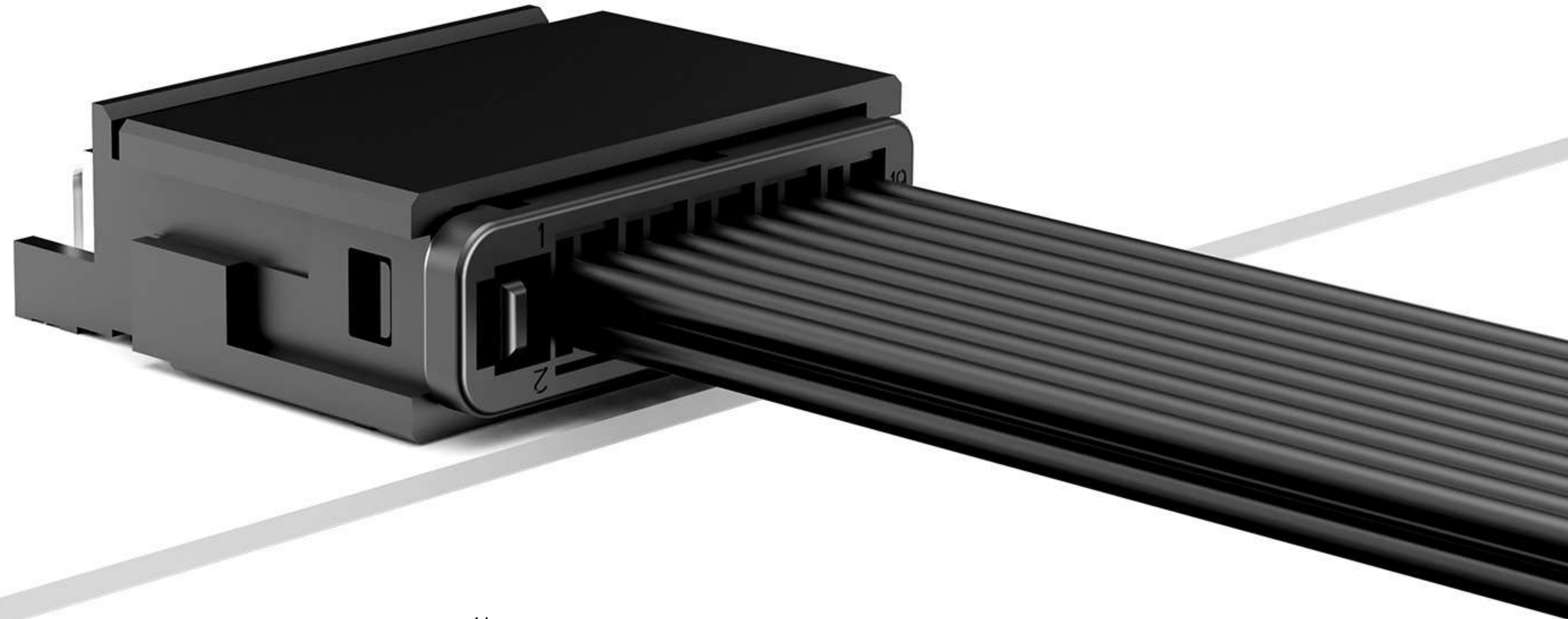
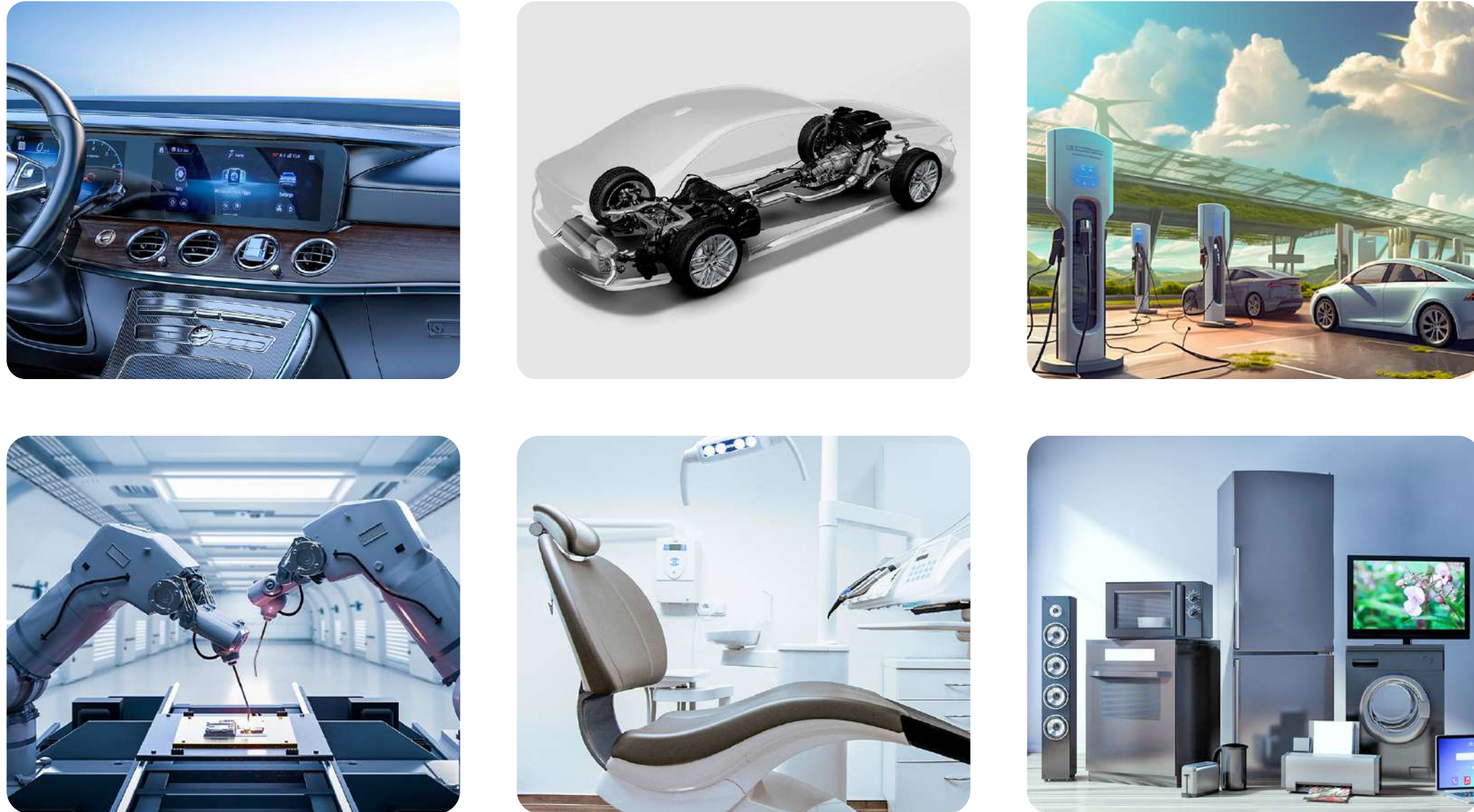


