

Dynamic Series

Yasushi Araki

Product Management

Communications & Industrial Solutions (CIS)

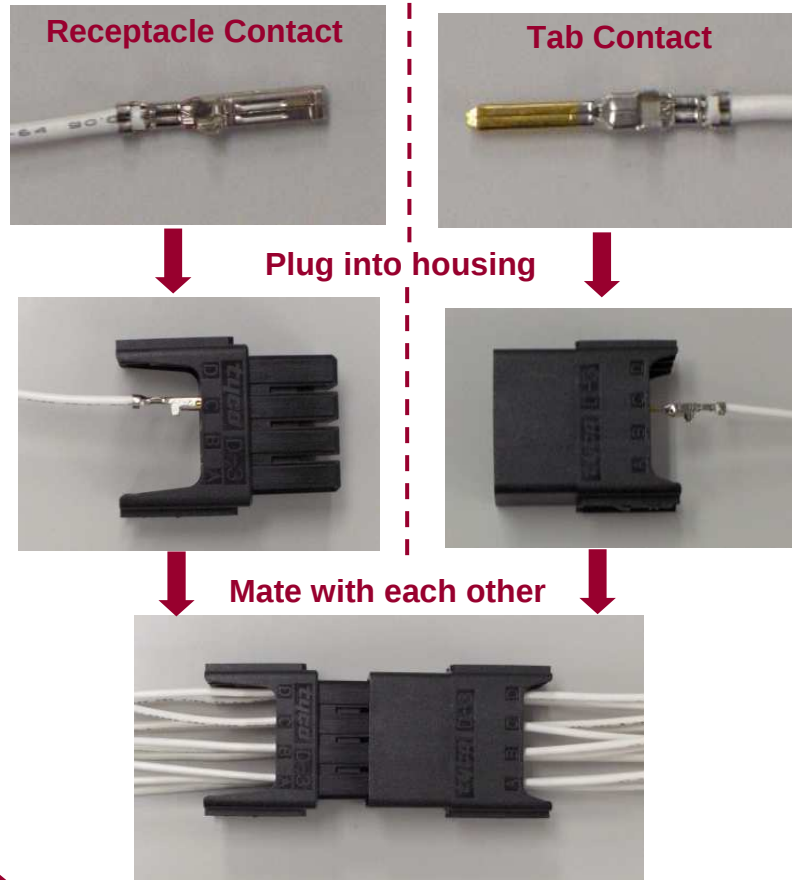


Agenda

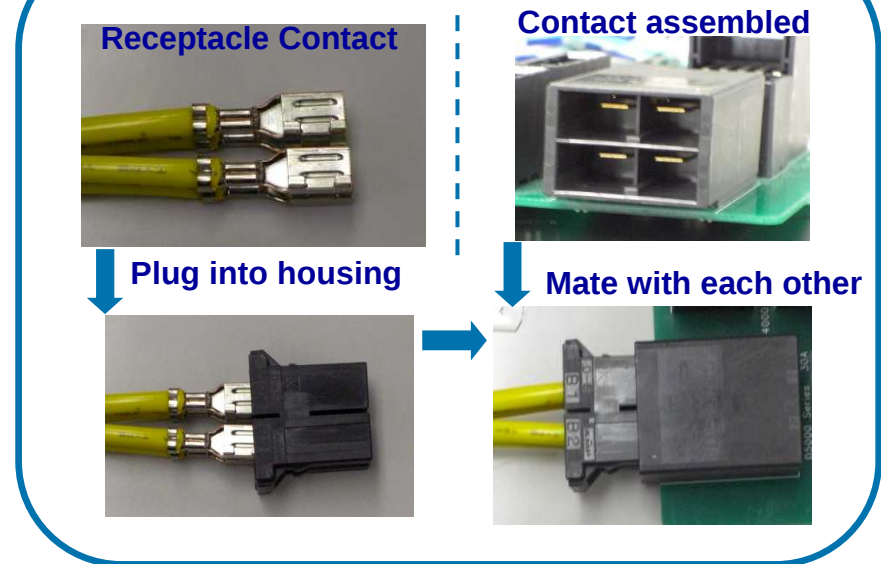
- 1. Types of Connectors**
- 2. Advantage of Dynamic Series**
 - 1-A) Standardized Sets of Contacts
 - 1-B) Variety of Connectors
 - 1-C) Reliabilities
 - 1-D) Easy Handiness
- 3. Promoting Dynamic Series**
 - 3-A) How to Select the Products
 - 3-B) Product Details
- 4. Industrial Applications**
 - 4-A) Application Examples
 - 4-B) Usage Examples
- 5. Replacing Terminal Blocks**
- 6. Production Locations**
- 7. Product Road Map**
- 8. Promotion Tools**

1. Types of Connectors

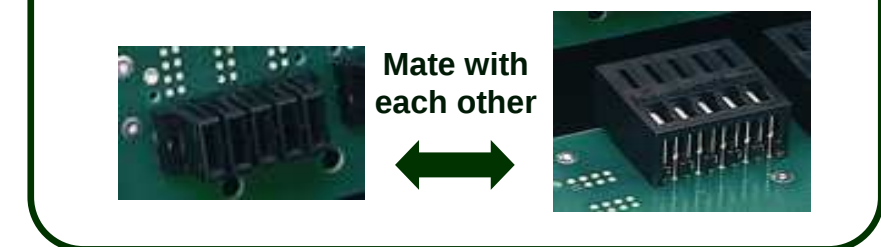
Wire to Wire



Wire to Board



Board to Board



2. Advantage of Dynamic Series

Advantages

A) Standardized Sets of Contacts:

- Reduce inventory and tooling that help productivities.

B) Variety of Connectors:

- Customers obtain design flexibility.
- The whole application looks better with adapting the same type of connectors.

C) Reliabilities

- Designed high reliable contacts.
- Robust design for rough handling.

D) Easy Handiness

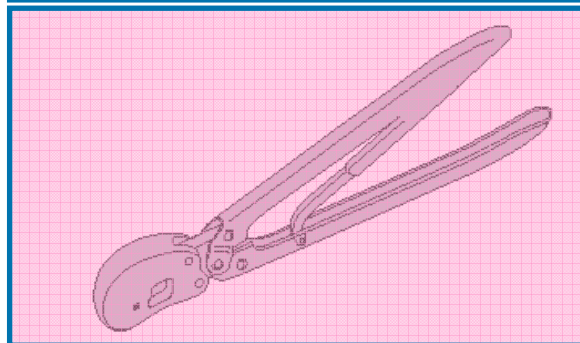
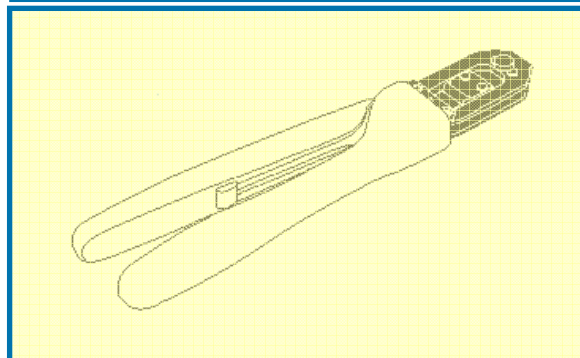
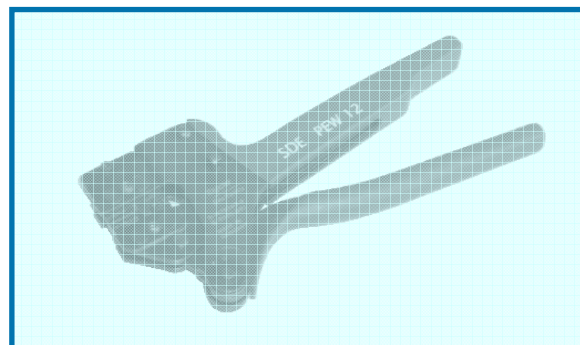
- Keying function for no connection mistake.
- Easy to plug in and out by operators.
- Identified the circuit numbers on the connectors.
- Label space for identifications.

2-A) Standardized Contacts

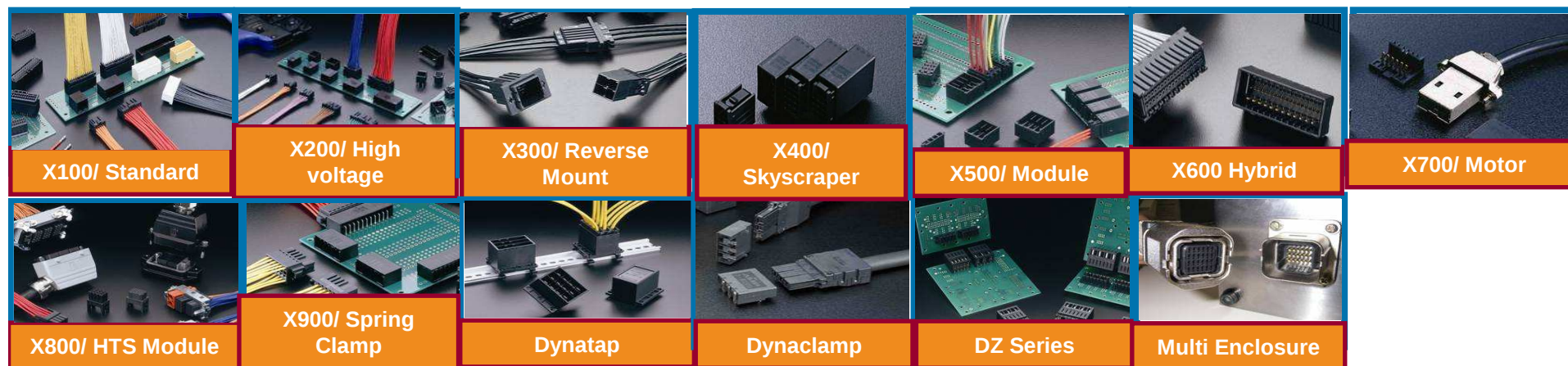


Requires Less Tooling

Series	Rated Current (A)	AWG#	Wire Range Mark	Only Hand Tool	Dice P/N	Set (Tool + Dice)	
D1000	3~5	30	S	9-1478240-0	1762953-1	1762952-1	
		28					
		28	M		1762847-1	1762846-1	
		26					
		24					
		22	L		1762951-1	1762950-1	
		28					
		26					
		24					
		22	2L		1762626-1	1762625-1	
20							
18							
D2000	5	28	S	-	-	91576-1	
		26					
		24					
		22	M			91595-1	
		20					
18							
D3000	15	28	S	-	-	91565-1	
		26					
		24					
		24	M			1762955-1	1762954-1
		22					
		20					
		20					
		18	L			1762957-1	1762956-1
		16					
		16					
14	2L	-	-	91560-1			
16							
14	3L			91561-1			
12							
D4000	24	16	M	9-1478240-0	1762671-1	1762675-1	
		14					
		14			L	1762670-1	1762674-1
		12					
D5000	30~45	16	S	-	-	234170-1	
		14					
		12	M			234171-1	
		10					
		8					1366044-1



2-B) Variety of Connectors



↓ Contacts		Type of connectors→												
Series	Rated Current (A)	Types of Connectors												
		100	200	300	400	500	600	700	800	900	ME	Cable Clamp	DZ	TAP
		STD	High Voltage	Reverse	Sky Scraper	Module	Hybrid	Motor	HTS Module	Cage Clamp				
D1000	5	4-40	2-20			3-34				8-38		10		
D2000	5	3-50					48		30					
D3000	15	3-20	2-20		12, 20	2-20		6	12	3-10				18, 24
D4000	24		2-6						8					
D5000	45		2-8	3,4								3,4	3-7	12
D7000	65	4		4								4		
New Products														
Numbers of Positions														

