

# **Dynamic Series Connectors**

2021 Edition





List of the Dynamic series

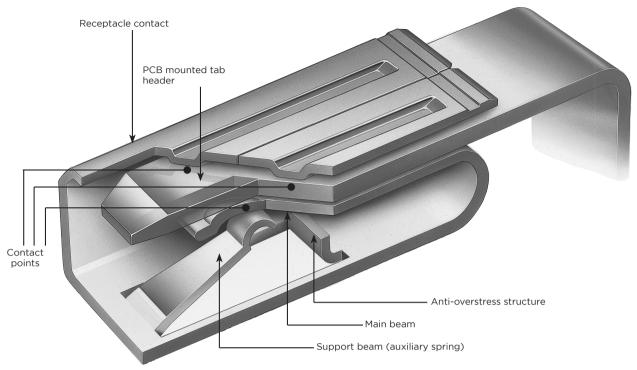
Series  Mini  1000  2000	Family images	Spec.Name  Mini  Slim 1100S 1100D 1200S 1200D 1500T 1900D 2100S 2100D 2100M 2600D	Description  Double-row Standard  Small Standard  Standard  Standard  High Voltage  High Voltage  Module Type  Spring Clamp Type  Standard	Wire-to-		Wire-to DIP Horizontal type  - O O	-board	SMT Horizontal type	Panel O	DIN Rai	Тар	Wire	Drawer I I I	Board to	Number of Positions  12,16,20  4,6,8,12 4,8,10
Mini 1000	Family images	Mini Slim 1100S 1100D 1200S 1200D 1500T 1900D 2100S 2100D 2100M	Double-row Standard Small Standard Standard Standard High Voltage High Voltage Module Type Spring Clamp Type Standard	- 0 - 0	Vertical type	DIP Horizontal type  -  -  O	Vertical type	Horizontal type  O	- - -	- - -	- - -	- - -	-	- - -	12,16,20 4,6,8,12 4,8,10
Mini 1000	Family images	Mini Slim 1100S 1100D 1200S 1200D 1500T 1900D 2100S 2100D 2100M	Double-row Standard Small Standard Standard Standard High Voltage High Voltage Module Type Spring Clamp Type Standard	- 0 - 0	Vertical type	Horizontal type  -  -  O	Vertical type	Horizontal type  O	- - -	- - -	- - -	- - -	-	- - -	12,16,20 4,6,8,12 4,8,10
1000		Slim 1100S 1100D 1200S 1200D 1500T 1900D 2100S 2100D 2100M	Small Standard Standard Standard High Voltage High Voltage Module Type Spring Clamp Type Standard	- 0 - 0		- O			- - -	- - -	- - -	- - -	-	- - -	4,6,8,12 4,8,10
1000		Slim 1100S 1100D 1200S 1200D 1500T 1900D 2100S 2100D 2100M	Small Standard Standard Standard High Voltage High Voltage Module Type Spring Clamp Type Standard	0 - 0 0	- - - 0	- 0 0	-	- -	-	-	-	-		- - -	4,6,8,12 4,8,10
1000		Slim 1100S 1100D 1200S 1200D 1500T 1900D 2100S 2100D 2100M	Small Standard Standard Standard High Voltage High Voltage Module Type Spring Clamp Type Standard	0 - 0 0	- 0	0	-	-	-	-	-	-		-	4,6,8,12 4,8,10
1000		Slim 1100S 1100D 1200S 1200D 1500T 1900D 2100S 2100D 2100M	Small Standard Standard Standard High Voltage High Voltage Module Type Spring Clamp Type Standard	0 - 0 0	- 0	0	-	-	-	-	-	-		-	4,6,8,12 4,8,10
		1100S 1100D 1200S 1200D 1500T 1900D 2100S 2100D 2100M	Standard Standard High Voltage High Voltage Module Type Spring Clamp Type Standard	0 0	- 0	0	-	-	-	-	-	-		-	4,8,10
		1100S 1100D 1200S 1200D 1500T 1900D 2100S 2100D 2100M	Standard Standard High Voltage High Voltage Module Type Spring Clamp Type Standard	0 0	- 0	0	-	-	-	-	-	-		-	4,8,10
		1100D 1200S 1200D 1500T 1900D 2100S 2100D 2100M	Standard High Voltage High Voltage Module Type Spring Clamp Type Standard	0 0 0 -	0	0							_		
		1200S 1200D 1500T 1900D 2100S 2100D 2100M	High Voltage High Voltage Module Type Spring Clamp Type Standard	0	0		0	_		_					110.18.20.22.24.
		1200D 1500T 1900D 2100S 2100D 2100M	High Voltage  Module Type  Spring Clamp Type  Standard	0		-			0	_	-	-	-	-	10,18,20,22,24, 26,28,30,32, 34,40
		1500T 1900D 2100S 2100D 2100M	Module Type Spring Clamp Type Standard	-	0		-	-	-	-	-	-	-	_	2
2000		1500T 1900D 2100S 2100D 2100M	Module Type Spring Clamp Type Standard	_		0	_	_	0	_	_	_	_	_	4,6,8,10,
2000		1900D 2100S 2100D 2100M	Spring Clamp Type Standard	_	0	0	_	_	0	0	_	0	_	_	12,16,20 3,6,9,10, 12,36
2000		2100S 2100D 2100M	Standard	-											
2000		2100D 2100M			0	0	-	-	-	-	-	-	-	-	8,12,16,22,30, 38
2000		2100M		0	0	0	-	-	0	-	-	-	-	-	3
2000			Standard	0	0	0	-	-	0	-	-	-	-	-	6,8,12,16,20
2000		2600D	Multiposition Drawer	0	-	0	-	-	0	-	-	-	0	-	50
***		0	Hybrid Power/Signal	-	0	-	-	-	-	-	-	-	-	-	48
		2800	Multi-Frame	0	-	-	-	-	0	-	-	-	-	-	30
		2950	Spring Clamp Type	_	-	0	-	-	-	-	-	-	-	-	5,6
		2970	On-Site Push-In Type		-	-	-	0	-	-	-	-	-	-	3,4
1		3100S	Standard & SMT	0	0	0	0	0	0	-	-	-	-	-	3,4,5,6,8,10
		3100D	Standard	0	0	0	-	-	0	-	-	-	-	-	6,8,10,12,16,20
4		3100M	Module Type	-	0	0	-	-	-	-	-	-	-	-	6
		3200S	High Voltage	0	0	0	-	-	0	-	-	-	-	-	2,3,4,5,6
		3200M	High Voltage	0	0	0		-	0	-	-	-	0	-	6,10,12,20
3000	3200FMLB	Sequential type	_	-	0	-	-	-	-	-	-	-	-	4,12	
		3200T	High Voltage	-	-	0		-	-	-	-	-	-	-	9
		3400F	Skyscraper	_	-	0	-	-	-	-	-	-	-	-	12,20
	-	3500D	Modular Type	0	0	0	-	-	0	-	-	-	_	-	2,4,6,12,20
ı	-	3800 3100/3200	Multi-Frame Dynatap	0	-	-	-	_	0	-	-	-	_	_	12 6,18,24/ 4,24
	-	3950	Spring Clamp Type	-	_	0	-	-	_	_	-	_	_	_	3,4,6,7,8,11
	T .	4200S	Standard	0	0	0	-	-	0	_	_	-	-	_	2,3,4
		4200M	Module Type	0	_	_	_	_	0	_	_	_	_	_	6
4000				-											
		4800	Multi-Frame	0	_	_	-	_	0	_	_	_	_		8
		4950	Spring Clamp Type	_	-	0		-	-	-	-	-	-	-	8
		5200S	Standard	0	0	0	-	-	0	-	-	-	-	-	2,3,4,6
		5200M	High Voltage	0	0	0		-	0	-	-	-	-	-	4,6,8
		5300S	Reversed Housing	-	-	-	-	-	0	-	-	-	-	-	3
		5300D	Reversed Housing		-	-	-	-	0	-	-	-	-	-	4
		5200	Dynatap	-	-	-	-	-	-	0	0	-	-	-	4,12,20
5000		5200Μα	High Current	-	-	0		-	-	-	-	-	-	-	2,4
			Dyna-Clamp kit	0	0	0	-	-	0	-	-	-	-	-	3,4
		DZ-5200	Board-to-Board type	-	-			-	-	-	-	-	-	0	5,7
2	Lilly Manager	DL-3200	Боага то-воага туре	-		-		-	-	-	-	-	-	0	3,4
		5800	Multi-Frame	0		-		-	0	-	-	-	-	-	4
		5900	Spring Clamp Type	-	-	0	-	-	-	-	-	-	-	-	4,6
		7100	Standard	0	-	0	-	-	0	-	-	-	-	-	4
7000	100	7300	Reversed Housing	0	-	0	_	-	0	_	-	-	-	_	4
4			Dyna-Clamp kit	0	-	_	_	_	_	_	_	_	_	_	4
			2 - Committee and	Ť											
8000		8000	Standard	-	0	-	0	0	0	0	0	0	0	0	2
Othe	ner products		Multiple Enclosure Connector	<u> </u>						_	_				1



				Electrical Perfor	rmance		Safety Standards	
Number of Rows	Pitch (mm)	Wire Range (AWG)	Maximum rated current (A)	Maximum Rated voltage (V)	Withstanding Voltage (V)	Durability (Cycles)	UL CSA TÜV	Corresponding Pages
2	1.8	22-26	3	250	650	30	UL : File No. E28476	10-13
2 (4,6Pos), 3 (8Pos), 4 (12Pos)	-	22-30	4.5	250	1500	30	UL : 1977 E28476 CSA : Report No.182.3	18-20
1	2.0	30-22	3	125	1000			21
2	2.0	30 - 22	3	125	1000		UL : File No. E28476	22 - 24
2	2.5	30 - 18	5	250	1500	Gold: 100 Tin: 30	TÜV : License No. R50085096	25 26 - 28
3,4	3.5							29 - 31
2	3.5	24 - 18	4	150	1500		UL : 1059 E60677	32
1 2	2.5	28 - 18	5	250		500	UL : File No. E28476 CSA : Report No. LR7189 TÜV : License No. R9950679	37 38 - 39
2		20	2.6		1500			40
3	D-2(2.5) D-3(3.81)	D-2(28 - 18) D-3(28 -14)	D-2(3.2) D-3(7.5)	250		500	UL : File No. E28476 CSA : Report No. LR7189	41
6	3.75	28 - 18	5				TÜV : License No. R9950679	103 - 106
1	5.08	18 - 14	10	600	2200	Gold: 500	UL : 1059	70
1	5.0 3.81	24 - 14	10(UL)/20(IEC)	300(UL)/400(IEC)	2210	Gold: 100; Tin: 25	UL:1059 IEC:61984/90647-7-1	74 - 76 47 - 50
2	3.81			250	1500			51 - 52
2	3.81							53
1	5.08							54 - 56
2	5.08	28 - 14	15	600	2200	Gold: 500	UL : File No. E28476	57 - 61
2	5.08	20 14	15			Tire 100	CSA : Report No. LR7189 TÜV : License No. R50084673	62
3	5.08			250	1500	Tin: 100	(VDE0627)	63 - 64
2	3.81 5.08			250 600	1500 2200			65 66 - 67
4	6.5			600	2200			106
3,6	3.81	28 - 14	15	250	1500			77 - 79
1,2	7.5	22-14	14.5	600	2200	Gold: 500	UL : 1059	71
1	6.35		24	600	2500		UL : File No. E28476	84 - 85
2	6.35	16 - 12	24	600	2500	25	TÜV : License No. R50084673	86
4	6.35	10 - 12	24	600	2500	25	UL : File No. E28476	106
1	7.5	16 - 10	22	600	3310	Gold: 500	UL : 1059	72
1								91 - 92
2						0.76µ Gold: 50	UL : File No. E28476	93 - 94
2	10.16	16 - 10	30	630	3000	0.38μ Gold: 25	CSA : Report No. LR7189 TÜV : License No. R9650368	95
3		20 - 8	45			Silver: 25		96
1		16 - 10	30			0.76µ Gold: 50 0.38µ Gold: 25	-	97 - 98
	5.08		20	250	2200		UL : File No. E28476	
1	10.16	-	30	600	4000	15	CSA : Report No. LR7189 TÜV : License No. R50073218	101 - 102
2	12.0	16 - 10	30	630	3000	0.76μ Gold: 50 0.38μ Gold: 25	UL : File No. E28476 CSA : Report No. LR7189	106
1	13.1	16-8	42	600(IEC)	2200	0.38µ Gold: 25	UL : 1059	73
2	16	16 - 6	60 (board-to-wire) 65 (wire-to-wire)				UL : File No. E28476	110
2	16	16 - 6	55 (wire-to-wire cable clamp type)	630	3000	0.76μ Gold: 20	TÜV : License No. R9650368	111
1	24.4	3	100A (wire-to-wire) 90A (wire-to-board)	1000	3000	10		113 - 116
4,8	See details	in series page		See details in ser	ies page		See details in series page	117 - 119



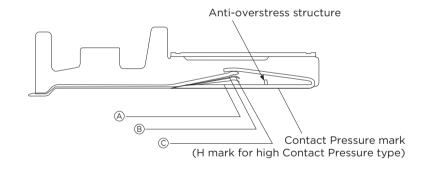
### Contact Features (Example of the D-3000 Series)



(Illustration of the D-3 Connector)

### **Contact Pressure Adjustment Method**

- Gold and Tin contacts are available. Adjustable gaps for the auxiliary spring (at positions of A-C) to get the optimum contact pressure. For gold-plated product, both high pressure contact and standard pressure contact are available in accordance with the intended use
- Anti-overstress structure prevents damage to the main beam which might be caused by insertion of external objects or twisting (Receptacle contact type of D-2 S, M/D-3 S, M, L, 2L, 3L/D-5 S, M)



(Applicable to the D-3 terminal)

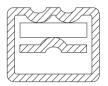
Plating	Туре	Contact Pressure	Position	Contact Pressure Mark	Applicable Positions	Specifications	Application	Durability (cycles)
Gold	Standard Contact Pressure	Around 1.47N	A	_	1~100	Standard	Used for signal/power multi- position and High durability cycles circuits	500
Gold	High Contact Pressure	Around 2.45N	B	Н	1~20	Vibration / High current	Used for signal/Power supply/ Motor application with high- vibration feature	500
Tin	High Contact Pressure	Around 3.92N	©	Н	1~10	High Current	Used for Signal/Power supply circuit with few durability cycles	100



### Contact Features (Example of the D-3000 Series)

### Tab/Receptacle Contact

Male side is tab, while female side is receptacle contact so as to avoid twisting. (Refer to Figure below) Highly reliable 3-point contacts are used.

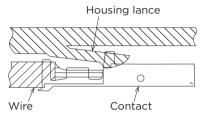


### Fixing of the contact and housing

The housing lance is used to secure the contact in place. The lance ensures the contact stays secure in the housing and helps prevent damage during contact mating.

In addition to these protective features, the housing lance produces an audible "click" ensuring the contact is securly locked in the housing.

The contact can still be easily removed with extraction tool.



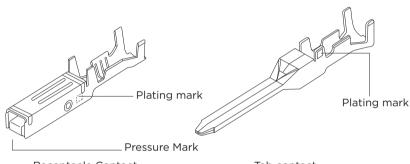
#### Confirmation Marks

- Contact Pressure marks....."H" mark on the bottom of the contact for high pressure contact product (standard pressure contact for those without the marks) (Only for D-3 connector)
- Plating marks.....To show clearly types and thickness of the plating. Following numbers will be marked on the side surface of the contact. This number is consistent with the additional number of contact's part model number.
- -2.....Gold plating of 0.38µm in thickness
- -3.....Gold plating of 0.76µm in thickness
- -5.....Tin plating



#### Wire range marks

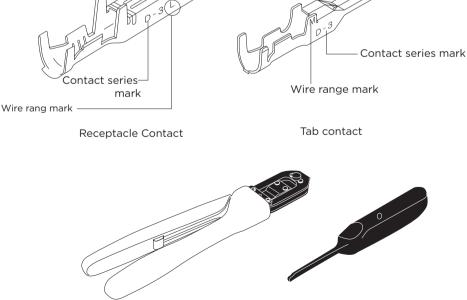
/G#30-28
/G#28-22
/G#28-22
/G#22-18
/G#28-24
/G#22-18
/G#28-24
/G#24-20
/G#20-16
/G#16-14
/G#16-14
/G#16-14
/G#14-12
/G#20-16
/G#16-14
/G#12-10
/G#8



Receptacle Contact

Tab contact

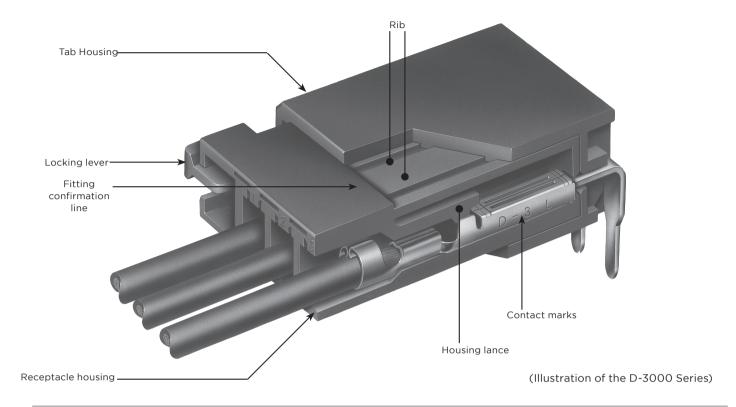
Extraction



Hand tool

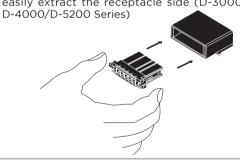


### Housing Features (Example of the D-3000 Series)

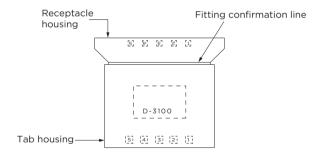


### Easy to insert and extract the connector

- When you insert or extract the connector, a clear "click" sound will be heard. A fitting confirmation line is provided to confirm the operation
- Pinch 2 locking levers on both sides of the housing to easily extract the receptacle side (D-3000/D-3200/ D-4000/D-5200 Series)

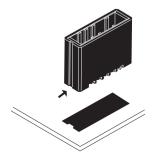


 For safety consideration, well rounded corners will be used to prevent hand Injuries when inserting or extracting the connector



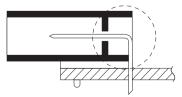
#### **Vertical - type header**

•To avoid misinstallation or misalignment of the Header on board, pay attention to direction indicator (Concave) of Vertical-type header (only available for D-3000 Series)



#### **Housing to protect Tin-plated contacts**

 For protecting the soldering Tin-plated contacts, Housing of horizontal type of Header will be fully applied to cover contacts.

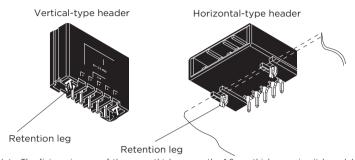


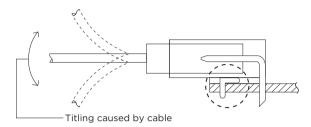


### Housing Features (Example of the D-3000 Series)

#### **Retention legs for board mounting**

- For robotic automatic implementation, the retention legs will be provided for both the vertical-type and the horizontal-type headers.
- Especially for the horizontal-type header, it is possible to mount to the bottom of the housing and it will not take up as wide a space as the conventional system. Retention legs are close to the insertion part of the receptacle housing so as to resist tilting caused by the cable.

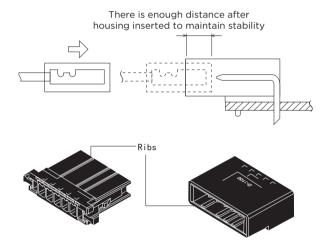




Note: The fixing pins are of the same thickness as the 1.6mm thickness circuit board. When they are used for a 2.4mm thickness circuit board, the strength will decrease somewhat.

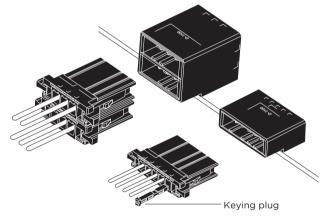
### **Twisting Prevention Structure**

 The ribs are used in both receptacle housing and tab housing. This safety design can be used to avoid any backlashes between housings after the receptacle housing has been completely inserted into tab housing.



### **Anti-mis-mating structure**

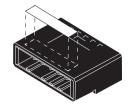
• Part of the products (D-1200D/ D-2100S/ D-2100D/ D-3100S/ D-3100M/ D-3200S/ D-3200M/D-3200T/ D-4000/ D-5200S/ D-5200M) is provided with keying to prevent incorrect insertion. By using this plug, it also makes it easier to prevent incorrect insertion of other items. (refer to Page 121, which shows the information of keying plug, for D-2000 series only; and Page 121, For D-3000 series only)



#### **Label Mark**

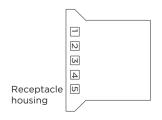
 A flat side portion is provided in the housing for custom labels.

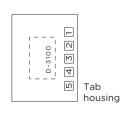




#### Easy-to-read circuit number

• To facilitate cable assembly, tab and receptacle housings will be marked with circuit numbers.







**Guideline for plating selection**(These guidelines apply to the D-3000 series only. Please note that they may not be suitable for other products.)

Whether to use gold or tin plating depends on the voltage, current, environment (vibration, temperature, gas, etc.), number of contact positions, and other variables.

Gold plating is recommended for general industrial machinery, but in reality cost considerations are also a factor. To help in this selection, these guidelines have been put together for Dynamic Series as a reference in the selection process.

#### (1) Selection based on voltage and current

	Gold Plated	Undetermined zone	Tin	No Plating (Reference)	
Voltage	Below 3 V	3 to 30 V	30 ~ 100 V	Over 100 V	
Current	Below 1 A	1 to 10 A	Over 10 A	Over 0.1 A	

(Table 1)

Table 1 shows us that gold should always be used for applications under 3 volts and 1 ampere. When the voltage is over 30 and amperage is over 10, tin plating can be used. The most difficult area to make a selection is in the undetermined zone. In this zone either gold or tin plating can be used, and environmental parameters are the key variation to consider due to extensive impact on the application.

In a clean environment tin plating is acceptable. However, use gold plating if the environment is harsh, such as high heat or humidity, the presence of gas is possible, vibration is extreme, mating and demating are frequent, or other factors.

# (2) Selection based on number of contact positions (selection based on contact pressure)

Selecting based on the number of contact positions is often forgotten. The higher the contact pressure the more possible it is to use tin plating or no plating, regardless of the voltage or current mentioned in section 1. However, if pressure is too high, mating and demating become impossible so the connector function is lost. To get around this, we can drive the voltage and current down into a workable zone, but then we run into the problem of oxidation. To prevent oxidation, we use tin (approximately 2.94 N optimum contact pressure) or gold (approximately 1.18 N) plating. Even though, the contact pressure increases proportionally as we increase the number of contact positions, which causing difficult mating and demating. Generally speaking, given a 39.2 N limit for mating/demating by hand, it becomes difficult without using leverage,

such as a lever or jack screw when exceed the limit.

The Dynamic D-3000 series has a maximum of 20 contact positions. The contact pressure per pin with tin plating is 3.92 N, and with gold plating is 2.45 N and 1.47 N (high pressure types and standard types are available for some applications).

For instance, given 3.92 N for tin plating, the insertion and extraction force of 20-position connector will be 58.8N and 49.0N, which is difficult because it exceeds the range for barehanded work. Therefore, gold plating are selected when position increased regardless of the voltage and current conditions mentioned in section 1.

Table 2 shows the applicable maximum number of contact positions as a reference.

Contact Pressure	Applicable Maximum Number of Contact Positions	
(1)Gold Standard contact pressure parts:	1.47N	20
(2)Gold High contact pressure parts:	2.45N	20
(3)Tin High contact pressure parts:	3.92N	12

(Table - 2) Note: Insertion force and extraction force are not the same as contact pressure.

#### (3) Environment (vibration, humidity, gas, etc.)

Although the environment was discussed in section 1 about voltage and current, it is summarized again here.

Use gold plating in a harsh environment, particularly for

Use gold plating in a harsh environment, particularly for high vibration or heat, the presence of gas or other harsh conditions. Gold is a noble metal and does not react easily with other materials which means good resistance to oxidation. This is a very important property for contacts.

Also, if vibration is an issue, fretting corrosion (microabrasion) is a risk. In cases like this, gold plating is always the recommended choice.



**Guideline for plating selection (**These guidelines apply to the D-3000 series only. Please note that they may not be suitable for other products.)

#### (4) Others considerations

#### Contact between dissimilar metals

Strongly recommend to match contacts with same plating materials. For example, gold-plated receptacle contact mate with gold-plated tab contact or header. That's because different plating materials may create a lot of ionization and electrolytes which lead to corrosion, therefore the performance of product will be worse than a pair of connectors with same plating.

The above information has been summarized in "Plating selection at a glance" for your convenience.

★★ Best★★ Good★ Usable- Unacceptable

#### • Being consistent within an application

We recommend that, as much as possible, the same type of plating be used within one application. This is to prevent connections being made between dissimilar metals, gold and tin as mentioned on the left, during assembly and maintenance. And for the same reason, we recommend using the same plating in factories or workplaces where assembly or harness production is done.

#### Platings selection at a glance

			Gold Plated					
Voltage/Current	Application	Tin plated	0.3	βμ	0.76μ			
			Standard pressure	High pressure	Standard pressure	High pressure		
	Standard specifications	-	**	**	***	***		
	Vibration	-	*	**	*	***		
Below 3V Below 1A	Harsh environment	-	* *		**	***		
Delow IA	Extensive mating/ unmating	-	**	*	***	**		
	Many contact positions	-	***	**	***	**		
	Standard specifications	-	**	**	***	***		
	Vibration	-	*	**	*	***		
3 to 30V 1 to 10A	Harsh environment	-	**	**	***	***		
1 10 1071	Extensive mating/ unmating		**	*	***	**		
	Many contact positions	-	***	**	***	**		
	Standard specifications	**	***	***	***	***		
	Vibration	-	**	***	**	***		
Over 30V Over 10A	Harsh environment	-	**	**	***	***		
Over IUA	Extensive mating/ unmating	-	***	**	***	**		
	Many contact positions	-	***	**	***	**		

The above table is based on industrial equipment with sufficient margin reserved. There are various combinations depending on the application, so it is not necessarily as shown in the above table, which is for reference only.



### Mini Dynamic Series

#### Series Introduction

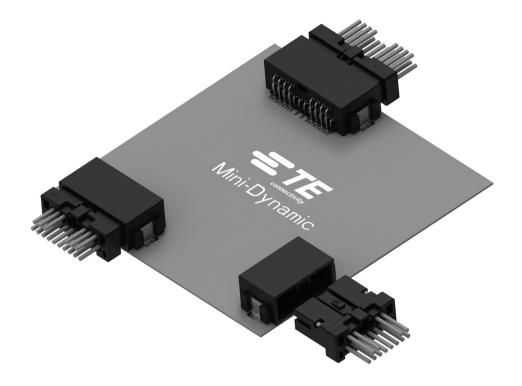
The Dynamic Mini Sub-series, as the name suggests, are the smallest connectors in the Dynamic family, with superior low profile design, both in height and pitch. It is ideal for use in applications where board space is at a premium.

The Dynamic Mini Sub-series is superior in design with the same performance features found in all Dynamic products:

- Crimped terminals on the wire end
- Audible-tactile locking mechanism for male and female mating
- Double locking design for the wire-end terminals in the wire-end plastic housing
- Unique protective latch concept to ensure the reliability of the connection

It is also worth mentioning. That halogen-free materials are used for the board-end plastic housing.

The higher reliability and smaller size make the Mini Sub-series not only usable in the industrial environment, but can also easily meet the needs of other applications in automotive and robotics, which require higher vibration resistance.



#### Product Highlights

### 1. Small size

The Dynamic Mini Series has a lower profile than the D-1100D Series, especially in the height, which provides more valuable space on the board.

#### 2. Secondary locking design

Dynamic Mini introduces the secondary locking design, in addition to the conventional terminals for cable wrapping and crimping. There is also a flush-mounted latch on the plastic housing which provides additional locking of the terminal into the plastic housing increasing reliability. This further reduces the risk of the cable loosening.

#### 3. Sunken unlocking structure

In addition to inheriting the superior audibletactile locking design of the Dynamic Series, the Mini sub-series has a unique protective latch concept. Compared to the D-1200 Series, which raises the plastic housing around the unlocking structure to protect the latch and prevent accidental unlocking. The Dynamic Mini achieves the same function through a sunken design that is more user-friendly.

#### 4. Tin-plated terminals

The choice of tin plating, together with the secondary locking and sunken unlocking structure, makes the Dynamic Mini products extremely cost effective.

## 5. Board-end surface-mount (SMT) design, suitable for reflow soldering

High temperature material is selected for the board-end plastic housing, suitable for reflow soldering. The soldering plate of the terminal is surface-mounted (SMT), which facilitates automatic pick and place.

NOTE: All products are RoHS compliant On selection.



## Mini Dynamic Series Performance and Specifications

### Performance

Series Item	Mini Dynamic				
Pitch	1.8 mm				
Rated voltage (max)	250V AC/125V DC				
Rated current (max)	3A				
Contact resistance	20mΩ max				
Withstanding voltage	650V				
Operating temperature	-40℃ ~ 125℃				

### Positions / Wire size / Rated current

### Mini Dynamic

Positions	Cable size ( AWG )					
POSITIONS	22	24	26			
1	3	2.5	2			
2~20	2.5	2	1.5			
21~40	2	1.5	1			

### Product Specification and Instruction Sheet

	108-137443 (reference for industrial
Product manual	field )
Product manual	108-137526 ( reference for
	automotive field )
	114-137526 (for receptacle-end
Installation manual	terminal )
installation manual	114-137527 (for receptacle-end
	plastic housing )

### Materials and Plating

Category	Material
Terminal	Copper alloy
Plating in mating area	Tin plating over nickel underplate
Plastic housing	UL94-V-0
Plastic housing of tab (board end)	High temperature nylon, halogen free
Plastic housing of receptacle (wire end)	PBT
Reinforced pin	Copper alloy



### Mini Series Contact

### ■Crimp Contacts



Wire Range				Con	tact	Applicable Tools		
		Outer Diameter of Insulation mm	Wire Range Mark	Receptacle Contact		CCII Hand Tool PEW12 Hand Tool*	Crimping Tool	
AWG	mm <sup>2</sup>			Plating	Strip Form	(PEW12 dies only)	Crimping 1001	
26	0.0	0.13 0.85-1.10	S	Tin plating	2834464-5	4-1579014-0	2151332-2	
26	0.13						2-2151332-2	
24	0.22	0.05.170	м	Tip plating	2834464-6		2151524-2	
22	0.35	0.95-1.30	М	Tin plating	2834464-6		2-2151524-2	

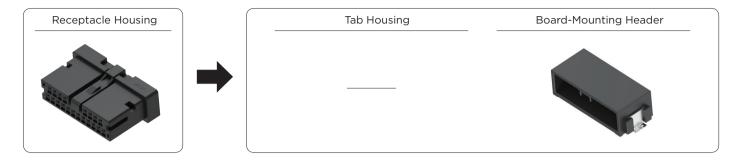
Receptacle contacts are available for all receptacle housings, and the tab housings are available for all tab housings.

NOTE: All products are RoHS compliant On selection.



### Mini Dynamic Double-row Standard Types - 1.8mm pin pitch

### Type Chart

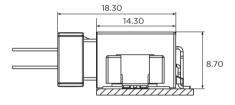


Pos	Color	Key	Receptacle Housing	Plating	Board-Mounting Header
12	Black	X	1-2834461-2	Tin	1-2834465-2
IZ	Black	Y	1-2834497-2	Tin	1-2834499-2
16	Black	X	1-2834461-6	Tin	1-2834465-6
10	Black	Υ	1-2834497-6	Tin	1-2834499-6
20	Black	X	2-2834461-0	Tin	2-2834465-0
20	Black	Υ	2-2834497-0	Tin	2-2834499-0

### Relative Product Information

Applicable contact...P.12
Performance & specifications...P.11

### Mated Dimensions



### External Dimensions

### ■ Receptacle Housing

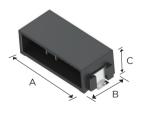


Daa	Kay Cala		Dout Number	Dimensions			
Pos	Key	Color	Part Number	Α	В	С	
12	X	Black	1-2834461-2	19.3	15.7	8.35	
12	Υ	DIACK	1-2834497-2	19.5	15.7	0.33	
16	X	Black	1-2834461-6	22.9	15.7	8.35	
10	Υ	DIACK	1-2834497-6	22.9	15.7	8.33	
20	X	-Black	2-2834461-0	26.5	15.7	8.35	
20	Y	DIACK	2-2834497-0	20.5	15.7	8.35	

NOTE: All products are RoHS compliant On selection.

### ■ Board-Mounting Header

Horizontal type



D.	os	Key	Plating	Color	Part Number	Dimensions		
	US	Key	Plating	COIOI	Color Part Number		В	С
	2	X	Tin	Dlask	1-2834465-2	23.9	14.45	8.7
	2	Υ	HIN	Black	1-2834499-2	25.9	14.45	8.7
1	6	X	Tin	DII.	1-2834465-6	27.5	14.45	8.7
'	0	Υ	1111	Black	1-2834499-6	27.3	14.45	8.7
		X	Tin	Black	2-2834465-0	31.1	14.45	8.7
	20 Y Tin		Diack	2-2834499-0	31.1	14.43	0.7	



#### D-1000 Series

#### Series introduction

D-1000 Series are the smallest connectors for signal lines among all the Dynamic connector series.

The Dynamic 1000 Series consists of 3 different pitch sizes: 2.0mm standard type, 2.5mm high-voltage type and 3.5mm type. As market needs change, the D-1000 series will evolve to meet those demands.

D-1000 Series has gold plated contacts to maintain its high reliability and also tin plated contacts for economical market needs. Customers can choose their own contacts according to specifications, applications and cost.



### **Product Features**

#### 1.Wide Applicable Wire

From D-1000 series has wide applicable wire range of 30 AWG to 18 AWG with maximum 2.2 mm of outside diameter (D-1200/ D-1500). Therefore there are no special safety considerations using it in electrical cabinets.

#### 2. Hand Tools are available for all wire sizes.

Standard crimping tools can be used for the D-1000 series by exchanging the die. The ability to exchange the die based on difference wire sizes shortens the lead-time and reduces the cost of use for the hand tool.

## 3.Housing and Contact Features A) Housing products

The D-1000 series consists of D-1100 series with 2.0mm pitch center line, D-1200 series with 2.5mm pitch center line. The D-1500 series is 3.5mm pitch.

In addition to black, the series is also available in other colors. Using different colors in the application can be helpful in reducing the assembly time.

#### **B) Contact Products**

D-1000 series provide gold plating contact as standard products and also tin plating contact for economical market needs. Choose contact according to specifications, application, quality level and cost.

## 4.Other Features (Basic Dynamic series features)

- Header connector and tab connector have enough length from the tip of contact to top of its housing. To prevent contact from bending during mating
- The positioning dowels in the housing and the terminals do not come into contact, so damage to the terminals during operation can be kept to a minimum.
- Clear identification of circuit number helps with correct wiring
- Metal retention leg on header prevents unwanted movement from cable tension
- Housing lock design avoid wire scratching

Note: All models are RoHS compliant.



