

AMP Dynamic Series Connectors



Overview

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See inside back cover for Global Contacts and phone numbers.

Note: Connectors are not designed to mate and unmate on energized line.

Product Facts

- 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 supplies, etc.
- Consists of wire-side connector and board-side connector
- Diverse housings are available to meet most specific applications
- With contacts standardized, the tool types used can be reduced
- Termination can be automated and field maintenance simplified
- As contacts can be crimped, connector quality is maintained
- Standardization of contacts leads to easier management of inventory
- To help prevent human errors in termination a common identification mark is on hand tools and contacts
- Housing color and design are coordinated

Need more information?

Call Technical Support at the numbers listed below.

Technical Support is staffed with specialists well versed in Tyco Electronics products. They can provide you with:

- Technical Support
- Catalogs
- Technical Documents
- Product Samples
- Tyco Electronics Authorized Distributor Locations

Restriction on the use of Hazardous Substances (RoHS)

At Tyco Electronics, we're ready to support your RoHS requirements. We've assessed more than 1.5 million end items/components for RoHS compliance, and issued new part numbers where any change was required to eliminate the restricted materials. Part numbers in this catalog are identified as:

RoHS Compliant — Part numbers in this catalog are RoHS Compliant, unless marked otherwise. These products comply with European Union Directive 2002/95/EC as amended 1 January 2006 that restricts the use of lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE in certain electrical and electronic products sold into the EU as of 1 July 2006.

NOTE: For purposes of this Catalog, included within the definition of RoHS Compliant are products that are clearly "Out of Scope" of the RoHS Directive such as hand tools and other non-electrical accessories.

NOTE: Information regarding RoHS compliance is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information provided by our suppliers. This information is subject to change. For latest compliance status, refer to our website referenced at right.

Getting the Information You Need

Our comprehensive on-line RoHS Customer Support Center provides a forum to answer your questions and support your RoHS needs. A RoHS FAQ (Frequently Asked Questions) is available with links to more detailed information. You can also submit RoHS questions and receive a response within 24 hours during a normal work week. The Support Center also provides:

- Cross-Reference from Non-compliant to Compliant Products
- Ability to browse RoHS Compliant Products in our on-line catalog
- Downloadable Technical Data Customer Information Presentation
- More detailed information regarding the definitions used above
- So whatever your questions when it comes to RoHS, we've got the answers at www.tycoelectronics.com/leadfree



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Catalog 1242132
Revised 5-07Dimensions are in millimeters
unless otherwise specified.Dimensions are shown for
reference purposes only.USA: 1-800-522-6752
Canada: 1-905-470-4425South America: 55-11-2103-6000
Hong Kong: 852-2735-1628

D-1000 Series (Wire-to-Board, Wire-to-Panel and Wire-to-Wire)

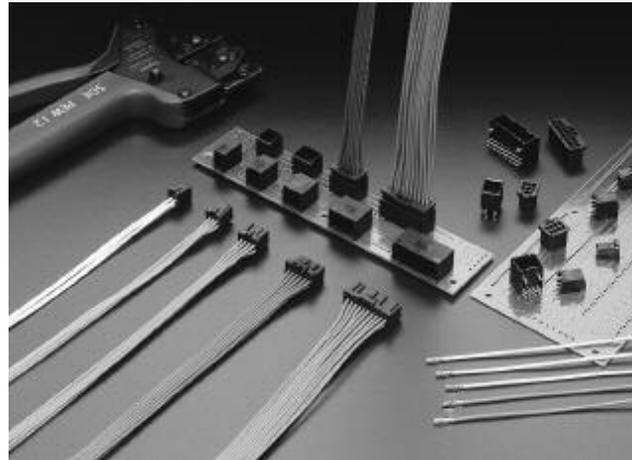
D-1000 Series

Product Facts

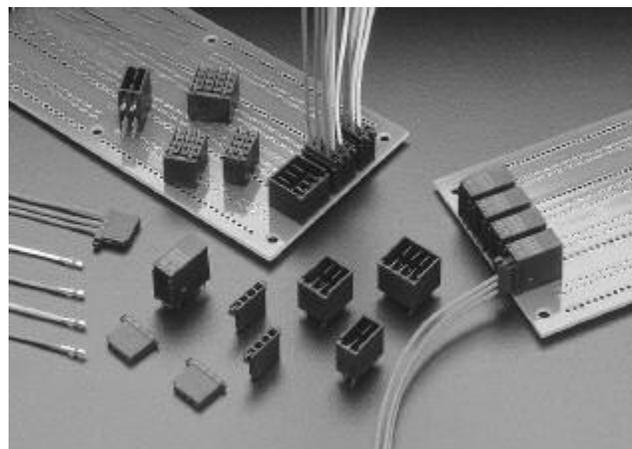
- Header and tab connectors have enough length from the tip of contact to top of housing to help prevent contact from bending when receptacle mates to tab connector.
- D-1000 has housing lance structure. Without contact lance, it is expected to avoid contact lance broken in terminal process handling
- Clear identification of circuit number provides for correct wiring
- Metal retention leg assembly tab header helps prevent damage from unexpected cable tension
- Housing lock design



D-1100



D-1200



D-1500

D-1000 Series are the smallest connectors for signal lines in the Dynamic connector series. D-1000 Series occupies 40% less volume than the D-2000 Series, so it can contribute to customers' equipment miniaturizing requirement.