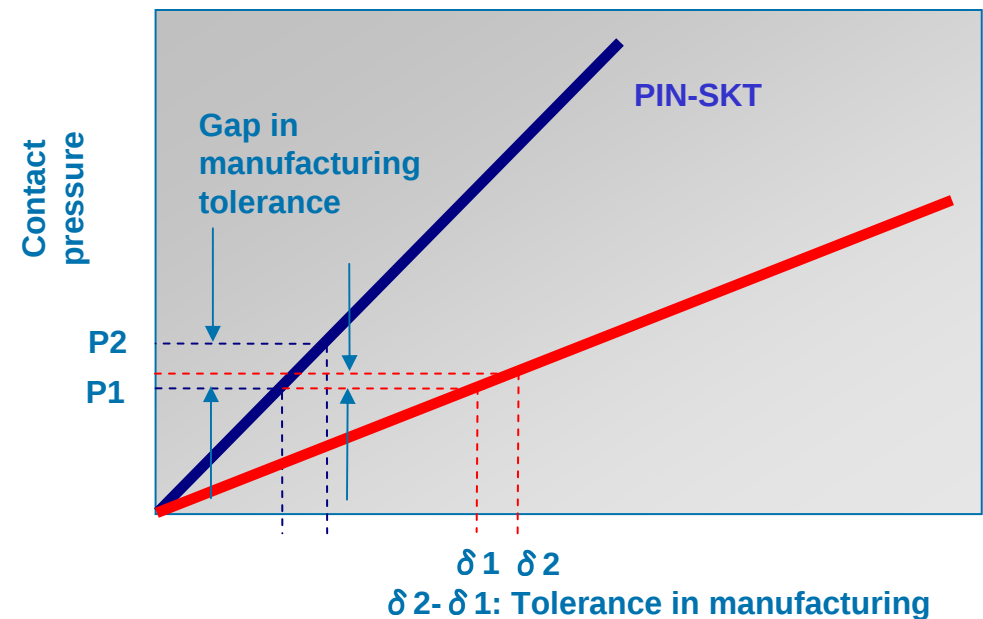
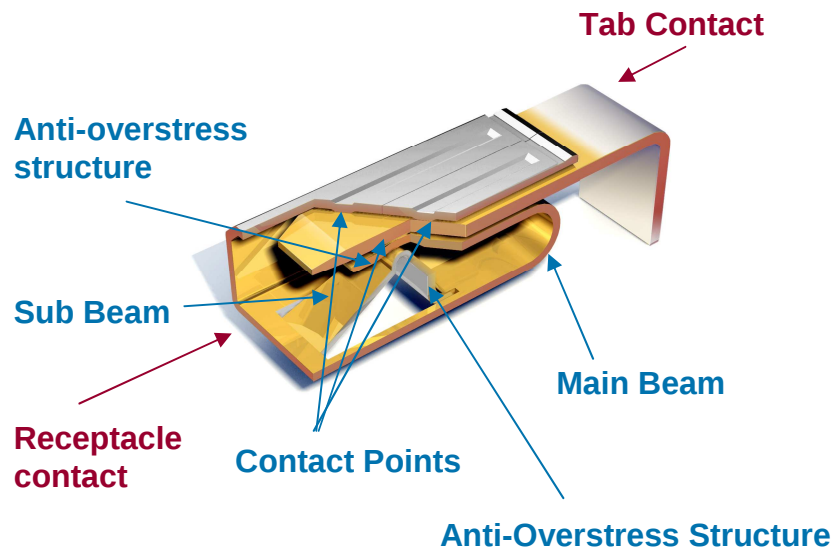
2-B) Variety of Connectors

	Image	Receptacle	TAB Housing		PCB TAB Header	
			Panel Mount	Free Hanging	Right Angle	Vertical
STD (100)						
	Image	Receptacle	TAB Housing		PCB TAB Header	
			Panel Mount	Free Hanging	Right Angle	Vertical
High Voltage (200)		 Wider pitches compare to 100				
	Image	Receptacle	TAB Housing		PCB TAB Header	
			Panel Mount	Free Hanging	Right Angle	Vertical
Reverse (300)		 Opposite way of STD				
	Image	Receptacle	TAB Housing		PCB TAB Header	
			Panel Mount	Free Hanging	Right Angle	Vertical
Skyscraper (400)		 Piled up for no space to horizontal				
	Image	Receptacle	TAB Housing		PCB TAB Header	
			Panel Mount	Free Hanging	Right Angle	Vertical
Module (500)						
	Image	Receptacle	TAB Housing		PCB TAB Header	
			Panel Mount	Free Hanging	Right Angle	Vertical
Hybrid (600)		 12pos. Of D3 (15A), 36pos. Of D2 (5A)				

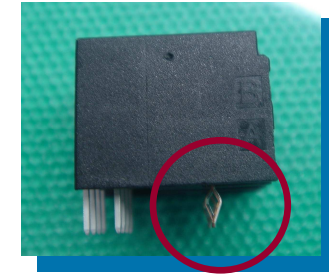
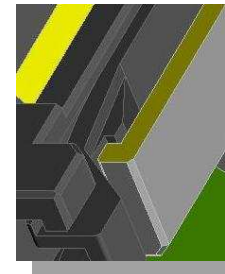
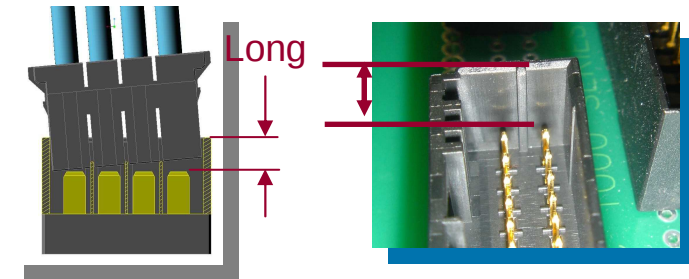
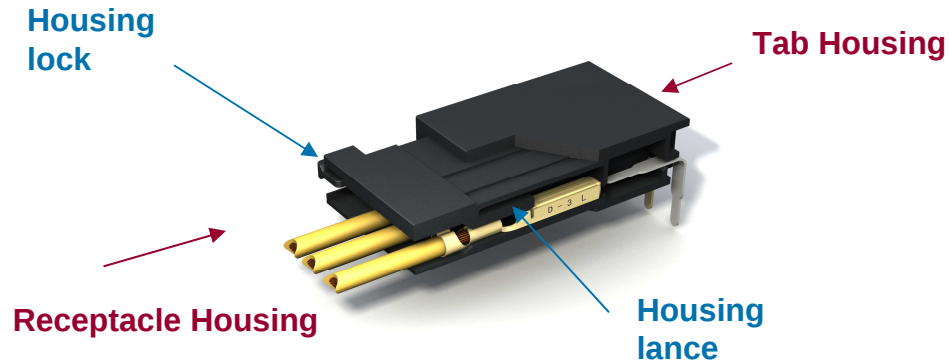
	Image	Plug	Motor Side			
Motor (700)			 Customer Restricted			
	Image	Receptacle	TAB Housing	HTS Products		
				Frame	Metal Hood	Metal Base
HTS (800)						
	Image	Receptacle	TAB Housing		PCB TAB Header	
			Panel Mount	Free Hanging	Right Angle	Vertical
Cage Clamp (900)		 Crimp type & spring type				
	Image	Plug Case	Rec. Housing	Tab Housing	Base	
Multiple Encloser (ME)		 Plastic & Metal				
	Image	Cable Clamp	TAB Housing		PCB TAB Header	
			Panel Mount	Free Hanging	Right Angle	Vertical
Cable Clamp						
	Image	Receptacle				Tab Header
Board to Board						
	Image	Receptacle	TAB Housing			
			Panel Mount	Free Hanging	Din	
TAP						One receptacle branches to the others

2-C) Reliabilities - Features of Contacts

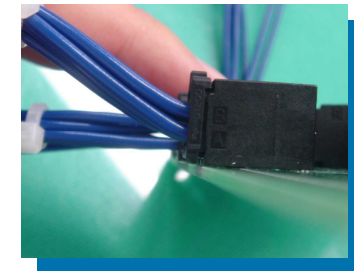
- Adapt **high conductivity material**
- High reliable **spring concept**
- **“Box” shaped** contact prevents defecting the spring contact.
- **Three points contact** provides high electrical characteristics.
- **Low friction force**



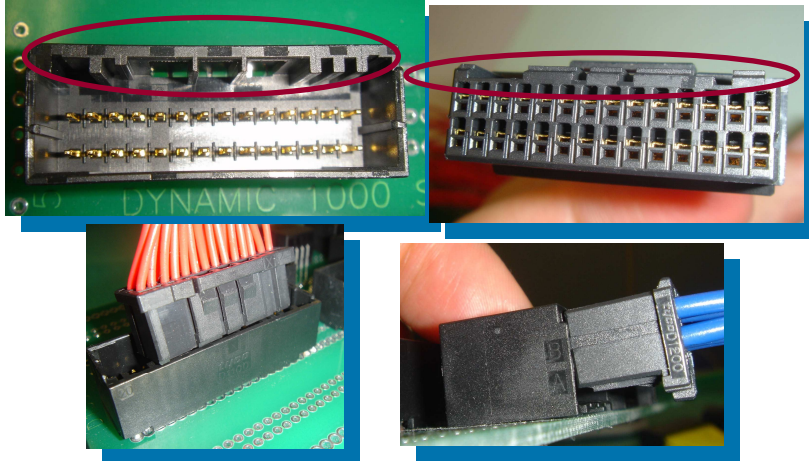
2-C) Reliabilities - Features of Housings



- Shrouded shape HDR & short length Tab to **anti-Kojiri (Defect by twisting)**
- **Audible click sounds** when mating that secure unmating.
- **Robust lock** and **leg contact** strengthen on the mount PCB



2-D) Easy Handiness – Feature

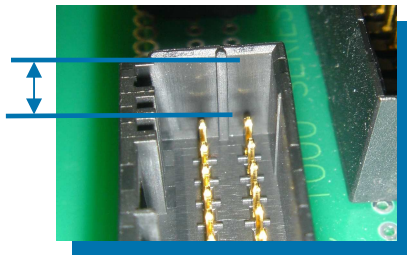


Lib :

- Guides to mate correctly
- Keying function
- Prevent mating the different housings
- Preventing wrong direction insert

Depth :

- Prevents touching the tabs directly
- Prevents defecting the contacts

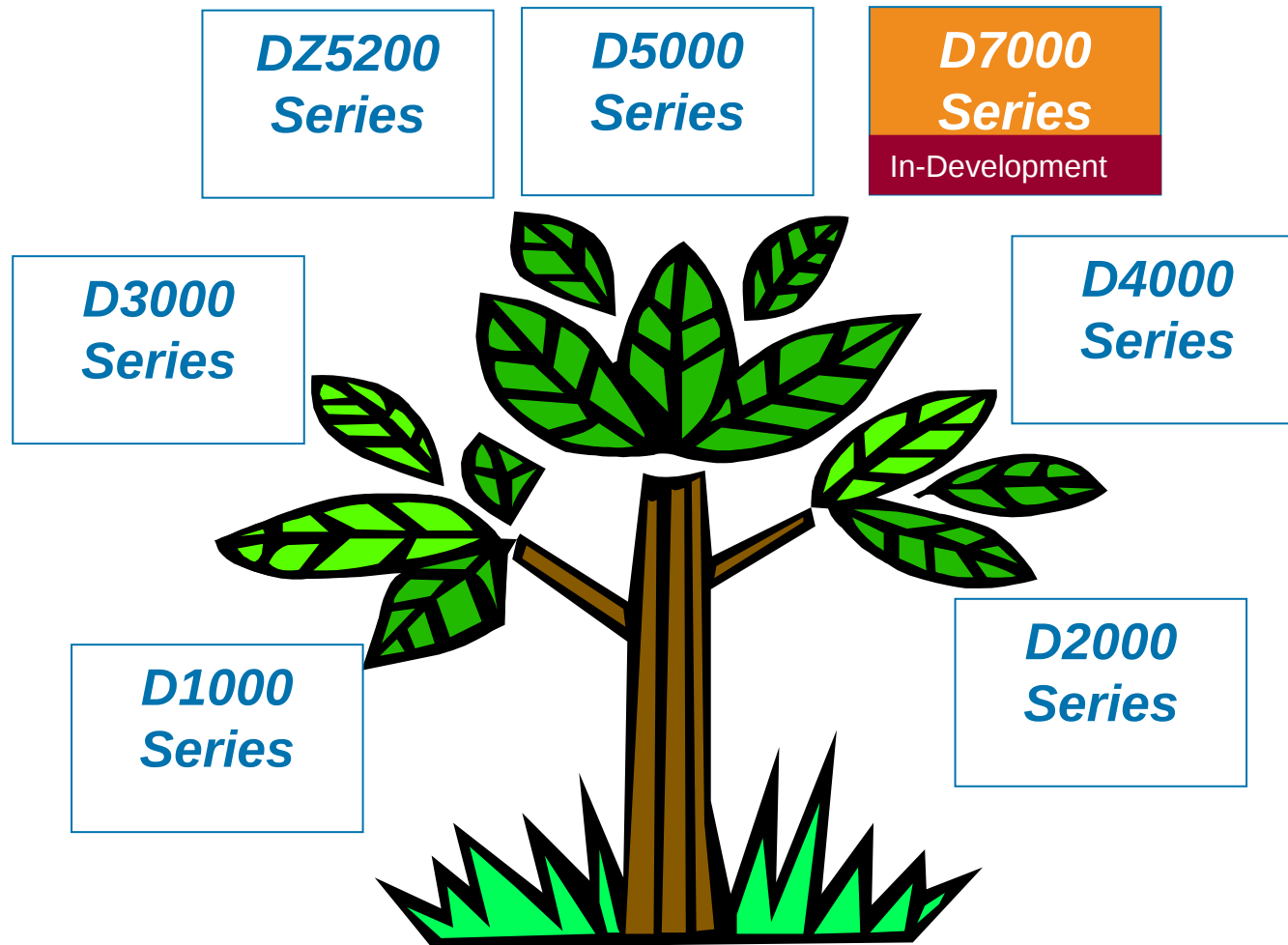


Space :

