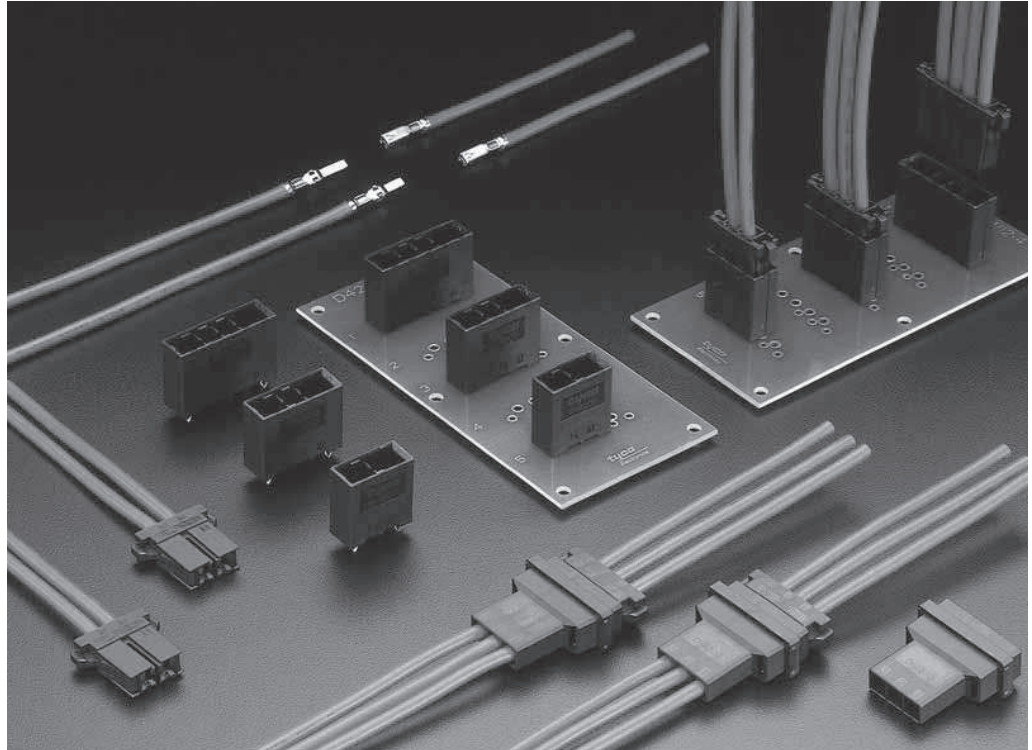


Dynamic Series Connectors

D-4000 Series

Series profile

These 20 amp power line connectors are perfect for industrial machinery. They are available in the right sizes for machinery that needs to be made smaller and with high amperages. They have a new 4-point contact design that maintains hertzian stress and increases contacts. Compared to the Dynamic 3000 series, they support over 50% of the amperage, yet with a mating height increase of 14% to achieve miniaturization. This is an increase in amperage per unit volume of about 32% compared to existing products.



Features

1. Compact high-amperage contacts
They have a new contact design with 4 contacts that maintain hertzian stress and physically increases contacts. This not only increases amperage (maximum 20 A rating), but also boosts reliability.
2. Sequential contacts
Sequential mating is possible so the ground is mated first to alleviate static electric charge. Long tabs were developed for the tab contacts as the way to do sequential connection. Plus, by using these contacts in combination with regular tab contacts you can construct a sequential connection environment.
3. Tines (leads) for high amperage
New V shape tines (leads) were developed for mounting on boards. Even though a lot of on-board connection space is needed, through-holes were made as small as possible to make pattern design easy. (patent pending)
4. Lock feeling
Obvious lock sound and feeling when mating means work can be done without mistakes, such as mismating (half-mating), even if the connection cannot be seen.
5. Keying
The housing is keyed (with a slit), so differentiating between X keys and Y keys prevents mismating.