Wire-to-Board Wafer Connector

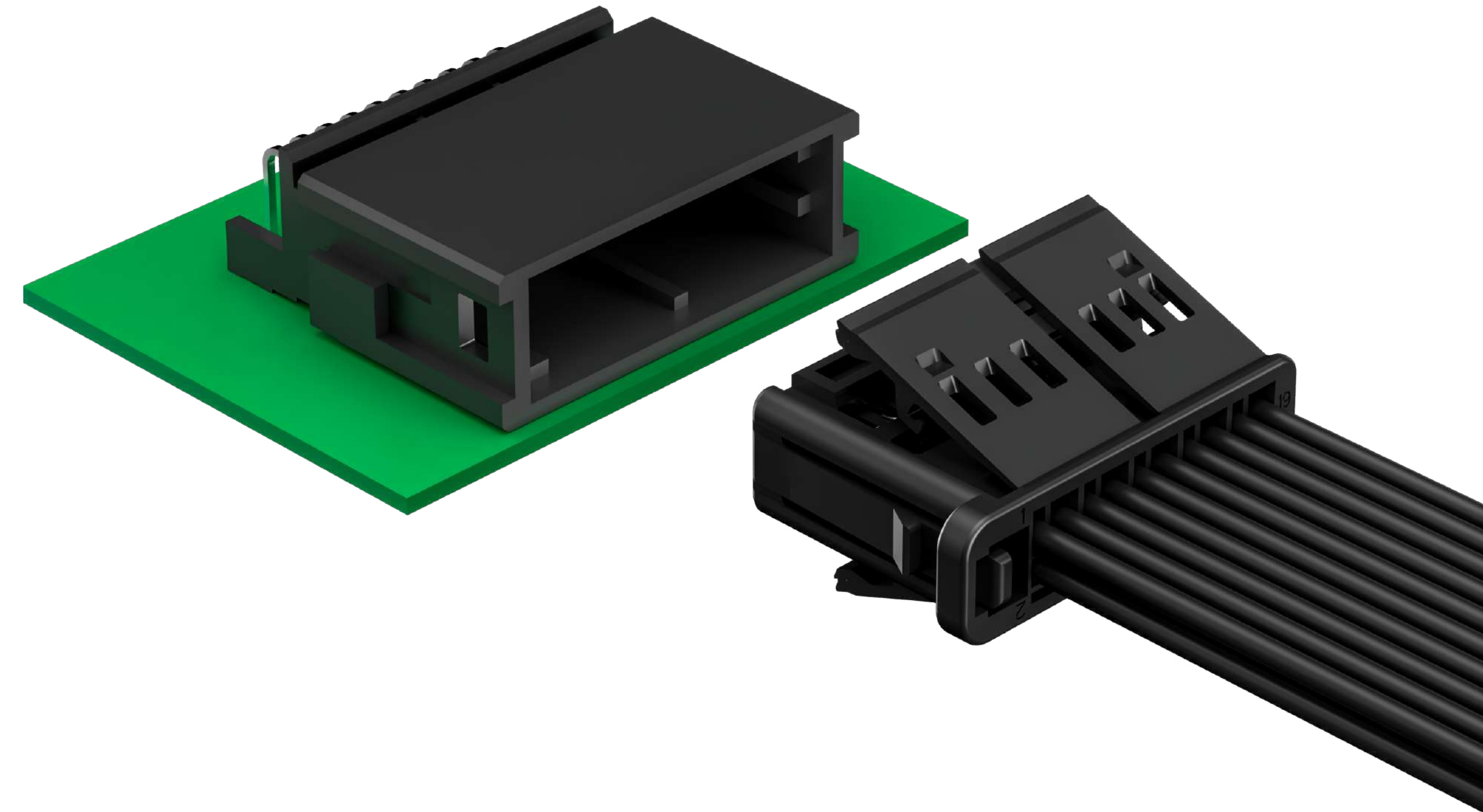
CPCO-20 Series 1.80mm Pitch



LV214 Compliant



Applications: Automotive (In-Vehicle Entertainment Systems, Powertrain Systems, Safety Systems, Chassis Systems, and E-Bike Applications, etc.), Industrial, Medical, Smart Home, and Renewable Energy.



The CPCO-20 series connectors, designed with premium materials and ultra-durable housing, boast advanced anti-misalignment mechanisms and robust latch structures, guaranteeing reliable connections. An audible "click" during mating confirms successful assembly, thereby bolstering user confidence. These connectors exhibit exceptional stability, combining a compact design with a high current-carrying capacity.

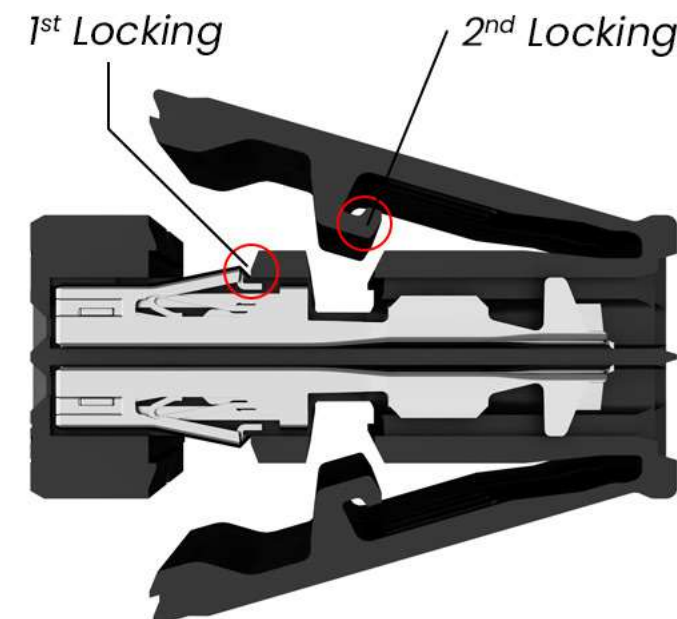
Latch Mechanism, Terminal Position Assurance (TPA)

Latch Mechanism: Designed to maintain a secure connection after insertion, mitigating the risk of accidental disconnection due to external forces or vibrations.

