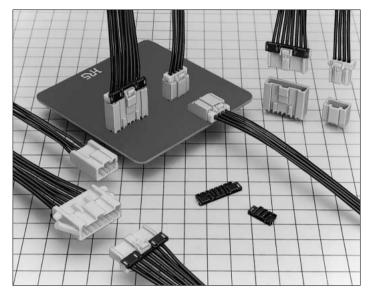
2.5mm Pitch Connector for Full Lock and Discrete Wire Connection

DF1E Series



Features

1. Full Lock Function Added

The inner lock system adopts a full lock mechanism. This mechanism prevents disengagement to occur due to an unexpected external shock.

2. Increase in Crimping Contact Fixation Force and Semi-insertion Prevention

The double lock is activated for the use method to give a stress to the cable, to increase crimping contact fixation force, and to prevent the semi-insertion of the crimping contact.

3. Mold Lance Adopted

Since the contact lance may be deformed involving in the contact after the crimping process, the mold lance has been adopted.

4. Mis-insertion Prevention

Equipped with the mechanism to completely prevent reverse insertion and insertion between dissimilar contacts.

5. Means to Prevent Solder Crack

The glass enforcement resin is adopted for the pin header to prevent a solder crack to occur due to heat compression.

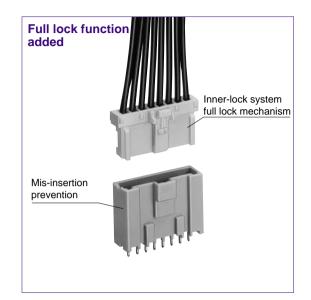
6. Correspond to Potting

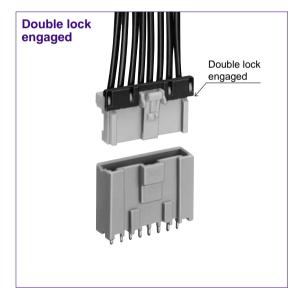
Corresponding to potting, the pin header is provided for product variations.

Corresponding to potting up to 8mm and mounting height 19.8mm (no retainer), the low profile is achieved.

7. Production Facility Cost Reduction

The female crimping contact uses the DF1B series crimping contact, which has been conventionally marketed. Investment for new facilities isn't needed. However, if the retainer is installed in the cable with AWG#22 or more wire, use the DF1E crimping contact. The female crimping contact for in-line is used together with the DF1B applicator. Therefore, no investment is needed for new facilities.





8. Correspond to Automatic Insertion Machine

The radial tape packaging is provided for 2 to 8 contacts on the straight pin header side, in order to correspond to mass production.

9. Various Applications

With the same series, various applications can be used for the board solder dip type and inline.

Applications

Electronic equipment, office machines, industrial equipment, and consumer equipment, and so on



■Products Specifications

| | Rating | Rated Current Note 1. AWG#20~24 : 3A 26 : 2A 28 : 1A 30 : 0.5A Rated Voltage AC250V | Operating Temperature Range -35∼+85℃ Note 2. Operating Moisture Range 40~80% | Storage Temperature Range -10~+60℃ Note 3. Storage Moisture Range 40~70% |
|--|--------|--|---|---|
|--|--------|--|---|---|

| Item | Specification | Condition |
|-------------------------------------|---|---|
| 1. Contact Resistance | 30mΩ max. | Measured at 20mV max. and 1mA |
| 2. Insulation Resistance | 1000MΩ min. | Measured at 500V DC |
| 3. Withstand voltage | Neither short or breakdown | 150V AC energized for 1 minute |
| 4. Single Insertor/Extraction Forth | MIN 0.4N, MAX 4.4N | Measured at the square steel pin with 0.635 ± 0.002 |
| 5. Operating Life | 30mΩ max | 30 cycles of insertions/extractions |
| 6. Vibration | Electrical discontinuity, 1µS max. | $10{\sim}55 \text{Hz}$ and single amplitude 0.75mm in 3 directions for 2 hours, respectively. |
| 7. Shock | Electrical discontinuity, 1µS max. | 490m/s and 11ms, sin/cosine 3 directions, 3 times, respectively |
| 8. Moisture Resistance | 30mΩ max | Exposed to temperature $40\pm2^\circ$ C and humidity $90{\sim}95\%$ for 96 hours |
| 9. Temperature Cycle | 30mΩ max. | (-55°C: 30 minutes-> 5~35°C: 5 minutes-> 85°C: 30 minutes-> 5~35°C: 5 minutes) 5 cicles |
| 10. Resistance to Soldering heat | Neither deformation on the appearance nor remarkable contact backlash is found. | Reflow: 250°C: 20 seconds |
| | | Manual soldering: Soldering iron temperature: 300 $\ensuremath{\mathbb{C}}$ for 3 seconds |

Note 1 : Temperature rise included when energized

Note 2 : This storage indicates a long-term storage state for the unused product before the board mounted.

The operating temperature and moisture ranges are applied to the non-energized state after the connector has been installed to the board.

Note 3 : The above standards represent this series. Individual formal agreement should be based on the "Specification".

