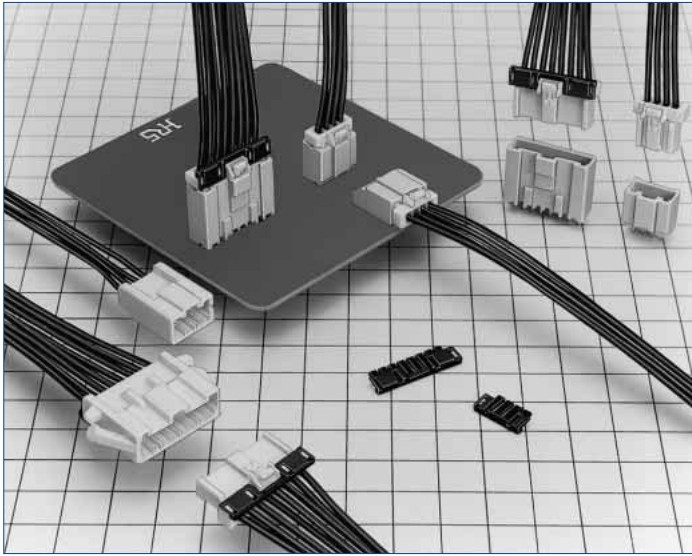


2.5mm Pitch Connectors for Full Lock and Discrete Wire Connection

DF1E Series

UL, C-UL Listed



■ 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. (Fig.1)

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. (Fig.2)

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. (Fig.1)

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 22 AWG 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.

Full lock function added

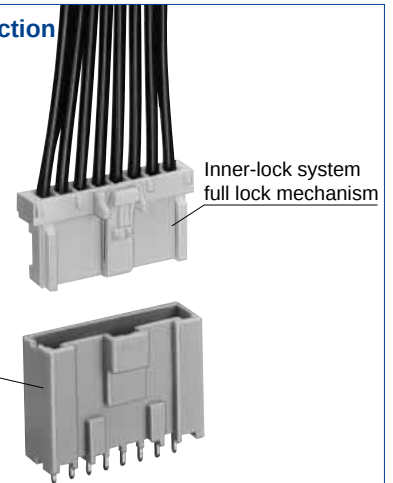


Fig.1

Double lock engaged

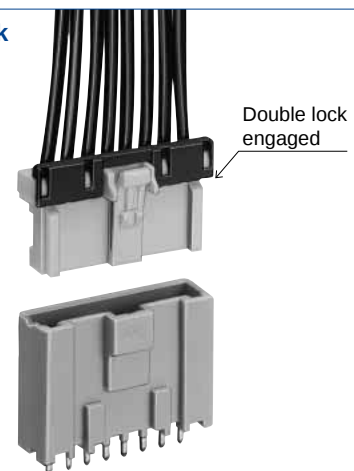


Fig.2

8. Various Applications

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

9. Listed by UL, C-UL

10. Glow wire compliance (Compliant with IEC 60695-2-11)

Products Specifications

Rating	Current rating Note 1. AWG#20 to 24 : 3A 26 : 2A 28 : 1A 30 : 0.5A Voltage rating 250VAC	Operating Temperature Range : -35 to +85°C Note 2. Operating Moisture Range : 40 to 80%	Storage Temperature Range : -10 to +60°C Note 3. Storage Moisture Range : 40 to 70% Note 3.

UL, C-UL Rating		
Rating	Current rating	20 to 22 AWG : 3A 24 to 28 AWG : 1A 30 AWG : 0.5A
	Voltage rating	30V AC

■UL/C-UL File No. and Recognition No.

UL : E52653

C-UL : E52653

Item	Specification	Condition
1. Contact Resistance	30mΩ max.	Measured at 20mV max. and 1mA
2. Insulation Resistance	1000MΩ min.	500V DC
3. Withstanding voltage	No flashover or insulation breakdown.	650V AC/1 minute
4. Single Insertor/Extraction Force	MIN 0.29N, MAX 4.41N	Measured at the square steel pin with 0.635±0.002
5. Durability (Mating/un-mating)	30mΩ max	30 cycles
6. Vibration	No electrical discontinuity of 1μs or more	Frequency : 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions.
7. Shock	No electrical discontinuity of 1μs or more	Acceleration of 490 m/s ² , 11 ms duration, sine half-wave waveform, 3 cycles in each of the 3 axis
8. Humidity (Steady state)	30mΩ max	96 hours at temperature of 40±2°C and humidity of 90% to 95%
9. Temperature Cycle	30mΩ max.	(-55°C : 30 minutes-> 5 to 35°C : 5 minutes-> 85°C : 30 minutes-> 5 to 35°C : 5 minutes) 5 cycles
10. Resistance to Soldering heat	No deformation of components affecting performance.	Flow : 260°C for 10 seconds
		Manual soldering : 300°C for 3 seconds

Note 1 : Current rating of header is 3A.

Note 2 : Includes temperature rise caused by current flow.

Note 3 : The term "storage" refers to products stored for long period of time prior to mounting and use. Operating Temperature Range and Humidity range covers non conducting condition of installed connectors in storage, shipment or during transportation.

Materials / Finish

Product	Part	Material	Finish	Remarks
Socket	Insulator	Polyamide	White	UL94V-0
	Insulator	Polyamide	Beige	UL94V-0
Header	Contact	Brass	Tin plated or Gold plated	————
	Insulator	Polyamide	White	UL94V-0
In-line Plug	Insulator	Polyamide	Black	UL94V-0
retainer	Insulator	Polyamide	Black	UL94V-0
Crimping contact	Contact	Phosphor copper	Tin plated or Gold plated	————

