

Dynamic Series Connectors

D-5000 Series

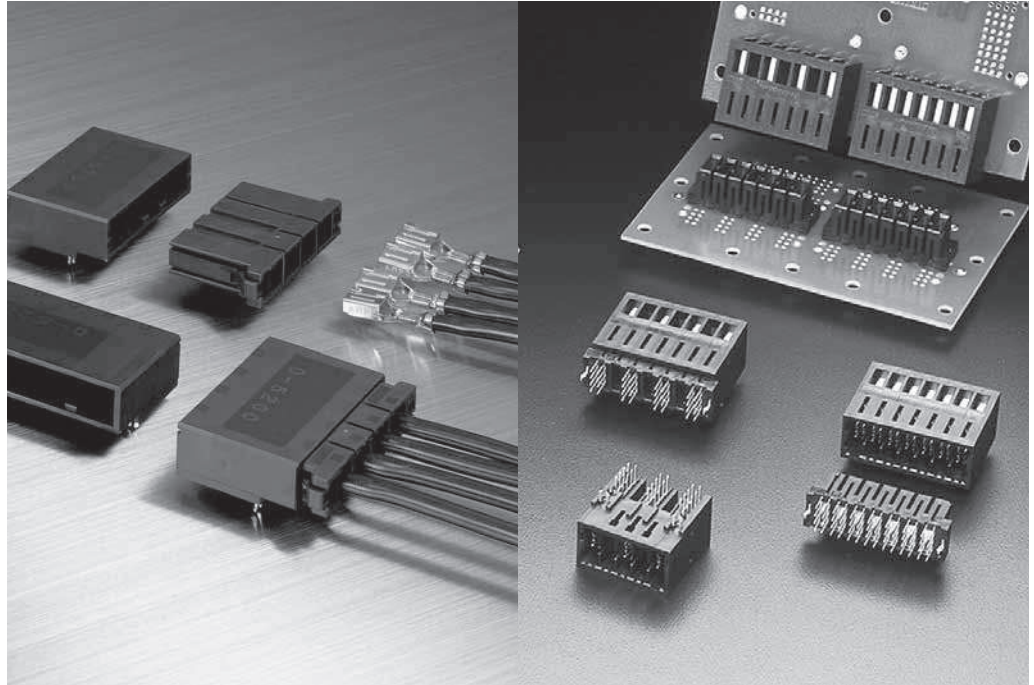
Series profile

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

They can be used for a variety of applications as replacements for terminal blocks, or round terminals. They keep the contact concept and track record built up by the Dynamic series, and are compact with high amperage capabilities. Plus, they have excellent low insertion and extraction force with high reliability.

From PCBs to internal wiring, any situation can be handled with the same series, and there is a wide variety of housings available.

The D-5000 series proposes assured connections without requiring skilled workers, even for high-amperage power lines.



Features

1. High-amperage contacts

The D-5000 series uses a pinch-resistant box type contact concept, which has the tradition and track record of the Dynamic series. The receptacle contacts are reliable providing both superior flexure and conductivity by using a newly developed copper alloy, the same as the D-3000 series. Plus, we have added a silver plated type to the D-5000 α series to cover even more of the high-amperage area. You can select contacts to match your application.

2. Sequential contacts

Sequential mating is possible so the ground is mated first to alleviate static 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

The tines (leads) for on-board mounting are a newly developed twin-lead type. It is possible to reliably join patterns and connectors because a wide area of PCBs can be allocated.

4. IP20 (prevents finger contact)

We propose the D-5300 reverse mount type for applications that have parts with live current on the equipment. Connectors on the equipment (panel side) satisfy IP-20 standards with a housing that covers the receptacle contact on the equipment.

Dynamic Series Connectors

D-5000 Series Specifications and Standards

Performance Specifications

Item	D-5200	D-5300	D-5200α
Pitch	400mils (10.16mm)		
Current Rating	30A Max.		45A Max.
Voltage Rating	630V AC/DC		
Dielectric Withstanding Voltage	3,000V AC (1 minute)		
Contact Resistance	2mΩ Max.		
Insertion Force	9.8 N Max. (per position)		
Extraction Force	1.96 N Min. (per position)		
Durability	50 Cycles (0.76 μm gold)		
Housing Lock Strength	98 N Min		

Positions/wire size/current rating

Unit: A (ampere)

No. of Pos.	Series	Wire Size (AWG)						
		20	18	16	14	12	10	8
6	D-5200	—	—	16	19	25	30	—
4	D-5300	—	—	16	19	25	30	—
3	D-5200α	12	16	20	25	33	38	45
4		12	15	18	23	31	35	43

Specifications and Instruction Sheets

Product Specification		108-5453
Test Report		501-5188
Application Specification		114-5206
Hand Tool Instruction Sheets	Hand Tool Part Number: 234170-1	411-5712
	Hand Tool Part Number: 234171-1	411-5713
	Hand Tool Part Number: 91596-1	408-8547-1
	Hand Tool Part Number: 1366044-1	411-5976
Extraction Tool (Part Number : 409158-1) Instruction Sheet		411-5774

Don't fail to obtain Instruction Sheets and other appropriate papers when you adopt our products.

Orders can be placed through our online catalogs also.

Material and Finish

Description	Item	D-5200	D-5300	D-5200α
Contact	Material	Copper alloy		
	Finish	Gold plated with under-plated Nickel	Gold/Silver plated with under-plated Nickel	Silver plated with under-plated Nickel
Tab Post	Material	Copper alloy	—	Copper alloy
	Finish	Gold plated with under-plated Nickel	—	Silver plated with under-plated Nickel
Housing	Material	UL 94V-0, Glass filled thermoplastic polyester (PBT)		

Safety Specifications

The following safety specifications are applicable to specific Part Numbers.

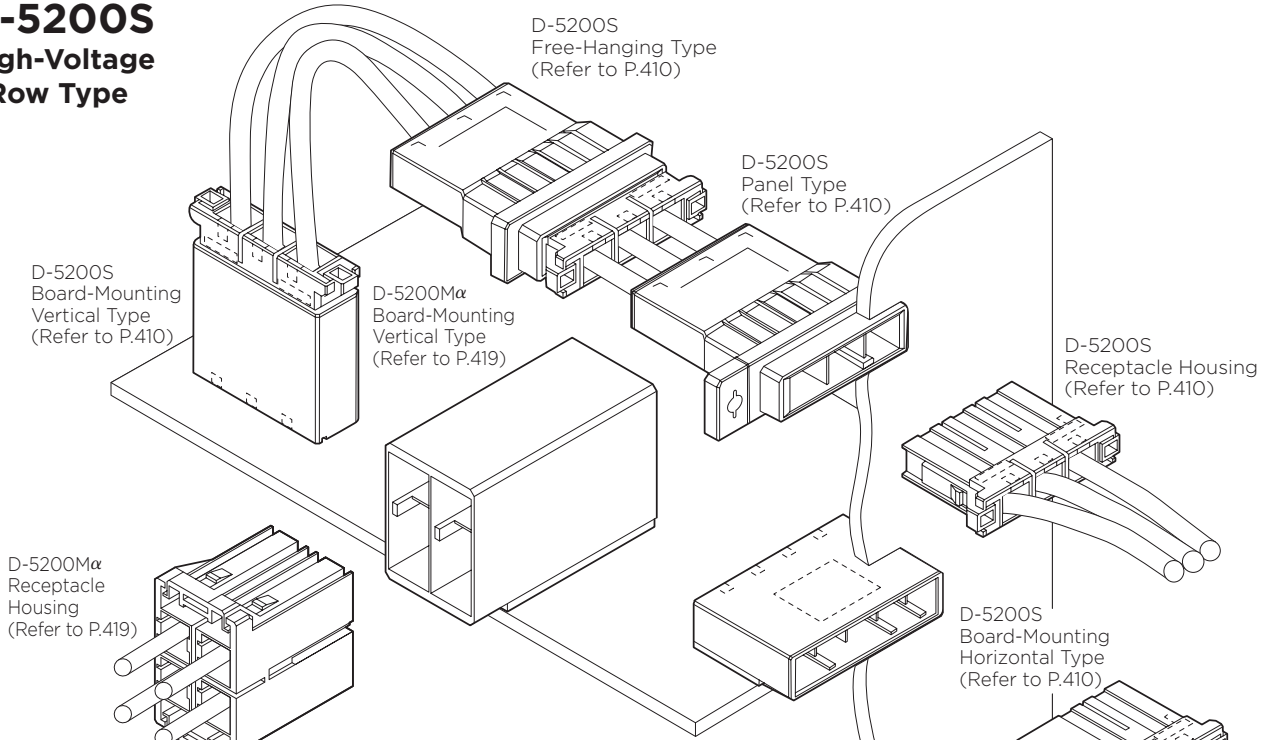
Contact us to check if approval is given to each of Part Numbers you are using. Note that there are instances where values differ from those given in Product Specification.