Terminal Position Assurance (TPA): Designed to provide enhanced terminal alignment, strengthen the retention force between the terminal and housing, and increase connector stability.



Latch Mechanism



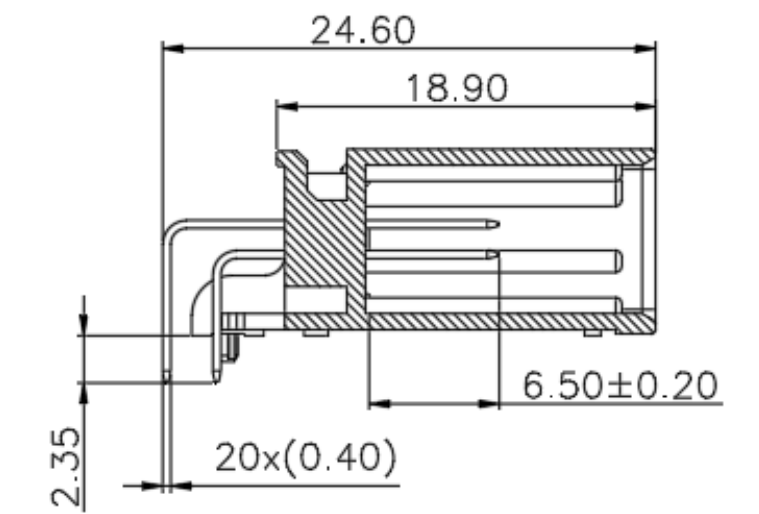
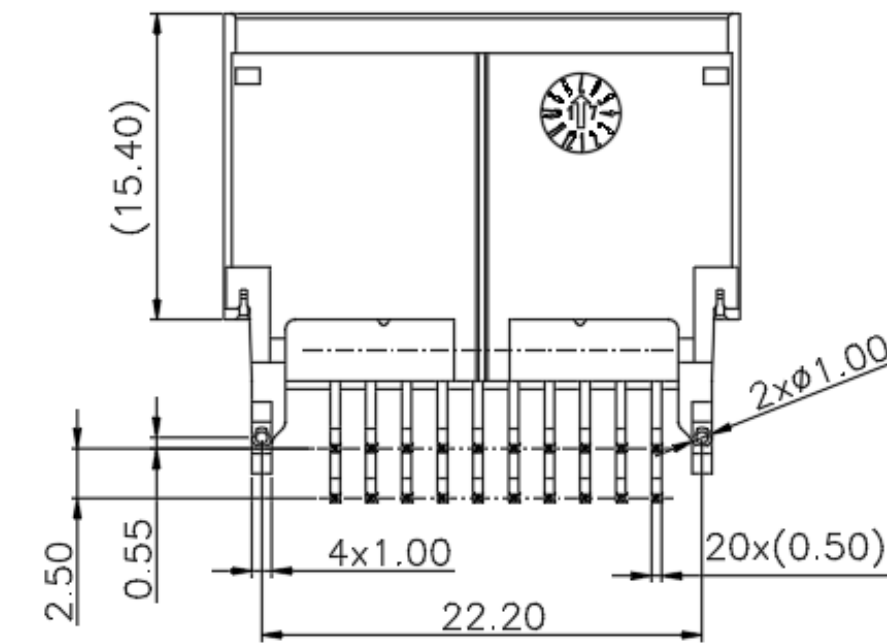
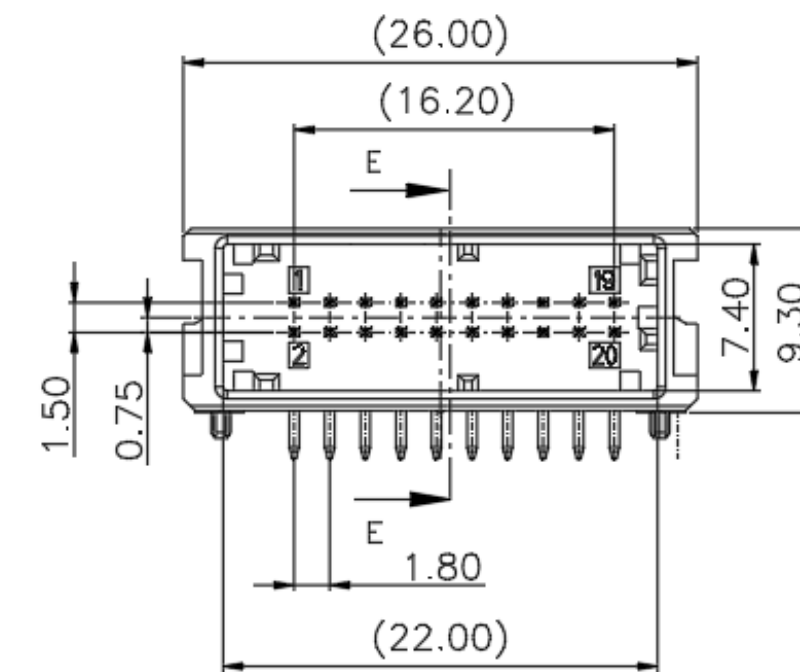
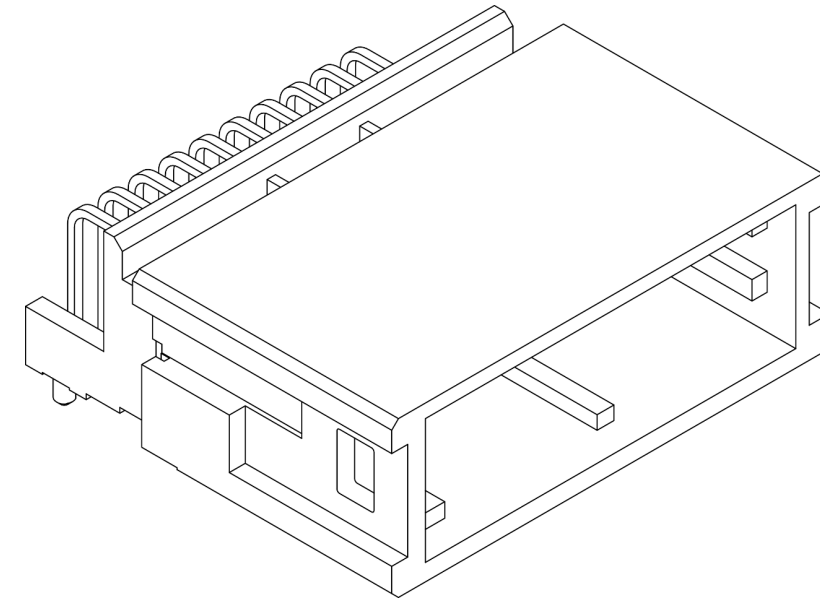
Terminal Position Assurance