- Visible circuit number
- Label space



3. Promoting Dynamic Series



3-A) How to Select the Products

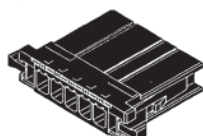
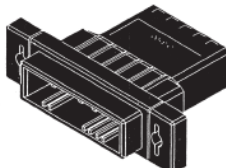
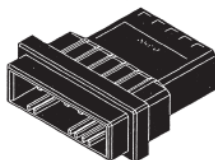
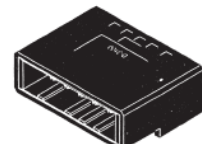
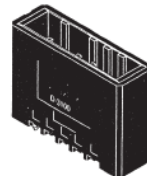
Name of Series			Electrical Performance				Pitch [mm]	Wire Range [AWG]	Number of Position [P]	Number of Row [row]	Housing Types														Sally Standards UL CSA ※TUV	Product Specification	Application Specification
Series	Designation	Description	Maximum Current Rating [A]	Maximum Voltage Rating [V AC/DC]	Withstanding Voltage [V AC/1minute]	Durability [Cycles]					Wire to Wire		Wire to Board				DN Rail	Tap	Junction Box	Drawer	Board to Board						
											Free Hangers	Panel Mount	DIP		SMT												
1000	1100S	Standard	3	125	700	50 (Gold) 30 (Tin)	2.0	30 ~ 22	4,8,10	1	-	-	-	O	-	O	-	-	-	-	-	-	O	108-78268 (Gold Plating) 108-78298 (Tin Plating)	114-5377		
	1100D	Standard							10,20,22,24,26,28,30,32,34,40	2	O	O	O	O	O	O	-	-	-	-	-	-	O				
	1200S	High Voltage	5	250	1100		2.5	30 ~ 18	2	1	O	-	O	-	-	-	-	-	-	-	-	-	O				
	1200D	High Voltage							4,6,8,10,12,16,20	2	O	O	O	O	O	-	-	-	-	-	-	O					
	1500T	Module Type							3,6,9,12,34,36	3	O	O	O	O	-	-	O	-	O	-	-	O					
2000	2100S	Standard Type	5	250	1500	500	2.5	28 ~ 18	3	1	O	O	O	O	-	-	-	-	-	-	-	O	108-5619 (S/D) 108-5659 (M)	114-5897			
	2100D	Standard Type							6,8,12,16,20	2	O	O	O	O	-	-	-	-	-	-	-	O					
	2100M	Multiposition Drawer	2.6	50		2	O	O	-	O	-	-	-	-	O	-	x										
	2600D	Hybrid of Power and Signal	D-2 (3.2) D-3 (7.5)	500		D-2 (2.5) D-3 (3.81)	D-2 (28 ~18) D-3 (28 ~14)	D-2 (36) D-3 (12)	D-2 (2) D-3 (1)	-	-	O	-	-	-	-	-	-	x	108-78301							
	2800	HTS Module	5			3.0	28 ~ 18	30	6	O	O	-	-	-	-	-	-	-	-	x	108-78284	114-5258					
3000	3100S	Standard	15	250	1500	500 (Gold) 1000 (Tin)	3.81	28 ~ 14	3,4,5,6,8,10,6x3(Tap)	1,3(Tap)	O	O	O	O	O	O	-	O	-	-	-	-	O	108-5349	114-5148		
	3100D	Standard					3.81		6,8,10,12,16,20	2	O	O	O	O	-	-	-	-	-	O	-	O					
	3100M	Module					3.81		6	1x2	-	-	O	O	-	-	-	-	-	-	-	O					
	3200S	High Voltage		5.08	2,3,4,5,6,4x6(Tap)		1,6(Tap)		O	O	O	O	O	O	-	O	-	-	-	O							
	3200M	High Voltage		5.08	6,10,12,20		2		O	O	O	O	-	-	-	-	-	O	-	O							
	3200T	High Voltage		5.08	9		3		-	-	-	O	-	-	-	-	-	-	-	O							
	3400F	Skyscraper		3.81	12,16,20		4		-	-	-	O	-	-	-	-	-	-	-	O							
	3500D	Module		5.08	2,4,6,10,12,20		2		O	O	O	O	-	-	-	-	-	-	-	O							
	3700	For Motor		3.81	6		1		-	O	-	-	-	-	-	-	-	-	-	O							
	3800	HTS Module		5.2	12		4		O	O	-	-	-	-	-	-	-	-	-	-	O	108-78285					
4000	4200S	Standard	24	600	2500	25	6.35	16 ~ 12	2,3,4	1	O	O	O	O	-	-	-	-	-	-	-	O	108-78182	114-5369			
	4200M	Module	24	600	2500		6.35		6	1x2	O	O	-	-	-	-	-	-	-	-	O	108-78388	114-5369				
	4800	HTS Module	24	600	2500		6.35		8	2	O	O	-	-	-	-	-	-	-	-	-	O	108-78388	114-5369			
5000	5200S	Standard	30	630	3000	50 (Gold 0.76u) 25 (Gold 0.38u)	10.16	16 ~ 8	2,3,4,5,6	1	O	O	O	O	-	-	-	-	-	-	-	O	108-5453	114-5206			
	5200S	Cable Clamp							3	2	-	-	-	O	-	-	-	-	-	-	-	-			O		
	5200D	Cable Clamp							4	2	O	-	-	-	-	-	-	-	-	-	-	-			O		
	5200M	High Voltage							4,6,8,4x5(Tap)	1,2	O	O	-	O	-	-	O	O	-	-	-	-			O		
	5200Ma	High Current	45			25 (Silver)	10.16	20 ~ 8	2,4	2	-	-	-	O	-	-	-	-	-	-	O						
	5300S	Reversed Housing	30						3	1	-	O	-	-	-	-	-	-	O								
	5300D	Reversed Housing	50 (Gold 0.76u) 25 (Gold 0.38u)			12.0	16 ~ 8	4	2	-	O	-	-	-	-	-	-	-	-	-	O	108-78389	114-5206				
	5800	HTS Module						4	2	O	O	-	-	-	-	-	-	-	-	-	-	O	108-5453	-			
	DZ-5200	Board to Board	20	250	2200	15	5.08	-	5,7	1	-	-	-	-	-	-	-	-	-	-	O	x	108-5453	-			
	DZ-5200	Board to Board	30	600	4000		10.16		3,4	1	-	-	-	-	-	-	-	-	-	O	x	108-5453	-				
Special Products		Dynamic Pneumatic	Refer the Product Specification 108-78406				8.5	Ø4,6 (Tube)		2,8	1,2	O	O	-	-	-	-	-	-	-	-	-	108-78406	-			
		Multiple Enclosure	Refer the catalog							15, 24, 32	4, 8	-	O	-	-	-	-	-	-	-	-	-	108-78417	114-5377			

3-A) How to Select the Products

- 10A, 4Position, Right Angle

Name of Series			Electrical Performance				Pitch [mm]	Wire Range [AWG]	Number of Position [P]	Number of Row [row]	Housing Types					
Series	Designation	Description	Maximum Current Rating [A]	Maximum Voltage Rating [V AC/DC]	Withstanding Voltage [V AC/1minute]	Durability [Cycles]					Wire to Wire		Wire to Board			
											Free Hangers	Panel Mount	DIP		SMT	
3000	3100S	Standard	15	250	1500	500 (Gold) 1000 (Tin)	3.81	28 ~ 14	4,5,6,8,10,6x3(Tap)	1,3(Tap)	○	○	○	○	○	○

- Parts number

Receptacle Housing		Tab Housing			Board-mounting Tab Header		
		(Panel Type)	(Free-hanging Type)		(Horizontal Type)	(Vertical Type)	
							
No. of Pos.	Keying	Receptacle Housing	Tab Housing			Board-mounting Tab Header	
			Panel Type	Free-hanging Type	L Fitting	Horizontal Type	Vertical Type
2	See D-3200S Series						
3	X	1-178288-3*1	1-178802-3	1-177648-3	S	1-178293-□	1-178313-□
	Y	2-178288-3*2	2-178802-3	2-177648-3	S	2-178293-□	2-178313-□
4	X	1-178288-4	—	—	S	1-178294-□	1-178314-□
	Y	2-178288-4	—	—	S	2-178294-□	2-178314-□

3-B) Product Details - 1000 Series

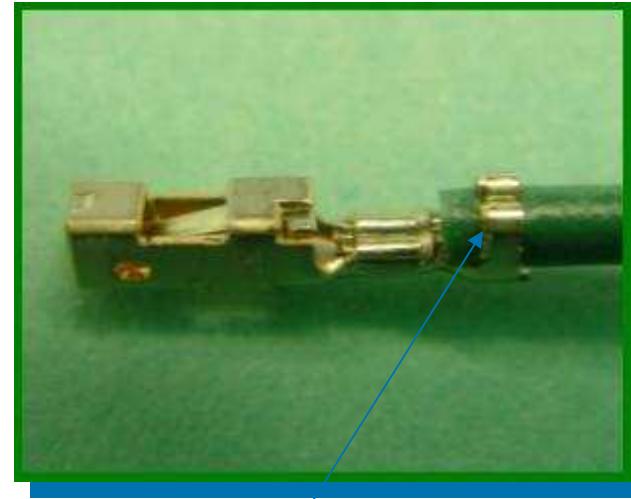
- Smallest size in Dynamic series.
- Wide housing range from 2pos. to 40pos.
- Three kinds of centerline pitch, 2.0mm, 2.5mm, 3.5mm.
- AWG #30 ~ #18
- Also, lineups D1500 and D1900 series are available.



Name of Series			Electrical Performance				Pitch [mm]	Wire Range [AWG]	Number of Position [P]	Number of Row [row]	Housing Types										
Series	Designation	Description	Maximum Current Rating [A]	Maximum Voltage Rating [V AC/DC]	Withstanding Voltage [V AC/1minute]	Durability [Cycles]					Wire to Wire		Wire to Board				DIN Rail	Tap	Junction Box	Drawer	Board to Board
											Free Hangers	Panel Mount	DIP		SMT						
1000	1100S	Standard	3	125	700	50 (Gold 0.38u) 30 (Tin)	2.0	30 ~ 22	4,8,10	1	—	—	—	O	—	O	—	—	—	—	
	1100D	Standard							10,20,22,24,26,28,30,32,34,40	2	O	O	O	O	O	O	—	—	—	—	—
	1200S	High Voltage	5	250	1100		2.5	30 ~ 18	2	1	O	—	O	—	—	—	—	—	—	—	
	1200D	High Voltage							4,6,8,10,12,16,20	2	O	O	O	O	O	—	—	—	—	—	—
	1500T	Module Type							3,6,9,12,34,36	3	O	O	O	O	—	—	O	—	O	—	—
	1900	Cage Clamp	4	150	1100		3.5	24 ~ 20	8, 12, 22, 20, 38	2	—	O	O	—	—	—	—	—	—	—	—

3-B) Product Details - 1000 Series Contact

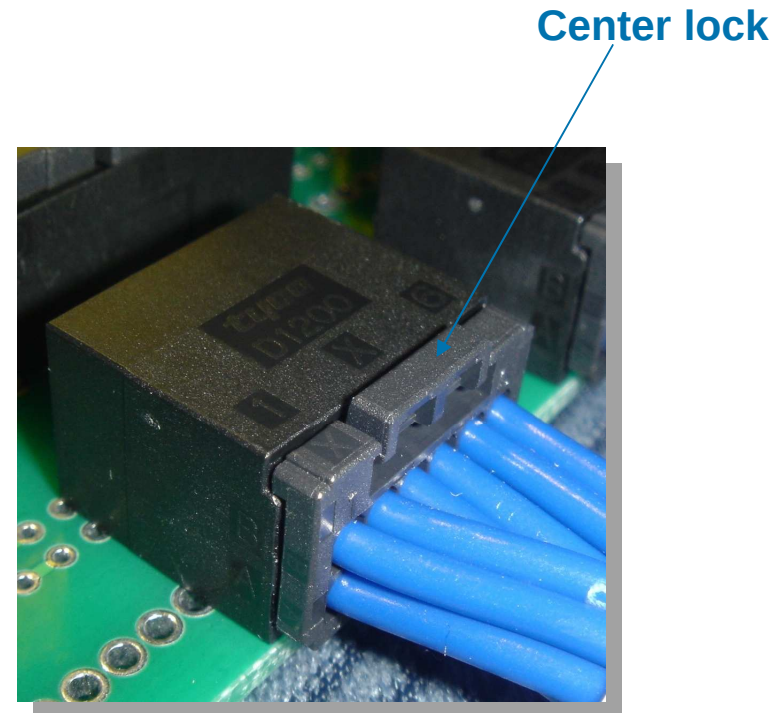
- Fully “Box” type contact.
- Applicable wire is #30 through #18.
- UL1007 #18 is available.
- Four size contacts are available.
 - S,M,L,2L
- Gold plating is as standard and tin plating is for economical market.
- Stamped identification
 - Contact name
 - Contact size