Series	D-5200 Series (400 mil, 10.16mm pitch)			D-5200Mα Series																																						
	Voltage Rating	Current Rating	Temperature Rating	Voltage Rating	Current Rating	Temperature Rating																																				
Product Specification 108-5453	630V AC/DC	See the preceding page	-55°C~+105°C	—	See the preceding page	-55°C~+105°C																																				
UL File No.E28476 (Recognized Component)	Determined by requirements of equipment in use.	Determined by requirements of equipment in use.	—	—	Determined by requirements of equipment in use.	—																																				
CSA Report No. LR 7189	600V AC/DC	<table border="1"> <thead> <tr> <th>AWG</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>16</td> <td>13</td> </tr> <tr> <td>14</td> <td>18</td> </tr> <tr> <td>12</td> <td>25</td> </tr> <tr> <td>10</td> <td>30</td> </tr> </tbody> </table>	AWG	A	16	13	14	18	12	25	10	30	—	—	—	—																										
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TÜV License No. R9650368 IP Protection IP-10 Overvoltage Classification (II) Number of repeated insertions and withdrawals allowed : 50 times.	600V AC/DC	<table border="1"> <thead> <tr> <th>AWG</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>16</td> <td>15</td> </tr> <tr> <td>14</td> <td>20</td> </tr> <tr> <td>12</td> <td>25</td> </tr> <tr> <td>10</td> <td>30</td> </tr> </tbody> </table>	AWG	A	16	15	14	20	12	25	10	30	-30°C~+105°C	—	<table border="1"> <thead> <tr> <th rowspan="2">AWG</th> <th colspan="2">A</th> </tr> <tr> <th>1-3Pos.</th> <th>4Pos.</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>12.5</td> <td>12.5</td> </tr> <tr> <td>18</td> <td>17.5</td> <td>16</td> </tr> <tr> <td>16</td> <td>21</td> <td>19.5</td> </tr> <tr> <td>14</td> <td>26</td> <td>24</td> </tr> <tr> <td>12</td> <td>33</td> <td>31</td> </tr> <tr> <td>10</td> <td>40</td> <td>37.5</td> </tr> <tr> <td>8</td> <td>48</td> <td>46</td> </tr> </tbody> </table>	AWG	A		1-3Pos.	4Pos.	20	12.5	12.5	18	17.5	16	16	21	19.5	14	26	24	12	33	31	10	40	37.5	8	48	46	-30°C~+105°C
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Dynamic Series Connectors

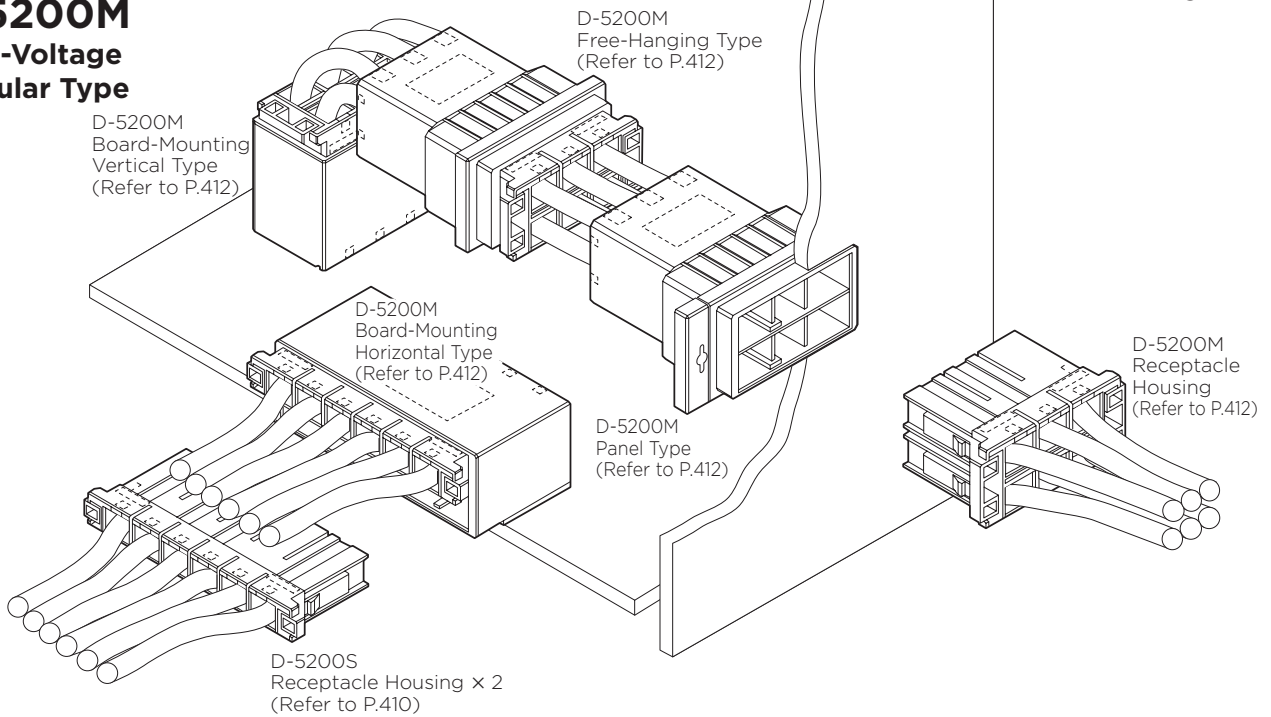
D-5000 Series List of Dynamic Series Products by Application

D-5200S High-Voltage 1 Row Type



D-5200M α High-Current Modular Type

D-5200M High-Voltage Modular Type

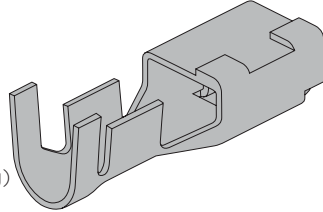


Dynamic Series Connectors

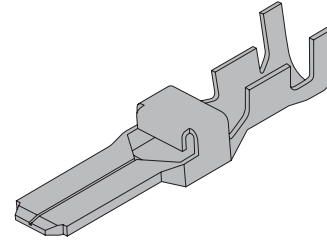
D-5 Contact

■ Crimp Type

Receptacle Contact
(Used on Receptacle Housing)



Tab Contact
(Used on Tab Housing)



● D-5 Series Contact : Gold Plated/Silver Plated Type

Applicable Wire		Wire Ins. Diameter mm	Wire Range Mark	Contact Part Number			Tool Part Number	
AWG	mm ²			Receptacle Contact	Tab Contact	Sequetial Tab Contact	Mini-Applicator	Hand Tool
20	0.50	1.8~2.83	SS	Strip Form 1318985-2 1318985-3 1318985-6	—	—	1528106-2	—
16	1.25	2.3~3.23		Loose Piece 1318986-2 1318986-3 1318986-6	—	—	—	91596-1
16	1.25	3~3.8	S	Strip Form 179955-2 179955-3	917802-2 917802-3	84696-1	1366659-2	—
14	2.20			Loose Piece 316040-2 316040-3 316040-6	917804-2 917804-3 917804-6	2013594-1	—	234170-1
12	3.50	4~5.2	M	Strip Form 179956-2 179956-3	917803-2 917803-3	84695-1	1366660-2	—
10	5.50			Loose Piece 316041-2 316041-3 316041-6	917805-2 917805-3 917805-6	2013593-1	—	234171-1
8	8.00	4.9~7.8	L	Strip Form 1318696-2	—	—	1366658-3	—
				Loose Piece 1318697-2	1747443-6	—	—	1366044-1

Note : • The part number suffix is the code for plating.
 -1: 0.2 μm thick gold plated
 -2: 0.38 μm thick gold plated
 -3: 0.76 μm thick gold plated
 -6: 2.54 μm thick silver plated

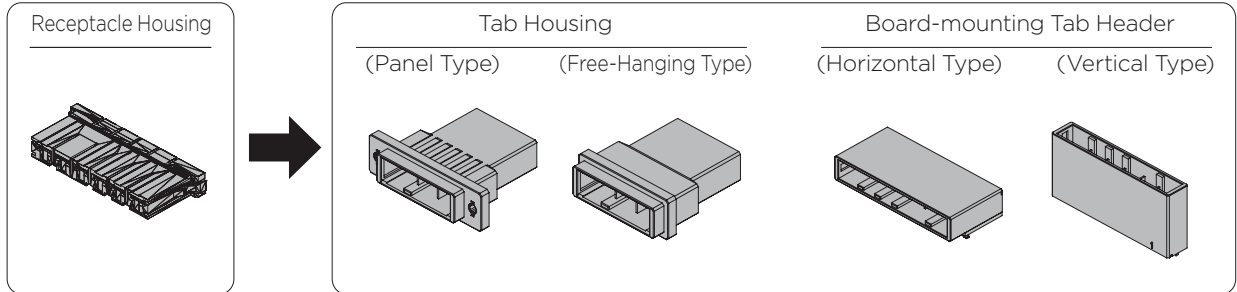
- Minimum order quantity is provided for each product. When ordering, specify your requirements by multiplying the quantity set for each.
- Mini-Applicator is for use on Automachine. Refer to P.437
- Strip Form contacts are used with Mini-Applicator and Loose-Piece contacts are with hand tools.

The receptacle contacts can be used with all receptacle housings, and tab contacts can be used with all tab housings.