■Product Number Structure

●Pin Header

DF1E C - * P - 2.5 DSA
① ② ③ ④ ⑤ ⑥

① Series Name : DF1E	③ Number of Contacts : 2 to 15 contacts (note. 2)												
② Hold Types (Note. 1) <table><tr><td>Standard Product</td><td>Potting</td></tr><tr><td><table><tr><td></td><td>With Boss</td></tr><tr><td>C</td><td>Without Boss</td></tr></table></td><td><table><tr><td></td><td>With Boss</td></tr><tr><td>G</td><td>Without Boss</td></tr></table></td></tr></table>	Standard Product	Potting	<table><tr><td></td><td>With Boss</td></tr><tr><td>C</td><td>Without Boss</td></tr></table>		With Boss	C	Without Boss	<table><tr><td></td><td>With Boss</td></tr><tr><td>G</td><td>Without Boss</td></tr></table>		With Boss	G	Without Boss	④ Connector Type P : Pin Header
Standard Product	Potting												
<table><tr><td></td><td>With Boss</td></tr><tr><td>C</td><td>Without Boss</td></tr></table>		With Boss	C	Without Boss	<table><tr><td></td><td>With Boss</td></tr><tr><td>G</td><td>Without Boss</td></tr></table>		With Boss	G	Without Boss				
	With Boss												
C	Without Boss												
	With Boss												
G	Without Boss												
	⑤ Contact Pitch : 2.5mm												
	⑥ Form type DSA : Straight through hole DS : Right Angle Type												

Note 1 : The right angle pin header has no symbol.

Note 2 : The potting header has 2 to 10 contacts.

●Socket

DF1E - * S - 2.5 C
① ② ③ ④ ⑤

① Series Name : DF1E	③ Connector type S: Socket
② Number of Contacts : 2 to 15 contacts	④ Contact Pitch : 2.5mm
	⑤ Form Type C : Crimping socket

●In-line Plug

DF1E A - * EP - 2.5 C
① ② ③ ④ ⑤ ⑥

① Series Name : DF1E	③ Number of Contacts : 2 to 10 contacts
② In-line Plug type Blank: With Panel mount Lock A : Without Panel mount Lock	④ EP : In-line plug
	⑤ Contact Pitch : 2.5mm
	⑥ Form Type C : Crimping socket

●Crimping Contact

DF1E - ** SCF
① ② ③

① Series Name : Socket side : DF1B (Note 1) DF1E (Note 1) Plug side : DF1E	② Applicable Cable Size 2022 : 20 to 22 AWG 2428 : 24 to 28 AWG 30 : 30 AWG
	③ Packaging Type SCF : Female contact/reel/Tin plated SCFA: Female contact/reel/Gold plated SC : Female contact/pack/Tin plated SCA : Female contact/pack/Gold plated PCF : Male contact/reel/Tin plated PCFA: Male contact/reel/Gold plated PC : Male contact/pack/Tin plated PCA : Male contact/pack/Gold plated

Note 1 : When the retainer is used, use DF1E-2022SC(F)(A), DF1B-2428SC(F)(A), and DF1B-30SC(F)(A) contacts.

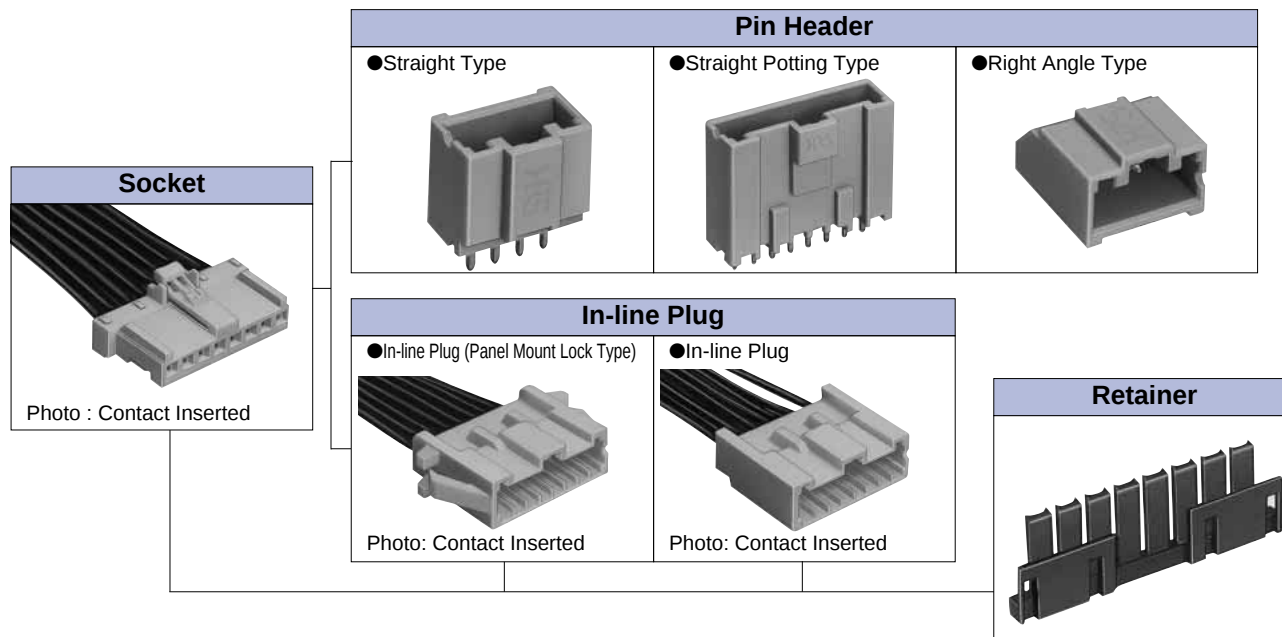
When no retainer is used, all DF1B-**SC(F)(A) and DF1E-2022SC(F)(A) contacts can be used.

