated height:15(0.591)	□ Mated height:15(0.591)	□ Mated height:11.8(0.465)
8931E-□□-178S-F	○ Mated height:15(0.591)	○ Mated height:15(0.591)	○ Mated height:11.8(0.465)
8931E-□□-178L-F	○ Mated distance:20(0.787)	○ Mated distance:20(0.787)	○ Mated distance:16.8(0.661)
8930E-□□-178MS-F	○ Mated height:15(0.591)	○ Mated height:15(0.591)	○ Mated height:11.8(0.465)

Note: △ 40, 50, 80, and 100 pins are available

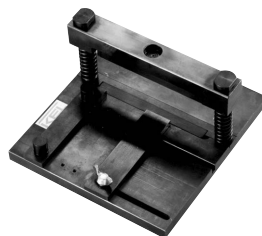
□ 20, 30, 40, 50, 60, 80, and 100 pins are available without locking ejector system

## Termination Equipment

### ■Hand Press(HP-12)



### ■Cable Trimmer(CT-15)



### ■Locating Fixture(LF-40)



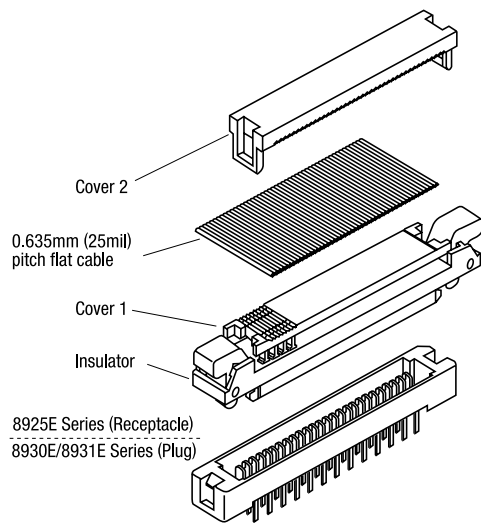
### ■Seating Platen



\*Specifications and dimensions of Termination equipment are subject to change without notice.

## Product Concept and Features

### ( Exploded View )



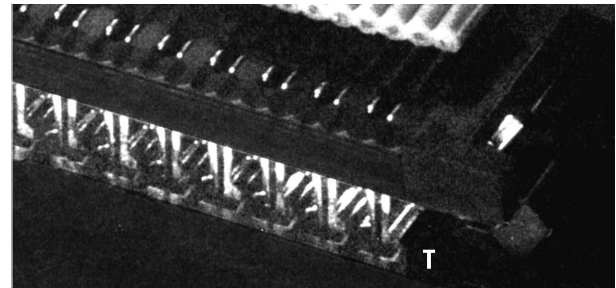
### ■ Highly reliable and original termination form

The terminating process of 8925E series starts with the flat cable of 0.635mm pitch placed between Covers #1 and #2 which aligns and prevents any deviation between the cable and connector.

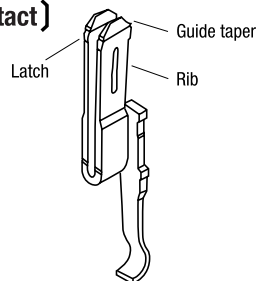
The contacts are held in position by the insulator body. The tips of the contact forks with guide taper and latch are sharp and break through the cable sheath to provide a gas tight termination.

The contact rib which is purposely rounded creates high pressure to insure a reliable termination without damage during the termination process.

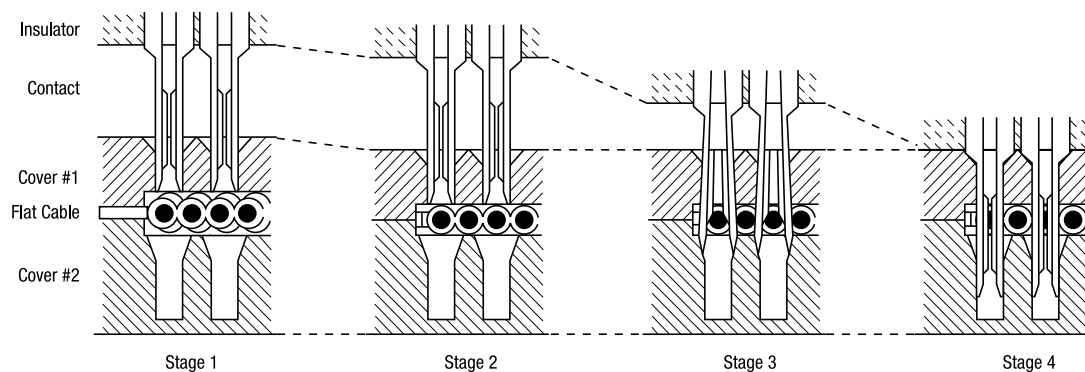
The connector can be terminated with a minimum of special tooling in a standard press as well as a press for MIL-STD type connectors.



### ( 8925(E) Series contact )



### ( Insulation Displacement Process )



The contact is held in position by the insulator body and the contact forks are guided by Cover #1.



As pressure is applied the cable is aligned in the grooves of Cover #1 and #2.



Cover #1 and #2 hold the cable and stabilize the contact / conductor interface. The contact slides through Cover #1 which supports and aligns the cable through out the termination process.

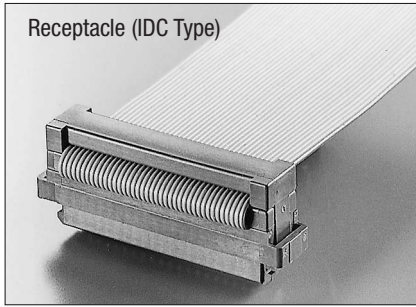


The contacts terminate the conductor and slide into Cover #2. The contact forks are compressed by Cover #2 and form a gas tight termination.

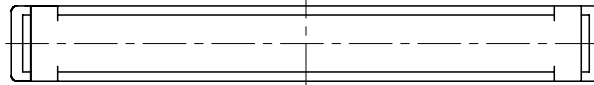
The reliability of the termination process depends on maintaining proper alignment of the cable to the connector, the contact to the conductor, and the stability of contact in the connector. The design of the 8925(E) satisfies the requirements as explained above.

8925-□□□-179-F (Receptacle, Without locking ejectors)

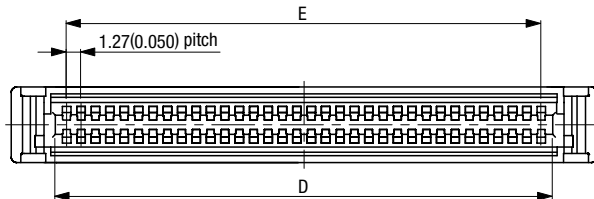
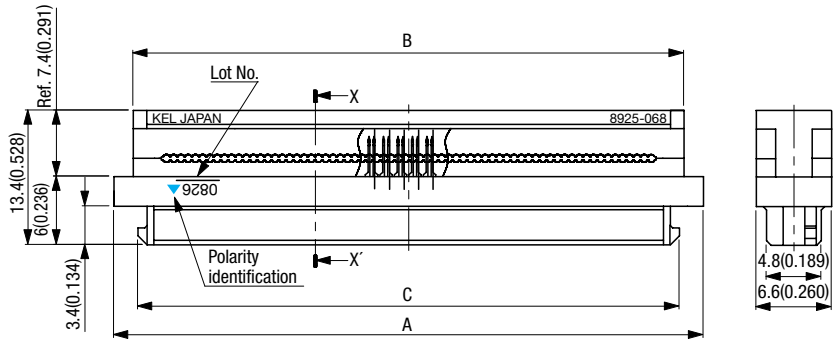
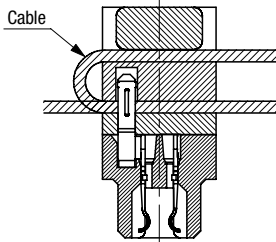
Unit:mm(inch)



Receptacle (IDC Type)