### **D-1000 Series Performance and Specifications**

### **Performance**

ltem series	D-1100	D-1200	D-1500	D-1900
Pitch	2.0mm	2.5mm	3.5mm	3.5mm
Rated voltage	125V AC/DC			150V AC/DC
Rated current	1 pos: 3A	1 pos: 5A	1 pos: 5A	1 pos: 4A
(Max)	With AWG22	With AWG18		
Contact resistance		20mΩ Max		40mΩ Max
Withstanding Voltage	1,000V AC	1,500V AC	1,500V AC	1,100V AC
Operation Temperature		-30°C ~+105°C		

### Positions/ wire size / rated current

#### D-1100~1500 series

Position	Wire Size (AWG)									
Position	18	20	22	24	26	28	30			
1	5	4	3	2.5	2	1.5	1			
2~20	3.5	2.7	2.5	2	1.5	1	0.8			
21~40	-	-	2	1.5	1	0.8	0.5			

### D-1900 series

Position	Wire Size (AWG)						
Position	18	20	22	24			
8~12	3	2	1.5	1			
13~38	2	1.5	1	0.5			

### **Product Specifications**

	108-78268 (gold-plated)				
Product	108-78298 (tin-plated)				
		108-78336 (D-1900)			
		114-5377 (D-1100、			
Application	Applications Specifications				
	Part number: 1762952-1	400 10 414 JDN			
Crimping tool	Part number: 1762846-1				
instruction sheet	Part number: 1762950-1	408-10414-JPN			
	Part number: 1762625-1				
Extraction	411-78241				
D-1900 Extraction	411-78263				

### **Materials and Plating**

Description	Material	Finish			
Receptacle Contacts Tab Contact	Copper alloy	Tin-plating or 0.38µm gold-plating over 1.27µm Nickel under-plated			
Board Mount Header	Copper alloy	0.38 μm gold-plating over 1.27 μm Nickel under-plated 2.0 μm Tin-plating on tail side			
Housing	UL94V-0, Thermoplastic PBT containing glass fiber				

**Safety Standards** \*Remember to obtain Instruction Sheets when you choose to use these tools.

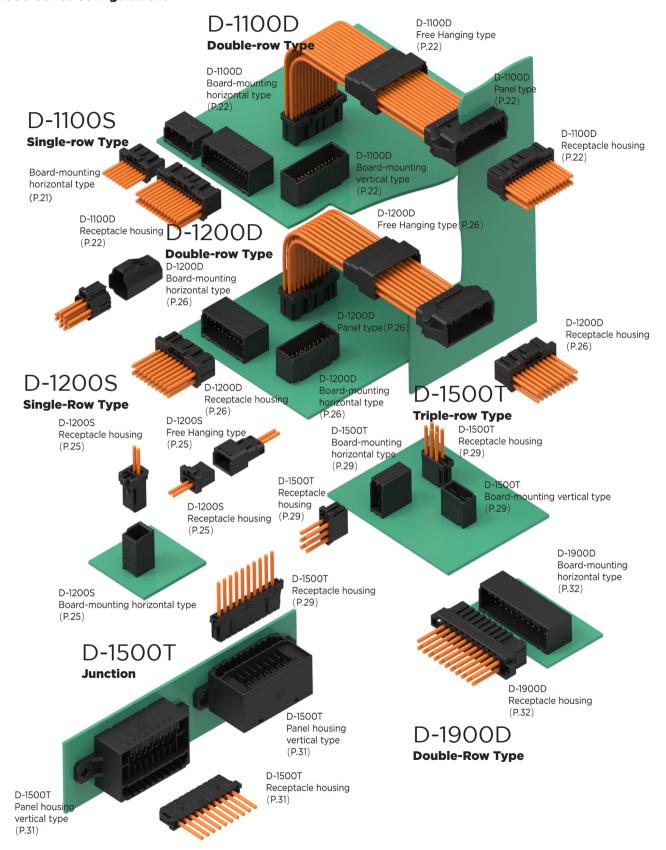
The safety specifications listed below are approved on specific part numbers. Please contact our sales department to check whether the part numbers you use are approved or not.

series		D-1100			-1200、D-1500		D-1900			
Specifications	Rated Voltage	Rated Current	Temperature Range	Rated Voltage	Rated Current	Temperature Range	Rated Voltage	Rated Current	Temperature Range	
Product Specifications 108-78268	125V AC/DC	3A (1 pos)	-55°C ~+105°C	250V AC/DC	5A (1 pos)	-55°C~+105°C	150V AC/DC	4A (1 pos)	-30°C ~+105°C	
UL File No.E28476	Based on requirements of Application	Based on requirements of Application	-	Based on requirements of Application	Based on requirements of Application	-	Based on requirements of Application	Based on requirements of Application	-	
CSA Report No.LR7189	125V AC/DC	3A	_	250V AC/DC	5A	_	150V AC/DC	4A (1 pos)	_	
TÜV	125V AC/DC	AWG A (Ipos)  22 3  24 2.5  26 2  28 1.5  30 1	-55°C ~+105°C	250V AC/DC	AWG A (Ipos)  18 5 20 4 22 3 24 2.5 26 2 28 1.5 30 1	-55°C ~+105°C	150V AC/DC	AWG A (1pos) 18 4 20 3 22 2.5 24 2	-30°C -+105°C	

 $Some \ part \ numbers \ are \ not \ available \ yet. \ Please \ contact \ our \ Sales \ Department \ for \ more \ information.$ 



#### **D-1000 Series Configurations**



### **D-1000 Series Contact**

### **■ Crimp Contacts**

Receptacle Contact (for Receptacle housing)





Wi	ire Range	Outside Diameter	Wire			Contacts			Applicabl	e tools														
		of	Range	Receptacle Contact		tact	Tab Contact		CCII hand tool PEW12 hand tool*	Tool numbers														
AWG	mm <sup>2</sup>	mm	Mark	Plating	Strip form	Loose Piece	Strip form	Loose Piece	(PEW12 dies Only)	Mini Applicator														
30	0.05	0.6.10		Gold Plating	1827569-2	1827586-2	1903111-2	1903115-2	2119144-1	011 40 40 0														
28	0.10	0.6~1.2	S	Tin plating	_	_	_	_	1762952-1* (1762453-1)	2114042-2														
28	0.08																							
26	0.12	10010	.,	Gold Plating	1827570-2	1827587-2	1903112-2	1903116-2	2119141-1	04540004														
24	0.20	1.08~1.6	М	М	1.08-1.6 M	M	l M	M	M	M	M	IM	M	M	M	М	М						1762846-1* (1762847-1)	2151082-1
22	0.37					Tin plating	1871303-1	1871743-1	1903120-1	1903124-1														
28	0.08																							
26	0.12	1.08-1.9 L	L	L	L	L	1.08~1.9 L	Gold Plating	1827571-2	1827588-2	1903113-2	1903117-2	2119143-1											
24	0.20							L	L	~1.9 L						1762950-1* (1762951-1)	2114043-2							
22	0.37			Tin plating	1871304-1	1871744-1	1903121-1	1903125-1																
22	0.34~0.37			Gold Plating	1827572-2	1827589-2	1903114-2	1903118-2																
20	0.51~0.53	1.4~2.2	2L	2   2L	1.4~2.2 2L	2 2 3 4 1 1 1 1 1 1 1	.32,3,2 2	.52.000 2			2119142-1 1762625-1*	2151083-1												
18	0.85~0.87			Tin plating	1871731-1	1871745-1	1903122-1	1903126-1	(1762626-1)	0.000 .														

## Remarks: The contacts L and 2L do not fit into the D-1100 receptacle housing and tab housing.

When ordering, specify your requirements by multiplying the quality.

Contact our Sales Department for more information. Gold plating:0.38µm Tin plating:2.0µm For mini-applicators information, contact our Sales

Department.

Keying plug: 1939588-1

Strip Form contacts are used with Mini-applicators (bench machine) and Loose-Piece contacts are with hand tools.

\*With die set

Keying Plug with flip locator use CCII hand tools (CERT\*CRIMPII)

PEW12 dies are interchangeable hand tools.

\* Only hand tools are available with dies, part number 9-147824D-0

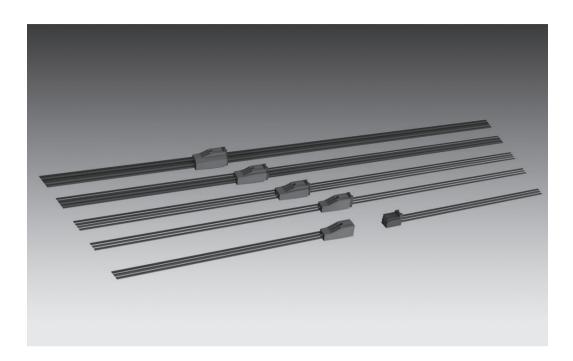
Receptacle contacts are only available for receptacle housings, while the Tab housings are only available for tab housings. Refer to pages P.120-124 for details of applicable tools.



### **D-1000Slim Series**

#### **Series Introduction**

The Dynamic D-1000 Slim Series is a wire-to-wire connection solution for smaller devices in the industrial field. A perfect blend of high reliability and small size is achieved through a balanced contact arrangement, supporting the trend toward miniaturization of devices.



### **Product Highlights**

#### 1. Small size

The D-1000 Slim has a size advantage over the D-1100 and D-1200 series based on a near-circular hole layout. This is especially important when the product needs to be used in restricted spaces, such as the internal wiring of robotic arms. The more reasonable hole layout improves the efficiency of space usage.

## 2. Vibration-resistant terminal housing structure

Box receptacles and terminals are highly vibration-resistant. The slots in the housing prevent improper mating and provide high reliability.

#### 3. Effective mating length

Although small, the reliability required for industrial devices is achieved by terminals that ensure effective mating length.

### 4. Latching

When mating, a clear locking sound and sensation informs the operator, making it possible to complete work without defects such as improper mating (half mating) even in an operating environment where visual inspection is not possible.



### **D-1000Slim Series Performance and Specifications**

### Performance

Rated voltage	AC/DC 250V max.
Withstanding voltage	AC 1,500 V / 1 minutes
Wire Range	AWG # 22 ~ # 30
Operating temperature	-55℃ ~ +125℃
Durability	30 cycles

### Product Specification and Instruction Sheet

Product Specification	108-140257
Application Specifications	114-5377
Instruction Sheet	408-78197

### Materials and Plating

Category	Material	Plating			
Receptacle Contact Tab Contact	Copper alloy	Gold plating (0.2µm)			
Housing	UL94V	-O, thermoplastic PBT with glass fiber			

### Positions / Wire size / Rated current

### D-1000 Slim Series

Pos	Cable size ( AWG )						
F05	AWG 22	AWG 24	AWG 26	AWG 28	AWG 30		
2-4	4.5	3.9	3.2	2.2	1.6		
5-6	4.2	3.4	2.9	2	1.3		
7-8	3.8	3.1	2.6	1.8	1.2		
9-12	3.5	2.8	2.3	1.6	1.1		

Temperature rise: 30°C max

Pos	Cable size ( AWG )							
FUS	AWG 22	AWG 24	AWG 26	AWG 28	AWG 30			
2-4	8.6	7.2	6	4.1	3.1			
5-6	8	6.4	5.5	3.7	2.9			
7-8	7.3	5.8	5	3.2	2.5			
9-12	6.5	5.2	4.4	2.9	2.3			

Ambient temperature: 25℃, temperature rise: 100℃

### D-1000 Slim Contact



Receptacle contact (used in receptacle housing)



Tab contact (used in tab housing)

Wire I	re Range Outer		\Λ/ırρ			Contact			Applicab	le Tools
AWG		Diameter of Insulation	Range	Plating	Receptacle Contact		Tab Contact		Hand Tool	Micro
AVVG		mm		Plating	Strip Form	Loose Piece	Strip Form	Loose Piece	A A	Applicator
30 28	0.05	0.6 ~ 1.2	S	Gold plating	2367817-1	2367818-1	2367819-1	2367820-1	2381707-1 (2119144-1 with 2381710-1)	2151110-1
28	0.08									
26	0.08	1.08 ~ 1.6 M	м	Gold	2367817-2	2367818-2	2367819-2	2367820-2	2371748-1 (2119141-1	2151082-1
24	0.20		~ 1.0   M   p	plating 236/81/-2	230/01/-2	230/010-2	230/019-2	230/020-2	with 2381710-1)	2131002-1
22	0.30									



### 1000 Slim Small Standard Types

### Type Chart

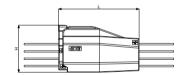


	Color	Key		Tab Ho	ousing	Board-Mounting Header	
Pos			Receptacle Housing	Panel Type	Free Hanging type	Horizontal type	Vertical type
4	Dlask	Х	1-2366515-4	 	1-2366600-4		
4	Black	Υ	2-2366515-4	 	2-2366600-4		
6	Black	Х	1-2366515-6	 	1-2366600-6		
0		Υ	2-2366515-6	 	2-2366600-6		
8	Black	Х	1-2366515-8	 	1-2366600-8		
8	Black	Υ	2-2366515-8	 	2-2366600-8		
12	Black	Х	3-2366515-2	 	3-2366600-2		
12	Віаск	Υ	4-2366515-2	 	4-2366600-2		

### Relative Product Information

Applicable contact...P.19
Performance & specifications...P.19

### **Mated Dimensions**



Pos	Н	L
4	8.9	21.5
6	8.9	21.5
8	11	21.5
12	13	21.3

### External Dimensions

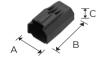
### ■ Receptacle Housing



Pos	Key	Plating	Color	Part Number	Dimensions			
POS	Key			Part Number	Α	В	С	
4	X		- Black	1-2366515-4	6.1	10.5	8.2	
4	Υ	] -		2-2366515-4		10.5	0.2	
6	X		Black	1-2366515-6	8.8	10.5	8.2	
6	Υ	_		2-2366515-6				
8	X		Black	1-2366515-8	8.8	10.5	10.2	
°	Υ	-	DIACK	2-2366515-8	0.0	10.5		
12	X		Black	3-2366515-2	11.5	11.3	12.2	
	Υ	_		4-2366515-2	11.5	11.3		

### ■ Tab housing

Free Hanging type

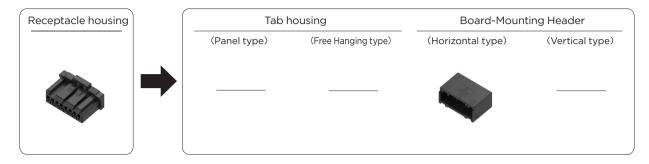


Pos	Key	Disting	Color	Part Number	Dimensions			
POS	Key	Flating		Part Number	А	В	С	
4	X		Black	1-2366600-4	7.2	19	8.6	
4	Υ	] -	Diack	2-2366600-4	/.2	19	0.0	
6	X	-	Black	1-2366600-6	9.9	19.7	8.6	
	Υ			2-2366600-6				
8	X		Black	1-2366600-8	9.9	19.7	10.6	
0	Υ	] -	DIACK	2-2366600-8	9.9	19.7		
12	X		Black	3-2366600-2	12.6	21	12.6	
12	Υ	_	DIACK	4-2366600-2	12.0	21	12.6	



### D1100S Single-row Standard Types - 2mm pin pitch

### Type Chart

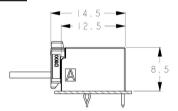


		.,	Receptacle housing	Tab ho	ousing		Board-Mounting Header		
Pos	Color	Key		Panel type	Free Hanging type	Plating	Horizontal type	Vertical type	
	Black	×	1-1939758-4	_	_	Gold	1-1939760-4	_	
4		^	1-1939/38-4	_	_	Tin	1-1939761-4	_	
		Υ	2-1939758-4	_	_	Gold	2-1939760-4	_	
8	Black	Χ	1-1939758-8	_	_	Gold	1-1939760-8	_	
°	DIACK	Υ	2-1939758-8	_	_	Gold	2-1939760-8	_	
		X	1-1939758-0	_	_	Gold	1-1939760-0	_	
10	Black	ck   ^	1-1939/30-0	<u> </u>		Tin	1-1939761-0		
		Υ	2-1939758-0	_	_	Gold	2-1939760-0	_	

### **Relative Product Information**

Applicable contact ...P.17
Performance & Specifications ...P.15

### **Mated Dimensions**



### **External Dimensions**

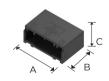
### **■** Receptacle Housing



D	Key	Calar	David Nivers Is a se	D	imensior	าร	
Pos		Color	Part Number	Α	В	С	
4	X	Black	1-1939758-4	8.9	11.3	9.15	
4	Υ	DIACK	2-1939758-4	0.9	11.3	9.15	
8	Х		1-1939758-8	16.9	11.3	0.15	
°	Υ	Black	2-1939758-8	10.9	11.5	9.15	
10	X	Black	1-1939758-0	20.9	11 7	0.15	
10	Υ	DIACK	2-1939758-0	20.9	11.3	9.15	

### **■** Board-Mounting Header

Horizontal type

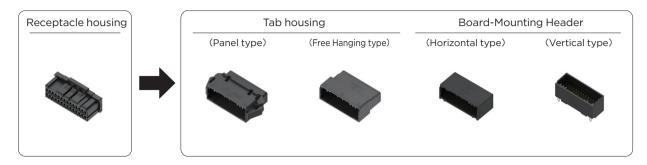


Pos	Key Plating	Disting	Color	Part Number	Dimensions			
POS	Key	Plating		Part Number	Α	В	С	
	Х	Gold		1-1939760-4			8.5	
4	^	Tin	Black	1-1939761-4	10.6	12.5		
	Υ	Gold		2-1939760-4				
8	Χ	Gold	Black	1-1939760-8	18.6	12.5	8.5	
°	Υ	Goid	DIACK	2-1939760-8			0.5	
	X	Gold		1-1939760-0			8.5	
10	X	Tin	Black	1-1939761-0	22.6	12.5		
	Υ	Gold		2-1939760-0				



### D-1100D Double-row Standard Types - 2mm pin pitch

### **Type Chart**



_	Color	Key		Tab h	ousing		Board-Moui	nting Header
Pos			Receptacle housing	Panel type	Free Hanging type	Plating	Horizontal type	Vertical type
10	Black	Х	1-1827862-5	1-2069681-5	1-2069682-5	Gold	1-1827873-5	1-2040516-5
10	ыаск	^	1-2333149-5**	1-2009081-3	1-2069682-5	Tin	1-2271887-5	1-2341421-5
18	Black	Х	1-1827862-9	_	_	Gold	_	1-2040516-9
20	DII.		1-1827862-0			Gold	1-1827873-0	_
20	Black	X	1-2333149-0**			Tin	1-2379284-0	1-1554590-0
22*	DII.	X	1-1827863-1	1 1007100 1	1-1903127-1	Gold		1-1827872-1
22*	Black	^	_	1-1903128-1	1-1903127-1	Tin		1-1871315-1
24	Black	Х	1-1827863-2	_	_	Tin	_	1-1871315-2
		X	1-1827863-3	1 1007100 7	1 1007107 7	Gold	1-1939638-3	1-1827872-3
26*	Black	^	1-2333134-3**	1-1903128-3	1-1903127-3	Tin	1-2372488-3	1-1871315-3
		Υ	2-1827863-3	_	_	Gold	_	See P24 SMT
28	Disak	Х	1-1827863-4	1 1007120 4	1-1903127-4	Gold	1-1939638-4	1-1827872-4
28	Black	^	1-2333134-4**	1-1903128-4	1-1903127-4	Tin	1-2372488-4	1-1871315-4
30*	DII-	Х	1-1827863-5			Gold	1-1939638-5	1-1827872-5
30*	Black	^	_		<del>-</del>	Tin	1-2372488-5	1-1871315-5
32*	Disak	Х	1-1827863-6	1 1007120 €	1 1007107 6	Gold		1-1827872-6
52"	Black	^	_	1-1903128-6	1-1903127-6	Tin	<del>_</del>	1-1871315-6
		X	1-1827863-7	1 1007100 7	1 1007107 7	Gold	1-1939638-7	1-1827872-7
34*	Black	^	1-2333134-7**	1-1903128-7	1-1903127-7	Tin	1-2372488-7	1-1871315-7
		Υ	2-1827863-7	_	_	Gold	_	2-1871315-7
40*	Diagi		1-1827863-0	1-1903128-0	1 1007127 0	Gold	1-1939638-0	1-1827872-0
40*	Black	X	1-2333134-0**	1-2350416-0**	- 1-1903127-0	Tin	1-2372488-0	1-1871315-0

<sup>\*</sup> There are products in other colors available. Please consult TE's sales representative.

### **Related product information**

Applicable contact ...P.17

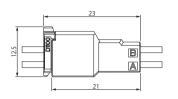
Performance & Specifications ...P.15



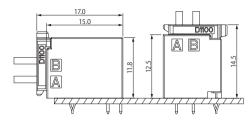
<sup>\*\*</sup> The product marked with "\*\*" has a high-retention force version of Receptacle housing.

### D-1100D Double-row Standard Types - 2mm pin pitch

### **Mated Dimension**



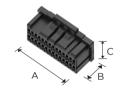
Panel/Free Hanging type



Horizontal/Vertical type

### **External Dimensions**

### **■** Receptacle Housing



Pos	Kev	Color	Part Number	D	imensior	าร
F 0 3	1 03 Rey Cold		Fait Nullibei	Α	В	С
10	×	Black	1-1827862-5	10.6	11.3	10.5
10	^	Black	1-2333149-5	12.6	11.5	12.5
18	Х	Black	1-1827862-9	20.6	11.3	12.5
20	×	Black	1-1827862-0	22.6	11.3	12.5
20	^	Black	1-2333149-0	22.6	11.5	12.5
22	×	Black-	1-1827863-1	24.6	11.3	12.5
	_ ^	DIACK	_	24.6	11.5	12.5
24	Х	Black	1-1827863-2	26.6	11.3	12.5
	Х	Black	1-1827863-3		11.3	
26	_ ^	DIACK	1-2333134-3	28.6		12.5
	Υ	Black	2-1827863-3			
28	×	Black	1-1827863-4	30.6	11.3	12.5
20	_ ^	DIACK	1-2333134-4	30.6		12.5
30	×	Black-	1-1827863-5	32.6	11.3	12.5
30	_ ^	DIACK	_	32.0	11.5	12.5
32	Х	Black	1-1827863-6	34.6	11.3	12.5
	×	Black	1-1827863-7			
34	_ ^	DIACK	1-2333134-7	36.6	11.3	12.5
	Υ	Black	2-1827863-7			
40	×	Black	1-1827863-0	42.6	11.3	12.5
40	_ ^	Diack	1-2333134-0	42.0	11.3	12.5

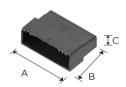
### **■ Tab Housing**

Panel type



Pos	l/ov/	Color	Part Number	D	imension	ıs
POS	Key	Color	Part Number	А	В	С
10	Χ	Black	1-2069681-5	22.1	21.0	13.9
22	Χ	Black	1-1903128-1	34.1	21.0	13.9
26	Χ	Black	1-1903128-3	38.1	21.0	13.9
28	Χ	Black	1-1903128-4	40.1	21.0	13.9
32	Χ	Black	1-1903128-6	44.1	21.0	13.9
34	Χ	Black	1-1903128-7	46.1	21.0	13.9
40	X	Black	1-1903128-0	52.1	21.0	13.9
40	^	Black	1-2350416-0	JZ.1	21.0	13.9

Free Hanging type



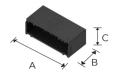
Pos	Key	Color	Part Number	Dimensions			
POS	Key	Color	Part Number	А	В	С	
10	X	Black	1-2069682-5	12.6	21.0	11.3	
22	X	Black	1-1903127-1	24.6	21.0	11.3	
26	X	Black	1-1903127-3	28.6	21.0	11.3	
28	X	Black	1-1903127-4	30.6	21.0	11.3	
32	X	Black	1-1903127-6	34.6	21.0	11.3	
34	X	Black	1-1903127-7	36.6	21.0	11.3	
40	Х	Black	1-1903127-0	42.6	21.0	11.3	



## D-1100D Double-row Standard Types - 2mm pin pitch

### **■** Board-Mounting Header

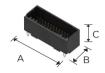
Horizontal type



Pos	I/av	Disting	Calar	Part Number	D	imensior	าร
POS	Key	Plating	COIOI	Part Number	Α	В	С
10	X	Gold	Black	1-1827873-5	12.6	15.0	11.8
10		Tin	BIACK	1-2271887-5	12.6	15.0	11.8
20	Х	Gold	Black	1-1827873-0	22.6	15.0	11.0
20	^	Tin	BIACK	1-2379284-0	22.0	15.0	11.8
26	X	Gold	Dlade	1-1939638-3	28.6	15.0	11.8
26	_ ^	Tin	Black	1-2372488-3			11.0
28	X	Gold	DII.	1-1939638-4	30.6	15.0	11.8
20	^	Tin	Black	1-2372488-4	30.6		
30	X	Gold	Black	1-1939638-5	32.6	15.0	11.0
30	_ ^	Tin	Black	1-2372488-5	32.0	15.0	11.8
34	X	Gold	Black	1-1939638-7	36.6	1E O	11.8
34	^	Tin	DIACK	1-2372488-7		15.0	11.0
40	Х	Gold	Black	1-1939638-0	42.6	15.0	11.8
40	_ ^	Tin	DIdCK	1-2372488-0	42.6		11.8

### **■** Board-Mounting Header

Vertical type



D	1/	DI-+i	C-1	Davit Novasla av	D	imensior	าร
Pos	Key	Plating	Color	Part Number	А	В	С
10	X	Gold	Black	1-2040516-5	12.6	11.3	12.5
	_ ^	Tin	DIACK	1-2341421-5	12.0	11.5	12.5
18	X	Gold	Black	1-2040516-9	20.6	11.3	12.5
20	X	Tin	Black	1-1554590-0	22.6	11.3	12.5
22	X	Gold	Black	1-1827872-1	24.6	11.3	12.5
22	_ ^	Tin	DIACK	1-1871315-1	24.0	11.5	12.5
24	X	Tin	Black	1-1871315-2	26.6	11.3	12.5
26	X	Gold	Black	1-1827872-3	20.6	11.3	12.5
26	_ ^	Tin	Black	1-1871315-3	28.6	11.5	12.5
28	X	Gold	Black	1-1827872-4	30.6	11.3	12.5
28	_ ^	Tin	Black	1-1871315-4	30.6		
30	X	Gold	Black	1-1827872-5	32.6	11.3	12.5
30	_ ^	Tin	ыаск	1-1871315-5	32.6	11.5	12.5
32	X	Gold	Black	1-1827872-6	34.6	11.3	12.5
32	_ ^	Tin	DIACK	1-1871315-6	34.0	11.5	12.5
	Х	Gold	Black	1-1827872-7			
34	_ ^	Tin	DIACK	1-1871315-7	36.6	11.3	12.5
	Υ	Gold	Black	2-1871315-7			
40	Х	Gold	Black	1-1827872-0	42.6	11.3	12.5
40	^	Tin	Black	1-1871315-0	42.6	11.5	12.5

### **SMT**

### **■** Board-Mounting Header

Vertical type



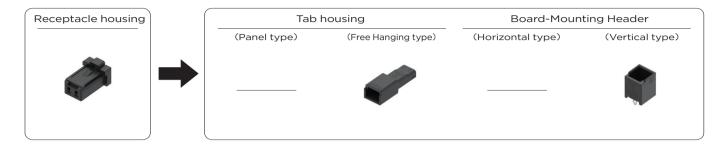
Pos	Kev	Plating	Color	Part Number	Dimensions			
F 0 3	Rey		Color	Part Number	А	В	С	
	X	Gold	Black	1-1939995-3				
26	^	Goid	DIACK	1-2339471-3*	34.6	16.3	13.5	
	Υ	Gold	Black	2-1939995-3				
40	X	Gold	Black	1-1939995-0	48.6	16.3	13.5	
40	Υ	Gold	Black	2-1939995-0	40.0	10.5	13.5	

<sup>\*</sup> Packaging form: emboss.



### D-1200S Single Row/High Voltage Types - 2.5mm pin pitch

### Type Chart

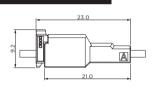


Doo	Color	I/ov/	Receptacle housing	Tab housing		Plating	Board-Mounting Header		
POS	Color	Key	Receptacle flousing	Panel type	Free Hanging type	Plating	Horizontal type	Vertical type	
	Black	v	1-1871465-2		1-1903129-2	Gold		1-1871468-2	
2	DIACK	DIdCK A	1-107 1403-2		1-1903129-2	Tin		1-2348456-2	
	-	Υ	_	_	_	_	_	_	

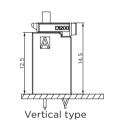
### **Relative Product Information**

Applicable contact ...P.17
Performance & Specifications ...P.15

### **Mated Dimension**



Free Hanging type



### **External Dimensions**

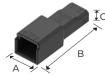
### **■** Receptacle Housing



	Pos	Kev	Color	Part Number	Dimensions			
		Ney		Part Number	А	В	С	
	2	X Black 1-18		1-1871465-2	7.6	11.3	9.2	

### **■ Tab Housing**

Free Hanging type



Doc	Pos Key Color Part N	Part Number	Dimensions				
Pos		COIOI	Part Number	А	В	С	
2	X	Black	1-1903129-2	7.6	21.0	8.0	

Note: All Part Numbers are RoHS compliant.

### **■** Board-Mounting Header

Vertical type



Pos	Kev	Plating	Color	Part Number	D	imensions		
P05	Key	Plating	COIOI	Part Number	A E	В	С	
2	Х	Gold	Black	1-1871468-2	7.6	8.0	12.5	



### D-1200D Double Row High Voltage Types - 2.5mm pin pitch

### Type Chart



				Tab h	ousing		Board-Mour	ting Header
Pos	Color	Key	Receptacle housing	Panel type	Free Hanging type	Plating	Horizontal type	Vertical type
	Disak	Х	1-1827864-2	1-1903131-2	1-1903130-2	Gold	1-1827876-2	1-1827875-2
4	Black	×	9-1827864-2*	1-1903131-2	1-1903130-2	Tin	1-2348455-2	1-2348454-2
	Black	Υ	2-1827864-2	_	_	Gold	2-1827876-2	2-1827875-2
	Black	Х	1-1827864-3	1 1007171 7	1 1007170 7	Gold	1-1827876-3	1-1827875-3
6	Black	×	9-1827864-3*	1-1903131-3	1-1903130-3	Tin	1-2348455-3	1-2348454-3
	Black	Υ	2-1827864-3	2-1903131-3	2-1903130-3	Gold	2-1827876-3	2-1827875-3
	Black	Х	1-1827864-4	1-1903131-4	1-1903130-4	Gold	1-1827876-4	1-1827875-4
8	Black	^	1-2349949-4**	1-1903131-4	1-1903130-4	Tin	1-2348455-4	1-2348454-4
	Black	Υ	2-1827864-4	2-1903131-4	2-1903130-4	Gold	2-1827876-4	2-1827875-4
	Black	x	1-1827864-5			Gold		1-1827875-5
10	Diack	^	1-102/004-3		_	Tin	_	1-2348454-5
	Black	Υ	2-1827864-5	_	_	Gold		2-1827875-5
	Black	x	1-1827864-6 9-1827864-6*	1-1903131-6	1-1903130-6	Gold	1-1827876-6	1-1827875-6
12	D.G.O.K	,	1-2349949-6**	000.01		Tin	1-2348455-6	1-2348454-6
	Black	Υ	2-1827864-6	_	_	Gold	_	2-1827875-6
	Black	Х	1-1827864-8			Gold	_	1-1827875-8
16	Black	^	1-102/004-0			Tin	_	1-2348454-8
	Black	Υ	2-1827864-8	<u> </u>	_	Gold	_	2-1827875-8
	Black	×	1-1827864-0	1-1903131-0	1-1903130-0	Gold	1-1827876-0	1-1827875-0
20	Diack	^	1-102/004-0	1-1903131-0	1-1903130-0	Tin	1-2348455-0	1-2348454-0
	Black	Υ	2-1827864-0	2-1903131-0	2-1903130-0	Gold	2-1827876-0	2-1827875-0

<sup>\*</sup> The Receptacle housing 9-1827864- $\square$  is a latch-protected product with different locking heights. Please refer to P. 27 \*\* The product marked with "\*\*" is high-retention force version of Receptacle housing.

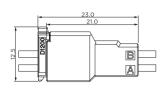
### **Relative Product Information**

Applicable contact ...P.17 Performance & Specifications ...P.15

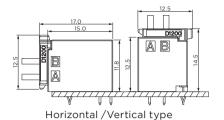


### D-1200D Double-row High-voltage Types - 2.5mm pin pitch

### **Mated Dimension**

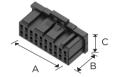






### **External Dimensions**

### **■** Receptacle Housing



Doo	I/ou	Calar	Part Number	D	imensio	ns
Pos	Key	Color	Part Number	А	В	С
	X	Black	1-1827864-2			12.5
4	^	Black	9-1827864-2*	7.6	11.3	12.65
	Υ	Black	2-1827864-2			12.5
	X	Black	1-1827864-3			12.5
6	^	Black	9-1827864-3*	10.1	11.3	12.65
	Υ	Black	2-1827864-3			12.5
	Х	Black	1-1827864-4			
8		Black	1-2349949-4**	12.6	11.3	12.5
	Υ	Black	2-1827864-4			
10	X	Black	1-1827864-5	15.1	11.3	12.5
10	Υ	Black	2-1827864-5	13.1	11.5	12.5
		Black	1-1827864-6			12.5
12	X	Black	9-1827864-6*	17.6	11.3	12.65
12		Black	1-2349949-6**	17.0	11.3	
	Υ	Black	2-1827864-6			12.5
16	X	Black	1-1827864-8	22.6	11.3	12.5
10	Υ	Black	2-1827864-8	22.0	11.3	12.5
20	X	Black	1-1827864-0	27.6	11.3	12.5
	Υ	Black	2-1827864-0	27.0	11.3	12.5

<sup>\*</sup> The product with protective latches has different locking heights.
\*\* The product marked with "\*\*" has high-retention force version of Receptacle housing.



Standard products: 6P; key X: 1-1827864-3



Products with protective latches: 6P; key X: 9-1827864-3

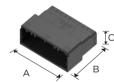
#### **■ Tab Housing**

Panel type



Pos	Key	Color	Part Number	D	Dimensions			
POS	Key	Color	Part Number	А	В	С		
4	X	Black	1-1903131-2	17.1	21.0	13.9		
6	X	-Black	1-1903131-3	19.6	21.0	13.9		
0	Υ	DIACK	2-1903131-3	19.6	21.0	13.9		
8	X	Disak	1-1903131-4	22.1	21.0	13.9		
8	Υ	Black	2-1903131-4	22.1				
12	X	Black	1-1903131-6	27.1	21.0	13.9		
20	Х	Disak	1-1903131-0	37.1	21.0	13.9		
20	Υ	Black	2-1903131-0	37.1	21.0	15.9		

#### Free Hanging type



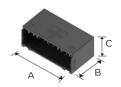
Pos	Key	Color	Part Number	D	imensior	าร	
POS	Key	Color	Part Number	А	В	С	
4	X	Black	1-1903130-2	7.6	21.0	11.3	
6	X	Black	1-1903130-3	10.1	21.0	11.3	
0	Υ	DIACK	2-1903130-3	10.1	21.0	11.5	
8	X	Black	1-1903130-4	12.6	21.0	11 7	
0	Υ	Біаск	2-1903130-4	12.6		11.3	
12	X	Black	1-1903130-6	17.6	21.0	11.3	
20	X	DII-	1-1903130-0	27.6	01.0	11.3	
20	Υ	Black	2-1903130-0	27.0	21.0	11.5	



### D-1200D Double-row High-voltage Types - 2.5mm pin pitch

### **■** Board-Mounting Header

Horizontal type



Doo	I/av	Disting	Calar	Part Number	D	imensior	าร
Pos	Key	Plating	Color	Part Number	Α	В	С
	Х	Gold	Black	1-1827876-2			
4	^	Tin	Black	1-2348455-2	7.6	15.0	11.8
	Υ	Gold	Black	2-1827876-2			
	6 X	Gold	Black	1-1827876-3			
6		Tin	Black	1-2348455-3	10.1	15.0	11.8
		Gold	Black	2-1827876-3			
	X	Gold	Black	1-1827876-4		15.0	11.8
8	^	Tin	Black	1-2348455-4	12.6		
	Υ	Gold	Black	2-1827876-4			
12	X	Gold	Black	1-1827876-6	17.6	15.0	11.8
12	^	Tin	Black	1-2348455-6	17.6	15.0	11.0
	Х	Gold	Black	1-1827876-0			
20	*	Tin	Black	1-2348455-0	27.6	15.0	11.8
	Υ	Gold	Black	2-1827876-0			

### **■** Board-Mounting Header

Vertical type



D	1/	Disting a	Calan	Davit Niversia au	D	imensior	าร
Pos	Key	Plating	Color	Part Number	Α	В	С
	X	Gold	Black	1-1827875-2			
4	_ ^	Tin	Black	1-2348454-2	7.6	11.3	12.5
	Υ	Gold	Black	2-1827875-2			
	X	Gold	Black	1-1827875-3		11.3	
6	_ ^	Tin	Black	1-2348454-3	10.1		12.5
	Υ	Gold	Black	2-1827875-3			
	X	Gold	Black	1-1827875-4		11.3	
8		Tin	Black	1-2348454-4	12.6		12.5
	Υ	Gold	Black	2-1827875-4			
	X	Gold	Black	1-1827875-5		11.3	
10		Tin	Black	1-2348454-5	15.1		12.5
	Υ	Gold	Black	2-1827875-5			
	X	Gold	Black	1-1827875-6			
12	_ ^	Tin	Black	1-2348454-6	17.6	11.3	12.5
	Υ	Gold	Black	2-1827875-6			
	X	Gold	Black	1-1827875-8			
16	_ ^	Tin	Black	1-2348454-8	22.6	11.3	12.5
	Υ	Gold	Black	2-1827875-8			
	X	Gold	Black	1-1827875-0			
20	X	Tin	Black	1-2348454-0	27.6	11.3	12.5
	Υ	Gold	Black	2-1827875-0			

### Fan Motor Water-Proof 3P

### **■** Wire-To-Wire

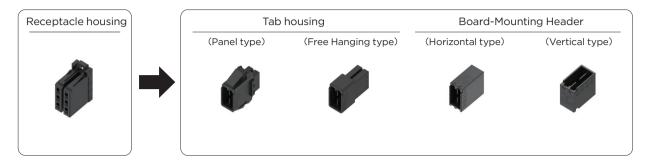
Panel mount type

Pos	Part Number				
7	Male	2013891-1			
3	Female	2013892-1			



### D-1500T Triple-row High-voltage Modular Type - 3.5mm pin pitch

### Type Chart

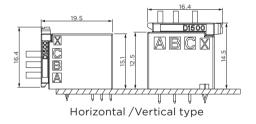


Doc	Color Key Receptacle housing		Decentacle housing	Tab ho	ousing	Plating	Board-Mour	iting Header
POS			Receptacle flousing	Panel type Free Hanging type		Plating	Horizontal type	Vertical type
3	Black	Χ	1-1827579-1	_	1-2040444-1	_	_	1-1827581-1
6	Black	X	1-2069029-2	1-2040404-2	1-2040444-2	Gold	1-1827583-2	1-1827581-2
9	Black	X	1-2069029-3	_	1-2040444-3	Gold	_	1-1827581-3
12	Black	X	1-2069029-4	_	1-2040444-4	Gold	_	1-1827581-4
36	Black	Х	_	3-2040404-2	_	Gold	<del>-</del>	_

### **Relative Product Information**

Applicable contact ...P.17
Performance & Specifications ...P.15

### **Mated Dimension**



### **■** Receptacle Housing



Dos	Pos Key	Color	Part Number	Dimensions			
POS	Ney	COIOI	Part Number	Α	В	С	
3	X	Black	1-1827579-1	3.3	11.3	16.4	
6	X	Black	1-2069029-2	6.8	11.3	16.4	
9	Х	Black	1-2069029-3	10.3	11.3	16.4	
12	Х	Black	1-2069029-4	13.8	11.3	16.4	



## D-1500T Triple-row High-voltage Modular Type - 3.5mm pin pitch

### **External Dimensions**

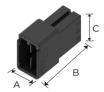
### **■ Tab Housing**

Panel type



Dos	Kov	ey Color Part Number -	Dart Number	Dimensions			
POS	Pos Key		Α	В	С		
6	X	Black	1-2040404-2	8.5	21.0	24.5	
36	Х	Black	3-2040404-2	43.5	21.0	24.5	

Free Hanging type



Doc	Pos Key C		Part Number	Dimensions			
POS			Color Part Number -		В	С	
3	X	Black	1-2040444-1	3.0	21.0	15.0	
6	X	Black	1-2040444-2	6.5	21.0	15.0	
9	X	Black	1-2040444-3	10.0	21.0	15.0	
12	X	Black	1-2040444-4	13.5	21.0	15.0	

### **■** Board-Mounting Header

Horizontal type



Doc	Pos Key Pla	Disting	lating Color	Part Number	Dimensions			
POS		Plating		Part Number	А	В	С	
6	Х	Gold	Black	1-1827583-2	8.1	17.5	15.1	

Vertical type

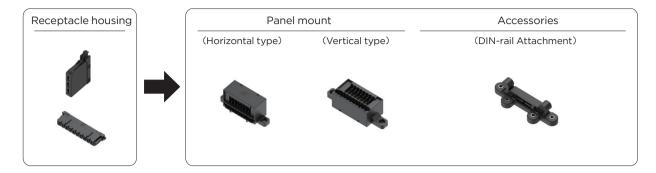


Pos	L'ov	Plating	Color	Part Number	Dimensions			
POS	Pos Key Platir		g Coloi Fart Number		Α	В	С	
3	X	Gold	Black	1-1827581-1	4.6	14.6	12.5	
6	X	Gold	Black	1-1827581-2	8.1	14.6	12.5	
9	X	Gold	Black	1-1827581-3	11.6	14.6	12.5	
12	X	Gold	Black	1-1827581-4	15.1	14.6	12.5	



### D-1500T Junction Box - 3.5mm pin pitch

### Type Chart



Pos	Color	Kov	Receptacle housing	Plating	Panel	mount	Accessories	
POS	os Color Key Receptacle housing	Receptacle flousing	Plating	Horizontal type	Vertical type	DIN-rail attachmentt		
3	Black	X	1-1827579-1	_	_	_	_	
10	Black	_	1971150-1	_	_	_	_	
34	Black	_	_	Gold	1971151-1	1971151-2	1971182-1'	

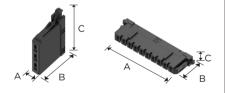
Note: Kit PN 1971190-1 is also available, which includes the junction box 1971151-2, DIN-rail mounting feet 1971182-1 and 2 screws.