D-1000 Series receptacle and tab contacts have a wide wire range, 30 through 18 AWG with 2.2 mm wire insulation diameter maximum, which is commonly used for electrical cabinet wiring.

D-1000 Series housings consist of D-1110 Series for 2.0 mm centerline and D-1200 Series for 2.5 mm centerline as the standard type. In addition, D-1500 Series housings are for 3.5 mm centerline sensor applications or branch connection of power lines.

D-1000 Series has gold plated contacts as standard and also tin plated contacts for economical market needs. Customers have a choice of contacts depending on specifications, application, and cost.

Crimping hand tool features a changeable die set structure. It offers minimal installation tooling cost. This tooling system will evolve to D-2000, D-3000 and D-4000 Series in the future.

D-1000 Series (Continued)

D-1 Contact and Performance Specifications

Crimp Type

Applicable Wire range		Wire Ins. Diameter mm	Wire Range Mark	Style	Contact Part Numbers				Tool Numbers	
AWG	mm ²				Receptacle	Contact	Tab Contact		Mini	Hand Tool [†]
					Gold Plating	Tin Plating	Gold Plating	Tin Plating	Applicator	(Dies Only)
30	0.05	0.0~1.2	S	Strip Form	1827569-2	—	1903111-2	—	1891033-2	—
28	0.09			Loose Piece	1827586-2	—	1903115-2	—	—	1762952-1 (1762953-1)
28	0.08	1.08~1.6	M	Strip Form	1827570-2	1871303-1	1903112-2	1903120-1	1891035-2	—
26	0.12			Loose Piece	1827587-2	1871743-1	1903116-2	1903124-1	—	1762846-1 (1762847-1)
24	0.20				1827571-2	1871304-1	1903113-2	1903121-1	1891036-2	—
22	0.38				1827588-2	1871744-1	1903117-2	1903125-1	—	1762950-1 (1762951-1)
28	0.08	1.08~1.9	L	Strip Form	1827571-2	1871304-1	1903113-2	1903121-1	1891036-2	—
26	0.12			Loose Piece	1827588-2	1871744-1	1903117-2	1903125-1	—	1762950-1 (1762951-1)
24	0.20				1827572-2	1871731-1	1903114-2	1903122-1	1891037-2	—
22	0.38				1827589-2	1871745-1	1903118-2	1903126-1	—	1762625-1 (1762626-1)
22	0.34	1.4~2.2	2L	Strip Form	1827572-2	1871731-1	1903114-2	1903122-1	1891037-2	—
20	0.50			Loose Piece	1827589-2	1871745-1	1903118-2	1903126-1	—	1762625-1 (1762626-1)
18	0.86				1827589-2	1871745-1	1903118-2	1903126-1	—	1762625-1 (1762626-1)

Notes: Minimum order quantity for tooling is one.

Tin plating: 2.0 µm.

Mini-Applicators are for use with automachines. (For more information, contact Technical Support at the numbers listed below.)

Strip Form contacts are for use with Mini-Applicators (automachines) and Loose-Piece contacts are for Hand tools.

The contacts L and 2L do **not** fit into the D-1100 receptacle housing.

[†] With handle.

Performance Characteristics

Series —	D-1100	D-1200	D-1500
Pitch —	2.0 mm	2.5 mm	3.5 mm
Voltage Rating —	125 VAC	250 VAC	250 VAC
Current Rating (Max.) —	Pos. :3A (AWG 22 wire)	Pos. :5A (AWG 18 wire)	Pos. :5A (AWG 18 wire)
Contact Resistance —	20 mΩ max.	20 mΩ max.	20 mΩ max.
Dielectric Withstanding Voltage —	700 V	1100 V	1100 V
Temperature Range —	-55°C~+105°C	-55°C~+105°C	-55°C~+105°C

*When connectors are used singly.

Material and Finish

Receptacle Contact — Copper alloy, 0.38 µm gold plated over 1.27 µm nickel underplate

Tab Contact — Copper alloy, 0.38 µm gold plated over 1.27 µm nickel underplate

PCB Tab Post — Copper alloy, 0.38 µm gold plated over 1.27 µm nickel underplate, Tab Post 2.0 µm tin plated

Housing — Glass-filled polyester (PBT), UL94V-0

Specifications and Instruction Sheets

Product Specifications
108-78268 (Gold plating)
108-78298 (Tin plating)

Application Specification
114-5377

Crimping Tool Instruction Sheets
411-78194 (Part Number 1762625-1)
411-78201 (Part Number 1762846-1)
411-78204 (Part Number 1762950-1)
411-78205 (Part Number 1762952-1)