O/D 2.1mm Fai. Max

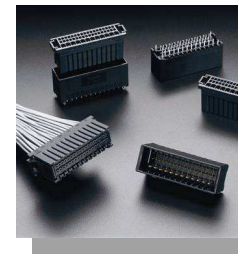
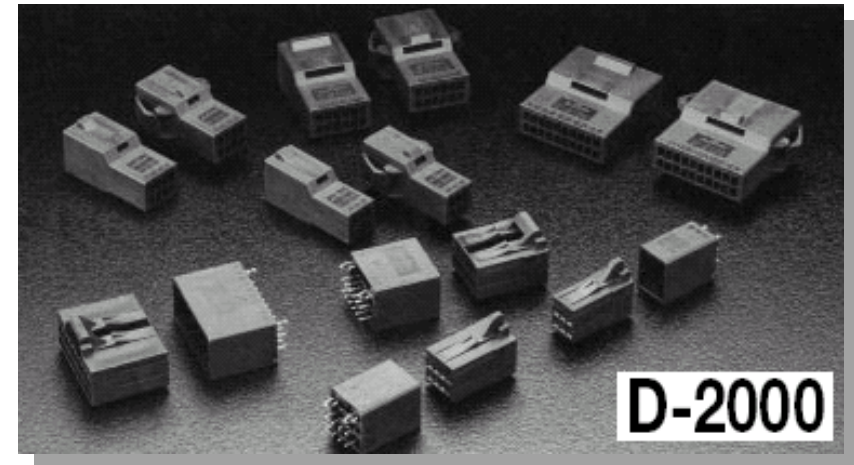
3-B) Product Details - 1000 Series Housing

- Upper center lock concept, and clear lock feeling prevents miss connection.
- Low height and miniaturized.
- Contact can easily snap into housing cavity due to its housing lance structure.
- Contact can remove by small general driver or exclusive tool.

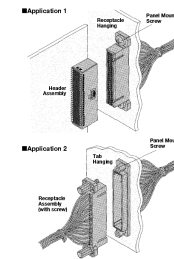


3-B) Product Details - 2000 Series

- Smaller size in Dynamic series
- Drawer type available
- Mainly for signal lines under 250V
- AWG #28 ~ #18
- 5A Max. rated current



D2600 Hybrid

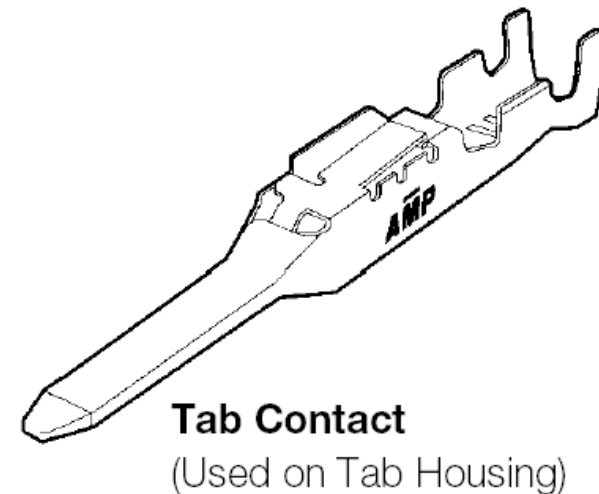
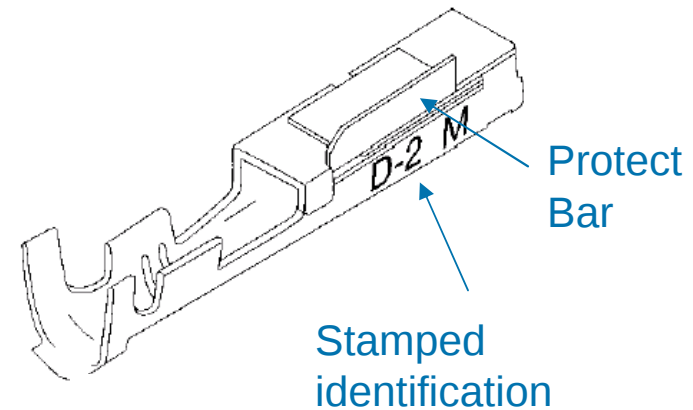


D2100 Drawer

Name of Series			Electrical Performance				Pitch [mm]	Wire Range [AWG]	Number of Position [P]	Number of Row [row]	Housing Types											
Series	Designation	Description	Maximum Current Rating [A]	Maximum Voltage Rating [V AC/DC]	Withstanding Voltage [V AC/1minute]	Durability [Cycles]					Wire to Wire		Wire to Board				DIN Rail	Tap	Junction Box	Drawer	Board to Board	
											Free Hangins	Panel Mount	DIP		SMT							
2000	2100S	Standard Type	5	250	1500	500 (Gold 0.38u)	2.5	28 ~ 18	3	1	○	○	○	○	—	—	—	—	—	—		
	2100D	Standard Type							6,8,12,16,20	2	○	○	○	○	—	—	—	—	—	—	—	—
	2100M	Multiposition Drawer							2.6	50	2	○	○	—	○	—	—	—	—	○	—	
	2600D	Hybrid of Power and Signal	D-2 (3.2) D-3 (7.5)				D-2 (2.5) D-3 (3.81)	D-2 (28 ~18) D-3 (28 ~ 14)	D-2 (36) D-3 (12)	D-2 (2) D-3 (1)	—	—	○	—	—	—	—	—	—			
	2800	HTS Module	5				3.0	28 ~ 18	30	6	○	○	—	—	—	—	—	—	—	—	—	

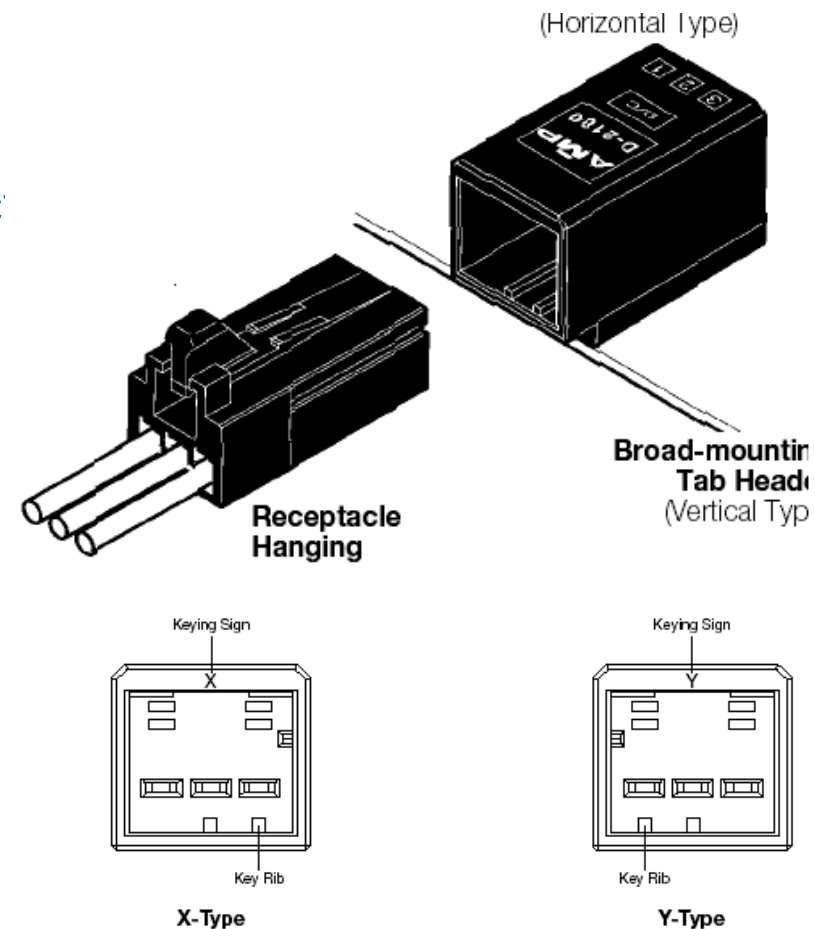
3-B) Product Details - 2000 Series Contact

- Available for AWG#28-#18 in two kinds of size.(S,M)
- Gold plating onto nickel plating.
- Reliable electrical performance based on the existing contact design from automotive industry.
- Contact lance with protect bar prevent from the outside damage.
- Stamped identification
 - Contact name
 - Contact size



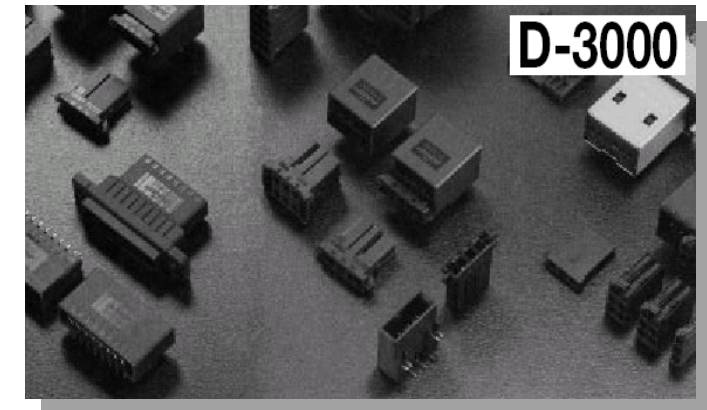
3-B) Product Details - 2000 Series Housing

- Clear lock feeling.
- Enough deep insight in tab housing to prevent from contact crashing.
- Center locking style due to space saving.
- Clear circuit number.
- Key structure
- Strong structure against outside force.



3-B) Product Details - 3000 Series

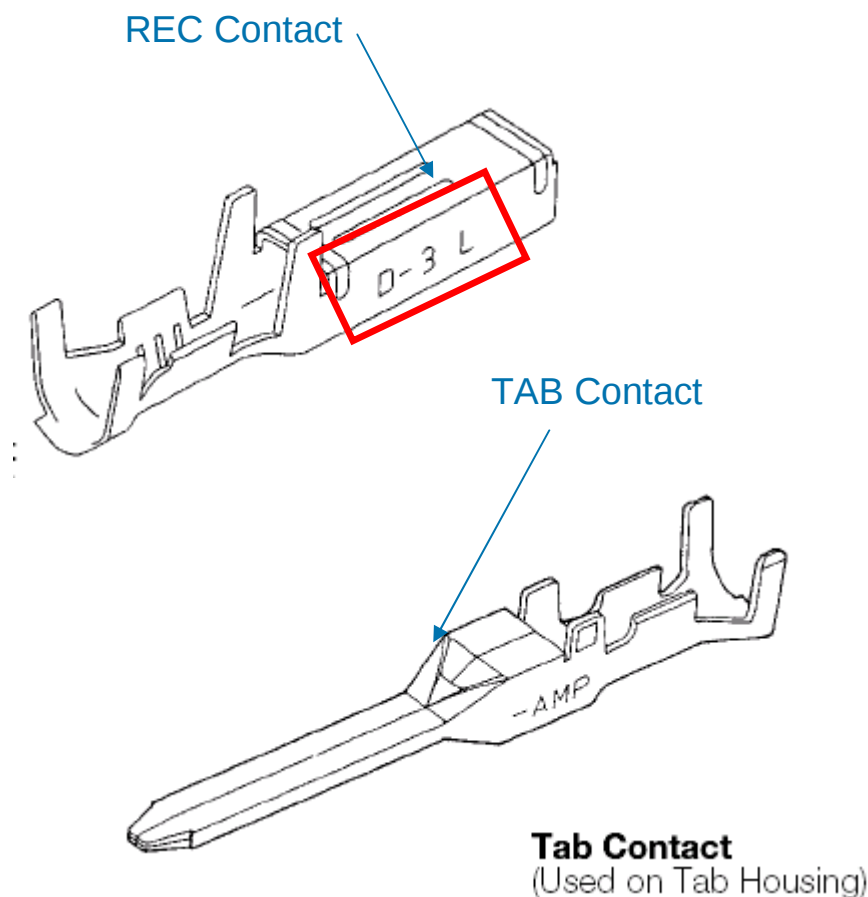
- Most variety prepared in Dynamic Series
- AWG#28 ~ #14 as wire range
- 15A Max. rated current
- Except standard type, skyscraper, module, motor types available
- Common type available. (Dynatap)