Product parameters

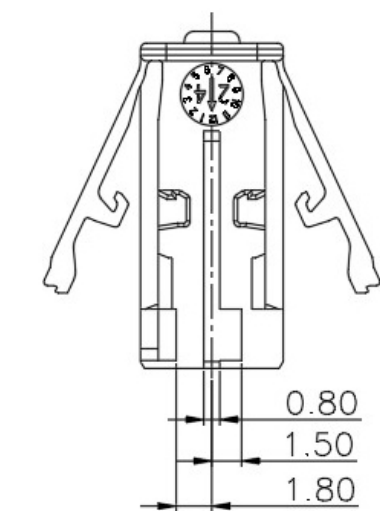
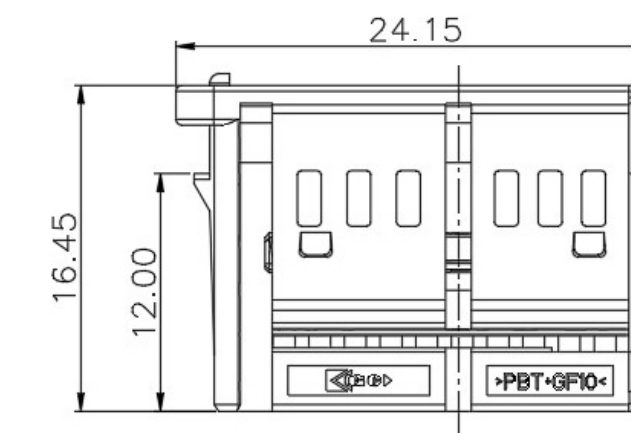
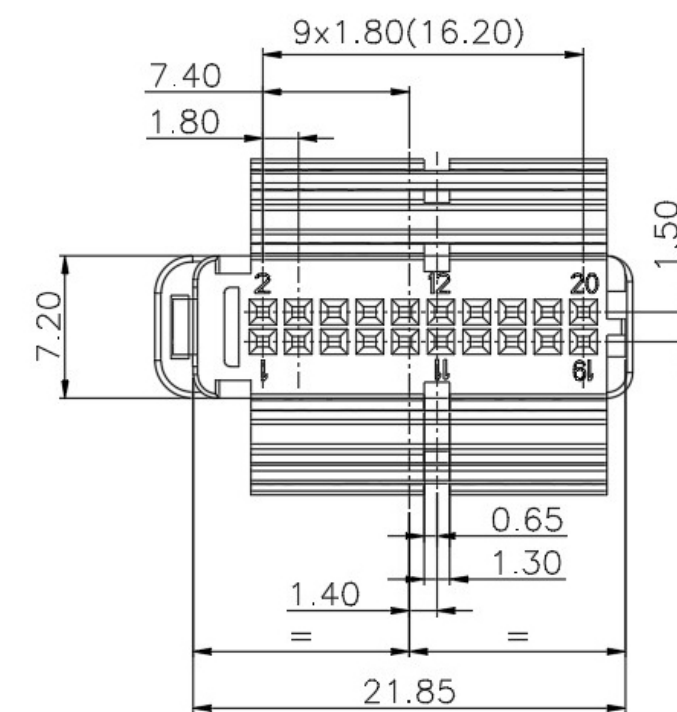
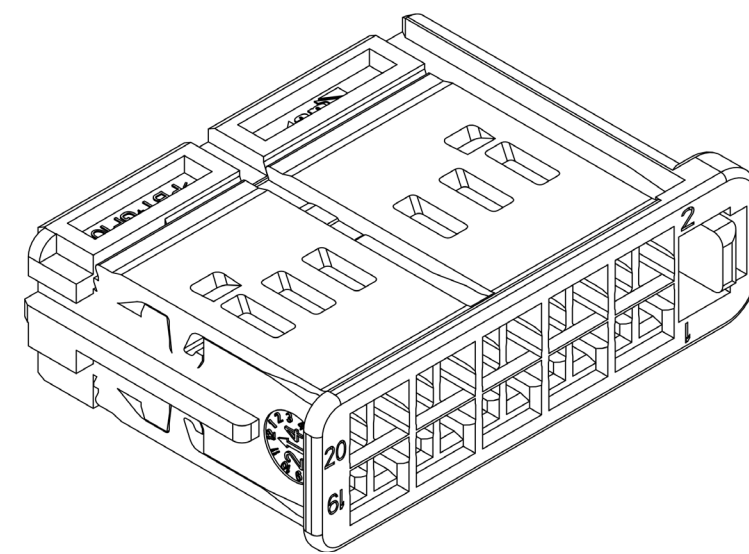
Board Side			Wire Side (Mating Part)		
Type	Pin No.	Part Number	Housing PN	Terminal PN	Wire Specs
Horizontal	20	CPCO-20-VX0X-TX	RLKZV210	RARZID2	0.13-0.17mm ² (AWG26) 0.22-0.35mm ² (AWG22-AWG20)

Material Specifications	
Insulation Material (Board End)	LCP, Black / Natural Color
Insulation Material (Wire End)	PBT, Black / Natural Color
Contact Material	Copper Alloy (Tin Plated)
Electrical Characteristics	
Rated Current	2A/Pin (AWG26) 2.5A/Pin (AWG24) 3A/Pin (AWG22)
Insulation Resistance	≥100MΩ
Contact Resistance	≤30mΩ
Withstand Voltage	500V AC for 1 minute
Mechanical Characteristics	
Mechanical Vibration	5Hz-2000Hz-5Hz; 10m/s ²
Mechanical Shock	Acceleration of 30g, single shock duration 6ms, 50 times per axis
Retention Force	≥15N/Pin
Durability	Tin-20 times; Gold-100 times
Latch Release Force	≥100N
Environmental Characteristics	
Operating Temperature	-40°C to +105°C