■Material

| Product | Part | Material | Treatment | Remarks |
|------------------|-----------|-----------------|----------------|---------|
| Socket | Insulator | Polyamide | White | UL94V-0 |
| Header | Insulator | Polyamide | Beige | UL94V-0 |
| neader | Contact | Brass | Solder plating | |
| In-line Plug | Insulator | Polyamide | White | UL94V-0 |
| retainer | Insulator | Polyamide | Black | UL94V-0 |
| Crimping contact | Contact | Phosphor copper | Tin plating | |

Note : The whisker method is implemented for HRS tin plating.

Ordering Information

Pin Header

| <u>DF</u> פ | <u>1E</u> w | <u>C</u> e | - <u>*</u> | _ | 2.5 y | DSA u |
|----------------|----------------|------------|------------------------|-------------|-----------------|----------|
| | | | | | | |
| | | | | | | |
| •Soc | ket | | | | | |
| <u>DF</u> ੧ | <u>1E</u> w | | <u>×</u> <u>S</u> r | - <u>2.</u> | 5 <u>C</u> y | |

| qS | eries Name | e : C |)F | r Number of Contacts : 2 to 15 contacts |
|--------------------------|-----------------------------|---------|-------------------------|---|
| w Series No. : 1E | | | | t Connector Type |
| e Hold Types | | | | P : Pin Header |
| Standard Product Potting | | Potting | y Contact Pitch : 2.5mm | |
| | With Boss With Boss | | With Boss | u Form type |
| С | Without Boss G Without Boss | | Without Boss | DSA : Straight Dip |
| | | | DS : Right Angle Type | |

Note 1 : The right angle pin header has no symbol. Note 2 : The potting header has 2 to 10 contacts.

| q Series Name : DF | r Connector type | |
|---------------------------------------|-------------------------|--|
| w Series No. : 1E | S: Socket | |
| Number of Contacts : 2 to 15 contacts | t Contact Pitch : 2.5mm | |
| | y Form Type | |
| | C : Crimping socket | |

In-line Plug

| DF | <u>1E</u> | <u>A</u> | - 💥 | <u>EP</u> | - <u>2.5</u> | <u>C</u> |
|----|-----------|----------|-----|-----------|--------------|----------|
| q | w | е | r | t | У | u |

| q Series Name : DF | Number of Contacts : 2 to 10 contacts |
|------------------------------|---------------------------------------|
| w Series No. : 1E | t EP : In-line plug |
| e In-line Plug type | y Contact Pitch : 2.5mm |
| None: With Panel mount Lock | u Form Type |
| A : Without Panel mount Lock | C : Crimping socket |

•Crimping Contact

| DF | <u>1E</u> | - | ** | <u>SCF</u> |
|----|-----------|---|----|------------|
| q | w | | е | r |

| e Applicable Cable Size |
|-----------------------------|
| 2022:AWG#20~#22 |
| 2428 : WG#24~#28 |
| 30 : AWG#30 |
| r Packaging Type |
| SCF : Female contact : Reel |
| SF : Female contact : Bag |
| PCF : Male contact : Reel |
| PC : Male contact : Bag |
| |

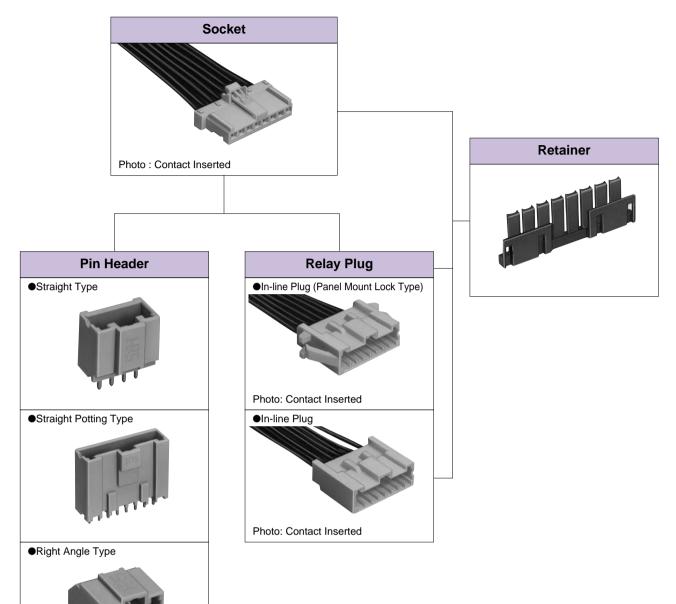
Note 1 : When the retainer is used, use DF1E-2022SC(F), DF1B-2428SC(F), and DF1B-30SC(F) contacts. When no retainer is used, all DF1B-***SC(F) and DF1E-2022SC(F) contacts can be used.

| q Series Name : DF | r Connector Type |
|---------------------------------------|---|
| w Series No. : 1E | RS/P : Retainer |
| Number of Contacts : 2 to 10 contacts | Commonly used for socket and in-line plug |
| | t Contacts Pitch:2.5mm |