Name of Series			Electrical Performance				Pitch 〔mm〕	Wire Range 〔AWG〕	Number of Position 〔P〕	Number of Row 〔row〕	Housing Types										
Series	Designation	Description	Maximum Current Rating 〔A〕	Maximum Voltage Rating 〔V AC/DC〕	Withstanding Voltage 〔V AC/1minute〕	Durability 〔Cycles〕					Wire to Wire		Wire to Board				DIN Rail	Tap	Junction Box	Drawer	Board to Board
											Free Hangers	Panel Mount	DIP		SMT						
								Vertical	Right Angle	Vertical			Right Angle								
3000	3100S	Standard	15	250	1500	500 (Gold 0.38u, 0.76u) 1000 (Tin)	3.81	28 ~ 14	3,4,5,6,8,10,6x3(Tap)	1,3(Tap)	○	○	○	○	○	○	—	○	—	—	—
	3100D	Standard					3.81		6,8,10,12,16,20	2	○	○	○	○	—	—	—	—	—	○	—
	3100M	Module					3.81		6	1x2	—	—	○	○	—	—	—	—	—	—	—
	3200S	High Voltage		600	2200		5.08		2,3,4,5,6,4x6(Tap)	1,6(Tap)	○	○	○	○	○	○	—	○	—	—	—
	3200M	High Voltage					5.08		6,10,12,20	2	○	○	○	○	—	—	—	—	○	—	
	3200T	High Voltage					5.08		9	3	—	—	—	○	—	—	—	—	—	—	
	3400F	Skyscraper		250	1500		3.81		12,16,20	4	—	—	—	○	—	—	—	—	—	—	—
	3500D	Module		600	2200		5.08		2,4,6,10,12,20	2	○	○	○	○	—	—	—	—	—	—	—
	3700	For Motor		250	1500		3.81		6	1	—	○	—	—	—	—	—	—	—	—	—
	3800	HTS Module		600	2200		5.2		12	4	○	○	—	—	—	—	—	—	—	—	—

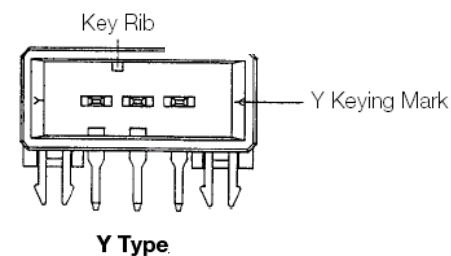
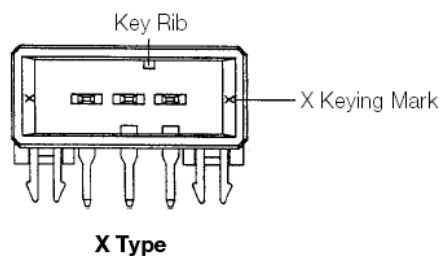
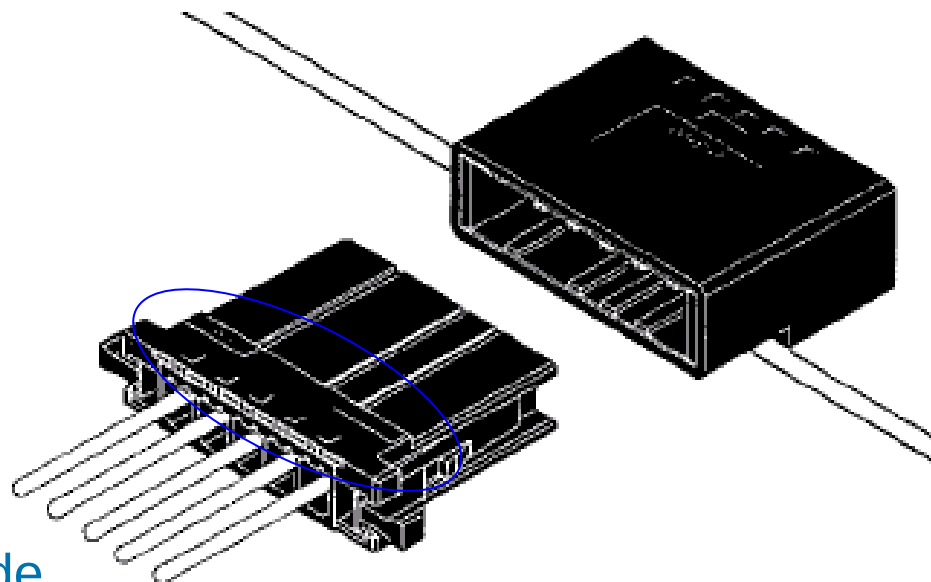
3-B) Product Details - 3000 Series Contact

- The high performance contact from automotive industry.
- Box contact.
- No lance in contact itself
- Gold plating and tin plating contact are available.
- Branded identification
 - Plating specification
 - Contact size
 - Contact name



3-B) Product Details - 3000 Series Housing

- Clear lock feeling
- Enough deep insight in tab housing to avoid of contact defecting while mating.
- Flat area for mark-plate.
- Branded circuit number.
- Key structure
- Strong structure against outside force.



3-B) Product Details – HTS Module

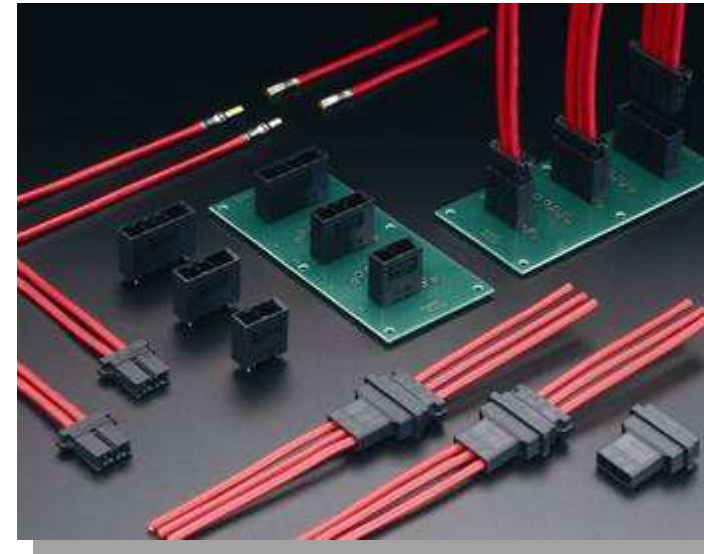
- Utilizing existing Dynamic contacts for HTS die-cast
- Connector position
 - 2800 30Pos./ module
 - 3800 12Pos./ module
 - 4800 8Pos./ module
 - 5800 4Pos./ module



Name of Series			Electrical Performance				Pitch [mm]	Wire Range [AWG]	Number of Position [P]	Number of Row [row]	Housing Types										
Series	Designation	Description	Maximum Current Rating [A]	Maximum Voltage Rating [V AC/DC]	Withstanding Voltage [V AC/minute]	Durability [Cycles]					Wire to Wire		Wire to Board				DIN Rail	Tap	Junction Box	Drawer	Board to Board
											Free Hangers	Panel Mount	DIP		SMT						
													Vertical	Right Angle	Vertical	Right Angle					
2000	2800	HTS Module	5				3.0	28 ~ 18	30	6	○	○	—	—	—	—	—	—	—		
3000	3800	HTS Module		600	2200		5.2		12	4	○	○	—	—	—	—	—	—	—		
4000	4800	HTS Module	24	600	2500		6.35		8	2	○	○	—	—	—	—	—	—	—		
5000	5800	HTS Module					12.0		4	2	○	○	—	—	—	—	—	—	—		

3-B) Product Details - 4000 Series

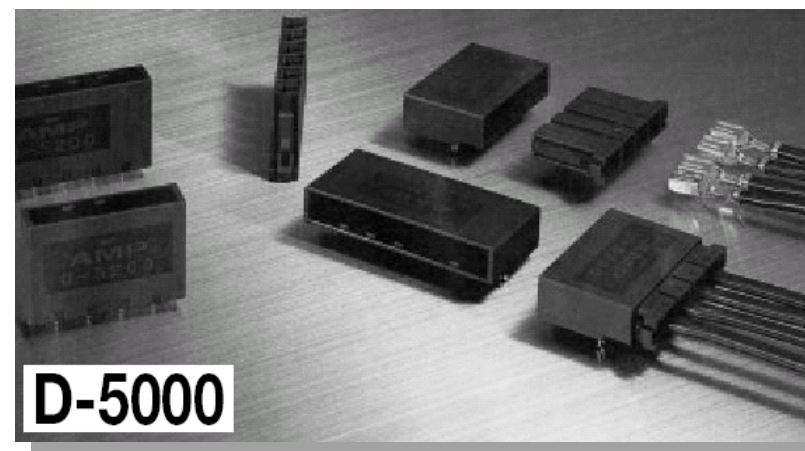
- AWG#16 to #12 wire range
- 24A per contact. (In case of #12)
- Wire to wire and wire to board application are available.



Name of Series			Electrical Performance				Pitch [mm]	Wire Range [AWG]	Number of Position [P]	Number of Row [row]	Housing Types												Sally Standards	Product Specification	Application Specification																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Series	Designation	Description	Maximum Current Rating [A]	Maximum Voltage Rating [V AC/DC]	Withstanding Voltage [V AC/1minute]	Durability [Cycles]					Wire to Wire		Wire to Board				DIN Rail	Tap	Junction Box	Drawer	Board to Board	UL CSA ※TUV																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
											Free Hangers	Panel Mount	DIP		SMT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

3-B) Product Details - 5000 Series

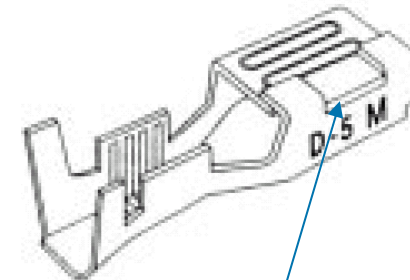
- AWG #14 to #10 wire range
- 30A Max. rated current
- Sequential tab header and tab contact are available.
- Clamp version is available.



Name of Series			Electrical Performance				Pitch [mm]	Wire Range [AWG]	Number of Position [P]	Number of Row [row]	Housing Types												
Series	Designation	Description	Maximum Current Rating [A]	Maximum Voltage Rating [V AC/DC]	Withstanding Voltage [V AC/1minute]	Durability [Cycles]					Wire to Wire		Wire to Board				DIN Rail	Tap	Junction Box	Drawer	Board to Board		
											Free Hangers	Panel Mount	DIP		SMT								
5000	5200S	Standard	30	630	3000	50 (Gold 0.76u) 25 (Gold 0.38u)	10.16	16 ~ 8	2,3,4,5,6	1	○	○	○	○	—	—	—	—	—	—			
	5200S	Cable Clamp							3		—	—	—	○	—	—	—	—	—	—	—	—	—
	5200D	Cable Clamp							4	2	○	—	—	—	—	—	—	—	—	—	—	—	
	5200M	High Voltage							4,6,8,4x5(Tap)		1.2	○	○	—	○	—	—	○	○	—	—	—	—
	5200Ma	High Current	45			25 (Silver)		20 ~ 8	2,4	2	—	—	—	○	—	—	—	—	—	—	—		
	5300S	Reversed Housing	30			50 (Gold 0.76u) 25 (Gold 0.38u)	10.16	16 ~ 8	3	1	—	○	—	—	—	—	—	—	—	—	—		
	5300D	Reversed Housing							4	2	—	○	—	—	—	—	—	—	—	—	—		
	5800	HTS Module							4	2	○	○	—	—	—	—	—	—	—	—	—	—	—
	DZ-5200	Board to Board							20	250	2200	15 (Gold)	5.08	—	5,7	1	—	—	—	—	—	—	—
	DZ-5200	Board to Board	30			600		4000	10.16	3,4	—	—	—		—		—	—	—	—	—	—	

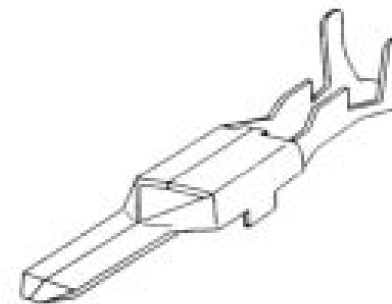
3-B) Product Details - 5000 Series Contact

- AWG#16 to #10 wire range.
- Gold plating onto nickel plating.
- No contact lance in contact itself.
- Branded identification
 - Contact name
 - Contact size



Receptacle Contact
(Used in Receptacle Housing)

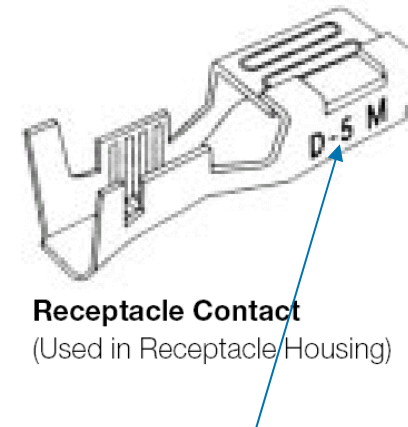
Branded identification



Tab Contact
(Used in Tab Housing)

3-B) Product Details - 5000 Series α Contact

- AWG# 20 to #8 wire range
- Silver plating under nickel plating.
- Reliable electrical performance with higher current rating up to 45A per contact.
- No contact lance in contact itself.
- Branded identification
 - Contact name
 - Contact size