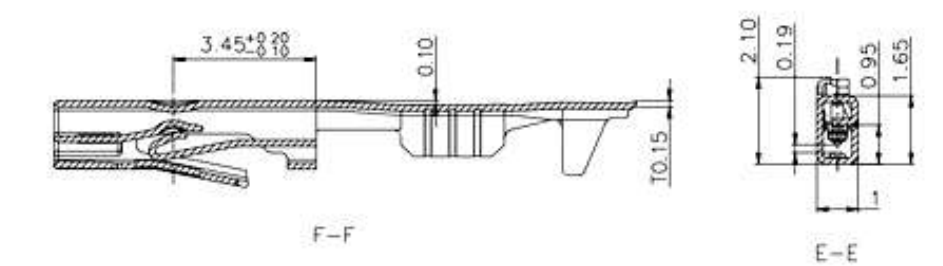
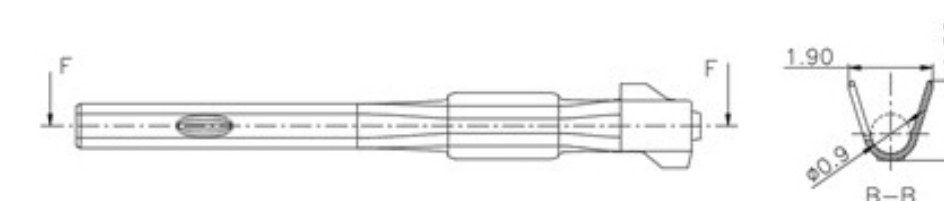
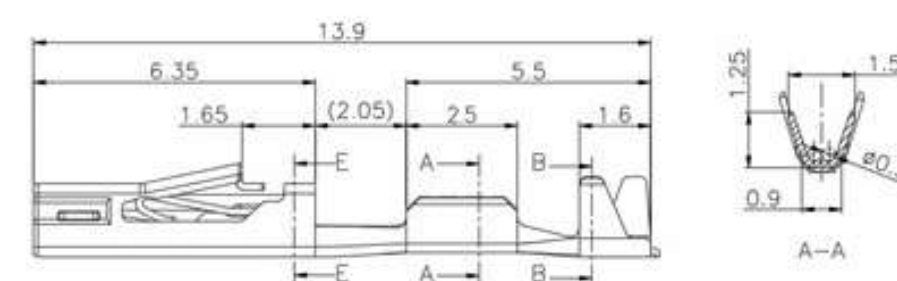
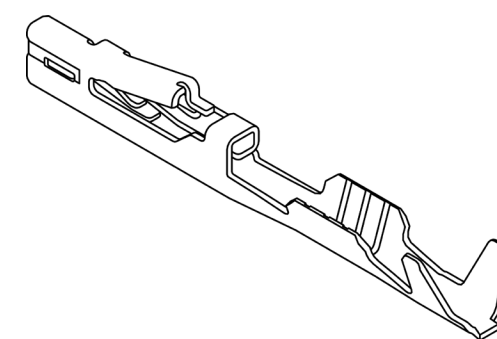
Board Side Header



Wire Side Housing

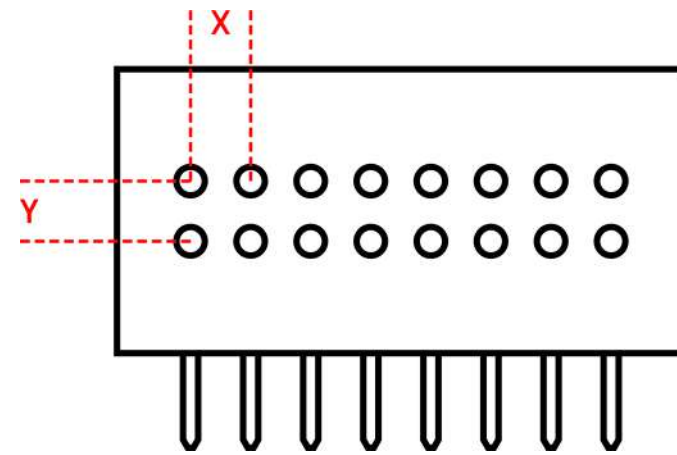


Wire Side Terminal



Wire-to-Board Automotive Connector

CMOD-40 Series



Pitch:

Plug 1 (X=2.54mm, Y=2.54mm)

Plug 2 (X=3.50mm, Y=6.50mm)

Plug 3 (X=5.25mm, Y=7.45mm)