X-X' Cross Section



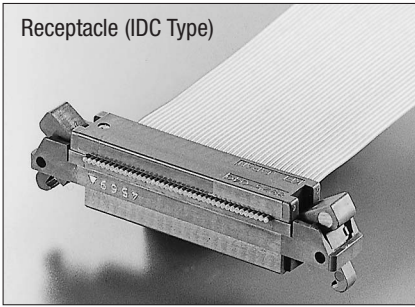
Packaging style  
Pipe

■Product Table / Dimensions

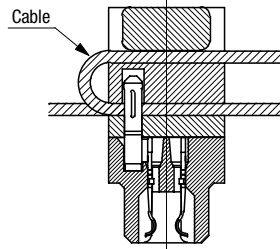
No. of contacts	Part Number	A	B	C	D	E	Number of packaging
40	8925-040-179-F	33.93 (1.336)	30.53 (1.201)	29.73 (1.170)	26.13 (1.029)	24.13 (0.950)	15
50	8925-050-179-F	40.28 (1.586)	36.88 (1.452)	36.08 (1.420)	32.48 (1.279)	30.48 (1.200)	12
68	8925-068-179-F	51.71 (2.036)	48.31 (1.902)	47.51 (1.870)	43.91 (1.729)	41.91 (1.650)	10
80	8925-080-179-F	59.33 (2.336)	55.93 (2.202)	55.13 (2.170)	51.53 (2.028)	49.53 (1.950)	8
100	8925-100-179-F	72.03 (2.836)	68.63 (2.702)	67.83 (2.670)	64.23 (2.529)	62.23 (2.450)	7

8925E/8925R-□□□-179-F (Receptacle, With locking ejectors)

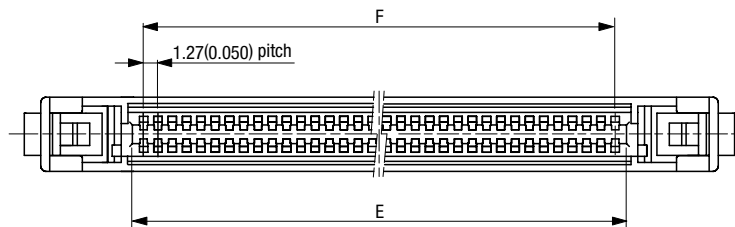
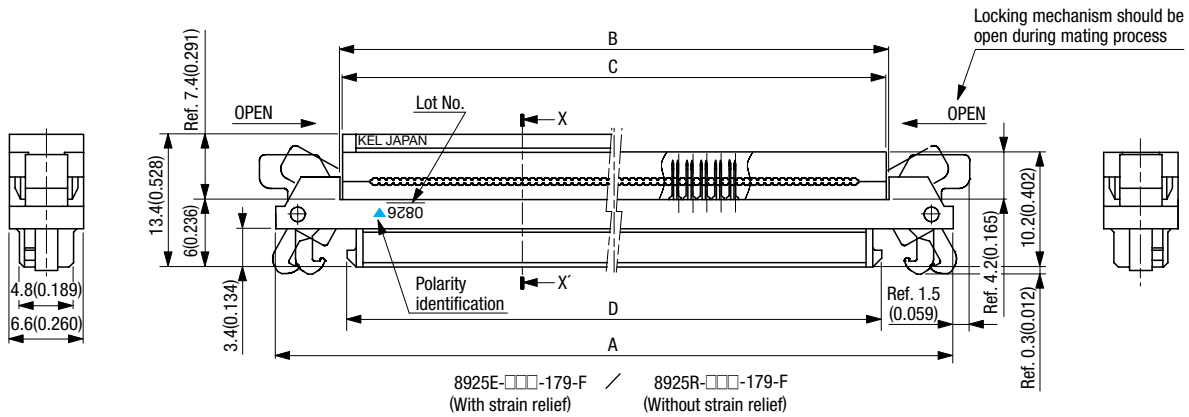
Receptacle (IDC Type)



X-X' Cross Section



Unit:mm(inch)



Product Table / Dimensions

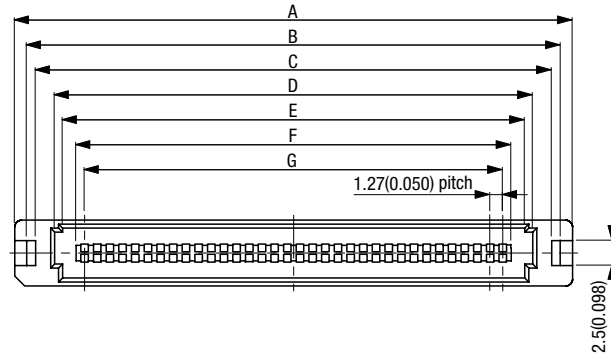
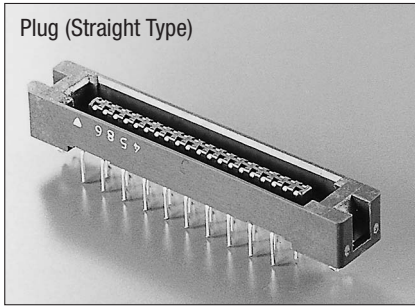
No. of contacts	Part Number	Packaging style						Number of packaging
		A	B	C	D	E	F	
20	8925E-020-179-F	29.63	18.23	17.83	17.03	13.43	11.43	15
	8925R-020-179-F	(1.167)	(0.718)	(0.702)	(0.670)	(0.529)	(0.450)	
30	8925E-030-179-F	35.98	24.58	24.18	23.38	19.78	17.78	13
	8925R-030-179-F	(1.417)	(0.968)	(0.952)	(0.920)	(0.779)	(0.700)	
40	8925E-040-179-F	42.33	30.93	30.53	29.73	26.13	24.13	11
	8925R-040-179-F	(1.667)	(1.218)	(1.202)	(1.170)	(1.029)	(0.950)	
50	8925E-050-179-F	48.68	37.28	36.88	36.08	32.48	30.48	10
	8925R-050-179-F	(1.917)	(1.468)	(1.452)	(1.420)	(1.279)	(1.200)	

No. of contacts	Part Number	Packaging style						Number of packaging
		A	B	C	D	E	F	
60	8925E-060-179-F	55.03	43.63	43.23	42.43	38.83	36.83	8
	8925R-060-179-F	(2.167)	(1.718)	(1.702)	(1.670)	(1.529)	(1.450)	
68	8925E-068-179-F	60.11	48.71	48.31	47.51	43.91	41.91	8
	8925R-068-179-F	(2.367)	(1.918)	(1.902)	(1.870)	(1.729)	(1.650)	
80	8925E-080-179-F	67.73	56.33	55.93	55.13	51.53	49.53	7
	8925R-080-179-F	(2.667)	(2.218)	(2.202)	(2.170)	(2.029)	(1.950)	
100	8925E-100-179-F	80.43	69.03	68.63	67.83	64.23	62.23	6
	8925R-100-179-F	(3.167)	(2.718)	(2.702)	(2.670)	(2.529)	(2.450)	

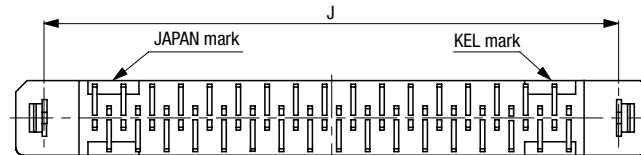
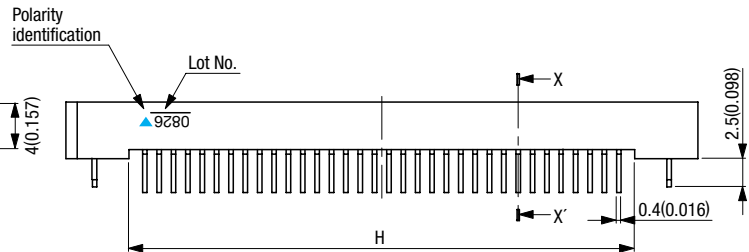
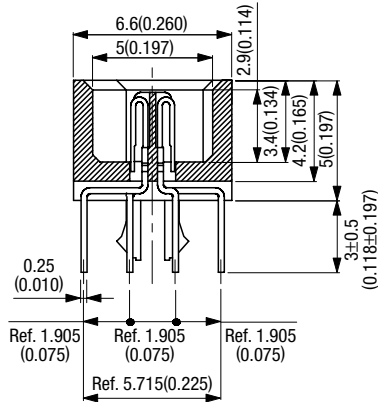
8931E-□□□-178S-F (Plug, With flanges and hooks)

Unit:mm(inch)

Plug (Straight Type)

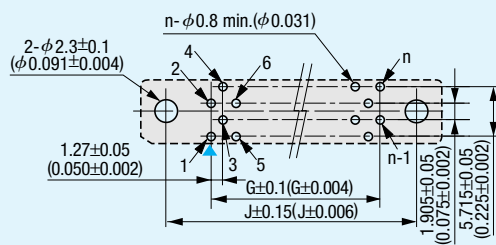


X-X' Cross Section

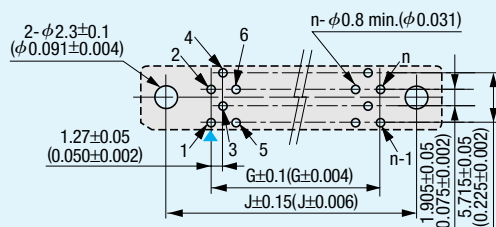


Printed Circuit Board Layout  
(Component Side View)

For 20,40,60,68,80,100 contacts



For 30,50 contacts



▼=Polarity identification  
Recommended PCB Thickness  $t=1.6\pm0.19(0.063\pm0.007)$   
"n" is number of contacts.