●Retainer

DF1E - * RS/P - 2.5
① ② ③ ④

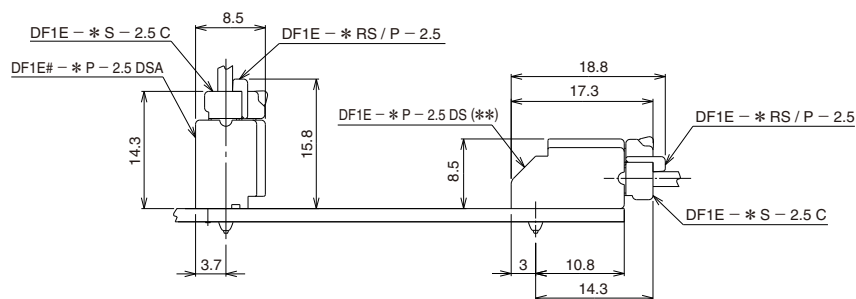
① Series Name : DF1E	③ Connector Type RS/P : Retainer
② Number of Contacts : 2 to 10 contacts	Commonly used for socket and in-line plug
	④ Contacts Pitch:2.5mm

Application Pattern

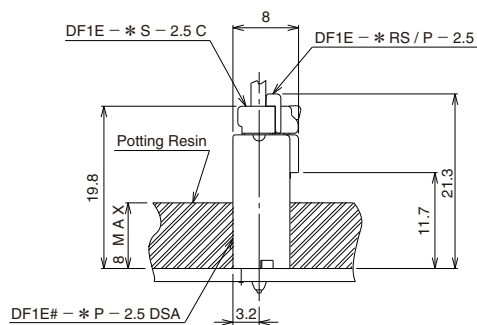


Mated Dimensions

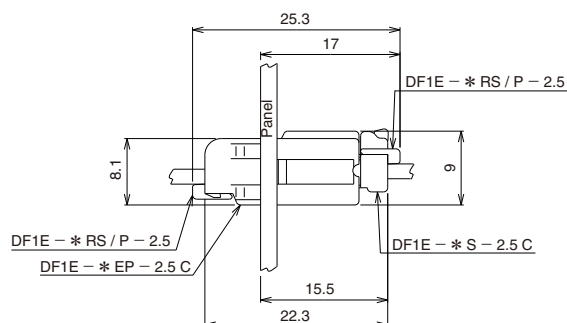
Standard Header



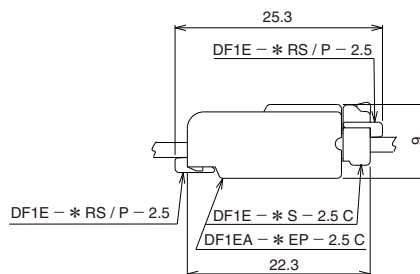
Header for Potting



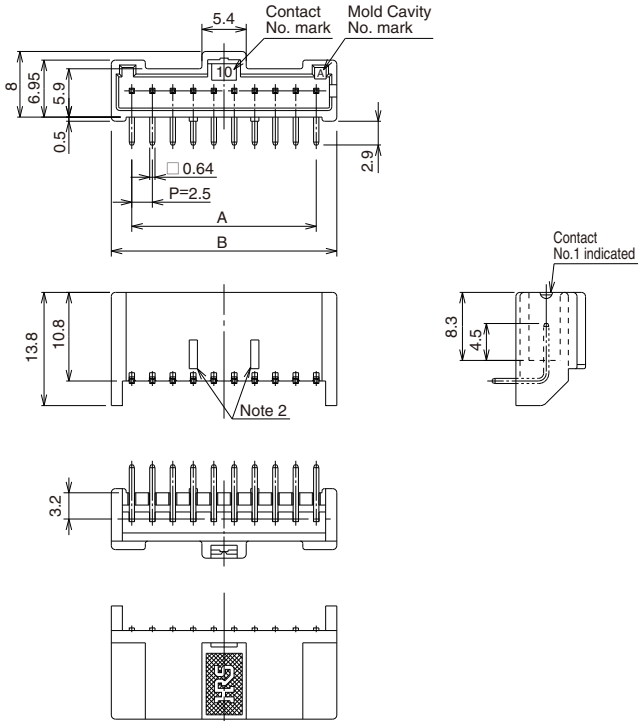
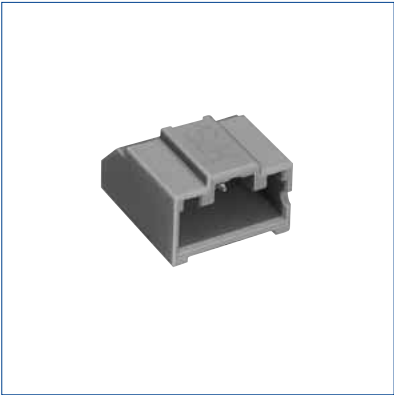
Panel Mounting Lock In-line Plug



In-line Plug



■Right Angle Pin Header



Part No.	HRS No.	No. of Contacts	A	B	RoHS
DF1E- 2P-2.5DS(**)	541-0985-0 **	2	2.5	7.5	Yes
DF1E- 3P-2.5DS(**)	541-0986-3 **	3	5.0	10.0	
DF1E- 4P-2.5DS(**)	541-0987-6 **	4	7.5	12.5	
DF1E- 5P-2.5DS(**)	541-0988-9 **	5	10.0	15.0	
DF1E- 6P-2.5DS(**)	541-0989-1 **	6	12.5	17.5	
DF1E- 7P-2.5DS(**)	541-0990-0 **	7	15.0	20.0	
DF1E- 8P-2.5DS(**)	541-0991-3 **	8	17.5	22.5	
DF1E- 9P-2.5DS(**)	541-0992-6 **	9	20.0	25.0	
DF1E-10P-2.5DS(**)	541-0993-9 **	10	22.5	27.5	
DF1E-11P-2.5DS(**)	541-0994-1 **	11	25.0	30.0	
DF1E-12P-2.5DS(**)	541-0995-4 **	12	27.5	32.5	
DF1E-13P-2.5DS(**)	541-0996-7 **	13	30.0	35.0	
DF1E-14P-2.5DS(**)	541-0997-0 **	14	32.5	37.5	
DF1E-15P-2.5DS(**)	541-0998-2 **	15	35.0	40.0	

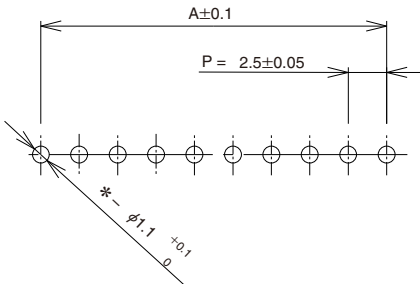
[Specific No.] -* *, (* *)
(36) : Gold plated
(35) : Tin plated

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.