Retainer



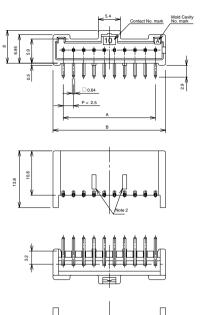
■Application Pattern



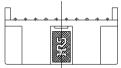


Right Angle Pin Header









| The symbol ** included in |
|--------------------------------|
| HRS No. and the product spec |
| No. indicates the Specific No. |

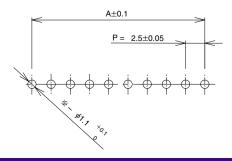
| Product No. | HRS No. | Number of Contacts | А | В |
|----------------------|----------------------|--------------------|------|------|
| DF1E - 2P-2.5DS(***) | CL541 - 0985- 0 -%% | 2 | 2.5 | 7.5 |
| DF1E - 3P-2.5DS(***) | CL541 - 0986- 3 - ** | 3 | 5.0 | 10.0 |
| DF1E - 4P-2.5DS(***) | CL541 - 0987- 6 -** | 4 | 7.5 | 12.5 |
| DF1E - 5P-2.5DS(***) | CL541 – 0988– 9 –%% | 5 | 10.0 | 15.0 |
| DF1E - 6P-2.5DS(***) | CL541 – 0989– 1 –%% | 6 | 12.5 | 17.5 |
| DF1E - 7P-2.5DS(***) | CL541 - 0990- 0 -%% | 7 | 15.0 | 20.0 |
| DF1E - 8P-2.5DS(***) | CL541 - 0991- 3 - ** | 8 | 17.5 | 22.5 |
| DF1E - 9P-2.5DS(***) | CL541 – 0992– 6 –%% | 9 | 20.0 | 25.0 |
| DF1E -10P-2.5DS(***) | CL541 – 0993– 9 –%% | 10 | 22.5 | 27.5 |
| DF1E -11P-2.5DS(***) | CL541 – 0994– 1 –%% | 11 | 25.0 | 30.0 |
| DF1E -12P-2.5DS(***) | CL541 – 0995– 4 –%% | 12 | 27.5 | 32.5 |
| DF1E -13P-2.5DS(***) | CL541 – 0996– 7 –%% | 13 | 30.0 | 35.0 |
| DF1E -14P-2.5DS(***) | CL541 – 0997– 0 –%% | 14 | 32.5 | 37.5 |
| DF1E -15P-2.5DS(***) | CL541 – 0998– 2 –%% | 15 | 35.0 | 40.0 |

Note 1. : A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the products per bag. However, the quantity for delivery will be changed according to the Specific No.

Note 2. : The 2 to 4 contacts differ in two convex portions from those in above figures. The 2 and 3 contacts are not contained, but the 4 contact connector is contained in the center at one point.

Note 3. : Styles of 2 to 4 contact connectors partially differ from those in above figures.

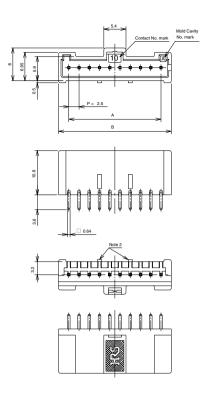
PCB Footprints (Board Thickness t = 1.6 ± 0.1)

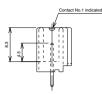


B116 IRS

Straight Pin Header







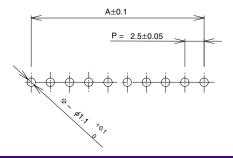
| Product No. | HRS No. | Number of Contacts | А | В |
|-----------------------|-----------------|--------------------|------|------|
| DF1EC- 2P-2.5DSA(***) | CL541-0867-4-** | 2 | 2.5 | 7.5 |
| DF1EC- 3P-2.5DSA(***) | CL541-0868-7-** | 3 | 5.0 | 10.0 |
| DF1EC- 4P-2.5DSA(***) | CL541-0869-0-** | 4 | 7.5 | 12.5 |
| DF1EC- 5P-2.5DSA(***) | CL541-0870-9-** | 5 | 10.0 | 15.0 |
| DF1EC- 6P-2.5DSA(***) | CL541-0871-1-** | 6 | 12.5 | 17.5 |
| DF1EC- 7P-2.5DSA(***) | CL541-0872-4-%% | 7 | 15.0 | 20.0 |
| DF1EC- 8P-2.5DSA(***) | CL541-0873-7-** | 8 | 17.5 | 22.5 |
| DF1EC- 9P-2.5DSA(***) | CL541-0874-0-%% | 9 | 20.0 | 25.0 |
| DF1EC-10P-2.5DSA(***) | CL541-0875-2-** | 10 | 22.5 | 27.5 |
| DF1EC-11P-2.5DSA(***) | CL541-0876-5-** | 11 | 25.0 | 30.0 |
| DF1EC-12P-2.5DSA(***) | CL541-0877-8-** | 12 | 27.5 | 32.5 |
| DF1EC-13P-2.5DSA(***) | CL541-0878-0-** | 13 | 30.0 | 35.0 |
| DF1EC-14P-2.5DSA(***) | CL541-0879-3-** | 14 | 32.5 | 37.5 |
| DF1EC-15P-2.5DSA(%%) | CL541-0880-2-** | 15 | 35.0 | 40.0 |

The symbol ****** included in HRS No. and the product spec No. indicates the Specific No.