### **Relative Product Information**

Applicable contact ...P.17
Performance & Specifications...P.15

### **External Dimensions**

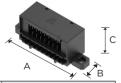
### **■** Receptacle Housing



Pos Kev		Color	Part Number	Dimensions			
POS	Key	Color	Part Number	Α	В	С	
3	X	Black	1-1827579-1	3.3	11.3	16.4	
10	_	Black	1971150-1	42.2	11.3	4.6	

### **■** Panel Mount

Horizontal type

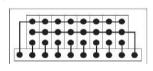


Pos Kev		ey Plating	Color	Part Number	Dimensions		
POS	Key	Plating	Color	Part Number	А	В	С
34	_	Gold	Black	1971151-1	57.7	18.7	24.6

Note: All Part Numbers are RoHS compliant.

### **■ Tab Housing**

Vertical type





Pos	Kev	Plating	Calar	Part Number	Dimensions			
POS	Key	Plating	Color	Part Number	А	В	С	
34	_	Gold	Black	1971151-2	64.8	22.8	18.2	

### **■**Accessories

Pins to be mounted with a foot attachment



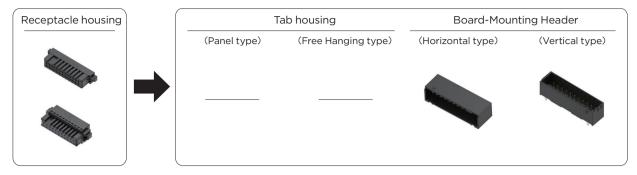
Doc	Kov	Color	Part Number	Dimensions				
Pos Key	Color	Part Number	Α	В	С			
_	_	Black	1971182-1	67.5	19.0	18.1		



<sup>&</sup>lt;sup>•</sup> 4 screws are needed for attaching connector into place

### D-1900D Double-row Spring Clamp Type - 3.5mm pin pitch

### Type Chart

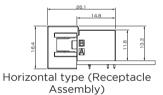


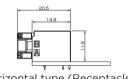
Pos	Receptacle housing			Receptacle Assembly	Tab h	ousing	Board-Mounting Header		
			Spring Crimp	Spring Clamp type	Panel type	Free Hanging type	Horizontal type	Vertical type	
8	Black	Χ	1-1871946-4	1-1871940-4	_	_	1-1871935-4	1-2013325-4	
12	Black	Χ	1-1871946-6	1-1871940-6	_	_	1-1871935-6	1-2013325-6	
16	Black	Χ	1-1871946-8	1-1871940-8		_	1-1871935-8	_	
22	Black	Χ	2-1871946-1	2-1871940-1		_	2-1871935-1	2-2013325-1	
30	Black	Χ	_	2-1871940-5		_		_	
38	Black	Х	_	2-1871940-9	_	_	2-1871935-9	_	

### **Relative Product Information**

Applicable contact ...P.17 Performance & Specifications ...P.15 Special tool 1891348-1

### **Mated Dimension**





Horizontal type (Receptacle Housing)

### **External Dimensions**

# ■ Receptacle Housing (Crimp type)



Pos Key		Color	Part Number	Dimensions			
POS	Ney	Color	Part Number	А	В	С	
8	X	Black	1-1871946-4	24.2	15.0	9.9	
12	X	Black	1-1871946-6	34.2	15.0	9.9	
16	X	Black	1-1871946-8	41.2	15.0	9.9	
22	X	Black	2-1871946-1	51.7	15.0	9.9	

# ■ Receptacle Assembly (Spring clamp)

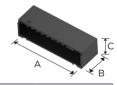


Doo	Dag Kay		Color	Part Number	Dimensions			
Pos	Key	Plating	Color	Part Number	Α	В	С	
8	X	Gold	Black	1-1871940-4	25.2	20.6	16.4	
12	Х	Gold	Black	1-1871940-6	32.2	20.6	16.4	
16	X	Gold	Black	1-1871940-8	39.2	20.6	16.4	
22	Х	Gold	Black	2-1871940-1	49.7	20.6	16.4	
30	Х	Gold	Black	2-1871940-5	63.7	20.6	16.4	
38	Х	Gold	Black	2-1871940-9	77.7	20.6	16.4	

Note: All Part Numbers are RoHS compliant.

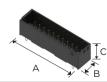
### **■** Board-Mounting Header

Horizontal type



Doc	Pos Kev		Color	Part Number	Dimensions			
POS	Ney	Plating	Color	Part Number	А	В	С	
8	X	Gold	Black	1-1871935-4	19.8	14.8	11.8	
12	X	Gold	Black	1-1871935-6	26.8	14.8	11.8	
16	Х	Gold	Black	1-1871935-8	33.8	14.8	11.8	
22	X	Gold	Black	2-1871935-1	44.3	14.8	11.8	
30	Х	Gold	Black	2-1871955-5	58.3	14.8	11.8	
38	X	Gold	Black	2-1871935-9	72.3	14.8	11.8	

Vertical type



Pos	Pos Key Plating Color Part Number		Part Number	Dimensions			
POS	Key	Plating	Color	Part Number	А	В	С
8	X	Gold	Black	1-2013325-4	20.2	11.5	12.5
12	Х	Gold	Black	1-2013325-6	26.8	11.5	12.5
22	Х	Gold	Black	2-2013325-1	44.3	11.5	12.5

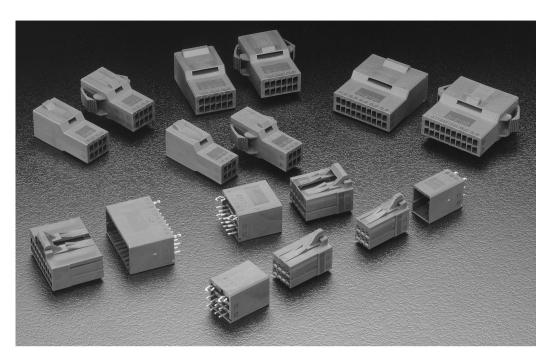


### D-2000 Series

#### Series introduction

The D-2000 series is a compact connector in the Dynamic series and has the specifications for industrial machinery. Its proprietary concept, long contact wiping length, provides the high-reliability which is needed for industrial machinery.

The series also includes the multi-position drawer type not found in any other series. The hybrid type integrates signal and power contacts in a single connector.



#### **Product Features**

#### 1.Terminal and Housing Construction are Twist Resistant

The box shape receptacle contact is highly resistant to twisting and the housing slit also prevents angled mating to increase reliability.

#### 2.Contact Wiping Length

Attaining the reliability needed for industrial machinery in a compact size by using a long contact wiping length.

#### 3.Wire Sizes:

With its 2.5 mm pitch, it is a compact series, yet it can use 18 AWG wires, which are often used in industrial equipment.

#### 4. Audible Latching

Obvious lock sound and feeling when mating means work can be done without mistakes, such as mismating (halfmating), even if the connection cannot be seen.

### 5.Keying

The housing is keyed (with a slit), so differentiating between X keys and Y keys prevents mismating. It is also possible to make more key patterns by using keying plugs.

#### **6.Center Locking**

This is the first application of a center lock in Dynamic series. On-board space requirements can be minimized because these connectors can be mounted in a tight space for high-density mounting on boards requiring signal lines.

#### 7.Drawer Type

The drawer type connector was developed with a floating construction on one side for applications where it is not possible to see the connection. There can be up to 50 positions, the highest in the series. These connectors make it possible to make connections between units with flexibility.

#### 8. Hybrid Type

The D-2600 series combines signal and power contacts in a single connector by using D-2000 contacts as signal contacts and D-3000 contacts as power ones. This saves on-board space and improves maintenance.



### **D-2000 Series Performance and Specifications**

### Performance

Item	2100S/D	2100M	2600D		
Pitch	2.5mm				
Rated Current:	5A max	2.6A max	3.2A max		
Rated Voltage	250V AC/DC				
Dielectric Withstanding Voltage	1500V AC	2300V AC	1500V AC		
Total resistance	$5 \text{m}\Omega$ max (	initial) 10m $\Omega$ max (	lifetime)		
Insertion strength	4.5	9N max (per pole)			
Withdrawal strength	0.2	29N min (per pole)			
Durability	500 cycles				
Lock strength	39.2N min	_	98N min		

#### **Positions / wire size / Rated Current**

D-2100S/D value

Position			Wire	Size		
Position	AWG 18	AWG 20	AWG 22	AWG 24	AWG 26	AWG 28
3	5	4.5	4.3	3.3	2.9	2.3
6	5	4.2	4	2.7	2.5	2
8	4.5	4	3.5	2.5	2.2	1.8
12	4	3.5	3	2.3	1.9	1.5
16	3.2	2.8	2.4	2	1.6	1.2
20	3.2	2.8	2.4	2	1.6	1.2

#### **Product Specification**

Series Name	D-2100S/D	D-2600D			
Product Specifications	108-5619	108-5659	108-78301		
Applications Specifications	114-5258				
Instruction sheet (hand	408-10414 (S)				
tool)	408-8547-1(M)				
Instruction sheet (extraction tool PN)	(1276716-1)411-5900				

Please refer to the standards on P. 43 for the D-3000 contact used in D-2600D  $\,$ 

Please refer to the manual when using the product. An e-Catalogue is also available for download from the Internet.

#### **Materials and Plating**

Category	Material	Plating			
Receptacle Contact Tab Contact	Copper alloys	0.38 µm Gold plating over nickel underplate			
Board mount Header	Copper alloys	0.38 µm Gold plating over nickel underplate Tin plating on tail side			
Housing	UL94-V-0, thermoplastic PBT with glass fiber				

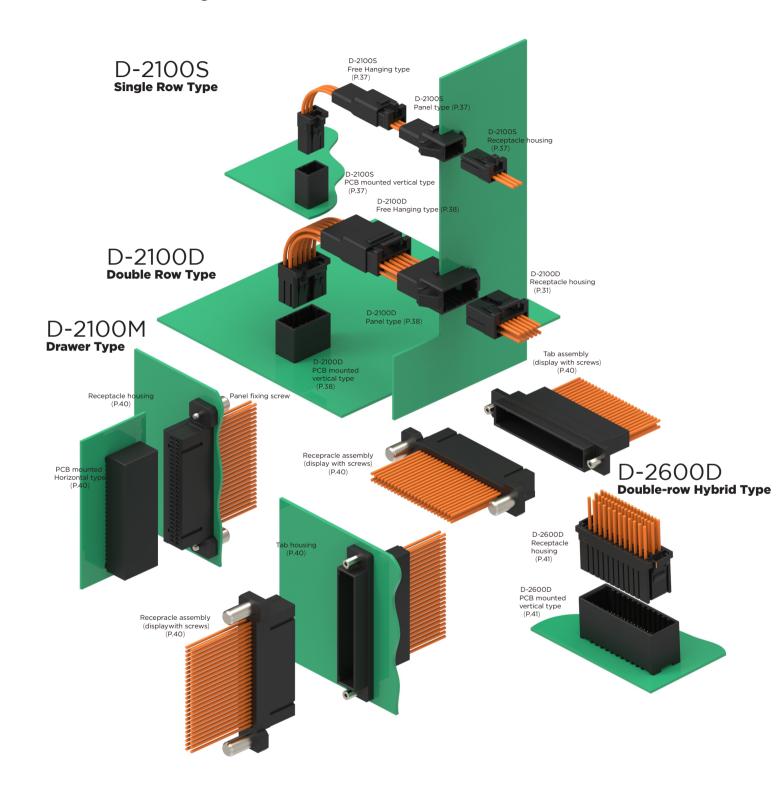
### **Safety Standards**

The safety specifications listed below are approved on specific part numbers. Please contact our Technical Support Centre to check whether the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Tyco Electronics Specifications.

series		D-2100 series		D-2100M Drawer Type			
Standards	Rated Voltage	Rated Current	Temperature Range	Rated Voltage	Rated Current	Temperature Range	
Product Specifications 108-5619 (general) 108-5659 (drawer type)	250V AC/DC	5A (unipolar)	-55°C ~+105°C	250V AC/DC	2.6A AWG#20 hours 50 pole load	-5°C ~+105°C	
UL File No.E28476	Determined according to the requirements of application	Determined according to the requirements of application	-	Determined according to the requirements of application	Determined according to the requirements of application	-	
CSA Report No. LR 7189	250V AC/DC	AWG#24-#28: 3.3A AWG#18-#22: 5A	-	250V AC/DC	Max 5A per pole	-	
TÜV License No. R 9950679	125V AC/DC	5A	-55℃ ~+105℃	125V AC/DC	Max 5A per pole	-5°C ~+105°C	



### **D-2000 Series Configurations**





### **D-2000 Series Contact**

■Crimped type
(gold plating thickness

0.38 µm )



Receptacle Contact (used in receptacle housing)



Tab contact (used in tab housing)

Wire Range	Outside W	Wire	Contact part number				Models of applicable tools		
		Insulation Ran	Range	Receptacle Contact		Tab Contact			T
AWG	mm <sup>2</sup>		Mark	Strip form	Loose Piece	Strip form	Loose Piece	Hand Tools	Tool numbers
28	0.09								
26	0.12	0.88~1.3	S	1318106-1	1318108-1	1318110-1	1318112-1	91576-1	2151240-1
24	0.20	1.11~1.43							
24	0.20	2.2~2.25	S1	1-1318106-1*		1-1318110-1*			
22	0.30			1318105-1	1318107-1	1318109-1	1318111-1	91595-1	2151071-1
20	0.50	1.26~1.8	М						
18	0.85	1.79~1.9							

#### \*This terminal is only applicable to the UL1051 cable.

Note: When placing your order, please check with the confirmed sales leadtime.

Please contact our sales department or distributor for more information.

Strip Form contacts are used with Mini-applicators (bench machine) and Loose-Piece contacts are with hand tools.

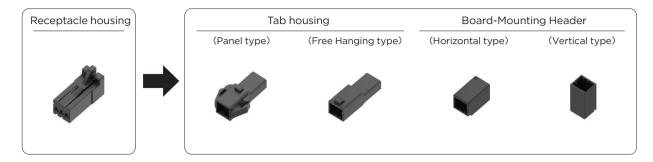
The receptacle contact can be used in all receptacle housings, the Tab housing can be used in all tab housings. Details of the applicable tools are available from P.120-124

NOTE: All products are RoHS compliant On selection.



# D-2100S Single-row Standard Type - 2.5mm pin pitch

# **Type Chat**



Doc	Color	Kov	Receptacle housing	Tab ho	Plating	Board-Mounting Header		
POS	Color	rtey		Panel type	Free Hanging type	Plating	Horizontal type	Vertical type
	Black	Χ	1-1318120-3	1-1318116-3	1-1318117-3	Gold	1376135-1	1318123-1
7	Black	Υ	2-1318120-3	2-1318116-3	2-1318117-3	Gold	1376135-2	1318123-2
3	Black	Z	3-1318120-3			Gold	1376135-3	
	Black	Χ	1-1473074-3 <sup>*</sup>	_		Gold		1-1318123-1**

NOTE: The \* mark means drawer typer

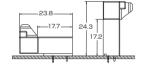
\*\*Sequential

# **Relative Product Information**

Application contact...P.36
Performance & Specifications...P.34

# **Mated Dimension**





Panel /Free Hanging type

Horizontal type Vertical type

# **External Dimensions**

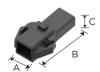
### **■** Receptacle Housing



D	17	C-1	Davit Niversland	Dimensions			
Pos	Key	Color	Part Number	Α	В	С	
	X	Black	1-1318120-3				
3	Υ	Black	2-1318120-3	8.9	20.0	12.0	
3	Z	Black	3-1318120-3				
	X	Black	1-1473074-3	8.9	20.0	11.8	

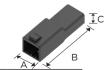
# **■ Tab Housing**

Panel type



				Dimensions			
Pos	Key	Color	Part Number	Α	В	С	
7	Х	Black	1-1318116-3	10.7	70.7	0.5	
3	Υ	Black	2-1318116-3	19.7	30.7	9.5	

Free Hanging type



Pos	I/ou	Calar	Part Number	Dimensions				
	Key	Color	Part Number	Α	В	С		
7	Χ	Black	1-1318117-3	10.0	30.7	0.5		
3	Y Black 2-		2-1318117-3	10.2	30.7	9.5		

# **■** Board-Mounting Header

Horizontal type



Pos	Kev	Disting	Color	Dout Number	Dimensions			
POS	Key	Plating		Part Number	А	В	С	
	X	Gold	Black	1376135-1	10.2	17.7	11.0	
3	Υ	Gold	Black	1376135-2				
	Z	Gold	Black	1376135-3				

Vertical type



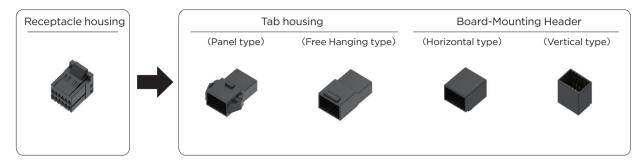
Pos	Kev	Disting	Color	Part Number	Dimensions		
POS	Key	Plating		Part Number	Α	В	С
		Gold	Black	1318123-1	10.2	9.5	17.8
3	X	Gold	Black	1-1318123-1**			
	Υ	Gold	Black	1318123-2			

<sup>\*\*</sup>Sequential



# D-2100D Double-row Standard Type - 2.5mm pin pitch

# Type Chart

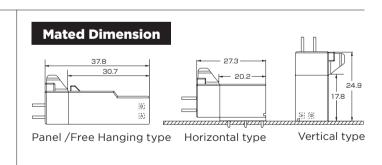


_				Tab ho	ousing		Board-Moun	ting Header	
Pos	Color	Key	Receptacle housing	Panel type Free Hanging type		Plating	Horizontal type	Vertical type	
6	Black	Х	1-1318119-3	1-1318114-3	1-1318115-3	Gold	1376136-1	1318124-1	
6	Black	Υ	2-1318119-3	2-1318114-3	2-1318115-3	Gold	1376136-2	1318124-2	
	Disak	X	1-1318119-4	1 1710114 4	1 1710115 4	Cald	1376009-1	1318125-1	
8	Black	^	1-1318119-4	1-1318114-4	1-1318115-4	Gold	1-1376009-1*	1-1318125-1*	
8	DII-	lack Y	0.1710110.4	0.1710114.4	2 1710115 4	6-1-1	1776000 0	1318125-2	
	Віаск		2-1318119-4	2-1318114-4	2-1318115-4	Gold	1376009-2	1-1318125-2*	
	Black	x	1 1710110 <i>C</i>	1-1318118-6	1 1710114 6	1 1710115 6	Gold	1376020-1	1318126-1
	Black	^	1-1318118-0	1-1318114-6	1-1318115-6	Gold	13/6020-1	1-1318126-1*	
12	DII-	Y	0.1710110.6	0.1710114.6		6-1-1	1776000 0	1318126-2	
	Black	Y	2-1318118-6	2-1318114-6		Gold	1376020-2	1-1318126-2*	
	Black	Z	3-1318118-6			Gold		1318126-3	
16	Black	Х	1-1318118-8			Gold		1747994-1	
16	Black	Υ	2-1318118-8			Gold		1747994-2	
20	Black	Х	1-1318118-9	1-1318114-9	1-1318115-9	Gold	1376137-1	1318127-1	
20	Black	Υ	2-1318118-9	2-1318114-9	2-1318115-9	Gold	1376137-2	1318127-2	

Note: There is Z-key option in 20-position product, please contact TE sales representative for more information

# **Relative Product Information**

Applicable contact...P.36
Performance & Specifications ...P.34





<sup>\*</sup>Sequential

# D-2100D Double-row Standard Type - 2.5mm pin pitch

# **External Dimensions**

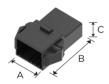
# **■** Receptacle Housing



Pos	Key	Color	olor Part Number		Dimensions				
POS	Key	Color	Part Number	Α	В	С			
6	Χ	Black	1-1318119-3	8.3	20.0	15.8			
0	Υ	Black	2-1318119-3	0.3	20.0	13.6			
8	Χ	Black	1-1318119-4	10.8	20.0	15.8			
0	Υ	Black	2-1318119-4	10.6	20.0	15.8			
	Χ	Black	1-1318118-6		20.0				
12	Υ	Black	2-1318118-6	15.8		14.8			
	Z	Black	3-1318118-6						
16	Χ	Black	1-1318118-8	20.8	20.0	14.8			
10	Υ	Black	2-1318118-8	20.6	20.0	14.0			
20	Χ	Black	1-1318118-9	25.8	20.0	14.8			
20	Υ	Black	2-1318118-9	23.8	20.0	14.8			

### **■ Tab Housing**

Panel type



Pos	Key	Color	Part Number	D	imensior	าร	
POS	ney	Color	Part Number	Α	В	С	
6	Χ	Black	1-1318114-3	19.7	70.7	13.2	
0	Υ	Y Black 2-1318114-3		19.7	30.7	13.2	
8	Χ	Black	1-1318114-4	22.2	30.7	13.2	
°	Υ	Y Black 2-1318114-4		22.2	30.7	13.2	
12	Χ	Black	1-1318114-6	27.2	30.7	17.0	
12	Υ	Black	2-1318114-6	27.2	30.7	13.2	
20	Χ	Black	1-1318114-9	37.2	30.7	13.2	
	Υ	Black	2-1318114-9	37.2	30.7	15.2	

### **■ Tab Housing**

Free Hanging type



Pos	Vov	Plating	Calar	Part Number	Dimensions			
PUS	Key	Plating	COIOI	Part Number	А	В	С	
6	X	Gold	Black	1-1318115-3	10.2	30.7	10.7	
0	Υ	Gold	Black	2-1318115-3	10.2		10.7	
8	X	Gold	Black	1-1318115-4	12.7	30.7	10.7	
0	Υ	Gold	Black	2-1318115-4	12.7			
12	X	Gold	Black	1-1318115-6	17.7	30.7	10.7	
20	Х	Gold	Black	1-1318115-9	27.7	30.7	10.7	
20	Υ	Gold	Black	2-1318115-9	27.7	30.7	10.7	

# **■** Board-Mounting Header

Horizontal type



Pos	Kev	Plating	Color	Part Number	D	imensior	าร
POS	Key	Plating	COIOI	Part Number	Α	В	С
6	X	Gold	Black	1376136-1	10.2	20.2	14.7
6	Υ	Gold	Black	1376136-2	10.2	20.2	
	~	X Gold	Black	1376009-1		20.2	14.7
8	^		DIACK	1-1376009-1*	12.7		
	Υ	Gold	Black	1376009-2			
12	X	Gold	Black	1376020-1	17.7	20.2	14.7
12	Υ	Gold	Black	1376020-2	17.7	20.2	14.7
20	X	Gold	Black	1376137-1	27.7	000	14.7
	Υ	Gold	Black	1376137-2	27.7	20.2	14./

<sup>\*</sup>Sequential

Vertical type



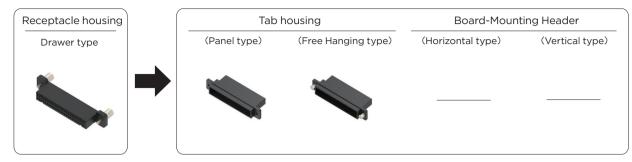
Pos	I/av	Plating	Calar	Part Number	D	imensior	าร
POS	Key	Plating	Color	Part Number	Α	В	С
6	X	Gold	Black	1318124-1	10.2	13.2	17.8
6	Υ	Gold	Black	1318124-2	10.2	13.2	17.0
8	Х	Gold	Black	1318125-1 1-1318125-1*	12.7	13.2	17.8
0	Υ	Gold	Black	1318125-2 1-1318125-2*	12.7		17.8
	Х	Gold	Black	1318126-1 1-1318126-1*	17.7	13.2	17.8
12	Υ	Gold	Black	1318126-2 1-1318126-2*			
	Z	Gold	Black	1318126-3			
16	Х	Gold	Black	1747994-1	00.7	13.2	17.8
16	Υ	Gold	Black	1747994-2	22.7	15.2	17.8
20	X	Gold	Black	1318127-1	27.7	13.2	17.8
20	Υ	Gold	Black	1318127-2	27.7	13.2	17.0

<sup>\*</sup>Sequential



# D-2100M Double-row Standard Multipostion Type (Drawer) - 2.5mm pin pitch

# **Type Chart**



Pos	Color	r Key	Receptacle housing		Tab housing		Plating	Board-Mounting Header	
			Type	Part Number	Panel type	Free Hanging type	Plating	Horizontal type	Vertical type
50	Black	-	Drawer	1318577-1	1318578-1 1318578-2 (with nuts)	_	Gold	_	_
50	Black	_	Threaded drawer	1376072-2	_	1376073-2	_	_	_

# **Relative Product Information**

Applicable contact...P.36
Performance & Specifications ...P.34
Accessories ...P.125

# **Mated Dimension**



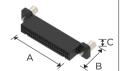
Panel type/Free Hanging type



Horizontal type

# **External Dimensions**

# **■** Receptacle Housing

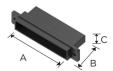


Pos	Kev	Color	Part Number	D	imensior	าร
	Key	Color	Part Number	Α	В	С
50	_	Black	1318577-1	88.5	20.0	16.6
50	_	Black	1376072-2*	88.5	32.0	16.6

\*The product contains a receptacle housing 1318577-2 and two screws 1376058-1

### **■ Tab Housing**

Panel type



Pos	Kev	Color	Part Number	D	imensior	าร
POS	Key	COIOI	Part Number	Α	В	С
50	_	Black	1318578-1	86.1	30.7	15.9
30	- Black 1318578-2(with nuts)		00.1	30.7	15.9	

NOTE: All products are RoHS compliant On selection.

# ■ Receptacle Assembly (with screws)

Free Hanging type

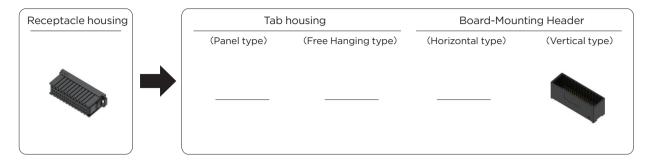


Pos	Key	Color	Part Number	D	imensior	าร
	Key	Color	Part Number	Α	А В С	С
50	_	Black	1376073-2	86.1	30.7	15.9



# D-2600D Double-row Hybrid Type - pin pitch, 2.5mm (D-2), 3.81mm (D-3)

# **Type Chart**



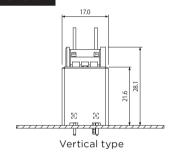
Dos	Color Kev	Receptacle housing	Tab housing		Disting	Board-Mounting Header		
POS	Color Key	Receptacie nousing	Panel type	Free Hanging type	Plating	Horizontal type	Vertical type	
48*	Black -	1827540-1	_	_	Gold	_	1827538-1	

<sup>\*36</sup> D-2000 contacts and 12 D-3000 contacts are used in combination

## **Relative Product Information**

Applicable contact...P.36,46
Performance & Specifications ...P.34,43

# Mated Dimension



# **External Dimensions**

### ■ Receptacle Housing



Pos	Kev	Plating	Color	Part Number	D	imensior	าร
POS	Key	Plating	Color	Part Number	Α	В	С
48	_	_	Black	1827540-1	58.7	22.8	15.8

### **■** Board-Mounting Header

Vertical type



Pos	os Key Plating Color P		Part Number	Dimensions			
POS	Key	Plating	COIOI	Part Number	Α	В	С
48	_	Gold	Black	1827538-1	55.9	18.0	21.6



### D-3000 Series

### Series introduction

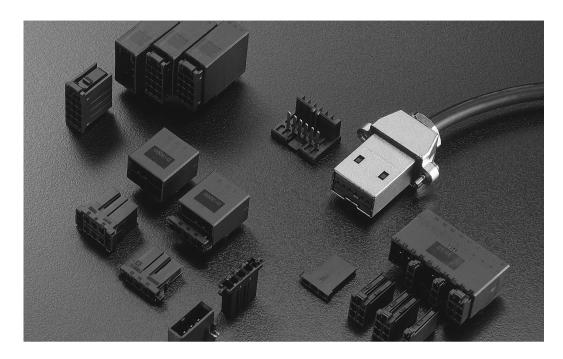
The 3000 series is the main Dynamic Series. They are widely used as industrial 'signal' and 'power' connectors.

Pin layout comes in two types: 3.81mm pitch (standard) and 5.08mm pitch (high voltage). The standard pitch is used for signal circuits and the high voltage type is used for power circuits.

For power source usage, it meets recent demands for small size and high power which comply with miniaturisation of the machinery. The newly developed copper alloy can carry a higher current of 15A per pole despite its small size.

This concept is based on the development strategy of the Dynamic Series to cover as wide a range of solutions for as many customers as possible. This concept makes the D-3000 series terminals fit all D-3000 housings, and the wide variety of which means that it is not necessary for a customer to look outside of this range for every requirement.

The D-3000 series has been in development for more than a decade since its initial development, gaining momentum through customer input, and is currently being extended further.



### **Product Features**

### 1. Anti-twist contact structure

An anti-twist contact structure were developed for motor industry which has 3 contact points when mating receptacle contact with tab contact or header. Concept of 3-contact-points provides high reliability in a real-world environment.

### 2. Three plating types

3 Plating types are available to meet the customer's cost, performance requirements and applications. Under a normal environment with few mating/unmating requirements, tin plating can be used. Where there is a large number of mating/unmating requirements, then gold plating at 0.38  $\mu m$  thickness shoud be used. If the environment is deleterious then gold plating at 0.76  $\mu m$  thickness can be selected

### 3. Two types of contact pressure options

2 types of contact pressures are available depending on application: standard Contact pressure for withstanding a large number of mating/unmating requirements or other extreme environments, and high Contact pressure for vibration prone applications

### 4. High Current

Despite its small size, it conducts up to 15A (at a maximum temperature rise of  $30^{\circ}$ C). The latest developed copper alloy adds to the reliability of the 3-point contact structure

### 5. Audible Latching

When mating, a dear 'lock' sound and vibration will be felt by the assembler, that can prevent working 'blind' mis-mating (or halfmating) problems

### 6. Keying

The housing provides a keying (slit), hence mis-matings can be prevented by using the X and Y keys separately. At the same time, the keying plug can be used to create new key patterns.



# **D-3000 Series Performance and Specifications**

### **Performance**

ltem Pitch	150mil (3.81mm)	200mil (5.08mm)		
Rated Voltage	250V AC/DC	600V AC/DC		
Rated Current	1 pole 3 pole 6 pole: 16 pole (AWG#16 for use a	: 12A 9.5A 9: 8A		
Contact resistance	10mΩ	max		
Withstanding Voltage	1,500V AC(1 min)	2,200V AC(1 min)		
Temperature	-55-+105°C			

### **Performance & Specificatios**

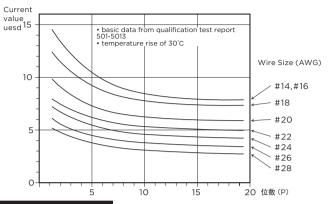
Product Specifications	108-5349
Tost Donort	501-5013
Test Report	501-78668 FMLB
Applications Specifications	114-5148
Applications specifications	114-78030 FMLB
Pull tool product number	411-5726
(234168-1) manual	411-3726

Hand tool manual					
Tool product number	Instruction No.				
91565-1					
91559-1					
91558-1	408-8547-1				
91560-1					
91561-1					

Refer to instruction manuals for usage information.

An E-Catalogue is also available for download from the internet

### **Positions/Wire Size/Rated Current**



### **Material and Plating**

Category	Materials Plating			
Receptacle Contact Tab Contact	Copper alloys	Tin-plating or gold-plating over Nickel under-plated		
Board Mount Header	Copper alloys	Tin-plating or gold-plating over Nickel under-plated		
Housing	UL94V-0 t (SMT type)	hermoplastic PBT with glass fiber, PPS ), Black		

# **Safety Standards**

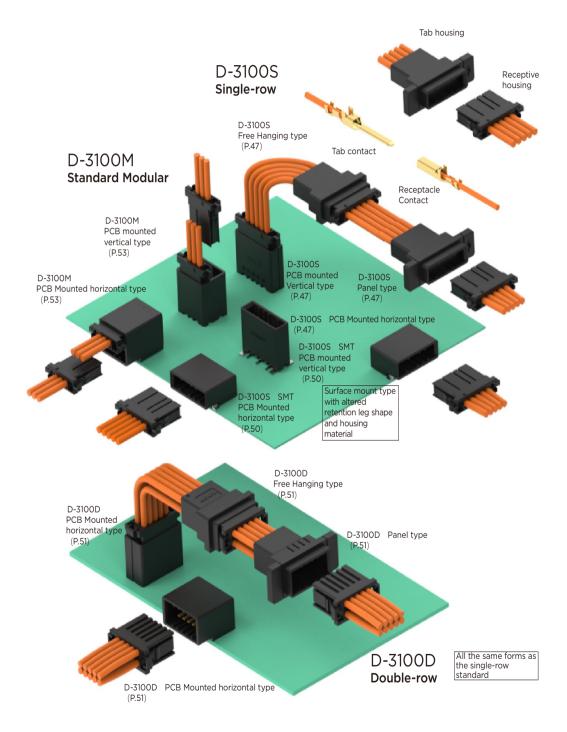
The safety specifications listed below are approved on specific part numbers. Please contact our Technical Support Centre to check whether the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Tyco Electronics Specifications.