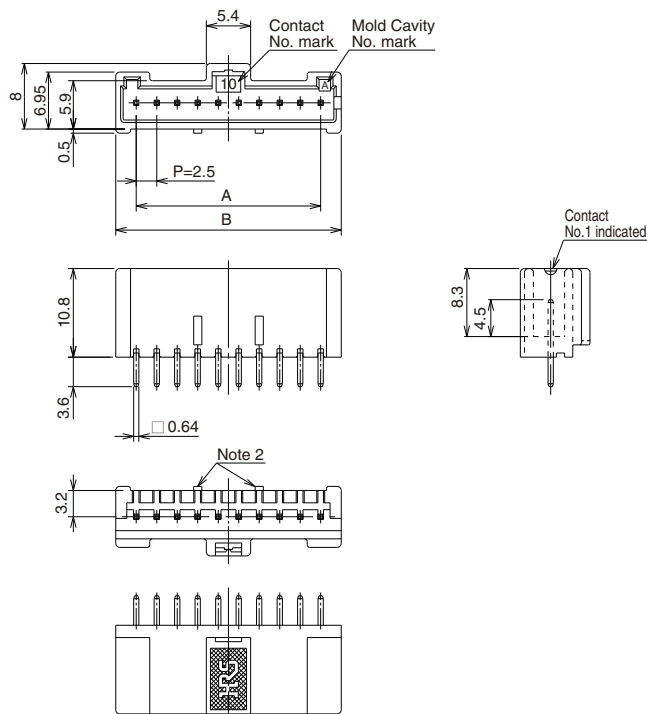
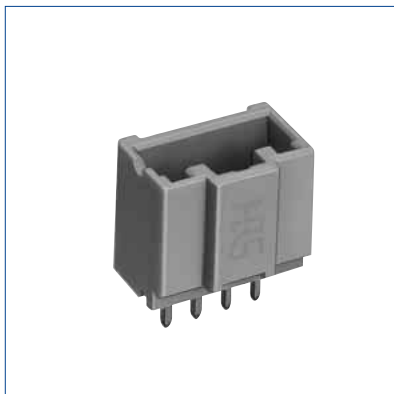
Note 2 : The 2 to 4 contacts differ in two convex portions from those in above figures. The 2 and 3 contacts are not contained, but the 4 contact connector is contained in the center at one point.

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

●PCB mounting pattern (Board Thickness $t = 1.6 \pm 0.1$)



■Straight Pin Header



Part No.	HRS No.	No. of Contacts	A	B	RoHS
DF1EC- 2P-2.5DSA(**)	541-0867-4 **	2	2.5	7.5	Yes
DF1EC- 3P-2.5DSA(**)	541-0868-7 **	3	5.0	10.0	
DF1EC- 4P-2.5DSA(**)	541-0869-0 **	4	7.5	12.5	
DF1EC- 5P-2.5DSA(**)	541-0870-9 **	5	10.0	15.0	
DF1EC- 6P-2.5DSA(**)	541-0871-1 **	6	12.5	17.5	
DF1EC- 7P-2.5DSA(**)	541-0872-4 **	7	15.0	20.0	
DF1EC- 8P-2.5DSA(**)	541-0873-7 **	8	17.5	22.5	
DF1EC- 9P-2.5DSA(**)	541-0874-0 **	9	20.0	25.0	
DF1EC-10P-2.5DSA(**)	541-0875-2 **	10	22.5	27.5	
DF1EC-11P-2.5DSA(**)	541-0876-5 **	11	25.0	30.0	
DF1EC-12P-2.5DSA(**)	541-0877-8 **	12	27.5	32.5	
DF1EC-13P-2.5DSA(**)	541-0878-0 **	13	30.0	35.0	
DF1EC-14P-2.5DSA(**)	541-0879-3 **	14	32.5	37.5	
DF1EC-15P-2.5DSA(**)	541-0880-2 **	15	35.0	40.0	

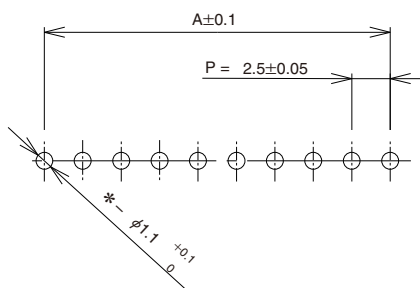
[Specific No.] -* *, (* *)
 (36) : Gold plated
 (35) : Tin plated

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.

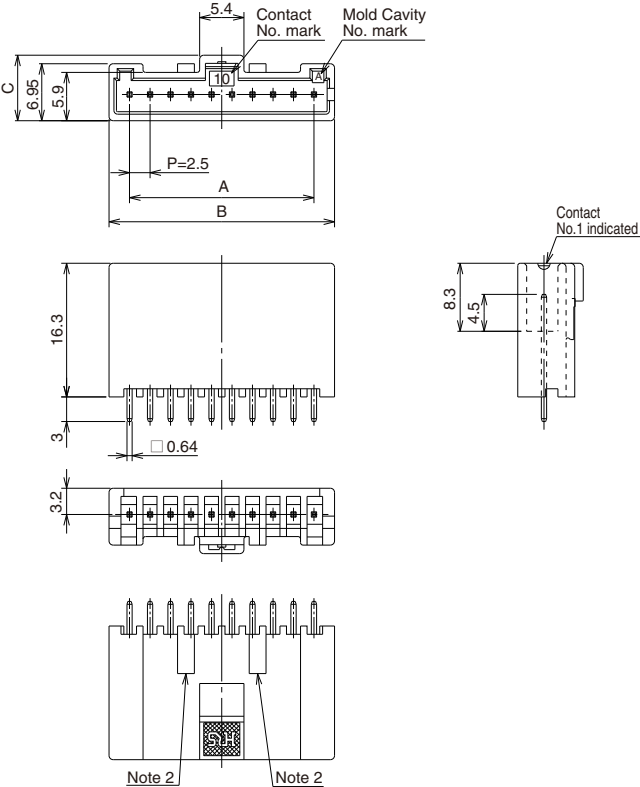
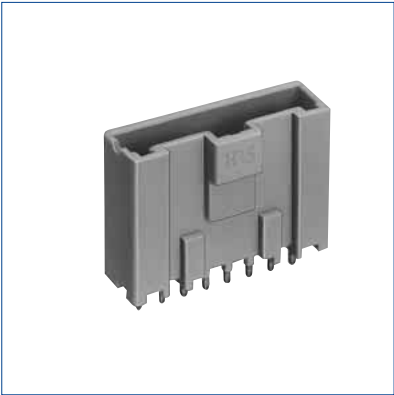
Note 2 : The 2 to 4 contacts differ in two convex portions from those in above figures. The 2 and 3 contacts are not contained, but the 2 and 3 contacts are not contained, and 4 contact is in the center at one point.