Note 1. : A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the products per bag. However, the quantity for delivery will be changed according to the Specific No.

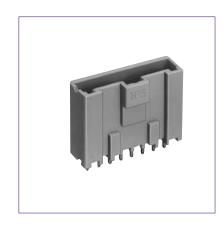
- Note 2. : The 2 to 4 contacts differ in two convex portions from those in above figures. The 2 and 3 contacts are not contained, but the 2 and 3 contacts are not contained, and 4 contact is in the center at one point.
- Note 3. : Styles of 2 to 4 contacts partially differ from those in above figures.
- Note 4. : The radial package is prepared for DF1EC-%P-2.5DSA(25). However, 2 to 8 contacts only are provided. (Quantity of packaged 2 and 3 contacts: 1000pcs., 4 to 8 contacts: 400pcs.)

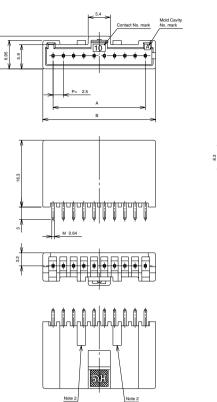
PCB Footprints (Board Thickness t = 1.6 ± 0.1)

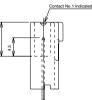




Straight Pin Header for Potting







| Product No. | HRS No. | Number of Contacts | A | В | С |
|-----------------------|--------------------|--------------------|------|------|-----|
| DF1EG - 2P-2.5DSA(%%) | CL541 – 0923 – 3%% | 2 | 2.5 | 7.5 | 7.8 |
| DF1EG - 3P-2.5DSA(%%) | CL541 – 0924 – 6%% | 3 | 5.0 | 10.0 | 7.8 |
| DF1EG - 4P-2.5DSA(※※) | CL541 – 0925 – 9** | 4 | 7.5 | 12.5 | 7.8 |
| DF1EG – 5P–2.5DSA(%%) | CL541 – 0926 – 1%% | 5 | 10.0 | 15.0 | 8.0 |
| DF1EG – 6P–2.5DSA(※※) | CL541 - 0927 - 4%% | 6 | 12.5 | 17.5 | 8.0 |
| DF1EG - 7P-2.5DSA(%%) | CL541 – 0928 – 7** | 7 | 15.0 | 20.0 | 8.0 |
| DF1EG - 8P-2.5DSA(※※) | CL541 – 0929 – 0%% | 8 | 17.5 | 22.5 | 8.0 |
| DF1EG - 9P-2.5DSA(※※) | CL541 – 0930 – 9** | 9 | 20.0 | 25.0 | 8.0 |
| DF1EG -10P-2.5DSA(※※) | CL541 – 0931 – 1%% | 10 | 22.5 | 27.5 | 8.0 |
| DF1EG | CL541 – 0932 – 4%% | 11 | 25.0 | 30.0 | 8.0 |

The symbol ****** included in HRS No. and the product spec No. indicates the Specific No.

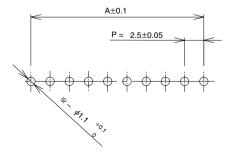
Note 1. : A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the product per bag. However, the quantity for delivery will be changed according to spec number.

Note 2. : The 2 to 6 and 9 to 10 contact connectors differ in two convex portions from those in above figures. The 2 to 5 and 9 to 10 contacts are not contained, but the 6 contact is bonded to the convex portion at both ends.

Note 3. : Styles of 2 to 4 contact may partially differ from the above figures.

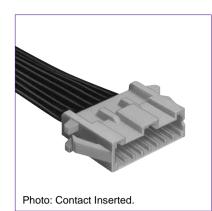
Note 4. : The radial tape packaging is prepared for DF1EG-%P-2.5DSA(25).However, 2 to 8 contacts are available. (Quantity of packaged 2 and 3 contacts : 1000pcs., 4 to 8 contacts: 400pcs.)

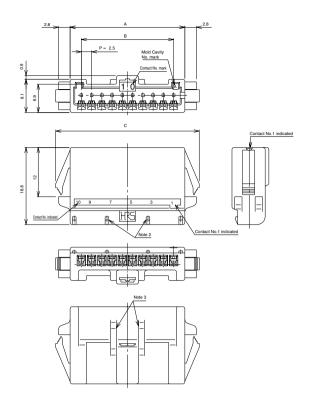
PCB Footprints (Board Thickness t = 1.6 ± 0.1)