Series	D-3100 an	D-3100 and D-3400 series (3.81mm pitch)			D-3200 and D-3500 series (5.08mm pitch)			
STD.	Rated Voltage	Rated Current	Temperature Range	Rated Voltage	Rated Current	Temperature Range		
Product Specifications 108-5349	250V AC/DC	Above table	-55°C ~+105°C	600V AC/DC	Above table	-55℃~+105℃		
UL File No.E28476 (Recognized Component)	Based on the requirements of Application	Based on the requirements of Application	-	Based on the requirements of Application	Based on the requirements of Application	-		
CSA Report No. LR7189	250V AC/DC	8A max	-	250V AC/DC	8A max	-		
TÜV License No. R9151488 (EN61984) IP protection level IP-00 Overvoltage type (II)	250V AC/DC	AWG A 28 2 26 3 24 3 22 4 20 5 18 6 16 8 14 8	-55°C ~+105°C	400V AC	AWG A 28 2 26 3 24 3 22 4 20 5 18 6 16 8 14 8	-55°C ~+105°C		
Same as above		Same as above	Same as above	300V AC/DC	Same as above	Same as above		



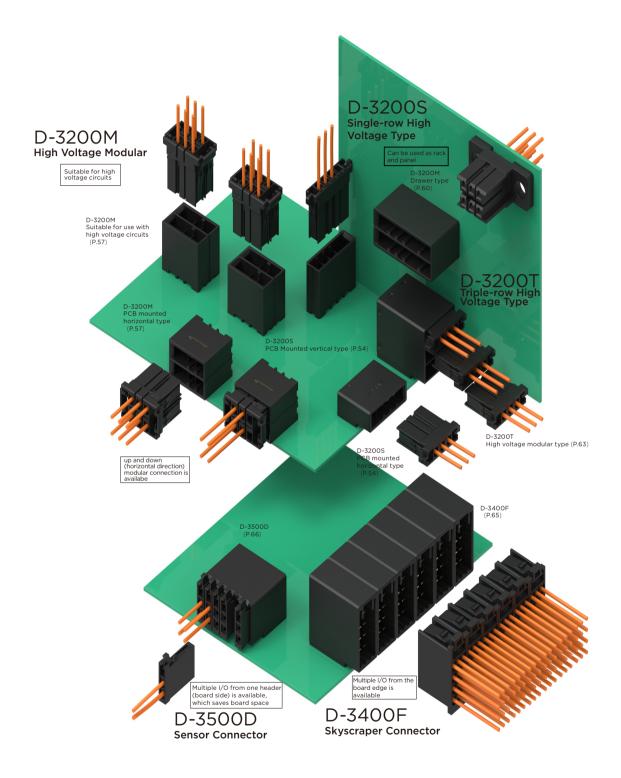
# **D-3000 Series Configurations**

All connector forms are provided, from the wire-to-wire panel type and free hanging type to the wire-to-board horizontal type and vertical type. Each position can carry a maximun current of up to 15A.





# **D-3000 Series Configurations**





### **D-3000 Series Contact**

### **■ Crimped Types**

Receptacle Contact (used in receptacle housing)





Wire I	Range	Outside			(	Contacts			Applicable to	ools
		Diameter	Wire Range	Rece	ptacle Contact		Tab C	ontact	CCII Hand Tool	Mini
AWG	mm <sup>2</sup>	Insulation mm	Mark		Strip form	Loose Piece	Strip form	Loose Piece	PEW12 Hand Tool* (PEW12 dice only)	Applicator
28 26	0.08 0.12	0.8~1.2	S	Standard contact pressure (gold plating only)	175194-□ 2298107-1"	175216-□ 2311162-1''	175284-□	175287-□	91565-1	2836130-1
24	0.20	1.0~1.4		High contact pressure	1-175194-□	1-175216-□				
24	0.20	1.2~1.6	М	Standard contact pressure (gold plating only)	175195-□ 2298107-2"	175217-ロ 2311162-2** FMLB	175285-□	175288-□	91559-1	2151080-1
22 20	0.30 0.50	1.7~2.6 (1.7~2.35)**	1*1	High contact pressure	1-175195-□	1-175217-□	173283-LI	173200-11	91339-1	2131060-1
20 18	0.50 0.85	1.8~2.8	L	Standard contact pressure (gold plating only)	175196-□ 2298107-3**	175218-□ 2311162-3¨	175286-□	175289-□	91558-1	2151018-1
16	1.25	2.2~2.8 (2.2~2.56)**		High contact pressure	1-175196-□	1-175218-□				
16	1.25	2.2~2.8	2L	Standard contact pressure (gold plating only)	917484-□ 2298107-4 <sup>**</sup>	917511-□ 2311162-4¨	917485-□	917512-□	91560-1	2151119-1
14	2.20			High contact pressure	1-917484-□	1-917511-□				
16	1.25	3.1~3.3	3L	Standard contact pressure (gold plating only)	353715-□ 2298107-5"	353717-□ 2311162-5"	353716-□	353718-□	91561-1	2151073-1
14	2.20	3.3~3.8		High contact pressure	1-353715-□	1-353717-□				

Reference: Plating code

- -2: 0.38 µm thickness gold plating
- -3:  $0.76 \mu m$  thickness gold plating
- -5: Tin plating (only set to the high contact pressure type)
- -When placing your order, please check with sales for confirmed lead-times.
- -Please consult the sales department for micro-application operating manual. tools

Strip Form contacts are used with Mini-applicators (bench machine) and Loose-Piece contacts are with hand tools.

\* The outer diameter of the insulation is applicable to Losse Piece terminals.

For strip form, see notes 114-5148

\*\*Sequential (FMLB) female contacts. See 114-78030 in the operating manual.

The receptacle contact can be used in all receptacle housings, while the Tab housing can be used in all tabs housings Details of the applicable tool are available from P.120-124



# D-3100S Single-row Standard - 3.81mm pin pitch

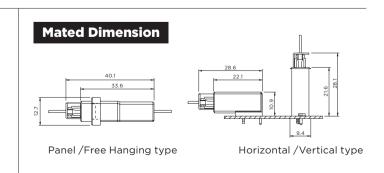
# **Type Chart**



Pos	Color	Kev	Receptacle housing		Tab housing		Plating	Board-Mount	ing Header
POS	Color	Key	Receptacle flousing	Panel type	Free Hanging type	L Bracket	Plating	Horizontal type	Vertical type
							Gold	1-178293-2	1-178313-2
	Black	X	1-178288-3	1-178802-3	1-177648-3	S	Gold	1-178293-3	1-178313-3
3							Tin	1-178293-5	1-178313-5
3							Gold	2-178293-2	2-178313-2
	Black	Υ	2-178288-3	2-178802-3	2-177648-3	S	Gold	2-178293-3	2-178313-3
							Tin	2-178293-5	2-178313-5
							Gold	1-178294-2	1-178314-2
	Black	X	1-178288-4		_	_	Gold	1-178294-3	1-178314-3
4							Tin	1-178294-5	1-178314-5
4							Gold	2-178294-2	2-178314-2
	Black	Υ	2-178288-4		_	_	Gold	2-178294-3	2-178314-3
							Tin	_	2-178314-5
							Gold	1-178295-2	1-178315-2
5	Black	X	1-178288-5	1-178802-5	1-177648-5	L	Gold	1-178295-3	1-178315-3
							Tin	1-178295-5	1-178315-5
							Gold	1-178296-2	1-178316-2
	Black	X	1-178288-6	_	_	-	Gold	1-178296-3	1-178316-3
6							Tin	1-178296-5	1-178316-5
O							Gold	2-178296-2	2-178316-2
	Black	Υ	2-178288-6	_	_	-	Gold	_	2-178316-3
							Tin	_	2-178316-5
							Gold	1-178297-2	1-178317-2
8	Black	X	1-178288-7	1-178802-7	1-177648-7	L	Gold	1-178297-3	1-178317-3
							Tin	1-178297-5	1-178317-5
							Gold	1-178298-2	1-178318-2
10	Black	X	1-178288-8	1-178802-8	1-177648-8	L	Gold	1-178298-3	1-178318-3
Ю							Tin	1-178298-5	1-178318-5
	Black	Υ	2-178288-8	2-178802-8	2-177648-8	L	Gold	2-178298-3	2-178318-2

### **Relative Product Information**

Applicable contact...P.46
Performance & Specifications...P.43
Accessories...P.125





# D-3100S Single-row Standard - 3.81mm pin pitch

# **External Dimensions**

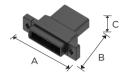
# **■** Receptacle Housing



Pos	Key	Color	Part Number	D	imensio	าร
POS	Key	Color	Part Number	Α	В	С
3	Χ	Black	1-178288-3	26.8	22.8	7.2
_ 3	Υ	Black	2-178288-3	20.0	22.0	7.2
4	Χ	Black	1-178288-4	30.6	22.8	7.2
_ 4	Υ	Black	2-178288-4	30.6	22.0	7.2
5	Х	Black	1-178288-5	34.4	22.8	7.2
6	Х	Black	1-178288-6	38.2	22.8	7.2
0	Υ	Black	2-178288-6	30.2	22.0	7.2
8	Х	Black	1-178288-7	45.8	22.8	7.2
10	Χ	Black	1-178288-8	53.4	22.8	7.2
	Υ	Black	2-178288-8	55.4	22.0	7.2

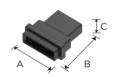
# **■ Tab Housing**

Panel type



Pos	Kev	Color	Part Number	Dimensions			
POS	Key	Color	Part Number	Α	В	С	
3	Χ	Black	1-178802-3	40.0	33.6	12.7	
) 3	Υ	Black	2-178802-3	40.0	33.0	12.7	
5	Χ	Black	1-178802-5	47.0	33.6	12.7	
8	Χ	Black	1-178802-7	59.0	33.6	12.7	
10	Χ	Black	1-178802-8	67.0	33.6	12.7	
10	Υ	Black	2-178802-8	67.0	33.0	12.7	

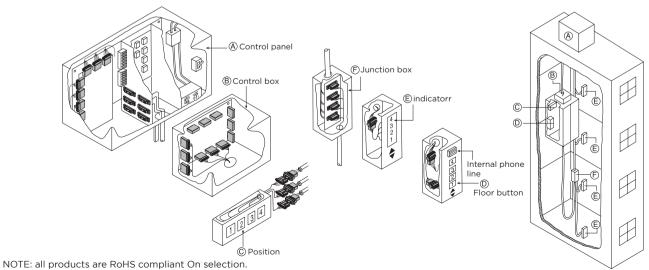
Free Hanging type



Pos	I/ov/	Color	Part Number	D	imensior	าร
POS	Key	Color	Part Number	Α	В	С
3	X	Black	1-177648-3	25.6	33.6	12.7
	Υ	Black	2-177648-3	25.0	33.0	12.7
5	Χ	Black	1-177648-5	33.2	33.6	12.7
8	X	Black	1-177648-7	44.6	33.6	12.7
10	X	Black	1-177648-8	52.2	33.6	12.7
10	Υ	Black	2-177648-8	32.2	33.0	12./

# **Applications**

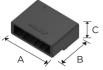
Example of elevator applications



# D-3100S Single-row Standard - 3.81mm pin pitch

# **■** Board-Mounting Header

Horizontal type



					D	imensior	าร
Pos	Key	Plating	Color	Part Number	А	В	С
		Gold	Black	1-178293-2			
	Х	Gold	Black	1-178293-3	1		
3		Tin	Black	1-178293-5	21.6	22.1	10.9
3		Gold	Black	2-178293-2	21.6	22.1	10.9
	Υ	Gold	Black	2-178293-3			
		Tin	Black	2-178293-5			
		Gold	Black	1-178294-2			
	X	Gold	Black	1-178294-3	25.4		
4		Tin	Black	1-178294-5		22.1	10.9
	Y	Gold	Black	2-178294-2			
	Y	Gold	Black	2-178294-3			
		Gold	Black	1-178295-2	29.2	22.1	
5	X	Gold	Black	1-178295-3			10.9
		Tin	Black	1-178295-5			
		Gold	Black	1-178296-2			
6	Х	Gold	Black	1-178296-3	33.1	22.1	10.9
6		Tin	Black	1-178296-5	33.1	22.1	10.9
	Υ	Gold	Black	2-178296-2			
		Gold	Black	1-178297-2			
8	X	Gold	Black	1-178297-3	40.7	22.1	10.9
		Tin	Black	1-178297-5			
		Gold	Black	1-178298-2			
10	Х	Gold	Black	1-178298-3	10.7	221	10.9
10		Tin	Black	1-178298-5	48.3	22.1	
	Υ	Gold	Black	2-178298-3	1		

# **■** Board-Mounting Header

Vertical type

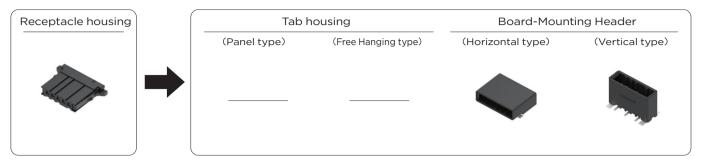


Pos	Key	Plating	Color	Part Number	D	imensio	าร
POS	Key	Plating	COIOI	Part Number	Α	В	С
		Gold	Black	1-178313-2			
	X	Gold	Black	1-178313-3			
3		Tin	Black	1-178313-5	21.6	9.4	21.6
3		Gold	Black	2-178313-2	21.0		21.0
	Υ	Gold	Black	2-178313-3			
		Tin	Black	2-178313-5			
	×	Gold	Black	1-178314-2			
	×	Gold	Black	1-178314-3			
4		Tin	Black	1-178314-5	25.4	9.4	21.6
4		Gold	Black	2-178314-2	25.4	9.4	21.6
	Υ	Gold	Black	2-178314-3			
		Tin	Black	2-178314-5			
		Gold	Black	1-178315-2		9.4	
5	X	Gold	Black	1-178315-3	29.2		21.6
		Tin	Black	1-178315-5			
		Gold	Black	1-178316-2			
	X	Gold	Black	1-178316-3			
		Tin	Black	1-178316-5	33.1	9.4	21.6
6		Gold	Black	2-178316-2	33.1	9.4	21.6
	Υ	Gold	Black	2-178316-3			
		Tin	Black	2-178316-5			
		Gold	Black	1-178317-2			
8	X	Gold	Black	1-178317-3	40.7	9.4	21.6
		Tin	Black	1-178317-5			
		Gold	Black	1-178318-2			
10	X	Gold	Black	1-178318-3	40.7	0.4	21.6
10		Tin	Black	1-178318-5	48.3	9.4	21.6
	Y	Gold	Black	2-178318-2			



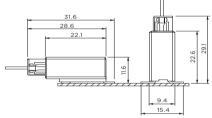
# D-3100S Single-row SMT Types - 3.81mm pin pitch

# **Type Chart**



Pos	Color	Kov	Receptacle housing	Tab ho	using	Plating	Board-Mounting Header		
PUS	os Color Key		Receptacle flousing	Panel type	Free Hanging type	Plating	Horizontal type	Vertical type	
5	Black	Χ	1-178288-5	_	_	Gold	1-177662-2	1-177665-2	
0	Black		1-178288-7	_	_	Gold	1-179188-2		
*	DIdCK	^	1-1/0288-/	_	_	Gold	1-179188-3		

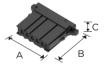
# **Mated Dimension**



Horizontal /Vertical type

# **External Dimensions**

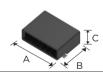
# **■** Receptacle Housing



Pos	Kev	Color	Part Number	r Dim	imensior	าร
POS	Key	Color	Part Number	А	В	С
5	X	Black	1-178288-5	34.4	22.8	7.2
8	Х	Black	1-178288-7	45.8	22.8	7.2

# **■** Board-Mounting Header

Horizontal type



Pos	Kev	Plating	Color	Part Number	Di	mension	ns
POS	Key	Plating	COIOI	Part Number	Α	В	С
5	Х	Gold	Black	1-177662-2	29.2	22.1	11.6
8	X	Gold	Black	1-179188-2	40.7	22.1	11.6
	_ ^	Gold	Black	1-179188-3	40.7	ZZ.I	11.0

Vertical type

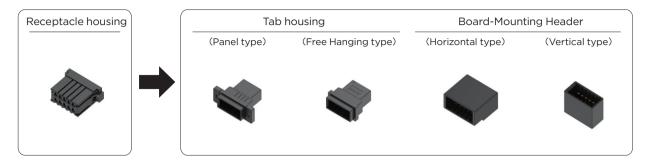


Doo	I/au	Diation	Calar	Part Number	Di	Dimensions	
Pos	Key	Plating	Color	Part Number	Α	В	С
5	Χ	Gold	Black	1-177665-2	29.2	9.4	22.6



# D-3100D Double-row Standard Type - 3.81mm pin pitch

# Type Chart



Pos	Color	I/av	Decembrale housing		Tab housing		Plating	Board-Moun	ting Header
POS	Color	Key	Receptacle housing	Panel type	Free Hanging type	L Bracket	Plating	Horizontal type	Vertical type
							Gold	178303-2	178323-2
6	Black	X	178289-3	178803-3	178964-3	S	Gold	178303-3	178323-3
							Tin	178303-5	178323-5
							Gold	1717412-2	1903601-2
8	Black	x	178289-4	<del>-</del>	178964-4	S	Gold	1717412-3	_
							Tin	_	1903601-5
							Gold	178305-2	178325-2
10	Black	x	178289-5	178803-5	178964-5	L	Gold	178305-3	178325-3
							Tin	178305-5	178325-5
							Gold	178306-2	178326-2
12	Black	X	178289-6	178803-6	178964-6	L	Gold	178306-3	178326-3
							Tin	178306-5	178326-5
							Gold	178307-2	178327-2
16	Black	X	178289-7	178803-7	178964-7	L	Gold	178307-3	178327-3
							Tin	178307-5	178327-5
							Gold	178308-2	178328-2
20	20 Black X	178289-8	178803-8	178964-8	L	Gold	178308-3	178328-3	
							Tin	178308-5	178328-5

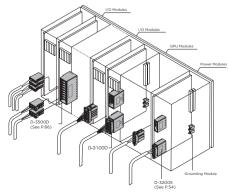
# **Relative Product Information**

Applicable contact...P.46 Performance & Specifications...P.43 Accessories...P.125

# Mated Dimension 40.1 33.6 25.9 Panel /Free Hanging type Horizontal /Vertical type

# **Applications**

Example of Programmable Controller Application





# D-3100D Double-row Standard Type - 3.81mm pin pitch

# **External Dimensions**

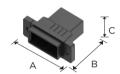
# **■** Receptacle Housing



Pos	Key	Color	Part Number	Dimensions				
			Part Number	Α	В	С		
6	X	Black	178289-3	24.4	22.8	12.5		
8	X	Black	178289-4	28.2	22.8	12.5		
10	X	Black	178289-5	32.0	22.8	12.5		
12	X	Black	178289-6	35.8	22.8	12.5		
16	X	Black	178289-7	42.7	22.8	12.5		
20	Х	Black	178289-8	51.0	22.8	12.5		

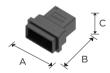
### **■ Tab Housing**

Panel type



Pos	Key	Color	Part Number	Dimensions				
			Part Number	Α	В	С		
6	Х	Black	178803-3	40.0	33.6	17.8		
10	Х	Black	178803-5	47.0	33.6	17.8		
12	Х	Black	178803-6	51.0	33.6	17.8		
16	Х	Black	178803-7	59.0	33.6	17.8		
20	Х	Black	178803-8	67.0	33.6	17.8		

### Free Hanging type

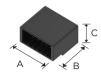


Doo	I/av	Color	Part Number	Dimensions			
Pos	Key	Color	Part Number	Α	В	С	
6	X	Black	178964-3	25.6	33.6	17.8	
8	X	Black	178964-4	29.4	33.6	17.8	
10	X	Black	178964-5	33.2	33.6	17.8	
12	X	Black	178964-6	37.0	33.6	17.8	
16	X	Black	178964-7	44.6	33.6	17.8	
20	X	Black	178964-8	52.2	33.6	17.8	

NOTE: all products are RoHS compliant On selection.

# **■** Board-Mounting Header

Horizontal type



Doo	Kayı	Disting	Calar	Part Number	D	imensior	าร
Pos	Key	Plating	Color	Part Number	Α	В	С
	Х	Gold	Black	178303-2			15.9
6	X	Gold	Black	178303-3	21.6	25.9	
	X	Tin	Black	178303-5			
8	X	Gold	Black	1717412-2	25.4	25.9	1E O
0	X	Gold	Black	1717412-3	25.4	23.9	15.9
	X	Gold	Black	178305-2			
10	X	Gold	Black	178305-3	29.2	25.9	15.9
	X	Tin	Black	178305-5			
	X	Gold	Black	178306-2		25.9	
12	X	Gold	Black	178306-3	33.1		15.9
	X	Tin	Black	178306-5			
	Χ	Gold	Black	178307-2			
16	X	Gold	Black	178307-3	40.7	25.9	15.9
	X	Tin	Black	178307-5			
	Х	Gold	Black	178308-2			
20	Х	Gold	Black	178308-3	48.3	25.9	15.9
	Х	Tin	Black	178308-5			

Vertical type

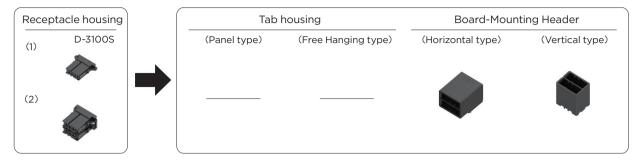


Doo	l/av	Diation	Calar	Dout Number	D	imensior	าร
Pos	Key	Plating	Color	Part Number	Α	В	С
	X	Gold	Black	178323-2			21.6
6	X	Gold	Black	178323-3	21.6	14.4	
	X	Tin	Black	178323-5			
8	X	Gold	Black	1903601-2	25.4	14.4	21.6
°	X	Tin	Black	1903601-5	25.4	14.4	21.0
	X	Gold	Black	178325-2			
10	X	Gold	Black	178325-3	29.2	14.4	21.6
	X	Tin	Black	178325-5			
	X	Gold	Black	178326-2		14.4	
12	X	Gold	Black	178326-3	33.1		21.6
	X	Tin	Black	178326-5			
	X	Gold	Black	178327-2			
16	X	Gold	Black	178327-3	40.7	14.4	21.6
	X	Tin	Black	178327-5			
	X	Gold	Black	178328-2			
20	X	Gold	Black	178328-3	48.3	14.4	21.6
	X	Tin	Black	178328-5			



# D-3100M Double-row Standard Modular Type - 3.81mm pin pitch

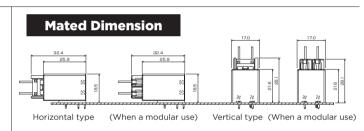
# **Type Chart**



Pos	Color	Kov	Receptacl	e housing	Tab ho	ousing	Plating	Board-Mour	iting Header
POS	COIOI	Key	1 row 3 pos.	2 row 6 pos.	Panel type	Free Hanging type	Plating	Horizontal type	Vertical type
					_	_	Gold	1-178137-2	1-178141-2
	Black	XX	1-178288-3 (2)	1-178127-6 (1)	_	_	Gold	1-178137-3	1-178141-3
					_	_	Tin	1-178137-5	1-178141-5
6	Black	YY	2-178288-3 (2)	2-178127-6 (1)	_	_	Gold	2-178137-2	
6	DIACK	1 1	2-1/0200-3 (2)	2-1/012/-0 (1)	_	_	Tin	2-178137-5	
			1 170200 7 (1)		_	_	Gold	3-178137-2	3-178141-2
	Black	XY	1-178288-3 (1) 2-178288-3 (1)	′   4-1/8127-6 (1)	_	_	Gold	3-178137-3	3-178141-3
			2-170200-3 (1)			_	Tin	3-178137-5	3-178141-5

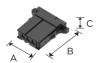
# **Relative Product Information**

Applicable contact...P.46
Performance & Specifications ...P.43



# **External Dimensions**

### **■** Receptacle Housing



Pos	Kev	Color	Part Number	D	imensions		
POS	Key	COIOI	Part Number	Α	С		
7	X	Black	1-178288-3	26.8	22.8	7.2	
3	Υ	Black	2-178288-3	20.8	22.8	/.2	



		.,		5	Dimensions				
	Pos	Key	Color	Part Number	Α	В	С		
		XX	Black	1-178127-6					
	6	YY	Black	2-178127-6	24.8	22.8	14.8		
		XY	Black	3-178127-6					

NOTE: all products are RoHS compliant On selection.

# **■** Board-Mounting Header

Horizontal type



-	_	17	DI 1:	<u> </u>	D. LNI. I	D	imensior	าร
	Pos	Key	Plating	Color	Part Number	Α	В	С
ſ		XX	Gold	Black	1-178137-2		25.9	
			Gold	Black	1-178137-3			
			Tin	Black	1-178137-5			
	6	YY	Gold	Black	2-178137-2	21.6		18.5
	O	1 1	Tin	Black	2-178137-5			18.5
			Gold	Black	3-178137-2			
		XY	Gold	Black	3-178137-3			
l			Tin	Black	3-178137-5			

Vertical type

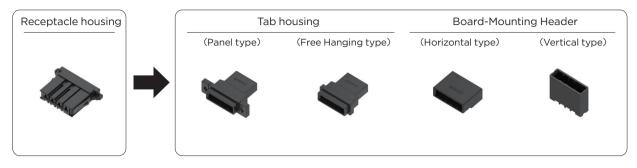


	D 14		D:		5 11 1	Dimensions			
	Pos	Key	Plating	Color	Part Number	Α	В	С	
Г			Gold	Black	1-178141-2			21.6	
		XX	Gold	Black	1-178141-3	21.6	17.0		
	6		Tin	Black	1-178141-5				
	0	XY	Gold	Black	3-178141-2				
			Gold	Black	3-178141-3				
			Tin	Black	3-178141-5				



# D-3200S Single-row High Voltage Type - 5.08mm pin pitch

# **Type Chart**



D	Color	1/	Receptacle housing		Tab housing		Plating	Board-Moun	ting Header									
Pos	Color	Key	Receptacle housing	Panel type	Free Hanging type	L Bracket	Plating	Horizontal type	Vertical type									
	Plack V						Gold	1-179276-2	1-917337-2									
	Black	Χ	1-178128-2	1-179553-2	1-179552-2	S	Gold	1-179276-3	1-917337-3									
2							Tin	1-179276-5	1-917337-5									
2							Gold	2-179276-2	2-917337-2									
	Black	Υ	2-178128-2	2-179553-2	2-179552-2	S	Gold	2-179276-3	2-917337-3									
							Tin	_	2-917337-5									
							Gold	1-178138-2	1-178136-2									
	Black X  Black Y		1-178128-3	1-179553-3	1-179552-3	S	Gold	1-178138-3	1-178136-3									
							Tin	1-178138-5	1-178136-5									
3							Gold	2-178138-2	2-178136-2									
			2-178128-3	2-179553-3	2-179552-3	S	Gold	2-178138-3	2-178136-3									
							Tin	2-178138-5	2-178136-5									
	Black		3-178128-3			_	Tin		3-178136-5									
					1.170550.4		Gold	1-179277-2	1-917338-2									
	Black	Χ	1-178128-4	1-179553-4	1-179552-4	S			1-917338-3									
4							Tin	1-179277-5	1-917338-5									
4																Gold	2-179277-2	2-917338-2
	Black	Υ	2-178128-4	2-179553-4	2-179552-4	S	Gold	2-179277-3	2-917338-3									
							Tin	2-179277-5	2-917338-5									
							Gold	1-316130-2	1-316132-2									
	Black	Χ	1-178128-5			_ [	Gold	1-316130-3	1-316132-3									
5							Tin	1-316130-5	1-316132-5									
	Black	Υ	2-178128-5				Gold	2-316130-2	2-316132-2									
	Black	Y	2-1/8128-3	<del></del>		_	Gold	2-316130-3	2-316132-3									
							Gold	1-316131-2	1-316133-2									
	Black	Χ	1-178128-6		_	-	Gold	1-316131-3	1-316133-3									
6							Tin	1-316131-5	1-316133-5									
ю							Gold	2-316131-2	2-316133-2									
	Black	Υ	2-178128-6	_	_	-	Gold		2-316133-3									
							Tin	2-316131-5										

# **Relative Product Information**

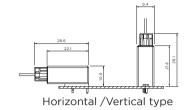
Applicable contact...P.46 Performance & Specifications ...P.43 Accessories ...P.125



# D-3200S Single-row High Voltage Type - 5.08mm pin pitch

# **Mated Dimension**





# **External Dimensions**

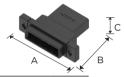
# **■** Receptacle Housing



Pos	Key	Color	Part Number	D	imensior	าร
POS	rtcy	Color	Part Number	Α	В	С
2	Χ	Black	1-178128-2	24.6	22.8	7.2
~	Υ	Black	2-178128-2	24.0	22.0	7.2
	Х	Black	1-178128-3			
3	Υ	Black	2-178128-3	29.7	22.8	7.2
	Z	Black	3-178128-3			
4	Χ	Black	1-178128-4	34.8	22.8	7.2
4	Υ	Black	2-178128-4	34.0	22.0	7.2
5	Х	Black	1-178128-5	39.9	22.8	7.2
3	Υ	Black	2-178128-5	39.9	22.0	7.2
6	Х	Black	1-178128-6	45.0	22.8	7.2
	Υ	Black	2-178128-6	45.0	22.0	7.2

# **■ Tab Housing**

Panel type



_				Dimensions			
Pos	Key	Color	Part Number	А	В	С	
2	Х	Black	1-179553-2	36.8	33.6	12.7	
	2 Y		2-179553-2	36.8	33.0	14.7	
3	Х	Black	1-179553-3	41.9	33.6	10.7	
3	Υ	Black	2-179553-3	41.9		12.7	
4	Х	Black	1-179553-4	47.0	33.6	12.7	
4	Υ	Black	2-179553-4	47.0	33.0	12.7	

Free Hanging type



Pos	Kov	Color	Part Number	Dimensions			
POS	Key	Color	Part Number	Α	В	С	
2	X	Black	1-179552-2	23.0	33.6	12.7	
~	Υ	Black	2-179552-2	23.0		12.7	
3	X	Black	1-179552-3	201	77.0	12.7	
3	Υ	Black	2-179552-3	28.1	33.6		
4	X	Black	1-179552-4	33.2	33.6	12.7	
4	Υ	Black	2-179552-4	33.2	33.6	12.7	



# D-3200S Single-row High Voltage Type - 5.08mm pin pitch

# **■** Board-Mounting Header

Horizontal type



Doo	I/ov:	Diatir	Calar	Daut Numahasii	D	imensior	าร
Pos	Key	Plating	Color	Part Number	А	В	С
		Gold	Black	1-179276-2			
	Χ	Gold	Black	1-179276-3	1		
2	2 Y	Tin	Black	1-179276-5	19.1	22.1	10.9
		Gold	Black	2-179276-2			
	T	Gold	Black	2-179276-3			
		Gold	Black	1-178138-2			
	Χ	Gold	Black	1-178138-3			
3		Tin	Black	1-178138-5	24.2	22.1	10.9
3		Gold	Black	2-178138-2	24.2	22.1	
	Υ	Gold	Black	2-178138-3	1		
		Tin	Black	2-178138-5			
		Gold	Black	1-179277-2			10.9
	Χ	Gold	Black	1-179277-3	29.2		
4		Tin	Black	1-179277-5		22.1	
4		Gold	Black	2-179277-2	29.2		
	Υ	Gold	Black	2-179277-3			
		Tin	Black	2-179277-5	1		
		Gold	Black	1-316130-2			
	Χ	Gold	Black	1-316130-3			
5		Tin	Black	1-316130-5	34.3	22.1	10.9
	Υ	Gold	Black	2-316130-2	1		
	T	Gold	DIACK	2-316130-3			
		Gold	Black	1-316131-2			
	Χ	Gold	Black	1-316131-3			
6	Tin	Black	1-316131-5	39.4	22.1	10.9	
	Y	Gold	Black -	2-316131-2			
		Tin	Black	2-316131-5			

# **■** Board-Mounting Header

Vertical type

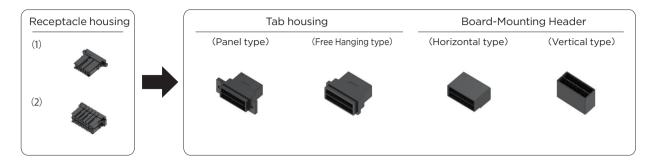


Doo	I/ov/	Diation	Colo	Daut Number	D	imensior	าร
Pos	Key	Plating	Color	Part Number	А	В	С
		Gold	Black	1-917337-2			
	X	Gold	Black	1-917337-3			
2		Tin	Black	1-917337-5	10.1	0.4	21.0
2		Gold	Black	2-917337-2	19.1	9.4	21.6
	Y	Gold	Black	2-917337-3			
		Tin	Black	2-917337-5			
		Gold	Black	1-178136-2			
	X	Gold	Black	1-178136-3			21.6
		Tin	Black	1-178136-5			
3		Gold	Black	2-178136-2	24.2	9.4	
	Υ	Gold	Black	2-178136-3			
		Tin	Black	2-178136-5			
	Z	Tin	Black	3-178136-5			
		Gold	Black	1-917338-2			21.6
	X	Gold	Black	1-917338-3	29.2		
4		Tin	Black	1-917338-5		9.4	
4		Gold	Black	2-917338-2			
	Υ	Gold	Black	2-917338-3			
		Tin	Black	2-917338-5	]		
		Gold	Black	1-316132-2			
	X	Gold	Black	1-316132-3			
5		Tin	Black	1-316132-5	34.3	9.4	21.6
	Y	Gold	Black	2-316132-2	]		
	Y	Gold	Black	2-316132-3			
		Gold	Black	1-316133-2			
	X	Gold	Black	1-316133-3			
6		Tin	Black	1-316133-5	39.4	9.4	21.6
		Gold	Black	2-316133-2			
	Υ	Gold	Black	2-316133-3	1		



# D-3200M Double-row High Voltage Types - 5.08mm pin pitch

# Type Chart



Pos	Color	Kev	Receptacle housing (2)	٦	ab housing		Plating	Board-Moun	ting Header	
POS	Color	Key	Receptacle housing (2)	Panel type	Free Hanging type	L Bracket	Plating	Horizontal type	Vertical type	
						S	Gold	1-178139-2	1-178140-2	
	_	XX	1-178129-6	1-179555-3	1-179554-3	S	Gold	1-178139-3	1-178140-3	
						S	Tin	1-178139-5	1-178140-5	
						S	Gold	2-178139-2	2-178140-2	
	-	YY	2-178129-6	2-179555-3	2-179554-3	S	Gold	2-178139-3	2-178140-3	
6						S	Tin	2-178139-5	2-178140-5	
						S	Gold	3-178139-2	3-178140-2	
	-	XY	3-178129-6	3-179555-3	3-179554-3	S	Gold	3-178139-3	3-178140-3	
						S	Tin	3-178139-5	3-178140-5	
	_	YX	X(1)			_	Gold	4-178139-2		
	_	ZX	X(1)			_	Tin	6-178139-5		
							Gold	1-316080-2	1-917657-2	
	-	XX	1-917659-5			_	Gold	1-316080-3	1-917657-3	
							Tin	1-316080-5	1-917657-5	
								Gold	2-316080-2	2-917657-2
10	-	YY	2-917659-5			_	Gold	2-316080-3	2-917657-3	
							Tin	2-316080-5	2-917657-5	
							Gold	3-316080-2	3-917657-2	
	-	XY	3-917659-5			_	Gold	3-316080-3	3-917657-3	
							Tin	3-316080-5	3-917657-5	
							Gold	1-316081-2	1-917658-2	
	-	XX	1-917659-6	1-179555-6	1-179554-6	L	Gold	1-316081-3	1-917658-3	
							Tin	1-316081-5	1-917658-5	
							Gold	2-316081-2	2-917658-2	
12	-	YY	2-917659-6	2-179555-6		L	Gold	2-316081-3	2-917658-3	
							Tin	_		
							Gold	3-316081-2	3-917658-2	
	-	XY	3-917659-6	3-179555-6	3-179554-6	L	Gold	3-316081-3	3-917658-3	
							Tin	_		
20	-	XX	1-917659-8	1-179555-8		_	-			

# **Relative Product Information**

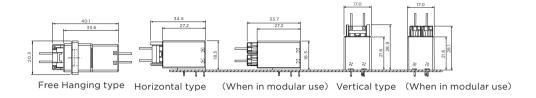
Applicable contact...P.46 Performance & Specifications...P.43 Accessories...P.125

For(1)D-3200S Receptacle housing, please see P.54 PN 1-178128-3 and 3-178128-3 are used.



