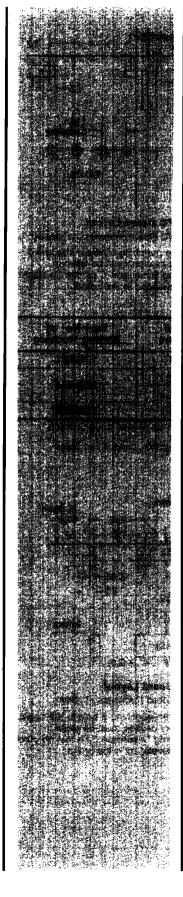
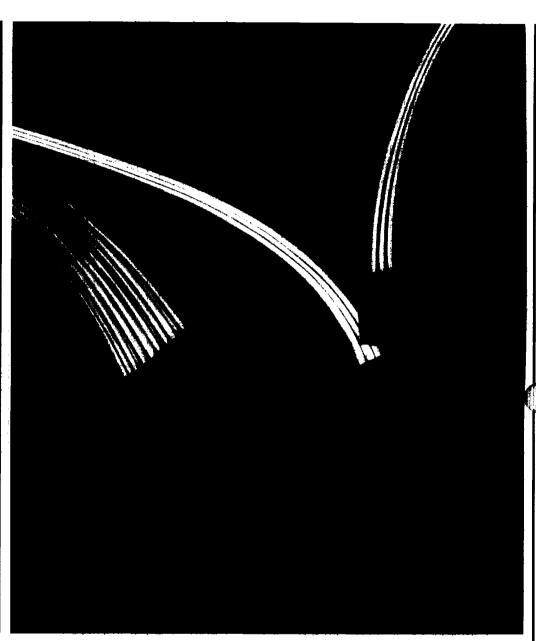
Wire to Board Connectors AMP Dynamic Series Connectors





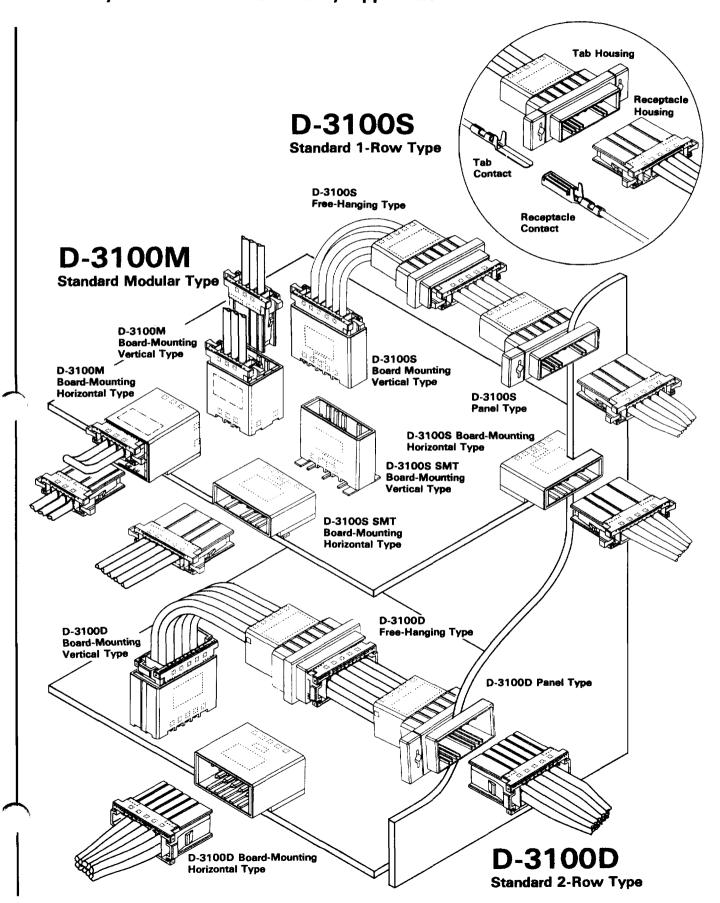
Features

- ■Connector system designed for exclusive use with I/O and power circuits in the power and control boards of heavy electric systems and FA equipment, process computers, FA computers, PCs, NCs, servodrivers, servomotors, inverters, switching power supply, etc.
- Consists of wire-side connector and board-side connector.

- ■Diverse housings are available to meet every specific application.
- ■With contacts standardized, the tool types used can be reduced. Termination can be automated and field maintenance simplified.
- As contacts can be shared, connector quality is stabilized.
- Standardization of contacts leads to stabilization of management and

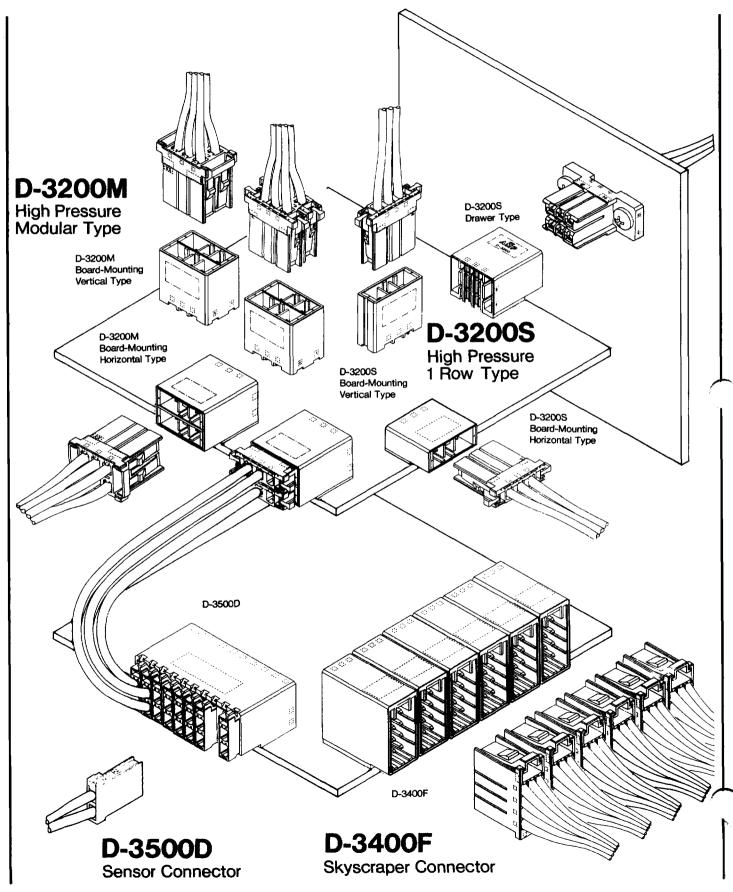
- supply of related parts.
- ■To prevent human errors in termination a common identification mark is impressed on handtools and contacts.
- Housing color and design are coordinated.

Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series List of Dynamic Series Products by Application





Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series List of Dynamic Series Products by Application



Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series Performance Specifications

Pitch	150mil (3.81mm)	200mil (5.08mm)				
Voltage Rating	250V AC	600V AC*				
	·	sition:15A sition:12A				
Current Rating	6-position: 10A					
	16-po:	16-position: 8A				
	(when using	(when using #16 AWG wire)				
Insulation Resistance	10m	nΩ max.				
Dielectric Withstanding Voltage	1,500V	2,200V(1minute				
Operating Temperature	-55	~+105° C				

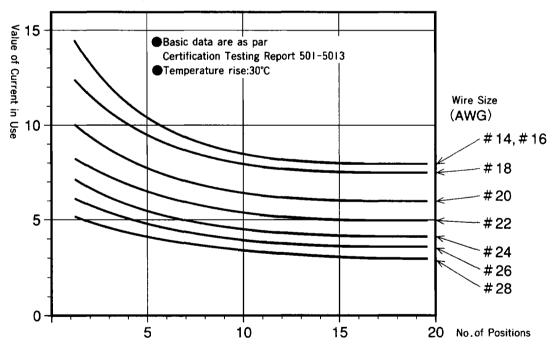
Genarally, the current value of connector is shown as per position. The current rating of this product is 15A as shown in the table. Note that in all circumstances it is the value per position

As the number of positions increases, this value decreases. This decrease can be calculated from the table and the current curve shown in the graph below.

Example:

- ●With a 6-position connector, 10A of current per position or a total of 60A(max) can be carried as shown in the table.
- With a 10-position connector, 8.5A of current per position or a total of 85A(max) can be carried as indicated by dotted lines in the graph below.

Number of Position vs Current Curve (reference)



Material and Finish

_	Description	Meterial	Finish			
	Receptacle contact Tab contact	Copper alloy	Bright tin plating and gold plating			
_	Tab post	Copper alloy	Solder plating and gold plating			
	Housing		ssfiber rein-forced polyester (PBT) 66 MT Type), liquid crystal polymer black color.			



Wire to Board-Connectors AMP Dynamic Series Connectors / D-3000 Series Performance Specifications

Specifications and Instruction Sheets

S	peci	fica	tions	and	Inst	ruction	Sheets	
	_							

Product Specification	108-5349	
Testing Report	501-5013	
Application Specification	114-5148	
Instruction Sheet-Extraction Tool	411-5726	-

Instruction Sheet-Hand Tools

Instruction Sheet-Manual Tools									
Tool No.	IS No.	Tool No.	IS No.						
919600-1		90682-1	408-9933						
919601-1	411-5626	90683-1	408-9935						
919602-1		90684-1	408-9934						
234172-1	411-5714	58571-1	408-4135						
914592-2	411-5561(IS-561J)	58572-1	408-4132						
914595-2	411-5562(IS-562J)								
914596-3	411-5585(IS-585J)								

^{*}Don't fail to obtain Instruction Sheets when you choose to use these tools.

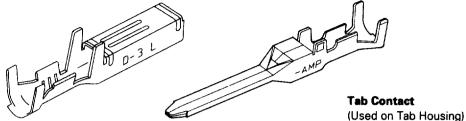
Safety Specifications

The safety specifications listed below are approved on specific part numbers. Contact our Sales Department to check if the part numbers you use are approved or not. Keep in mind that there are instances where values deffer from those given by AMP Specifications.

Series	D-3100,D	-3400 Series(3.81)	mm pitch)	D-3100, D-3400 Series (3.81mm pitch)				
Specifications	Current Rating	Voltage Rating	Temperature Rating	Current Rating	Voltage Rating	Temperature Rating		
AMP Specifications 108-5349	250V AC	See page 583	- 55 to +105℃	600V AC (Signal conn.)	See page 583	- 55 to +105℃		
UL File No.E28476 (Recognized Component)	Determind by requirements of equipment in use.	Determind by requirements of equipment in use	+130℃	Determind by requirements of equipment in use.	Determind by requirements of equipment in use	+130℃		
CSA Report No. LR7189	250V AC	8A max.		250V AC	8A max.			
TÜV License N0. R9151488(VDE0627) IP Protection IP-00 Ivervoltage Classification(II) Number of Repeated Insertions and Withdrawals 50	200V AC	AWG #28= 2A AWG #26= 3A AWG #24= 3A AWG #22= 4A AWG #20= 5A AWG #18= 6A AWG #16= 8A AWG #14= 8A	- 20 to +105℃	400V AC	AWG #28= 2A AWG #26= 3A AWG #24= 3A AWG #22= 4A AWG #20= 5A AWG #18= 6A AWG #16= 8A AWG #14= 8A	- 20 to +105℃		

Wire to Board Connectors AMP Dynamic Series Connectors / D-3000 Series D-3 Contact and Application Tooling

Crimp Type



Receptacle Contact (Used on Receptacle Housing)

		<u> </u>	Ι΄.		Con	tact Part Numb	-	Minimum	Annlie	etion Tool	ine Dart N		
Wire	Range	Wire	Wire		Receptacle			Order Quantity	Mini-	ation Tooling Part Num Hand Tool			
AWG	mm²	Ins. Diameter	Range Mark		Canadaud Ulabanasaa	Tab Contact	for Contact (pieces)	Appli- cator	Standard Type	Economy Type(i)	Economy Type(II) (Dies*)		
28	0.08	0.8 -1.2		ST.	175194 - 🗌	1-175194 - 🗌	175284 - 🗆	4,000	914347-2				
26	0.12	0.0 1.2	0.0 -1.2	S					· ·				
24	0.20	1.0 -1.4		LP.	175216 - 🗌	1-175216 - 🗌	175287 - 🗌	1,000		919600-1	914592-2	90682-1 (90682-2)	
24	0.20	1.2 -1.6		ST.	175195 - 🗌	1-175195 - 🗌	175285 - 🗌	3,500	914348-2				
22	0.30	4700	м					·····				00000 4	
20	0.50	1.7 -2.6		LP.	175217 - 🗌	1-175217 - 🗌	175288 - 🗌	1,000		919601-1	914595-2	90683-1 (90683-2)	
20	0.50	1.8 -2.8		ST.	175196 - 🗌	1-175196 - 🗆	175286 - 🗆	3.000	919547-2				
18	0.85	1.8 -2.8	L	• • • • • • • • • • • • • • • • • • • •				5,000					
16	1.25	2.2 -2.8	_	LP.	175218 - 🗌	1-175218 - 🗌	175289 - 🗌	1,000		919602-1	914596-2	90684-1 (90684-2)	
16	1.25	2220		ST.	917484 - 🗌	1-917484 - 🗀	917485 - 🗌	3,000	234157-2				
14	2.20	2.2 -2.8	2L	LP.	917511 - 🗌	1-917511 - 🗀	917512 - 🗌	1,000		234172-1			

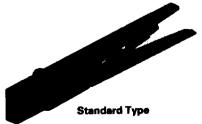
Note: *Enter the following plating code in Part Number suffix-[]:

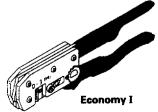
- $-2 = 0.38 \mu \text{ m}$ thick gold plating
- $-3 = 0.76 \mu$ m thick gold plating
- 5 = Tin plating
- *Solder-type Contact: We do not manufacture solder-type contacts for any specific application. However, for your information, the soldering method using the above-listed crimp contacts is given as one-point advice, see page 588.
- *Minimum order quantity is provided. When ordering, specify your requirements by multiplying the quantity. (The figures for Strip Form Contacts denote one-reel's quantities).
- *Minimum order quantity for tooling is one.
- *Mini-Applicators are for use with automachines. (See page 587. For more information, contact our Sales Department).
- *Strip Form contacts are for use with Mini-Applicators (automachines) and Loose-Piece contacts are for Hand tools.

Hand Tools

Three types of hand tool are available; Standard Type for general production and Economy Type (I)and (II)for low-volume production and maintenance. The crimping sections of both Standard Type and Economy Type(I)tools adopt Straight-Action formula for improved reliability as with automatic termination machines. Economy(II)tool is a low-cost version for use in prototyping and

servicing. The die section can be changed for this Economy(II)Tool. Also, by changing dies, you can use the tool sa FA tool (for right-hand use)as described in page 586, or to crimp other lines of contacts from our company. For detailed information, see the catalog of AMP Pro-Crimper(II)hand tools.







~			
For General Production	For Low-Volume Production	For Prototyping No	
Yes	No		
More than 50,000	More than 5,000	More than 5,000	
1	1	1	
	Yes	Yes No	

Wire to Board Connectors AMP Dynamic Series Connectors / D-3000 Series **Application Tooling**

FA Hand Tool

FA hand tool is designed to be capable of handling most of FArelated crimping operation by a single tool in order to simplify harness fabrications suited to the specific needs of FA market. It may be said that the equipment forming the uncleus of the FA system include PCs, CNCs, servo-drivers and servomotors. And the wire used in connecting these equipment ranges in wire size from AWG#26-20 which applies to signal circuits to AWG #18-16 which is for power circuits (See Sketch below).