Dynamic Series Connectors

D-4000 Series Specifications and Standards

Performance Specifications

Item	Pitch	6.35mm (250mils)
Voltage Rating		600V AC (rms)/DC
Current Rating		2 position : 24A 3 position : 23A 4 position : 22A (when using #12 AWG wire)
Contact Resistance		10mΩ Max. (Final)
Dielectric Withstanding Voltage		2,500V AC (1 minute)
Operating Temperature		-55°C~+105°C

Positions/wire size/current rating

Unit: A (ampere)

No. of Pos.	Wire Size (AWG)		
	12	14	16
2	24	21	16
3	23	20	15
4	22	19	14

Specifications and Instruction Sheets

	Product Specification	108-78182
	Application Specification	114-5369
Hand Tool Instruction Sheets	Hand Tool Part Number: 1762130-1 (M)	411-78174
	Hand Tool Part Number: 1762671-1 (M)★	411-78229
	Hand Tool Part Number: 1762129-1 (L)	411-78173
	Hand Tool Part Number: 1762670-1 (L)★	411-78195
	Extraction Tool (Part Number : 176246-1) Instruction Sheet	411-78186

Don't fail to obtain Instruction Sheets when you choose to use these tools. Orders can be placed through our online catalogs also.
★PEW12

Material and Finish

Description	Material	Finish
Receptacle contact Tab contact	Phosphor bronze or Copper alloy	Gold plated with underplated Nickel (0.38μm)
Tab post	Phosphor bronze or Copper alloy	Tin plated and (Contact area) Gold plated with underplated Nickel
Housing	UL94V-0, Glass filled thermoplastic polyester (PBT)	