Dynamic Series Connectors

D-5200S — High-Current 1 Row Type

Part Number Chart

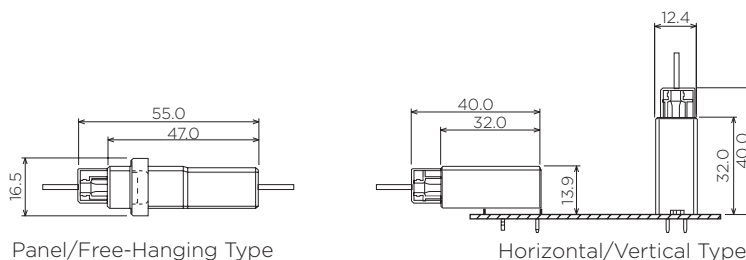


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header				
					Panel Type	Free-Hanging Type	Horizontal Type		Vertical Type		
							Standard Type	Sequential Type	Standard Type	Sequential Type	
2	Black	X	1-179958-2	Gold	1-353047-2	1-353046-2	1-353079-2	—	1-353080-2	—	
	Black			1-353079-3			—	1-353080-3	—		
	Black	Y	2-179958-2	Gold	2-353047-2	2-353046-2	—	—	6-353080-2	—	
	Black			—			—	2-353080-2	—		
3	Black	X	1-179958-3	Gold	1-353047-3	1-353046-3	1-353081-2	8-353081-2	1-353082-2	8-353082-2	
	Black			1-353081-3			—	1-353082-3	—		
	Black	Y	2-179958-3	Gold	2-353047-3	2-353046-3	2-353081-2	—	6-353082-2	—	
	Black			2-353081-3			—	2-353082-2	—		
4	Black	X	1-179958-4	Gold	(Use D-5200M with 2-row and 4 or 6 positions on page 419.)		1-917541-2	8-917541-2	1-917542-2	8-917542-2	
	Black			1-917541-3			—	1-917542-3	—		
	Black	Y	2-179958-4	Gold			2-917541-2	—	2-917542-2	—	
	Black			—			—	2-917542-3	—		
6	Black	X	1-179958-6	Gold			1-179959-2	—	1-179960-2	—	
	Black			1-179959-3			—	1-179960-3	—		
	Black	Y	2-179958-6	Gold			—		—	6-179960-2	—
	Black			—					—	2-179960-2	—
	Black			—	—	2-179960-3			—		
	Black			—	—	7-179960-2			—		

Information about related products

Applicable Contact Refer to P.409
Performance Specifications... Refer to P.407

Mating Dimensions

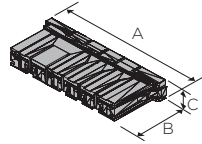


Dynamic Series Connectors

D-5200S — High-Current 1 Row Type

Dimensions

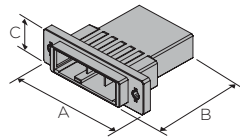
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-179958-2	35.8	29.0	9.8
	Y	—	Black	2-179958-2			
3	X	—	Black	1-179958-3	46.0	29.0	9.8
	Y	—	Black	2-179958-3			
4	X	—	Black	1-179958-4	53.7	29.0	9.8
	Y	—	Black	2-179958-4			
6	X	—	Black	1-179958-6	74.0	29.0	9.8
	Y	—	Black	2-179958-6			

■ Tab Housing

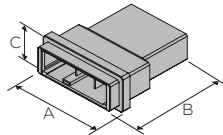
Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-353047-2	47.0	47.0	16.5
	Y	—	Black	2-353047-2			
3	X	—	Black	1-353047-3	57.0	47.0	16.5
	Y	—	Black	2-353047-3			

■ Tab Housing

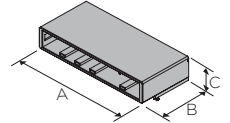
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-353046-2	33.4	47.0	16.5
	Y	—	Black	2-353046-2			
3	X	—	Black	1-353046-3	43.6	47.0	16.5
	Y	—	Black	2-353046-3			

■ Board-mounting Tab Header

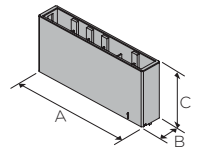
Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	Gold	Black	1-353079-2	29.4	32.0	13.9
		Gold	Black	1-353079-3			
3	X	Gold	Black	1-353081-2	39.5	32.0	13.9
		Gold	Black	8-353081-2			
		Gold	Black	1-353081-3			
		Gold	Black	2-353081-2			
3	Y	Gold	Black	2-353081-3	39.5	32.0	13.9
		Gold	Black	1-917541-2			
		Gold	Black	8-917541-2			
		Gold	Black	1-917541-3			
4	X	Gold	Black	1-917541-2	49.7	32.0	13.9
		Gold	Black	8-917541-2			
		Gold	Black	1-917541-3			
		Gold	Black	2-917541-2			
4	Y	Gold	Black	2-917541-2	49.7	32.0	13.9
		Gold	Black	1-179959-2			
		Gold	Black	1-179959-3			
		Gold	Black	1-179959-3			

■ Board-mounting Tab Header

Vertical Type

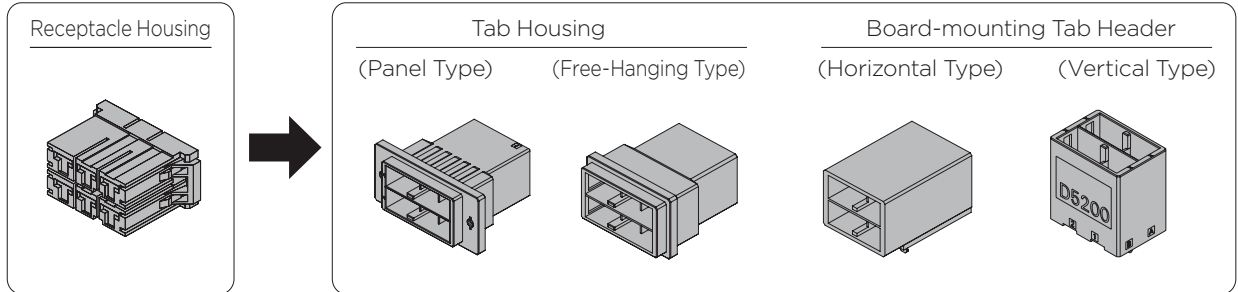


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	Gold	Black	1-353080-2	29.4	12.4	32.0
		Gold	Black	1-353080-3			
		Gold	Black	6-353080-2			
		Gold	Black	2-353080-2			
2	Y	Gold	Black	2-353080-3	29.4	12.4	32.0
		Gold	Black	2-353080-2			
		Gold	Black	1-353082-2			
		Gold	Black	8-353082-2			
3	X	Gold	Black	1-353082-3	39.5	12.4	32.0
		Gold	Black	6-353082-2			
		Gold	Black	2-353082-2			
		Gold	Black	2-353082-3			
3	Y	Gold	Black	2-353082-3	39.5	12.4	32.0
		Gold	Black	1-917542-2			
		Gold	Black	8-917542-2			
		Gold	Black	1-917542-3			
4	X	Gold	Black	1-917542-3	49.7	12.4	32.0
		Gold	Black	2-917542-2			
		Gold	Black	2-917542-3			
		Gold	Black	2-917542-3			
4	Y	Gold	Black	1-179960-2	70.0	12.4	32.0
		Gold	Black	1-179960-3			
		Gold	Black	6-179960-2			
		Gold	Black	2-179960-2			
		Gold	Black	2-179960-3			
		Gold	Black	7-179960-2			

Dynamic Series Connectors

D-5200M — High-Current Modular 2 Row Type

Part Number Chart



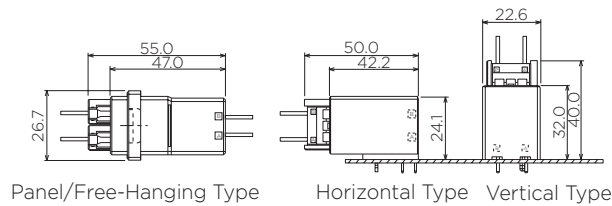
No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header			
					Panel Type	Free-Hanging Type	Horizontal Type		Vertical Type	
							Standard Type	Sequential Type	Standard Type	Sequential Type
4	Black	XX	1-917807-2	Gold/Silver	1-917809-2	1-917808-2	1-1123309-2	8-1123309-2	1-1981458-6	—
	Black	YY	2-917807-2	Gold/Silver	2-917809-2	2-917808-2	2-1123309-2	—	2-1981458-6	—
	Black	XY	3-917807-2	Gold/Silver	3-917809-2	3-917808-2	3-1123309-2	—	3-1981458-6	—
6	Black	XX	1-917807-3	—	1-917809-3	1-917808-3	—	—	—	—
	Black	YY	2-917807-3	—	2-917809-3	2-917808-3	—	—	—	—
	Black	XY	3-917807-3	—	3-917809-3	3-917808-3	—	—	—	—
8	Black	XX	— *1	Gold	—	—	1123829-1	—	—	—
	Black	YY	—	—	—	—	—	—	—	—
	Black	XY	—	—	—	—	—	—	—	—

*1: Use two 1-179958-4

Information about related products

Applicable Contact Refer to P.409
Performance Specifications... Refer to P.407

Mating Dimensions

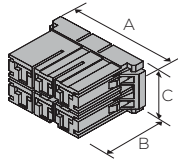


Dynamic Series Connectors

D-5200M — High-Current Modular 2 Row Type

Dimensions

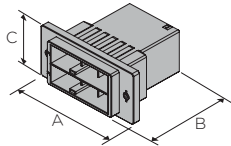
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	—	Black	1-917807-2	33.4	29.0	20.0
	YY	—	Black	2-917807-2			
	XY	—	Black	3-917807-2			
6	XX	—	Black	1-917807-3	43.5	29.0	20.0
	YY	—	Black	2-917807-3			
	XY	—	Black	3-917807-3			