# D-3200M Double-row High-voltage Modular Types - 5.08mm pin pitch

# **Mated Dimension**



# **External Dimensions**

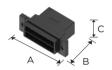
### **■** Receptacle Housing



Pos	Key	Color	Part Number	D	imensior	าร
FUS	Rey	COIOI	Fait Number	А	В	С
	XX	Black	1-178129-6			
6	YY	Black	2-178129-6	27.3	22.8	14.8
	XY	Black	3-178129-6			
	XX	Black	1-917659-5			
10	YY	Black	2-917659-5	37.5	22.8	14.8
	XY	Black	3-917659-5			
	XX	Black	1-917659-6			
12	YY	Black	2-917659-6	42.5	22.8	14.8
	XY	Black	3-917659-6			
20	XX	Black	1-917659-8	62.9	22.8	14.8

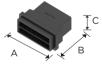
# **■** Tab Housing

Panel type



Pos	Key	Color	r Part Number	Dimensions			
POS	Key	COIOI	Part Number	Α	В	С	
	XX	Black	1-179555-3				
6	YY	Black	2-179555-3	41.9	33.6	20.3	
	XY	Black	3-179555-3				
	XX	Black	1-179555-6				
12	YY	Black	2-179555-6	57.9	33.6	20.3	
	XY	Black	3-179555-6				
20	XX	Black	1-179555-8	78.2	33.6	20.3	

Free Hanging type



Pos	Key	Color	Part Number	Dimensions			
POS	Key	Color Part Number		Α	В	С	
	XX	Black	1-179554-3				
6	6 YY XY	Black	2-179554-3	28.1	33.6	20.3	
		Black	3-179554-3				
12	XX	Black	1-179554-6	43.4	33.6	20.3	
12	12 XY		3-179554-6	43.4	45.4   55.6	20.3	



# D-3200M Double-row High-voltage Modular Types - 5.08mm pin pitch

# **■** Board-Mounting Header

Horizontal type



_	14	DI II	6 1	D 1 N 1	D	imensior	าร
Pos	Key	Plating	Color	Part Number	Α	В	С
		Gold	Black	1-178139-2			
	XX	Gold	Black	1-178139-3			
		Tin	Black	1-178139-5			
		Gold	Black	2-178139-2			
	YY	Gold	Black	2-178139-3			
6		Tin	Black	2-178139-5	24.2	27.2	18.5
		Gold	Black	3-178139-2			
	XY	Gold	Black	3-178139-3			
		Tin	Black	3-178139-5			
	YX	Gold	Black	4-178139-2			
	ZX	Tin	Black	6-178139-5			
		Gold	Black	1-316080-2			18.5
	XX	Gold	Black	1-316080-3			
		Tin	Black	1-316080-5			
		Gold	Black	2-316080-2	]	27.2	
10	YY	Gold	Black	2-316080-3	34.3		
		Tin	Black	2-316080-5			
		Gold	Black	3-316080-2			
	XY	Gold	Black	3-316080-3			
		Tin	Black	3-316080-5			
		Gold	Black	1-316081-2			
	XX	Gold	Black	1-316081-3			
		Tin	Black	1-316081-5			
12	10	Gold	Black	2-316081-2	39.4	27.2	18.5
12	YY	Gold	Black	2-316081-3	35.4	21.2	10.5
		Tin	Black				
	VV	Gold	Black	3-316081-2			
	XY	Gold	Black	3-316081-3			

# **■** Board-Mounting Header

Vertical type

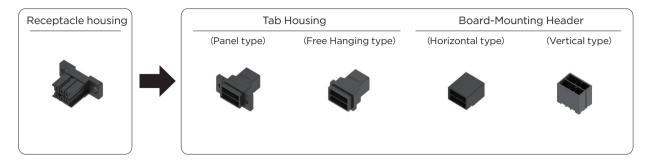


					D	imensior	าร
Pos	Key	Plating	Color	Part Number	А	В	С
		Gold	Black	1-178140-2			
	XX	Gold	Black	1-178140-3	1		
		Tin	Black	1-178140-5	1		
		Gold	Black	2-178140-2			
6	YY	Gold	Black	2-178140-3	24.2	17.0	21.6
		Tin	Black	2-178140-5	]		
		Gold	Black	3-178140-2			
	XY	Gold	Black	3-178140-3			
		Tin	Black	3-178140-5			
		Gold	Black	1-917657-2			
	XX	Gold	Black	1-917657-3	]		21.6
		Tin	Black	1-917657-5			
		Gold	Black	2-917657-2			
10	YY	Gold	Black	2-917657-3	34.3	17.0	
		Tin	Black	2-917657-5			
		Gold	Black	3-917657-2			
	XY	Gold	Black	3-917657-3			
		Tin	Black	3-917657-5			
		Gold	Black	1-917658-2			
	XX	Gold	Black	1-917658-3			
		Tin	Black	1-917658-5			
		Gold	Black	2-917658-2			
12	YY	Gold	Black	2-917658-3	39.4	17.0	21.6
		Tin	Black				
		Gold	Black	3-917658-2			
	XY	Gold	Black	3-917658-3			
		Tin	Black				



# D-3200M Double-row High-voltage Modular Types - 5.08mm pin pitch

# Type Chart



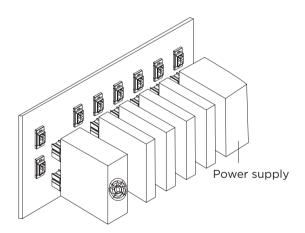
Doc	Dos Color Koy	Decentagle housing	Tab ho	ousing	Plating	Board-Mounting Header		
POS	Pos Color Key Receptacle housing		Receptacle flousing	Panel type	Free Hanging type	Plating	Horizontal type	Vertical type
	6 Black XX 1-917266-3				Gold	1-178139-2	1-178140-2	
6		1-917266-3	1-179555-3	1-179554-3	Gold	1-178139-3	1-178140-3	
						Tin	1-178139-5	1-178140-5

# **Relative Product Information**

Applicable contact...P.46
Performance & Specifications ...P.43
Accessories ...P.125

# **Applications**

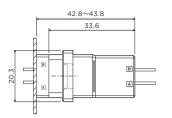
Example of Compact Disk Device Application



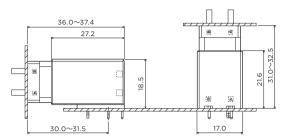


# D-3200M Double-row High voltage Drawer Types - 5.08mm pin pitch

# **Mated Dimension**



Panel /Free Hanging type



Horizontal type/Vertical type

# **External Dimensions**

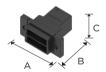
# ■ Receptacle Housing (Drawer type)



Doc	Kev	Color	Part Number	Dimensions			
Pos	ney		Part Number	Α	В	С	
6	XX	Black	1-917266-3	40.0	25.7	15.4	

# **■ Tab Housing**

Panel type



Doc	Kov	Color	Part Number	D	imensior	าร
Pos	Key	COIOI	Part Number	А	В	С
6	XX	Black	1-179555-3	41.9	33.6	20.3

Free Hanging type



	Pos	Key	Color	Part Number	Dimensions			
				Part Number	Α	В	С	
Γ	6	XX	Black	1-179554-3	28.1	33.6	20.3	

NOTE: all products are RoHS compliant On selection.

# **■** Board-Mounting Header

Horizontal type



Pos Key	Kov	Plating C	Color	Part Number	Dimensions		
	Plating	COIOI	Part Number	Α	В	С	
		Gold	Black	1-178139-2			
6	XX	Gold	Black	1-178139-3	24.2	27.2	18.5
		Tin	Black	1-178139-5			

Vertical type

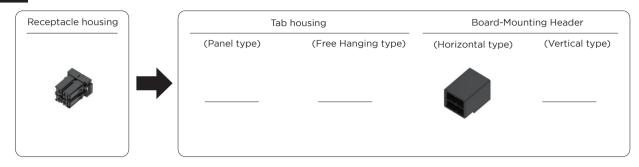


Pos	Kov	Key Plating Color Part Number		Dimensions			
POS	Pos   Key  Pi	Flating Color	Part Number	Α	В	С	
	Gold	Black	1-178140-2				
6	XX	Gold	Black	1-178140-3	24.2	17.0	21.6
		Tin	Black	1-178140-5			



# D-3200 FMLB (Sequential Type) - 5.08mm pin pitch

# Type Chart



Doc	Color	Kay Dagge	Receptacle housing	Tab ho	ousing	Plating	Board-Mounting Header		
POS C	Color	Key	Receptacle flousing	Panel type	Free Hanging type	Plating	Horizontal type	Vertical type	
4	Dlask	RR	1-2291727-1	_	— Gold	Cald	1-2299004-1	_	
4	Black	SS	2-2291727-1	_	_	Gold	2-2299004-1	_	
		RR	1-2291728-1	_	_		1-2299005-1	_	
12	Black	SS	2-2291728-1	_	_	Gold	2-2299005-1	_	
		RS	_	_	_		3-2299005-1	_	

# 

# **External Dimensions**

## **■** Receptacle Housing



Pos	Kev	Color	Part Number	Dimensions			
POS	Ney	COIOI	Part Number	Α	В	С	
4	RR	Black	1-2291727-1	14.2	22.8	14.8	
4	SS	BIACK	2-2291727-1	14.2			
10	RR B		1-2291728-1	745	22.0	14.0	
12	SS	Black	2-2291728-1	34.5	22.8	14.8	

# **Relative Product Information**

Applicable contact...P.46 Performance & Specifications ...P.43 Accessories ...P.125

NOTE: all products are RoHS compliant On selection.

### **■** Board-Mounting Header

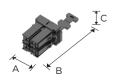
Horizontal type



Pos Key	Kov	Plating	Color	Part Number	Dimensions			
	Plating	COIOI	Part Number	А	В	С		
1	RR	_	Black	1-2299004-1	14.2	22.8	14.8	
4	SS	_	DIACK	2-2299004-1				
	RR	_		1-2299005-1	34.5	22.8	14.8	
12	SS	-	Black	2-2299005-1				
	RS	_		3-2299005-1				

### Stress relief (optional)

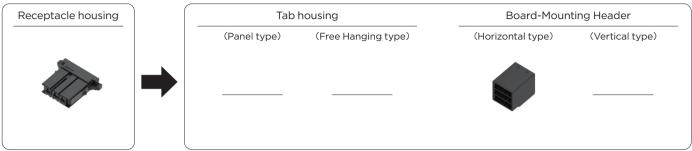
Pos	Key	Color	Part Number
4	RR	Black	1-2303376-1
	SS	Black	2-2303376-1
	RR		1-2303378-1
12	SS	Black	2-2303378-1
	RS		3-2303378-1





# D-3200T Triple-row High Voltage Modular Types - 5.08mm pin pitch

# Type Chart



	R	eceptacle Hous	sing (m	aximum 9 Pos	i.)		
Sino	gle-Row (D-3	2005) %1		Double-Rov	v (D-3200M)		
31115	gie Now (D-5.	2003) %1	Single-Row (D-3200S) %1				
POS	KEY	Part Number	POS	KEY	Part Number		
3	×	1-178128-3	6	XX	1-178129-6		
3	Х	1-178128-3	O	^^	1-1/6129-6		
3	X	1-178128-3	3	×	1-178128-3		
3	Х	1-178128-3	3	Υ	2-178128-3		
3	Х	1-178128-3	6	XX	1-178129-6		
3	Υ	2-178128-3	О	^^	1-1/8129-6		
3	Υ	2-178128-3	3	Х	1-178129-3		
3	Υ	2-178128-3	6	YY	2-178129-6		
3	Х	1-178128-3	О	YY	2-1/8129-6		
3	X	1-178128-3	3	Х	1-178129-3		
3	Y	2-178128-3	6	XY	3-178129-6		
3	Х	1-178128-3	О	A Y	3-1/8129-6		
3	Z	3-178128-3	3	Z	3-178129-3		
3	Y	2-178128-3	6	XY	3-178129-6		
3	Х	1-178128-3	0	^1	3-1/0129-0		

	Board-	Mounting Hea	der
	Horizon	tal type (D-32	00T)
POS	KEY	Plating	Part Number
9	xxx	Gold	1-1123624-2
9	^^^	Tin	1-1123624-5
9	XXY	Gold	3-1123624-2
3	^^1	Tin	3-1123624-5
9	YYX	Gold	4-1123624-2
ก	117	Tin	4-1123624-5
9	XYX	Gold	5-1123624-2
9	XIX	Tin	5-1123624-5
9	XYZ	Gold	9-1123624-2

# **Relative Product Information**

Applicable contact...P.46
Performance & Specifications ...P.43

%1: P.54

# Mated Dimension 38.8 32.3 Horizontal type

# **External Dimensions**

# ■ Receptacle Housing



				Dimensions			
Pos	Key	Color	Part Number	Α	В	С	
	X	Black	1-178128-3				
3	Υ	Black	2-178128-3	29.7	22.8	7.2	
	Z	Black	3-178128-3				
	XX	Black	1-178129-6				
6	YY	Black	2-178129-6	27.3	22.8	14.8	
	XY	Black	3-178129-6				

NOTE: all products are RoHS compliant On selection.

# **■** Board-Mounting Header





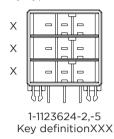
				Dimensions			
Pos	Key	Plating	Color Part Number		Α	В	С
	xxx	Gold	Black	1-1123624-2			
	^^^	Tin	Black	1-1123624-5			
9	XXY	Tin	Black	3-1123624-5	24.2	32.3	27.1
9	YYX	Tin	Black	4-1123624-5	24.2	32.3	27.1
	XYX	Gold	Black	5-1123624-2	1		
	XYZ	Gold	Black	9-1123624-2			

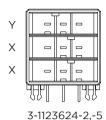


# D-3200T Triple-row High-voltage Modular Type - Key Description

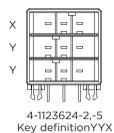
# ■Board-Mounting Header - horizontal type

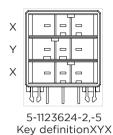
Key Type

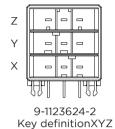




Key definitionXXY



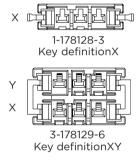


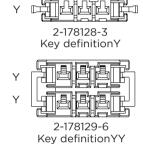


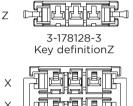
cy definition/(1)

# ■Receptacle Housing, single-row、double-row

Key Type

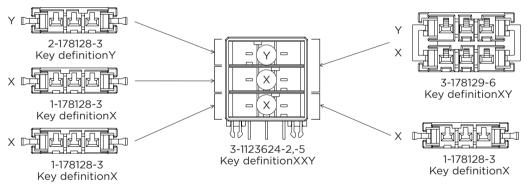






1-178129-6 Key definitionXX

### ■Application Examples of Key Matching



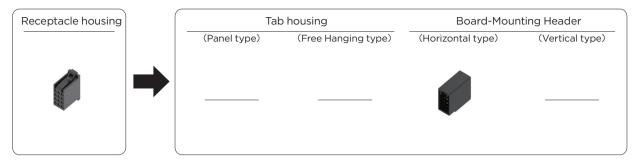
		Receptac	le Housing (9 po	ositions)		
Single-	row ( D-320	OS) %1	Double-row ( D-	-3200M) Single-	row (D-3200S) %1	
Pos	Key	Part Number	Pos	Pos	Part Number	
3	X	1-178128-3	6	XX	1-178129-6	
3	X	1-178128-3	0	^^	1-1/0129-0	
3	X	1-178128-3	3	X	1-178128-3	
3	X	1-178128-3	3	Υ	2-178128-3	
3	X	1-178128-3	6	XX	1-178129-6	
3	Υ	2-178128-3	0	^^	1-170129-0	
3	Υ	2-178128-3	3	X	1-178128-3	
3	Υ	2-178128-3	_	YY	2-178129-6	
3	X	1-178128-3	6	11	2-1/0129-0	
3	X	1-178128-3	3	X	1-178128-3	
3	Υ	2-178128-3	6	XY	3-178129-6	
3	X	1-178128-3	٥	_ ^ Y	3-1/8129-6	
3	Z	3-178128-3	3	Z	3-178128-3	
7	Υ	2-178128-3	6	XY	7 170120 6	
3	X	1-178128-3	٥	^ 1	3-178129-6	

	Board	d-Mounting He	eader
	Horizoi	ntal type ( D-3	200T)
Pos	Key	Plating	Part Number
9	×××	Gold	1-1123624-2
9		Tin	1-1123624-5
9	XXY	Gold	3-1123624-2
9	^^1	Tin	3-1123624-5
9	YYX	Gold	4-1123624-2
9	YYX	Tin	4-1123624-5
9	XYX	Gold	5-1123624-2
	\ \ \ \	Tin	5-1123624-5
9	XYZ	Gold	9-1123624-2



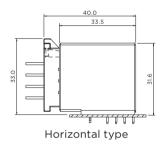
# D-3400F Skyscraper Connectors - 3.81mm pin pitch

# Type Chart



Doc	Pos Color Key	Receptacle housing	Tab housing		Plating	Board-Mounting Header		
POS	COIOI r	Receptacle flousing		Panel type	Free Hanging type	Plating	Horizontal type	Vertical type
	12 Black – 178214-1	_	_	Gold	178216-2	_		
12		178214-1	_	_	Gold	178216-3	_	
				_	_	Tin	178216-5	_
				_	_	Gold	917251-2	
20	20 Black -	917249-1	_	_	Gold	917251-3		
			_	_	Tin	917251-5	_	

# Mated Dimension



# **External Dimensions**

### **■** Receptacle Housing



Doc	Pos Key	Color	Part Number	Dimensions			
POS		COIOI	Part Number	А	В	С	
12	_	Black	178214-1	12.2	22.8	32.1	
20	_	Black	917249-1	19.8	22.8	32.1	

### **■** Board-Mounting Header

Horizontal type

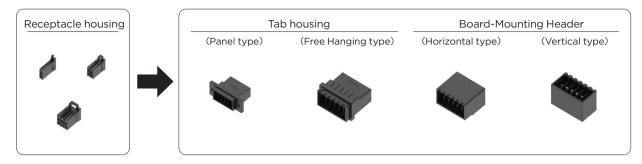


Dos	Pos Key	Plating	Color	Part Number	Dimensions			
POS		Plating	Color	Part Number	Α	В	С	
	_	Gold	Black	178216-2				
12	_	Gold	Black	178216-3	15.0	33.5	31.6	
	_	Tin	Black	178216-5				
	_	Gold	Black	917251-2				
20	_	Gold	Black	917251-3	22.6	33.5	31.6	
	_	Tin	Black	917251-5				



# D-3500D Sensor Connector - 5.08mm pin pitch

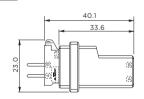
# Type Chart



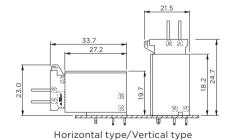
D	C-1	17	Danasta da kassisas		Tab housing		Disting	Board-Moun	ting Header		
Pos	Color	Key	Receptacle housing	Panel type	Free Hanging type	L Bracket	Plating	Horizontal type	Vertical type		
			175362-1			_					
2	Black	_	175362-2			_	_				
			175362-3			_	_				
	Black		175363-1								
	White	k –	1-175363-1	_				1376133-2			
4	Black		175363-2*			_	Gold				
	Blue		2-175363-1								
	Black		175363-3								
6	Black		1318095-1		_						
0	DIACK	_	1318095-2			_	_		_		
									Gold	177555-2	316516-2
12	Black	_		917241-6	917242-6	S	Gold	177555-3	316516-3		
12	DIACK			3-917241-6	3-917242-6	3	Gold	1-177555-2	_		
							Tin	177555-5	316516-5		
				0170 41 0	017040.0		Gold	175365-2	316517-2		
20	20 Black -	:		917241-8 3-917241-8	917242-8 3-917242-8	S	Gold	175365-3	316517-3		
			3 31, 241 0	3 31, 242 0		Tin	175365-5	316517-5			

<sup>\*</sup> Small Lever Type

# **Mated Dimension**



Panel type/Free Hanging type



# **Relative Product Information**

Applicable contact...P.46 Performance & Specifications ...P.43 Accessories ...P.125



# D-3500D Sensor Connector - 5.08mm pin pitch

# **External Dimensions**

# **■** Receptacle Housing



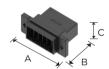




Pos	Key	Color	Part Number	Dimensions			
POS	FOS Ney		Coloi Fait Number		В	С	
	_	Black	175362-1				
2	_	Black	175362-2	4.6	22.8	21.0	
	_	Black	175362-3				
	_	Black	175363-1				
	_	White	1-175363-1				
4	_	Blue	2-175363-1	9.7	22.8	21.0	
	_	Black	175363-2				
	_	Black	175363-3				
6	_	Black	1318095-1	14.7	22.8	21.0	
	_	Black	1318095-2	14.7	22.0	21.0	

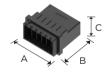
# **■ Tab Housing**

Panel type



Dos	Pos Key		Part Number	Dimensions			
POS			Color Part Number		В	С	
12	-	Black	917241-6	52.0	33.6	21.5	
12	_	Black	3-917241-6	32.0			
20	_		917241-8	72.0	77.0	21.5	
20	-	Black	3-917241-8	72.0	33.6	21.5	

Free Hanging type

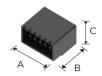


Pos Key		Color	Part Number	Dimensions			
		Color	Part Number	А	В	С	
12	_	Black	917242-6	36.4	33.6	21.5	
12	_	Black	3-917242-6	30.4	33.0		
20	_	Black	917242-8	56.8	33.6	21.5	
20	_	Black	3-917242-8	30.0	33.0	21.5	

NOTE: all products are RoHS compliant On selection.

# **■** Board-Mounting Header

Horizontal type



D	1/	Plating	Color	Davit November	Dimensions			
Pos	Pos Key	Plating	Color	Part Number	Α	В	С	
4	_	Gold	Black	1376133-2	12.2	27.2	19.7	
	_	Gold	Black	177555-2			19.7	
12	_	Gold	Black	177555-3	32.5	27.2		
12	_	Tin	Black	177555-5	32.3	27.2		
	_	Gold	Black	1-177555-2				
	_	Gold	Black	175365-2				
20	_	Gold	Black	175365-3	52.8	27.2	19.7	
	_	Tin	Black	175365-5				

Vertical type



Pos Key	Plating	Color	Part Number	Dimensions			
	Plating	Color	Part Nulliber	Α	В	С	
12 -	_	Gold	Black	316516-2			
	_	Gold	Black	316516-3	32.5	18.2	21.6
	_	Tin	Black	316516-5			
	_	Gold	Black	316517-2			
20	_	Gold	Black	316517-3	52.8	18.2	21.6
	_	Tin	Black	316517-5			



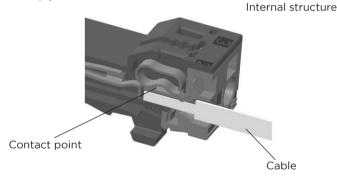
# **Spring Clamp Type**

The Spring Clamp Type series is a spring clamp type connector applicable to Servo I/O application, etc.

Thanks to the on-site mounting without any crimping tools, working time can be saved significantly.



•Adopt the standard wiring method as Dynamic series, and Spring clamp type contacts on receptacle side which comply with UL1059.



- •Applicable to ports of power supply series where a UL508 servo amplifier and inverter, etc. must be used.
- •The implementation can be carried out on-site without any crimping tools. Compared to the spiral wiring method, working time is saved significantly.

### **Product Features**

### 1.Spring clamp contact

The contact is assembled in housing already with a spring clamp design which provide easy on-site installation, therefore increase the efficiency of assembly.

### 2. Audible Latching

Obvious lock sound and feeling when mating means work can be done without mistakes, such as mismating (halfmating), even if the connection cannot be seen.

### 3.Keying

The housing is keyed (with a slit), so differentiating between X keys and Y keys prevents mismating. It is also possible to make more key patterns by using keying plugs.



# **Spring Clamp Series Performance and Specifications**

# Performance

Series Item	D-2950	D-3950	D-4950	D-5900
Contact pitch [mm]	5.08	7.5	7.5	13.1
Rated current max. UL [A]	10	14.5	22	42
Rated voltage UL1059 B [V]	300 AC/DC	300 AC/DC	300 AC/DC	-
Rated voltage UL1059 C [V]	-	300 AC/DC	300 AC/DC	600 AC/ DC
Rated voltage UL1059 D [V]	300 AC/DC	600 AC/DC	600 AC/DC	-
Dielectric withstanding Voltage	2,200V AC	2,200V AC	2,200V AC	2200V AC
Wire size [AWG]	18-14	22-14	10-16	16-8
Wire size [mm <sup>2</sup> ]	0.75-2.0	0.3-2.0	1.25-5.5	1.25-8.0

# Positions/ Wire size / Rated current

# D-2950 series

No of energized	Current(A)							
positions	AWG14	AWG16	AWG18	AWG20	AWG22			
5	11.25	10.5	9.5	8	6.5			
6	10.5	9.75	9	7	5.5			

### D-3950 series

No of energized			Current(A)		
positions	AWG14	AWG16	AWG18	AWG20	AWG22
1	14.5	13.75	13	10.75	8.7
2-5	12.75	11.75	10.25	8.25	7.2
6-11	11.8	9.75	8.75	7	5.5

# D-4950 series

No of energized		Current(A)							
positions	AWG10	AWG12	AWG14	AWG16					
8	22	19	15	10					

# **Product Specifications**

Series	D-2950	D-3950	D-4950	D-5900
Product Specification	108-140221	108-78997	108-140216	108-140022
Application Specification	408-78172	411-78272	408-78173	408-78067

### D-5900 series

No of energized		Current(A)						
positions	AWG14	AWG16	AWG18	AWG20	AWG22			
4	42	30	20	15	10			
6	35	30	20	15	10			

# **Materials and Plating**

Description	Material	Finish		
Receptacle contact (mating area only)	Copper alloy	0.38µm Gold plating over 1.27µm Nickel under plating		
Board-mounting header contact	Copper alloy	Mating area: 0.38µm Gold platin over 1.27µm Nickel under platin Tail area: 2µm TIN plating over 1.27µm Nickel under plating		
Receptacle Housing Board-mounting header Housing	Thermo	plastic PBT contain glass fiber, UL94V-0,		



# D-2950 Spring Clamp Type - 5.08mm pin pitch

# Type Chart

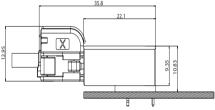






Pos	Kev	Color	Circuit mark	Receptacle Assembly	Plating	Board-Mounting Header Assembly	
	Rey	COIOI	Circuit illark	Single-row Horizontal	Flating	Single-row Horizontal	
5	X	Black	Yes	1-2347004-5	Gold	1-2347005-5	
6	6 X Black Yes		Yes	1-2347004-6	Gold	1-2347005-6	

# Mated Dimension

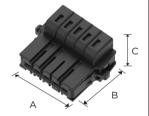


Special auxiliary tools for wire insertion and extraction: 2347681-1

# **External Dimensions**

# **■** Receptacle Assembly

Single-Row Horizontal

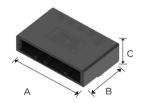


	Pos	Key	Disting	ngColor	Part Number	Dimensions			
1			riating		Part Number	А	В	С	
ľ	5	Х	Gold	Black	1-2347004-5	39.2	29.0	13.0	
	6	Х	Gold	Black	1-2347004-6	44.3	29.0	13.0	

NOTE: all products are RoHS compliant On selection.

# **■** Board-Mounting Header Assembly

Single-Row Horizontal

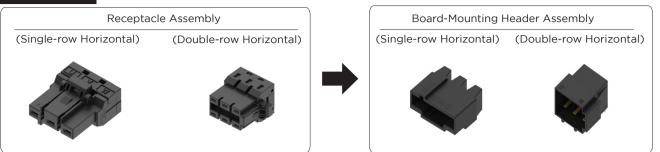


Pos	Key	Key Plating Color Part Number		Dart Number	D	imensior	าร
		Plating	Color	Part Number	Α	В	С
5	Х	Gold	Black	1-2347005-5	34.3	22.1	10.9
6	Х	Gold	Black	1-2347005-6	39.4	22.1	10.9



# D-3950 Spring Clamp Type - 7.5mm pin pitch

# **Type Chart**



Pos	Color	Kev	Circuit mark		e Assembly	Plating	Board-Mounting	Header Assembly
F 0 5	COIOI	Rey	Circuit illark	Single-row Horizontal Double-row Horizontal		Flating	Single-row Horizontal	Double-row Horizontal
3	Black	X	Yes	3-2229794-1		Gold	3-2229803-1	_
3	DIACK	^	No	3-2289080-1	80-1 —		3-2229003-1	_
	Black	Х	Yes	1-2331743-4		Gold	1-2271457-4	_
4	Black	Х	No	1-2331743-1		Gold	1-22/145/-4	_
	Black	Υ	No	2-2331743-1		Gold	2-2271457-4	_
6	Black	Х	No	1-2271454-6		Gold	1-2271457-6	_
6	Black	-	Yes		2229800-1	Gold		2229806-1
<b>※</b> 7	Black	Υ	Yes	1-2229794-2		Gold	1-2229803-2	_
8	Black	Х	Yes	1-2349815-2		Gold	1-2271457-8	_
11	Black	Х	Yes	1-2229794-1		Gold	1-2229803-1	_
''	віаск	X	No	1-2289080-1		Gold	1-2223003-1	_

X The 7P connector is a 11P connector with 4 contacts removed.

# **Mated Dimension**

Double row

Special auxiliary tools for wire

insertion and extraction: 1981045-1

# **External Dimensions**

### **■** Receptacle assembly

Single-Row Horizontal



Doo	I/ov	Plating	Circuit	Calar	Part Number	Dir	nensio	ns
Pos	Key	Plating	Illustration	Color	Loior Part Number		В	С
3	X	Gold	Yes	Black	3-2229794-1	22.0	25.4	15.6
٥	3   X   G0	Gold	No	Diack	3-2289080-1	22.0	25.4	15.6
	X Gold	Yes	Black	1-2331743-4	27.7	25.4	15.6	
4		A Gold	No	Black	1-2331743-1	27.7	25.4	15.6
	Υ	Gold	No	Black	2-2331743-1	27.7	25.4	15.6
6	Х	Gold	No	Black	1-2271454-6	44.5	25.4	15.6
<b>※</b> 7	Υ	Gold	Yes	Black	1-2229794-2	82.0	25.4	15.6
8	Х	Gold	Yes	Black	1-2349815-2	57.7	25.4	15.6
11	X	X Gold	Yes	Black	1-2229794-1	82.0	25.4	15.6
		Gold	No		1-2289080-1	82.0	25.4	15.6

 $\ensuremath{\mathbb{X}}$  The 7P connector is a 11P connector with 4 contacts removed.

Double-row Horizontal



Pos	Key	Plating	Color	Part Number	Dimensions			
Pos				Fait Number	Α	В	С	
6	_	Gold	Black	2229800-1	25.2	25.6	20.4	

NOTE: all products are RoHS compliant On selection.

# **■** Board-Mounting Header Assembly

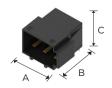
Single-Row Horizontal



Pos	Key	Plating	Color	Part Number	Dimensions			
					А	В	С	
3	X	Gold	Black	3-2229803-1	22.0	18.1	12.0	
4	Х	Gold	Black	1-2271457-4	29.5	18.1	12.0	
4	Υ	Gold	Black	2-2271457-4	29.5	18.1	12.0	
6	Х	Gold	Black	1-2271457-6	44.5	18.1	12.0	
<b>※</b> 7	Υ	Gold	Black	1-2229803-2	82.0	18.1	12.0	
8	Х	Gold	Black	1-2271457-8	59.5	18.1	12.0	
11	Х	Gold	Black	1-2229803-1	82.0	18.1	12.0	

 $\ensuremath{\mathbb{X}}$  The 7P connector is a 11P connector with 4 contacts removed

Double-row Horizontal

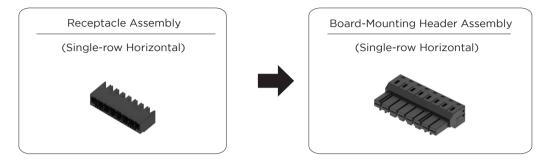


Do	Pos	Key	Plating Co	Calar	Part Number	Dimensions		
	POS			Color		Α	В	С
	3	Χ	Gold	Black	2229806-1	22.0	18.1	12.0



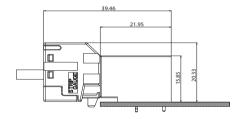
# D-4950 Spring Clamp Type - 7.5mm pin pitch

# Type Chart



Pos	Color	Kev	Cincolit accorde	Receptacle Assembly	Diation	Board-Mounting Header Assembly		
		Key	Circuit mark	Single-row Horizontal	Plating	Single-row Horizontal		
8	Black	Χ	Yes	1-2349849-8	Gold	1-2349825-8		

# **Mated Dimension**

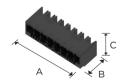


Special auxiliary tools for wire insertion and extraction: 2349891-1

# **External Dimensions**

### **■** Receptacle Assembly

Single-Row Horizontal



Pos	Key	Plating Color	Calar	Part Number	Dimensions		
POS			COIOI		Α	В	С
8	X	Gold	Black	1-2349849-8	61.5	31.7	22.1

# **■** Board-Mounting Header Assembly

Single-Row Horizontal

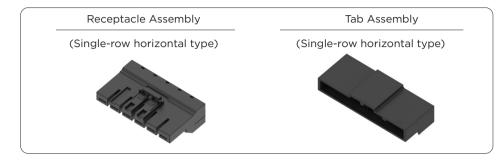


Pos	Key	Plating	Color	Part Number	Dimensions		
					Α	В	С
8	X	Gold	Black	1-2349825-8	61.5	22.0	15.9



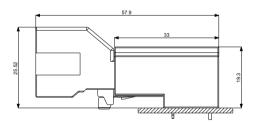
#### D-5900 Field Wiring Type - 13.1 mm pin pitch

#### Type Chart



Dos	Color	Kov	Circuit Mark	Receptacle Assembly	Plating	Tab Assembly	
POS	COIOI	Key	Circuit Mark	Single-row horizontal type	Plating	Single-row horizontal type	
4	黑色	X	有	4-2260663-1	Gold	4-2260661-1	
4	4 黑色 Y 有		有	4-2260663-2	Gold	4-2260661-1	
6	黑色	X	有	6-2260663-1	Gold	6-2260661-1	

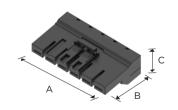
#### Mated Dimensions



Special auxiliary tools for wire insertion and extraction: 2260828-1

#### External Dimensions

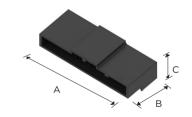
■ Receptacle Assembly Single-row horizontal type



Pos	Kev	Plating	Color	Part Number	Dimensions			
POS	Rey			Part Number	А	В	С	
4	Х	Gold	Black	4-2260663-1	52.9	45.9	25.9	
4	Y	Gold	Black	4-2260663-2	52.9	45.9	25.9	
6	X	Gold	Black	6-2260663-1	79.1	45.9	25.9	

NOTE: all products are RoHS compliant On selection.

# ■ Tab Assembly Single-row horizontal type



Pos	I/ov/	Diation	Calar	Part Number –	Dimensions			
Pos	Key	Plating	Color		А	В	С	
4	X	Gold	Black	4-2260661-1	57.6	33	19.3	
4	Υ	Gold	Black	4-2260661-1	57.6	33	19.3	
6	X	Gold	Black	6-2260661-1	83.8	33	19.3	



#### On-site Push-in Type

The On-site push-in type series is applicable to the power input and output of servo control systems.

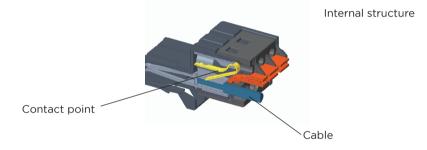
The compact size saves space on the board and facilitates the high-density design of the board. The vertically plugging design and the newly added cable unplugging button make the "tool-free" on-site mounting possible.

The high temperature housing material applicable to reflow soldering and the economical version enrich the choice of connectors for the servo application.

The On-site push-in type series inherits the Dynamic's high reliability, audible & tactile locking system and key design to provide a more efficient solution for the installation process.



•Adopt the standard wiring method as Dynamic series, and Spring clamp type contacts on receptacle side which comply with UL1059.



- •Applicable to ports of power supply series where a UL508 servo amplifier and inverter, etc. must be used.
- •The implementation can be carried out on-site without any crimping tools. Compared to the spiral wiring method, working time is saved significantly.

#### **Product Features**

#### 1. Release button design

On-site Push-in type has a release button design, which could support wire inserting and removing of the connector, therefore achieving toolless assembly.

#### 2.Spring clamp contact

The contact is assembled in housing already with a spring clamp design which provide easy on-site installation, therefore increase the efficiency of assembly.

#### 3. High temperature housing material

Housing is made of high temperature material, therefore withstand reflow soldering process.

#### 4. Three different Header options

Three different Headers-including horizontal header, vertical header and reversed headerwhich fit to varies of application needs.

#### 5. Two plating types

Both gold plating and tin plating contacts balance the high reliability and economical requests.

#### **6.Center locking**

This is the first application of a center lock in Dyamic series. On-board space requirements can be mounted in a tight space for highdensity mounting on boards requiring signal lines.

#### 7. Audible Latching

Obvious lock sound and feeling when mating means work can be done without mistakes, such as mismating (halfmating), even if the connection cannot be seen.



#### **Spring Clamp Series Performance and Specifications**

#### **Performance**

ltem Series	D-2970
Contact pitch [mm]	5.0
Rated current max. UL [A]	10 (AWG14 x 1)
Rated voltage UL1059 B [V]	20 (AWG14 x 1)
Rated voltage UL1059 C [V]	300 AC/DC
Rated voltage UL1059 D [V]	400 AC/DC
Dielectric withstanding Voltage	2,200V AC
Wire size [AWG]	18-14
Wire size [c]	0.75-2.0

#### Positions/ Wire size / Rated current

#### D-2970 Series

			C	urrent(	A)		
Pos	AWG 26	AWG 24	AWG 22	AWG 20	AWG 18	AWG 16	AWG 14
3	4.5	5.5	7	8	9.5	11.5	15
4	4	4.5	6	7.5	9	11.5	14
Reference UL1059 Limit	1	2	3	5	7	10	15

When spec is over UL1059 limit, UL1059 requirement equipment shall use Limit current.