In-line Plug (Panel Mount Lock Type)





| Product No. | HRS No. | Number of Contacts | А | В | С | D | E |
|--------------------|---------------------|--------------------|------|------|------|------|------|
| DF1E- 2EP-2.5C(%%) | CL541- 0943- 0 -%% | 2 | 8.0 | 2.5 | 15.0 | 8.4 | 12.5 |
| DF1E- 3EP-2.5C(%%) | CL541- 0944- 3 -*** | 3 | 10.5 | 5.0 | 17.5 | 10.9 | 15.0 |
| DF1E- 4EP-2.5C(%%) | CL541- 0945- 6 -%% | 4 | 13.0 | 7.5 | 20.0 | 13.4 | 17.5 |
| DF1E- 5EP-2.5C(%%) | CL541- 0946- 9 -%% | 5 | 15.5 | 10.0 | 22.5 | 15.9 | 20.0 |
| DF1E- 6EP-2.5C(%%) | CL541- 0947- 1 -** | 6 | 18.0 | 12.5 | 25.0 | 18.4 | 22.5 |
| DF1E- 7EP-2.5C(%%) | CL541- 0948- 4 -%% | 7 | 20.5 | 15.0 | 27.5 | 20.9 | 25.0 |
| DF1E- 8EP-2.5C(%%) | CL541- 0949- 7 -%% | 8 | 23.0 | 17.5 | 30.0 | 23.4 | 27.5 |
| DF1E- 9EP-2.5C(%%) | CL541- 0950- 6 -%% | 9 | 25.5 | 20.0 | 32.5 | 25.9 | 30.0 |
| DF1E-10EP-2.5C(%%) | CL541-0951-9-** | 10 | 28.0 | 22.5 | 35.0 | 28.4 | 32.5 |

The symbol ** included in HRS No. and the product spec No. indicates the Specific No.

Note 1. : A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the products per bag. However, the quantity for delivery will be changed according to the Specific No.

Note 2. : In regard to 2 to 5 contacts, the retainer fixed convex portions are located at both ends.

Note 3. In regard to 2 to 7 contacts, 2 convex portions are different from those in the above figures.

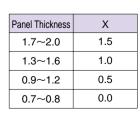
Note 4. Use the no radius side at the panel edge in the looking area.

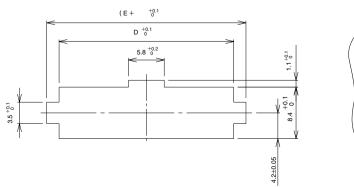
Note 5. : Panel fixation is loosened. (May be enlarged according to the panel board thickness.)

Note 6. : Styles of 2 to 4 contact partially differ from those in the above figures.

* Refer to page B122 for the retainer.

Panel Cutouts

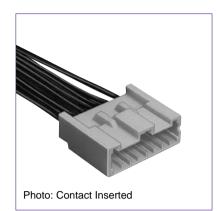


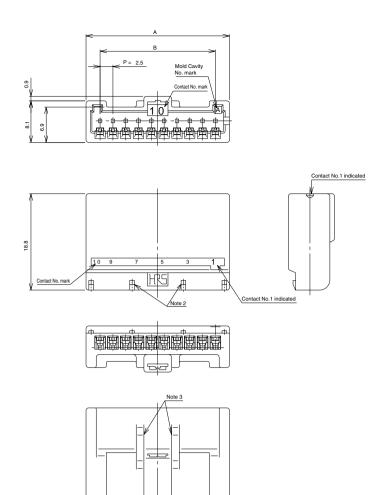






In-line Plug





| Product No. | HRS No. | Number of Contacts | А | В |
|----------------------|------------------------|--------------------|------|------|
| DF1EA - 2EP-2.5C(%%) | CL541 - 0957 - 5 - *** | 2 | 8.0 | 2.5 |
| DF1EA - 3EP-2.5C(%%) | CL541 - 0958 - 8 - *** | 3 | 10.5 | 5.0 |
| DF1EA - 4EP-2.5C(%%) | CL541 - 0959 - 0 - *** | 4 | 13.0 | 7.5 |
| DF1EA - 5EP-2.5C(%%) | CL541 - 0960 - 0 - *** | 5 | 15.5 | 10.0 |
| DF1EA - 6EP-2.5C(%%) | CL541 - 0961 - 2 - *** | 6 | 18.0 | 12.5 |
| DF1EA - 7EP-2.5C(%%) | CL541 - 0962 - 5 - *** | 7 | 20.5 | 15.0 |
| DF1EA - 8EP-2.5C(%%) | CL541 - 0963 - 8 - *** | 8 | 23.0 | 17.5 |
| DF1EA - 9EP-2.5C(%%) | CL541 - 0964 - 0 - *** | 9 | 25.5 | 20.0 |
| DF1EA -10EP-2.5C(%%) | CL541 – 0965 – 3 – *** | 10 | 28.0 | 22.5 |

The symbol ****** included in HRS No. and the product spec No. indicate a Specific No.

Note 1. : A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the products per bag. However, the quantity for delivery will be changed according to the Specific No.

Note 2. : In regard to 2 to 5 contacts, the retainer fixed convex portions are located at both ends.

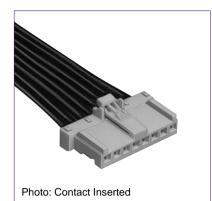
Note 3.: 2 to 7 contacts do not contain two convex portions, which is different from the above figure.