Automobile



Industrial

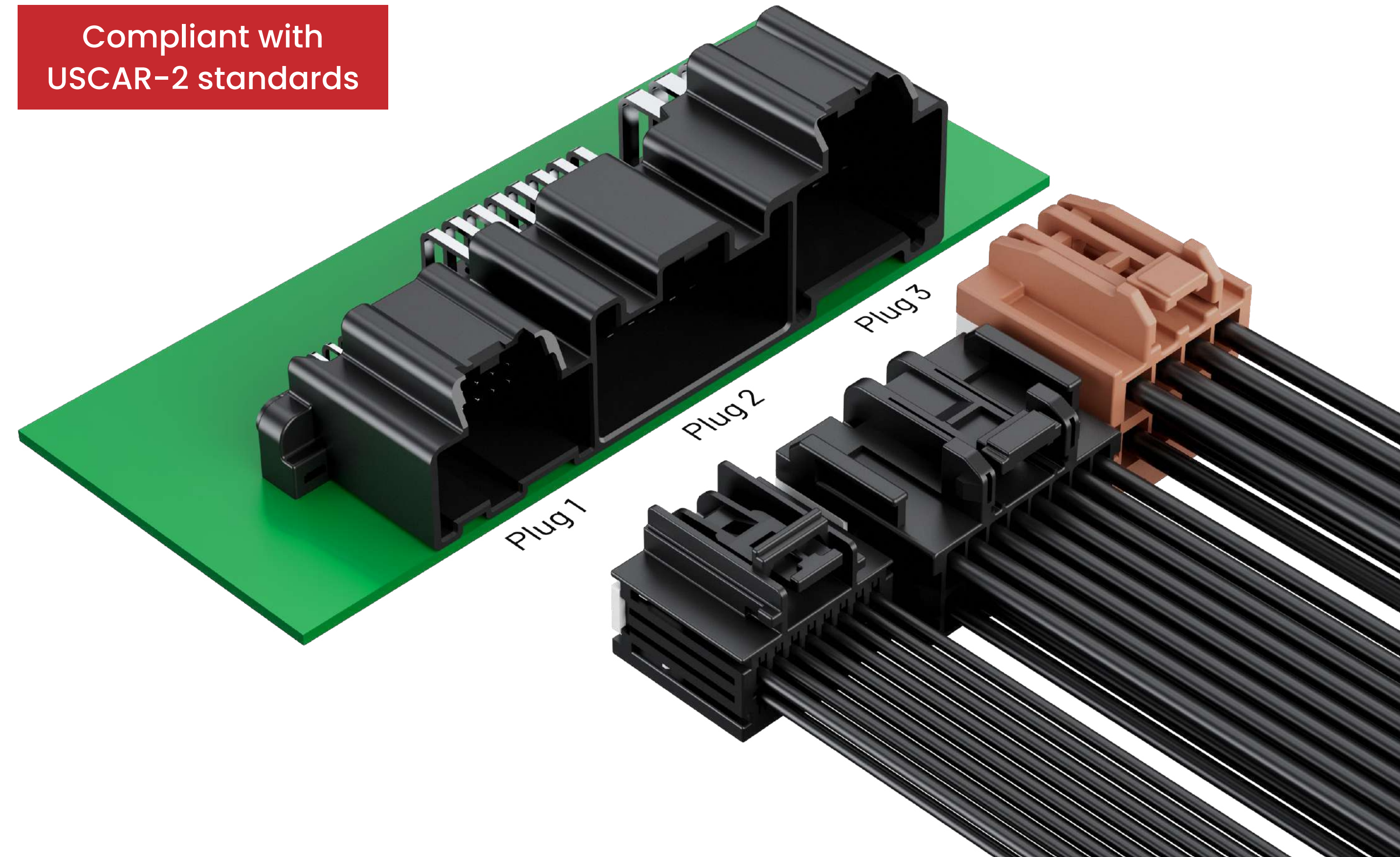


Smart Home



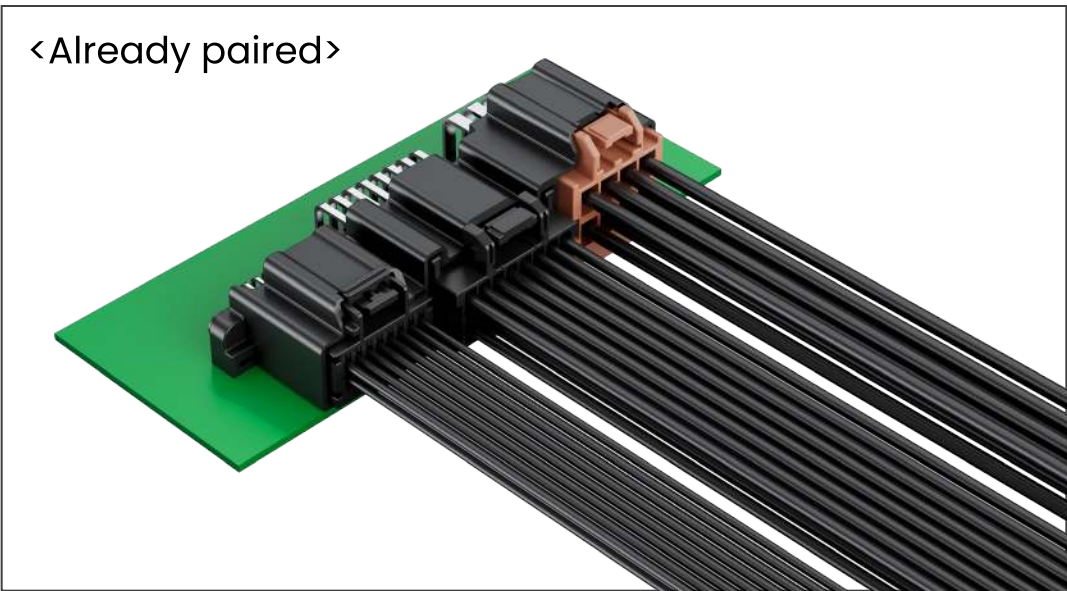
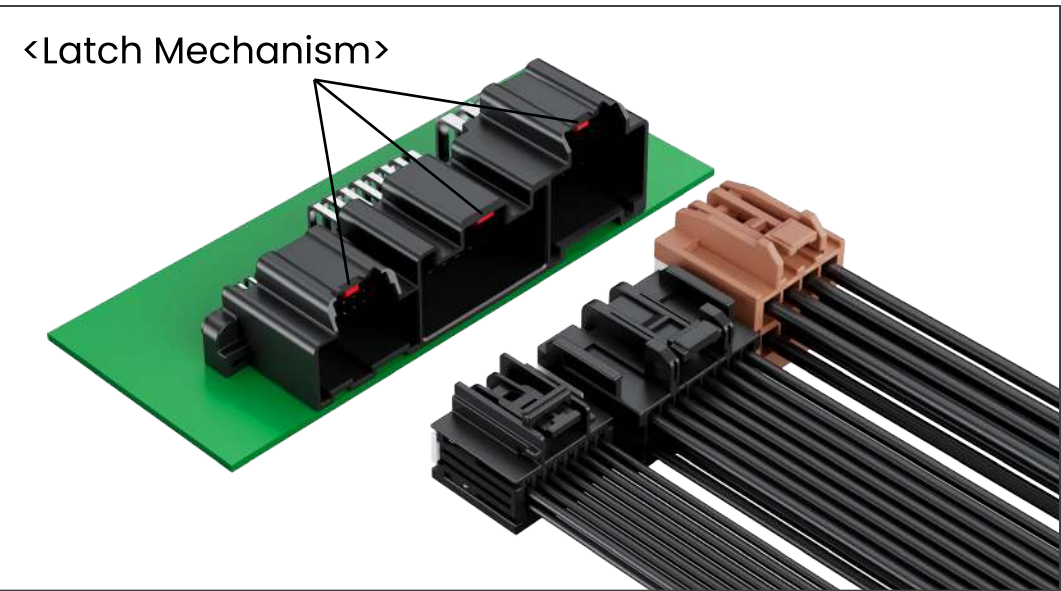
New Energy