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

●PCB mounting pattern (Board Thickness $t = 1.6 \pm 0.1$)



■Straight Pin Header for Potting



Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
DF1EG- 2P-2.5DSA(**)	541-0923-3 **	2	2.5	7.5	8.0	Yes
DF1EG- 3P-2.5DSA(**)	541-0924-6 **	3	5.0	10.0	8.0	
DF1EG- 4P-2.5DSA(**)	541-0925-9 **	4	7.5	12.5	8.0	
DF1EG- 5P-2.5DSA(**)	541-0926-1 **	5	10.0	15.0	7.8	
DF1EG- 6P-2.5DSA(**)	541-0927-4 **	6	12.5	17.5	7.8	
DF1EG- 7P-2.5DSA(**)	541-0928-7 **	7	15.0	20.0	7.8	
DF1EG- 8P-2.5DSA(**)	541-0929-0 **	8	17.5	22.5	7.8	
DF1EG- 9P-2.5DSA(**)	541-0930-9 **	9	20.0	25.0	7.8	
DF1EG-10P-2.5DSA(**)	541-0931-1 **	10	22.5	27.5	7.8	
DF1EG-11P-2.5DSA(**)	541-0932-4 **	11	25.0	30.0	7.8	

[Specific No.] -* *, (* *)
(35) : Tin plated

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.

●PCB mounting pattern (Board Thickness t = 1.6 ± 0.1)

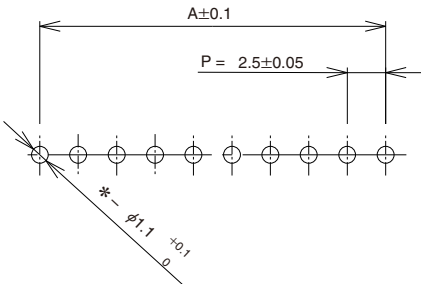
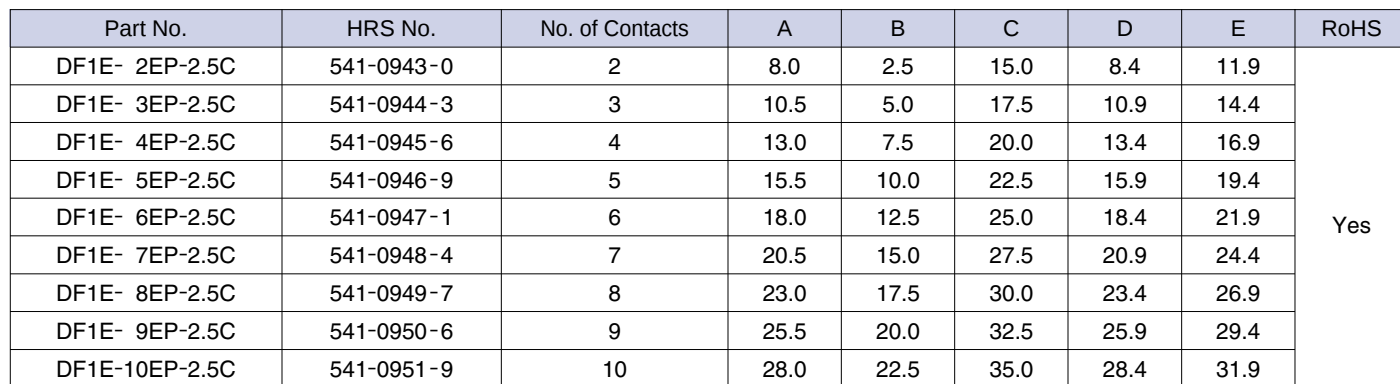


Photo: Contact Inserted.

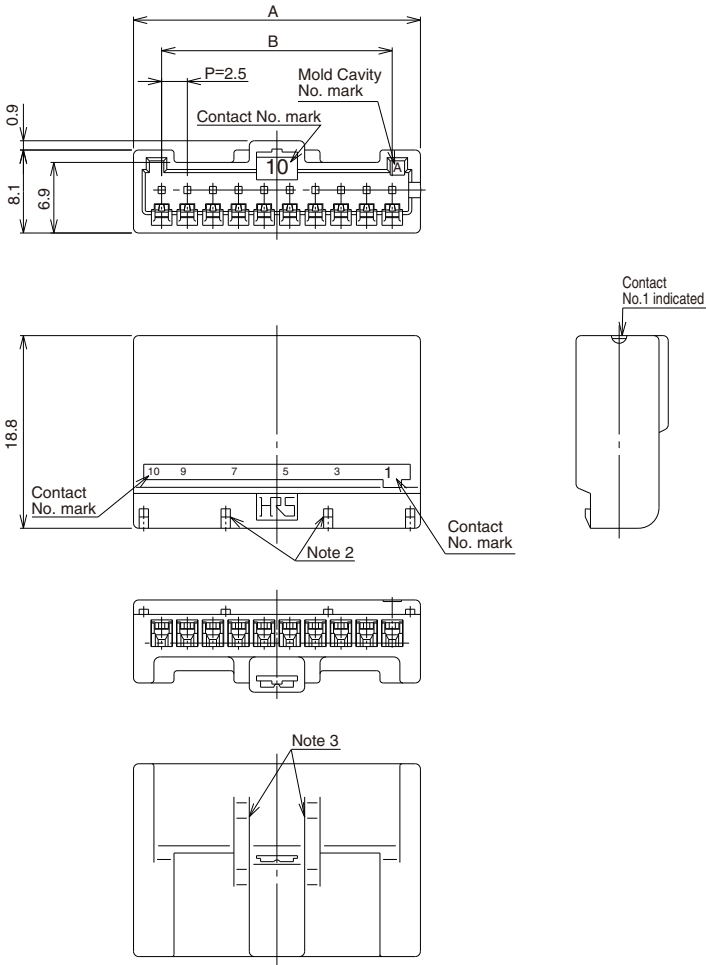
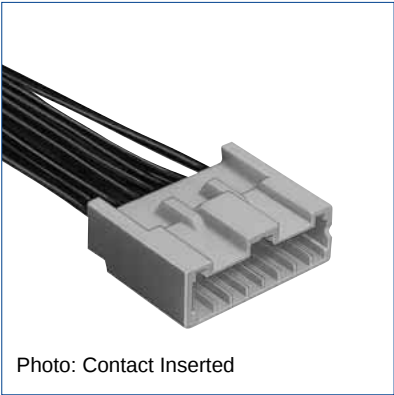


* Refer to page B156 for the retainer.