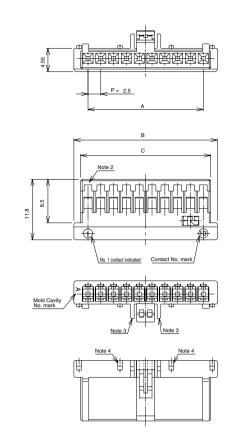
Note 4. : Styles of 2 to 4 contacts partially differ from the above figures.

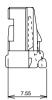
* Refer to page B122 for retainer.



Socket







| Product No. | HRS No. | Number of Contacts | A | В | С |
|---------------------|------------------------|--------------------|------|------|------|
| DF1E - 2S-2.5C(%%) | CL541 - 0811 - 0 - *** | 2 | 2.5 | 8.0 | 5.4 |
| DF1E - 3S-2.5C(%%) | CL541 - 0812 - 2 - *** | 3 | 5.0 | 10.5 | 7.9 |
| DF1E - 4S-2.5C(%%) | CL541 – 0813 – 5 – *** | 4 | 7.5 | 13.0 | 10.4 |
| DF1E - 5S-2.5C(%%) | CL541 - 0814 - 8 - *** | 5 | 10.0 | 15.5 | 12.9 |
| DF1E - 6S-2.5C(***) | CL541 - 0815 - 0 - *** | 6 | 12.5 | 18.0 | 15.4 |
| DF1E - 7S-2.5C(***) | CL541 - 0816 - 3 - *** | 7 | 15.0 | 20.5 | 17.9 |
| DF1E - 8S-2.5C(%%) | CL541 – 0817 – 6 – ** | 8 | 17.5 | 23.0 | 20.4 |
| DF1E - 9S-2.5C(%%) | CL541 - 0818 - 9 - *** | 9 | 20.0 | 25.5 | 22.9 |
| DF1E 10S2.5C(***) | CL541 - 0819 - 1 - *** | 10 | 22.5 | 28.0 | 25.4 |
| DF1E | CL541 - 0820 - 0 - ** | 11 | 25.0 | 30.5 | 27.9 |
| DF1E12S2.5C(%%) | CL541 – 0821 – 3 – *** | 12 | 27.5 | 33.0 | 30.4 |
| DF1E13D2.5C(%%) | CL541 – 0822 – 6 – *** | 13 | 30.0 | 35.5 | 32.9 |
| DF1E 14S 2.5C(%%) | CL541 - 0823 - 9 - ** | 14 | 32.5 | 38.0 | 35.4 |
| DF1E | CL541 - 0824 - 1 - ** | 15 | 35.0 | 40.5 | 37.9 |

The symbol ****** included in HRS No. and the product spec No. indicate a Specific No.

Note 1.: A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the products per bag. However, the quantity for delivery will be changed according to spec number.

Note 2. : The 2 contact connector is equipped with the convex portion to prevent false-insertion.

Note 3. : The 2 consult Has no wall on the locking side

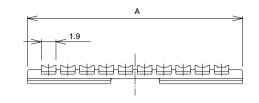
Note 4. : The 2 to 5 contacts contain the retainer fixed convex portions at both ends.

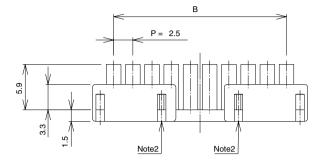
* Refer to page B122 for the retainer.

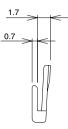


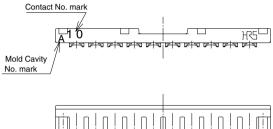
Retainer











| avity / | // | 1 |
|---------|----|---|
| | | |
| | | |

| Product No. | HRS No. | Number of Contacts | А | В |
|-----------------------|------------------|--------------------|------|------|
| DF1E - 2RS/P-2.5(***) | CL541 – 0971 – 6 | 2 | 8.0 | 2.5 |
| DF1E - 3RS/P-2.5(**) | CL541 – 0972 – 9 | 3 | 10.5 | 5.0 |
| DF1E – 4RS/P–2.5(%%) | CL541 – 0973 – 1 | 4 | 13.0 | 7.5 |
| DF1E - 5RS/P-2.5(***) | CL541 – 0974 – 4 | 5 | 15.5 | 10.0 |
| DF1E - 6RS/P-2.5(***) | CL541 – 0975 – 7 | 6 | 18.0 | 12.5 |
| DF1E - 7RS/P-2.5(***) | CL541 - 0976 - 0 | 7 | 20.5 | 15.0 |
| DF1E - 8RS/P-2.5(**) | CL541 – 0977 – 2 | 8 | 23.0 | 17.5 |
| DF1E - 9RS/P-2.5(***) | CL541 – 0978 – 5 | 9 | 25.5 | 20.0 |
| DF1E -10RS/P-2.5(%%) | CL541 – 0979 – 8 | 10 | 28.0 | 22.5 |

The symbol **%*** included in HRS No. and the product spec No. indicates the Specific No.