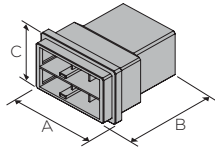
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	—	Black	1-917809-2	47.0	47.0	26.7
	YY	—	Black	2-917809-2			
	XY	—	Black	3-917809-2			
6	XX	—	Black	1-917809-3	57.0	47.0	26.7
	YY	—	Black	2-917809-3			
	XY	—	Black	3-917809-3			

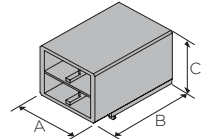
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	—	Black	1-917808-2	33.4	47.0	26.7
	YY	—	Black	2-917808-2			
	XY	—	Black	3-917808-2			
6	XX	—	Black	1-917808-3	43.6	47.0	26.7
	YY	—	Black	2-917808-3			
	XY	—	Black	3-917808-3			

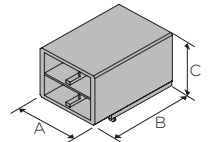
■ Board-mounting Tab Header

Horizontal Type



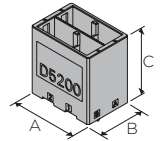
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	Gold	Black	1-1123309-2	29.4	42.2	24.1
	YY	Gold	Black	2-1123309-2			
	XY	Gold	Black	3-1123309-2			
8	XX	Gold	Black	1123829-1	49.7	32.0	26.3

Sequential Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	Gold	Black	8-1123309-2	29.4	42.2	24.1

Vertical Type

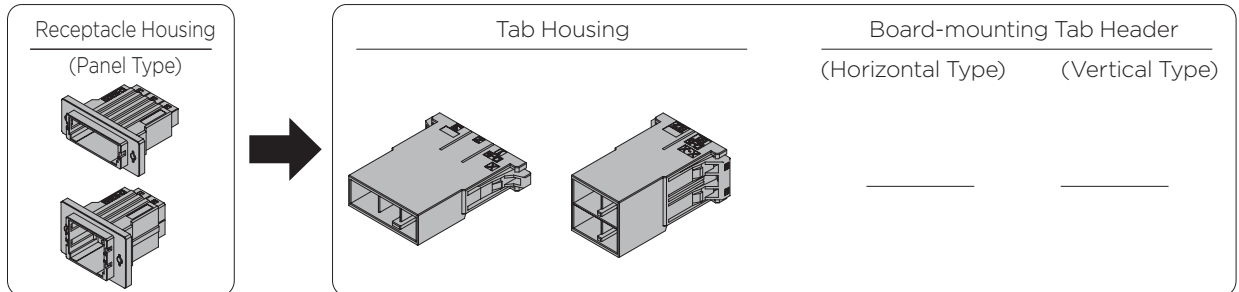


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	Silver	Black	1-1981458-6	29.4	22.6	32.0
	YY	Silver	Black	2-1981458-6			
	XY	Silver	Black	3-1981458-6			

Dynamic Series Connectors

D-5300 Series Reverse Mount Type

Part Number Chart

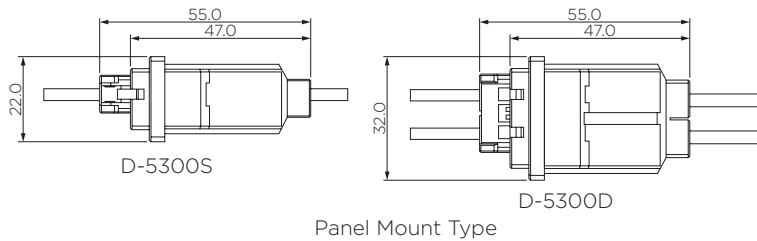


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing	Board-mounting Tab Header	
			Panel Type			Horizontal Type	Vertical Type
3	Black	X	1-1747821-3	—	1-1747819-3	—	—
	Black	Y	2-1747821-3	—	2-1747819-3	—	—
4	Black	XX	1-1747822-2	—	1-1747820-2	—	—
	Black	YY	2-1747822-2	—	2-1747820-2	—	—
	Black	XY	3-1747822-2	—	3-1747820-2	—	—

Information about related products

Applicable Contact Refer to P.409
Performance Specifications... Refer to P.407

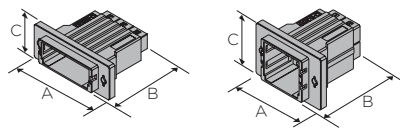
Mating Dimensions



Dimensions

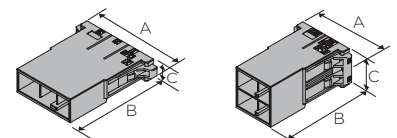
■ Receptacle Housing

Panel Mount Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-1747821-3	57.0	47.0	22.0
	Y	—	Black	2-1747821-3			
4	XX	—	Black	1-1747822-2	47.0	47.0	32.0
	YY	—	Black	2-1747822-2			
	XY	—	Black	3-1747822-2			

■ Tab Housing

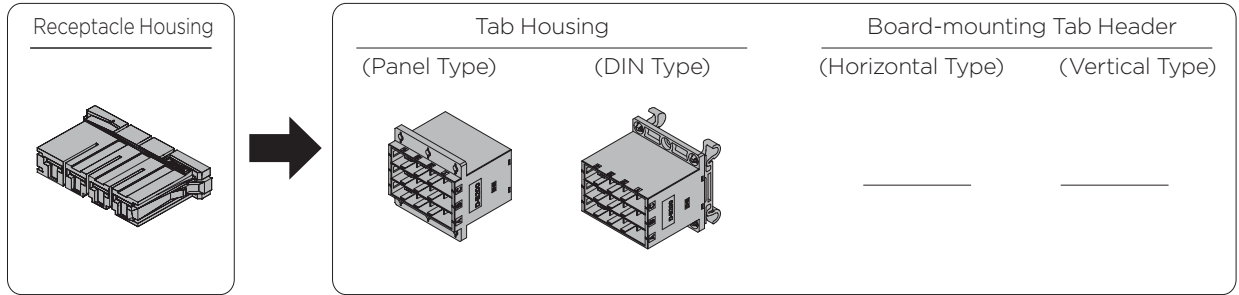


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-1747819-3	46.5	47.0	12.5
	Y	—	Black	2-1747819-3			
4	XX	—	Black	1-1747820-2	33.8	47.0	22.6
	YY	—	Black	2-1747820-2			
	XY	—	Black	3-1747820-2			

Dynamic Series Connectors

D-5200 Series Dynatap 12P (4P x 3 Row)

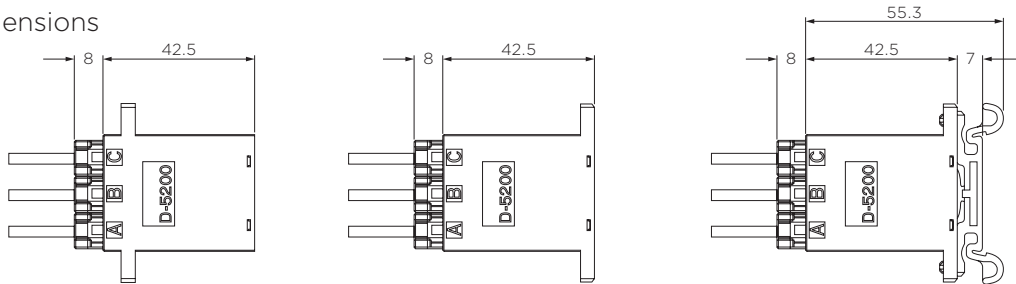
Part Number Chart



No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	DIN Type	Horizontal Type	Vertical Type
4	Black	—	1-179958-4	—	—	—	—	—
12	Black	—	—	Gold	1903146-1*1	1903146-3	—	—
12	Black	—	—	Gold	1903146-2*2	1-1903146-3	—	—
20	Black	—	—	Gold	2013285-1	—	—	—
	Black	—	—	Gold	2013285-2*2	2013285-3	—	—

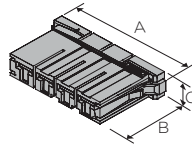
*1: Front panel type *2 Bottom type

Mating Dimensions



Mating parts

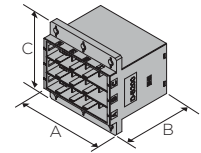
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	—	—	Black	1-179958-4	53.7	29.0	9.8

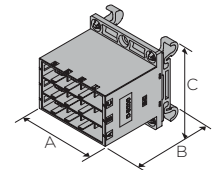
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	Gold	Black	1903146-1	49.7	42.5	50.0
	—	Gold	Black	1903146-2			
20	—	Gold	Black	2013285-1	50.5	42.5	76.4
	—	Gold	Black	2013285-2			

DIN Type

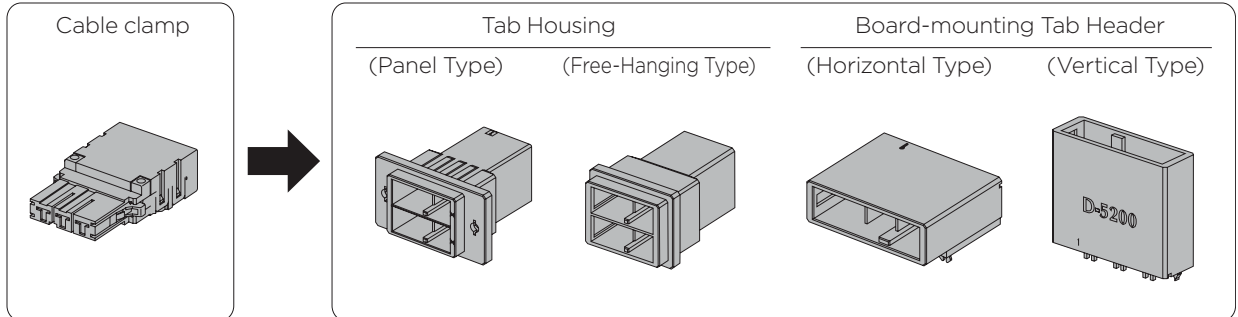


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	Gold	Black	1903146-3	49.7	55.3	50.0
	—	Gold	Black	1-1903146-3			
20	—	Gold	Black	2013285-3	53.0	55.3	76.4