To crimp such wide-ranging wire sizes with existing contacts and tools, it was necessary to provide three varieties of contacts and tools, S, M, and L. Isn't is possible to perform this operation with a single tool? Devised to satisfy such demand is this handtool to be exclusively used for FA apprication.

**Two types of contacts, M and L, are used. M is applicable to an expanded range of AWG #26-20 in place of usual AWG #24-20, while L covers an reduced range of AWG #18-16 in place of AWG #20-16. Combined, an extended range AWG#26-16 is coverd. Also, though to less extent, insulation diameters for respective wire sizes have been changed. This is to meet specifications in the area of FA applications as much as possible. It is recommended that you use these contacts upon chcking with the table below. Also, this tool is available in two styles as shown below, one for left-hander's use (dextral) and the other for right-hander's use(sinistral). Use whichever fits to you.

Crimping Range A, B, and C are for explanation purpose only and

are not marked on the tool body. Also, note that lefthander's tool has tool has the mark indecated in reverse (mirror image).

For right-hander's use P / N: 58571-1 (sinistral)

Die P / N: 58571-2

The body of right-hander's tool has the same configuration as that of Economy Type (II) and Pro-Crimper II (See Pro-Crimper Catalog). So dies are interchangeable. For left-hander's

For right-hander's

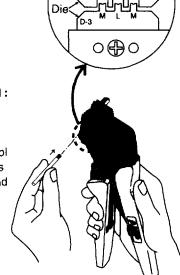
use P / N: 58572-1

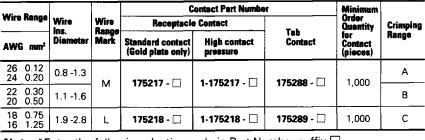
Die P / N: 58572-2

(dextral)

AWG18~16

(Crimp with C range using L contacts)





Note: *Enter the following planting code in Part Number suffix-\(\subseteq\).



 $-3 = 0.76 \mu \text{m}$ thick gold plating

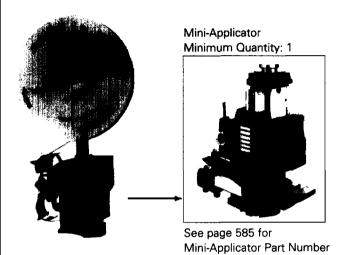
(Crimp with A range using M contacts)

D-3200M Board-mounting - 5 = Tin plating Horizontal Type Die is pre-loaded in the tool body. Minimum order quantity:1 D-3200M Servo-motor / Free hanging Type Servo-driver Application, Typical. D-3100D D-3100D Free-hanging Type Board-mounting Horizontal Type AWG26~24

> AWG22~20 (Crimp with B range using M contacts)

Wire to Board Connectors AMP Dynamic Series Connectors / D-3000 Series **Application Tooling**

(Automatic Termination Machine)



- ■AMP-O-LECTRIC* Terminating Machine (Model JJ-1) ●Remodelled from conventional AMP-O-LECTRIC machines, this bench-type unit features low noise during operation and compact and light weight in construction. It enables speedy and efficient operation.
 - A range of existing applicators can be used without modification.
 - Press Tact Time is 0.5 second, providing high-quality crimping.
 - Crimping capacity is 1t with this machine as against conventional machines' 1.5t.
 - In conjunction with AMP applicators, it can produce more than 6,000 high-quality terminations per hour.
 - Stable operation is ensured by simple clutch mechanism of proven reliability.
 - Deviation of crimp heights is ±0.02mm. Crimp heights can be set easily.
 - ODimensions: 250mm W x300mm D x 450mm H
 - OWeight: 63kg
 - OPower supply: 100V AC
 - ONoise level: 78dBA
 - OApplicable wire range: AWG #28-14

Machine body Part Number: 914717-1

MAMP-O-LECTRIC G Terminator

(Semi-Automatic Termination Machine)

- Extraordinarily low noise-76 dB.
- Precise adjustment of crimp heights can be done automatically or manually.
- No tool is required for changing applicators.
- ■Equipped with total and lot counters(LED Multi-Display).
- ■CQM (Crimp Quality Moniter)can be loaded.

ODimensions: 643mm W x 442mm D x 508mm H

OWeight: 110kg

OPower supply: 100V AC 50 / 60Hz OCycle time: 5,000 cycles / hour max. Machine body Part Number: □-354500-□. See page 585 for Mini-Applicator Part Number.

。那些说话。在1977年,

EAMP-O-MATIC Side Feed Stripper Crimper Mode II

(Semi-Automatic Termination Machine)

- An improved version of the preceding model that has been popular for its superb performance in wire stripping and high-speed processing of jacketed cable for external connection. Fertures increased productivity, easier operation and expanded
- ●Used for automated fabrication of harness assemblies using D sub-connectors for external connection, a slim version of AMPLIMITE II-J connector.
- Fine adjustment of crimp heights to be kept within the specifications is easy through precise adjustment mechanism.
- ODimensions: 355mm W x 457mm D x 838mm H
- OWeight: 68kg
- OPower supply: 120V AC 50 / 60Hz, 5A
- OAir supply: 80-100 psi OMachine cycle time: 1.3 sec
- OApplicable wire range: AWG #28-14 (jacketed cable and discrete wire)

Machine body Part Number: 854040-3

854040-4 equipped with CQM(Crimp Quality Monitor) For Mini-Applicators, contact our Sales Department.





Wire to Board Connectors AMP Dynamic Series Connectors / D-3000 Series Application Tooling

Battery-driven Power Crimping Tool

(used for Loose-Piece contacts)

- Battery-powered portable tool.
- Consists of the tool body, a battery, a recharger and crimping dies.

Tool Body Part Number : 752861-2 Instruction Sheet : IS 411-5166

Applicable Dies (See page 585 for contacts and applicable ranges)

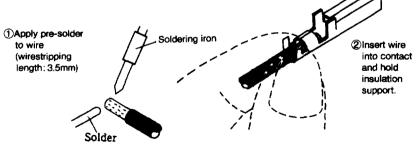
Contact Size	Crimping Dies P / N	lustruction Sheet No.
S	919597-1	IS 411-5624
М	939000-1	IS 411-5640
L	939001-1	IS 411-5641

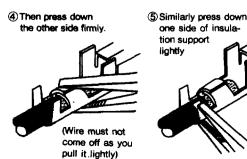
We do not supply parts other than crimping dies. You can purchase batteries and rechargers from our authorised distributors Ryuden-sha Co. Ltd. and Nihon Denkakogyou Co. Ltd. For details, contact our Sales Department.

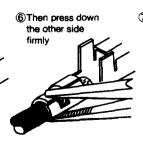


One-Point Advice

You may have experienced trouble with no crimping tool on hand while trying to work for prototype or maintenance. In such a case, we recommend that you solder in the following method:

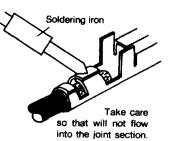






3 Press down one side of wire barrel lightly with radio pliers.

Tinally, apply soldering iron and melt pre-solder inside. For better result, add a small amount of solder.



Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series Application Tooling

Extraction Tool

This tool is used to extract contacts from wire-type tab/receptacle housings.



Part Number: 914677-1 Minimum order lot: 1

*Take care not insert into the Contact Section. If you have inserted by error, replace the damaged contact with a new one before proceeding the work.



①Insert Extraction Tool into the narrow section of the upper convex cavity of housing in the direction as shown (MaKe sure the Tool's top and bottom in correct position.)



The tip of Extraction Tool lifts up housing lance, making contact free.



3 Contact can now be pulled out.

■keying Plug

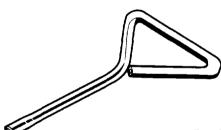
(used to prevent misinsertion)

Keying plug is used to preclude the possibility of contacts inserted in wrong directions when using connectors of the same size end-to-end.



Part Number: 175855-1 Minimum order lot: 500

■Tab Contact Cutting Jig



Part Number: 919041-1 Minimum order lot: 1

How To Use Plug and Jig

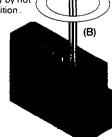
★Some of the products in this Series (D-3100S/D-3100M/D-3200S/D-3200M) are preloaded with keying plugs for preventing misinsertion.

①Insert a keying plug in one position of ②Wrench off a tab in the corresponding receptacle Housing. position of mating Tab Header and

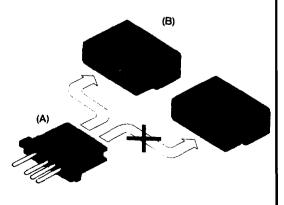
f' @Wrench off a tab in the corresponding position of mating Tab Header and empty that position. To wrench off the tab, insert Cutting Jig into its root and turn Jig as shown.

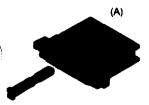
*For Tab housing (Panel/Free hanging Types), leaving Housing empty by not inserting a contact in one position.





3This being done, contacts cannot be inserted in wrong directions.





Wire to Board Connectors AMP Dynamic Series Connectors / D-3000 Series Connector Mouting Hardware

L Fittings

Used to secure free-hanging type tab housings onto panels. Two styles, large and small, are available, the former for large-sizes housings and the latter for small housings.

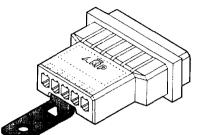
Applicable housings are spesified in the table of housings.



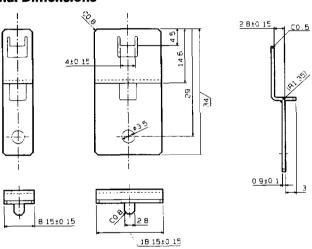
Part Number : 900121-2(S)
Minimum Order Quantity: 500



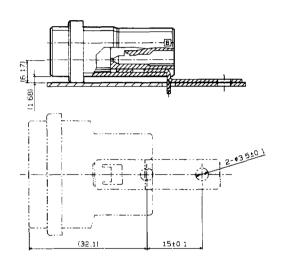
Part Number : 900121-4(M)
Minimum Order Quantity: 500



External Dimensions



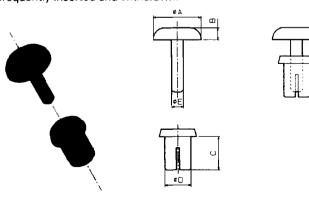
P/N:900121-2(S) P/N:900121-4(M)

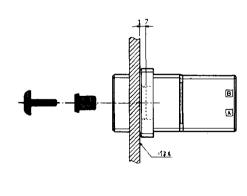


The location where housing is attached varies by series and size. Check with sample.

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.







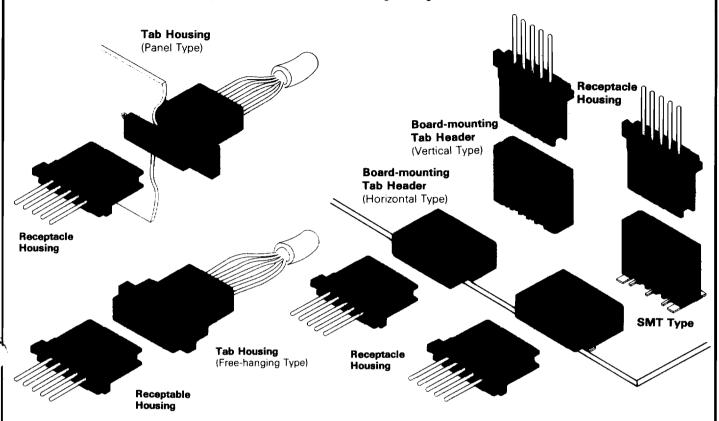
Recommended panel hole dimention

Part Number	Panel Thickness	Dimensions Dimensions						Insertion Force	Retention Force	Minimum Order	
		Α	В	Ç	D	E	insertion Force	Netention Force	Quantity		
900128-1	0.3-1.3	6.4	1.6	4.5	3.5	1.95	2-3kg	13kg Min. *	1,000		
100128-2	1.3-2.3	6.4	1.6	5.5	3.5	1.95	2-3kg	13kg Min. *	1,000		
100128-3	2.8-3.8	6.4	1.6	7.0	3.5	1.95	2-3kg	13kg Min. *	1,000		

^{*}When 2push rivets are used.

Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3100S—Standard 1-row Type

Appearance Board mounting pitch: Horizontal Type 150 mils(3.81mm)/Vertical Type 150 mils(3.81mm) Dielectric Withstanding Voltage=1,500 V(for one minute) Voltage Rating=250V AC



Receptacle Housing	Tab	Housing	Board -mounting Tab Header			
	(Panel Type)	(Free-hanging Type)	(Horizontal Type)	(Vertical Type)		

No. of	Keyig	Receptacle		Tab Housing		Board-mountii	ng Tab Header	Minimum
Position	vekiñ	Housing	Panel Type	Free-hanging Type	L Fitting	Horizontal Type	Vertical Type	Order Lot
2	See D-32	200S Series						
2	Х	1-178288-3*1	1-178802-3	1-177648-3	S	1-178293 -	1-178313 -	
3	Υ	2-178288-3*2	2-178802-3	2-177648-3	S	2-178293 -	2-178313 -	230
, X 1-178288-4		1-178288-4			S	1-178294 - 🗌	1-178314 -	400
4	Υ	2-178288-4			S	2-178294 -	2-178314 -	190
5	Х	1-178288-5*3	1-178802-5	1-177648-5	М	1-178295 - 🗌	1-178315 -	170
6	Х	1-178288-6			М	1-178296 -	1-178316 -	450
O	Υ	2-178288-6	_		М	2-178296 -	2-178316 -	150
8	Х	1-178288-7*4	1-178802-7	1-177648-7	М	1-178297 -	1-178317 - 🗌	120
10	Х	1-178288-8	1-178802-8	1-177648-8	М	1-178298 -	1-178318 -	400
10	Y	2-178288-8	2-178802-8	2-177648-8	М	2-178298 -	2-178318 -	100

Note: *Enter the following plating codes in - after Part Numbers: -2: 0.38 µm thick gold plating -3: 0.76 µm thick gold plating -5: Solder plating

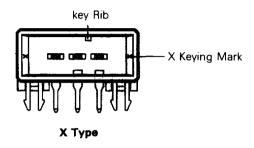
^{*1, *3} and *4 can be used as SMT Type Receptacle Housing. *1 and *2 can also be used in modular configuration in combination with D-3100M Tab Header.

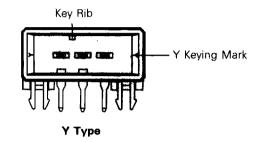


Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3100S—Standard 1-row Type

keying

This product (D-3100S) is provided with keying plugs to prevent misinsertion of contacts. Two types are available; X Type and Y Type (Shown below is the mating front of Tab Header)



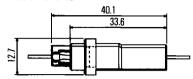


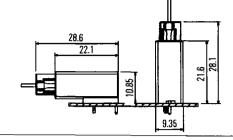
Wire to Board Connectors

AMP Dynamic Series Connectors/D-3000 Series

D-3100S—Standard 1-row Type

■Mating Dimensions

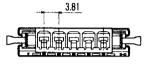


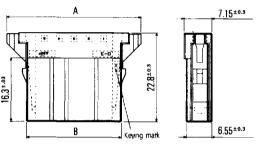


■Receptacle Housing



No. of	Part Number	Dime	nsions
Pos.	rari Number	Α	В
2			
3	□-178288-3	26.76	16.7
4	□-178288-4	30.57	20.51
5	□-178288-5	34.38	24.32
6	□-178288-6	38.19	28.13
8	□-178288-7	45.81	35.97
10	□-178288-8	53.43	43.37

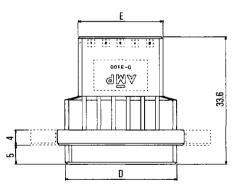


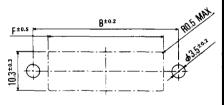


■Board-mounting Tab Housing

Panel Type





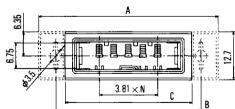


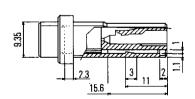
Panel Cutout

When mounting panel from the rear, either apply clamping torgue of less than 3kg, or use washers.