#### **Product Specifications**

ltem Series	D-2970
Product manual	108-140223
Operation manual	408-78171

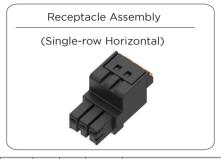
#### **Materials and Plating**

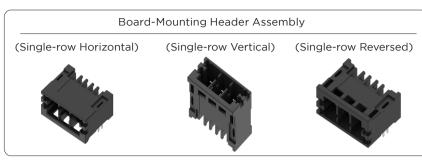
Description	Material	Finisher
Receptacle contact (Only at the contact point)	Copper alloy	1.0 µm Tin plating over 1.27 µm Nickel under-plated
Board-mounting header contact	Copper alloy	Mating area: 2.5 µm Tin plating over 1.27 µm Nickel under-plated Tail area: 2 µm Tin plating over 1.27 µm Nickel under-plated
Receptacle Housing Board-mounting header Housing	Liquid	Crystal Plastic (LCP), UL94V-0



#### D-2970 On-site Push-in Type - 5.0mm pin pitch

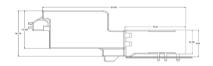
#### Type Chart



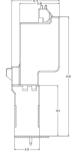


Pos	Color	Kov	Disting	Receptacle Assembly Board Mounting Header Assembly					
	COIOI	rtey	Plating	Single-Row Horizontal	Single-Row Horizontal	Single-row Vertical	Single-row Reversed		
3	Black	Χ	Tin	2336488-3	2336490-3	2336494-3	2336491-3		
3	Black	X	Gold	2-2336488-3	2-2336490-3	2-2336494-3	2-2336491-3		
4	Black	Χ	Tin	2336488-4	2336490-4	2336494-4	2336491-4		
4	4 Black X Gold		Gold	2-2336488-4	2-2336490-4	2-2336494-4	2-2336491-4		

#### **Mated Dimension**



Single-Row Horizontal



Single-row Vertical

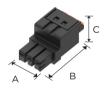


Single-row Reversed

#### **External Dimensions**

#### **■** Receptacle Assembly

Single-Row Horizontal



Pos	Key	Plating	Color	Part Number	Dimensions			
F 03				Fait Number	А	В	С	
3	X	Tin	Black	2336488-3	17	34	18.7	
3	X	Gold	Black	2-2336488-3	17	34	18.7	
4	X	Tin	Black	2336488-4	22	34	18.7	
4	Х	Gold	Black	2-2336488-4	22 34 18		18.7	

Single-Row Vertical



Pos	Kev	Plating	Color	r Part Number —	Dimensions			
POS	Key	Plating	COIOI		Α	В	С	
3	X	Tin	Black	2336494-3	19.9	9.8	14.8	
3	Х	Gold	Black	2-2336494-3	19.9	9.8	14.8	
4	X	Tin	Black	2336494-4	24.9	9.8	14.8	
4	X	Gold	Black	2-2336494-4	24.9	9.8	14.8	

NOTE: all products are RoHS compliant On selection.

#### **■ Board-Mounting Header Assembly**

Single-Row Horizontal



Pos	Pos Key	Plating	Color	Part Number	Dimensions		
1 03				T dit Namber	Α	В	С
3	Х	Tin	Black	2336490-3	19.9	14.8	9.8
3	Х	Gold	Black	2-2336490-3	19.9	14.8	9.8
4	Х	Tin	Black	2336490-4	24.9	14.8	9.8
4	Х	Gold	Black	2-2336490-4	24.9	14.8	9.8

Single-Row Reversed



	Pos	Key	Plating	Color	Part Number	Dimensions			
					Part Number	Α	В	С	
	3	Χ	Tin	Black	2336491-3	19.9	14.8	9.8	
	3	Χ	Gold	Black	2-2336491-3	19.9	14.8	9.8	
Ì	4	Χ	Tin	Black	2336491-4	24.9	14.8	9.8	
ĺ	4	Χ	Gold	Black	2-2336491-4	24.9	14.8	9.8	



#### **Tap Connector: Dyna-Tap Connectors**

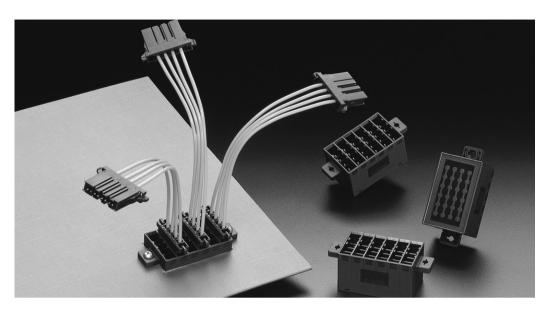
The common FA equipment is a device formed by combining functionally separated units in a final process. Tap on the circuit board was the original method used for supplying power to each unit.

Therefore, TE developed a tap connector with tap function—Dyna-Tap, which will not further burden the circuit board of which the space should be further saved in the future.

Dyna-Tap Connectors is a Dynamic series tap connector developed as an FA power connector, so it is the most suitable product for tap of the main power cable. (An application has been made for the design of its appearance)

Its specification is 6P to support the tap of the 3-phase power cable system widely used in the industry.

The relay type and panel type of the product has been developed. The matching model is 1-178288-6.



#### D-3100 Dyna-Tap18P(6Px3ROW)

#### Highlight

Since in most applications it is fixed outside the circuit board (chassis), a dust cover is installed to prevent dust from entering the inside of the housing. Therefore, it can be used in harsh environments.

#### **Application**

- •Power tap in the elevator control room
- •Power tap of power protection relays, etc.
- •Power tap in the semiconductor production equipment unit room
- Power supply for production line equipment

#### **Performance**

• Rated voltage: 250V AC/DC

• Rated current: : 8A (when the 18P and

AWG#14 are used)

• No of Pos.: 6Px3 = 18P (6P tap)

Durability 500 cyclesProduct standard: 108-5754

#### D-3200 Dyna-Tap24P(4Px6ROW)

#### Highlight 1

The Dynamic series connectors and contacts can be used. It is a power supply board that uses the Dynamic series (D-3200S 4P REC) with excellent connection reliability and gain high reputation. Compared to terminal blocks, its installation and maintenance costs are reduced significantly. Meanwhile, compatible terminals enable less costs of use and inventory.

#### Highlight 2

Positions of Power board installation can be set freely.

Considering that the relay type and panel type connectors are used jointly, panel type with fixtures near to opener or buttom are both available.

#### Highlight 3

Cost advantage by reducing number of components used and saving working hours on installation.

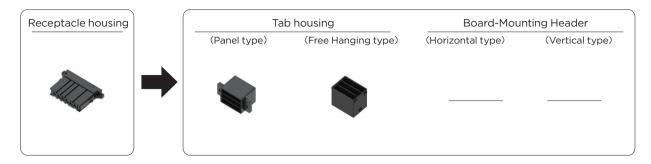
#### Other highlights

- •The Tin plated and Gold-plated type (0.38 µm) are provided.
- •The back is engraved with an electrical connection diagram.



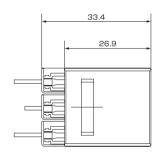
#### D-3100 Dyna-Tap 18P(6Px3ROW), 24P(6Px4ROW) - 3.81mm pin pitch

#### **Type Chart**



Pos	Color Key	Kov	ey Receptacle housing-	Tab housing		Through-hole	Plating		Board-Mounting Header	
		Key		Panel type	Free Hanging type	Tillough-noie P		ung	Horizontal type	Vertical type
6	Black	Х	1-178288-6				_	_	_	
18	Black	Х		1376807-2	1376807-1		_	_	_	
24	Black	Х				1971003-1	_	_	_	
24	Black	Х				1971003-2	_	_	_	

#### **Mated Dimension**



#### **External Dimensions**

#### **■** Receptacle Housing



Pos	Kev	Color	Part Number	D	imensior	าร
POS	ney	Color	Part Number	Α	В	С
6	Х	Black	1-178288-6	38.2	22.8	7.2

Through-hole



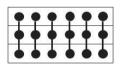
The circuit schematic is provided in the side of the product schematic above

Doo	I/ou	Calar	Part Number	Dimensions			
Pos	Pos Key Color		Part Number	Α	В	С	
24	X	Black	1971003-1	33.1	45.7	17.1	
	X	Black	1971003-2	35.1	45.7	35.1	

NOTE: all products are RoHS compliant On selection.

#### **■** Tab housing

Panel type





Pos	s Key Plating Color Part Nur	Part Number	D	Dimensions			
POS	Key	Plating	Color	Part Number	А	В	С
18	X	Gold	Black	1376807-2	51.0	26.9	24.6

Free Hanging type

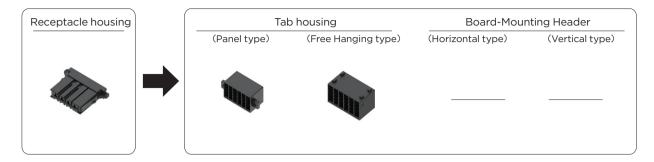


Pos	Kev	Plating Color	Calar	Part Number	Dimensions			
POS	Key		Part Number	А	В	С		
18	Х	Gold	Black	1376807-1	33.1	24.6	26.9	



#### D-3200 Dyna-Tap 24P(4Px6ROW) - 3.81mm pin pitch

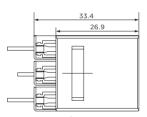
#### Type Chart



Pos	Color	· Kov	Receptacle housing	Tab housing		Plating	Board-Mounting Header		
1 205	Color	Key		Panel type	Free Hanging type	Plating	Horizontal type	Vertical type	
4	Black	Х	1-178128-4	<del>-</del>	_	_	_	_	
	Black	Х	_	1827691-2 <sup>×1</sup>	1827691-1	Gold	<del>_</del>	_	
24	Black	Х	_	1-1827691-2 <sup>×1</sup>	1-1827691-1	Tin			
24	Black	Х	_	1827691-3 <sup>×2</sup>	_	Gold	_	_	
	Black	Х	-	1-1827691-3 <sup>×2</sup>	_	Tin	_	_	

<sup>\*1:</sup>Front panel type \*2:Bottom panel type

#### **Mated Dimension**



Panel type/Free Hanging type

#### **External Dimensions**

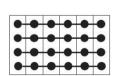
#### **■** Receptacle Housing

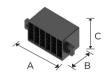


Pos	Kev	Color Part	Part Number	Dimensions			
POS	os key coid	COIOI	Part Number	Α	В	С	
4	X	Black	1-178128-4	24.6	22.8	7.2	

#### **■** Tab housing

Panel type





	Pos	Key	Plating	Color	Part Number	Dimensions			
	FUS				Part Number	А	В	С	
		Х	Gold	Black	1827691-2		26.9	29.2	
	24	Χ	Tin	Black	1-1827691-2	65.0			
	24	Χ	Gold	Black	1827691-3	65.0	20.9	29.2	
		Χ	Tin	Black	1-1827691-3				

Free Hanging type



Pos	Key	Disting	Color	Part Number	Dimensions		
		Plating	Color	Part Number	А	В	С
24	X	Gold	Black	1827691-1	47.5	26.9	29.2
	X	Tin	Black	1-1827691-1	47.5	20.9	29.2



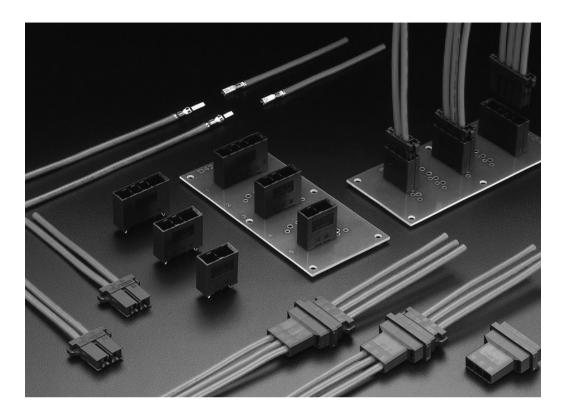
#### D-4000 Series

#### **Series introduction**

It is a connector most appropriate for industrial equipment equipped with 20A power cords. The optimum size meets the compactness and high current requirements of the equipment.

The terminal is newly designed to have 4 contact points.

Compared with the Dynamic3000 series, it can ensure a current of above 50% while only increase 14% in mated height, so that miniaturization is achieved. Compared to existing products, each positions has a current capacity increased by about 32%.



#### **Product Features**

#### 1. Small Size/High Current Contact

The contacts are newly-designed with 4 points of contact. This allows significantly improved current capacity (rated 20A maximum) as well as reliability.

#### 2. The sequential contacts

The sequential contact is a longer tab contact. When used in connection with the regular contacts it provides a ground that mates before the other power contacts.

#### 3. High current contact

New V shape contact were developed for mounting on boards with larger contact area while smaller though-holes. Even though a lot of on-board connection space is needed, through-holes were made as small as possible to make pattern design easily.

#### 4. Audible Latching

On mating, an audible lock sound and sensation is transmitted to the assembler, so that even when working 'blind' mis-mating (or half-mating) problems are avoided.

#### 5. Key

The housing has a keying (slit), so that by separating use of the X key and Y key mis-Mating is prevented.



#### **D-4000 Series Performance and Specifications**

#### **Performance**

ltem Pitch	250mils 6.35mm		
Rated Voltage	600V AC(rms)/DC		
Rated Current	2P: 24A 3P: 23A 4P: 22A (AWG#12 for use as powersource)		
Contact Resistance	10mΩ max		
Withstanding Voltage	2,500V AC(1 min)		
Operating Temperature	-55°C ~+105°C		

#### **Positions/Wire Size/Rated Current**

Unit: A(Amps)

Position	Wire Size(AWG)					
POSITION	12	14	16			
2	24	21	16			
3	23	20	15			
4	22	19	14			

#### **Product Specification**

	Product Specifications	108-78182
A	Applications Specifications	114-5369
Hand tool application specification	Part number: 1762130-1 (M)	411-78174
	Part number: 1762129-1 (L)	411-78173
Unplu	gging tool (1762461-1) operating manual	411-78186

When applicable, please be sure to order the operating manual. It can also be found in the online electronic specifications catalog.

#### **Materials and Plating**

Category	Materials	Plating		
Receptacle Contact Tab Contact	Phosphor bronze or copper alloy	0.38µm gold-plating over Nickel under- plated		
Board Mount Header	Phosphor bronze or copper alloy	Gold plating over Nickel under-plated Tin plating on tail side		
Housing	UL94V-0, reinforced thermoplastic PBT with glass fiber			

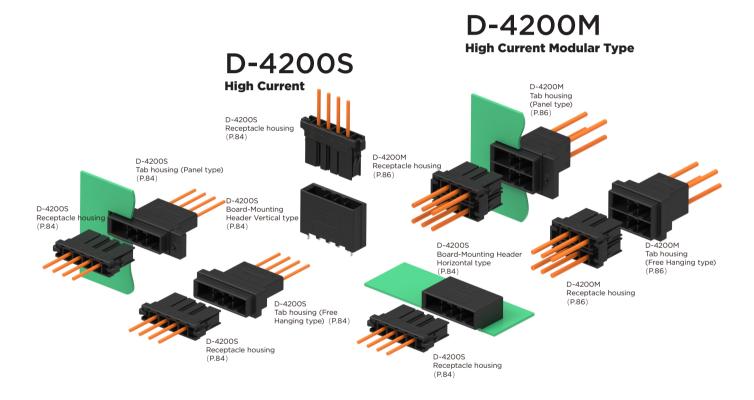
#### **Safety Standards**

The safety specifications listed below are approved on specific part numbers. Please contact our Technical Support Centre to check whether the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Tyco Electronics Specifications.

Series		D-4200	
Standard	Rated Voltage	Rated Current	Temperature Range
Product Specifications 108-78182	600V AC/DC	24A AWG#12 2P	-55°C ~+105°C
UL File No.E28476	Based on the requirements of Application	Based on the requirements of Application	-
CSA Report No. LR 7189	600V AC/DC	24A	_
TÜV License No. R 50084673	600V AC/DC	AWG A(2 P) 12 24 14 21 16 16	-55°C ~+105°C



#### **D-4000 Series Configurations**





#### **D-4000 Series Contact**

#### **■** Crimped Types

(Gold plating thickness 0.38 µm)



Receptacle Contact (Used in Receptacle housing)



Wire F	Range	Outside Diameter	Wire			Cont	tacts			Applicable	e tools
		of	Range	Receptac	le Contact	Tab C	ontact	Sequential Lor	ngTab contacts	Hand tool CCII hand tool PEW12 hand tool*	Mini-
AWG	mm²	Insulation mm	Mark	Strip form	Loose Piece	Strip form	Loose Piece	Strip form	Loose Piece	PEW12 dice only	Applicator
22	0.30	1.58~2.38	CC*	2287721-2	2288020-1	2287732-2	2288019-1	1-2287732-2	1-2288019-1		
20	0.50	1.76~2.56	33	220//21-2	2200020-1	220//32-2	2288019-1	1-220//32-2	1-2200019-1		
20	0.50	- 1.8~2.7									
18	0.85	1.8~2.7	S	2040015-2	2040587-1	2040016-2	2040586-1	1-2040016-1	1-2040586-1	2266289-1	2047670- 1
16	1.42	2.4~3.2									
16 14	1.25 2.20	2.0~3.2 2.8~3.75	М	1747418-2	1747499-2	1747419-2	1747501-2	1-1747419-2	1-1747501-2	1762130-1 1762671-1* (1762675-1)	1762120-2
14 12	2.20 3.50	2.9~3.8 3.8~4.2	L	1747415-2	1747498-2	1747416-2	1747500-2	1-1747416-2	1-1747500-2	1762129-1 1762670-1* (1762674-1)	1762119-2

Note \* Corresponding terminal's gold plating thickness is 0.76  $_{\mu}$  m, and that of the corresponding terminal without wire diameter and type is 0.38  $_{\mu}$  m.

Please contact our sales department or distributor for more information.

Strip Form contacts are used with Mini-applicators (bench machine) and Loose-Piece contacts are with hand tools.

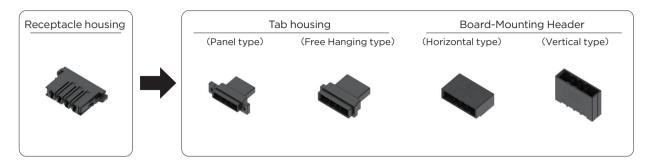
PEW 12 is an exchange-type hand tool. \*refers to the exchange-type hand tool with product number - 9-1478240-0

The receptacle contact can be used in all receptacle housings, the tab contact can be used in all tab housings. Details of the applicable tool are available from P.106-110.



#### D-4200S Single-row High Voltage - 6.35mm pin pitch

#### **Type Chart**



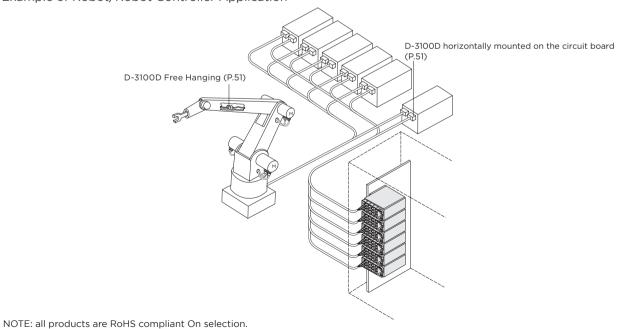
			5	Tab housing			Board-Mounting Header				
Pos	Color	Key	Receptacle housing		Free Hanging		Horizon	tal type	Vertical type		
	i i i i i i i i i i i i i i i i i i i	Panel type	type		Standard	Sequential	Standard	Sequential			
2	Black	Х	1-1747276-2	1-1747535-2	1-1747414-2	Gold	1-1903328-2	_	1-1747277-2	_	
	Black	Υ	2-1747276-2	2-1747535-2	2-1747414-2	Gold	2-1903328-2	_	2-1747277-2		
3	Black	X	1-1747276-3	1-1747535-3	1-1747414-3	Gold	1-1903328-3	5-1903328-3	1-1747277-3	5-1747277-3	
3	Black	Υ	2-1747276-3	2-1747535-3	2-1747414-3	Gold	2-1903328-3	6-1903328-3	2-1747277-3	6-1747277-3	
4	Black	Χ	1-1747276-4	1-1747535-4	1-1747414-4	Gold	1-1903328-4	5-1903328-4	1-1747277-4	5-1747277-4	
_ 4	Black	Υ	2-1747276-4	2-1747535-4	2-1747414-4	Gold	2-1903328-4	6-1903328-4	2-1747277-4	6-1747277-4	

#### **Relative Product Information**

Applicable contact...P.83
Performance & Specifications...P.81

#### **Applications**

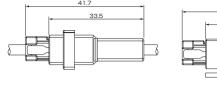
Example of Robot/Robot Controller Application

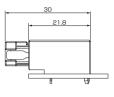


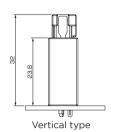


#### D-4200S Single-row High Voltage - 6.35mm pin pitch

#### **Mated Dimension**







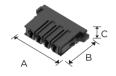
Panel type/Free Hanging type

Horizontal type

r dilet type, i ree ridiigiiig typ

#### **External Dimensions**

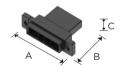
#### **■** Receptacle Housing



Pos	Kov	Color	Part Number	Dimensions			
POS	Key	Color	Part Number	Α	В	С	
2	X	Black	1-1747276-2	27.4	23.0	8.5	
2	Υ	Black	2-1747276-2	27.4		0.5	
3	X	Black	1-1747276-3	33.7	27.0	8.5	
3	Υ	Black	2-1747276-3	33.7	23.0	8.5	
4	Х	Black	1-1747276-4	40.1	23.0	8.5	
4	Υ	Black	2-1747276-4	40.1	23.0	0.5	

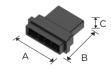
#### **■ Tab Housing**

Panel type



Pos	Key	Color	Part Number	Dimensions			
POS	Key	Color	Part Number	Α	В	С	
	X	Black	1-1747535-2	40.0	33.5	13.8	
2	Υ	Black	2-1747535-2	40.0		13.8	
3	Х	Black	1-1747535-3	46.0	33.5	13.8	
3	Υ	Black	2-1747535-3	46.0			
4	X	Black	1-1747535-4	53.0	33.5	13.8	
4	Υ	Black	2-1747535-4	33.0	33.3	13.0	

Free Hanging type

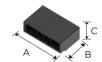


Pos	Key	Color	Part Number	Dimensions			
FOS Rey		Color	Part Number	Α	В	С	
2	X	Black	1-1747414-2	26.4	33.5	13.8	
~	Υ	Black	2-1747414-2	20.4		13.0	
3	X	Black	1-1747414-3	32.7	77.5	17.0	
3	Υ	Black	2-1747414-3	32.7	33.5	13.8	
4	Х	Black	1-1747414-4	70.1	33.5	17 0	
4	Υ	Black	2-1747414-4	39.1		13.8	

NOTE: all products are RoHS compliant On selection.

#### ■ Board-Mounting Header

Horizontal type



Doc	Kov	Disting	Color	Part Number	D	imensior	าร
Pos	Key	Plating	Color	Part Number	Α	В	С
2	Х	Gold	Black	1-1903328-2	22.4	21.8	11.9
2	Υ	Gold	Black	2-1903328-2	22.4	21.0	11.9
	Х	Gold	Black	1-1903328-3			11.9
3	Y	Gold	Black	2-1903328-3	28.7	21.8	
3	X	Gold	Black	5-1903328-3※1	20.7		
	Υ	Gold	Black	6-1903328-3※1			
	Х	Gold	Black	1-1903328-4			
4	Υ	Gold	Black	2-1903328-4	35.1	21.8	11.0
4	Х	Gold	Black	5-1903328-4※1	33.1	∠1.8	11.9
	Υ	Gold	Black	6-1903328-4※1			

**X1** Sequential

Vertical type



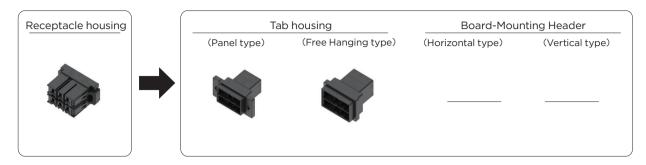
Dee	I/ou	Disting	Calar	Part Number	Dimensions			
Pos	Key	Plating	Color	Part Number	А	В	С	
2	Х	Gold	Black	1-1747277-2	22.4	10.4	23.8	
2	Υ	Gold	Black	2-1747277-2	22.4	10.4		
	Х	Gold	Black	1-1747277-3		10.4	23.8	
3	Υ	Gold	Black	2-1747277-3	28.7			
3	Х	Gold	Black	5-1747277-3×1	28.7			
	Υ	Gold	Black	6-1747277-3※1				
	Х	Gold	Black	1-1747277-4				
4	Υ	Gold	Black	2-1747277-4	35.1	10.4	23.8	
4	Х	Gold	Black	5-1747277-4※1	33.1	10.4	23.8	
	Υ	Gold	Black	6-1747277-4※1				

 $<sup>\</sup>times$ 1 Sequential



#### D-4200M Double-row High Current Modular Type - 6.35mm pin pitch

#### **Type Chart**



Doc	Pos Color Key Receptacle I	Decentacle bousing	Tab ho	ousing	Plating	Board-Mounting Header		
POS		Receptacle flousing	Panel type	Free Hanging type	Plating	Horizontal type	Vertical type	
	Black	XX	1-1903329-3	1-1903331-3	1-1903330-3	_	<del>-</del>	_
6	Black	YY	2-1903329-3	2-1903331-3	2-1903330-3	_	<del>_</del>	_
	Black	XY	3-1903329-3	3-1903331-3	3-1903330-3	_		_

#### **Relative Product Information**

Applicable contact...P.83
Performance & Specifications...P.81

# Mated Dimension 41.7 33.5 Panel type/Free Hanging type

#### **External Dimensions**

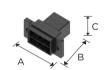
#### **■** Receptacle Housing



Pos	Kev	Color	Part Number	D	imensio	าร
POS Key		Color	Part Number	А	В	С
	XX	Black	1-1903329-3			
6	YY	Black	2-1903329-3	33.7	23.0	17.3
	XY	Black	3-1903329-3			

#### **■ Tab Housing**

Panel type



Doc	Pos Kev	Color	Part Number	Dimensions			
Pos Key	Color	Part Number	Α	В	С		
	XX	Black	1-1903331-3				
6	YY	Black	2-1903331-3	46.0	33.5	22.6	
	XY	Black	3-1903331-3				

Free Hanging type



Doo	I/au	v Color Part Numbe		Dimensions			
Pos	Key	Color	Part Number	А	В	С	
	XX	Black	1-1903330-3		33.5	22.6	
6	YY	Black	2-1903330-3	32.7			
	XY	Black	3-1903330-3				



#### D-5000 Series

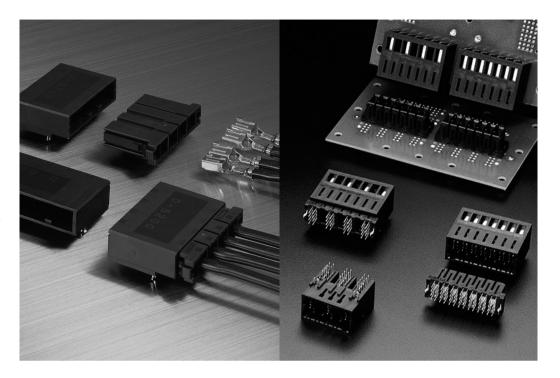
#### Series introduction

The Dynamic 5000 series was developed for up to 45 amperes in response to the demand for improved reliability and productivity for the main power lines in equipment.

They can be used for a variety of applications as replacements for terminal blocks, or round terminals. It is compact but with a high current capacity.

In addition, it has a wide variety of housings to cover all applications from PCB connections to internal wiring distribution.

The D-5000 series can be used for high current power line applications where reliability really matters.



#### **Product Features**

#### 1. High Current Contact

The D-5000 series uses the same 'twisresistant, box shape contact' as the rest of the Dynamic series contacts. The material is the same copper alloy developed for the D-3000 series with its superior elasticity and conducivity, which results in a reliable, robust contact capable of high current. Silver plated versions of the D-5000  $\alpha$  series, which support higher currents, are also available. The terminals can be selected according to use.

#### 2. Sequential Connection

The Sequential Mating means that the build up of static charge in the sequential contact is grounded first at mating. The long tab was developed for sequential connection of tab contacts. By using both this long tab contact and standard tab contacts, sequential connectibility is enhanced.

#### 3. Contact for High Amperage

The contact for on-board mounting are a newly developed twin-lead type. It is possible to reliably join patterns and connectors because a wide area of PCBs can be allocated. New V shape contacts were developed for mounting on boards. Even though a lot of on-board connection space is needed, through-holes were made as small as possible to make pattern design easily (patent pending).

# 4. IP20 (Protection from the approach of the finger)

D-5300 is recomended for applications with a supply side in the IP20 apparatus. By using a housing on the apparatus side (panel side) which can accommodate the receptacle contact, the apparatus side connector meets IP20 requirement.



#### **D-5000 Series Performance and Specifications**

#### Performance

Item	D-5200	D-5300	D-5200α		
Pitch	10.16mm				
Rated Current	35A	max	45A max		
Rated Voltage		630V AC / DC			
Withstanding Voltage	3000 VAC				
Total resistance		$2m\Omega$ max			
Insertion strength:	9.8N max (per position)				
Withdrawal strength	1.96N min (per position)				
Durability	50 cycles (0.76 µm Gold)				
Locking strength	98N min				

#### **Performance Specifications**

Product	Specifications	108-5453
Te	501-5188	
Applicatio	114-5206	
	Part number: 234170-1	411-5712
Hand tool manual	Part number: 234171-1	411-5713
Hariu toor manuar	Part number: 91596-1	408-8547-1
	Part number: 1366044-1	411-5976
Unplugging tool (m	411-5774	
	manual	411-3774

When applicable, please be sure to order the operating manuals. It can also be found in the online electronic specifications catalog.

#### **Material and Plating**

Category	Item	D-5200	D-5300	D-5200α				
	Materials		Copper alloys					
Receptacle Contacts Tab Contact	Plating	Gold Plating with Nickel under-plated	Gold/Silver Plating with Nickel under-plated	Gold Plating with Nickel under-plated				
D 114	Materials	Copper alloys	_	Copper alloy				
Board Mount Header	Plating	Gold Plating with Nickel under-plated	_	Gold Plating with Nickel under-plated				
Housing	Materials	UL94V-0, glass fiber reinforced thermoplastic PBT						

#### Position/Wire Size/Rated Current

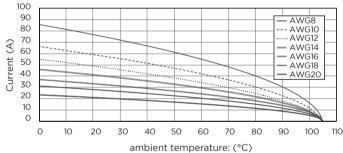
ambient temperature: 25°C, temperature rise: 80°C

Series		Rated Current (A)								
(Gold	Pos	AWG	AWG	AWG	AWG	AWG	AWG	AWG		
Plating)		8	10	12	14	16	18	20		
	2	60	48	40	32	25	22	17		
	3	58	48	38	30	25	19	15		
D-5200	4	53	48	36	28	24	19	15		
	6	50	41	35	27	22	17	14		
	8	48	39	33	25	21	16	14		
D-5300	3	51	43	38	30	24	17	14		
ט-3300	4	49	43	36	30	24	18	14		
D-5200α	3	-	-	-	-	-	-	-		
D-3200a	4	51	46	41	34	29	23	21		

Series			Rated Current (A)								
(Silver Plating)	Туре	Pos	AWG 8	AWG 10	AWG 12	AWG 14	AWG 16	AWG 18	AWG 20		
	wire to board	4	63	56	43	34	29	23	18		
D-5200		2	74	57	48	39	32	26	20		
D-3200	wire to	3	69	56	46	36	32	22	18		
	wire	4	67	55	44	37	27	23	18		
		6	57	46	35	31	26	19	16		
D-5300	wire to	3	59	47	41	30	24	19	15		
D-3300	wire	4	56	47	36	30	25	19	15		
D-5200α	wire to	3	-	-	-	-	-	-	-		
υ-5200α	board	4	63	50	41	34	28	22	19		

D-5200 2pos, silver plating, wire to wire

#### Temperature rise curve

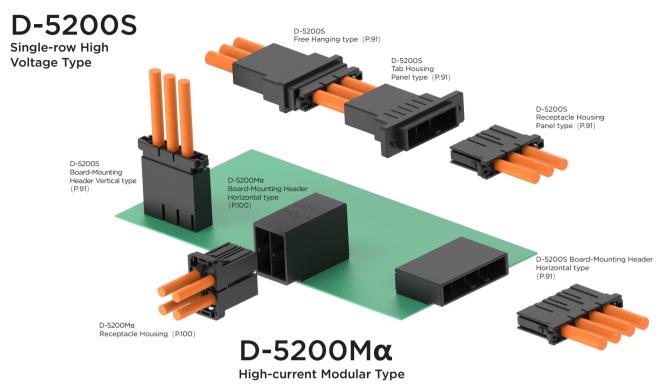


#### **Safety Standards**

The safety specifications listed below are approved on specific part numbers. Please contact our Technical Support Centre to check whether the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Tyco Electronics Specifications.

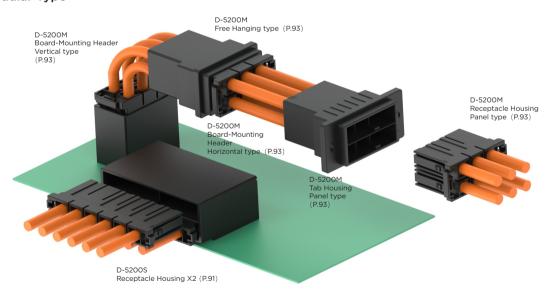
Series	D-5	200Series(10.16mmPi	tch)		D-5200Mα Series			
STD.	Rated Voltage	Rated Current	Temperature Range	Rated Voltage	Rated Current	Temperature Range		
Product Specifications 108-5453	630V AC/DC	(As shown above)	-55°C ~+105°C	630V AC/DC	(As shown above)	-55℃ ~+105℃		
UL File No.E28476 (Recognized Component)	Based on the requirements of application	Based on the requirements of application	_	_	Based on the requirements of application	_		
CSA Report No. LR 7189	600V AC/DC	AWG A 16 13 14 18 12 25 10 30	_	_	_	_		
TÜV License No. R9650368 IP protection level IP-10 Overvoltage type (II) 50 cycles of repeated plugging and unplugging	600V AC/DC	AWG A 16 15 14 20 12 25 10 30	-30°C ~+105°C	-	AWG 1-13P 4-No of Pos. 20 12.5 12.5 18 17.5 16 16 21 19.5 14 26 24 12 33 31 10 40 37.5 8 48 46	-30°C ~+105°C		

#### **D-5000 Series Configurations**



# D-5200M

High-voltage Modular Type





#### **D-5000 Series Contact**

#### **■** Crimped Types



Receptacle Contact (used in Receptacle Housing)



Tab contact (used in Tab Housing)

#### Terminal

	icable	Outside			Contacts					Applicable tools			
		Diameter of	Wire Range	Receptac	e Contact	Tab Contact		Long sequential contacts		Manual	Electric	Mold	Mini-
AWG	mm <sup>2</sup>	Insulation mm	Mark	Strip form	Loose Piece	Strip form	Loose Piece	Strip form	Loose Piece	Hand Tools	Hydraulic Tool※1	<b>%</b> 2	Application Tool
20	0.50	1.8~ 2.83	SS	1318985-□	1318986-□					91596-1			<b>*1</b>
16	1.25	2.35~ 3.23	33	1310903-1	1310900-1					91590-1			×I
16	1.25	3~3.80	S	179955-□	316040-□	917802-□	917804-□	94606 1	2013594-1	234170-1		2155022.1	2266273-2
14	2.20	3~3.60	5	179955-1	316040-1	91/602-11	917604-1	84696-1	-1 2013394-1	234170-1		2155822-1	2200273-2
12	3.50	4~5.2	М	179956-□	316041-□	917803-□	917805-□	84695-1	2013593-1	27 4171 1	2155369-1	2155503-1	2151086-2
10	5.50	4~5.2	141	179930-1	316041-11	91/603-1	91/603-1	04093-1	2013393-1	234171-1		2155505-1	2131060-2
8	8.00	4.9~7.8		1318696-□	1318697-□	1981690-□	1981691-□	2174021-1	2174022-1	1366044-1		2155502-1	2266274-2
	0.00	7.5 7.0	١	1510030 П	1510097-1	1747388-6	1301031-0	217-1021-1	21740221	1300044-1		2133302-1	2200274-2

Note Plating code

-2: Gold plating of 0.38 µm in thickness

-6: Silver plating of 2.54 µm in thickness

-3: Gold plating of 0.76  $\mu m$  in thickness

-1: Gold plating of 0.2  $\mu m$  in thickness

Please contact our sales department or distributor for more information.

Please contact the sales department for mini applications tools.

Strip Form contacts are used with Mini-applicators (bench machine) and Loose-Piece contacts are with hand tools.

X1 See P.123.

If you have any questions, please contact the AT tooling sales department.

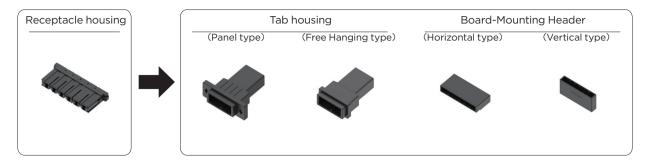
 $\times 2$  Used together with the electric hydraulic tool 2155369-1

The receptacle contact can be used in all receptacle housings, the tab contact can be used in all tab housings.