Panel Thickness	X
1.7 to 2.0	1.5
1.3 to 1.6	1.0
0.9 to 1.2	0.5
0.7 to 0.8	0.0



In-line Plug



Part No.	HRS No.	No. of Contacts	A	B	RoHS
DF1EA- 2EP-2.5C	541-0957-5	2	8.0	2.5	Yes
DF1EA- 3EP-2.5C	541-0958-8	3	10.5	5.0	
DF1EA- 4EP-2.5C	541-0959-0	4	13.0	7.5	
DF1EA- 5EP-2.5C	541-0960-0	5	15.5	10.0	
DF1EA- 6EP-2.5C	541-0961-2	6	18.0	12.5	
DF1EA- 7EP-2.5C	541-0962-5	7	20.5	15.0	
DF1EA- 8EP-2.5C	541-0963-8	8	23.0	17.5	
DF1EA- 9EP-2.5C	541-0964-0	9	25.5	20.0	
DF1EA-10EP-2.5C	541-0965-3	10	28.0	22.5	

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.

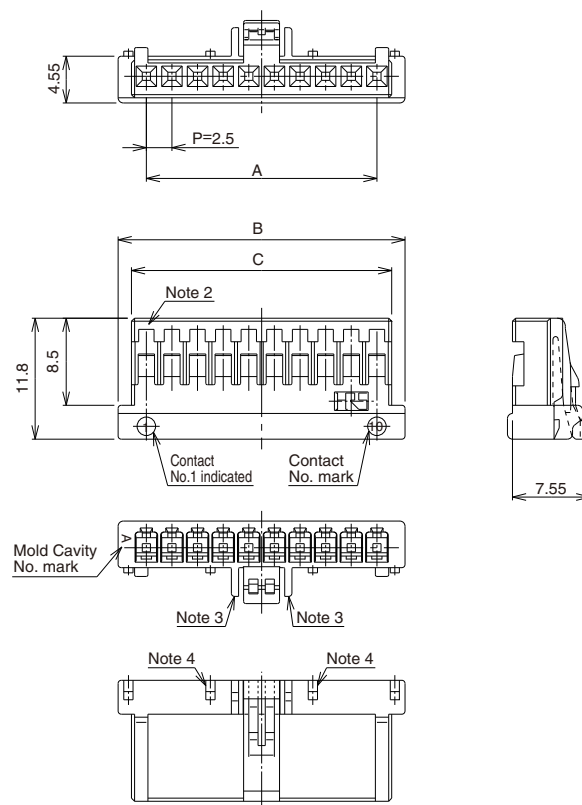
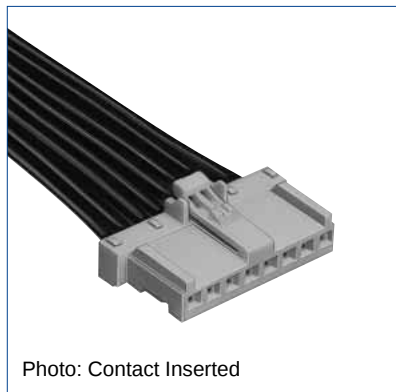
Note 2 : In regard to 2 to 5 contacts, the retainer fixed convex portions are located at both ends.

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 B156 for retainer.

Socket



Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
DF1E- 2S-2.5C	541-0811-0	2	2.5	8.0	5.4	Yes
DF1E- 3S-2.5C	541-0812-2	3	5.0	10.5	7.9	
DF1E- 4S-2.5C	541-0813-5	4	7.5	13.0	10.4	
DF1E- 5S-2.5C	541-0814-8	5	10.0	15.5	12.9	
DF1E- 6S-2.5C	541-0815-0	6	12.5	18.0	15.4	
DF1E- 7S-2.5C	541-0816-3	7	15.0	20.5	17.9	
DF1E- 8S-2.5C	541-0817-6	8	17.5	23.0	20.4	
DF1E- 9S-2.5C	541-0818-9	9	20.0	25.5	22.9	
DF1E-10S-2.5C	541-0819-1	10	22.5	28.0	25.4	
DF1E-11S-2.5C	541-0820-0	11	25.0	30.5	27.9	
DF1E-12S-2.5C	541-0821-3	12	27.5	33.0	30.4	
DF1E-13S-2.5C	541-0822-6	13	30.0	35.5	32.9	
DF1E-14S-2.5C	541-0823-9	14	32.5	38.0	35.4	
DF1E-15S-2.5C	541-0824-1	15	35.0	40.5	37.9	

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.