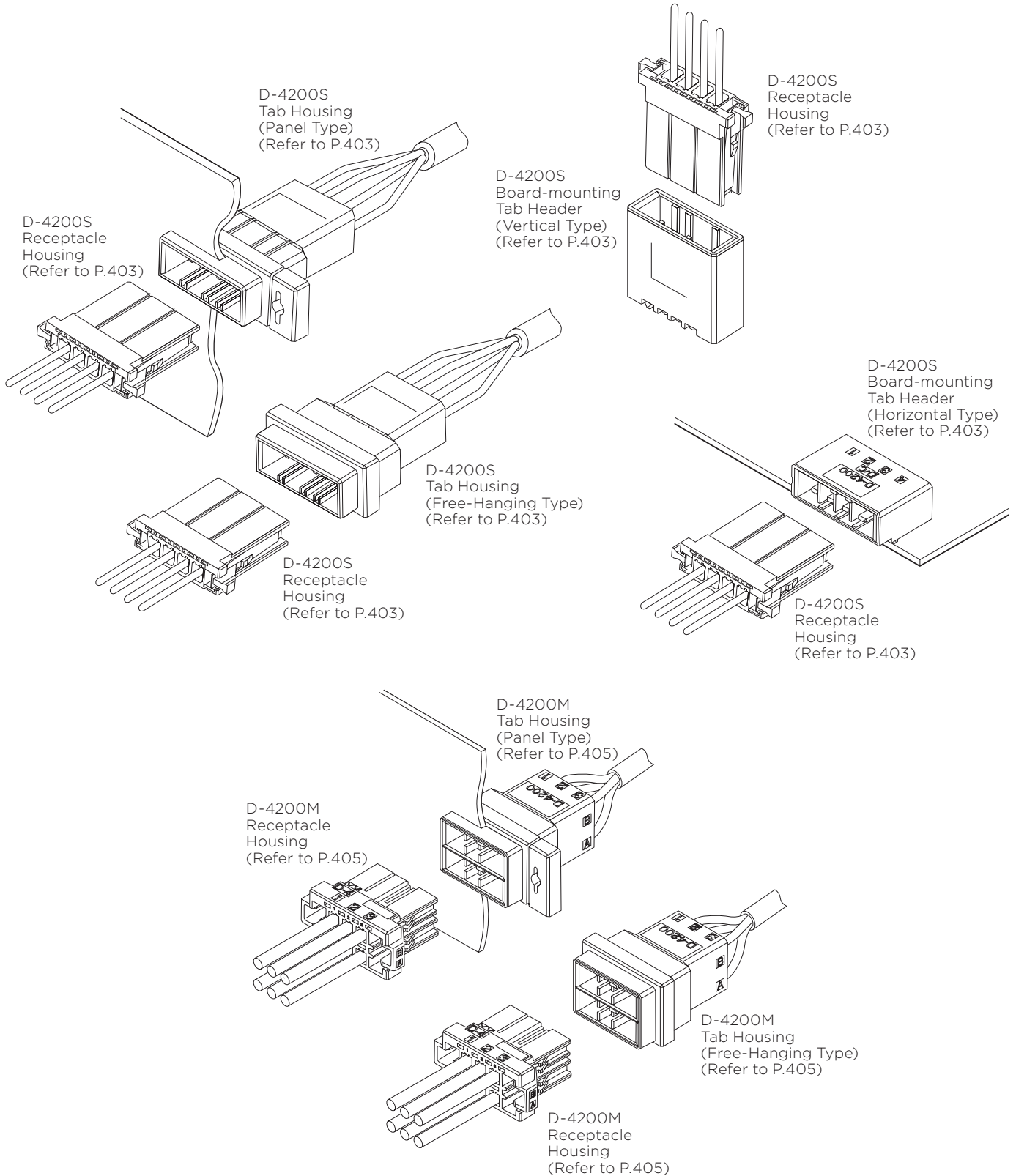
Safety Specifications

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 differ from those given by Product Specification.

Series	D-4200										
	Voltage Rating	Current Rating	Temperature Rating								
Product Specification 108-78182	600V AC/DC	24A AWG#12 2 positions in housing	-55°C~+105°C								
UL File No.E28476	Determined by requirements of equipment in use.	Determined by requirements of equipment in use.	—								
CSA Report No. LR 7189	600V AC/DC	24A	—								
TÜV License No. R 50084673	600V AC/DC	<table border="1"> <thead> <tr> <th>AWG</th> <th>A(2Pos.)</th> </tr> </thead> <tbody> <tr> <td>12</td> <td>24</td> </tr> <tr> <td>14</td> <td>21</td> </tr> <tr> <td>16</td> <td>16</td> </tr> </tbody> </table>	AWG	A(2Pos.)	12	24	14	21	16	16	-55°C~+105°C
AWG	A(2Pos.)										
12	24										
14	21										
16	16										

Dynamic Series Connectors

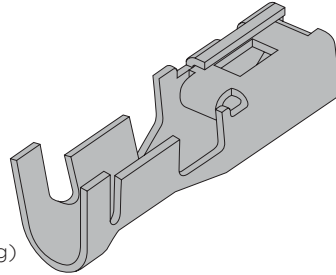
D-4000 Series List of Dynamic Series Products by Application



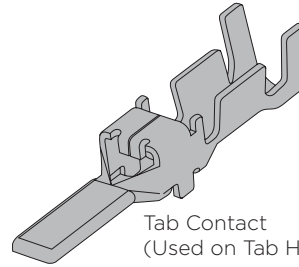
Dynamic Series Connectors

D-4 Contact

- Crimp Type
(Gold Plated: 0.38 μ m)



Receptacle Contact
(Used on Receptacle Housing)



Tab Contact
(Used on Tab Housing)

Applicable Wire		Wire Ins. Diameter mm	Wire Range Mark	Contact Part Number			Tool Part Number		
AWG	mm ²			Receptacle Contact	Tab Contact	Sequential Long Tab Contact	Mini-Applicator	Hand Tool (Dies Only)	
16 14	1.25 2.20	2.0~3.2 2.8~3.75	M	Strip Form	1747418-2	1747419-2	1-1747419-2	1762120-2	—
				Loose Piece	1747499-2	1747501-2	1-1747501-2	—	1762130-1 1762671-1★ (1762675-1)
14 12	2.20 3.50	2.9~3.8 3.8~4.2	L	Strip Form	1747415-2	1747416-2	1-1747416-2	1762119-2	—
				Loose Piece	1747498-2	1747500-2	1-1747500-2	—	1762129-1 1762670-1★ (1762674-1)