Compliant with
USCAR-2 standards



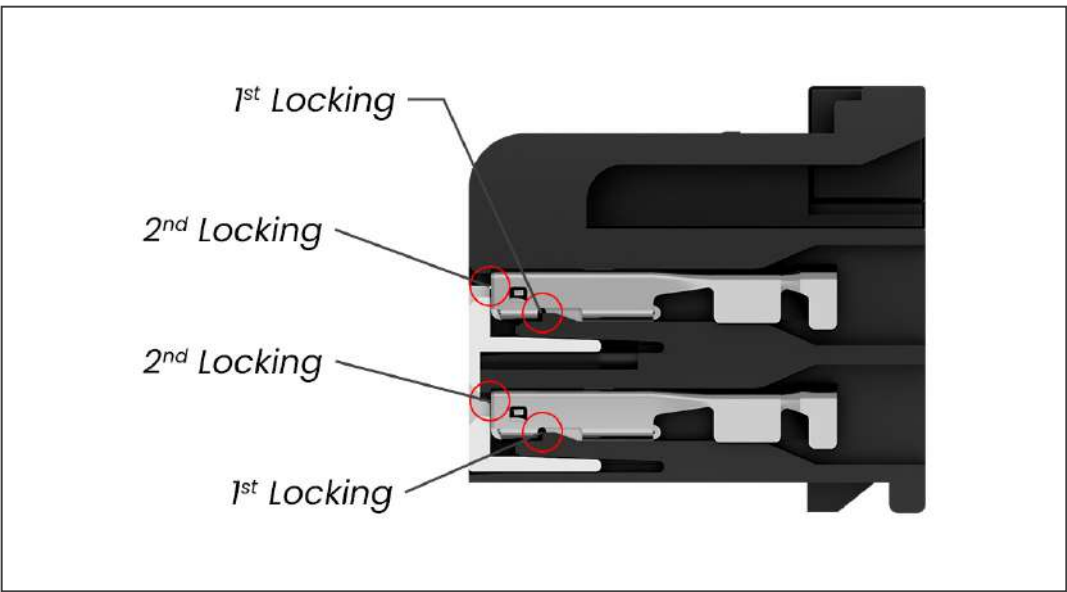
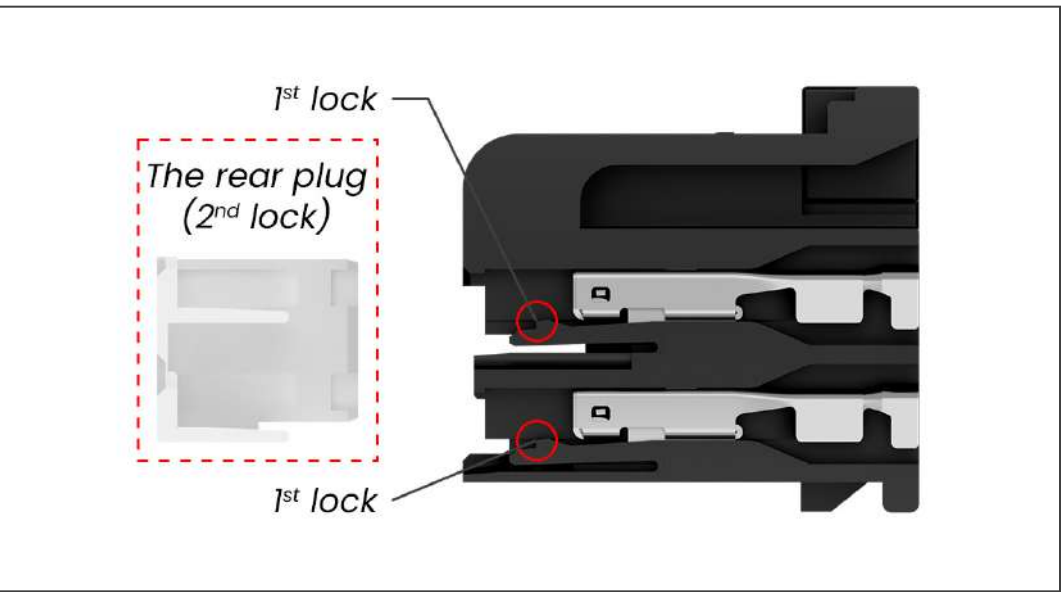
Latch Mechanism

The audible "click" sound when inserting each plug ensures proper assembly of the connector, improving stability and effectively preventing signal disruption due to vibration or impact.



Terminal Position Assurance (TPA)

The design ensures accurate terminal placement, enhancing the retention force between the terminal and the housing, effectively preventing terminal detachment, and improving the overall stability and reliability of the connector.



Product parameters

Board Side			
Type	Pin No.	Part Number	Insulation Material
Horizontal	40	CMOD-40-V001-TY	PA66, Black

Wire Side (Mating Part)

Serial Number	Pin No.	Housing PN	Terminal PN	Wire Specs
Plug 1	16	RMCZHA215	RARH160	0.35-0.5mm ² (AWG22-20)
Plug 2	16	RMCZ3A201	RAR3102	0.8-1.0mm ² (AWG18-16)
Plug 3	8	RMCZZA210	RARZ1F9	0.8-1.0mm ² (AWG18-16)

Material Specifications

Insulation Material	PBT, Black (Plug 1) PBT, Black (Plug 2) PBT, Brown (Plug 3)
Contact Material	Copper Alloy (Tin Plated)

Electrical Characteristics

Rated Current	0.64*0.64 Terminal: 6A (DC) 1.50*0.80 Terminal: 15A (DC) 2.80*0.80 Terminal: 17A (DC)
Rated Voltage	250V AC/DC
Insulation Resisance	≥100MΩ
Contact Resisance	≤20mΩ
Withstand Voltage	1000V/AC