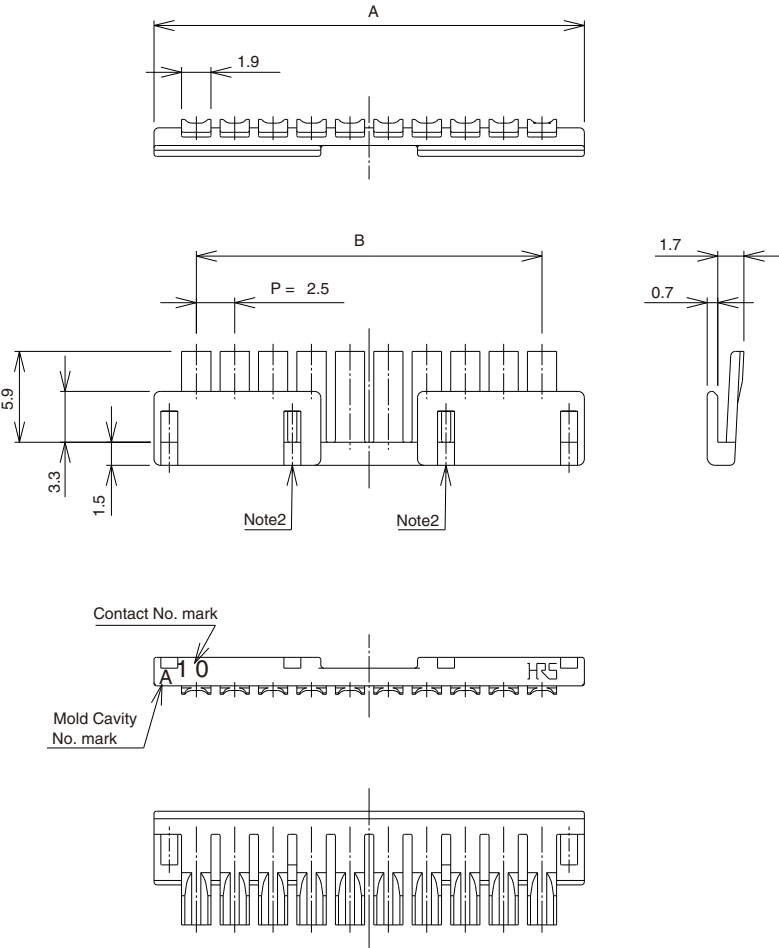
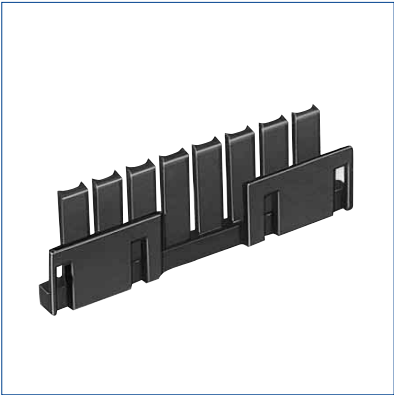
Note 2 : The 2 contact connector is equipped with the convex portion to prevent false-insertion.

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 B156 for the retainer.

◆Retainer



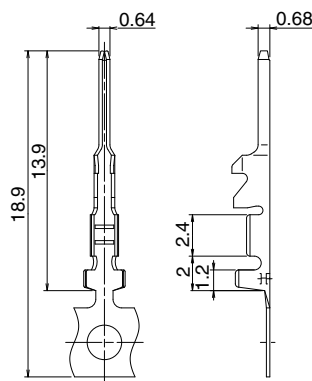
Part No.	HRS No.	No. of Contacts	A	B	RoHS
DF1E- 2RS/P-2.5	541-0971-6	2	8.0	2.5	Yes
DF1E- 3RS/P-2.5	541-0972-9	3	10.5	5.0	
DF1E- 4RS/P-2.5	541-0973-1	4	13.0	7.5	
DF1E- 5RS/P-2.5	541-0974-4	5	15.5	10.0	
DF1E- 6RS/P-2.5	541-0975-7	6	18.0	12.5	
DF1E- 7RS/P-2.5	541-0976-0	7	20.5	15.0	
DF1E- 8RS/P-2.5	541-0977-2	8	23.0	17.5	
DF1E- 9RS/P-2.5	541-0978-5	9	25.5	20.0	
DF1E-10RS/P-2.5	541-0979-8	10	28.0	22.5	

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 In-line plug.

◆ Plug Crimping Contact



Part No.	HRS No.	Applicable Cable				Packaging	Finish	RoHS
		UL Style	Jacket Diameter	Wire Size	Stranded Wire Conductor			
DF1E-2022PCF	541-0937-8	1007 1061	ϕ1.2 to 1.9mm	20 AWG	21/0.18	10,000 / reel	Tin plated	Yes
DF1E-2022PC	541-0938-0	1007		ϕ1.8mm	20 AWG	21/0.18		
			ϕ1.6mm	22 AWG	17/0.16			
DF1E-2428PCF	541-0939-3	1007 1061	ϕ0.9 to 1.5mm	24 AWG	11/0.16	10,000 / reel		
				26 AWG	7/0.16			
				28 AWG	7/0.127			
DF1E-2428PC	541-0940-2	1007	ϕ1.5mm	24 AWG	11/0.16	100 / pack		
			ϕ1.3mm	26 AWG	7/0.16			
			ϕ1.2mm	28 AWG	7/0.127			
DF1E-2022PCFA	541-1003-0	1007 1061	ϕ1.2 to 1.9mm	20 AWG	21/0.18	10,000 / reel		
				22 AWG	17/0.16			
DF1E-2022PCA	541-1004-3	1007	ϕ1.8mm	20 AWG	21/0.18	100 / pack		
			ϕ1.6mm	22 AWG	17/0.16			
DF1E-2428PCFA	541-1005-6	1007 1061	ϕ0.9 to 1.5mm	24 AWG	11/0.16	10,000 / reel		
				26 AWG	7/0.16			
				28 AWG	7/0.127			
DF1E-2428PCA	541-1006-9	1007	ϕ1.5mm	24 AWG	11/0.16	100 / pack		
			ϕ1.3mm	26 AWG	7/0.16			
			ϕ1.2mm	28 AWG	7/0.127			

Note 1 : Crimping Contact Extraction Tool DF-C-PO(B)

Note 2 : Applicable wire with tin plated solid soft conductor.

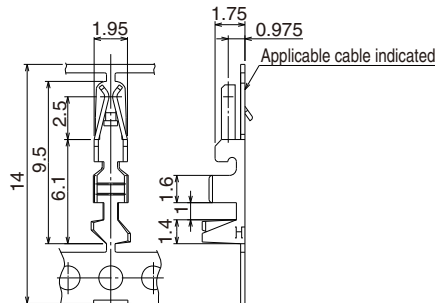
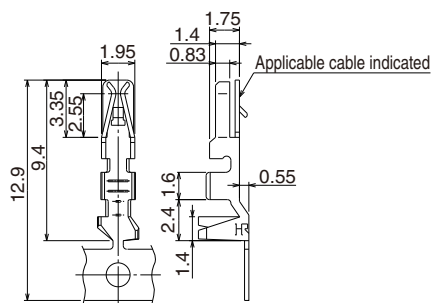
Note 3 : When using other than the recommended wire, contact your nearest Hirose representative.