Dynamic Series Connectors

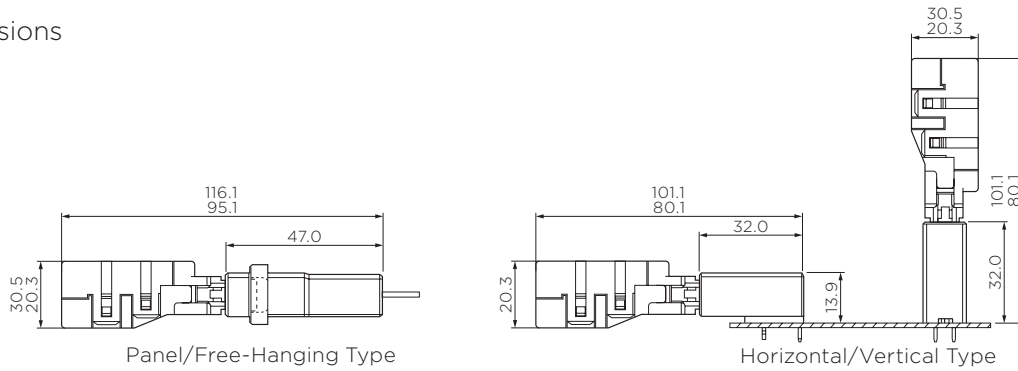
Dyna-Clamp Kit — Cable clamp kit

Part Number Chart



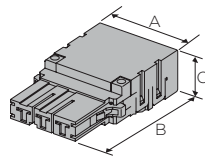
No. of Pos.	Keying	Cable clamp	Tab Housing		Board-mounting Tab Header	
			Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
3	—	1473668-1	1-353047-3	1-353046-3	1-353081-2 1-353081-3	1-353082-2 1-353082-3

Mating Dimensions



Dimensions

■ Cable clamp



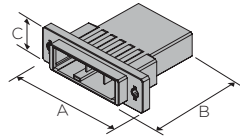
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	—	—	Black	1473668-1	40.3	69.3	20.3

Dynamic Series Connectors

Dyna-Clamp Kit — Cable clamp kit

■ Tab Housing

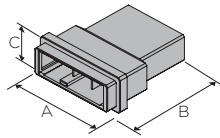
Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-353047-3	57.0	47.0	12.1

■ Tab Housing

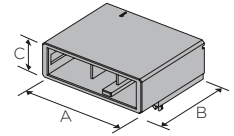
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-353046-3	43.6	47.0	12.1

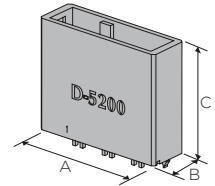
■ Board-mounting Tab Header

Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	Gold	Blac	k1-353081-2	39.5	32.0	13.9
		Gold	Black	1-353081-3			

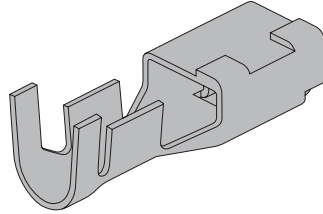
Vertical Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	Gold	Black	1-353082-2	39.5	12.4	32.0
		Gold	Black	1-353082-3			

Dynamic Series Connectors

D-5 α Series Contact



● D-5 α Series Contact : Silver Plated Type

Applicable Wire		Wire Ins. Diameter mm	Wire Range Mark	Contact Part Number		Tool Part Number	
AWG	mm ²			Receptacle Contact		Mini-Applicator	Hand Tool
20	0.50	1.8~2.83	SS	Strip Form	1318985-6	1366757-2	—
16	1.25	2.35~3.23		Loose Piece	1318986-6	—	91596-1
16	1.25	3~3.80	S	Strip Form	179955-6	1366659-2	—
14	2.20			Loose Piece	316040-6	—	234170-1
12	3.50	4~5.2	M	Strip Form	179956-6	1366660-2	—
10	5.50			Loose Piece	316041-6	—	234171-1
8	8.00	4.9~7.8	L	Strip Form	1318696-6	1366658-3	—
				Loose Piece	1318697-6	—	1366044-1

Note : The contacts part numbered with "-6" are Silver plated with 2.54 μ m thickness.

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

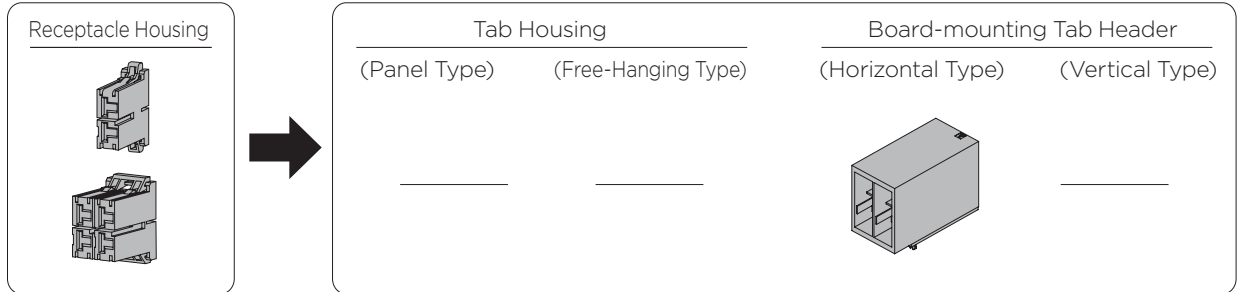
- Mini-Applicator is for use on Automachine. Refer to P.437
- Strip Form contacts are used with Mini-Applicator and Loose-Piece contacts are with hand tools.

Receptacle contacts can be used in all receptacle housings.

Dynamic Series Connectors

D-5200M α — High-Current/High-Voltage Modular Type 2 Row Type

Part Number Chart



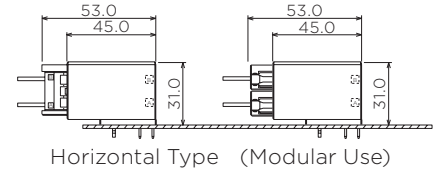
No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
2	Black	X	1-179958-2	—	—	—	—	—
	Black	Y	2-179958-2	—	—	—	—	—
4	Black	XX	1-917807-2	Silver	—	—	1-1318983-6	—
	Black	YY	2-917807-2	Silver	—	—	2-1318983-6	—
	Black	XY	3-917807-2	Silver	—	—	3-1318983-6	—

Note: The 2 pos. receptacles use same 2 pos. housing of D-5200S series. The 4 pos. receptacles use same 4 pos. housing of D-5200M series. The contacts, however, are D-5 (Silver plated type).

Information about related products

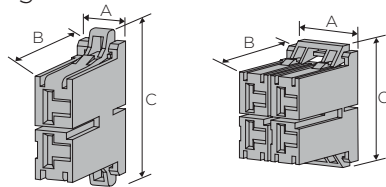
Applicable Contact Refer to P.418
Performance Specifications... Refer to P.407

Mating Dimensions



Dimensions

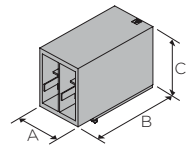
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-179958-2	9.8	29.0	23.8
	Y	—	Black	2-179958-2			
4	XX	—	Black	1-917807-2	20.0	29.0	33.4
	YY	—	Black	2-917807-2			
	XY	—	Black	3-917807-2			

■ Board-mounting Tab Header

Horizontal Type



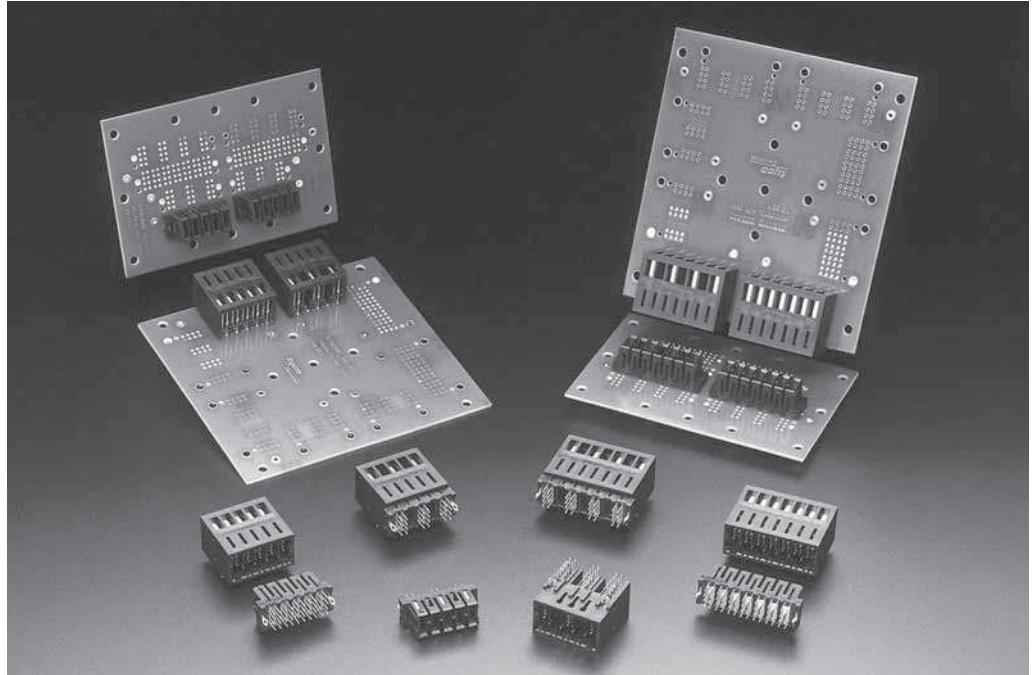
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	Silver	Black	1-1318983-6	22.6	45.0	30.9
	YY	Silver	Black	2-1318983-6			
	XY	Silver	Black	3-1318983-6			