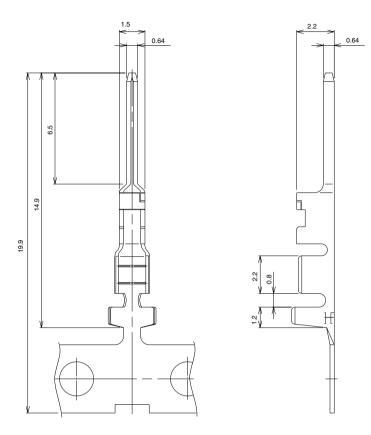
Note 1.: A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the products per bag. However, the quantity for delivery will be changed according to spec number.

Note 2. : The 2 to 4 contacts contain socket and plug fixed holes at both ends.

* This retainer can be used together with the socket and relay plug.



Plug Crimping Contact



•Applicable Cable (Tin plating annealed copper wire)

| Conductor Size (Wire construction) |
|------------------------------------|
| AWG # 20 (21 cores./0.18mm) |
| AWG # 22 (17 cores./0.16mm) |
| AWG # 24 (11 cores./0.16mm) |
| AWG # 26 (7 cores./0.16mm) |
| AWG # 28 (7 cores./0.127mm) |
| AWG # 30 (7 cores./0.1mm) |

Recommended Cable

UL1061, UL1007

Strip Length

3.0~3.7mm

Note : If other cables are used instead of the applicable cable, contact Hirose sales department.

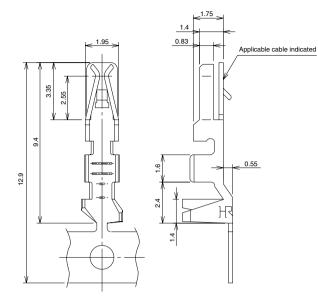
| Product No. | HRS No. | Applicable | Applicat | Applicable Cable | | Quantity |
|----------------|------------------|------------------|------------|------------------|------|----------|
| FIOUUCI NO. | | Cable Indication | AWG | Jacket Diameter | Туре | Quantity |
| DF1E - 2022PCF | CL541 – 0937 – 8 | 20 | AWG # 20 | 1.2~1.9mm | Reel | 10,000 |
| DF1E – 2022PC | CL541 - 0938 - 0 | 22 | AWG # 22 | 1.2 ~ 1.9000 | Bag | 100 |
| DF1E – 2428PCF | CL541 - 0939 - 3 | 24 | AWG # 24 | 0.9~1.5mm | Reel | 10,000 |
| DF1E – 2428PC | CL541 – 0940 – 2 | 28 | AWG # 28 | 0.9 - 1.51111 | Bag | 100 |
| DF1E – 30PCF | CL541 – 0941 – 5 | 20 | ANA/C # 20 | 0.6~1.2mm | Reel | 10,000 |
| DF1E - 30PC | CL541 – 0942 – 8 | 30 | AWG # 30 | 0.0*~1.211111 | Bag | 100 |

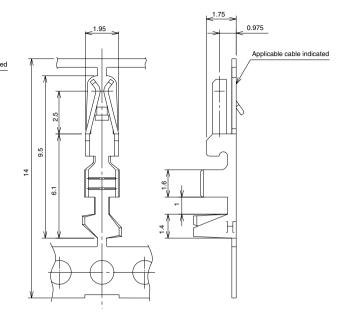
Crimping Contact Extraction Tool DF-C-PO(B)

Socket Crimping Contact

•DF1E-2022SCF

•DF1B - * * * * SCF





•Applicable Cable (Tin plating annealed copper wire)

| Conductor Size (Wire construction) |
|------------------------------------|
| AWG # 20 (21 cores./0.18mm) |
| AWG # 22 (17 cores./0.16mm) |
| AWG # 24 (11 cores./0.16mm) |
| AWG # 26 (7 cores./0.16mm) |
| AWG # 28 (7 cores./0.127mm) |
| AWG # 30 (7 cores./0.1mm) |

Recommended Cable

UL1061, UL1007

Strip Length

2.0mm~2.5mm

Note : If other cables are used instead of the applicable cable, consult Hirose sales department.

| Product No. | HRS No. | Applicable | Applicat | Applicable Cable | | Quantity |
|----------------|------------------|------------------|-----------|------------------|------|----------|
| FIOUUCI NO. | | Cable Indication | AWG | Jacket Diameter | Туре | Quantity |
| DF1E - 2022SCF | CL541 – 0999 – 5 | 20 | AWG # 20 | 1.2~1.9mm | Reel | 10,000 |
| DF1E - 2022SC | CL541 – 1000 – 2 | 22 | AWG # 22 | 1.2 - 1.31111 | Bag | 100 |
| DF1B - 2022SCF | CL541 – 0223 – 1 | 20 | AWG # 20 | 1.2~1.9mm | Reel | 10,000 |
| DF1B - 2022SC | CL541 – 0224 – 4 | 22 | AWG # 22 | 1.2~1.9mm | Bag | 100 |
| DF1B - 2428SCF | CL541 – 0678 – 1 | 24 | AWG # 24 | 0.9~1.5mm | Reel | 10,000 |
| DF1B – 2428SC | CL541 – 0679 – 4 | 28 | AWG # 28 | 0.9 - 1.51111 | Bag | 100 |
| DF1B – 30SCF | CL541 – 0682 – 9 | 30 | AWG # 30 | 0.6~1.2mm | Reel | 10,000 |
| DF1B - 30SC | CL541 – 0683 – 1 | | AVVG # 30 | 0.0 - 1.211111 | Bag | 100 |