Free-hanging Type





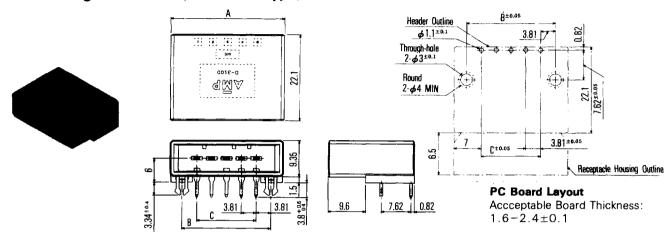


No. of	Part Number		Dimensions						
Pos.	Panel Type	Free-hanging Type	Α	В	C+	D	E	F	
2	 -								
3	□-178802-3	□-177648-3	40	31	25.57	21.62	14.62	22.6	
4									
5	□-178802-5	□-177648-5	47	38	33.19	29.24	22.24	30.2	
6									
8	□-178802-7	□-177648-7	59	50	44.62	40.67	33.67	41.6	
10	□-178802-8	□-177648-8	67	58	52.24	48.29	41.29	49.2	

^{*}Applieable to Free-hanging Type only.

Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3100S—Standard 1-row Type

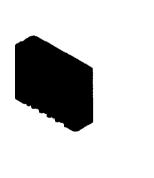
■Board-mounting Tab Header (Horizontal Type)

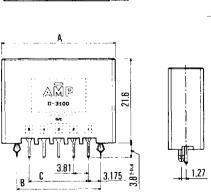


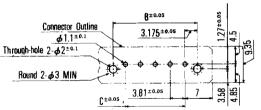
Solder tine section is 1.0 sq.

No. of	Do-t Noveboo		Dimensions					
Pos.	Part Number	Α	B	С				
2								
3	□-178293-□	21.62	15.24	7.62				
4	□-178294-□	25.43	19.05	11.43				
5	□- 178295- □	29.24	22.86	15.24				
6	□-178296-□	33.05	26.67	19.05				
8	□-178297-□	40.67	34.29	26.67				
10	□-178298-□	48.29	41.91	34.29				

Board-mounting Tab Header (Vertical Type)







PC Board Layout
Acceptable Board Thickness:
1.6-2.4±0.1

Solder tine section is 1.0 sq.

No. of	Dort Number		Dimensions					
Pos.	Part Number	Α	В	С				
2								
3	□-178313-□	21.62	13.97	7.62				
4	□-178314-□	25.43	17.78	11.43				
5	□-178315-□	29.24	21.59	15.24				
6	□-178316-□	33.05	25.4	19.05				
8	□-178317-□	40.67	33.02	26.67				
10	□-178318-□	48.29	40.64	34.29				

Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3100S—Standard SMT Type

Appearance Withstanding Voltage=1,500 V(for one minute) Voltage Rating=250V AC

Receptacle Housing

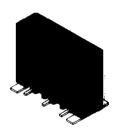
Board-mounting Tab Header

(Horizontal Type)

(Vertical Type)





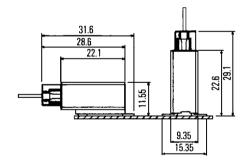


Part Number Chart

No. of	V accional	Becontools Hermins	Board-mountin	Minimum	
Pos.	Keying	Receptacle Housing .	Horizontal Type	Vertical Type	Order Lot
3	×	1-178288-3			230
5	×	1-178288-5	1-177662-[]**	1-177665-□	170
8	×	1-178288-7	1-179188-🗆		120

- Note: ★ Enter the following plating codes in after Part Numbers:
 - -2: 0.38 µm thick gold plating -3: 0.76 µm thick gold plating
 - * Material of Tab Heaber: P.P.S.
 - *D-3100S series. **160 pieces minimum lot.

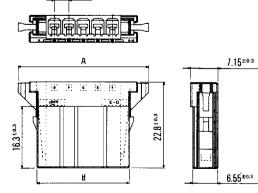
Mating Dimensions



3.81

■Receptacle Housing





No. of	Part Number	Dimen	sions
Pos.	Part Number	Α	B
3	□-178288 -3	26.76	16.7
5	□-178288-5	34.38	24.32
8	□-178288-7	45.81	35.97

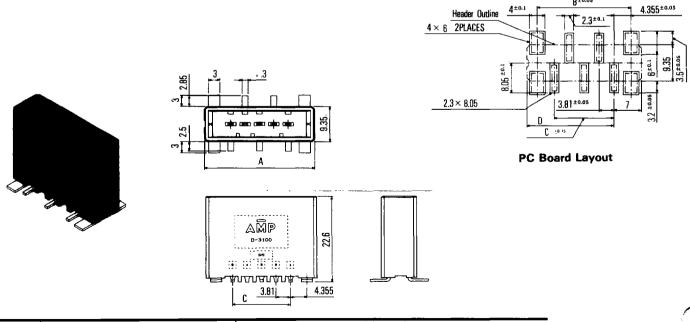


Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3100S—Standard SMT Type

Board-mounting Tab Header (Horizontal Type) 2320.1 × 5.120.1 SPIACES Header Outline 83820.1 × 420.1 2PIACES PC Board Layout PC Board Layout

No. of Pos.	Part Number	Dimensions					
	Fart Number	Α	В	С	D		
3	 -						
5	□-177662-□	29.24	22.86	15.24	22.24		
8	□-179188-□	40.67	34.29	26.67	33.67		

■Board -mounting Tab Header (Vertical Type)



No. of	Don't Alicenters		Dimensions						
Pos.	Part Number	Α	В	С	D				
3					<u> </u>				
5	□-177665-□	29.24	23.95	15.24	22.24				
8									

Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3100D Standard 2-row Type

Appearance Board mounting pitch: Horizontal Type 150 mile(3.81mm)/Vertical Type 150 mils(3.81mm) Dielectric Withstanding Voltage=1,500V (for one minute) Voltage Rating=250V AC Receptacle Housing **Broad-mounting** Tab Header (Vertical Type) **Tab Housing** (Panel Type) **Broad-mounting** Tab Header (Horizontal type) Tab Housing (Free-hanging Type) Receptacle Receptable Housing Housing

Receptacle Housing	Tab	b Housing Broad-mounting Tab Head		
	(Panel Type)	Type) (Free-hanging Type) (Horizontal Type)		(Vertical Type)
				The state of the s
			A Park	

Receptacle Housing

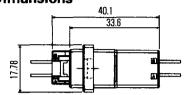
Part Number Chart

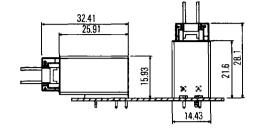
No.of	Receptacle Housing		Tab Housing		Board-mounting	Minimum	
Pos.	neceptacie nousing	Panel Typė	Free-hanging Type	L Fitting	Horizontal Type	Vertical Type	Order Lot
4				S			280
6	178289-3	178803-3	178964-3	S	178303-	178323-	230
8				S			190
10	178289-5	178803-5	178964-5	М	178305-	178325-	170
12	178289-6	178803-6	178964-6	М	178306-	178326-	150
16	178289-7	178803-7	178964-7	М	178307-	178327-	120
20	178289-8	178803-8	178964-8	М	178308-	178328-	100

Note: ★ Enter the following plating codes in -□ after Part Numbers -2: 0.38 µm thick gold plating -3: 0.76 µm thick gold plating -5: Solder plating

Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3100D—Standard 2-row Type

Mating Dimansions

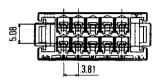


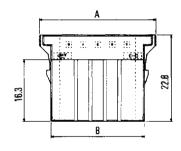


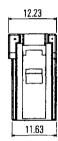
■Receptacle Housing



No. of	December 11	Dime	nsions
Pos.	Receptacle Housing	Α	В
4			
6	178289-3	24.66	16.70
8	The state of the s		
10	178289-5	31.98	24.32
12	178289-6	35.09	28.35
16	178289-7	42.71	35.97
20	178289-8	51.03	43.37

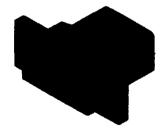


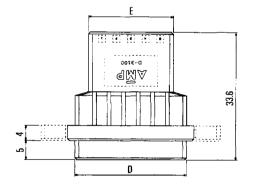


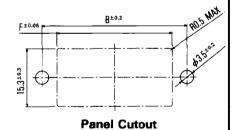


■Tab Housing

Panel Type



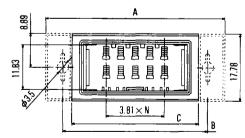


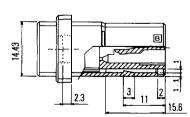


When mounting panel from the rear, either apply clamping torgue of less than 3kg, or use washers.

Free-hanging Type



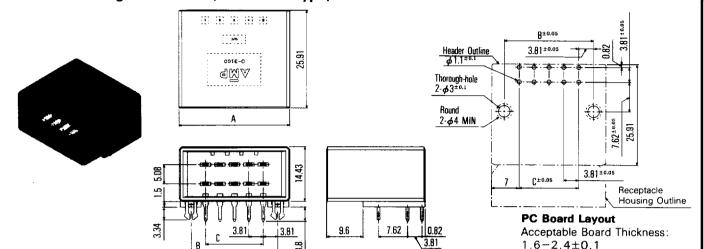




No. of	Part	Part Number			Dimensions						
Pos.	Panel Type	Free-hanging Type	A	В	С	D	E	F			
4											
6	178803-3	178964-3	40	31	25.57	21.62	14.62	22.6			
8											
10	178803-5	178964-5	47	38	33.19	29.24	22.24	30.2			
12	178803-6	178964-6	51	42	37.00	33.05	26.05	34.0			
16	178803-7	178964-7	59	50	44.62	40.67	33.67	41.6			
20	178803-8	178964-8	67	58	52.62	48.29	41.29	49.2			

Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3100D—Standard 2-row Type

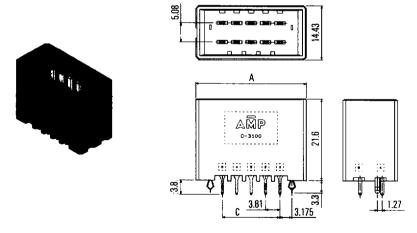
■Board -mounting Tab Header (Horizontal Type)

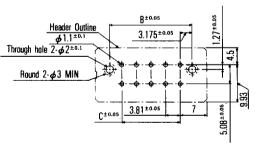


Solder tine section is 1.0 sq.

No. of	Part Number	Dimensions					
Pos.	Part Number	Α	В	С			
4				_			
6	178303-	21.62	15.24	7.62			
8	-	· ·					
10	178305-	29.24	22.86	15.24			
12	178306-	33.05	26.67	19.05			
16	178307-	40.67	34.29	26.67			
20	178308-	48.29	41.91	34.29			

■Board -mounting Tab Header (Vertical Type)





PC Board Layout Acceptable Board Thickness: 1.6-2.4±0.1

Solder tine section is 1.0 sq.

No. of	Part Number	Dimensions				
Pos.	Part Number	Α	В	С		
4						
6	178323-	21.62	13.97	7.62		
8						
10	178325-	29.24	21.59	15.24		
12	178326-🗌	33.05	25.4	19.05		
16	178327-🗌	40.67	33.02	26.67		
20	178328	48.29	40.64	34.29		

Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3100M—Modular Type

Appearance

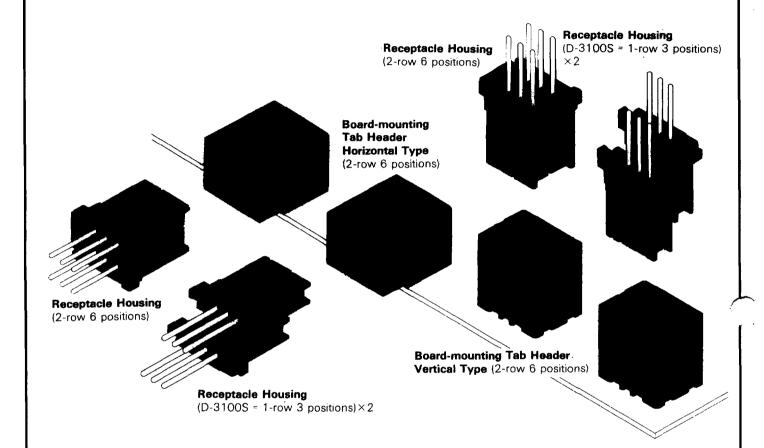
Connectors Can Be Used in Modular Configrations In Combination With D-3100S.

Ideally Suited For Allocation of Signal Circuits

Board mounting pitch: Horizontal Type 150×150miles (3.81×3.81mm) /

Vertical Type 150×300miles (3.81×7.62mm)

Dielectric Withstanding Voltage = 1,500V (for one minute) Voltage Rating = 250V AC



Board-mounting Tab Header Receptacle Housing (Vertical Type) (Horizontal Type)

Part Number Chart

		Board-mounting	Minimum		
No. of Pos.	Keying	Receptacle Housing	Horizontal Type	Vertical Type	Order Lot
	XX		1-178137-	1-1781 <i>4</i> 1-	230
6			2-178137-□		230
ŭ þ	XY	3-178127-6	3-178137-	3-178141-	230

Note: * Enter the following plating codes in - after Part Numbers: -2: 0.38 μ m thick gold plating -3: 0.76 μ m thick gold plating -5: Solder plating



Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3100M——Modular Type

keying

This product (D-3100M) is provided with keying to prevent mismationg of connector halves. Keying is available in three types — XX Type, YY Type and XY Type. (Shown below is the mating surface of Tab Header).

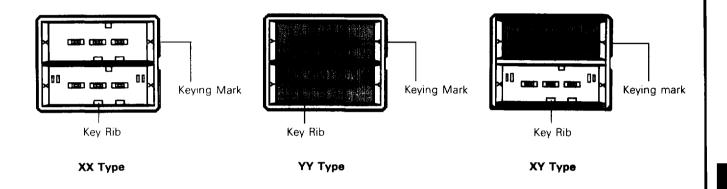
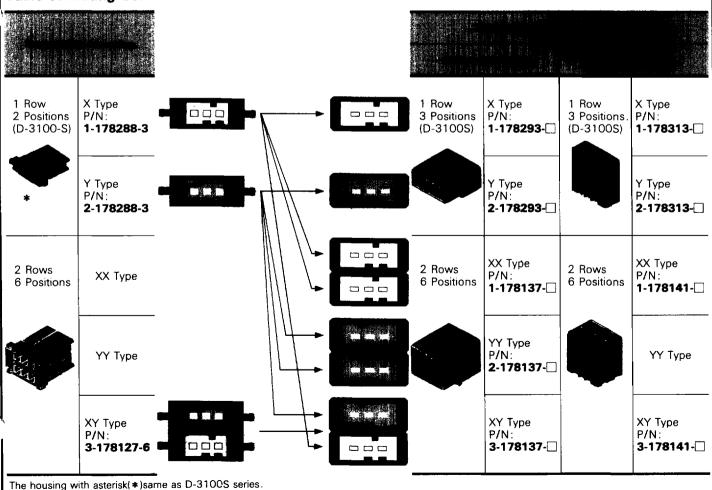


Table of Mating Combination

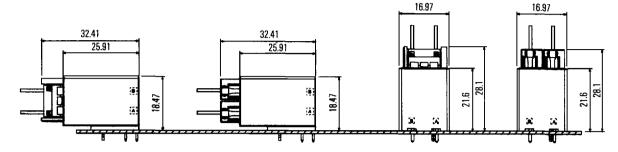


601

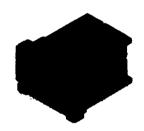


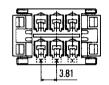
Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3100M Modular Type

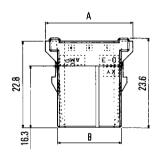
Mating Dimensions

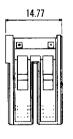


■Receptacle Housing









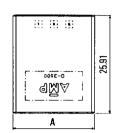
No. of	Vovina	Part Number	Dimensions			
Pos.	Keying	Part reumber	Α	В		
6	XY	3-178127-6	24.76	16.7		

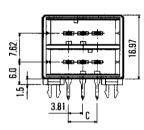
Although external or mounting dimensions are described on the catalog, the specifications are subject to change. When selecting products to your requirements, please request the appropriate drawings. Product Specifications, Instruction Sheets, etc., are also available. It is recommended that you request these documents as well.