Dynamic Series Connectors

DZ-5200

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

- Equipped with retention leg to protect board from load
- Space allocated to prevent twisting the contact
- Stacking and side-by-side connection types scheduled to enter lineup
- Circuit numbers are easy to identify even for board connectors
- Keying function so you can handle multiple items flexibly
- Soldering is possible without masking
- Scheduled to acquire UL, CSA and TÜV compliance



Performance Specifications

Item	Pitch	200 mils/400 mils 5.08mm/10.16mm
Voltage Rating		5.08mm pitch: 250V AC (rms)/DC 10.16mm pitch: 600V AC(rms)/DC
Current Rating		5.08mm pitch: 20A 10.16mm pitch: 30A
Contact Resistance		2mΩ Max.
Dielectric Withstanding Voltage		5.08mm pitch: 2,200V AC (1 minute) 10.16mm pitch: 4,000V AC (1 minute)
Operating Temperature		-55°C~+105°C
Product Specification		108-78186

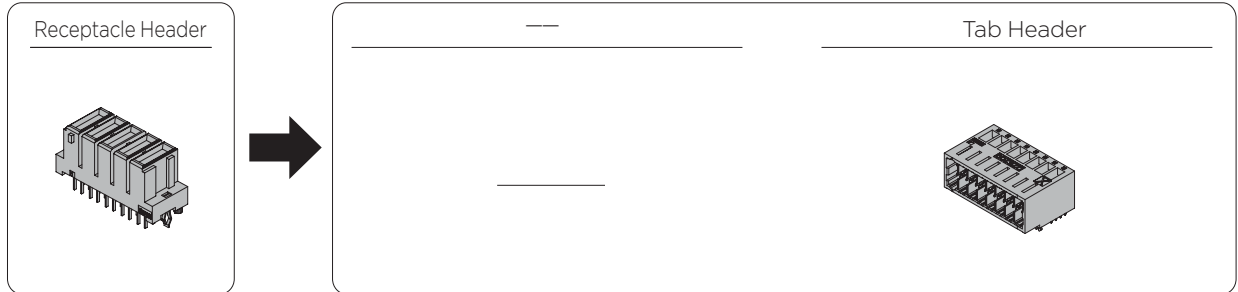
Material and Finish

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

Dynamic Series Connectors

DZ-5200

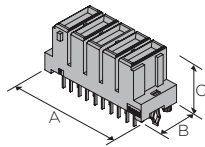
Part Number Chart



No. of Pos.	Color	Keying	Receptacle Header	Plating	—	Tab Header
3	Black	—	5-1747147-3	Gold	—	5-1747145-3
4	Black	—	5-1747147-4	Gold	—	5-1747145-4
5	Black	—	1-1747147-5	Gold	—	1-1747145-5
7	Black	—	1-1747147-7	Gold	—	1-1747145-7

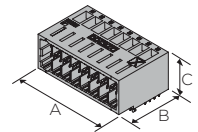
Dimensions

■ Receptacle Header



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	—	Gold	Black	5-1747147-3	30.8	11.5	14.0
4	—	Gold	Black	5-1747147-4	40.9	11.5	14.0
5	—	Gold	Black	1-1747147-5	30.8	11.5	14.0
7	—	Gold	Black	1-1747147-7	40.9	11.5	14.0

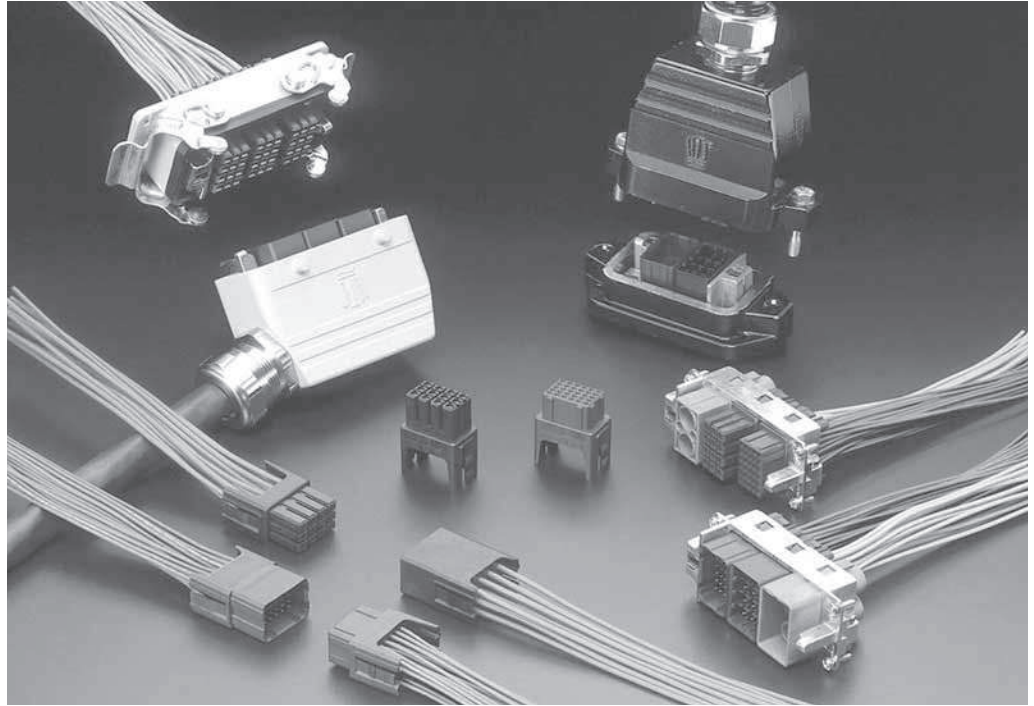
■ Tab Header



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	—	Gold	Black	5-1747145-3	28.8	27.0	17.5
4	—	Gold	Black	5-1747145-4	39.0	27.0	17.5
5	—	Gold	Black	1-1747145-5	28.8	27.0	17.5
7	—	Gold	Black	1-1747145-7	39.0	27.0	17.5

Dynamic HTS Module

Dynamic connector developed for applications that need heavy duty waterproofing. Now it is possible to use Dynamic series connectors for everything inside and outside the control board.



Performance Specifications

Item \ Series	D-2800	D-3800	D-4800	D-5800
Voltage Rating	250VAC/DC	600VAC/DC	600VAC/DC	630VAC/DC
Current Rating	5A	15A	25A	40A
	(#18 AWG)	(#16 AWG)	(#12 AWG)	(#8 AWG)
Contact Resistance	10mΩ Max. (Final)			2mΩ Max.
Dielectric Withstanding Voltage	1,500V AC (1 minute)		2,500V AC (1 minute)	3,000V AC (1 minute)
Operating Temperature	-55°C~+105°C			
Product Specification	108-78284	108-78285	108-78388	108-78389
Application Specification	114-5258	114-5148	114-5369	114-5206

Material and Finish

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

Contact

Contacts of proven Dynamic series, as well as the existing special tools and applicators, can be continued to be used.

D-2 Contact Refer to P.365 D-4 Contact Refer to P.402
D-3 Contact Refer to P.375 D-5 Contact Refer to P.409

Dynamic HTS Module

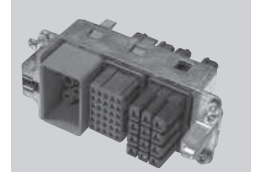
This series is a combined product of HTS series proven with rectangular connectors and popular Dynamic series.

Feature 1 Possible to use existing Dynamic contacts

The same tried-and-true Dynamic series connectors are used as is, so existing specialized tools and applicators can also be used.

Feature 2 Wide variety of variations when combined

Metal hoods and frames of HTS connectors, which offers variable choices depending on sizes and mounting types, are employed. Sizes and number of positions can be freely selected to meet the needs. It is also durable for high-current with which the existing Dynamic series can not cope, by combined with the existing HTS series.



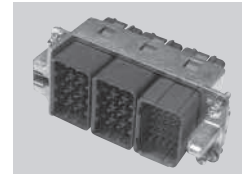
Both Dynamic and HTS combined



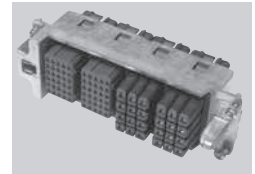
1 module type



2 module type



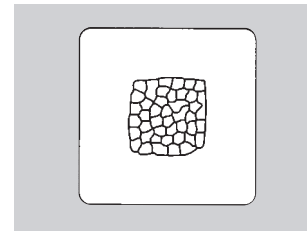
3 module type



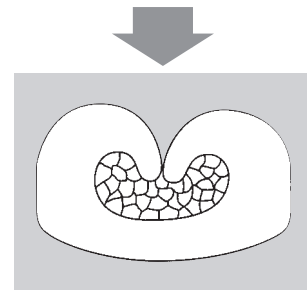
4 module type

Feature 3 Reduce assembly steps

Sequential terminals are available to enable the termination with automatic crimping machines. Termination time can be substantially reduced.