Note

- Minimum order quantity is provided for each product. When ordering, specify your requirements by multiplying the quantity set for each.
- ★ PEW12

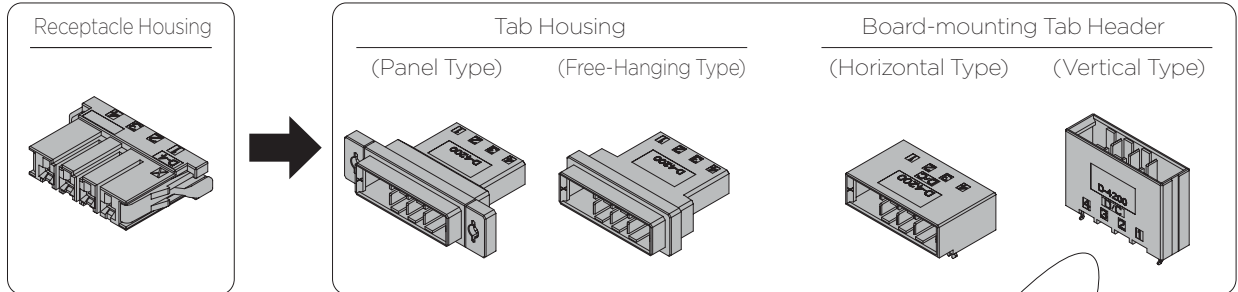
- Mini-Applicator is for use on Automachine. Refer to P.437
- Strip Form contacts are used with Mini-Applicator and Loose-Piece contacts are with hand tools.

The receptacle contacts can be used with all receptacle housings, and tab contacts can be used with all tab housings. See from page 437 for details on applicable tools.

Dynamic Series Connectors

D-4200S — High-Current 1 Row Type

Part Number Chart



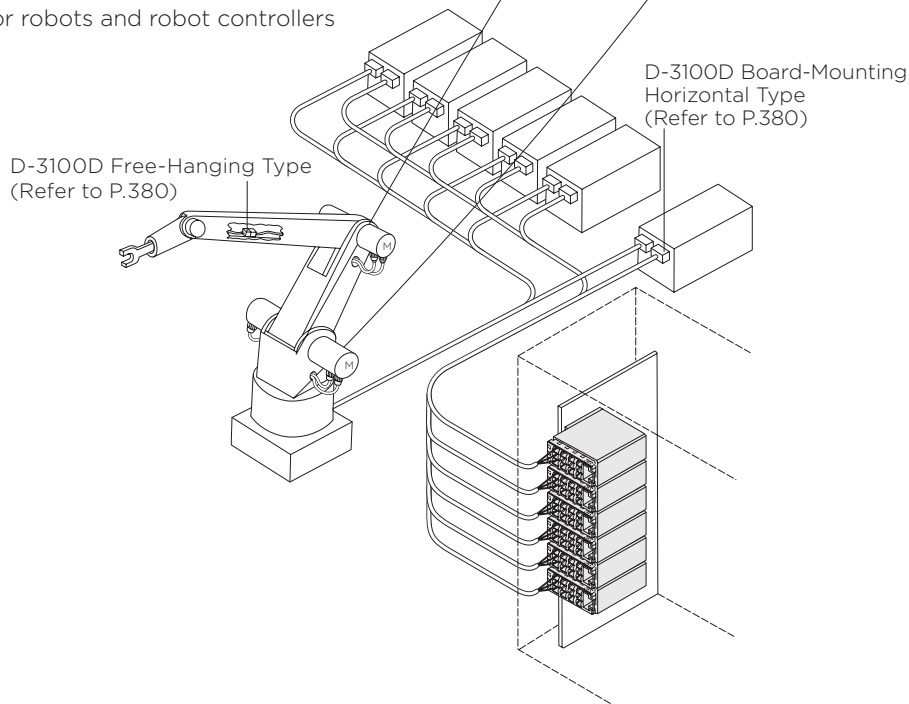
No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header			
					Panel Type	Free-Hanging Type	Horizontal Type		Vertical Type	
							Standard Type	Sequential Type	Standard Type	Sequential Type
2	Black	X	1-1747276-2	Gold	1-1747535-2	1-1747414-2	1-1903328-2	—	1-1747277-2	—
	Black	Y	2-1747276-2	Gold	2-1747535-2	2-1747414-2	2-1903328-2	—	2-1747277-2	—
3	Black	X	1-1747276-3	Gold	1-1747535-3	1-1747414-3	1-1903328-3	5-1903328-3	1-1747277-3	5-1747277-3
	Black	Y	2-1747276-3	Gold	2-1747535-3	2-1747414-3	2-1903328-3	6-1903328-3	2-1747277-3	6-1747277-3
4	Black	X	1-1747276-4	Gold	1-1747535-4	1-1747414-4	1-1903328-4	5-1903328-4	1-1747277-4	5-1747277-4
	Black	Y	2-1747276-4	Gold	2-1747535-4	2-1747414-4	2-1903328-4	6-1903328-4	2-1747277-4	6-1747277-4