Packaging style  
Pipe

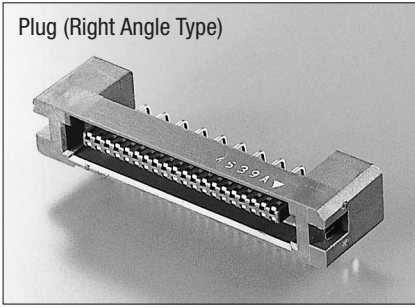
Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	H	J	Number of packaging
20	8931E-020-178S-F	25.43 (1.001)	23.03 (0.906)	21.23 (0.836)	17.43 (0.686)	15.83 (0.623)	13.13 (0.517)	11.43 (0.450)	14.23 (0.560)	20.32 (0.800)	20
30	8931E-030-178S-F	31.78 (1.251)	29.38 (1.157)	27.58 (1.086)	23.78 (0.936)	22.18 (0.873)	19.48 (0.767)	17.78 (0.700)	20.58 (0.810)	26.67 (1.050)	16
40	8931E-040-178S-F	38.13 (1.501)	35.73 (1.407)	33.93 (1.336)	30.13 (1.186)	28.53 (1.123)	25.83 (1.017)	24.13 (0.950)	26.93 (1.060)	33.02 (1.300)	13
50	8931E-050-178S-F	44.48 (1.751)	42.08 (1.657)	40.28 (1.586)	36.48 (1.436)	34.88 (1.373)	32.18 (1.267)	30.48 (1.200)	33.28 (1.310)	39.37 (1.550)	11
60	8931E-060-178S-F	50.83 (2.001)	48.43 (1.907)	46.63 (1.836)	42.83 (1.686)	41.23 (1.623)	38.53 (1.517)	36.83 (1.450)	39.63 (1.560)	45.72 (1.800)	10
68	8931E-068-178S-F	55.91 (2.201)	53.51 (2.107)	51.71 (2.036)	47.91 (1.886)	46.31 (1.823)	43.61 (1.717)	41.91 (1.650)	44.71 (1.760)	50.80 (2.000)	9
80	8931E-080-178S-F	63.53 (2.501)	61.13 (2.407)	59.33 (2.336)	55.53 (2.186)	53.93 (2.123)	51.23 (2.017)	49.53 (1.950)	52.33 (2.060)	58.42 (2.300)	7
100	8931E-100-178S-F	76.23 (3.001)	73.83 (2.907)	72.03 (2.836)	68.23 (2.686)	66.63 (2.623)	63.93 (2.517)	62.23 (2.450)	65.03 (2.560)	71.12 (2.800)	6

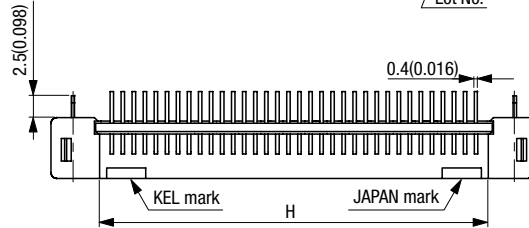
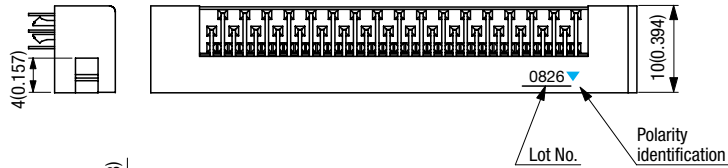
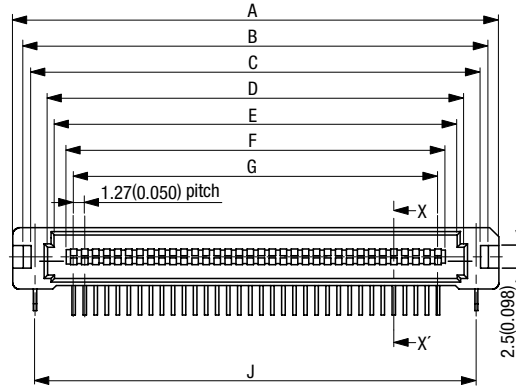
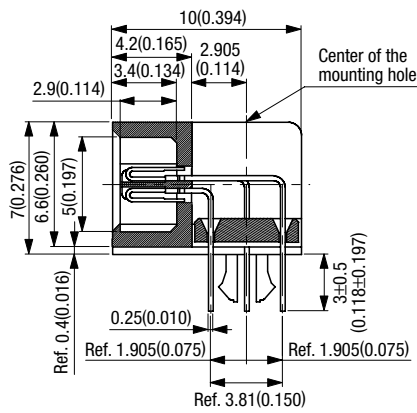
8931E-□□□-178L-F (Plug, With flanges and hooks)

Unit:mm(inch)

Plug (Right Angle Type)

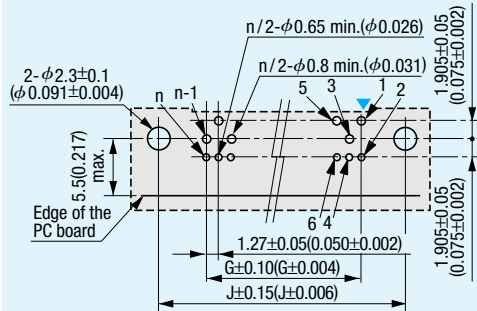


X-X' Cross Section

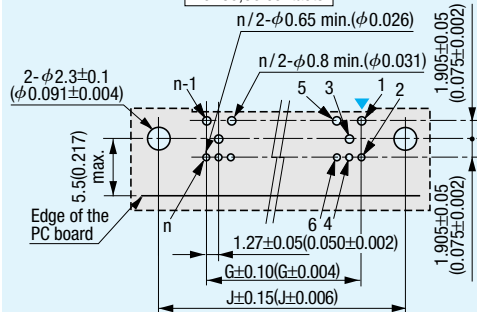


Printed Circuit Board Layout (Component Side View)

For 20,40,60,68,80,100 contacts



For 30,50 contacts



▼=Polarity identification  
Recommended PCB Thickness  $t=1.6\pm 0.19(0.063\pm 0.007)$   
"n" is number of contacts.