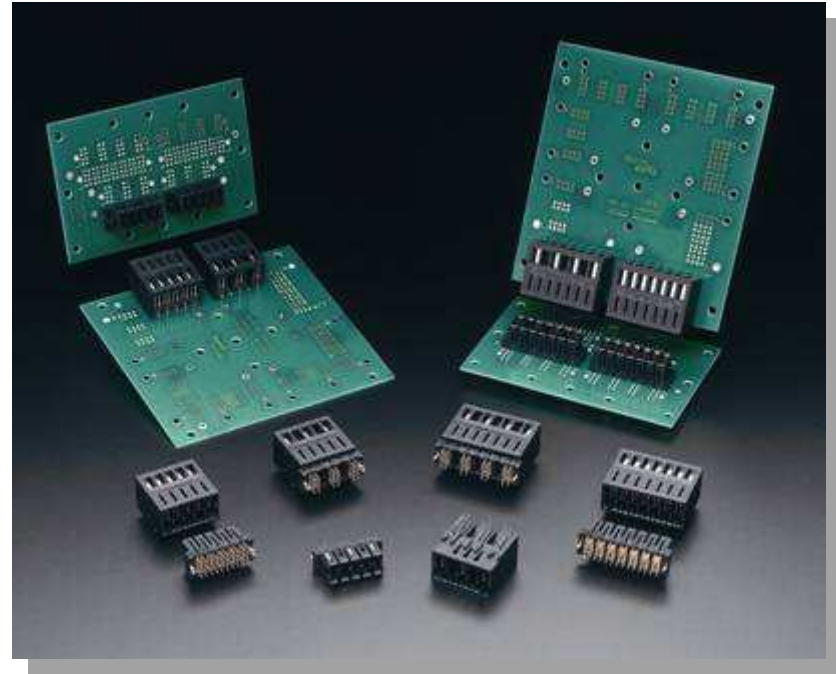


Receptacle Contact
(Used in Receptacle/Housing)

Branded identification

3-B) Product Details – DZ5200 Series

- High current board to board connector up to 30A per contact.
- Available for 20A in 5,7Pos.(5.08mm pitch) And 30A in 3Pos. and 4Pos.(10.16mm pitch)
- Multiple connector in one board accepted.
- Rated current/ voltage
 - 3,4Pos. 30A 600V
 - 5,7Pos. 20A 250V



3-B) Product Details –Multiple Enclosure

- Metal and plastic housing are available
- Utilizing existing contacts D1000, D3000
- IP65 (Mold type) & IP67 (Metal types)
- Fast on / off locking concept
- Standard type and reverse types are available
- Position types
 - 24 pos. (D1000 contact)
 - 14 + 1 pos. (D1000 + D3000 contact)
 - 32 pos. (D1000 contact)



➤ ***Suitable for human machine interface***

➤ ***Safety locking system***

➤ ***Panel mount***

4. Industrial Applications



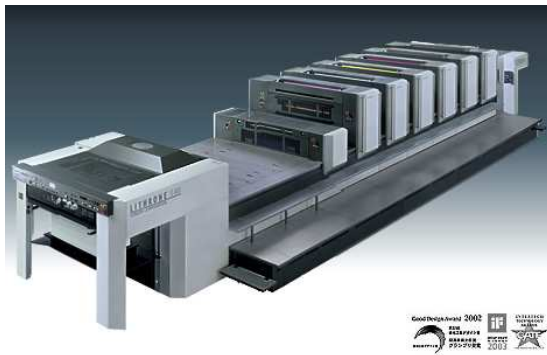
Machinery



Shot



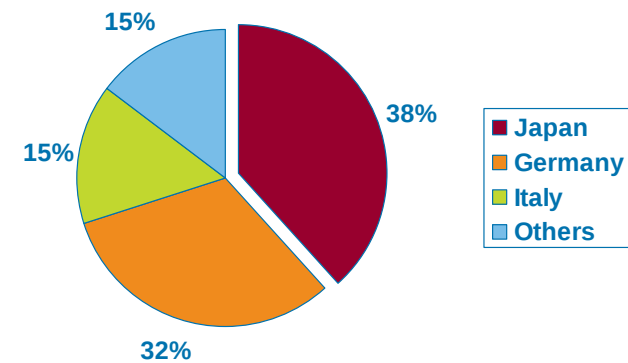
Chip Mounter



Printing Machine

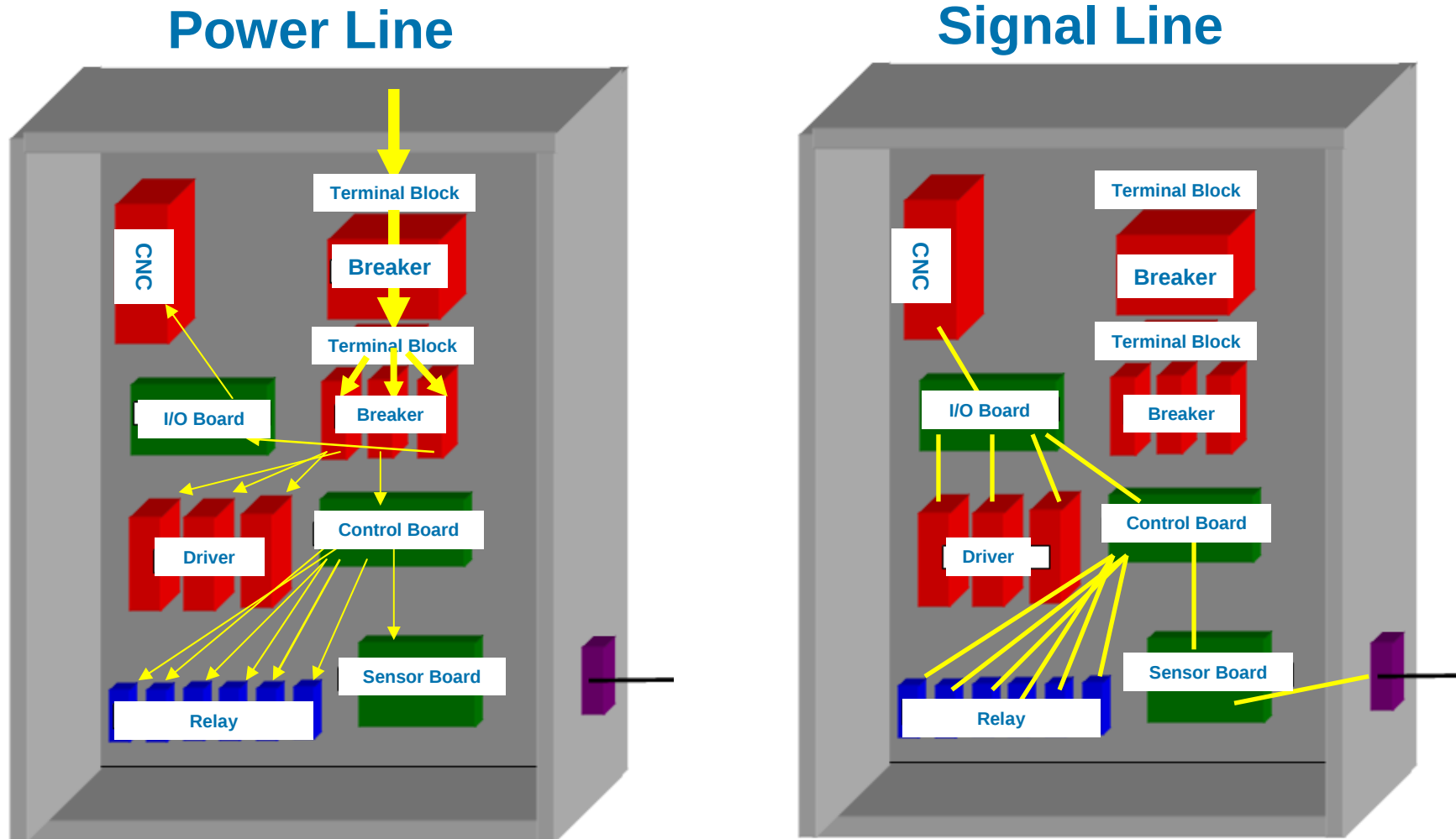


Robot

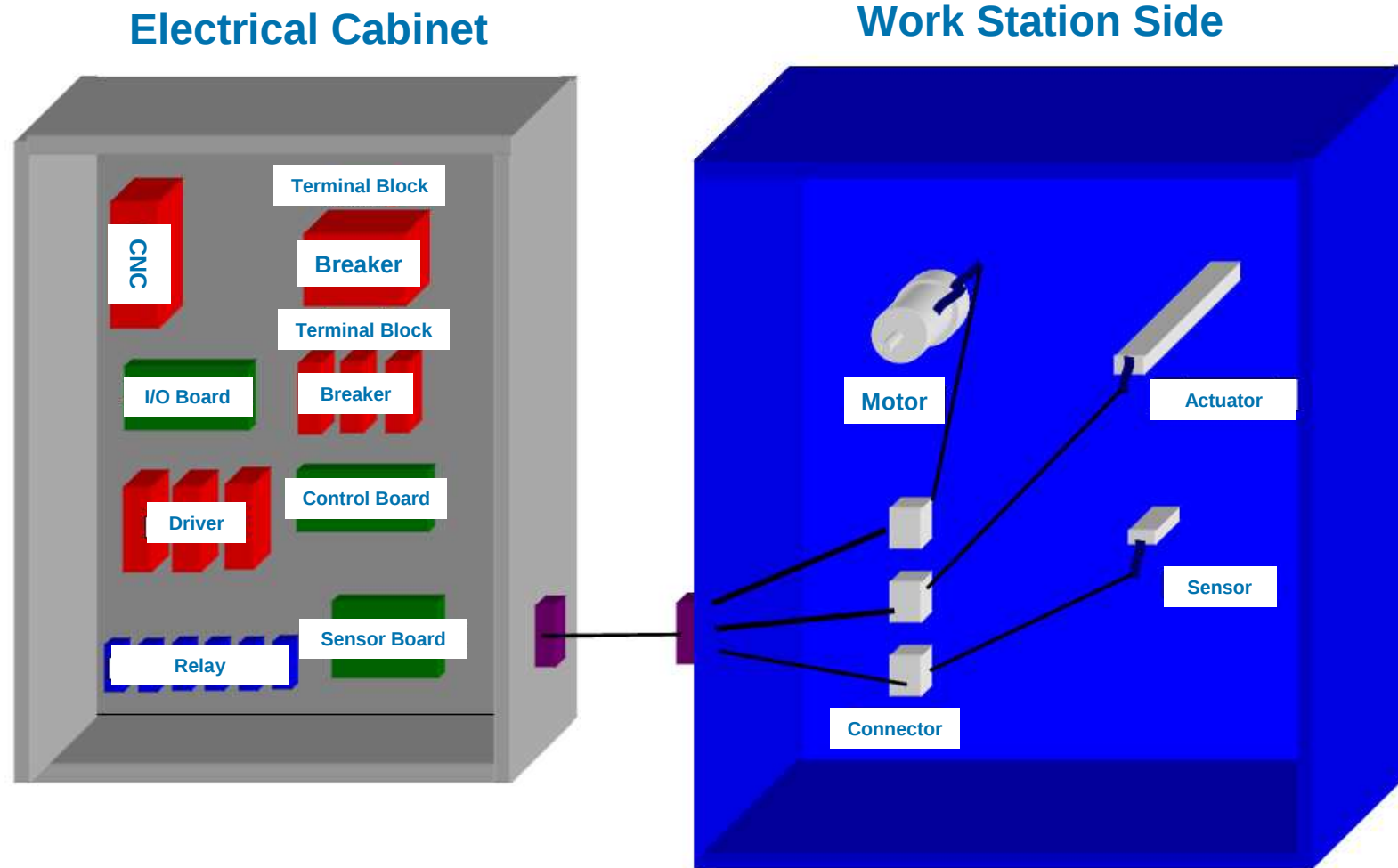


20 Billions USD (2008)

4-A) Application Example - Electrical Cabinet

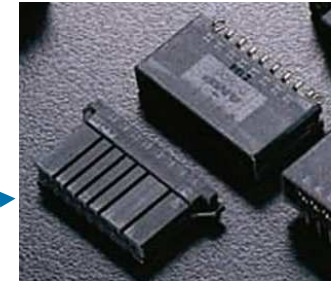
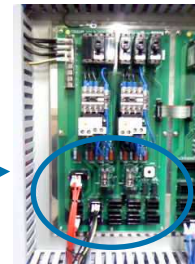