Information about related products

Applicable Contact Refer to P.402
Performance Specifications... Refer to P.400

Application

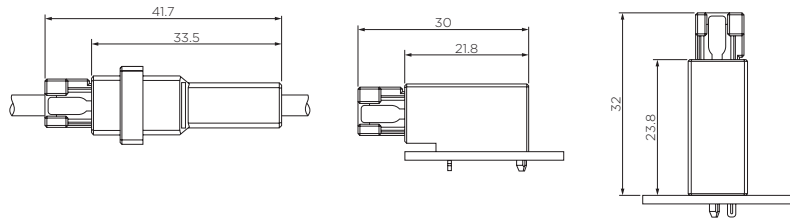
Example of application for robots and robot controllers



Dynamic Series Connectors

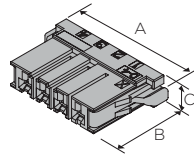
D-4200S — High-Current 1 Row Type

Mating Dimensions



Dimensions

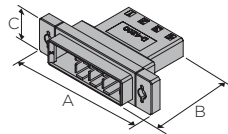
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-1747276-2	27.4	23.0	8.5
	Y	—	Black	2-1747276-2			
3	X	—	Black	1-1747276-3	33.7	23.0	8.5
	Y	—	Black	2-1747276-3			
4	X	—	Black	1-1747276-4	40.1	23.0	8.5
	Y	—	Black	2-1747276-4			

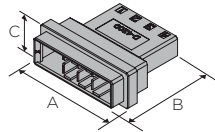
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-1747535-2	40.0	33.5	13.8
	Y	—	Black	2-1747535-2			
3	X	—	Black	1-1747535-3	46.0	33.5	13.8
	Y	—	Black	2-1747535-3			
4	X	—	Black	1-1747535-4	53.0	33.5	13.8
	Y	—	Black	2-1747535-4			

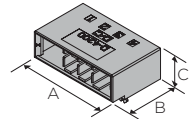
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-1747414-2	26.4	33.5	13.8
	Y	—	Black	2-1747414-2			
3	X	—	Black	1-1747414-3	32.7	33.5	13.8
	Y	—	Black	2-1747414-3			
4	X	—	Black	1-1747414-4	39.1	33.5	13.8
	Y	—	Black	2-1747414-4			