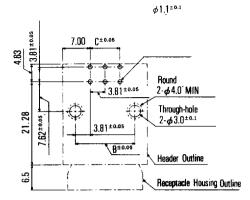
Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3100M—Modular Type

■Board-mounting Tab Header (Horizontal Type)



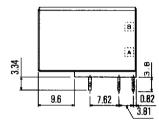






PC Board Layout

Acceptable Board Thickness: 1.6-2.4±0.1

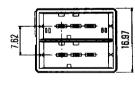


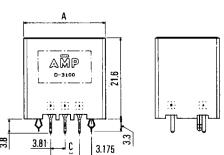
Solder	tine	section	is	1	.0	Sq	
--------	------	---------	----	---	----	----	--

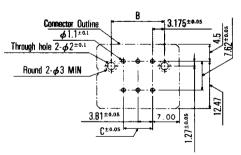
No. of	Keying	Part Number	Dimensions			
Pos.	Keying	Part Number	A	В	С	
	XX	1-178137-				
6	YY	2-178137-[]	21.62	15.24	7.62	
	XY	3-178137-□	1			

■Board-mounting Tab Header (Vertical Type)









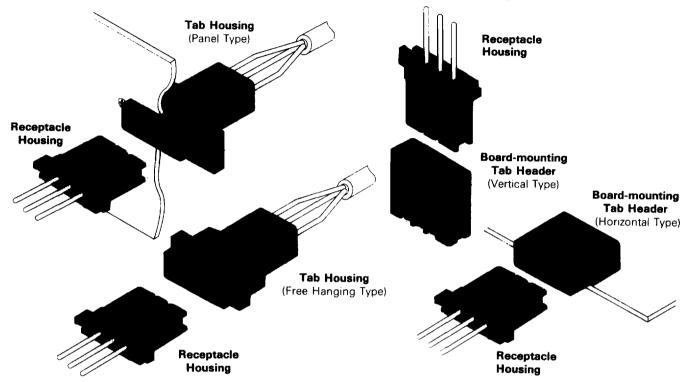
PC Board Layout
Acceptable Board Thickness: 1.6-2.4±0.1

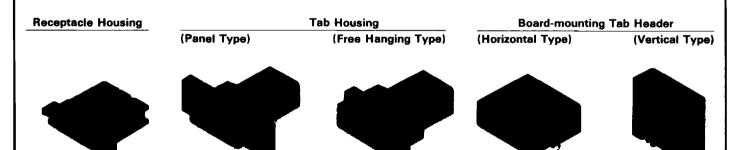
Solder tine section is 1.0 sq.

No. of		Don't Normalian	Dimensions			
No. of Pos.	Keying Part Number	A	В	С		
	XX	1-178141-				
6	YY		21.62	13.97	7.62	
	XY	3-178141-				



Appearance Bard mounting pitch: Horizontal Type 200miles (5,08mm) Dielectric Withstanding Voltage = 2,200V (for one minute) Voltage Rating = 600V AC (per connector)





Part Number Chart

No. of	Varion	Receptacle	Tab Housing			Board Mounting Tab Header		Minimum
Pos. Keying	Housing	Panel Type	Free Hanging Type	L Fitting	Horizontal Type	Vertical Type	Order Lot	
2	X	1-178128-2	1-179553-2	1-179552-2	S	1-179276-	1-917337-	200
2 [Υ	2-178128-2	2-179553-2	2-179552-2	S	2-179276-	2-917337-	260
	X	1-178128-3*1	1-17 95 53-3	1-179552-3	S	1-178138-	1-178136-	200
3	Υ	2-178128-3*1	2-17 95 53-3	2-179552-3	S	2-178138-	2-178136-	200
	Х	1-178128-4	1-179553-4	1-179552-4	S	1-179277-	1-917338-	470
4	Υ	2-178128-4	2-179553-4	2-179552-4	S	2-179277-	2-917338-	170
_	Х	1-178128-5"	Llan 2 row 6 m	onition D 2200M		1-316130-	1-316132-	1.10
5	Y	2-178128-5"		Use 2-row 6 position D-3200M,		2-316130-	2-316132-	140
_	X	1-178128-6"	1 '	in place 5 and 6 posision Panel and		1-316131-	1-316133-	
6	Y	2-178128-6'1	Free-hanging	Types.		2-316131-	2-316133-	120

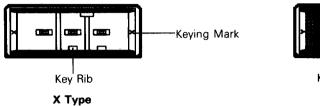
Note: Enter the following planting codes in - after Part Numbers:
-2:0,38 \(\mu \) thick gold plating
-3:0,76 \(\mu \) thick gold plating
-5: Solder plating

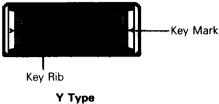
* *1 and *2 can also be used in modular configuration with D-3200M Tab Housing and Tab Header.



keying

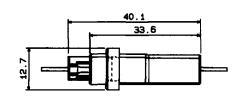
This product (D-3200S) is provided with keying to prevent mismating of the connector halves. Keying is available in two types —S Type and Y Type. (Shown below is the mating surface of Tab Header.)

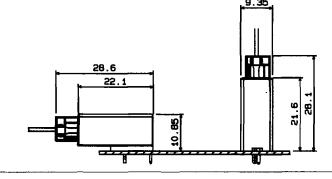






Mating Dimensions





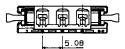
External Dimension

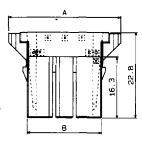
■Wire Application Type Receptacle Housing



5-and 6-position receptacle housings differ slightly in shape with each other. Check with diagram.

No.of	5 . t N	Dimer	ensions	
Pos.	Part Number	Α	В	
2	□-178128-2	24.62	14.16	
3	□-178128-3	29.7	19.24	
4	□-178128-4	34.78	24.32	
5	□-178128-5	39.86	29.4	
6	□-178128- 6	44.94	34.48	







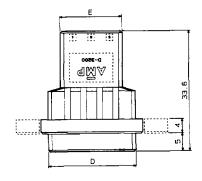
■Tab Housing

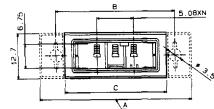
Panel Type

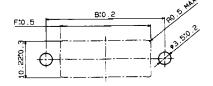


Free Hanging Type

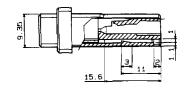






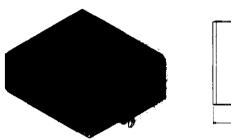


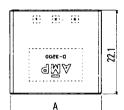
When mounting panel from the rear, either apply clamping torgue of less than 3kg, or use washers.

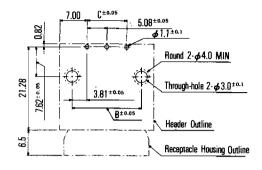


No.of	Part	Number			Dime	nsions		
Pos.	Panel Type	Free Hanging Type	Α	В	С	D	E	F
2	□-1795 53-2	□-179552-2	36.83	28	23.03	19.08	12.08	20
3	□-179553-3	□-179552-3	41.91	33	28.11	24.16	17.16	25
4	□-179553-4	□-179552-4	46.99	38	33.19	29.24	22.24	30

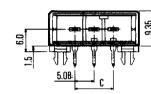
■Board-mounting Tab Header (Horizontal Type)

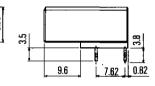






PC Board Layout
Acceptable Board Thickness:
1.6-2.4±0.1

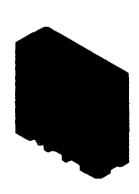


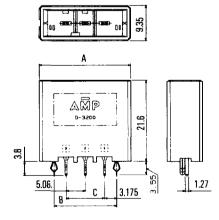


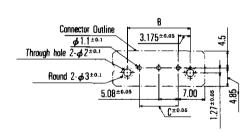
Solder tine section is 1.0 sq.

No.of	Dort Number	Dimensions				
Pos.	Part Number	A	В	С		
2	□-179276-□	19.08	12.7	5.08		
3	□-178138-□	24.16	17.78	10.16		
4	□-179277-□	29.24	22.86	15.24		
5	□-316130-□	34.32	27.84	20.32		
6	□-316131-□	39.4	33.02	25.4		

■ Board-mounting Tab Header (Vertical type)







PC Board Layout
Acceptable Board Thickness:
1.6-2.4±0.1

Solder tine section is 1.0 sq.

No.of	Dant Number			
Pos.	Part Number	Α	В	С
2	□-917337-□	19.08	11.43	5.08
3	□-178136-□	24.16	16.51	10.16
4	□-917338-□	29.24	21.59	15.24
5	□-316132-□	34.32	26.67	20.32
6	□-316133-□	39.4	31.75	25.4



Wire to Board Connectors AMP Dynamic Series Connectors / D-3000 Series D-3200S SMT Type

Receptacle Housing and Board Mount Tab Header

Appearance Dielectric Withstanding Voltage: 2,200V(1min.)

Voltage Rating: 600V AC (when one connector is used)

Receptacle Housing Board-Mount Tab Header (Horizontal)

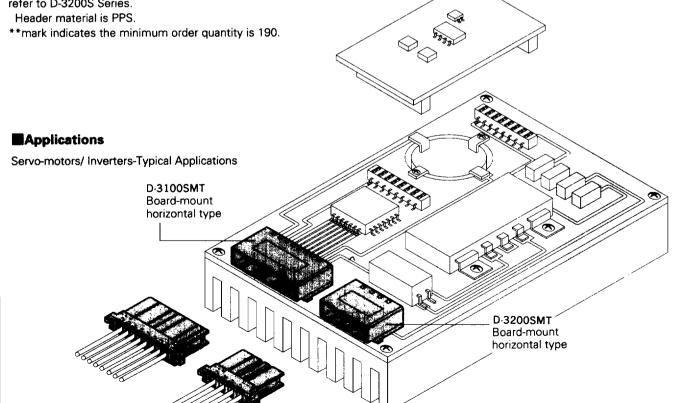
Receptacle Contact·····For each line of contacts, refer to the appropriate page.

No of Bositions	Varia-	Part Number of	Part Number of Board-Mount Tab Header	Minimum Order
No. of Positions	Keying	Receptacle Housing*	Horizontal Type	Lot
2	×	1-178128-2		260
3	×	1-178128-3	1-917389 -□**	200
4	×	1-178128-4		170
5	×	1-178128-5		140
6	×	1-178128-6		120

Note: Enter the following plating code in Part Number suffix- . Gold plating only for SMT Type.

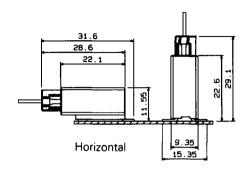
- $-2:0.38 \mu m$ thick gold plating
- -3:0.76 μ m thick gold plating

*marked Part Numbers are of the same design as D-3200S Series. For dimentions, refer to D-3200S Series.



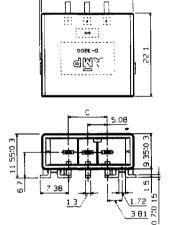
Wire to Board Connectors AMP Dynamic Series Connectors / D-3000 Series D-3200S SMT Type

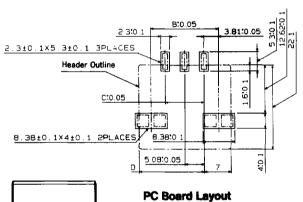
■Mating Dimensions

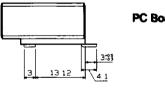


External Dimensions Board-mount Tab Header (Hrizonal Type)









No. of	Part Number of		Dime	nsions	
Position	Tab Header	A	В	С	D
3	91 7389 - 🗍	24.16	17.78	10.16	17.16



Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series -Modular Type D-3200M-

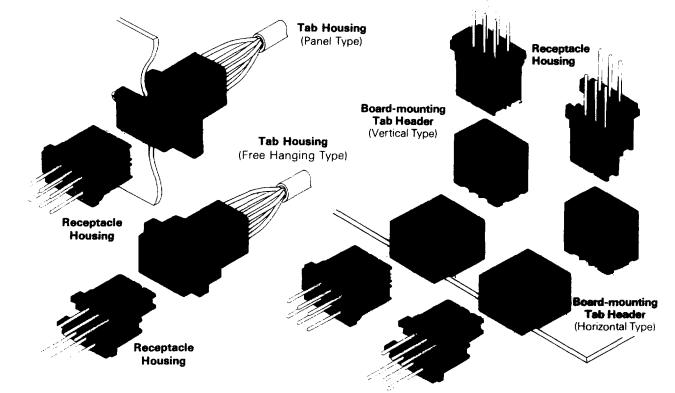
Appearance

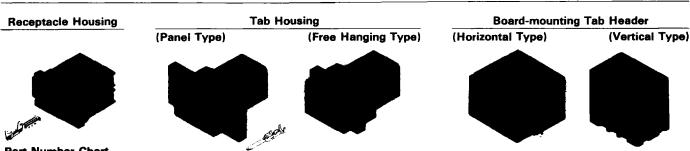
Connectors Can Be used In Modular Configurations In Conbination With D-3200S.

Ideally Suited For Allocation of Power Circuits.

Broad mounting pitch Horizontal Type 200x2000mils (5.08×5.08mm) Vertical Type 200×300mils (5.08×7.62mm)

Dielectric Withstanding Voltage = 2,200V (for one minute) Voltage Rating = 600V AC (per connector)



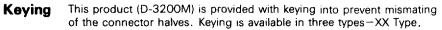


No. of	Keying	Receptacle	Tab Housing*			Board Mountin	Minimum	
Pos.		Housing	Panel Type	Free Hanging Type	i. Fitting	Horizontal Type	Vertical Type	Order Lot
	XX	1-178129-6	1-179555-3	1-179554-3	S	1-178139-	1-178140- 🗌	200
6	YY	2-178129-6	2-179555-3	2-179554-3	S	2-178139-	2-178140- 🗌	200
	XY	3-178129-6	3-179555-3	3-179554-3	S	3-178139-	3-178140- 🗌	200
	XX	1-917659-5	_	_	М	1-316080-	1-917657-	140
10	YY	2-917659-5	_		М	2-316080-	2-917657-	140
	XY	3-917659-5			М	3-316080-	3-917657-	140
	XX	1-917659-6	1-179555-6	1-179554-6	М	1-316081-	1-917658- 🗌	120
12	YY	2-917659-6	2-179555-6	2-179554-6	М	2-316081-	2-917658- 🗌	120
_	XY	3-917659-6	3-179555-6	3-179554-6	М	3-316081-	3-917658- 🗌	120

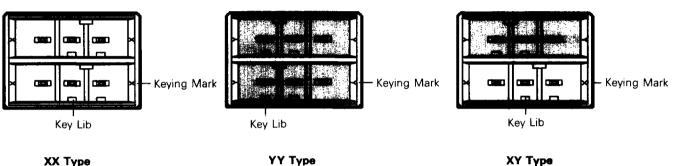
Note: Enter the following plating codes in- \square after Part Numbers : -2:0.38 μ m thick min. gold plating -3:0.76 μ m thick min. gold plating

^{*}mark can also be used in Drawer connector in combination with D-3200M Drawer Type.

Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3200M Modular Type

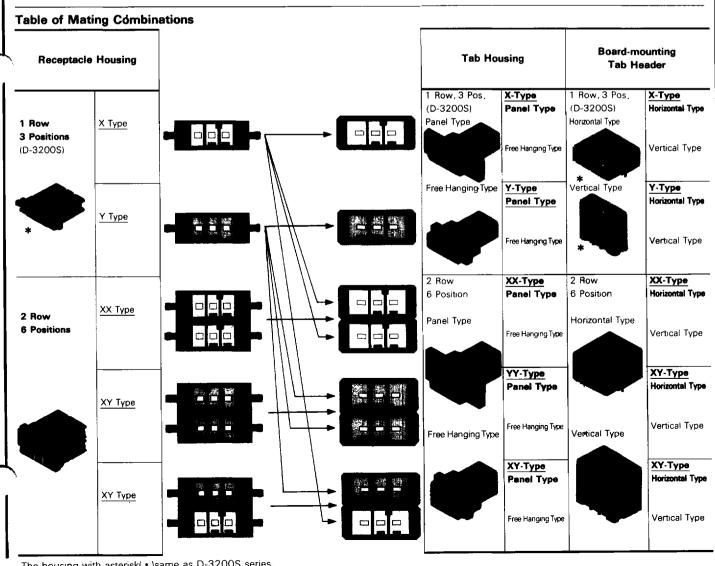


YY Type and XY Type. (Shown below is the mating surface of Tab Header.)



XX Type

XY Type



The housing with asterisk(*)same as D-3200S series.

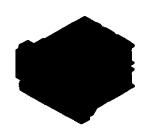


Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3200M——Modular Type

Mating Dimensions 16.97

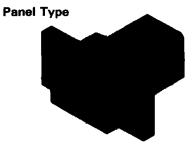
External Dimension

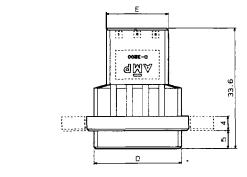
■Receptacle Housing

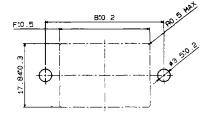


A Row	
Circuit #1	
Α	14 77
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
I	السيا السا
B Keying Mark	(6 55)
	B Row A Row

No.of	David Namehou	Dime	nsions
Pos.	Part Number	Α	В
6	□-178129-6	27.3	19.24
10	□- 917659 -5	37.46	29.4
12	□-91 7659 -6	42.54	34.48

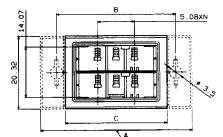






When mounting panel from the rear, either apply clamping torgue of less than 3kg, or use washers.



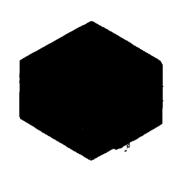


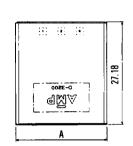
a l	₿
17.02	
	- Francisco -
	15.6

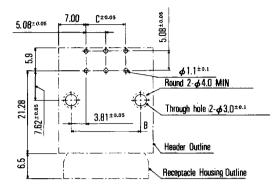
No.of	Part	Dimensions						
Pos.	Panel Type	Free Hanging Type	Α	В	С	D	E	F
6	□-179555-3	□-179554-3	41.91	33	28.11	24.16	17.16	25
12	□-179555-6	□-179554-6	57.91	49	43.35	39.4	32.4	41

Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3200M——Modular Type

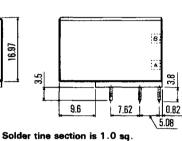
■Board-mounting Tab Header (Horizontal Type)







5.08 C R



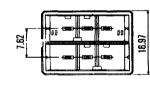
PC Board Layout

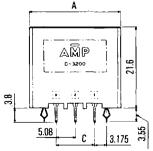
Acceptable Board Thickness: 1.6-2.4±0.1

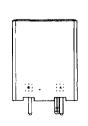
No.of	Dort Number	Dimensions			
Pos.	Part Number	Α	В	С	
6	□-178139-□	24.16	17.78	10.16	
10	□-316080-□	34.32	27.94	20.32	
12	□-316081-□	39.4	33.02	25.4	

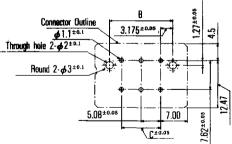
■Board-mounting Tab Header (Vertical Type)











PC Board Layout Acceptable Board Thickness: 1.6-2.4±0.1

Solder tine section is 1.0 sq.

No.of	Don't Number	Dimensions			
Pos.	Part Number	Α	В	С	
6	□-178140-□	24.16	16.51	10.16	
10	□-917657-□	34.32	26.67	20.32	
12	□-917658-□	39.4	31.75	25.4	

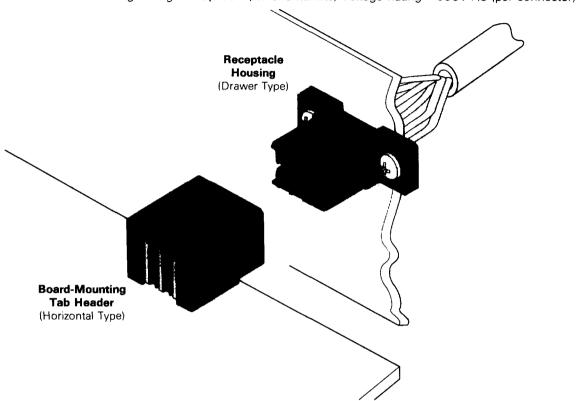


Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3200M——Drawer Type

Appearance Board mounting pitch: Horizental Type 200 x 200 mils (5.03 x 5.08mm)/

Vertical Type 200 x 300mils (5.08 x 7.62mm)

Dielectric Withstanding Voltage = 2,200V (for one minute) Voltage Rating = 600V AC (per connector)



Receptacle Housing

Tab Housing

Board-mounting Tab Header

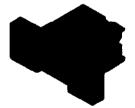
(Drawer Type)

(Panel Type)

(Free Hanging Type)

(Horizontal Type)

(Vertical Type)











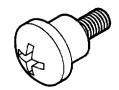
Part Number Chart

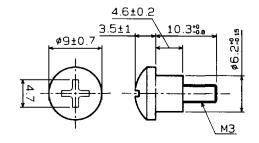
		D ()	Tab Ho	ousing	Board Mountin	g Tab Header	Min.
No. of Pos.	Keying	Receptacle Housing	Panel Type	Free Hanging Type	Horizontal Type	Vertical Type	Order Lot
	XX	1-917266-3	1-179555-3	1-179554-3	1-178139-	1-178140-	200
6	YY		2-179555-3	2-179554-3	2-178139-	2-178140-	200
	XY		3-179555-3	3-179554-3	3-178139-	3-178140-	200

Note: Enter the following plating codes in - after Part Numbers: -2:0.38 µm thick min, gold plating -3:0.76 µm thick min, gold plating -5: Solder plating

Panel Mounting Screw (Tapping Fashion)

Part Number	Minimum Order Lot
900167-1	500





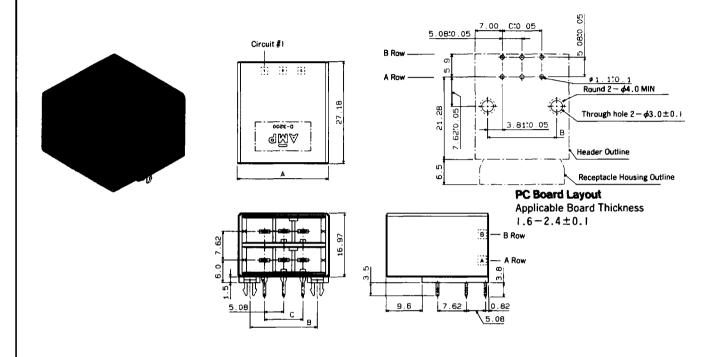
Wire to Board Connectors AMP Dynamic Series Connectors / D-3000 Series D-3200M Drawer Type

Mating Dimensions 35 91 ~ 3 ~ 41 42<u>8</u>~438 33 6 21 6 30.95 긡 16 97 30 01~31 51 **External Dimensions** .Row Number Circuit Number 1 ■Rceptacle Housing (Panel Type) <u> ∕ E</u> 213 16 3/ 14 17 C±0.3 2-M3 PCB B±0 1 **Dimensions** No.of **Part Numbers** В C E Pos. A 14.76 10.16 **-917266-3** 40 29 20.5 19.24 6 ■Tab Housing B:0.2 F:0.5 Circuit Number 1 **Panel Type** 00SE-0 **₫**ሺ\& **Panel Cutout** When mounting panel from the rear either apply clamping torgue of less than 3kg, or use washers. 5.08XN Free-hanging Type 8 Row B Row A Part Numbers **Dimensions** No.of B Free-hanging Type C Pos. **Panel Type** 17.16 33 24.16 ____ -1**79554**-3 41.91 **-179555-3**



Wire to Board Connectors AMP Dynamic Connectors / D-3000 Series D-3200M Drawer Type

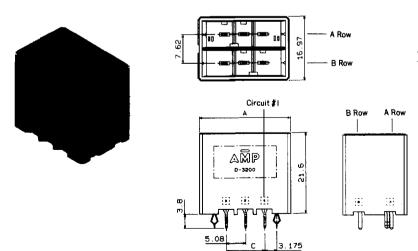
Board-mount Tab Header (Horizontal Type)

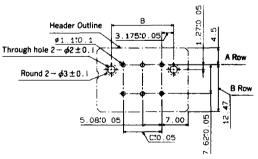


Solder	tine	section	is	0.64	sq

No. of	Part Number			
Pos.	Part Number	A	В	C
6	178139- <u></u>	24.16	17. 78	10.16

■Board-mount Tab Header (Vertical Type)





PC Board Layout
Applicable Board Thickness
1.6-2.4±0.1

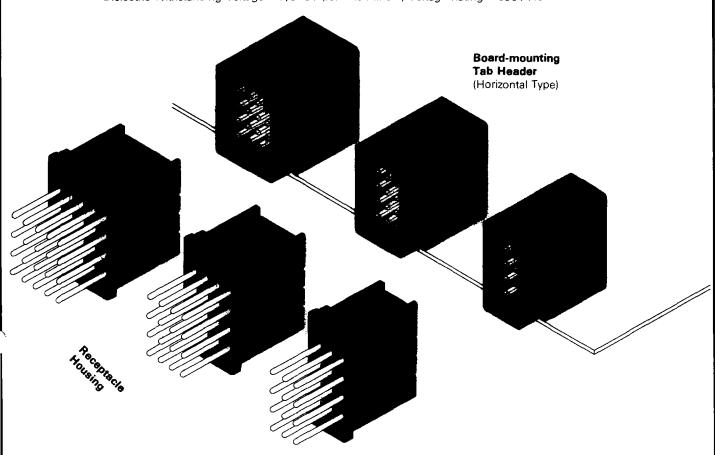
Solder	tine	section	is	0.64	SC

No. of	Down Marshan		Dimensions		
Pos.		Α	B	C	
6	□-178140-□	24.16	16.51	10.16	

Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3400F—Skyscraper Connectors

Appearance Board-mounting width reduced through increased heights. Compatible with increased I/O's. Board mounting pitch: Horizontal Type 150×150mils (3.81×3.81mm)

Dielectric Withstanding Voltage = 1,500V (for one minute) Voltage Rating = 250V AC



Receptacle Housing

Board-mounting Tab Header

(Horizontal Type)





Part Number Chart

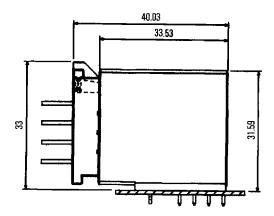
No.of Pos.	Recentacie Molising		Minimum Order Lot
12	178214-1	178216-	140
16			
20	917249-1	917251-□	140

Note: * Enter the following plating codes in - after Part Numbers: -2: 0.38 μ m thick gold plating -3: 0.76 μ m thick gold plating -5: Solder plating



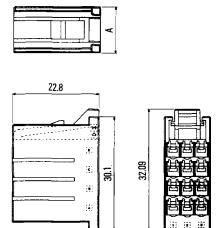
Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3400F—Skyscraper Connectors

Mating Dimension



■Receptacle Housing



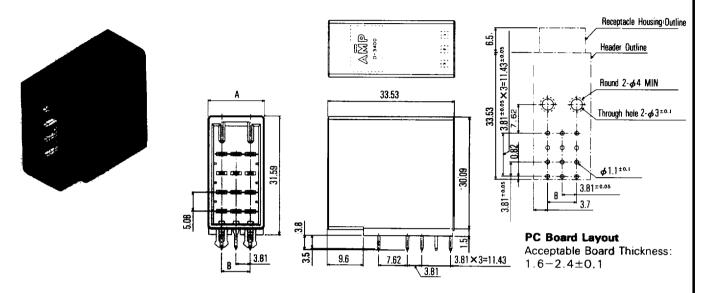


No. of	Don't Mount	Dimensions	
Pos.	Part Number	A	
12	178214-1	12.22	
16			
20	917249-1	19.84	



Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3400F—Skyscraper Connectors

■Board-mounting Tab Header (Horizontal Type)



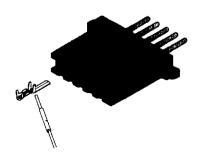
No.of	Dord Number	Dimer	nsions
Pos.	s. Part Number	A	В
12	178216-□	15.02	7.62
20	917251-	22.64	15.24

One-point Advice

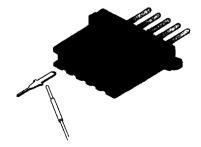
There are two major causes for faulty contact fo the connector. _. They are:

- (1) Scooping of contacts at mating/unmating
 - With this Dynamic Series, each connector is designed to protect contacts agagainst scooping very effectively.
- (2) Widening of contact gap by forcing tester bar, etc., into receptacle contacts when making continuity check.
 - ◆Test bars that are commercially availble (2 mm) cannot be pushed in from the entry port of housing. Never do continuity check by inserting clips, etc. Failure may also be caused by mis-insertion of the extraction tool, be careful when you use the tool.

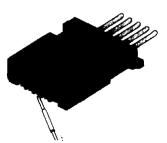
(Recommended methods of continuity check)



①Utilize tab contacts.



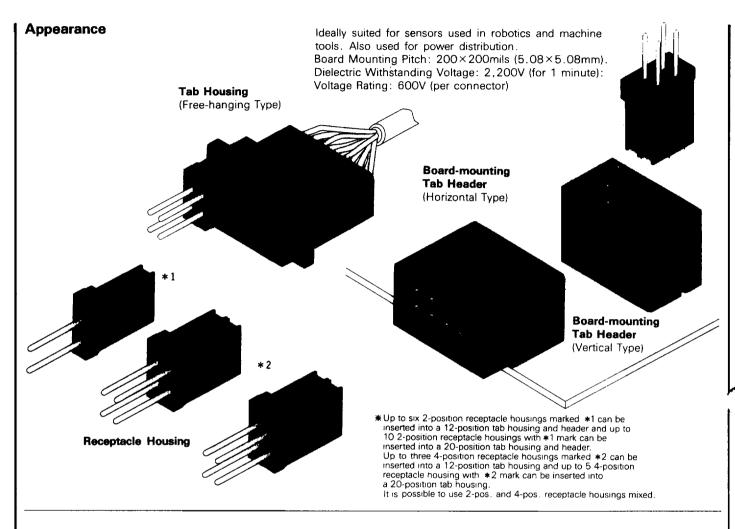
②Extract contacts from Boardmounting Vertical Type connector and insert them for testing.