4-A) Application Example - Machinery

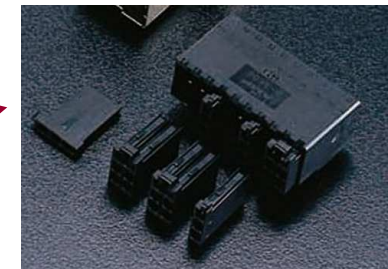
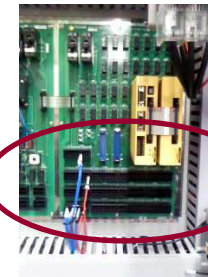


4-B) Usage Example (Electrical Cabinet)

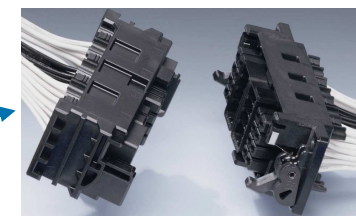
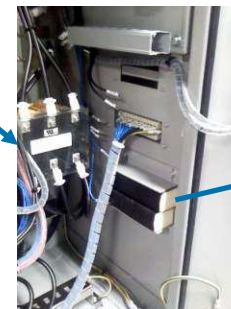
Dynamic HTS



D3200

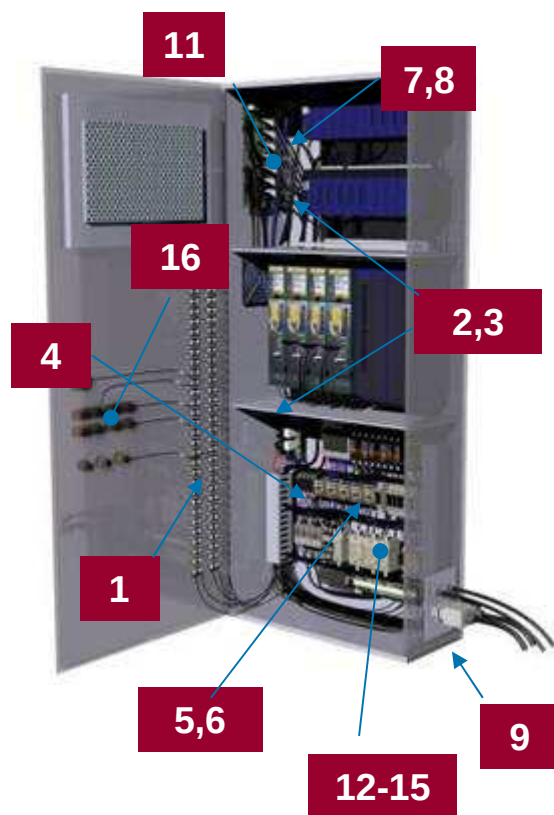


D3500



High Density

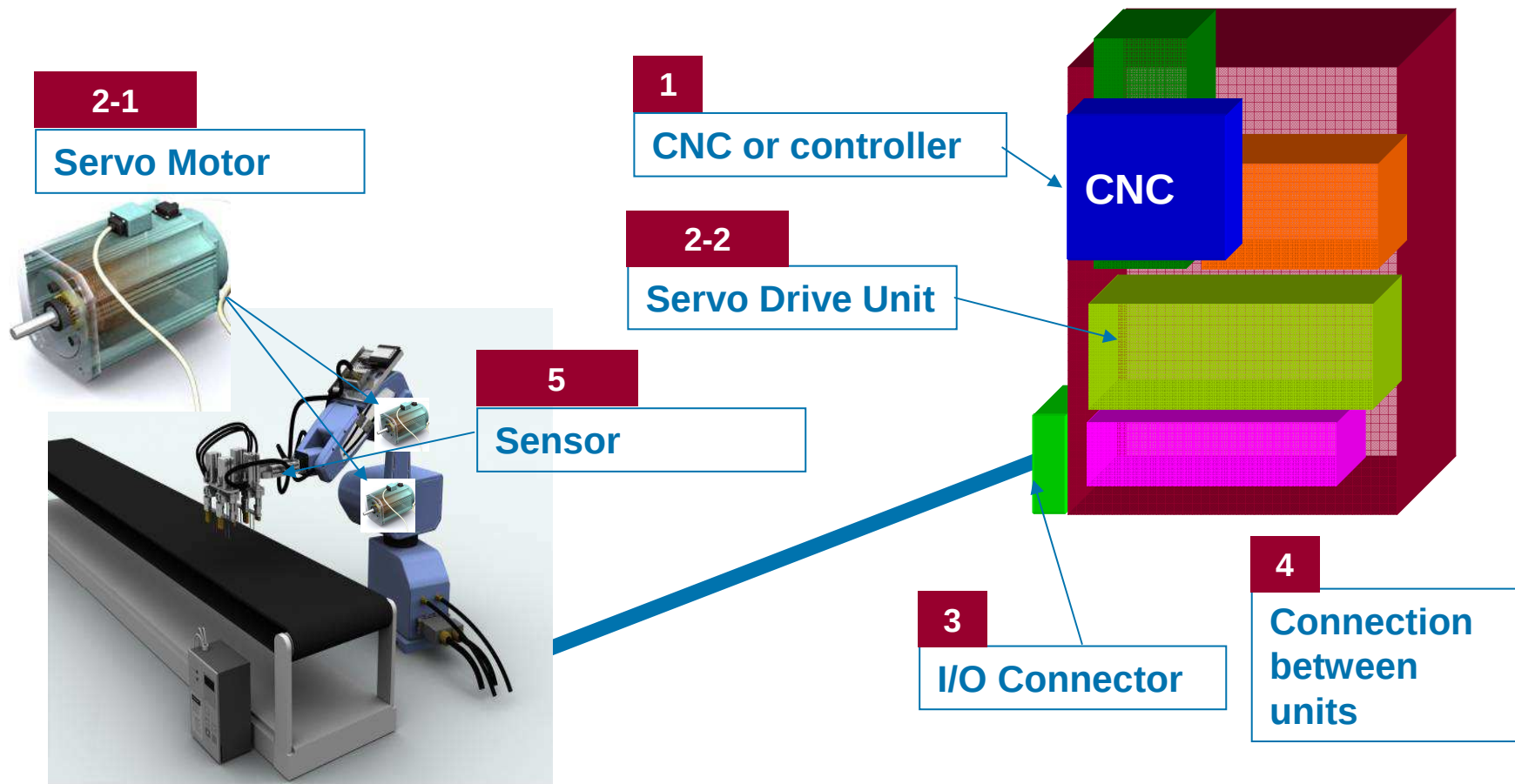
4-B) Usage Example (Electrical Cabinet)



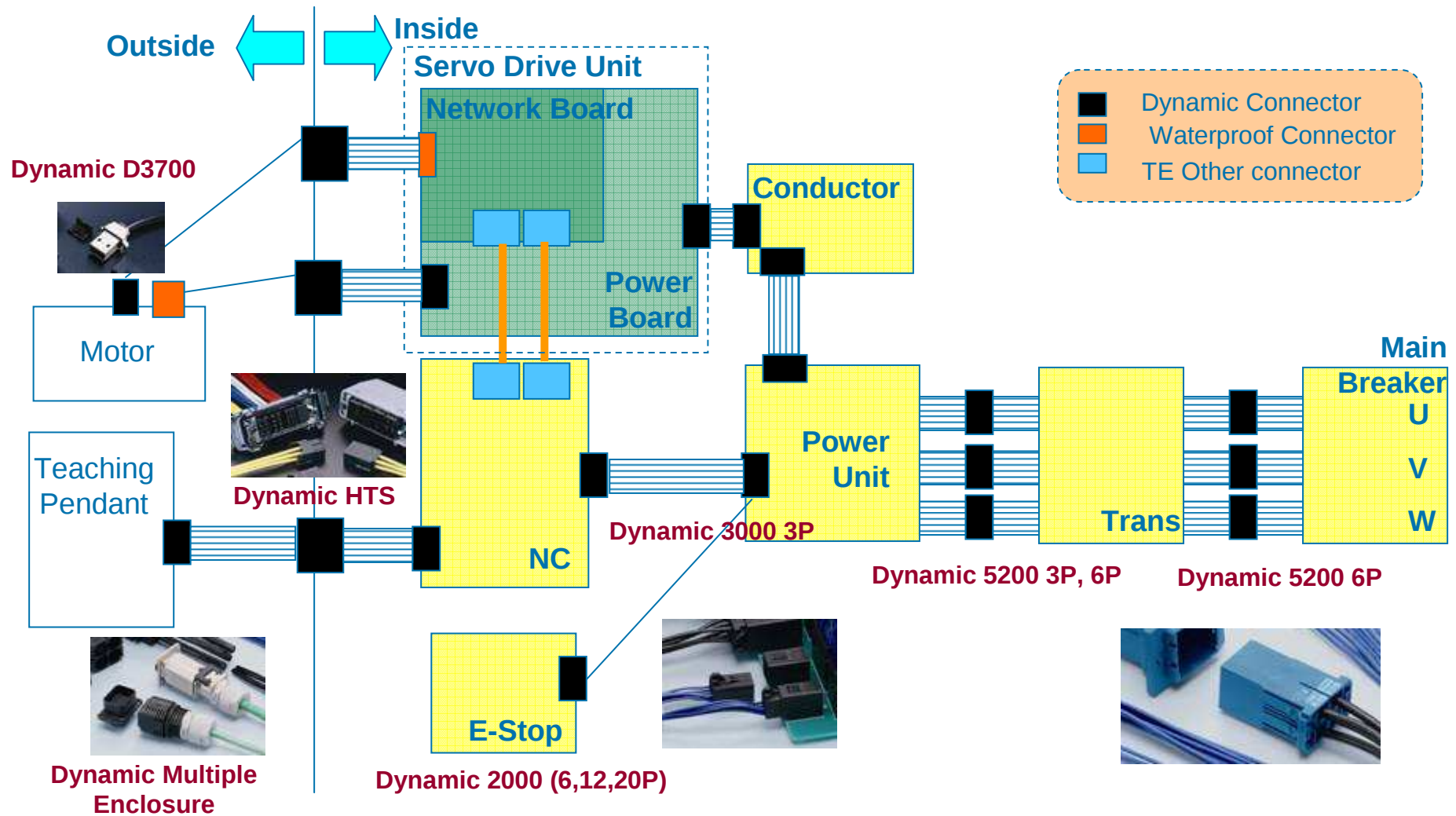
Application package for Electrical Cabinet

No	Application	Tyco Products
1	Sensor I/O	RITS Connector D1500 Series
2	Wire to board (multi position)	D1100 Series
3	Wire to board & wire for signal	D1200 Series
4	Wire to board & wire for power 30A	D2000 Series
5	Wire to board & wire for power 20A	D5200 Series
6	Wire to board & wire for power 15A	D4200 Series
7	Power supply board to board	D3100 Series
8	Cabinet I/O to body equipment	DZ5200 Series
9	Power outlet (High power)	Dynamic HTS Module
10	Power outlet (Middle power)	Dynatap 5200
11	For Control board	Dynatap 3200
12	For control actuator	PCN series Relay
13	Safety Relay	PTH, PTF series Relay
14	Industrial Switches	RT series Relay
15		SR2, SR4, SR6 series Safety Relay
16		Alcoswitches