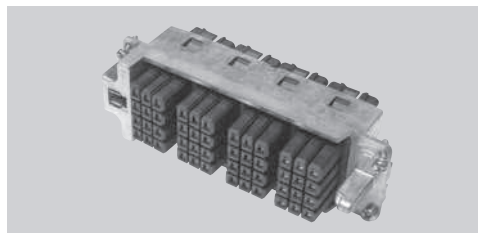
Productivity is poor because wires are inserted in terminal hole and crimped



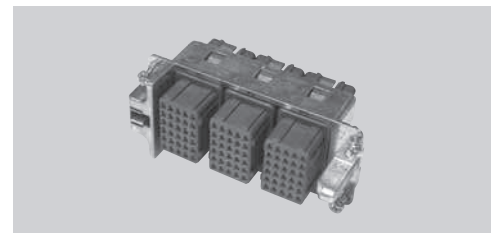
Productivity is good because wires are placed from above. Plus, there are consecutive terminals so automated crimping is possible

Feature 4 High density mounting possible

Approximately 30% higher density mounting is possible compared to the high density type of the existing HTS connectors.



D-3000 4 module type 48 Pos.



D-2000 3 module type 90 Pos.

Dynamic HTS Module

Connector selection procedure

Step 1

Decide current and number of positions



Step 2

Decide size of wires



Step 3

Select contact and housing



Step 4

Select frame



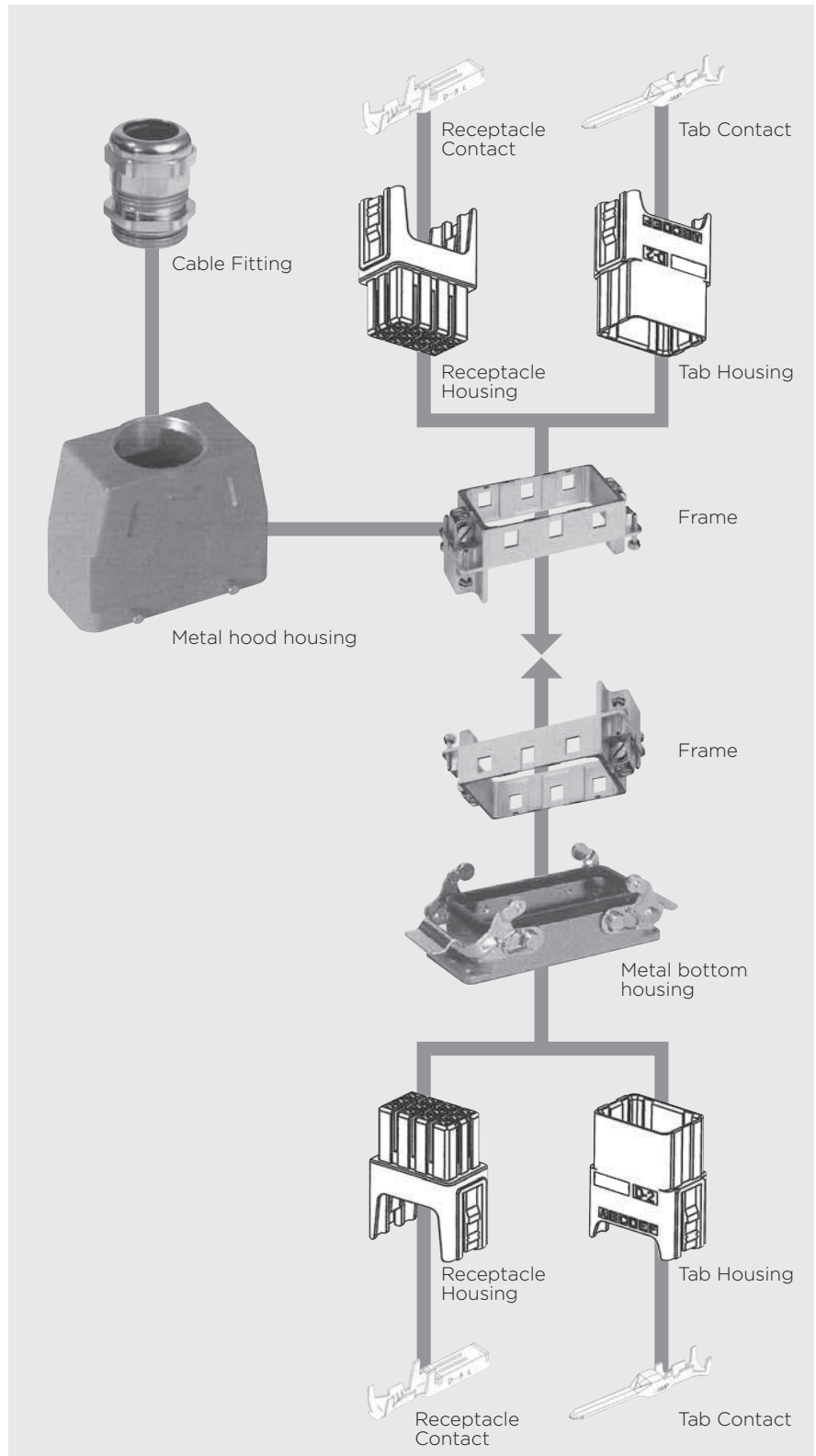
Step 5

Select cable fit (screw)



Step 6

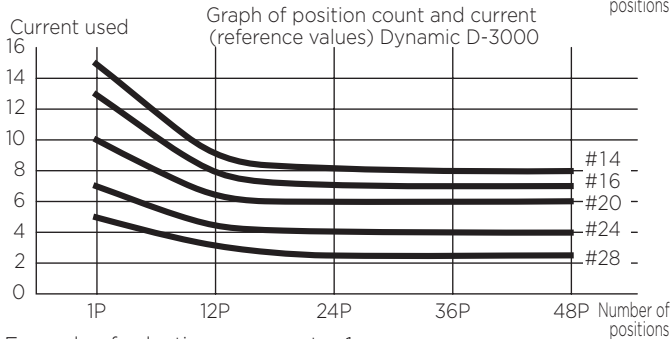
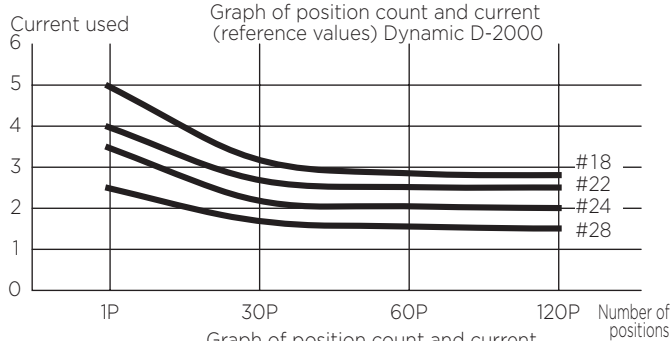
Select metal housing



Dynamic HTS Module

Example of selecting a connector

Step 1 Step 2 Refer to the following graphs to select the amperage, number of positions, and wire size.



Example of selecting a connector 1

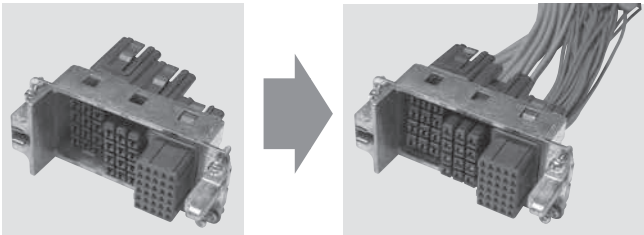
This example describes how to select connectors for; 8 amperes at 20 positions and 3 amperes at 20 positions. We can see from the graph above that the D-3000 #16 is sufficient for 8 amps x 20, and the D-2000 #18 is sufficient for 3 amperes x 20. (Refer to page 365 and 375 for the contacts)

D-2000 contact: 1318105-1, 1318109-1

D-3000 contact: 917484-□, 917485-□

Step 3 Step 4

Next, we select the Dynamic housing (see pages 426 and 427) and frame (see page 428) to support the connector and position count that we selected.



Example of selecting a connector 2

We can see that for the specifications we selected for example 1 we need 2 sets of D-3000 housing and 1 set of D-2000 housing (select from page 426 and 427). A total of 3 sets are necessary, so we select a 3-module type frame (select from page 428).

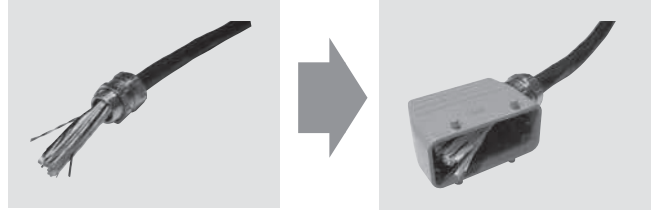
D-2000 housing: 1747365-1, 1747366-1 one each

D-3000 housing: 1747363-1, 1747364-1 two each

Frame for 3 modules: 1108782-1, 1108782-2 one each

Step 5

Select a cable fitting (see page 429) that is suitable for the thickness of the jacket cable being used.