Crimping Contact Extraction Tool DF-C-PO(B)

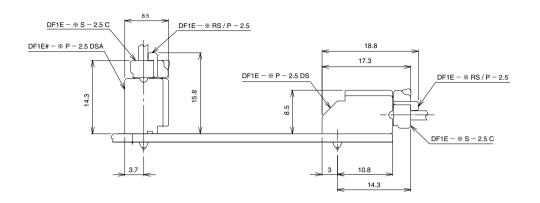
Crimping Tools

| Item | Product No. | HRS No. | Applicable Contact |
|-------------------------|--------------------------|------------------|---|
| Applicator | AP105 – DF1E – 2022S | CL901 - 4561 - 0 | DF1E - 2022SCF |
| | AP105 – DF1B – 2022S 🛛 | CL901 - 4510 - 9 | DF1B – 2022SCF |
| | AP105 – DF1B – 2428S | CL901 - 4518 - 0 | DF1B – 2428SCF |
| | AP105 – DF1B – 30S | CL901 – 4517 – 8 | DF1B – 30SCF |
| | AP105 – DF1B – 2022P 🛛 🔘 | CL901 – 4509 – 0 | DF1E – 2022PCF |
| | AP105 – DF1B – 2428P 🛛 🔘 | CL901 – 4521 – 5 | DF1E – 2428PCF |
| | AP105 – DF1B – 30P 🔘 | CL901 – 4519 – 3 | DF1E – 30PCF |
| Main Press Unit | CM – 105 🔘 | CL901 - 0005 - 4 | |
| Manual Crimping Tool | HT102/DF1E – 2022S | CL550 – 0277 – 1 | DF1E – 2022SC |
| | DF1B – TA2022SHC | CL550 – 0182 – 7 | DF1B – 2022SC |
| | DF1B – TA2428SHC | CL550 – 0209 – 1 | DF1B – 2428SC |
| | DF1B – TA30SHC | CL550 – 0211 – 3 | DF1B – 30SC |
| | HT102/DF1BE – 2022P | CL550 - 0278 - 4 | DF1E – 2022PC |
| | HT102/DF1BE – 2428P | CL550 – 0279 – 7 | DF1E – 2428PC |
| | HT102/DF1BE – 30P | CL550 – 0280 – 6 | DF1E – 30PCF |
| Contact Extraction Tool | DF – C – PO (B) | CL550 – 0179 – 2 | DF1E – 2022SC (F) DF1B – * * * * SC (F) DF1E – * * * * PC (F) |

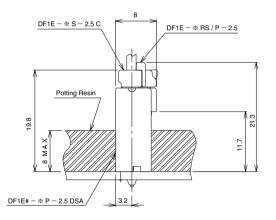
Note 1. : Add "^O" to the last number of the product, in order to use DF1B series tools, which have been conventionally merchandized. Note 2. : f any trouble has occurred due to other tools, which are not designated by Hirose, Hirose won't guarantee any products.

Application Pattern

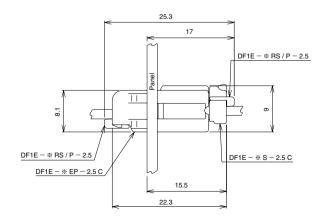
•Standard Header



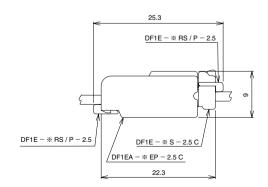
•Header for Potting



Panel Mounting Lock In-line Plug



In-line Plug





Precautions for Use

| 1. Recommended Soldering Condition | ●Flow Condition with Automatic Solder Machine Soldering temperature: 25±5℃, Soldering time: Within 3 seconds ●Manual Soldering Condition Soldering temperature: 290±10℃, Soldering time: Within 2 seconds |
|------------------------------------|--|
| 2. Cleaning Condition | : Refer to the "Nylon Connector Instruction Manual" contained in the other nylon connector catalog. |
| | However, if the connector is cleaned by the potting header, the detergent remains within the connector, which will cause malfunction. |
| 3. Connection Condition | : Refer to the "Nylon Connector Instruction Manual" contained in the other nylon connector catalog. |
| 4. Cautions | To remove the connector, if the connector is forcedly removed, it will cause connector damage. If the connector is hardly removed, slightly push the connector once, and then remove it using the lock. In some method for laying the cable within equipment, a tension may be applied to the cable so as to remove the contact. In this case, it is recommended to use the |
| | retainer. If the potting process is implemented, it is desirable to fill the connector with resin, considering the resin surface tensile force. |
| | The color phase of this product may be slightly different from that of the forming product according to the manufacturing lot and future storage conditions, however the difference doesn't affect the performance. |