#### D-5200S Single-Row High Current Type - 10.16mm pin pitch

#### Type Chart

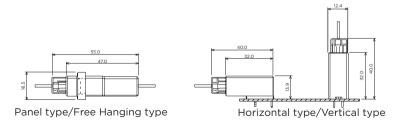


				Tab h	ousing			Board-Mour	nting Header	
Pos	Color	Key	Receptacle housing		Free Hanging	Plating	Horizon	tal type	Vertica	al type
			Housing	Panel type	type		Standard	Sequential	Standard	Sequential
	Black					Gold	1-353079-2		1-353080-2	
	Black	Х	1-179958-2	1-353047-2	1-353046-2	Gold	1-353079-3		1-353080-3	
2	Black					Gold			6-353080-2	
	Black	Υ	2-179958-2	2-353047-2	2-353046-2	Gold			2-353080-2	
	Black	ī	2-1/9956-2	2-353047-2	2-333046-2	Gold			2-353080-3	
	Black					Gold	1-353081-2	8-353081-2	1-353082-2	8-353082-2
	Black	X	1-179958-3	1-353047-3	7-3 1-353046-3	Gold	1-353081-3		1-353082-3	
3	Black					Gold			_	
	Black	<b>Y</b>	2-179958-3	2-353047-3	3 2-353046-3	Gold	2-353081-2		2-353082-2	
	Black	Y	2-1/9958-3	2-353047-3		Gold	2-353081-3		2-353082-3	
	Black	X	1-179958-4			Gold	1-917541-2	8-917541-2	1-917542-2	8-917542-2
4	Black	^	1-1/9936-4			Gold	1-917541-3		1-917542-3	
4	Black	Y	2-179958-4			Gold	2-917541-2		2-917542-2	
	Black	ī	2-1/9936-4			Gold			2-917542-3	_
	Black			4P or 6P Wire-to	o-wire connectors	Gold	1-179959-2		1-179960-2	_
	Black	X	1-179958-6	are available in [	D5200M, see P.93	Gold	1-179959-3		1-179960-3	_
6	Black					Gold			6-179960-2	
	Black					Gold	2-179959-2		2-179960-2	
	Black	Υ	2-179958-6			Gold	2-179959-3		2-179960-3	_
	Black				_	Gold			7-179960-2	

#### **Relative Product Information**

Applicable contact...P.90
Performance & Specifications...P.88

#### **Mated Dimension**





#### D-5200S Single-Row High Current Type - 10.16mm pin pitch

#### **External Dimensions**

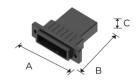
#### **■** Receptacle Housing



Doc	Pos Key		Part Number	Dimensions			
rus Key		Color	Part Number	Α	В	С	
2	Χ	Black	1-179958-2	35.8	29.0	9.8	
	Υ	Black	2-179958-2	33.0	29.0	9.0	
3	Χ	Black	1-179958-3	46.0	29.0	9.8	
3	Υ	Black	2-179958-3	46.0			
4	Χ	Black	1-179958-4	53.7	29.0	9.8	
4	Υ	Black	2-179958-4	55.7	29.0	9.0	
6	Х	Black	1-179958-6	74.0	29.0	9.8	
	Υ	Black	ack 2-179958-6 74.0		29.0	9.0	

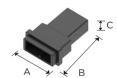
#### **■ Tab Housing**

Panel type



Pos Key		Color	Part Number	Dimensions			
POS	Pos Key		Color Fait Number		В	С	
2	X	Black	1-353047-2	47.0	47.0	16.5	
	Υ	Black	2-353047-2	47.0		10.5	
3	X	Black	1-353047-3	57.0	47.0	16.5	
	Υ	Black	2-353047-3	57.0	47.0	16.5	

Free Hanging type



Pos Kev	Color	Part Number	Dimensions			
POS	Pos Key Colo		Part Number	А	В	С
	Х	Black	1-353046-2	77.4	47.0	16.5
2	Υ	Black	2-353046-2	33.4		16.5
3	Х	Black	1-353046-3	43.6	47.0	16.5
3	Υ	Black	2-353046-3	43.6	47.0	10.5

NOTE: all products are RoHS compliant On selection.

#### **■** Board-Mounting Header

Horizontal type



							∠ B
Pos	Key	Plating	Color	Part Number	D	imensior	าร
POS	Key	Plating	Color	Part Number	Α	В	С
2	X	Gold	Black	1-353079-2	29.4	32.0	13.9
2	^	Gold	Black	1-353079-3	29.4	32.0	13.9
		Gold	Black	1-353081-2			
	Χ	Gold	Black	8-353081-2※			
3		Gold	Black	1-353081-3	39.5	32.0	13.9
	Υ	Gold	Black	2-353081-2			
	Y	Gold	Black	2-353081-3			
		Gold	Black	1-917541-2		32.0	13.9
4	X	Gold	Black	8-917541-2※	49.7		
4		Gold	Black	1-917541-3	49.7	32.0	13.9
	Υ	Gold	Black	2-917541-2			
	X	Gold	Black	1-179959-2			
6		Gold	Black	1-179959-3	70.0	32.0	13.9
°	Υ	Gold	Black	2-179959-2	70.0	32.0	13.9
	T	Gold	Black	2-179959-3			

**XSequential** 

Vertical type



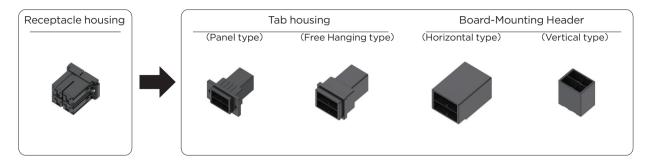
Pos	Key	Plating	Color	Part Number	D	imensior	าร
POS	Ney	Plating	Color	Part Number	А	В	С
		Gold	Black	1-353080-2			
	×	Gold	Black	1-353080-3			
2		Gold	Black	6-353080-2	29.4	12.4	32.0
	Y	Gold	Black	2-353080-2			
	ī	Gold	Black	2-353080-3			
		Gold	Black	1-353082-2			
	×	Gold	Black	8-353082-2※			
3		Gold	Black	1-353082-3	39.5	12.4	32.0
	Υ	Gold	Black	2-353082-2			
	T	Gold	Black	2-353082-3			
		Gold	Black	1-917542-2			32.0
	×	Gold	Black	8-917542-2%		12.4	
4		Gold	Black	1-917542-3	49.7		
	Y	Gold	Black	2-917542-2			
	Y	Gold	Black	2-917542-3			
		Gold	Black	1-179960-2			
	×	Gold	Black	1-179960-3			
	6 Y	Gold	Black	6-179960-2	70.0	12.4	32.0
٥		Gold	Black	2-179960-2	70.0	12.4	32.0
		Gold	Black	2-179960-3			
		Gold	Black	7-179960-2			

XSequential



#### D-5200M Double-row High Current Modular Type - 10.16mm pin pitch

#### Type Chart



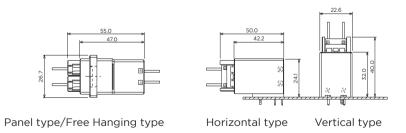
			December	Tab housing			Board-Mounting Header			
Pos	Pos Color Key	Key	Receptacle housing		Free Hanging	Plating	Horizon	ital type	Vertica	al type
			nousing	Panel type	type		Standard	Sequential	Standard	Sequential
	Black	XX	1-917807-2	1-917809-2	1-917808-2	Gold/Silver	1-1123309-2	8-1123309-2	1-1981458-6	
4	Black	YY	2-917807-2	2-917809-2	2-917808-2	Gold/Silver	2-1123309-2		2-1981458-6	
	Black	XY	3-917807-2	3-917809-2	3-917808-2	Gold/Silver	3-1123309-2		3-1981458-6	
	Black	XX	1-917807-3	1-917809-3	1-917808-3	_			1-2326092-2	
6	Black	YY	2-917807-3	2-917809-3	2-917808-3	_			2-2326092-2	
	Black	XY	3-917807-3	3-917809-3	3-917808-3	_			3-2326092-2	
	Black	XX	— <u></u> ※1			Gold	1123829-1		_	
8	Black	YY				_			_	
	Black	XY	<u> </u>			_	<u> </u>			

X1: Use two 1-179958-4

#### **Relative Product Information**

Applicable contact...P.90 Performance & Specifications...P.88

#### **Mated Dimension**





# D-5200M Double-row High Current Modular Type - 10.16mm pin pitch

#### **External Dimensions**

#### **■** Receptacle Housing



Doc	Pos Key		Part Number	Dimensions			
ros Rey	Color	Part Number	Α	В	С		
	XX	Black	1-917807-2				
4	YY	Black	2-917807-2	33.4	29.0	20.0	
	XY	Black	3-917807-2				
	XX	Black	1-917807-3				
6	YY	Black	2-917807-3	43.5	29.0	20.0	
XY		Black	3-917807-3				

#### **■ Tab Housing**

Panel type



Doc	Pos Key		Part Number	Dimensions			
1 03 Rey	Color	Part Number	А	В	С		
	XX	Black	1-917809-2				
4	YY	Black	2-917809-2	47.0	47.0	26.7	
	XY	Black	3-917809-2				
	XX	Black	1-917809-3				
6	YY	Black	2-917809-3	57.0	47.0	26.7	
	XY	Black	3-917809-3				

Free Hanging type



Pos	Key	Color	Part Number	Dimensions			
POS   Key		Color	Part Number	Α	В	С	
	XX	Black	1-917808-2				
4	YY	Black	2-917808-2	33.4	47.0	26.7	
	XY	Black	3-917808-2				
	XX	Black	1-917808-3				
6	YY	Black	2-917808-3	43.6	47.0	26.7	
	XY	Black	3-917808-3				

NOTE: all products are RoHS compliant On selection.

#### **■** Board-Mounting Header

Horizontal type



Pos	Kev	y Plating	Calar	Part Number	Dimensions			
POS	Ney	Plating	Color	Part Number	Α	В	С	
	XX	Gold	Black	1-1123309-2				
4	YY	Gold	Black	2-1123309-2	29.4	42.2	24.1	
	XY	Gold	Black	3-1123309-2				
8	XX	Gold	Black	1123829-1	49.7	32.0	26.3	

Sequential type



Doo	I/ov	Diation	ng Color Part Number	D	imensior	าร	
Pos	Key	Plating		Part Number	Α	В	С
4	XX	Gold	Black	8-1123309-2	29.4	42.2	24.1

Vertical type

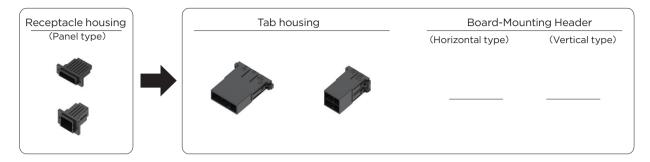


Doo	I/av	Plating	C-1	Davit Niversland	Dimensions			
Pos	Key		Color	Part Number	А	В	С	
	XX	Silver	Black	1-1981458-6				
4	YY	Silver	Black	2-1981458-6	29.4	22.6	32.0	
	XY	Silver	Black	3-1981458-6	]			
	XX	Gold	Black	1-2326092-2				
6	YY	Gold	Black	2-2326092-2	39.5	22.6	32	
	XY	Gold	Black	3-2326092-2				



#### D-5300 Reversed Mounting Type - 10.16mm pin pitch

#### Type Chart

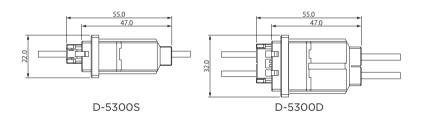


Doc	Pos Color Key	Kov	Receptacle housing	Tab housing	Plating	Board-Mounting Header		
POS		Key	Panel type	rab nousing	Plating	Horizontal type	Vertical type	
7	Black X		1-1747821-3	1-1747819-3	_	_	_	
3	Black Y	Υ	2-1747821-3	2-1747819-3	_	_	_	
	Black	XX	1-1747822-2	1-1747820-2	_	_	_	
4	Black	YY	2-1747822-2	2-1747820-2	_	_	_	
	Black XY		3-1747822-2	3-1747820-2	_	_	_	

#### **Relative Product Information**

Applicable contact...P.90 Performance & Specifications...P.88

#### **Mated Dimension**



#### **External Dimensions**

#### **■** Receptacle Housing

Panel Type





Doo	Key	Color	Part Number	Dimensions			
Pos	ros Rey	Color	Part Number	А	В	С	
7	X	Black	1-1747821-3	57.0	47.0	22.0	
3	Υ	Black	2-1747821-3	37.0	47.0	22.0	
	XX	Black	1-1747822-2				
4	YY	Black	2-1747822-2	47.0	47.0	32.0	
	XY	Black	3-1747822-2				

NOTE: all products are RoHS compliant On selection.

#### **■ Tab Housing**



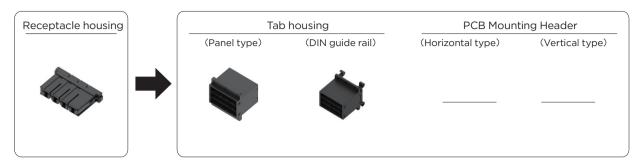


Doc	Pos Kev		Part Number	Dimensions			
Pos   Key		Color	Part Number	А	В	С	
7	X	Black	1-1747819-3	46.5	47.0	12.5	
3 Y	Υ	Black	2-1747819-3	46.5	47.0	12.5	
	XX	Black	1-1747820-2				
4	YY	Black	2-1747820-2	33.8	47.0	22.6	
	XY	Black	3-1747820-2				



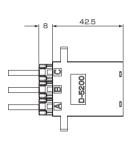
#### D-5200 Dyna-Tap 12P(4Px3 Row)、20P(4Px5 Row) - 10.16mm pin pitch

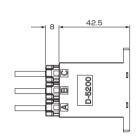
#### Type Chart

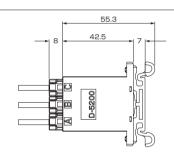


Dos	Color	Kov	Receptacle housing	Tab ho	ousing	Plating	Board-Mour	nting Header
- 03	COIOI	Key	Receptacle flousing	Panel type	Din-rail type	Plating	Horizontal type	Vertical type
4	Black	_	1-179958-4	<del>-</del>	_	_	_	_
12	Black	_	_	1903146-1※1	1903146-3	Gold	<del>_</del>	_
12	Black	_	_	1903146-2※2	1-1903146-3	Gold	_	_
20	Black	_	_	2013285-1※1	_	Gold	_	_
	Black	_	ı	2013285-2※2	2013285-3	Gold	_	_

%1:Front panel type %2:Bottom panel type







#### **External Dimensions**

#### **■** Receptacle Housing

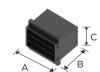


Doc	Kov	Color	Part Number	Dimensions			
Pos	Key			Α	В	С	
4	_	Black	1-179958-4	53.7	29.0	9.8	

#### **■ Tab Housing**

Panel type





Pos	Kev	Plating	Color	Part Number	Dimensions		
POS	Key	Plating	COIOI	Part Number	Α	В	С
12	_	Gold	Black	1903146-1	49.7	42.5	50.0
12	_	Gold	Black	1903146-2	49.7		30.0
20	_	Gold	Black	2013285-1	50.5	42.5	76.4
20	_	Gold	Black	2013285-2	30.3	42.5	76.4

DIN-rail type

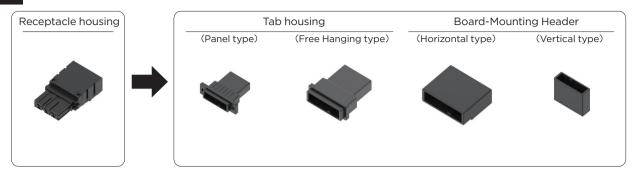


Pos	Kev	Disting	Color	Part Number	Dimensions		
	Key	Plating		Part Number	А	В	С
12	_	Gold	Black	1903146-3	49.7	55.3	50.0
12	_	Gold	Black	1-1903146-3	49.7	55.5	50.0
20	-	Gold	Black	2013285-3	53.0	55.3	76.4



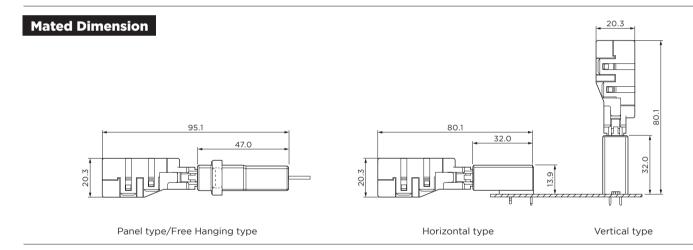
# Dyna-Clamp Kit/ Cable Clamp Kit - 10.16mm pin pitch

# Type Chart



	000	Key	Receptacle housing	Tab ho	ousing	Board-Mounting Header		
Pos	os	Key	Receptacie flousing	Panel type	Free Hanging type	Horizontal type	Vertical type	
	7		1473668-1	1-353047-3	1-353046-3	1-353081-2	1-353082-2	
	3		14/3000-1	1-353047-3	1-353040-3	1-353081-3	1-353082-3	
	4		1971239-1	1-917809-2	1-917808-2	1-1123309-2	1-1981458-6※	
	4	YY	1971239-2	2-917809-2	2-917808-2	2-1123309-2	2-1981458-6%	

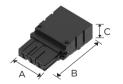
**XSilver-plated products** 



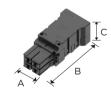
#### **External Dimensions**

#### **■** Receptacle Housing

Single-row



Double-row



Doo	Kov	Color	Part Number	Dimensions			
Pos	Key		Part Number	Α	В	С	
3	_	Black	1473668-1	40.3	69.3	20.3	

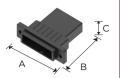
Pos	Kev	Color	Part Number	Dimensions			
	Key	Color	Part Number	Α	В	С	
4	XX	Black	1971239-1	36.0	81.2	29.0	
4	YY	DIdCK	1971239-2	36.0	01.2		



# Dyna-Clamp Kit /Cable Clamp Kit - 10.16mm pin pitch

#### **■** Tab Housing

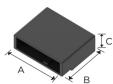
Panel type



Pos	Kev	Color	Part Number	Dimensions				
POS	Ney	Color	Part Number	Α	В	С		
3	X	Black	1-353047-3	57.0	47.0	12.1		
	XX	Black	1-917809-2	47.0	47.0	26.7		
4	YY	Black	2-917809-2	47.0	47.0	26.7		

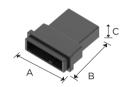
#### **■** Board-Mounting Header

Horizontal type



	Pos	Kev	Plating	Color	Part Number	Dimensions			
		Key	Plating	COIOI	Part Number	Α	В	С	
	3	X	Gold	Black	1-353081-2	39.5	32.0	13.9	
	3	_ ^	Gold	Black	1-353081-3	39.3			
	4	XX	Gold	Black	1-1123309-2	29.4	42.2	24.1	
	4	YY	Gold	Black	2-1123309-2	29.4	42.2	24.1	

Free Hanging type



ĺ	Pos	Kev	Color	Part Number	Dimensions				
	POS	ney	Color	Part Number	Α	В	С		
	3	X	Black	1-353046-3	43.6	47.0	12.1		
	1	XX	Black	1-917808-2	33.4	47.0	26.7		
	4	YY	Black	2-917808-2	33.4	47.0	26.7		

Vertical type



Pos	Kev	Plating	Calar	Part Number	Dimensions			
POS	Key	Plating	Color Part Number		Α	В	С	
3	7 V	X Gold		1-353082-2	39.5	12.4	32.0	
3	_ ^	Gold	Black	1-353082-3	39.3	12.4	32.0	
4	XX	Silver	Black	1-1981458-6	29.4	22.6	32.0	
4	YY	Silver	Black	2-1981458-6	29.4	22.6	32.0	



#### 



#### • D-5αSeries silver-plated type

Wire	e Range	Outside Diameter	Wire		Contacts			Applic	able tools	
		of	Range	Receptac	le Contact	Tab Contact	Lland Tools	Electric	DisaVC	To all numbrana
AWG	mm <sup>2</sup>	Insulation mm	Mark		Hydraulic Tool※5	Dice※6	Tool numbers			
20	0.50	1.8~2.83	SS	1318985-6	1318986-6	_	91596-1	_	_	1366757-2
16	1.25	2.35~3.23								1528106-2
16	1.25									1366659-2
14	2.20	3~3.80	S	179955-6	316040-6	917804-6	234170-1		2155822-1	1426229-2※1
12	3.50	4.50	.,	470050.0	74.00.44.0	047005.0	07.4474.4		0455507.4	1366660-2%2
10	5.50	4~5.2	M	179956-6	316041-6	917805-6	234171-1	2155369-1	2155503-1	2151086-2※3
8	8.00	4.9~7.8	L	1318696-6	1318697-6	1747443-6	1366044-1		2155502-1	1366658-3 1426325-2%4

Note: The model with its name including "-6" has a silver plating of 2.54  $\mu m$  in thickness.

For details, please contact the purchase agent or sales department.

Please contact the sales department for mini application tools.

Strip Form contacts are used with Mini-applicators (bench machine) and Loose-Piece contacts are with hand tools.

- X1 Applicable contact:179955-□
- $\times 2$  Applicable contact:179956- $\square$  917803- $\square$  84695- $\square$
- X3 Applicable contact:179956-□ 917803-□
- X4 Applicable contact:1318696-□

**%**5 See P.121

If you have any questions, please contact the AT tooling sales department.

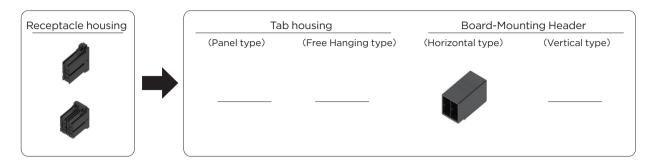
 $\times$ 6 Used together with the electric hydraulic tool 2155369-1

The Receptacle contacts can be used for all receptacle housings.



#### D-5200Mα Double-row High Current/Voltage Modular Type - 10.16mm pin pitch

#### **Type Chart**



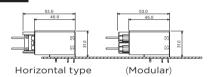
Pos Colo	Color	Kov	Decembrale begging	Tab housing		Plating	Board-Mounting Header		
	Color	ney	Receptacle housing	Panel type	Free Hanging type	Plating	Horizontal type	Vertical type	
	Black	Х	1-179958-2	_	_	_			
~	Black	Υ	2-179958-2	_		_			
	Black	XX	1-917807-2	_		Silver	1-1318983-6		
4	Black	YY	2-917807-2	_	_	Silver	2-1318983-6		
	Black	XY	3-917807-2	_	_	Silver	3-1318983-6		

Note: Receptacle housing 2-pole D-5200S and 4-pole D-5200M are the same product However, contact used is D-5a (silver plating type)

#### **Relative Product Information**

Applicable contact...P.99
Performance & Specifications...P.88

#### **Mated Dimension**



#### **External Dimensions**

#### **■** Receptacle Housing





Pos	Kev	Plating	Color	Part Number	Dimensions			
P05	Key	Flating	COIOI	Part Number	А	В	С	
2	X	_	Black	1-179958-2	9.8	29.0	23.8	
2	Υ	_	Black	2-179958-2	9.0	29.0	23.0	
	XX	-	Black	1-917807-2				
4	YY	-	Black	2-917807-2	20.0	29.0	33.4	
	XY	_	Black	3-917807-2				

#### ■ Board-Mounting Header



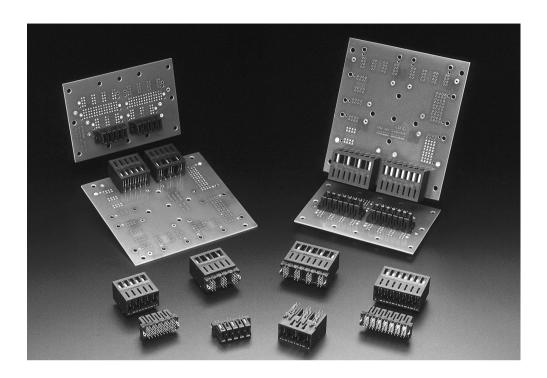
Pos	Key	Plating	Color	Part Number	Dimensions			
				Part Number	А	В	С	
	XX	Silver	Black	1-1318983-6				
4	YY	Silver	Black	2-1318983-6	22.6	45.0	30.9	
	XY	Silver	Black	3-1318983-6				



#### DZ-5200

Useful for enabling cableless control board. High-current board to board connectors with 30A per contact.

- Equipped with retention leg to protect board from load
- Space allocated to prevent the contact from twisting
- Stacking and parallel connection types available
- Circuit numbers are easily identified for board connectors
- Keying function included for flexibility when using multiple units
- Soldering without masking
- Passes UL, CSA and TUV standards



#### Performance Specifications

Pitch	200 mils/400 mils 5.08mm/10.16mm		
Rated Voltage	5.08mm Pitch:250V AC(rms)/DC 10.16mm Pitch:600V AC(rms)/DC		
Rated Current	5.08mm Pitch:20A 10.16mmPitch:30A		
Contact resistance	2mΩ max		
Withstanding Voltage	5.08mm Pitch:2,200V AC 1 min 10.16mm Pitch:4,000V AC 1 min		
Temperature	-55~+105°C		
Product Specifications	108-78186		

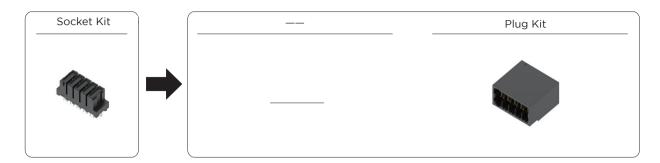
#### Materials and Plating

Category	Materials	Plating			
Receptacle Contact Tab Contact	Phosphor bronze Copper alloys	Gold Plating with Nickel under-plated			
Tab	Phosphor bronze Copper alloys	Tin, Gold Plating with Nickel under-plated			
Housing	UL9 4V-0, thermoplastic PBT with glass fiber				



# DZ-5200 - 5.08mm pitch for 5/7 position pins, 10.16mm pitch for 3/4 position pins

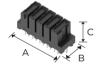
#### Type Chart



Pos	Color	Key	Socket Kit	Plating	_	Plug Kit
3	Black	_	5-1747147-3	Gold	_	5-1747145-3
4	Black	_	5-1747147-4	Gold		5-1747145-4
5	Black	_	1-1747147-5	Gold	<del></del>	1-1747145-5
7	Black	_	1-1747147-7	Gold	_	1-1747145-7

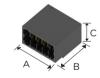
# **External Dimensions**

#### ■ Socket Kit



Pos	Key	Plating	Color	Part Number	Dimensions			
POS				Part Number	А	В	С	
3	_	Gold	Black	5-1747147-3	30.8	11.5	14.0	
4	_	Gold	Black	5-1747147-4	40.9	11.5	14.0	
5	_	Gold	Black	1-1747147-5	30.8	11.5	14.0	
7	_	Gold	Black	1-1747147-7	40.9	11.5	14.0	

#### ■ Plug Kit



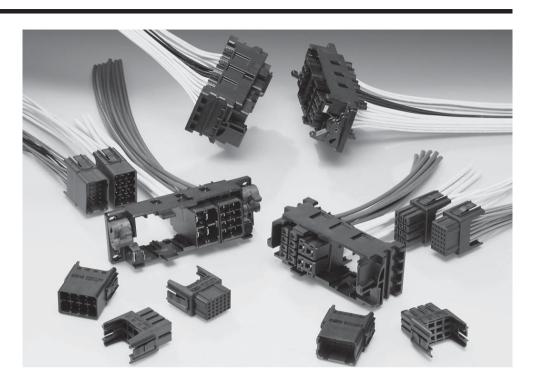
Pos	17	Plating	Color	Part Number	Dimensions			
POS	Key			Part Number	Α	В	С	
3	_	Gold	Black	5-1747145-3	28.8	27.0	17.5	
4	_	Gold	Black	5-1747145-4	39.0	27.0	17.5	
5	_	Gold	Black	1-1747145-5	28.8	27.0	17.5	
7	_	Gold	Black	1-1747145-7	39.0	27.0	17.5	



# Multi-Frame connector (MF Series)

The Multi-Frame connector is formed by combining the modular housing of the Dynamic Series connector with a resin frame. The modular structure can accommodate housings for D-2800, 3800, 4800 or 5800.

Additionally, the secure locking mechanism can be easily locked and unlocked by pressing the latches. The simple design saves time in assembly and maintenance.



#### Main Performance

Series Item	D-2800	D-3800	D-4800	D-5800
Rated Voltage	AC/DC 250V	AC/DC 600V	AC/DC 600V	AC/DC 630V
	5A	15A	25A	40A
Rated Current	When an AWG#18 wire is used	When an AWG#16 wire is used	When an AWG#12 wire is used	When an AWG#8 wire is used
Contact resistance		$2m\Omega$ max		
Withstanding Voltage	1,500VAC(1 min) 2,500VAC(1 min)			3,000VAC(1 min)
Operating Temperature				
Product Specifications	108-78284	108-78285	108-78388	108-78389
Applications Specifications	114-5258	114-5148	114-5369	114-5206

#### Materials and Plating

Category	Materials	Plating		
Receptacle Contact Tab Contact	Phosphor bronze or copper alloy	Gold Plating with Nickel under-plated		
Housing	UL94V-0, reinforced thermoplastic with glass fiber			

#### Contact

The D-2, D-3, D-4 and D-5 contacts of the Dynamic series can be directly used. (The existing tools can also be used as special tools and application tools)

See P.36 for the D-2 terminal. See P.83 for the D-4 terminal. See P.90 for the D-5 terminal.



#### **Multi-Frame Connector**

#### **Product Features**

- The modular structure can accommodate Dynamic series housings
- Panel mount
- · Quick locking
- Easy unlocking by pressing the latches
- · A key for preventing mis-plugging
- Easy operation

#### **Applications**

- Semiconductor and liquid crystal production equipment
- Large control equipment and machine tools
- Other

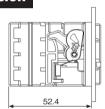
#### **Product Specifications**

Product standard number 108-78644

#### **Performance Specification**

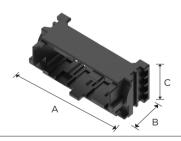
Item	STD.		
Frame Lock Strength	Pull force: 15kgf min		
Durability	50 cycles max		

#### **Mated Dimension**



#### **External Dimensions**

#### ■ Cable Side Frame



Vov	Part Number	Dimensions(mm)				
Key	Part Number	Α	В	С		
Z	2069524-4		45.1			
Y	2069524-3	97.1		40.4		
×	2069524-2	97.1				
W	2069524-1					

#### ■ Panel Side Frame



Key	Part Number	Dimensions(mm)			
Ney	Part Number	А	В	С	
Z	2069526-4				
Υ	2069526-3	120.0	34.3	40.4	
×	2069526-2	120.0			
W	2069526-1				



# Dynamic HTS Module - 12.0mm pin pitch

#### Type Chart



Dos	Color k	or Key Receptacle housing	Tab housing	Plating	Board-Mour	nting Header	
POS			Receptacle flousing	Tab Housing	Plating	Horizontal type	Vertical type
30	Black	_	1747365-1	1747366-1	_	<del>-</del>	_
12	Black	_	1747363-1	1747364-1	_	<del>_</del>	_
8	Black	_	1871416-1	1871417-1	_	_	_
4	Black	_	1871418-1	1871419-1	_	_	_

#### D-2800 Pitch: 3.75mm

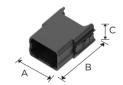
#### **External Dimensions**

#### **■** Receptacle Housing

# A B

	Pos	Key Color	Part Number	Dimensions			
			Color	Part Number	Α	В	С
	30	_	Black	1747365-1	30.3	37.6	19.5

#### **■ Tab Housing**



Pos	Kov	Color	Part Number	Dimensions			
	Key		Part Number	Α	В	С	
30	_	Black	1747366-1	30.3	40.0	19.5	

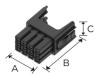


#### Dynamic Series Connector - 12.0mm pin pitch

D-3800 Pitch: 6.5mm

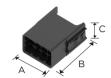
#### **External Dimensions**

#### **■** Receptacle Housing



Pos I	Kov	Color	Part Number	Dimensions			
	Key		Part Number	Α	В	С	
12	_	Black	1747363-1	30.3	41.4	19.5	

#### **■** Tab Housing

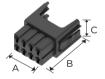


	Pos	Key	Color	Part Number	Dimensions			
				Part Number	Α	В	С	
	12	_	Black	1747364-1	30.3	40.0	19.5	

D-4800 Pitch: 6.35mm

#### **External Dimensions**

#### **■** Receptacle Housing



Pos	I/ov	Color	Part Number	Dimensions			
	Key		Part Number	Α	В	С	
8	_	Black	1871416-1	30.3	38.6	19.5	

#### **■ Tab Housing**

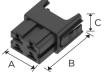


Pos	Kov	Color	Part Number	Dimensions			
	Key		Part Number	Α	В	С	
8	_	Black	1871417-1	30.3	40.0	19.5	

D-5800 Pitch: 12.0mm

#### **External Dimensions**

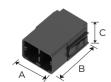
#### **■** Receptacle Housing



							,
	Pos	Kov	Key Color Part Num	Dart Number	Dimensions		
		Key		Part Number	Α	В	С
	4	_	Black	1871418-1	30.3	41.4	19.5

NOTE: all products are RoHS compliant On selection.

#### **■ Tab Housing**



Pos	Key Color		Part Number	Dimensions			
	Key	Color	Part Number	Α	В	С	
4	_	Black	1871419-1	30.3	44.1	19.5	



#### D-7000 Series

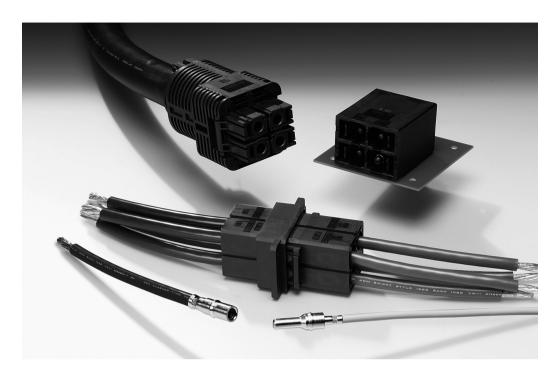
#### Series introduction

Dynamic D-7000 series includes the highest power rated connector that is max 65A (per contact, using max. wire size)

It is available in board to wire, wire to wire, wire to wire, wire to panel -some are finger safe (Reverse Mount Type) - and long pin types all providing stable electrical connections for semiconductor manufacturing machines, construction plant etc.

The number of positions is the industry standard 4P, which will meet a wide range of application requirements.

The receptacle contact is the 'crown band type containing a tube shape spring, meaning high performance and operation feasibility.



#### **Product Features**

# 1. Achieved High Current and High Reliability up to 65A

To accommodate the high current of 65A, we adopted, for the first time, a crown band with a multi-point contact mechanism in the receptacle contact. This contact is not only highly reliable, but disperses the heat generated when high current passes through the contact.

#### 2.Sequential Connection

Sequential connection is compatible 2 types of pin contact are available, standard type and long type. This is ideal for applications when sequential connections from the crown pin are required.

#### 3. Other

- Standard type and reverse type are available, offering a wide variety of mating options
- By using cable clamp type applicable to jacket cable, it can be used as an I/O connector



#### **D-7000 Series Performance and Specifications**

#### **Performance**

Item	
Pitch	16mm
Rated Current	65A max
Rated Voltage	630V AC / DC
Dielectric Withstand Voltage	3000 VAC
Total resistance	2mΩ max
Insertion strength:	49.0N max (per positions)
Withdrawal strength	4.9N min (per positions)
Durability	20 cycles
Locking strength	196N min

#### **Positions/Wire Size/Rated Current**

Unit: A (Amps)

Position	Series	Wire Size(AWG)						
Position	Series		14	12	10	8	6	
4	Wire-to-board	18	23	31	35	50	60	
4	Wire-to-wire	-	-	31	35	55	65	
4	Wire-to-wire(cable clamp type)	-	-	25	35	45	55	

#### **Product Specification**

Product Specifications	108-78470
TEST REPORT	501-78004
Extraction tool application specification	408-78147
Applications Specifications	114-5452

When applicable, please be sure to order the operation manual. It can also be found in the online electronic specifications catalog.

#### **Materials and Plating**

Туре	Item	Tab contact	Receptacle Contact (Crown-shaped Terminal)	
Contacts	Materials	Copper	Copper alloys	
	Plating	Silver plating with Nickel under-plated	Gold plating with Nickel under-plated	
Board Mount Header	Materials	Copper	-	
	Plating	Silver plating with Nickel under-plated	-	
Housing	Materials	UL94V-0, Thermoplastic PBT containing glass fiber		

#### **Safety Standards**

The safety specifications listed below are approved on specific part numbers. Please contact our Technical Support Centre to check whether the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Tyco Electronics Specifications.