Example of selecting a connector 3

Assume $\phi 21$ mm diameter jacket cable for this example, then we determine from the Cable diameter table (Dmin & Dmax section) on page 429, that a suitable cable fitting is the G29 or M32 cable fitting, for metal types.

This time we select the M32 type.

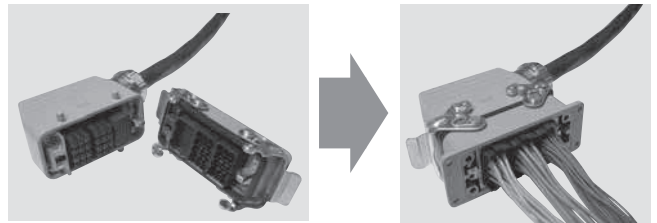
M32 cable fitting: 3-1102770-2 x 1

There are many cable fitting options available. Refer to the HTS catalog (889745 Rev.01-05) for options not listed in this catalog.

Step 6

Finally, refer to the HTS catalog (889745-2 Rev.09-08) to select a metal case of the same size as the frame and the cable fitting you selected. At this point you can select from three shapes of locks for the metal case.

* Select a lock shape that is the same shape for the cable side and the mounted side that were selected.



Example of selecting a connector 4

Select a metal housing for the parts that have been selected so far. From the HTS catalog, select a 3-module type (size 6) metal hood that can be attached to the M32 cable fitting. In this case, select a metal housing with dual side locks for wires that pull out horizontally. Select a bottom side metal housing that has the same kind of dual side locks. Finally, to finish, put all the parts selected so far into the metal housing.

Metal hood housing: 1106449-4

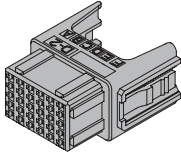
Metal bottom housing: 1-1102296-1

There are a wide variety of metal housings available, so refer to the HTS catalog (889745-2 Rev.09-08). The relevant page from the HTS catalog is shown on page 428 of this catalog.

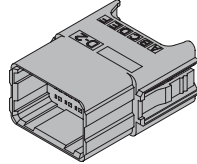
Dynamic HTS Module

Part Number Chart

Receptacle Housing



Tab Housing



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

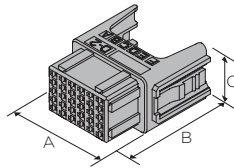


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing	Board-mounting Tab Header	
						Horizontal Type	Vertical Type
30	Black	—	1747365-1	—	1747366-1	—	—
12	Black	—	1747363-1	—	1747364-1	—	—
8	Black	—	1871416-1	—	1871417-1	—	—
4	Black	—	1871418-1	—	1871419-1	—	—

D-2800

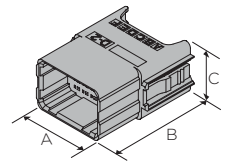
Dimensions

■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
30	—	—	Black	1747365-1	30.3	37.6	19.5

■ Tab Housing



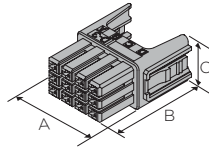
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
30	—	—	Black	1747366-1	30.3	40.0	19.5

Dynamic HTS Module

D-3800

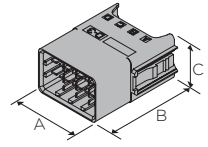
Dimensions

■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	—	Black	1747363-1	30.3	41.4	19.5

■ Tab Housing

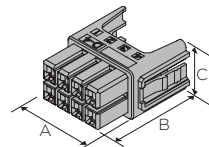


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	—	Black	1747364-1	30.3	40.0	19.5

D-4800

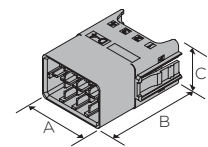
Dimensions

■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
8	—	—	Black	1871416-1	30.3	38.6	19.5

■ Tab Housing

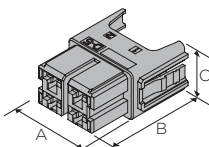


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
8	—	—	Black	1871417-1	30.3	40.0	19.5

D-5800

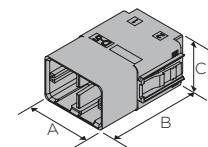
Dimensions

■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	—	—	Black	1871418-1	30.3	41.4	19.5

■ Tab Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	—	—	Black	1871419-1	30.3	44.1	19.5

Dynamic HTS Module

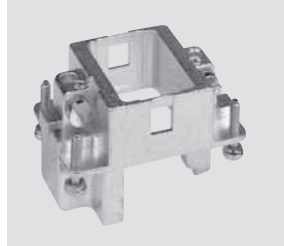
Frame and Metal Housing

Frame

Applicable Metal Housing

Size 3 (1 module type)

Part Number : 1108784-1
Hermaphroditic products

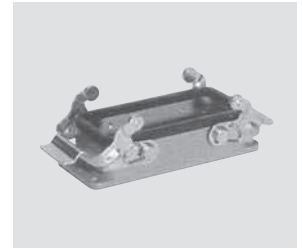
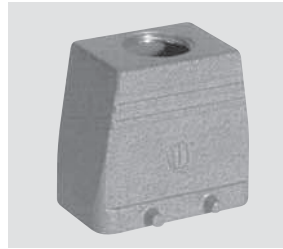
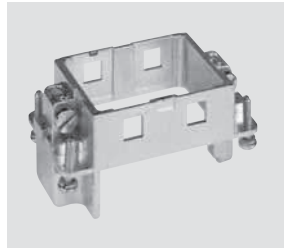


Refer to a HTS catalog No. 889745-2, Issued. 8-2008.

Refer to a HTS catalog No. 889745-2, P72-74.

Size 4 (2 module type)

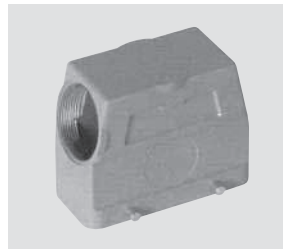
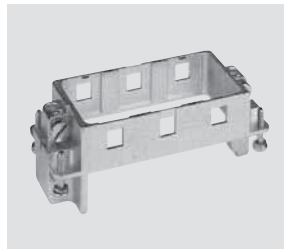
Part Number : 1108783-1 (Male)
1108783-2 (Female)



Refer to a HTS catalog No. 889745-2, P86-88.

Size 6 (3 module type)

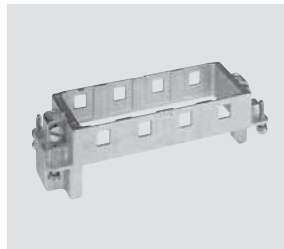
Part Number : 1108782-1 (Male)
1108782-2 (Female)



Refer to a HTS catalog No. 889745-2, P114-116.

Size 8 (4 module type)

Part Number : 1108780-1 (Male)
1108780-2 (Female)



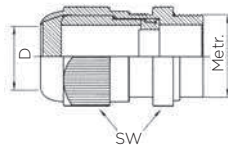
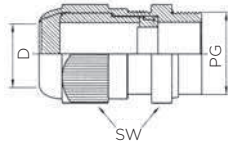
Refer to a HTS catalog No. 889745-2, P138-140.

Dynamic HTS Module

Cable Fitting

Plastic Type

Gland fitting IP 68 plastic

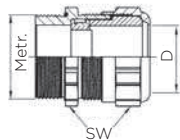
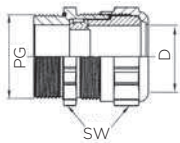


PG	D		SW	Designation	Part Number
	Min.	Max.			
11	5	10	22	HUT.11.P	1-1106005-7
13.5	6	12	24	HUT.13.P	2-1106005-7
16	10	14	27	HUT.16.P	3-1106005-7
21	13	18	33	HUT.21.P	4-1106005-7
29	18	25	42	HUT.29.P	5-1106005-7

Metr.	D		SW	Designation	Part Number
	Min.	Max.			
M16	4	8	20	HUT.M16.P	1-1102771-6
M20	6	12	24	HUT.M20.P	2-1102771-0
M25	10	14	29	HUT.M25.P	2-1102771-5
M32	13	18	36	HUT.M32.P	3-1102771-2
M40	18	25	46	HUT.M40.P	4-1102771-0
M50	22	32	55	HUT.M50.P	5-1102771-0

Metal Type

Gland fitting IP 68 brass, Nickel plated, neoprene sealing insert and O ring at connection thread



PG	D		SW	Designation	Part Number
	Min	Max			
11	5	10	20	HUT.11.MS	1-1106006-9
13.5	6	12	22	HUT.13.MS	2-1106006-9
16	10	14	24	HUT.16.MS	3-1106006-9
21	13	18	30	HUT.21.MS	4-1106006-9
29	18	25	40	HUT.29.MS	5-1106006-9
36	22	32	50	HUT.36.MS	6-1106006-9
42	32	38	57	HUT.42.MS	7-1106006-9

Metr.	D		SW	Designation	Part Number
	Min	Max			
M16	5	10	17	HUT.M16.MS	1-1102770-6
M20	6	12	22	HUT.M20.MS	2-1102770-0
M25	13	18	27	HUT.M25.MS	2-1102770-5
M32	18	25	34	HUT.M32.MS	3-1102770-2
M40	22	32	43	HUT.M40.MS	4-1102770-0

Variable options are available other than listed above. Please refer to P.188 to 193 of a HTS catalog.