The best method is to use Board-mounting Vertical type connector.



Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3500D—Sensor Connectors

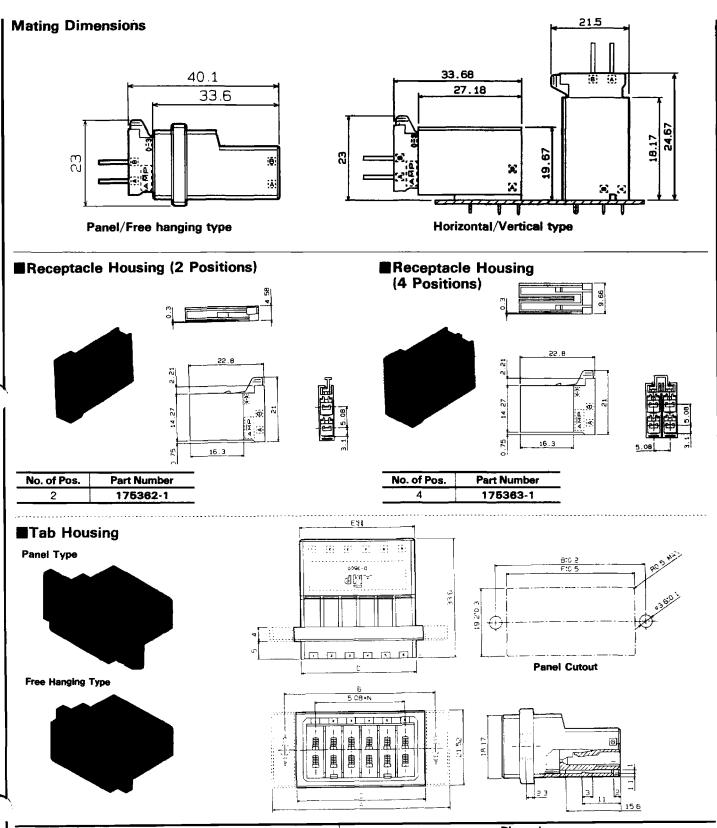


Receptacle Housing	Tat	Board-mounting Tab Heade		
	(Panel Type)	(Free Hanging Type)	(Horizontal Type)	
			4	
			8 A C	

No.of	Receptacle	Tab Housing		L	Board Mountin	ng Tab Header	Minimum
Pos.	Housing	Panel Type	Free Hanging Type	Fitting	Horizontal Type	Vertical Type	Order Lot
2	175362-1						450
4	175363-1						450
12		917241-6	917242-6	S	177555-□	316516-🗌	150
20		917241-8	917242-8	S	175365-	316517-	90

Note: * Enter the following plating codes in - after Part Numbers:
-2: 0.38 μ m thick gold plating
-3: 0.76 μ m thick gold plating
-5: Solder plating

Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3500D—Sensor Connectors

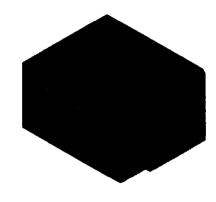


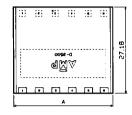
No. of	Part Number						Dimension		
Pos.	Panel Type	Free Hanging Type	A	8	С	Ð	E	F	
12	917241-6	917242-6	52	43	36.43	32.48	32.48	33.4	
20	917241-8	917242-8	72	63	56.75	52.8	52.8	53.8	

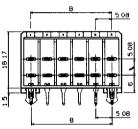


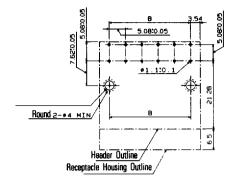
Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3500D—Sensor Connectors

■Board-Mounting Tab header (Horizontal Type)



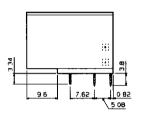






PC Boardf Layout Acceptable Board Thickness:

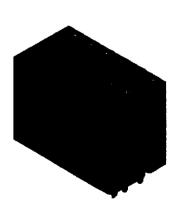
1.6-2.4±0.1

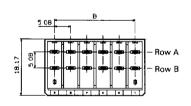


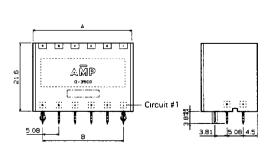
Solder tine section 0.64 sq.

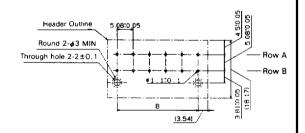
No. of	Part Number	Dimen	sions
Pos.	Pos. Part Number	Α	В
12	177555-🗆	32.48	25.4
20	1753 6 5-🗌	5 2.8	45.72

Board-Mounting Tab Header (Vertical Type)









PC Board Layout Acceptable Board Thickness

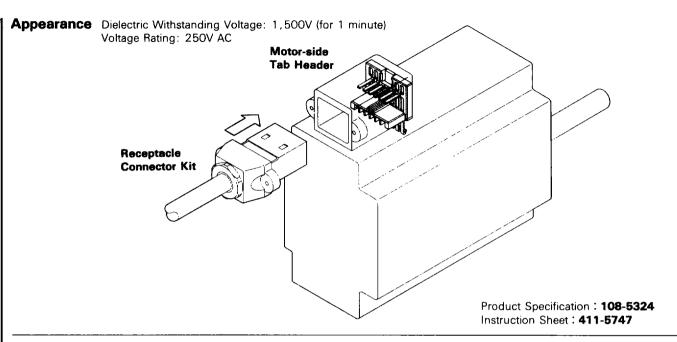
1.6-2.4±0.1

Solder	tine	section	0.	64	sa.

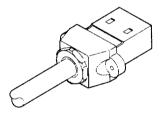
No. of	Don't March on	Dimensions	
Pos.	Part Number	Α	В
12	316516-	32.48	25.4
20	316517-	52.8	45.72



Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3700—Connectors for Exclusive Use with Servo Motor



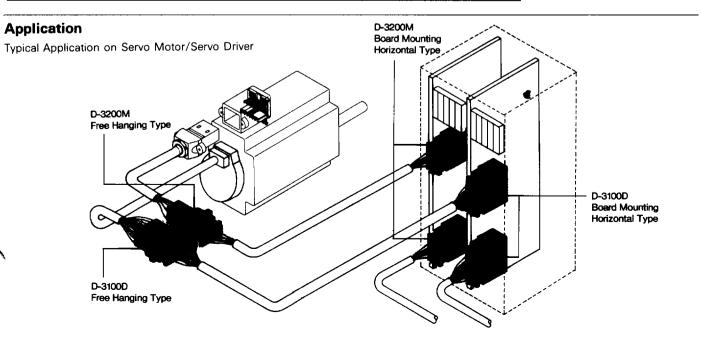
Receptacle Connector Kit



Part Number Chart

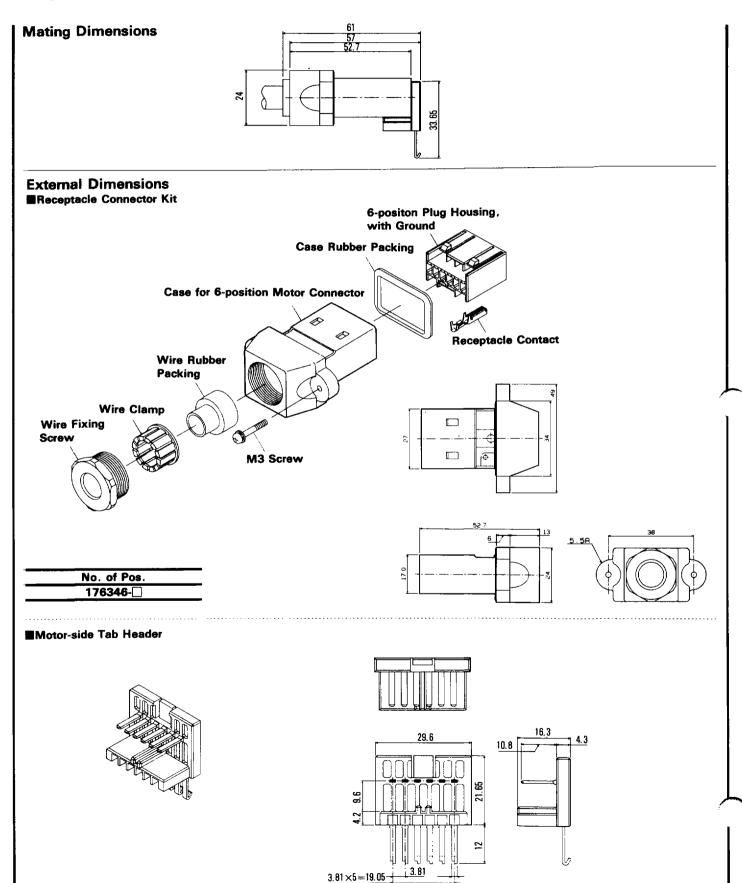
No.of Pos.	W/O Contact	Contact (P/N1-175218-2) including 6 contacts	Remarks
6	176346-7	176346-8	Products with CE mark
	1-176346-7	1-176346-8	Products with out CE mark

* Minimum order lot:5



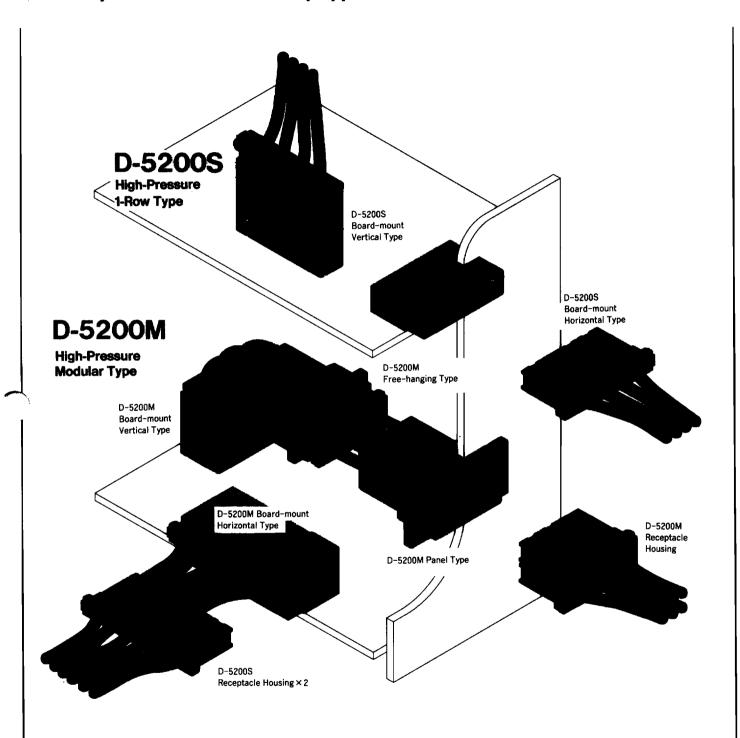


Wire to Board Connectors AMP Dynamic Series Connectors/D-3000 Series D-3700—Connectors for Exclusive Use with Servo Motor





Wire to Board Connectors AMP Dynamic Series Connectors / D-5200 Series List of Dynamic Series Products by Application





Wire to Board Connectors AMP Dynamic Series Connectors / D-5200 Series Performance Data and Specifications

Pitch	400mil (10.16mm)	
Description		
Voltage Rating	630V AC	
Current Rating	1 position: 30A	
	3 positions : 30A	
	6 positions : 30A	
	(when using AWG#10 wire)	
Contact Resistance	5mΩ Max.	
Dielectric Withstanding	3,000V	
Voltage	(1 minute)	
Operating Temperating	- 55~ + 105 ℃	

Material and Finish

Description	Material	Finish
Receptacle Contact Tab Contact	Copper alloy	Gold plating
Tab Post	Copper alloy	Gold plating
Housing	UL 94V-0 rated, glassfiber reinforced polyester (PBT)	



Wire to Board Connectors AMP Dynamic Series Connectors / D-5200 Series Performance Data and Specifications

■Specification and Instruction Sheets

114-5206
411-5712
411-5713

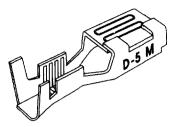
■Safety Specifications

The following safety specifications are applicable to specific Part Numbers. Contact us to check if approval is given to each of Part Numbers you are using. Note that there are instances where values differ from those given in AMP Performance Data.

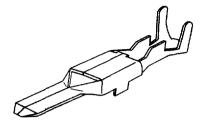
	D-5200 Series (400mil, 10.16mm pitch)					
:	Voltage Rating	Current Rating	Temperature Rating			
AMP. Specification 108-5453	630V AC	See the preceding page	- 55~ + 105℃			
UL		Application pending				
CSA		Application pending				
TÜV		Application pending				

Wire to Board Connectors AMP Dynamic Series Connectors / D-5200 Series D-5 Contact and Application Tooling

■Crimp Type Contacts



Receptacle Contact
(Used in Receptacle Housing)



Tab Contact (Used in Tab Housing)

Wire	Range	Ins. Dia. Wire			Contact Part Numbers Minimum			Application	Tooling
AWG	mm²	Range mm	Range Mark		Receptacle	Tab	Order Quantity(piece)	Mini-Applicator	Hand Tool
16	1.25	0 00		ST.	179955 - 🗌	917802- 🗌	1,500	234030-2	
14	2.20	3 ~ 3.8	5	LP.	316040 - 🗌	917804- 🗌	200		234170-1
12	3.50	4 50		ST.	179956 - 🗌	917803- 🗌	1,200	234029-2	
10	5.50	4 ~ 5.2	М	LP.	316041 - 🗌	917805- 🗌	200		234171-1

Note: Enter the following plating code in Part Number suffix-

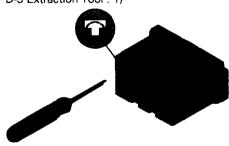
- 2 : 0.38 μ m thick gold plating
- -3:0.78 µm thick gold plating
- Minimum order quantity is provided for each product. When ordering, specify your requirments by multiplying the quantity set for each. (Minimum order quantity for Strip Form contacts is 1-reel's quantity)
- ·Minimum order quantity for tooling is one.
- Mini-Applicator is for use on Automachine (See the preceding page. Contact our Sales Department for details).
- Strip Form contacts are used with Mini-Applicator and Loose-Piece contacts are with hand tools.

Extraction Tool

- Used to extract contacts from wire type tab / receptacle housing.
- •D-5 Extraction Tool is used for D-3 contacts too. (Take care when inserting tool as the lance section of D-5 is turned upside down to that of D-3.)
- •With D-5 contacts only, it is possible to extract using a small-sized slotted screwdriver or something like eyeleteer.

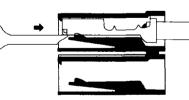
OHow to Use Extraction Tool

Part Number: 234168-1 (Minimum order quantity for D-3 Extraction Tool: 1)

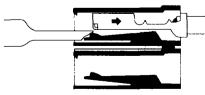


- ①Holding Insert Extraction Tool in the direction as shown, insert into the narrow lower section of Housing's reverse convex hole (make sure that you are holding tool in proper position, top and bottom.)
- *Take care not to insert tool into contact section. If you've inserted by error, replace the contact with a new one before proceeding the work.