■ Board-mounting Tab Header

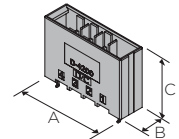
Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	Gold	Black	1-1903328-2	22.4	21.8	11.9
	Y	Gold	Black	2-1903328-2			
3	X	Gold	Black	1-1903328-3	28.7	21.8	11.9
	Y	Gold	Black	2-1903328-3			
	X	Gold	Black	5-1903328-3*1			
	Y	Gold	Black	6-1903328-3*1			
4	X	Gold	Black	1-1903328-4	35.1	21.8	11.9
	Y	Gold	Black	2-1903328-4			
	X	Gold	Black	5-1903328-4*1			
	Y	Gold	Black	6-1903328-4*1			

*1 Sequential Type

Vertical Type



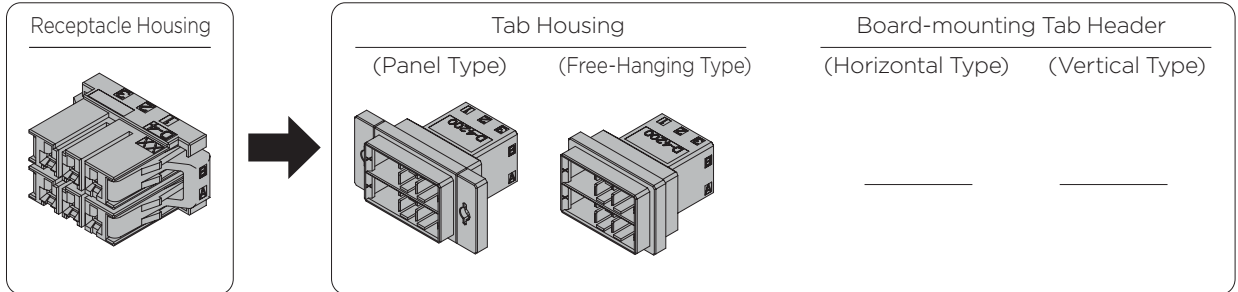
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	Gold	Black	1-1747277-2	22.4	10.4	23.8
	Y	Gold	Black	2-1747277-2			
3	X	Gold	Black	1-1747277-3	28.7	10.4	23.8
	Y	Gold	Black	2-1747277-3			
	X	Gold	Black	5-1747277-3*1			
	Y	Gold	Black	6-1747277-3*1			
4	X	Gold	Black	1-1747277-4	35.1	10.4	23.8
	Y	Gold	Black	2-1747277-4			
	X	Gold	Black	5-1747277-4*1			
	Y	Gold	Black	6-1747277-4*1			

*1 Sequential Type

Dynamic Series Connectors

D-4200M — High-Current Modular 2 Row Type

Part Number Chart

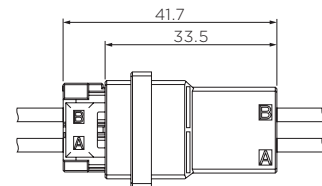


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
6	Black	XX	1-1903329-3	—	1-1903331-3	1-1903330-3	—	—
	Black	YY	2-1903329-3	—	2-1903331-3	2-1903330-3	—	—
	Black	XY	3-1903329-3	—	3-1903331-3	3-1903330-3	—	—

Information about related products

Applicable Contact Refer to P.402
Performance Specifications... Refer to P.400

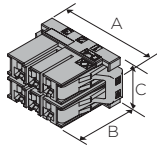
Mating Dimensions



Panel/Free-Hanging Type

Dimensions

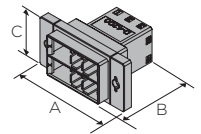
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	—	Black	1-1903329-3	33.7	23.0	17.3
	YY	—	Black	2-1903329-3			
	XY	—	Black	3-1903329-3			

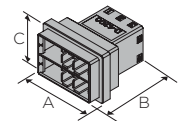
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	—	Black	1-1903331-3	46.0	33.5	22.6
	YY	—	Black	2-1903331-3			
	XY	—	Black	3-1903331-3			

Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	—	Black	1-1903330-3	32.7	33.5	22.6
	YY	—	Black	2-1903330-3			
	XY	—	Black	3-1903330-3			