Packaging style
Pipe

Product Table / Dimensions

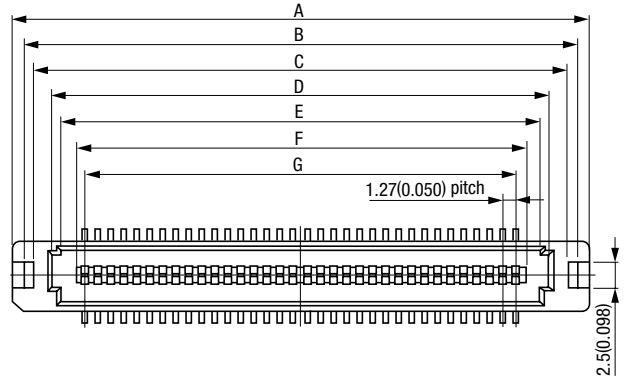
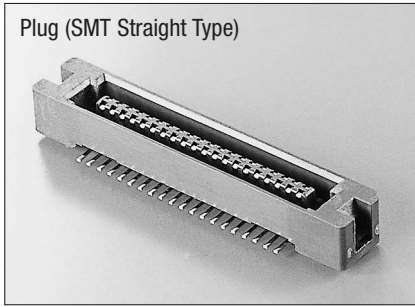
No. of contacts	Part Number	A	B	C	D	E	F	G	H	J	Number of packaging
20	8931E-020-178L-F	25.43 (1.001)	23.03 (0.907)	21.23 (0.836)	17.43 (0.686)	15.83 (0.623)	13.13 (0.517)	11.43 (0.450)	14.23 (0.560)	20.32 (0.800)	20
30	8931E-030-178L-F	31.78 (1.251)	29.38 (1.157)	27.58 (1.086)	23.78 (0.936)	22.18 (0.873)	19.48 (0.767)	17.78 (0.700)	20.58 (0.810)	26.67 (1.050)	16
40	8931E-040-178L-F	38.13 (1.503)	35.73 (1.407)	33.93 (1.336)	30.13 (1.186)	28.53 (1.123)	25.83 (1.017)	24.13 (0.950)	26.93 (1.060)	33.02 (1.300)	13
50	8931E-050-178L-F	44.48 (1.751)	42.08 (1.657)	40.28 (1.586)	36.48 (1.436)	34.88 (1.373)	32.18 (1.267)	30.48 (1.200)	33.28 (1.310)	39.37 (1.550)	11
60	8931E-060-178L-F	50.83 (2.001)	48.43 (1.907)	46.63 (1.836)	42.83 (1.686)	41.23 (1.623)	38.53 (1.517)	36.83 (1.450)	39.63 (1.560)	45.72 (1.800)	10
68	8931E-068-178L-F	55.91 (2.201)	53.51 (2.107)	51.71 (2.036)	47.91 (1.886)	46.31 (1.823)	43.61 (1.717)	41.91 (1.650)	44.71 (1.760)	50.80 (2.000)	9
80	8931E-080-178L-F	63.53 (2.501)	61.13 (2.407)	59.33 (2.336)	55.53 (2.186)	53.93 (2.123)	51.23 (2.017)	49.53 (1.950)	52.33 (2.060)	58.42 (2.300)	8
100	8931E-100-178L-F	76.23 (3.001)	73.83 (2.907)	72.03 (2.836)	68.23 (2.686)	66.63 (2.623)	63.93 (2.517)	62.23 (2.450)	65.03 (2.560)	71.12 (2.800)	6



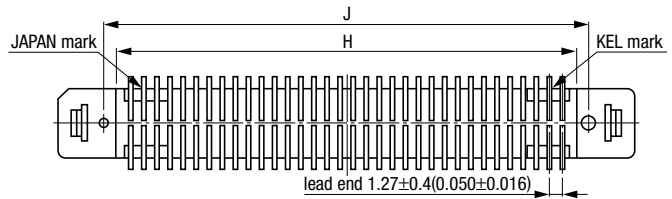
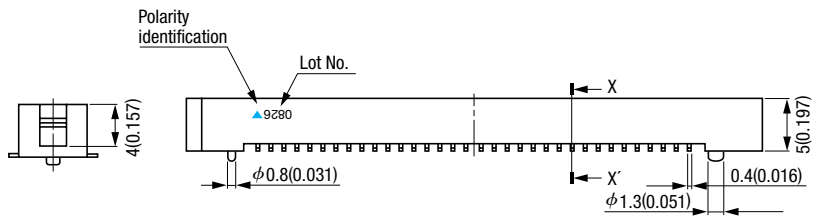
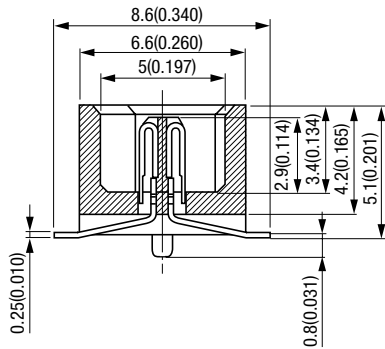
8930E-□□□-178MS-F (Plug)

Unit:mm(inch)

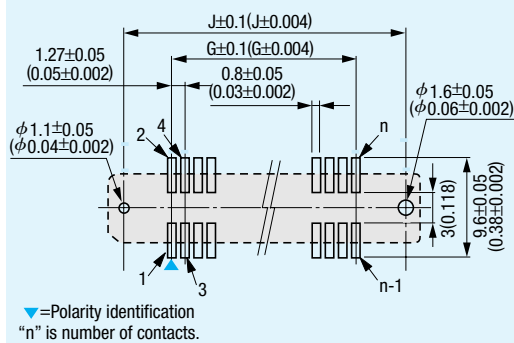
Plug (SMT Straight Type)



X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



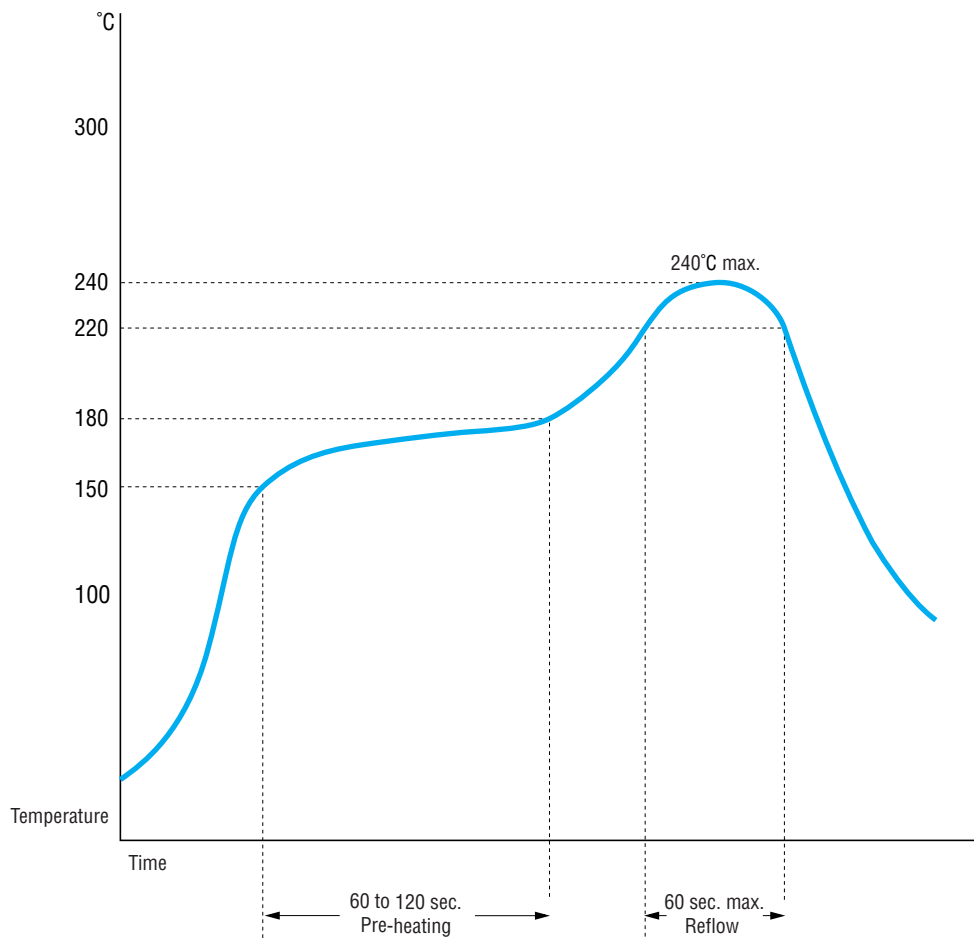
Packaging style  
Pipe

Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	H	J	Number of packaging
20	8930E-020-178MS-F	25.43 (1.001)	23.03 (0.907)	21.23 (0.836)	17.43 (0.686)	15.83 (0.623)	13.13 (0.517)	11.43 (0.450)	14.23 (0.560)	16.51 (0.650)	20
30	8930E-030-178MS-F	31.78 (1.251)	29.38 (1.157)	27.58 (1.086)	23.78 (0.936)	22.18 (0.873)	19.48 (0.767)	17.78 (0.700)	20.58 (0.810)	22.86 (0.900)	16
40	8930E-040-178MS-F	38.13 (1.501)	35.73 (1.407)	33.93 (1.336)	30.13 (1.186)	28.53 (1.123)	25.83 (1.017)	24.13 (0.950)	26.93 (1.060)	29.21 (1.150)	13
50	8930E-050-178MS-F	44.48 (1.751)	42.08 (1.657)	40.28 (1.586)	36.48 (1.436)	34.88 (1.373)	32.18 (1.267)	30.48 (1.200)	33.28 (1.310)	35.56 (1.400)	11
60	8930E-060-178MS-F	50.83 (2.001)	48.43 (1.907)	46.63 (1.836)	42.83 (1.686)	41.23 (1.623)	38.53 (1.517)	36.83 (1.450)	39.63 (1.560)	41.91 (1.650)	10
68	8930E-068-178MS-F	55.91 (2.201)	53.51 (2.107)	51.71 (2.036)	47.91 (1.886)	46.31 (1.823)	43.61 (1.717)	41.91 (1.650)	44.71 (1.760)	46.99 (1.850)	9
80	8930E-080-178MS-F	63.53 (2.501)	61.13 (2.407)	59.33 (2.336)	55.53 (2.186)	53.93 (2.123)	51.23 (2.017)	49.53 (1.950)	52.33 (2.060)	54.61 (2.150)	8
100	8930E-100-178MS-F	76.23 (3.001)	73.83 (2.907)	72.03 (2.836)	68.23 (2.686)	66.63 (2.623)	63.93 (2.517)	62.23 (2.450)	65.03 (2.560)	67.31 (2.650)	6