Saniaa		D-7100Series	D-7300Series			
STD.	Rated Voltage	Rated Current	Temperature Range	Rated Voltage	Rated Current	Temperature Range
Product Specifications 108-5453	630V AC/DC	(As shown above)	-55°C ~+105°C	630V AC/DC	(As shown above)	-55°C ~+105°C
UL File No.E28476 (Recognized Component)	600V AC	Based on the requirements of Application	Uses AWG6 wires Allowable maximum 6A	600V AC	Based on the requirements of Application	Based on the requirements of Application
TÜV License No. R50252537 IP protection Socket: IP-10 Plug: IP-00 Overvoltage type (II) 50 cycles of repeated plugging and unplugging	630V AC/DC	AWG WTW WIRE-TO-BOARD kt 16 18 - 14 23 - 12 31 31 25 10 35 35 35 8 50 55 45 6 60 65 55	-55°C ~ <b>+105°</b> C	630V AC/DC	AWG WTW WIRE-TO-BOARD kt 16 18 114 23 112 31 31 25 10 35 35 35 8 50 55 45 6 6 60 65 55	-55°C ~+105°C



### **D-7000 Series Contact**

### **■ Crimped Types**



Receptacle Contact (Receptacle housing usage)



Tab contact (Tab housing usage)

### · Gold-plated Receptacle contact, Sliver plated Tab contact

Wire	e Range	Outside Diameter of	Diameter of Contacts		ontacts	Applicable tools		
AWG	mm²	Insulation	Receptacle Contact	Tab contact				
16-14	1.6~2.6	10	1871132-4	_		409777-1%1		
12-10	12-10 2.7-6.6 10	10 1871132-3	STD.	1871131-3		2155816-1 ※3		
12 10			1071132 3	LONG	1-1871131-3		2155815-1 ※4	
, a	8 6.7-10.5 10 1871132-2	10	5 10	1871132-2	STD.	1871131-2	2155369-1 %2 2155814-1 %9	2155814-1 %5
		1071132 2	LONG	1-1871131-2		2103014-1743		
6	6 10.6~16.7	16.7	1871132-1	STD.	1871131-1		2155810-1 ※6	
	10.0"10.7	10	10 18/1132-1		1-1871131-1		2133010-1740	

Note: For details, please contact the purchase agent or sales department.

X1 Hand tool (W-shaped crimp)

\*2 Electric hydraulic tool See P.121.

If you have any questions, please contact the sales department.

X3 Mold (2155369-1 used together with the electric hydraulic tool / applicable wire: AWG#12; crimp shape: hexagon)

%4 Mold (2155369-1 used together with the electric hydraulic tool / applicable wire: AWG#10; crimp shape: hexagon)

%5 Mold (2155369-1 used together with the electric hydraulic tool / applicable wire: AWG#8; crimp shape: hexagon)

%6 Mold (2155369-1 used together with the electric hydraulic tool / applicable wire: AWG#6; crimp shape: hexagon)

The receptacle contact can be used in all receptacle housings, the tab contact can be used in all tab housings



# D-7100 - 16mm pin pitch

# Type Chart



Pos	Color	Receptacle housing	Tab housing	Plating	Board-Mounting Header
4	Black	2134055-1	2134057-1	Silver	1981823-1

# **Relative Product Information**

Applicable contact...P.109
Performance & Specifications...P.108

# **External Dimensions**

### **■** Receptacle Housing

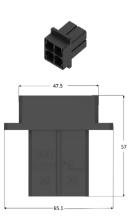
4P Model: 2134055-1



# **■ Tab Housing**

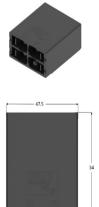
Panel type

4P Model: 2134057-1



# **■** Board-Mounting Header

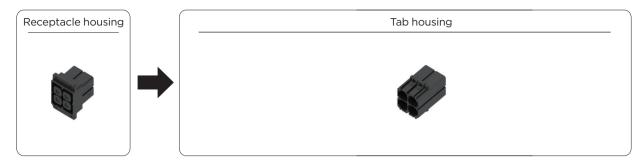
4P Model: 1981823-1





# D-7300 - 16mm pin pitch

# Type Chart



Pos	Color	Receptacle housing	Plating	Tab housing
4	Black	2134059-1	Silver	2134061-1

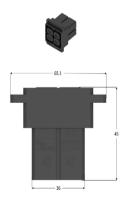
# **Relative Product Information**

Applicable contact...P.109
Performance & Specifications...P.108

# **External Dimensions**

### **■** Receptacle Housing

4P Model: 2134059-1

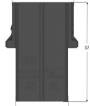


### **■ Tab Housing**

Panel type

4P Model: 2134061-1

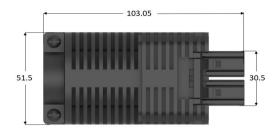






# D-7100 Dyna-Clamp Kit - 16mm pin pitch

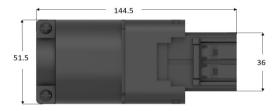
# **External Dimensions**



Pos	Color	Cable Size	Part Number
4 Black	Plack	S ø19 - 25	2-2069313-1
	Black	M ø25 - 31	1-2069313-1

# D-7300 Dyna-Clamp Kit

# **External Dimensions**



Pos	Color	Cable Size	Part Number
4 Black	S ø19 - 25	2-2069312-1	
	Black	M ø25 - 31	1-2069312-1

# **Relative Product Information**

Applicable contact...P.109
Performance & Specifications...P.108



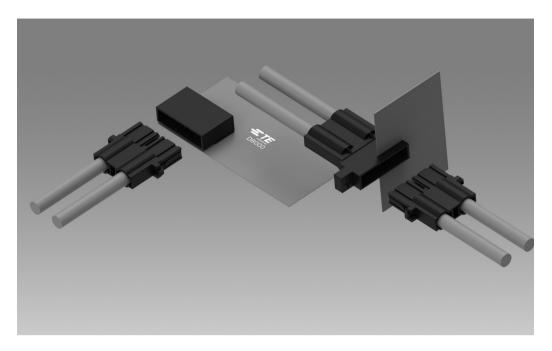
### **Dynamic D-8000 Series**

### **Series Introduction**

The D-8000 Series are by far the products with the largest current-carrying capacity in the Dynamic product line. The current-carrying capacity is up to 90A per unit for wire-to-board and 100A per unit for wire-to-wire.

The compact design provides more available space for applications requiring higher current-carrying capacity; the high temperature resistant board-end material can be applied to the reflow soldering process for easy uniformity on the client side.

D-8000 products, in line with the high reliability, small size and high cost performance that Dynamic products have always maintained, provide higher current-carrying capacity to meet the needs of the industrial market for high-current connectors.



# Product Highlights

#### 1. High current-carrying capacity

D-8000 products can reach 90A per unit for wire-to-board products and 100A per unit for wire-to-wire products. This product addition greatly improves the current-carrying range of the Dynamic product line.

#### 2. Compact design

Compared with the D-7000 products, the higher current carrying D-8000 connectors have a smaller size making them very costeffective.

# **3. Silver-plated contact area of the terminal** D-8000 products balance the dual

requirements of product performance and price, so the silver-plated contact design is used.

# 4. Board-Mounting Header suitable for reflow soldering

The D-8000's board-end connector is made of high temperature material and is suitable for reflow soldering. This allows for standardization and time savings on the soldering process.



# **Dynamic D-8000 Series Performance and Specifications**

# Performance

Item		
Pin Pitch	24.4 mm	
Rated Current	100A (wire-to-wire) / 90A (wire-to- board) max	
Rated voltage	1000V	
Withstanding voltage	3000V	
Contact resistance	0.8mΩ max	
Durability	10 cycles	
Insertion force	58.8N max (per pos)	
Extraction force	58.8N max (per pos)	
Locking mechanism holding force	96 N	
Retention force of contact in plastic housing	96 N	
Wire Range	AWG 3	
Operating Temperature	-55°C to 105°C	

# Positions / Wire size / Rated current

Unit: A

Pos	Series	Cable Size (AWG)
POS	Series	2
2	Wire-to-board	90
2	Wire-to-wire	100

# Product Specification and Instruction Sheet

Product manual	108-140254
Operation manual	114-78058-1
INSPECTION REPORT	501-78768

When using, be sure to order the instruction manual. Also available from the electronic specification catalog on the Internet.

# Materials and Plating

Category	Material	Plating
Receptacle contact, tab contact	Copper alloy	Silver (2 μm) over nickel plated (1.27 μm) plated
Board-mounting tab contact	Copper alloy	Mating face: Silver (2 µm) over nickel plated (1.27 µm) plated Soldering face: Tin (2 µm) over nickel plated (1.27 µm) plated
Receptacle housing and tab housing UL94V		BT containing glass fiber
Board-end housing	UL94V-0, high temperature nylon containing glass	



### **D-8000 Series Contact**

### ■Crimp Contacts





### Silver-plated type

W. 5		Outer		Contact	
VVIr	e Range	Diameter of Insulation	Receptacle Contact	Tab Contact	Applicable Tools
AWG	mm²	mm	Receptacie Contact	Idb Contact	
3	25	9.5	2373747-5	2351982-5	2372716-1

Note: When ordering products, please confirm the sales lot.

Please contact your agent or sales department for details.

Receptacle contacts are available for all receptacle housings, and the tab housings are available for all tab housings.



# Dynamic D-8000 - 24.4mm pin pitch

# Type Chart



Pos	Color	Receptacle Housing	Tab Housing	Plating	Board-Mounting Header
2	Black	1-2351981-2	1-2352216-2	Silver	1-2351965-2

### Relative Product Information

Applicable contact...P.115 Product specification...P.114

# Mated Dimensions 18.3 8.65 Wire to Wire Wire-to-Board, Horizontal type

### External Dimensions

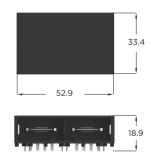
■Receptacle Housing



■Tab Housing



52.9 76.9 ■Board-Mounting Header





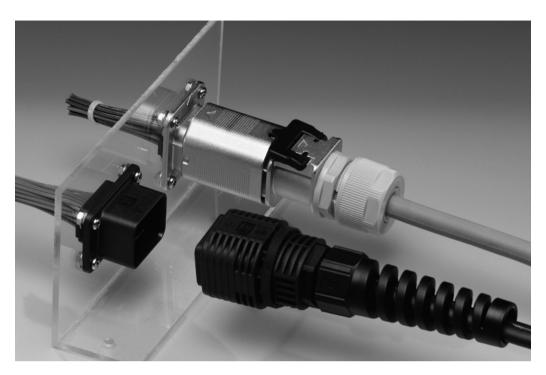
### **Multiple Enclosure Connector**

#### Series introduction

Human machine interfaces (HMI) can be found on a variety of machines. They allow people to communicate with equipment to control, operate and program. The multiple enclosure connector was developed as a connector for I/O interfaces for HMI.

They are superior in operation, very safe and easy to use. Plus, they use contacts from the Dynamic Series, providing high reliability.

There are two types of Multiple Enclosure connectors: metal and plastic. Their use depends on the type of environment.



### **Product Features**

#### 1. Wire Sizes

The metal type fits wires with diameter from 10mm to 11mm, the plastic type from 5mm to 12mm.

#### 2. Applicable Contacts

The highly reliable Dynamic D-1000 and D-3000 series terminals are used as contacts for I/O connectors for human machine interfaces (HMI). These can be crimped by using existing Dynamic crimping tools.

### 3. IP65 (plastic type), IP67 (metal type) i

The connectors have dust and water proofing for use in harsh conditions. (Note: need to be used with cable gland)

#### 4. Safety Lock Mechanism

The lock mechanism uses the fast on/off lock concept which can be locked or released by just grabbing the connector. Plus, our proprietary double lock mechanism prevents vibration related disconnect accidents.

#### 5. Two Types of Housing

The series includes two types of housing, a standard type and a reverse type for preventing exposure of live contacts.

#### 6. Cable Clamp Interface

Cable clamps, which are commercially available and can be selected according to application and purpose, can be attached to cover the cable entering the connector.

#### 7. Other Considerations

Audible & tactile locking design ensure the complete connection between receptale and tab.



# **Multiple Enclosure Connector**

### **Performance Specifications**

Item	Standard		
Rated Current	See the reference		
Rated Voltage	125VACrms (for the part with a pitch of 2mm)		
Dielectric Withstand Voltage	1,000V AC (1 min)		
Operating temperature	-30°C -105°C (including the temperature rise caused by electrification)		
Total resistance(low level)	$10m\Omega$ max (initial)		
Insulation resistance	1000m $Ω$ min (initial)		
Insert Strength	39.2N max (per position)		
Withdrawal Strength	4.9N max (per position)		
Durability	50 cycles		
Enclosure Lock Strength	98N min		

# Positions/Wire Size/Rated Current

Contact		Receptacle contacts and tab contact					
Wire Size	AWG	AWG	AWG	AWG	AWG	AWG	AWG
Position	#18	#20	#22	#24	#26	#28	#30
24Pos	-	-	2	1.5	1	0.8	0.5
14+1Pos	3.5	2.7	2.5	2	1.5	1	0.8

### Plastic type

Contact	Receptacle contacts and tab contact					
Wire Size Position	AWG #22	AWG #24	AWG #26	AWG #28	AWG #30	
32Pos	1.5	1	0.8	0.5	0.5	

### **Product Specification**

Product Standards	108-78417		
Applications Specifications	114-5377		
Manual	411-78287,78288(14+1P) 411-78262,78277(24P)		

#### Plastic type

Product Standards	108-78566		
Mounting Application Standard	114-5377		
Manual	411-78293(32P)		

Contact

Refer to D-1000 contact on P.17 and D-3000 contact on P.46

### **Materials and Plating**

### Metal type

Parts Materials	Materials	Finish
Contact	Copper alloys	Gold plating over Nickel under- plated
Connector Housing	UL94V-0, thermoplastic polyamide	_
Connector Case	Zinc	Nickel-plated
Bottom	Nitrile rubber	_
Shield Grip	Cold-rolled steel	Nickel plating over copper base

### Plastic type

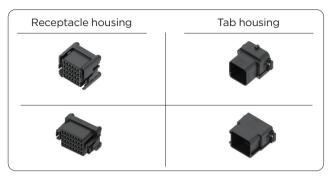
Description	Materials	Finish
Contact	Copper alloys	Gold plating over Nickel under- plated
Connector housing	UL94V-0, thermoplastic polyamide	_
Connector Case	UL94V-0, thermoplastic polyamide	_
Bottom	Nitrile rubber	_



# **Multiple Enclosure Connector**

# Type Chart







Type	Pos.	Receptacle housing	Polarity	Housing		Tab housing	
Туре	POS.	Receptacle flousing	Polarity	Receptacle (	(R) / Tab (T)	lab flousing	
Metal housing	24	1939847-1	Standard	1939850-1(R)	1939839-1(T)	1939840-1	
type	1981560-1		Reverse	1981556-1(T)	1981551-1(R)	1939640-1	
Metal housing	14+1	1939847-1	Standard	1981135-1(R)	1981133-1(T)	1939840-1	
type	14+1	1981560-1	Reverse	1981947-1(T)	1981945-1(R)	1939640-1	
Plastic	32	1981919-1	Standard	1981921-1(R)	1981914-1(T)	1981913-1	
housing type	32	1981919-1	Reverse	2013393-1(T)	2013391-1(R)	1901913-1	

Shield clip P /N 1939851 -1 (Receptacle housing) tool: 1891820 -1 (411-78273)

### **Relative Product Information**

Applicable contact... 24 position product: D-1000 S.M contacts see P.17.

14+1 position product: The D-1000 & D-3000 contacts see P.17 and 46

32 position product: D-1000 S.M contacts see P.17

# **External Dimensions**

#### **■** Receptacle Housing

Standard Type (Receptacle housing)



Pos	s Key Plating C		Color Part Number		Dimensions			
POS	Key	Plating	COIOI	Part Number	Α	В	С	
24	_	-	Black	1939850-1	19.6	15.3	16.8	
14+1	_	_	Black	1981135-1	22.0	22.8	16.8	
32	_	_	Black	1981921-1	27.2	15.3	17.6	

Reverse (Tab housing)



Pos	Vov	Disting	Color	Part Number	Dimensions		าร
POS	Key	Plating	Color	Part Number	А	В	С
24	_	_	Black	1981551-1	27.5	23.7	20.2
14+1	_	_	Black	1981945-1	27.5	23.7	20.2
32	_	_	Black	2013391-1	29.5	23.0	17.0

NOTE: all products are RoHS compliant On selection.

### **■ Tab Housing**

Standard Type (Tab housing)



Pos	Kev	Key Plating Cold		Dout Number	Dimensions			
POS	Key	Plating	Color	Part Number	Α	В	С	
24	_	_	Black	1939839-1	27.5	23.3	20.0	
14+1	_	_	Black	1981133-1	27.3	27.5	20.2	
32	_	_	Black	1981914-1	29.5	22.3	17.0	

Reverse (Receptacle housing)



Pos	Kev	Plating	Color	Color Part Number		Dimensions		
POS	Key	Plating	Color	Part Number	Α	В	С	
24	_	_	Black	1981556-1	19.6	20.8	16.8	
14+1	_	_	Black	1981947-1	22.8	28.2	16.8	
32	_	_	Black	2013393-1	27.2	20.0	17.6	

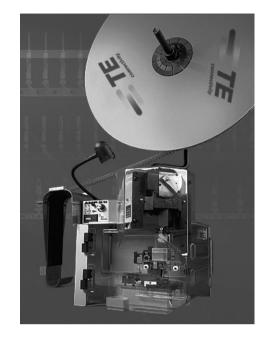


### ■ AMP - 3K/AMP - 5 K Tabletop Crimping Machine.

AMP - 3K/AMP - 5 K is a compact, low-cost desktop crimping machine. A DC motor linear scheme is used for low noise, and motor speed adjustment can be easily changed. It offers a wide range of crimping operations options with simple operation and a comfortable working environment.

- •It can be equipped with other companies' application tools.
- •The crimping height can be adjusted at 0.013 mm per step.
- •It can be used with a power supply of AC100V/240V.
- •Low noise and easy speed adjustment are achieved due to the DC motor drive.
- •Multiple modes and optional parts are available depending on the operating environment.

	Name	AMP-3K	AMP-5K			
	Type Universal mount type	1725950-3	1725900-3			
Part						
Number	AMP quick mount type	1-1725950-2	1-1725900-2			
	Stroke	30 mm				
	Dimensions	The application tool is mounted on the safety cover closed side (no reel): 512mm (width) x415mm (depth) x510mm (height)				
	Dimensions	The application tool is mounted on the safety cover closed (no reel): 427mm (width) x523mm (depth) x510mm (heigh				
	Weight	About 70kg (main body of the crimping machine)				
	Power supply	AC100-240V ( 310% ) Sing	le-phase 50 / 60Hz (6A)			
	Cycle time	0.4 s (when the jog m	node is terminated)			



### ■ SCM Stripper Crimping Machine (Tabletop Crimping Machine)

Stripper Crimping Machine with exchangeable Dies. With optimum processing of jacket cable ends, the operator selects among strip and crimp, strip only or crimp only with one touch.

Туре	AMP-3K Specification 1596509-3	AMP-5K Specification 1596509-4			
Applicable Wire	AWG 32-14 with the maximum skin outer diameter of 5.08mm (some AWG32-30 wires are inapplicable.) Please contact us for details.				
Jacket strip Dimensions	Min 29mm (or wire set if the peeling size is 29–45mm) The time is longer than usual.				
Strip Length	2.5-10mm				
Usable Applicators	Our company's 40mm strok	ke side feed application tool			
Noise level	< 82	2 dB			
Crimp ability	13,345N (1,360kgf) Can be crimped to the AWG14	22,226N(2,268kgf) Can be crimped to the AWG10 (or to AWG14, if it is an SCM)			
Power supply	AC 100-240V single phase 50/60Hz				
Air pressure	0.49 - 0.59MPA (5 - 6kg/cm <sup>2</sup> )				
Machine weight	About	: 80 kg			



AMP-3K Specification SCM



### ■ TE REC-Li60 (charging hydraulic tool)

- The lithium-ion battery is the lightest in its class.
- High power due to dual Battery-electric & hydraulic pump use.

Product Specification Rated output 54 kN

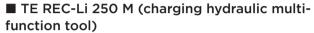
Crimp Range: 5.5 to 60mm<sup>2</sup>
Electric machine: 14.4 V DC motor

External dimensions 286 mm (length) x 285mm (height) x 75mm (width)

Weight: 2.7 kg (60 mm <sup>2</sup> Dices, battery pack included)

No. of times can be crimped: 270 times (60 mm<sup>2</sup> crimp per hour),

Manufacturer Part Number: 2155369 -  $\Box$ 



Product Specification Rated output 127kN

Crimp Range: 14 to 250 mm2 (copper wire bare pressure terminal and sleep)

sieep)

Electric motor: 14.4 V DC motor

External dimensions 340mm (length) x 280mm (height) x 75mm (width) Weight: 4.2kg (250mm 2 Dices, battery pack included) No. of times can be crimped: 50 times (250mm $^2$  crimp per hour),

Manufacturer Part Number: 2155363 -  $\square$ 



### ■ Key Plug-equipped D-1000 Series



Part Number:1939588-1

### **■** Key Plug-equipped D-2000 Series

(Used to prevent misinsertion)

Avoid mis-plugging when connectors with the same No of Pos. are used together.



Part Number:641994-1

### ■ Key Plug-equipped D-3000 Series

(Used to prevent mis-plugging)

Avoid mis-plugging when connectors with the same No of Pos. are used together.



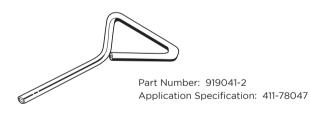
Part Number:175855-1

### ■ Receptacle Contact Cutting Tool D-1000 Series

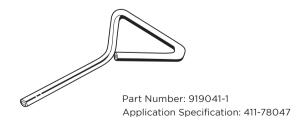
Part Number: 919041-3

Application Specification: 411-78047

### ■ Receptacle Contact Cutting Tool D-2000 Series



# ■ Receptacle Contact Cutting Tool SeriesD-3000 Series

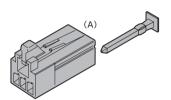




#### ■ How to use the plug and cutting tool

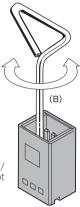
XIt should be noted that some of the products (D-2100 S/D-2100 D) to prevent mis-insertion, use keying mechanism from the beginning.

①Keying Plug inserted in one pole of the receptacle housing.



②Wrench off a tab in the corresponding position of mating Tab Header and empty that position. To wrench off the tab, insert Cutting Jig into its root and turn tool as shown.

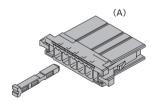
\*\*In tab Housing (Panel/ freehanging type), 1 pole is not inserted and is left free.



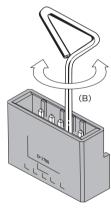
### ■ How to use the plug and tool for the D-3000 Series

In addition, mis-insertion function keying has been installed from the beginning in some of the products (D-3100S/ D-3100M/ D-3200S/D-3200M)

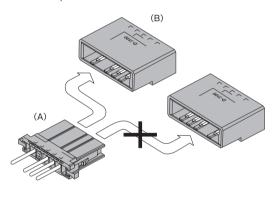
①The keying plug is inserted into the receptacle housing



- ②Wrench off a tab in the corresponding position of mating Tab Header and empty that position. To wrench off the tab, insert Cutting Jig into its root and turn tool as shown
  - \* In tab Housing (Panel/freehanging type), 1 pole is not inserted and is left free.



③When using these, it is impossible to mis-insert



### ■ Hand tools PEW 12, D-1000, D-3000 and D-4000 series



- Crimping with a straight action feel
   By manipulating the fulcrum of the handle, we have created a crimper that, while double action, is almost like
  - straight action.
  - Interchangeable dies
    The dies are easy to change. This means a wide variety of terminals can be handled with the minimum number of tools.
- Improve work efficiency Contact series, wire sizes and crimp heights printed on work surface of dies.
- Lower cost than existing specialized tools

  The superior functionality you want, at a price you like.



■ Hand Tools CERTI-CRIMP II, D-1000 Series Flip Locator, D-2000 Series, D-3000 Series, D-5000 Series Crimp part, as well as the machine, are highly reliable, Straight action method is introduced.



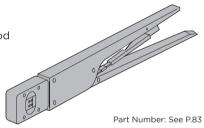


Part Number: See P.17,36,46,90.

- Handles are completely covered in urethane providing an easy grip and gentle on hands.
- Wire ranges and crimping height control values are printed on the crimping head for easy confirmation while working. Also, the ratchet in the handle keeps crimping quality very consistent.
- Hand crimping tool with wire stripper has four variations, while the previous model had only three variations.
- We recommend periodic maintenance when using hand crimping tools to keep crimping quality consistent.

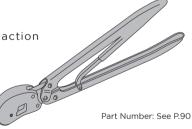
# ■ Hand Tool D-4000 Series

Crimper uses the reliable straight action method



### ■ Hand Tool D-5000 Series

As with machine use, the reliable straight action method is used.



#### **■** Extraction Tool for D-1000 Series

Used to pull D-1000 from the housing

Part Number:1891526-1 Manual: 411-78241



Used to pull D-2000 contacts from the housing

Part Number:1276716-1

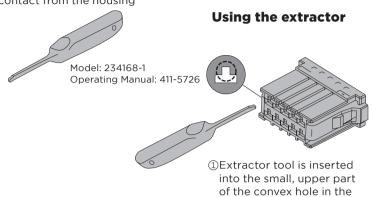




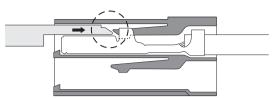


# **■ Extraction Tool for D-3000 Series**

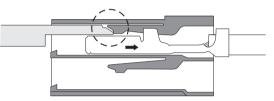
wiring type tool for pulling the contact from the housing



housing as shown in the diagram (please hold the tool the right way up) \* Take care not to insert into the Contact Section. If you have inserted by error, replace the damaged



②The tip of the tool lifts the housing lance and frees the contact

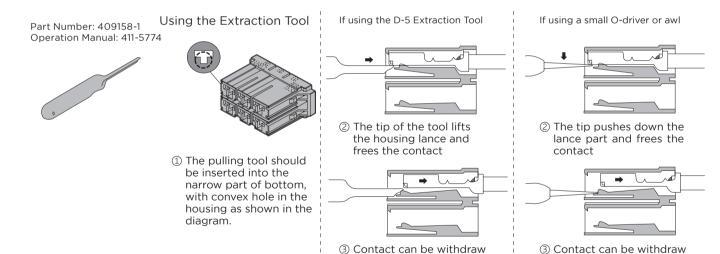


③Contact can be withdrawed

#### **■** Extraction Tool for D-5000 Series

contact with a new one before proceeding.

A tool for pulling out terminals from cable's crimping plug/socket housing. (When inserting, please note that the positioning dowels of D-3 and D-5 are opposite up and down.) Only D-5 terminals can be pulled out with a tool such as a small flathead screwdriver or awl.



#### **■Unplugging tool D-7000 series**

Part Number: 2040080-1

If it is inserted incorrectly, replace the terminal with a new one.

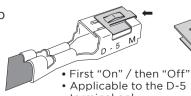


# **■**Crimping Oil

Part Number: 939691-1 For easing the friction between tool and contact during crimping



■Sequence clip





Part Number:179993-1

Applicable to the D-5 terminal only

### **Accessories**

### ■ L-bracket D-3000

Used to fix the air-to-air housing of the plug to the panel surface.

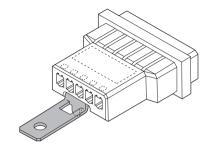
Model: 5900121-2(S) 5900121-4(L)





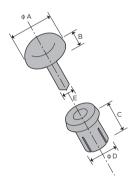


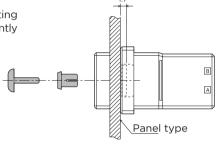
Part Number:5900121-4(L)



### **■** Push rivets

Used to secure panel-type tab housings onto panels (Use as a handy mounting hard ware. Cannot be used with larger sized housings or those that are frequently inserted and withdrawn).







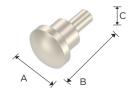
Penel Hole Machining recommended

Part Number	Jumber Panel Thickness Dimensions				Insertion Strength	Retention Force		
Part Number	Parier Triickness		В	С	D	E	insertion strength	Retention Force
900128-1	0.3~1.3	6.4	1.6	4.5	3.5	1.95	19.6N~29.4N	127.4N Min.*
900128-2	1.3~2.3	6.4	1.6	5.5	3.5	1.95	19.6N~29.4N	127.4N Min.*

<sup>\*</sup>when using 2

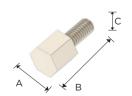
# Panel Mounting Screws D-2000, D-3000

Part Number	Dimensions			
Part Number	А	В	С	
900167-1	9.0	10.3	M3	



### Panel Mounting Hex Screws D-2000

Part Number	Dimensions			
Part Number	А	В	С	
1376059-1	5.5	12.3	M3	





# **Cable Glands**

### **Plastic Gland**



Material: PA Press seal material: PA Seal material: EPDM

Temperature range: -40°C~+100°C

Protection: IP68

Metr.	Dimension D		SW	Type	Part Number	Color of Housing	
Metr.	Minimum	Maximum	300	туре	rait Nullibel	Color of Housing	
	5	9	24	HSK-M20B-H	T3209201112-001	Black	
	6	12	24	HSK-M20B	T3209201122-001	Black	
1 .400*1 5	8	14	27	HSK-M20B-D	T3209201102-001	Black	
M20*1.5	5	9	24	HSK-M20G-H	T3209201212-001	Grey	
	6	12	24	HSK-M20G	T3209201222-001	Grey	
	8	14	27	HSK-M20G-D	T3209201202-001	Grey	

### **Metal Gland**



Material: Nickel plated brass Press seal material: PA Seal material: NBR

Temperature range:-40°C~+100°C

Protection: IP68

Metr.	Dimer	sion D	SW	Type	Part Number	
	Minimum	Maximum	300	Туре		
	5	9	22	DLX-20-MT	T3609200112-000	
M20*1.5	6	12	22	DLX-20-M	T3609200102-000	
	10	14	24	DLX-20-MB	T3609200122-000	

# **EMC** cable glands



Material: Nickel plated brass Press Seal Material: PA Temperature range:-40°C~+100°C

Protection: IP68

Metr.	Dimer	sion D	SW	Type	Part Number	
Meti.	Minimum	Maximum	3 4 4	туре		
M20*1.5	5	9	24	DLX-20-MTC	T3707200113-000	
	7	12	22	DLX-20-MC	T3706200103-000	



# Part basic number index

# **Contact and connectors**

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
917805	90,99	2298107	46	1903114	17	178296	47,49	1318126	38,39
917804	90,99	2289080	71	1903113	17	178295	47,49	1318125	38,39
917803	90,99	2288020	83	1903112	17	178294	47,49	1318124	38,39
917802	90	2288019	83	1903111	17	178293	47,49	1318123	37
917658	57,59	2287732	83	1871940	32	178216	65	1318112	36
917657	57,59	2287721	83	1871935	32	178141	53	1318111	36
917542	91,92	2271888	22,24	1871745	17	178141	57,59,60,61	1318110	36
917542		1	71		17	178140		1318109	36
917541	91,92 46	2271457	71	1871744	17	-	57,59,60,61		36
		2229806		1871743		178138	54,56	1318108	
917511	46	2229803	71	1871731	17	178137	53	1318107	36
917485	46	2229800	71	1871468	25	178136	54,56	1318106	36
917484	46	2229794	71	1871315	22,24	177665	50	1318105	36
917338	54,56	2174022	90	1871304	17	177662	50	1123829	93,94
917337	54,56	2174021	90	1871303	17	177555	66,67	1123624	63
917251	65	2069526	104	1871132	109	175365	66,67	1123309	93,94,97,98
900167	125	2069524	104	1871131	109	175289	46	2834464	12
900128	125	2069313	112	1827876	26,28	175288	46	2367817	19
84696	90	2069312	112	1827875	26,28	175287	46	2367818	19
84695	90,99	2040587	83	1827873	22,24	175286	46	2367819	19
641994	121	2040586	83	1827872	22,24	175285	46	2367820	19
353718	46	2040516	22,24	1827589	17	175284	46	1123624	64
353717	46	2040016	83	1827588	17	175218	46	2373747	115
353716	46	2040015	83	1827587	17	175217	46	2351982	115
353715	46	2013892	28	1827586	17	175216	46	2351965	116
353082	91,92,97,98	2013891	28	1827583	29,30	175196	46	T3209201112	126
353081	91,92,97,98	2013594	90	1827581	29,30	175195	46	T3209201122	126
353080	91,92	2013593	90	1827572	17	175194	46	T3209201102	126
353079	91,92	2013325	32	1827571	17	1747994	38,39	T3209201212	126
316517	66,67	1981919	119	1827570	17	1747501	83	T3209201222	126
316516	66,67	1981913	119	1827569	17	1747500	83	T3209201202	126
316133	54,56	1981823	110	1827538	41	1747499	83	T3609200112	126
316132	54,56	1981691	90	179960	91,92	1747498	83	T3609200102	126
316131	54,56	1981690	90	179959	91,92	1747443	99	T3609200122	126
316130	54,56	1981560	119	179956	90,99	1747443	83	T3707200113	126
316081	57,59	1981458	93,94,97,98	179955	90,99	1747418	83	T3706200113	126
	57,59	1971182	31	179933		1747416	83	13700200103	120
316080			-		54,56	-			
316041	90,99	1971151	31	179276	54,56	1747415	83		
316040	90,99	1939995	24	179188	50	1747277	84,85		
2350416	22,23	1939847	119	178328	51,52	1747147	102		
2349849	72	1939840	119	178327	51,52	1747145	102		
2349825	72	1939761	21	178326	51,52	1717412	51,52		
2349815	71	1939760	21	178325	51,52	1473668	97		
2348456	25	1939638	22,24	178323	51,52	1376137	38,39		
2348455	26,28	1939588	17,121	178318	47,49	1376136	38,39		1
2348454	26,28	1903601	51,52	178317	47,49	1376135	37		
2347005	70	1903328	84,85	178316	47,49	1376133	66,67		
2347004	70	1903126	17	178315	47,49	1376059	125		
2341421	22,24	1903125	17	178314	47,49	1376020	38,39		
2336490	76	1903124	17	178313	47,49	1376009	38,39		
2336488	76	1903122	17	178308	51,52	1318986	90,99		
2331743	71	1903121	17	178307	51,52	1318985	90,99		
2329463	22,24	1903120	17	178306	51,52	1318983	100		
2326092	93,94	1903118	17	178305	51,52	1318697	90,99		
2311162	46	1903117	17	178303	51,52	1318696	90,99		
2299005	62	1903116	17	178298	47,49	1318579	40		



# Part basic number index

# **Tools and Equipment**

Part Number	Page	Part Number	Page
939691	124	2047670	83
919041	121	1891526	15,123
91558	43,46	179993	123
91559	43,46	1725900	120
91560	43,46	1725950	120
91561	43,46	1762119	83
91565	43,46	1762119	83
91576	36	1762120	81,83
91595	36	1762130	81,83
91596	88,90,99	1762453	17
641994	121	1762461	81
5900121	125	1762461	15,17
409158	88,124	1762626	17
409777	109	1762670	83
2836130	46	1762670	83
234168	43,124	1762671	83
234170	88,90,99	1762675	83
234170	88,90,99	1762846	15,17
2303376	62	1762847	17
2303376	62	1762950	15,17
2266273	90	1762950	17
2266274	90	1762951	15,17
2266289	83	175855	121
2151018	46	1528106	99
2151018	36	1596509	120
2151071	46	1426229	99
2151075	46	1426325	99
2151082	17	1478240	17,83
2151083	17	1366044	88,90,99
2151086	90,99	1366658	99
2151119	46	1366659	99
2151240	36	1366660	99
2155363	121	1366757	99
2155369	90,99,109,121	2381707	19
2155502	90,99	2119144	19
2155503	90,99	2381710	19
2155810	109	2371748	19
2155814	109	2119141	19
2155815	109	2381710	19
2155816	109	2151110	19
2155822	90,99	2151082	19
2114042	17	2372716	115
2114043	17	25,2,10	115
2119141	17		
2119142	17		
2119143	17	-	
2119144	17	-	
2113144	"/		

### Housing

Part Number	Page	Part Number	Page
917809	93,94,97,98	1827863	22,23
917808	93,94,97,98	1827862	22,23
917807	93,94,100	1827691	79
917659	57,58	1827579	29,31
917266	60,61	1827540	41
917249	65	179958	91,92,93,96,100
917242	66,67	179555	57,58,60,61
917241	66,67	179554	57,58,60,61
353047	91,92,97,98	179553	54,55
353046	91,92,97,98	179552	54,55
2350416	22,23	178964	51,52
2349949	26,27	178803	51,52
2333149	22,23	178802	47,48
2333134	22,23	178289	51,52
2291728	62	178288	47,48,50,53,77,78
2291727	62	178214	65
2134061	111	178129	57,58,63
2134059	111	178128	54,55,57,63,79
2134057	110	178127	53
2134055	110	177648	47,48
2069682	22,23	175363	66,67
2069681	22,23	175362	66,67
2069029	29	1747822	95
2040444	29,30	1747821	95
2040404	29,30	1747820	95
2013393	119	1747819	95
2013391	119	1747535	84,85
2013285	96	1747414	84,85
1981947	119	1747276	84,85
1981945	119	1473074	37
1981921	119	1376807	78
1981914	119	1376073	40
1981556	119	1376072	40
1981551	119	1318578	40
1981135	119	1318577	40
1981133	119	1318120	37
1971239	97	1318119	38,39
1971150	31	1318118	38,39
1971003	78	1318117	37
1939850	119	1318116	37
1939839	119	1318115	38,39
1939758	21	1318114	38,39
1903331	86	1318095	66,67
1903330	86	2834461	13
1903329	86	2834497	13
1903146	96	2834465	13
1903131	26,27	2834499	13
1903130	26,27	2366600	20
1903129	25	178128	64
1903128	22,23	178129	64
1903127	22,23	2351981	116
1871946	32	2352216	116
1871465	25		
1827864	26,27		



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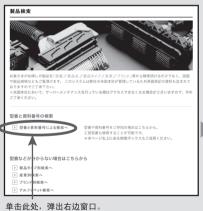
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- The applicable wire range (AWG) contained in this specification catalogue covers the values for using the application tools. When using a hand tool, please refer to the operating manual.



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