When Using D-3 Extraction Tool

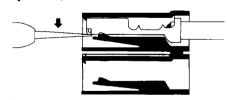


②The tip of Extraction Tool depresses housing lance, letting contact free.

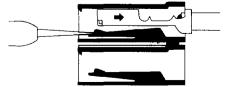


3 Contact can now be pulled out.

When Useng Slotted Screwdriver or Eyeleteer, etc.



When you butt the tip of tool at lance section and depress it, contact is released free.



3 Contact can be pulled out.

Wire to Board Connectors AMP Dynamic Series Connectors / D-5200 Series Application Tooling Mounting Hardwear

Application Tooling

MAMP-O-LECTRIC G Terminator

(Semi-automatic Terminating Machine)

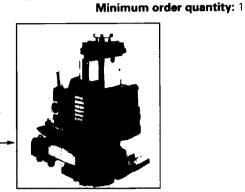
- Extremely low noise-76 dB.
- Precise adjustment of crimp heights can be done automatically or manually.
- No tool is required for changing applicators.
- Equipped with both total-and lot counters (LED Multi-Display).
- CQM (Crimp Quality Monitor)can be loaded.
- Dimension : 643mm W X 442mm D X 508mm H
- Weight: 110kg
- Power Supply: 100V AC 50 / 60Hz
 Cycle Time: 5,000 cycles / hour max.

Machine Body Part Number:

□-354500-□

Hand Tool

The crimping section incorporates Straight Action construction for improved reliability as with automachine.



Mini-Applicator

Part Number: See the proceding page

Part No.:

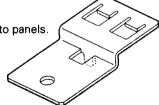
See the preceding page.

Minimum order quantity: 1

Mounting Hardwears

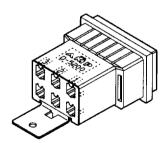
L Fittings

Used to secure free-hanging type tab housing onto panels.

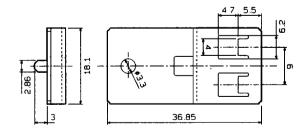


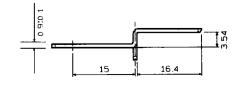
CAMBLE & Fair Mark Ext

Part Number: 917806-2(L)
Minimum order quantity: 500



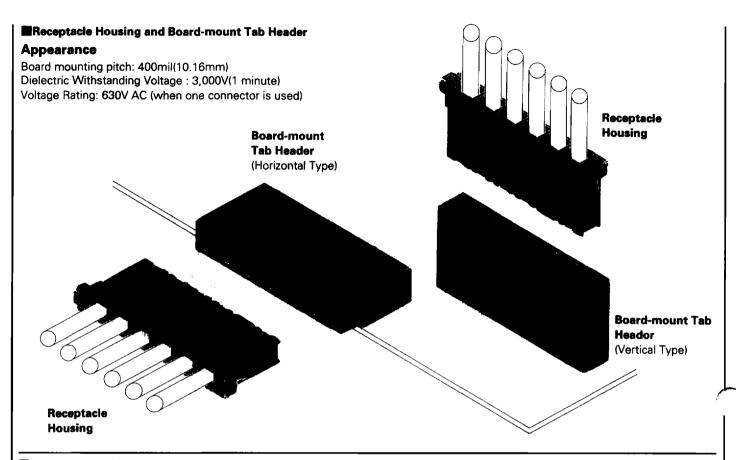
EExternal Dimensions



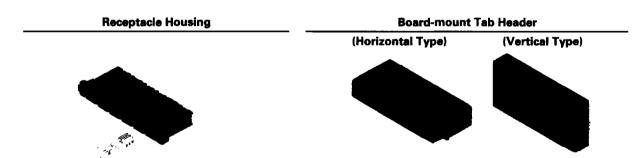


The location of attachment to housing varies by series and size. Check with sample.

Wire to Board Connectors AMP Dynamic Series Connectors / D-5200 Series D-5200S Standard 1-row Type



Part Number Table



Receptacle Contact·····For each line of contacts, refer to the appropriate page.

No. of	No. of Keving Part Number of		Part Number of Part Number of Tab Housing		Part Number of Boa	Minimum Order	
Pos.	Keying	Receptacle Housing	Panel Type	Free-hanging Type	Horizontal Type	Vertical Type	Quantity
	Х	1-179958-4			1-917541 - 🗌	1-917542 - 🗌	100
4	Y	2-179958-4		1-and 6-position	2-917541 - 🗌	2-917542 - 🗌	100
	Х	1-179958-6	Panel and F	4-and 6-position ree-hanging Types.	1-179959 - 🗌	1-179960 - 🗌	70
ь	Y	2-179958-6			2-179959 - 🔲	2-179960 - 🗌	70

For each line of L fittings, refer to the appropriate page.

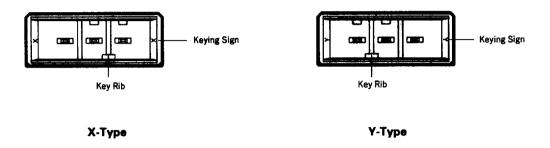
Note: Enter the following plating code in Part Number suffix-

- 2 : 0.38 μ m thick gold plating
- $-3:0.78 \mu m$ thick gold plating

Wire to Board Connectors AMP Dynamic Series Connectors / D-5200 Series D-5200S Standard 1-row Type

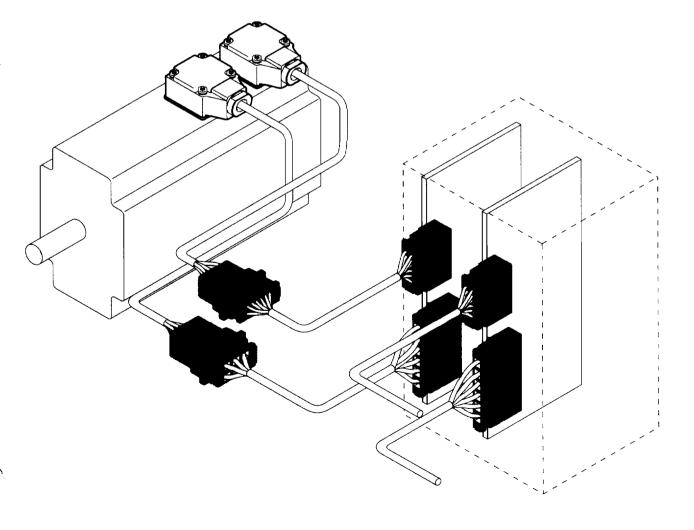
■Keying

Keying is provided with this product(D-5200S) for use in preventing misinsertion. Two types, X and Y, are available. (Shown below is the mated interface of Tab Header).



Application

Servo-motor / servo-driver----Typical Application



Wire to Board Connectors AMP Dynamic Series Connectors / D-5200 Series D-5200S Standard 1-row Type

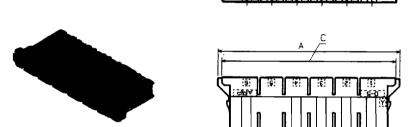
Mating Dimensions 55 40 97 97

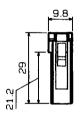
Panel / Free-hanging Type

Horizontal / Vertical Type

External Dimensions

Receptacle Housing





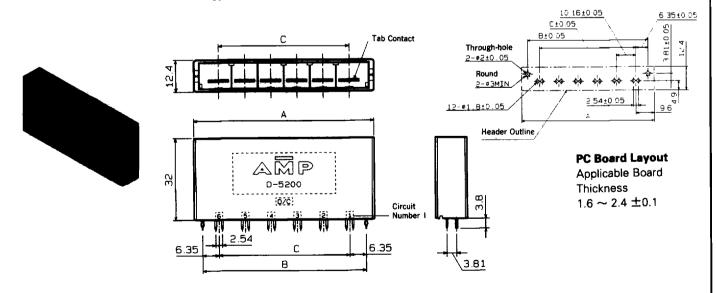
No. of	Part Number of	Dime	nsions
Position	Receptacle Housing	A	В
2	□-17 9958 -2		
3	□-179958-3		
4	□-17 9958-4	53.68	44.08
5	□-179958-5		
6	□-17 9958-6	74.00	64.40

Wire to Board Connectors AMP Dynamic Series Connectors / D-5200 Series D-5200S — Standard 1-row Type

■Board-mount Tab Header (Horizontal Type) Connector Outline 9.6 12-@1.8±0.05 Circuit Number I Through hole 2 54±0.05 2-#3:0.05 Q/Q Round 2-04MIN 0-2500 10.16±0.05 5 35±0.05 В Tab Contact **PC Board Layout** 32 Applicable Board Thickness $1.6 \sim 2.4 \pm 0.1$ 17.78 Contact plating area Solder tine section is 1.0 sq.

No. of	Part Number of		Dimensions	
Position	Tab Header	A	В	С
4	□-917541-□	49.68	43.18	30.48
6	□-179959-□	70.00	63.50	50.80





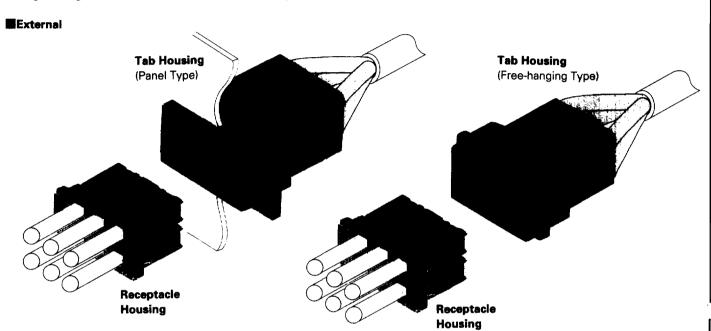
Solder tine section is 1.0 sq.

No. of	Part Number of		Dimensions	
Position	Tab Header	A	В	С
4	□-917542- □	49.68	43.18	30.48
6	□-179960-□	70.00	63.50	50.80

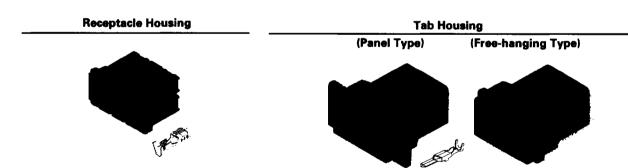
Wire to Board Connectors AMP Dynamic Series Connectors / D-5200 Series D-5200M — Modular Type

D-5200M—Can be used for modular application in conjunction with D-5200S.

Board mounting pitcn: 400 X400mil(10.16 X10.16mm) Dielectric Withstanding Voltage: 3,000V(1 minute) Voltage Rating: 630V AC (when one connector is used)



Part Number Table



Receptacle Contact

Tab Contact
For each line of contacts, refer to the approriate page.

No. of Position	Varian	Part Number of	Part Number of Tab Housing				
	Keying	Receptacle Housing	Panel Type	Free-hanging Type	L Fitting	Order Quantity	
	XX	1-917807-2	1-917809-2	1-917808-2	L	170	
·	YY	2-917807-2	2-917809-2	2-917808-2	L	170	
	XY	3-917807-2	3-917809-2	3-917808-2	L	170	
	XX	1-917807-3	1-917809-3	1-917808-3	L	120	
6	YY	2-917807-3	2-917809-3	2-917808-3	L	120	
	XY	3-917807-3	3-917809-3	3-917808-3	L	120	

Note: Enter the following plating code in Part Number suffix- :

- 2 : 0.38 $\mu\,\text{m}$ thick gold plating
- -3:0.76 μ m thick gold plating

Wire to Board Connectors AMP Dynamic Series Connectors / D-5200 Series D-5200M — Modular Type

EKeying

Keying is provided with this product(D-5200M)for use in preventing misinsertion. Three types, XX, YY, and XY, are available. (Shown below is the mated interface of Tab Header).

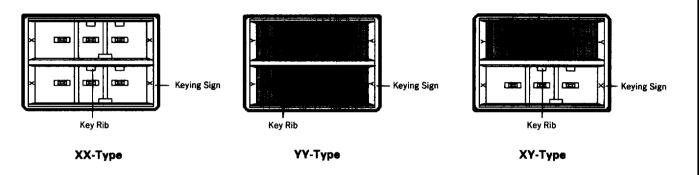
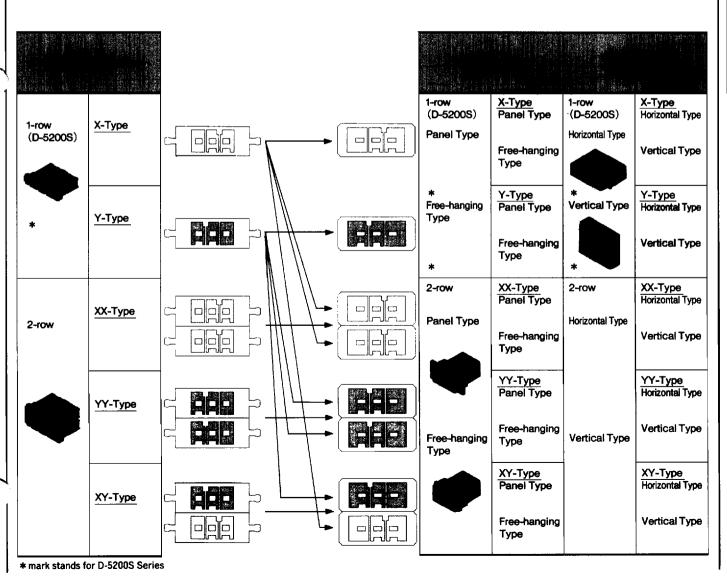


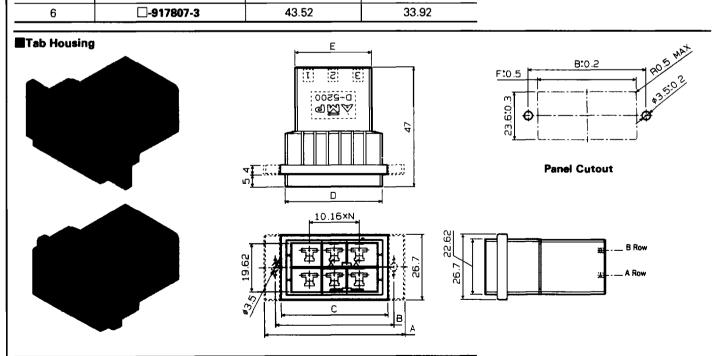
Table of Mating Combinations





Wire to Board Connectors AMP Dynamic Series Connectors / D-5200 Series D-5200M — Modular Type

Panel / Free-hanging Type Horizontal Type (When used as modular unit) Receptacle Housing No. of Part Number of Receptacle Housing A B Dimensions Receptacle Housing



23.76

33.36

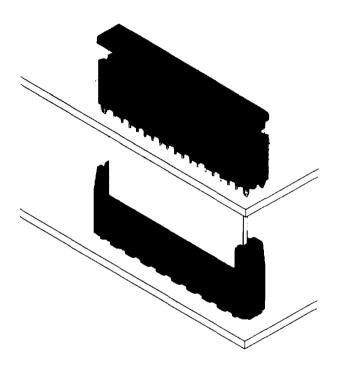
4

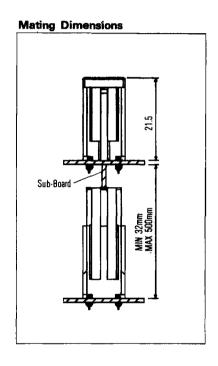
-917807-2

No. of	Part Number of Tab Housing		Dimensions					
Position	Panel Type	Free Hanging Type	Α	В	C	D	E	F
4	□-917809-2	□- 917808 -2	47	38	33.44	29.36	21.11	30.40
6	□-917809-3	□-917808-3	57	48	43.60	39.52	31.27	40.50

Other FA-related products.