## Recommended Soldering Conditions (SMT type)

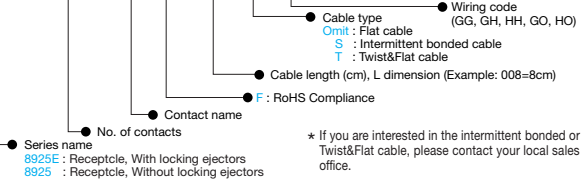
- Soldering Iron : 300°C or lower, 3 sec. max.
- Solder flux should be applied to PCB and not to contact tails.
- Recommended stencil thickness for solder paste is 0.15mm (0.006")
- Recommended temperature profile for IR reflow as the follows:



Note: Flux should be applied to PCB not connector tails.

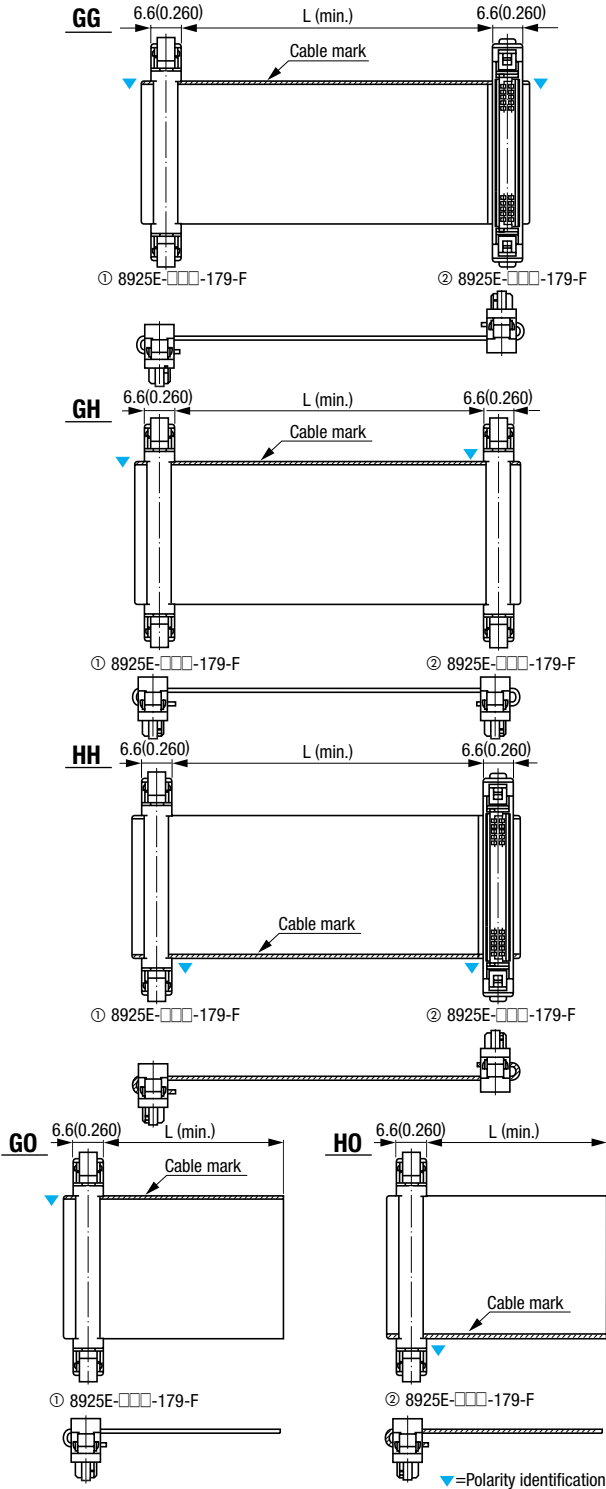
● ORDER CODE

8925E-□□□-179F-□□□-□□□



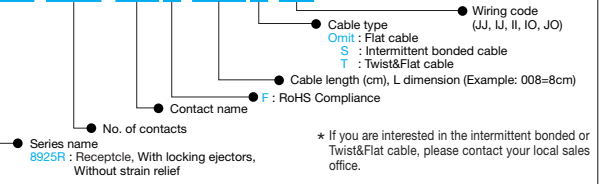
8925E-8925E Cable assemblies

Unit:mm(inch)



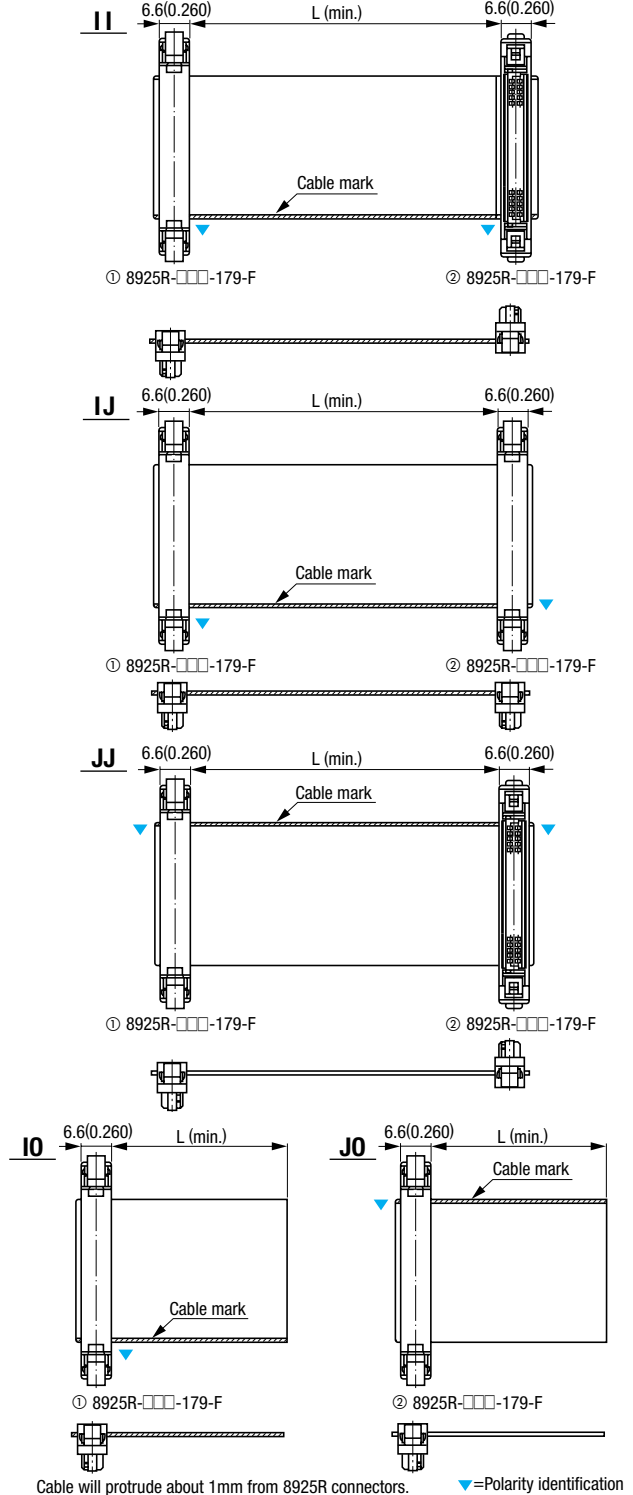
● ORDER CODE

8925R-□□□-179F-□□□-□□□



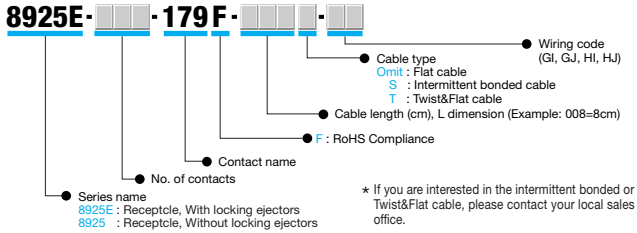
8925R-8925R Cable assemblies

Unit:mm(inch)



