

DYNAMIC ULTRA SERIES CONNECTOR SYSTEM



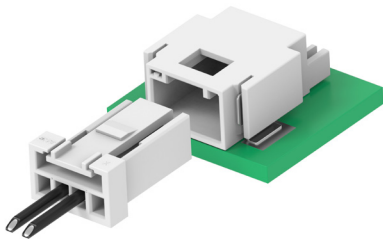
SERIES INTRODUCTION

The Dynamic Ultra connector series from TE Connectivity (TE) is engineered as a miniature wire-to-board interconnection system. Its multiple contact points provides for reliable performance even in demanding environments, such as electric vehicle (EV) powertrains, battery packs, and automotive lighting applications. Featuring a secondary locking mechanism, the Dynamic Ultra connector Series complies with the LV 214 standard, making it suitable for specialized automotive applications. Additionally, the series offers user-friendly features designed to enhance overall product functionality and benefits.

Product Highlights

Multiple Contact Points

The Dynamic Ultra Series features a multiple-contact-point design on the receptacle, helping ensure lower contact resistance. This design enhances reliability under conditions of high vibration and shock, making it highly suitable for demanding applications.



Secondary Locking Design

The Dynamic Ultra Series connector system incorporates a secondary locking mechanism in addition to conventional terminal options for cable wrapping and crimping. A pre-assembled spacer within the receptacle housing helps simplify cable assembly while reducing the risk of wire loosening. This secondary locking feature provides a contact retention force of 50N, helping ensure secure and durable connections.

Visual Lock Verification

The Dynamic Ultra Series includes a rectangular window on the top of the board-mounting headers, allowing for visual confirmation of the latch engagement from the receptacle. The locking status can also be verified using a camera system, enhancing assembly accuracy and reliability.

Dual Keying For Error Verification

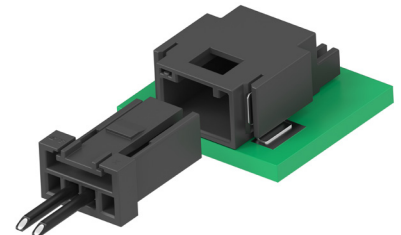
Both the receptacle and the board-mounting header are equipped with keying features to reduce the chances of assembly errors. This supports proper alignment and connection, even when using two sets of connectors with the same pin count on a single board.

Color Variants

The Dynamic Ultra Series is available in both black and natural colors, providing options to suit different application requirements and improve visual distinction.

Applications

- BESS / EVI
- HVAC
- Automotive - Lighting
- E-DRIVE
- On-board charging system



Dynamic Ultra Series Connector System Performance and Specifications

Performance

Series	Dynamic Ultra
Pitch	1.8 mm
Rated voltage (max.)	125 V AC
Rated current (max.)	3A
Contact resistance	30 mΩ Max
Withstanding voltage	1000 V AC
Operating temperature	-40°C TO 125°C

Positions / Wire size / Rated Current

Positions	Cable size (AWG)		
	22	24	26
2-10	3 A	2 A	1 A

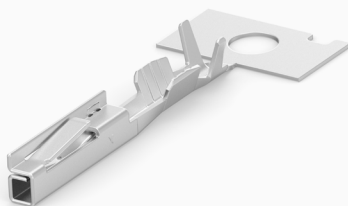
Product Specification and Instruction Sheet

Product Specification	108-137690
Application Specification	114-137706 (for receptacle contact) 114-137707 (for receptacle connector assembly) 114-137708 (for header connector)

Materials and Plating

Category	Material
Contact	Copper alloy
Plating in mating area	TIN
Plastic housing of header	UL94 V-0 PA
Plastic housing of receptacle (wire side)	UL94 V-0 PBT
Retention pin	Stainless steel

Crimp Contacts



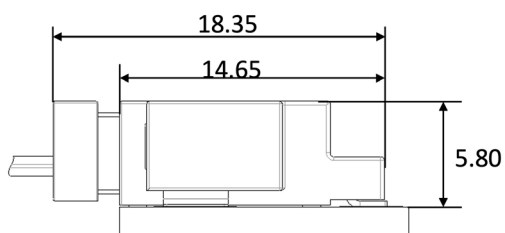
Wire Range				Receptacle Contact		Contact Release Tool	
AWG	mm ²	Outer Diameter of Insulation mm	Wire Rang mark	Plating	Strip Form	W/O Handle	With Handle
26	0.13-0.17	0.85-1.10	S	Tin	2834666-1	2834693-1	2834501-2
24-22	0.22-0.35	0.95-1.30	M	Tin	2834666-2		

Configurations

Pos.	Color	Key	Receptacle		Header	
			Image	TPA Pre-assembly	Image	Horizontal Type
2	Black	X		2834663-2		2834659-2
		Y		2834686-2		2834682-2
	Natural	X		2834672-2		2834674-2
		Y		2834688-2		2834684-2
6	Black	X		2834663-6		2834659-6
		Y		2834686-6		2834682-6
	Natural	X		2834672-6		2834674-6
		Y		2834688-6		2834684-6
10	Black	X		1-2834663-0		1-2834659-0
		Y		1-2834686-0		1-2834682-0
	Natural	X		1-2834672-0		1-2834674-0
		Y		1-2834688-0		1-2834684-0

Dynamic Ultra Single-row Standard Types - 1.8 mm pitch

Mated Dimensions (mm)



Relative Product Information

Applicable contact...P.4

Performance & specifications...P.3

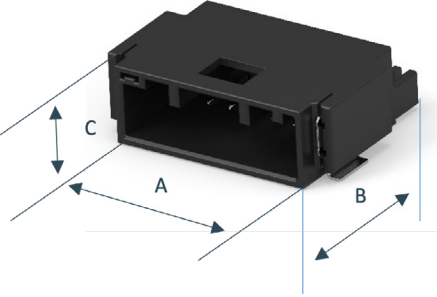
External Dimensions

Receptacle

	POS.	Color	Key	Part Number	Dimensions (mm)		
					A	B	C
	2	Black	X	2834663-2	8.7	12.5	5.4
			Y	2834686-2			
		Natural	X	2834672-2			
			Y	2834688-2			
	6	Black	X	2834663-6	15.9	12.5	5.4
			Y	2834686-6			
		Natural	X	2834672-6			
			Y	2834688-6			
10	Black	X	1-2834663-0	23.1	12.5	5.4	
		Y	1-2834686-0				
	Natural	X	1-2834672-0				
		Y	1-2834688-0				

Board-Mounting Header

Horizontal type

	POS.	Color	Key	Part Number	Dimensions (mm)		
					A	B	C
	2	Black	X	2834659-2	11.5	15.2	5.8
			Y	2834682-2			
		Natural	X	2834674-2			
			Y	2834684-2			
	6	Black	X	2834659-6	19.7	15.2	5.8
			Y	2834682-6			
		Natural	X	2834674-6			
			Y	2834684-6			
	10	Black	X	1-2834659-0	25.9	15.2	5.8
			Y	1-2834682-0			
		Natural	X	1-2834674-0			
			Y	1-2834684-0			

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