Safety Specifications for D-1000 Series

	Voltage Rating	Current Rating	Temperature Rating
Tyco Electronics Specifications	125 VAC (2mm)	3A (1 position)	-55°C~+105°C
108-78268 —	250 VAC (2.5mm)	5A (1 position)	
	250 VAC (3.5mm)		

UL File Number — E 28476

CSA Report Number — Pending Approval

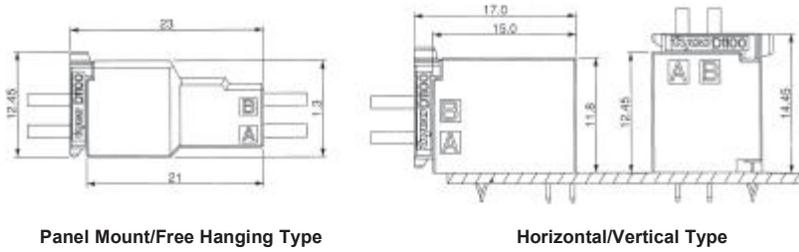
TUV License Number — Pending Approval

D-1000 Series (Continued)

D-1000 Series

D-1100D

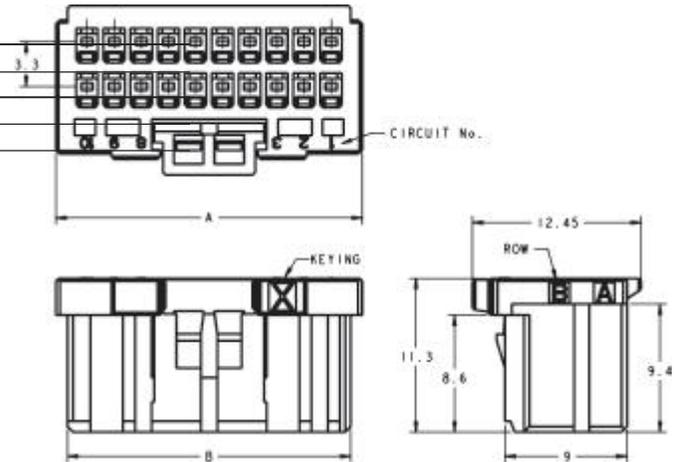
Mating Dimensions



External Dimensions

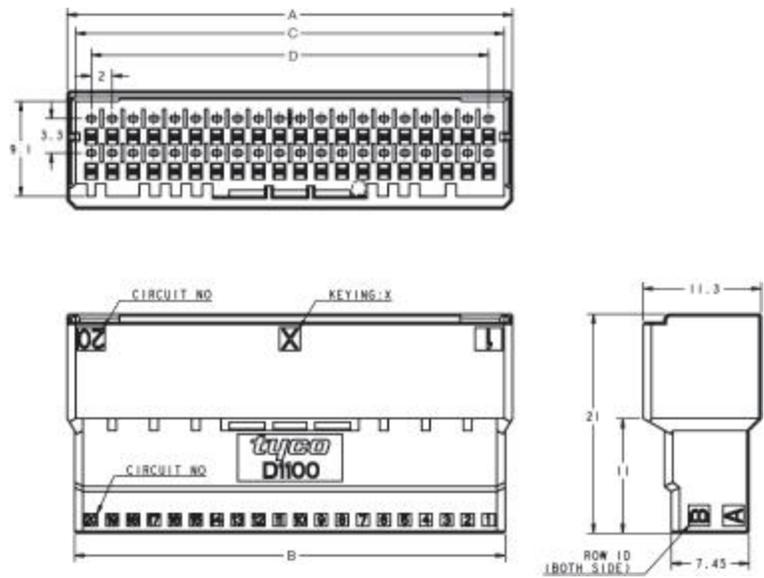
Receptacle Housing

No. of Pos.	Color	Part No.	Dimensions	
			A	B
10	Black	1-1827862-5	12.6	10.9
20	Black	1-1827862-0	22.6	20.9
22	Black	1-1827863-1	24.6	22.9
	Yellow	3-1871057-1		
26	Black	1-1827863-3	28.6	26.9
	Natural	1-1871057-3		
28	Black	1-1827863-4	30.6	28.9
	Black	1-1827863-5		
30	Natural	1-1871057-5	32.6	30.9
	Yellow	3-1871057-5		
32	Black	1-1827863-6	34.6	32.9
34	Black	1-1827863-7	36.6	34.9
40	Black	1-1827863-0	42.6	40.9



Tab Housing

**Panel Mount Type/
Free Hanging Type**



No. of Pos.	Part No.		Dimensions			
	Panel Mount Type	Free Hanging Type	A	B	C	D
22	1-1903128-1	1-1903127-1	24.6	23.2	23.0	20.0
26	1-1903128-3	1-1903127-3	28.6	27.2	27.0	24.0
28	1-1903128-4	1-1903127-4	30.6	29.2	29.0	26.0
32	1-1903128-6	1-1903127-6	34.6	33.2	33.0	30.0
34	1-1903128-7	1-1903127-7	36.6	35.2	35.0	32.0
40	1-1903128-0	1-1903127-0	42.6	41.2	41.0	38.0