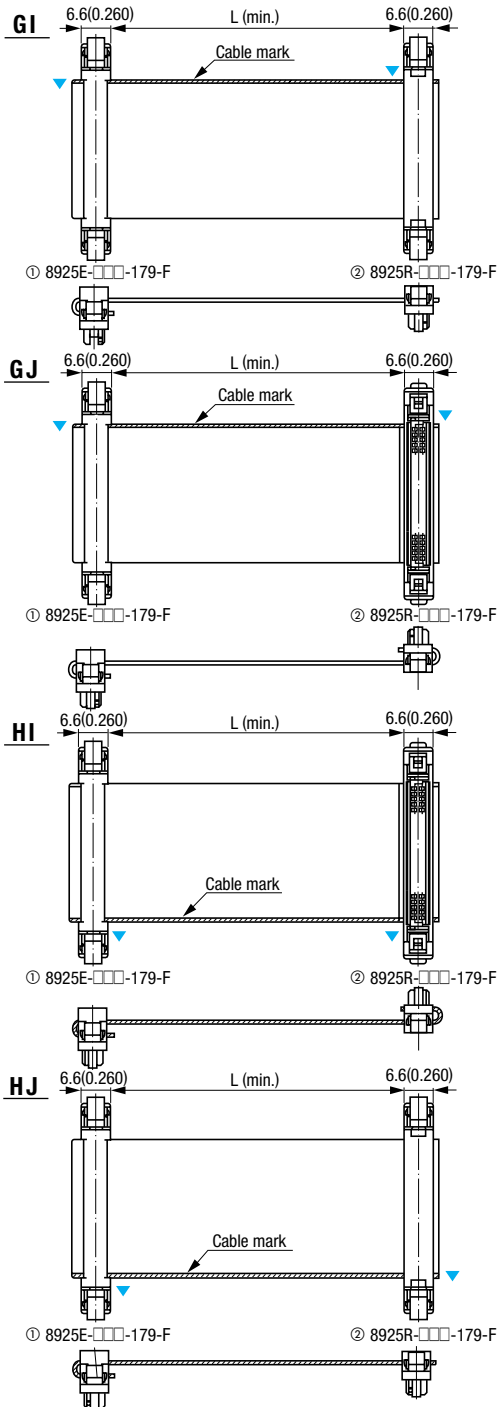
\*Intermittent bonded and Twist&Flat cable have a restriction on cable length (L dimension) because they are terminated at the fused part.  
 \*For GO, HO, IO and JO codes, orders are accepted in even quantities.  
 \*Harness end has an extra of approximately 1mm beyond the connector edge.

**ORDER CODE**



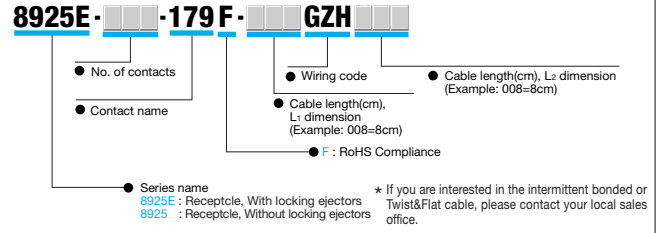
**8925E-8925R Cable assemblies**

Unit:mm(inch)



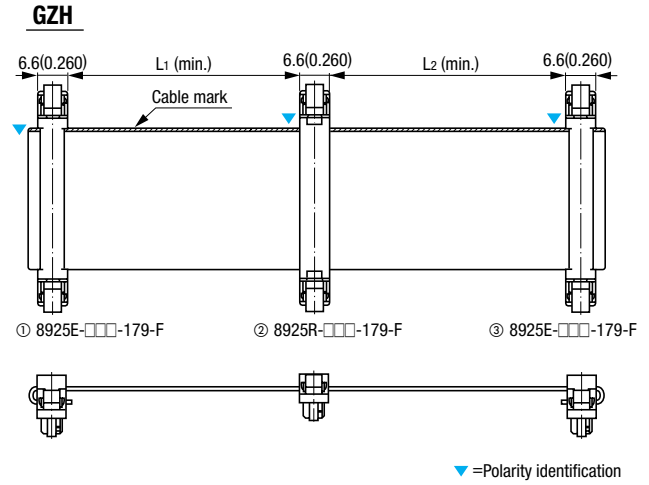
Cable will protrude about 1mm from 8925R connectors. ▼=Polarity identification

**ORDER CODE**

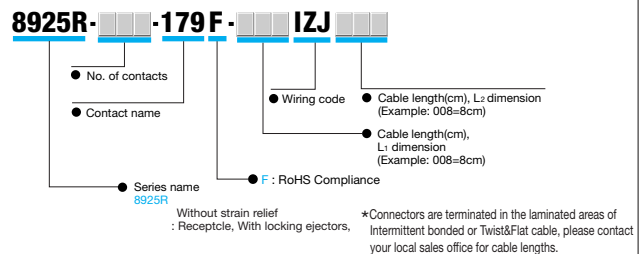


**Daisy chain assembly**

Unit:mm(inch)

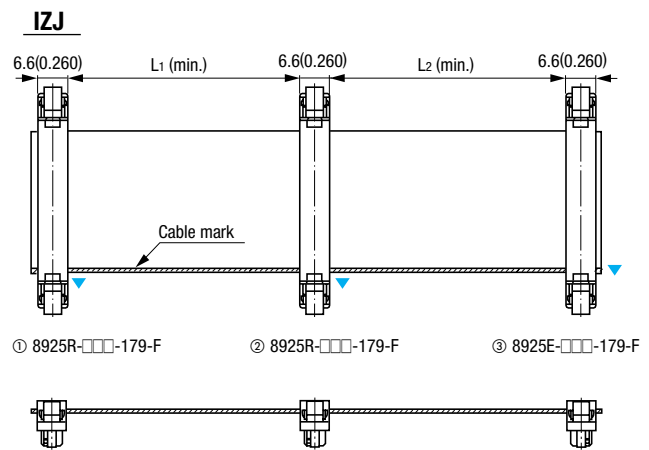


**ORDER CODE**



**Daisy chain assembly**

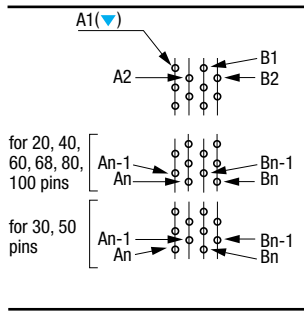
Unit:mm(inch)



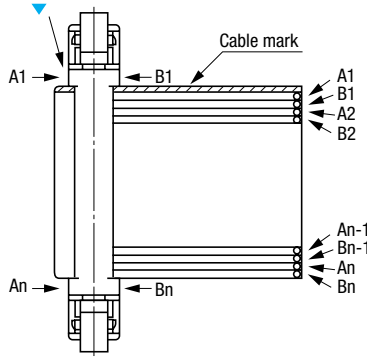
Cable will protrude about 1mm from 8925R connectors. ▼=Polarity identification

\*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 of approximate 1mm beyond the connector edge.