4-B) Usage Example - Robotics

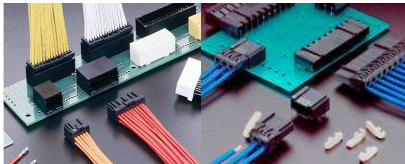


4-B) Usage Example - Robotics



4-B) Usage Examples

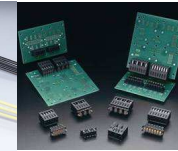
D1000, 2000, 3000



Cable
Clamp



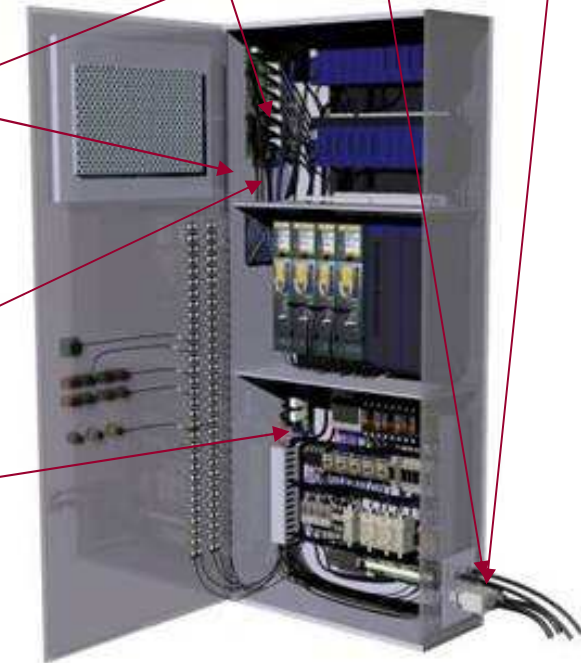
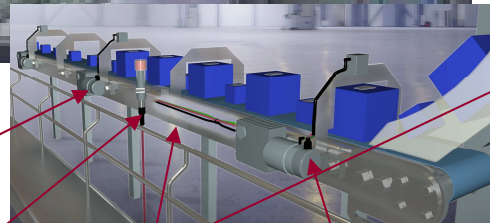
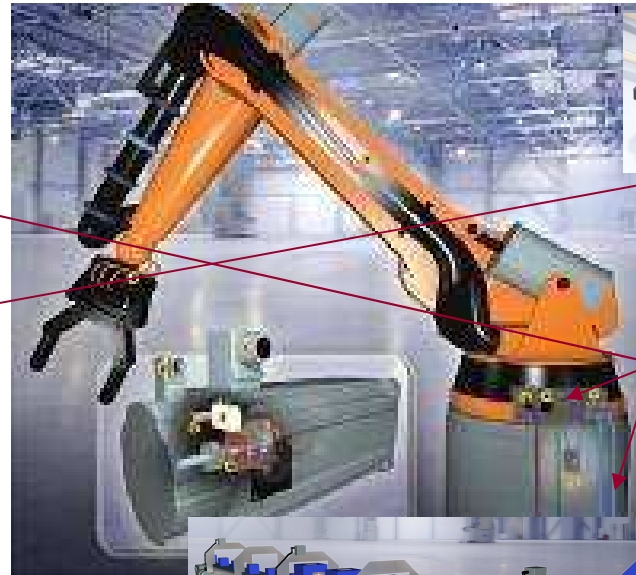
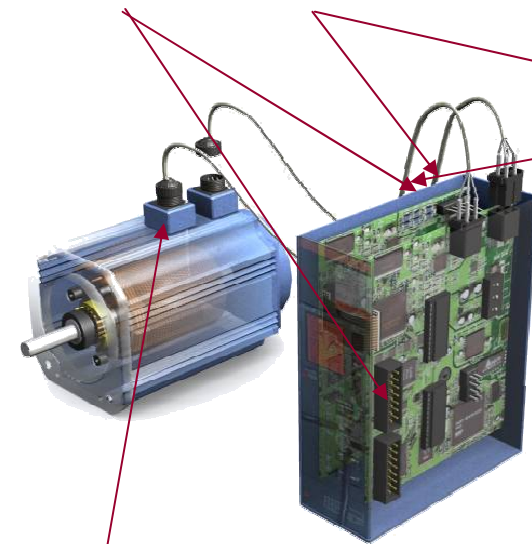
DZ5200



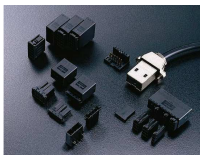
HTS
Enclosure



D7000



D3700



Pneumatic



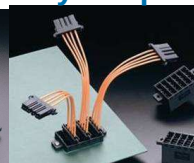
D1500



D3500

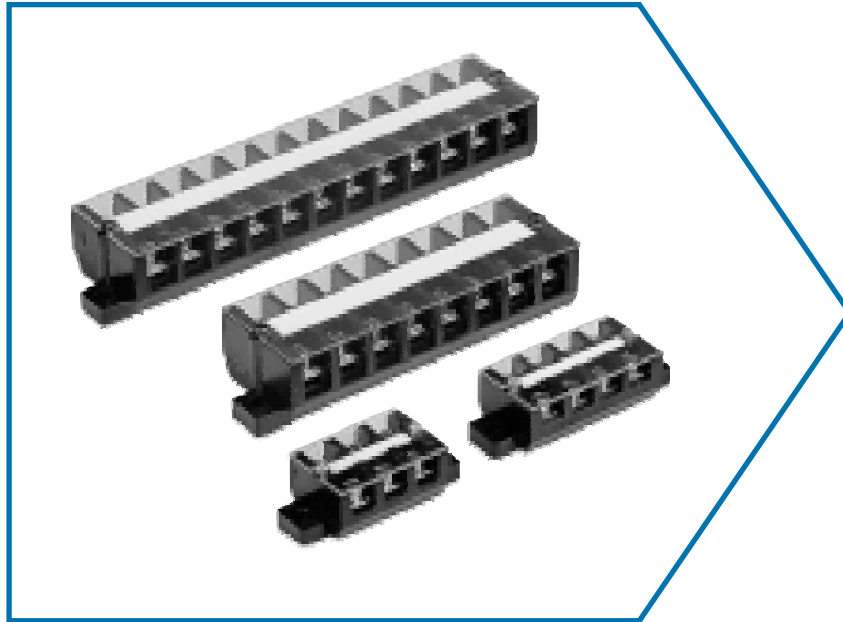


Dynatap



5. Replacing Terminal Blocks

Terminal Blocks



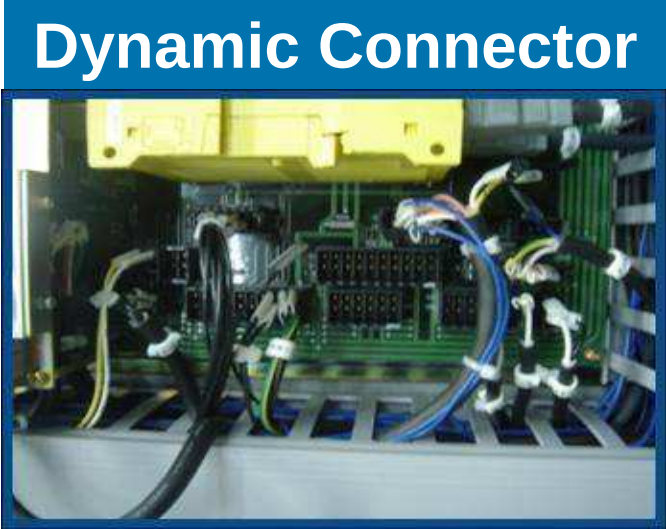
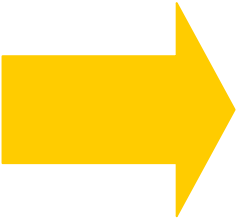
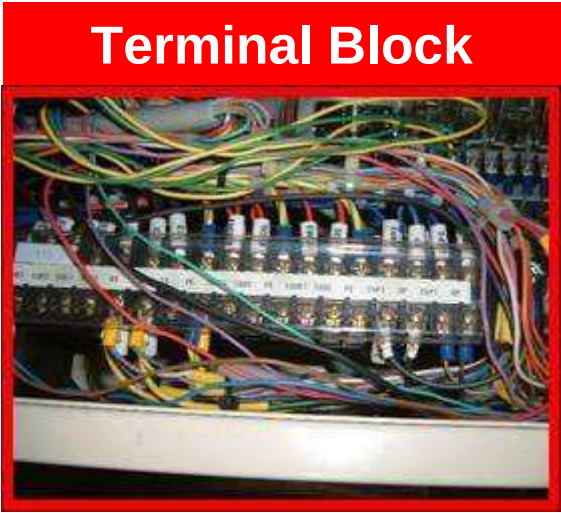
Dynamic Series



Why is Dynamic Series better than terminal blocks?



5. Replacing Terminal Blocks



Parts Comparison									
Terminal Blocks				Parts Name	Dynamic Series				
Name	Costs	QTY	Total		Name	Costs	QTY	Total	
Terminal Block 20Pos	4	50	200	PCB Type	D3: 20Pos V HDR	1.7	50	85	
—				REC HSG	D3: 20Pos REC HSG	0.7	50	35	
PIDG Contacts	0.05	1000	50	Contact	D3: Contact	0.09	1000	90	
	250			Total		210			

5. Terminal Blocks

Terminal Block				Process	Dynamic			
Overhead	Time (Sec)	QTY	Total HR		Overhead	Time (Sec)	QTY	Total HR
30	10	1000	10000	Wire cut	30	5	1000	5000
30	10	1000	10000	Wire Strip	30	5	1000	5000
30	10	1000	10000	Crimp	30	10	1000	10000
30	—		0	HSG Assy	30	5	1000	5000
30	—		0	Inspection	30	10	50	500
30	3	1000	3000	Assembly	50	10	50	500
			33000					26000
275				Cost	219.4444444			

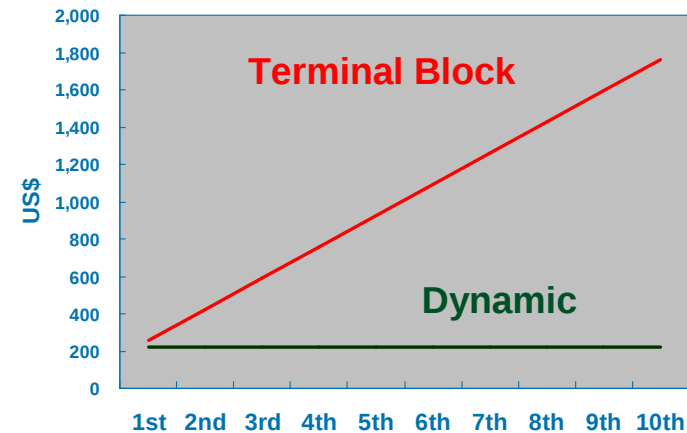
- \$55 USD on overhead

Maintenance Fee								
Overhead	Time (s)	QTY	Total Time	Process	Overhead	Time (s)	QTY	Total Time
100	3	1000	3000	Screw	100	0	0	0
83.33333333				Cost	0			

- \$83 USD since no maintenance fee

As a result

- Cost effectiveness especially no maintenance fee
- Reduce assembly time as well as delivery time
- Gains safe operation and obtain high quality



Maintenance Fee

6. Manufacturing Locations



Footprints

Overall Footprint

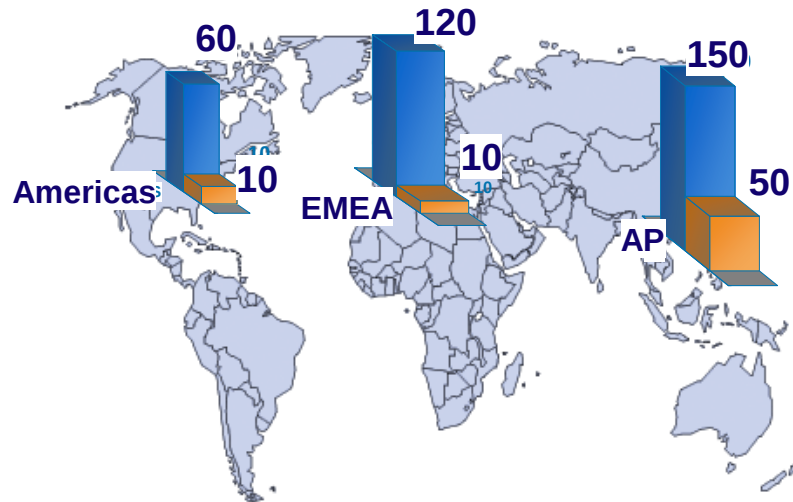
ITEMS	Image	Source	Purpose
HDRs (Assy Products)		TE Qingdao	Consolidate all assembly production lines
Components (REC, HSGs)		TE Qingdao & Zhuhai	Some high volume molds transferred to Zhuhai
Contacts		Japan Venders	·Limited of Plating Process in China ·Less labor require (cost relays on material costs)

*Minor products produce by other factory

7. Product Road Map

Market Potential

Units in M USD



Keys to Gain Market Share

- High Current Products

=> Such as D7000, D9000

- Cage Clamp Types

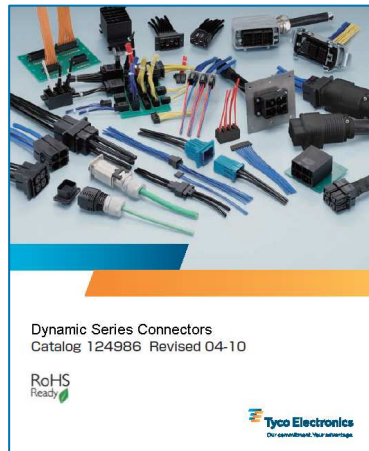
=> For Field Wiring

- Products for European Customers

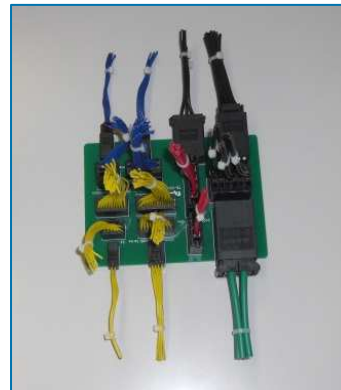
=> Item Expansion of European Requirements



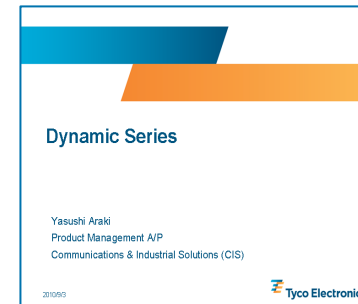
8. Promotion tools



**New English ver. Catalogue
(1242132)**



**New Sample Kit
(1554616-1)**



Training Material

Planning

- D7000 Series: Flyer
- Multi Enclosure: Flyer
- DZ5200 Series; Flyer