Board mounting pitch: Vertical Type 150×300mils (3.81×7.62mm)





Board-to-Board Parallel Interconnection (Stacking) Connectors, Designed Spacifically for Application in the FA Industry.

- Heights between boards can be set freely and in wide dimensions (from lowest 32mm up to practical maximum of approx. 500mm).
- Bellows Type; there is no bent pin.
- Board assembly is easy and simple. Automation of assembly is possible.
- Only two points of contact even for multy—stage (more than 2) configurations.
- Low mating force.

Material & Finish	Contact: Copper alloy, plated gold (0.38µm thick) on contact area and solder on legs, with nickel underplate on entire contact. Housing & Housing Cover: UL94V-O rated glass-filled PBT resin, black.
Voltage Rating	250V AC
Current Rating	2.5A (per position)
Operating Temp	-20°C~+85°C(incl. temperature rise of connector)
Insertions and extractions	less than 30 times

Product Specifications: 108-5354

Safety Standard Approvals

The following safety standard approvals are applicable to products in this series. Please confirm approval status for specific Part. Numbers by contacting our sales department. Also note that there are cases where data differ from AMP performance specifications.

UL File No.E28476(Recognized Component) Voltage Rating: determined by equipment in use. Current Rating: determined by equipment in use.

Temperature rating: 130°C

CSA Report No.LR7189 Voltage Rating: 250V AC Current Rating: 2.5A Temperature Rating: 130°C

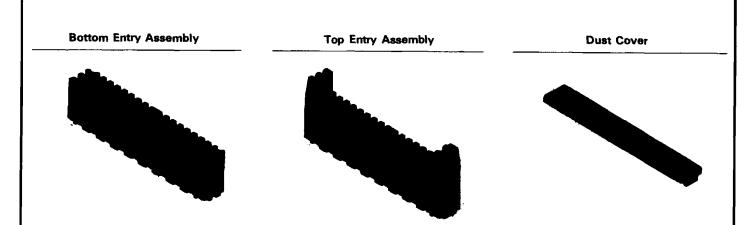
TÜV License No.9151551

Voltage Rating: 250V AC/300V DC (3.81mm pitch)

Current Rating: 2.5A

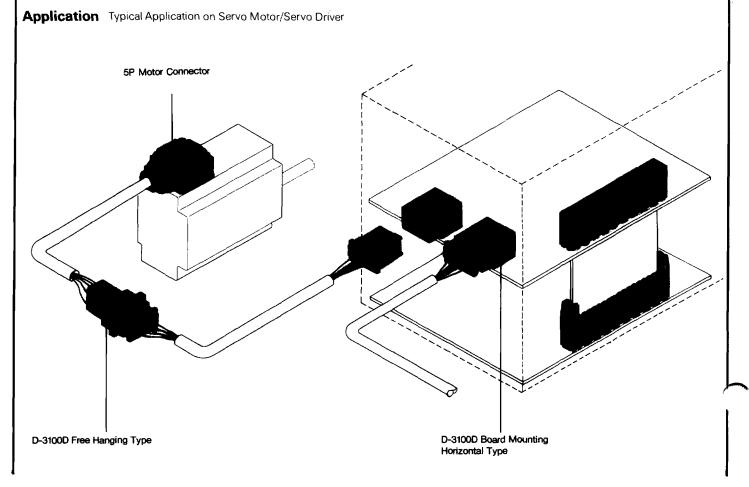
Temperature Rating: -20°C to +105°C

Insulation Group: B IP Protection: IP-00

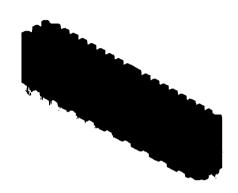


Part Number Chart

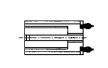
No.of	Bottom Entry	Top Entry	Dust Cover
Pos.	Assembly	Assembly	
32	178635-1	178636-1	178989-1

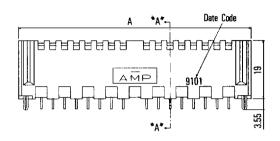


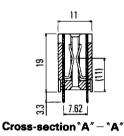
External Dimensions Buttom Entry Assembly

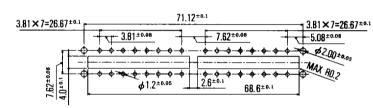


3.81 × 7=26.67	7.62 3.81 × 7=26.67
0.01	3.81
	65.6





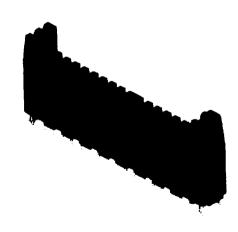




No. of Pos.	Part Number	
32	178635-1	

PC Board Layout Acceptacle Board Thickness: 1.6±0.1

■Top Entry Asembly



65.6		
9101 Service Area Contact	7.62	
Cro	ss-section "A" — "A"	"B"-"B"

3.81 × 7=26.67

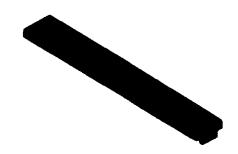
 $3.81 \times 7 = 26.67^{\pm 0.1}$ $5.08^{\pm 0.08}$ $5.08^{\pm 0.08}$ $6.67^{\pm 0.1}$ $6.67^{\pm 0.1}$ $6.67^{\pm 0.1}$

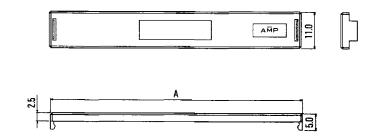
No. of Part Number 32 178636-1

PC Board Layout Acceptacle Board Thickness: 1.6±0.1



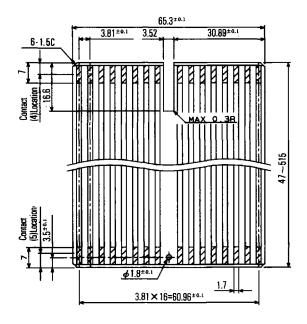
■Dust Cover

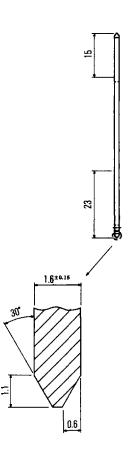




No. of Pos.	Part Number	
32	178989-1	

Sub-board







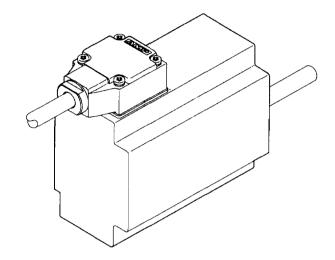
Wire to Board Connectors 5P Motor Connectors

Connectors specifically designed for use with water-proof motors.

- With a ground contact added, it can be used as a 6-position connector.
- ●It can also be used a range of other equipment as a panel-mounted 5-position water-proof connector.

	Contact: Phosphor bronze, plated gold (0.38µm thick) on contact area	
Material &	Receptacle Housing: UL94V-0 rated, glass-filled PBT resin, black	
Finish	Tab Header Housing: Liquid crystal polymer, black	
	Case: Zinc die-cast, plated nickel	
	Packing etc.: Nitrile rubber, black	
Voltage Rating	250V AC	
Current Rating	8A	
Operating Temp	-30°C ~ + 105°C	
Inseritons and extractions	30 times	

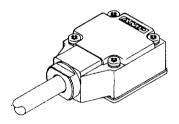
Product Spec.	108-	5323
Crimp Spec.	114-!	5091
Instruction Sheet	IS-529J	
Hand Tool	911799-2	IS-481J
Instruction Sheet	911788-2	IS-480J
Extraction tool 1.S.	IS-2	87J

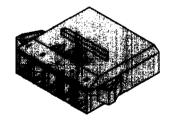


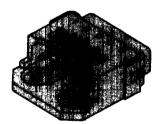
Case Kit

Receptacle Housing

Tab Header Kit





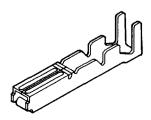


No. of Pos.	Case Kit	Receptacle Housing	Tab Header Kit	Minimum Order Lot
5	17 594 1-	175942-1	176129-1	10

Note: * For Part Number's _, choose from the following suffix numbers according to the diameter of cap tire cable used.

- -1 for \$\phi 6.5\$ cap tire cable
- -2 for φ7.5 cap tire cable

■Contact 070 Receptacle Contact



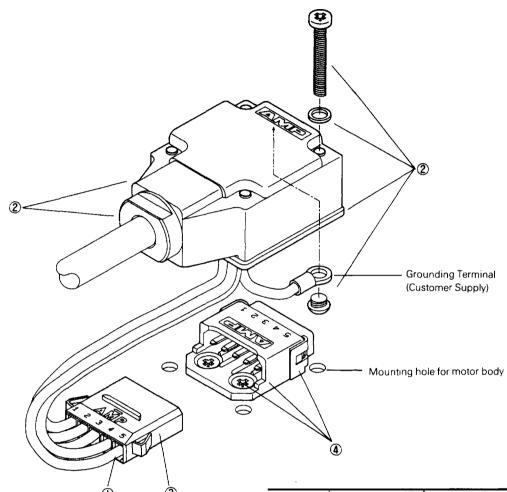
Wire Range		- Part Number		Hand Tool	
AWG	mm²	Wir. Ins. Dia.	Part Number Hand		Hand Tool
04.00	0202	1.4-1.8	Strip Form	173630-7	
24-22	0.2-0.3		Loose Piece	175026-7	911799-2
20.16	0.5.1.05	25 2.0-2.6	Strip Form	173631-7	
20-16	0.5-1.25		Loose Piece	175027-7	911788-2

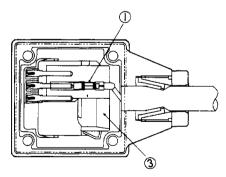
Note.* Material and Finish: Phospher bronze, plated 0.38 μ m gold on contact area. Extraction Tool Part Number: 755430-1

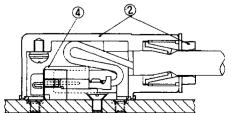


Wire to Board Connectors 5P Motor Connectors

Application



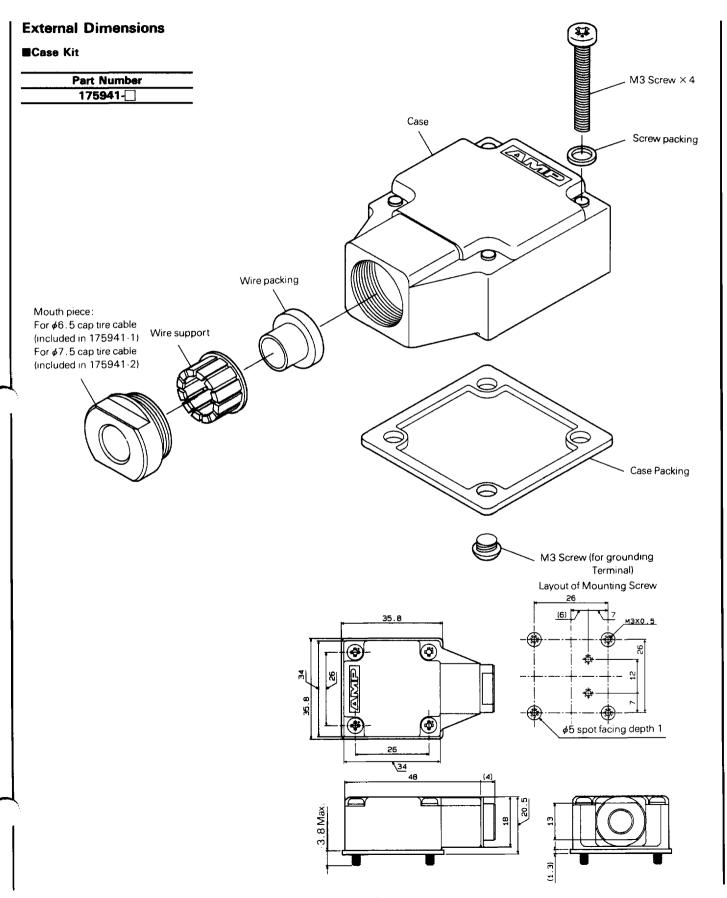




ltem No.	Part Number	Name
①	173630-7 173631-7	Receptacle Contact
	175941-1	Case Kit for φ6.5 Cable
2	175941-2	Case Kit for \$\phi\$7.5 Cable
3	175942-1	Receptacle Housing
4	176129-1	Tab Header Kit



Wire to Board Connectors 5P Motor Connectors



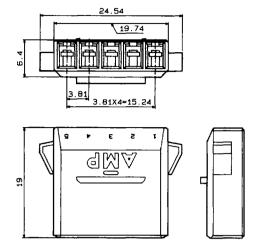


Wire to Board Connectors 5P Motor Connectors

■Receptacle Housing

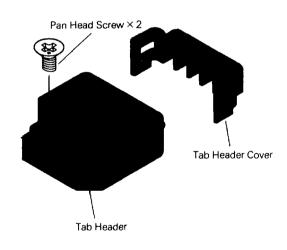
Part Number 175942-1

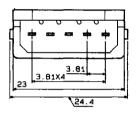


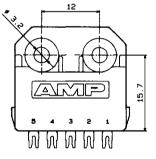


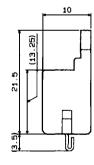
■Tab Header Kit

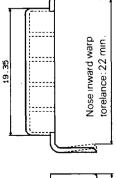
Part Number 176129-1

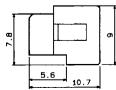


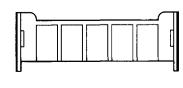












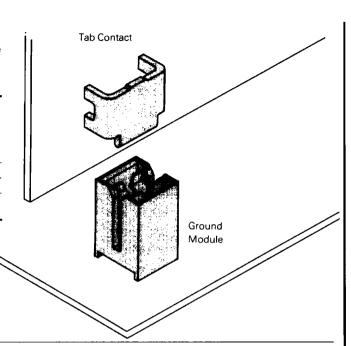


Wire to Board Connectors Ground Module

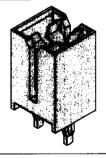
Power Connector for Board-to-Board Application

It can be used for tab contact connection. Besides, board can be directly inserted into this connector.

Material & Finish	Housing:Glass-filled thermoplastic, blue Contact: Copper alloy, plated gold (1,27 µm thick) on contact area and tin on post area Tab Contaht: Brass, 1,27 µm plated gold
Current Rating	20A
Operating Temp	-55℃~+85℃
Insertions and extractions	30 times



Ground Module

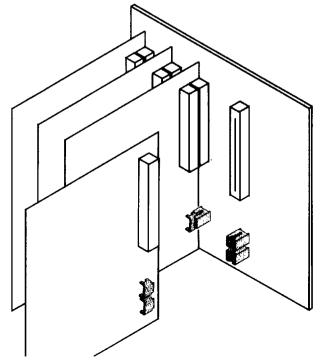


Part Number 119341-1 **Tab Contact**



Part Number 175145-2

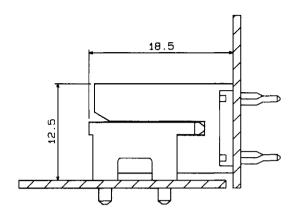
Application





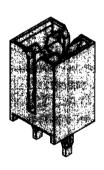
Wire to Board Connectors Ground Module

Mating Dimensions

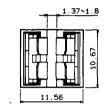


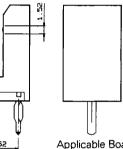
External Dimensions

■Ground Module



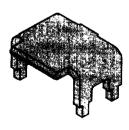
Part Number 119341-1





Applicable Board Thickness: 1.37~1.8

■Tab Header



Part Number 175145-2