Single end assembly (Example: G0 wiring)

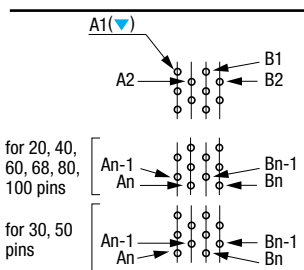


(Component side view)

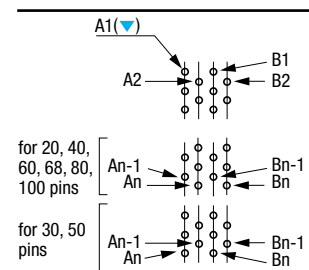
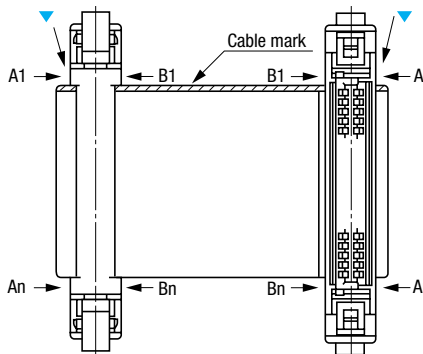


▼=Polarity identification

Double end assembly (Example: GG wiring)



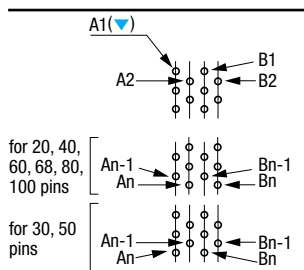
(Component side view)



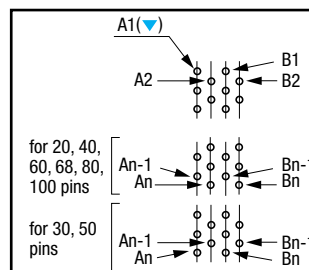
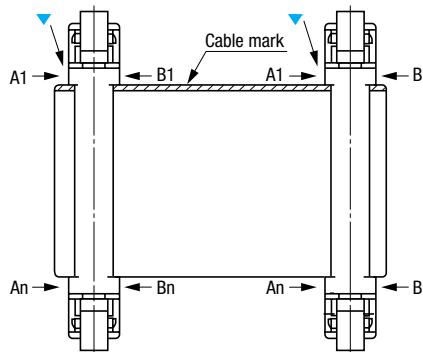
(Component side view)

▼=Polarity identification

Double end assembly (Example: GH wiring)



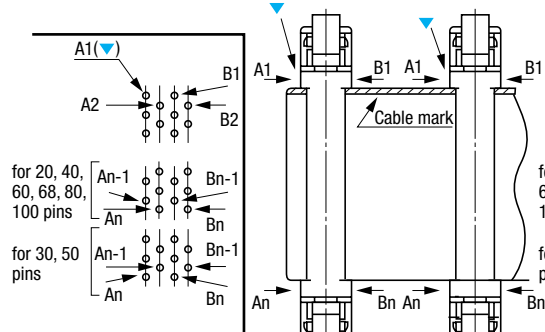
(Component side view)



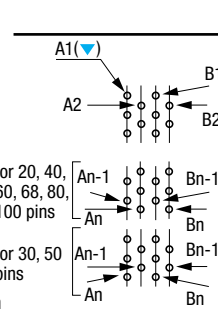
(Component side view)

▼=Polarity identification

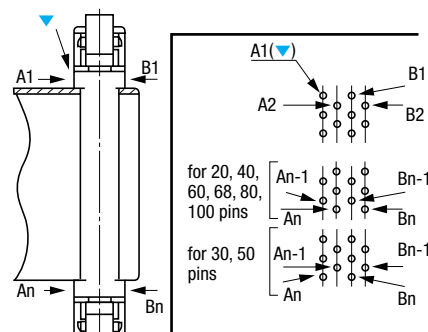
Daisy chain assembly (Example: GZH wiring)



(Component side view)

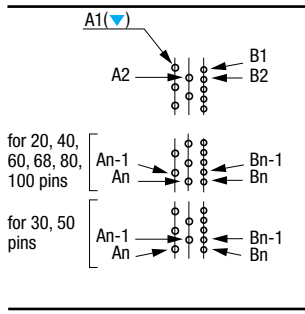


(Component side view)

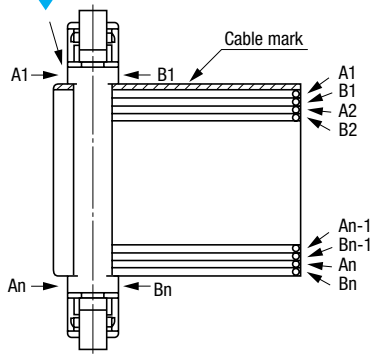


(Component side view)

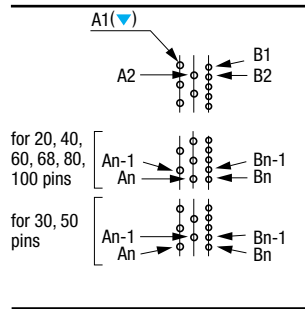
▼=Polarity identification

**Single end assembly (Example: G0 wiring)**


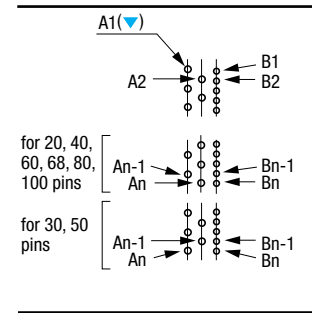
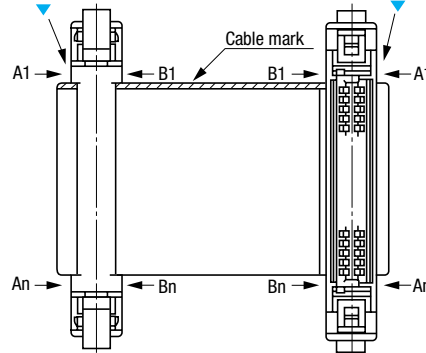
(Component side view)



▼=Polarity identification

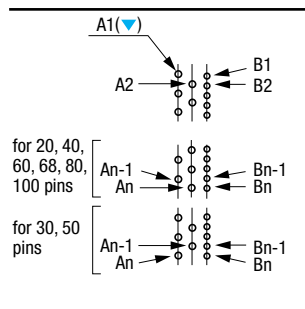
**Double end assembly (Example: GG wiring)**


(Component side view)

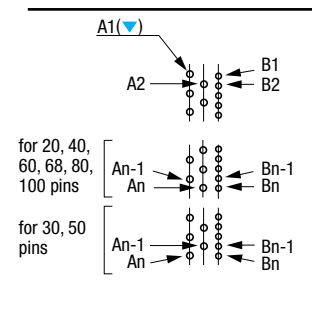
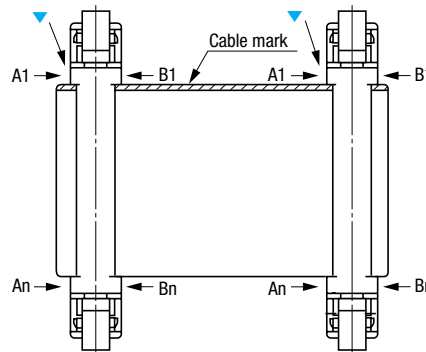


(Component side view)

▼=Polarity identification

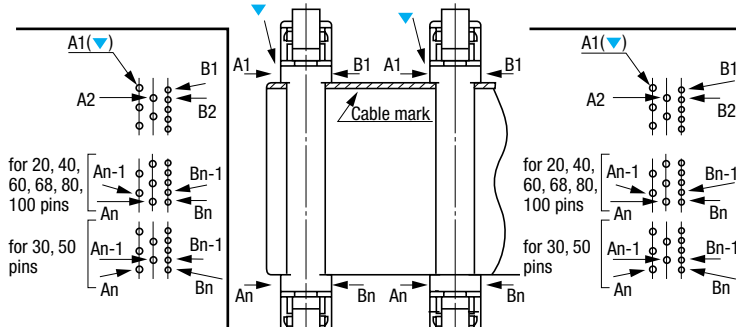
**Double end assembly (Example: GH wiring)**


(Component side view)



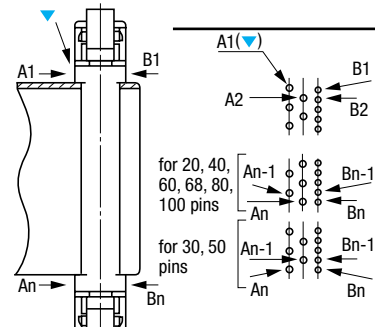
(Component side view)

▼=Polarity identification

**Daisy chain assembly (Example: GZH wiring)**


(Component side view)