Note 4 : Strip length : 3.0 to 3.7mm

Socket Crimping Contact

●DF1E-2022SCF (A)

●DF1B - * * * * SCF (A)



Part No.	HRS No.	Applicable Cable				Packaging	Finish	RoHS
		UL Style	Jacket Diameter	Wire Size	Stranded Wire Conductor			
DF1E-2022SCF	541-0999-5	1007 1061	ϕ1.2 to 1.9mm	20 AWG	21/0.18	10,000 / reel	Tin plated	Yes
				22 AWG	17/0.16			
DF1E-2022SC	541-1000-2	1007	ϕ1.8mm	20 AWG	21/0.18	100 / pack		
			ϕ1.6mm	22 AWG	17/0.16			
DF1B-2022SCF	541-0223-1	1007 1061	ϕ1.2 to 1.9mm	20 AWG	21/0.18	10,000 / reel		
				22 AWG	17/0.16			
DF1B-2022SC	541-0224-4	1007	ϕ1.8mm	20 AWG	21/0.18	100 / pack		
			ϕ1.6mm	22 AWG	17/0.16			
DF1B-2428SCF	541-0678-1	1007 1061	ϕ0.9 to 1.5mm	24 AWG	11/0.16	10,000 / reel		
				26 AWG	7/0.16			
				28 AWG	7/0.127			
DF1B-2428SC	541-0679-4	1007	ϕ1.5mm	24 AWG	11/0.16	100 / pack		
			ϕ1.3mm	26 AWG	7/0.16			
			ϕ1.2mm	28 AWG	7/0.127			
DF1B-30SCF	541-0682-9	1007 1061	ϕ0.6 to 1.2mm	30 AWG	7/0.1	10,000 / reel		
DF1B-30SC	541-0683-1	1007	ϕ1.1mm	30 AWG	7/0.1	100 / pack		
DF1E-2022SCFA	541-1001-5	1007 1061	ϕ1.2 to 1.9mm	20 AWG	21/0.18	10,000 / reel		
				22 AWG	17/0.16			
DF1E-2022SCA	541-1002-8	1007	ϕ1.8mm	20 AWG	21/0.18	100 / pack		
			ϕ1.6mm	22 AWG	17/0.16			
DF1B-2022SCFA	541-0662-1	1007 1061	ϕ1.2 to 1.9mm	20 AWG	21/0.18	10,000 / reel		
				22 AWG	17/0.16			
DF1B-2022SCA	541-0663-4	1007	ϕ1.8mm	20 AWG	21/0.18	100 / pack		
			ϕ1.6mm	22 AWG	17/0.16			
DF1B-2428SCFA	541-0680-3	1007 1061	ϕ0.9 to 1.5mm	24 AWG	11/0.16	10,000 / reel		
				26 AWG	7/0.16			
				28 AWG	7/0.127			
DF1B-2428SCA	541-0681-6	1007	ϕ1.5mm	24 AWG	11/0.16	100 / pack		
			ϕ1.3mm	26 AWG	7/0.16			
			ϕ1.2mm	28 AWG	7/0.127			
DF1B-30SCFA	541-0684-4	1007 1061	ϕ0.6 to 1.2mm	30 AWG	7/0.1	10,000 / reel		
DF1B-30SCA	541-0685-7	1007	ϕ1.1mm	30 AWG	7/0.1	100 / pack		

Note 1 : Crimping Contact Extraction Tool DF-C-PO(B)

Note 2 : Applicable wire with tin plated solid soft conductor.

Note 3 : When using other than the recommended wire, contact your nearest Hirose representative.

Note 4 : Strip length : 2.0 to 2.5mm

◆ Crimping Tools

Item	Part No.	HRS No.	Applicable Contact
Applicator	AP105-DF1E-2022S	901-4561-0	DF1E-2022SCF DF1E-2022SCFA
	AP105-DF1B-2022S ◎	901-4510-9	DF1B-2022SCF DF1B-2022SCFA
	AP105-DF1B-2428S ◎	901-4518-0	DF1B-2428SCF DF1B-2428SCFA
	AP105-DF1B-30S ◎	901-4517-8	DF1B-30SCF DF1B-30SCFA
	AP105-DF1B-2022P ◎	901-4509-0	DF1E-2022PCF DF1E-2022PCFA
	AP105-DF1B-2428P ◎	901-4521-5	DF1E-2428PCF DF1E-2428PCFA
Main Press Unit	CM-105C ◎	901-0001-0	—
Manual Crimping Tool	HT102/DF1E-2022S	550-0277-1	DF1E-2022SC
	DF1B-TA2022SHC ◎	550-0182-7	DF1B-2022SC DF1B-2022SCA
	DF1B-TA2428SHC ◎	550-0209-1	DF1B-2428SC DF1B-2428SCA
	DF1B-TA30SHC ◎	550-0211-3	DF1B-30SC DF1B-30SCA
	HT102/DF1BE-2022P	550-0278-4	DF1E-2022PC
	HT102/DF1BE-2428P	550-0279-7	DF1E-2428PC
Contact Extraction Tool	DF-C-PO (B)	550-0179-2	DF1E-2022SC (F) (A) DF1B- * * * * SC (F) (A) DF1E- * * * * PC (F) (A)

Note 1 : Add "◎" to the last number of the product, in order to use DF1B series tools, which have been conventionally merchandized.

Note 2 : If any trouble has occurred due to other tools, which are not designated by Hirose, Hirose won't guarantee any products.

Note 3 : For the crimping process, refer to "crimping quality standards" and "crimping condition".

◆ Precautions

1. Recommended Soldering Condition	Flow : 260°C for 10 seconds Manual soldering : 300°C for 3 seconds
2. Cleaning Condition	Refer to Wire-to-Board Connector Use Hand book. 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 Wire-to-Board Connector Use Hand book.
4. Cautions	● To remove the connector, if the connector is forcibly 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. ● Incomplete insertion of the contact can be prevented by mounting a retainer; however, mounting of a retainer might not be possible when the contact protrudes beyond the socket. Insert the contact securely and then mount 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.
5. Precautions	Refer to Wire-to-Board Connector Use Hand book.