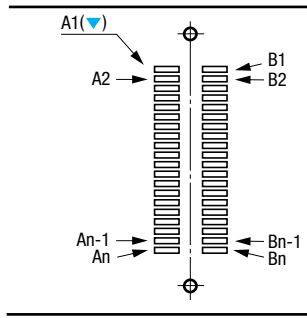
(Component side view)



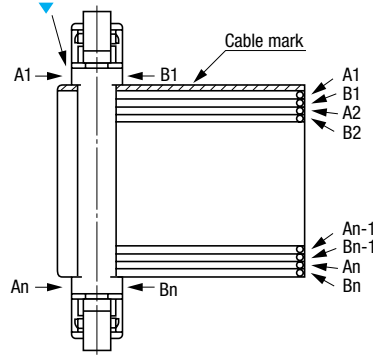
(Component side view)

▼=Polarity identification

**Single end assembly (Example: G0 wiring)**

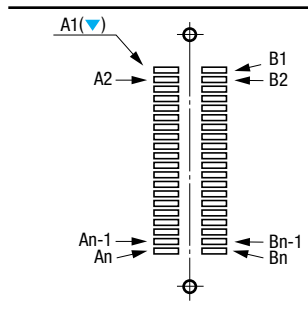


(Component side view)

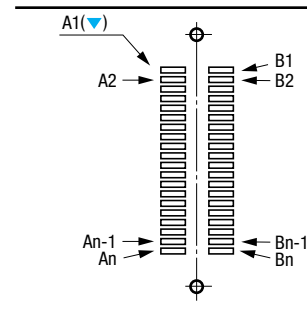
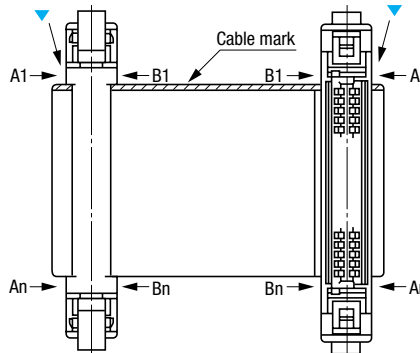


▼=Polarity identification

**Double end assembly (Example: GG wiring)**



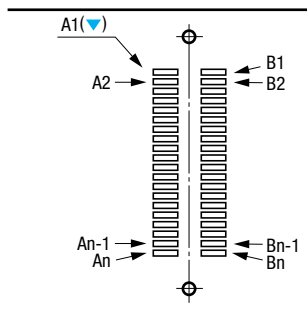
(Component side view)



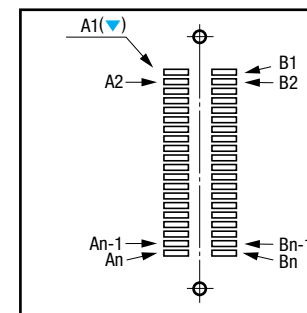
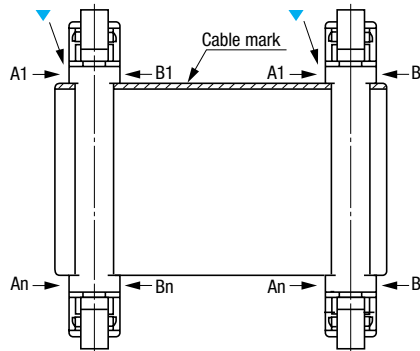
(Component side view)

▼=Polarity identification

**Double end assembly (Example: GH wiring)**



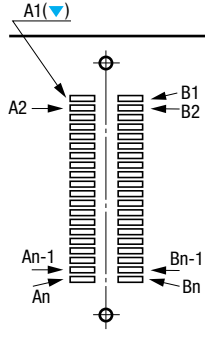
(Component side view)



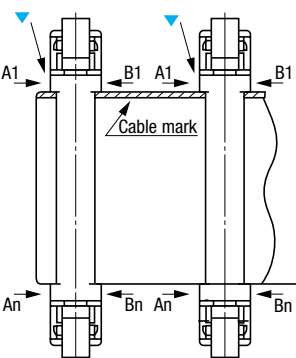
(Component side view)

▼=Polarity identification

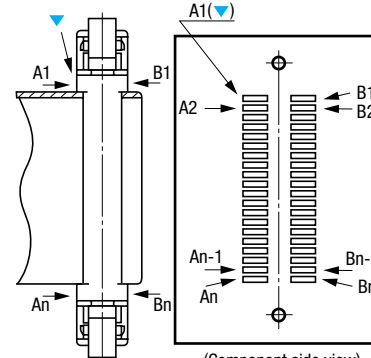
**Daisy chain assembly (Example: GZH wiring)**



(Component side view)



(Component side view)

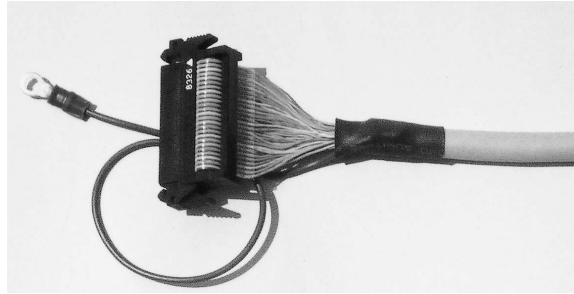


(Component side view)

▼=Polarity identification

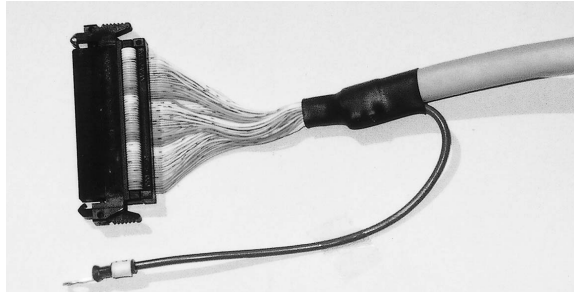
Specifications and dimensions are subject to change without notice.

### Our Custom Harness Manufacturing Support



■We are providing cable assemblies (harnesses) with connectors. Even if the harness products that you need are not listed in our catalog, we are flexible and can customize a solution for your request. Please feel free to contact your local sales office for more information.

### Custom Harness (Example with small O.D. I/O cable)

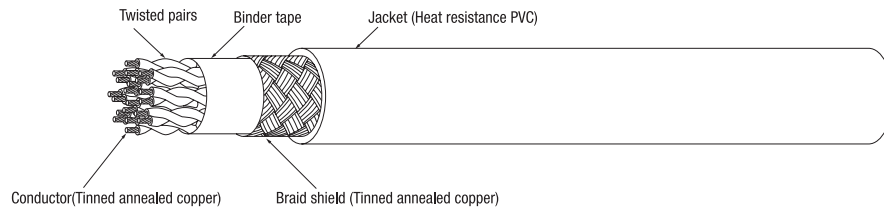


#### Features

- Can be fabricated for smaller diameter and lower weight.
- Make batch fusion by laminating and pressure-welding.
- Optional processes available for noise prevention, connection of braid shields, drain wire connections, conductive tape, etc.
- Various cable lengths are available. (Minimum: L=12cm)
- Using small O.D. I/O cable can save space limitation. (#30 AWG only: 8925E series)

\* For custom harness, please contact your local sales office.

#### Thin-Cable Structure



#### Cable Specifications(see)

Table1

		Conductor		Insulator		Braid	Jacket
No. of Paris	AWG size	Composition(No./mm)	Outside diameter(mm)	Material	Outside diameter(mm)	Density (%)	Outside diameter(mm)
10	28	7/0.127	0.38	Irradiation-bridged PVC	0.58	85 min.	6.0
14							6.7
18							7.2
20							7.6
25							8.1
34							9.0
40							9.5
50							10.4

Table2

		Conductor		Insulator		Braid	Jacket
No. of Paris	AWG size	Composition(No./mm)	Outside diameter(mm)	Material	Outside diameter(mm)	Density (%)	Outside diameter(mm)
14	30	7/0.102	0.3	Heat-resistant PVC	0.62	85 min.	6.8
25							8.3
30							8.8
34							9.2
40							9.8
50							10.7

#### (Remarks)

1. Electrical characteristics

Maximum conductor (at 20°C) : 28AWG : 246Ω / km  
 :30AWG : 361Ω / km

Minimum conductor (at 20°C) : 10MΩ-km

Withstanding voltage : 300V AC for 1 minute

2. Core color : Dot mark