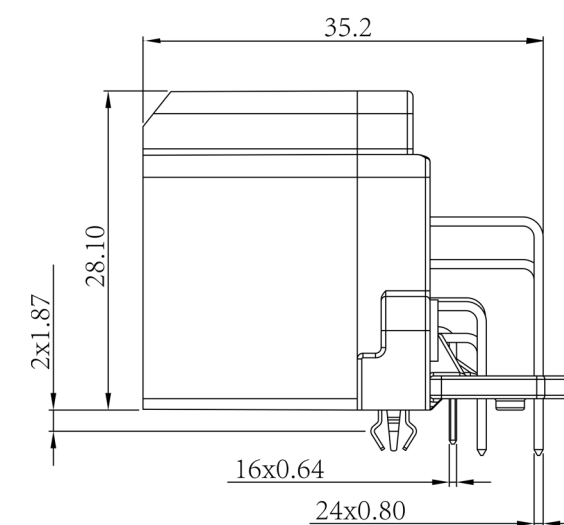
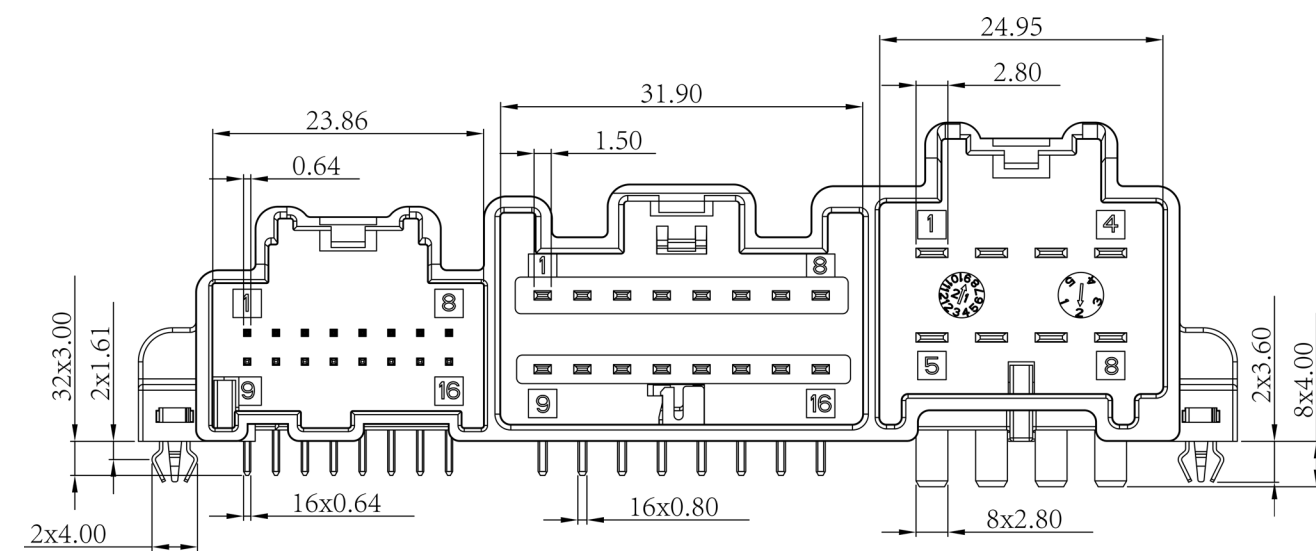
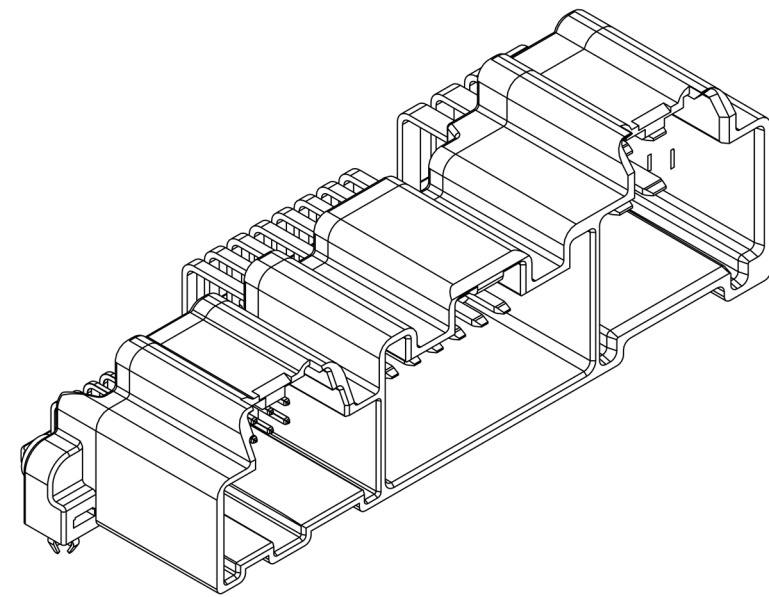
Mechanical Characteristics

Mechanical Shock and Vibration	Compliant with USCAR V1 Standard
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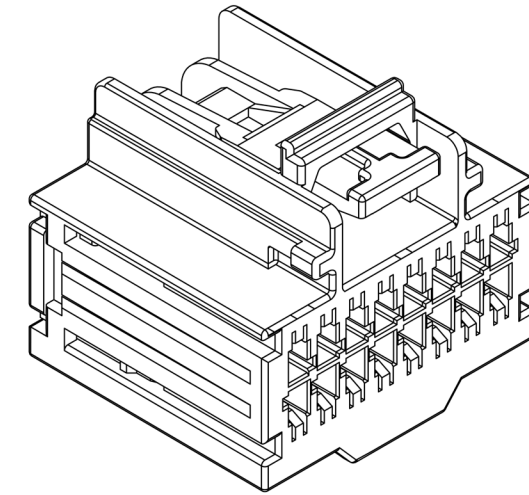
Environmental Characteristics

Operating Temperature	-40℃ - +105℃
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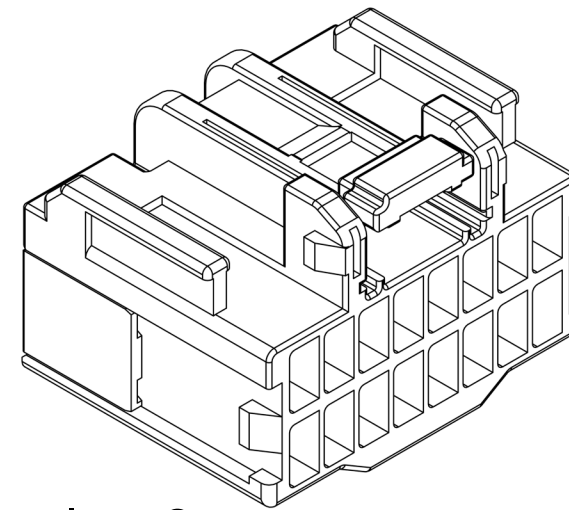
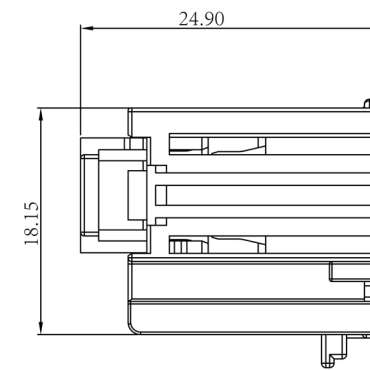
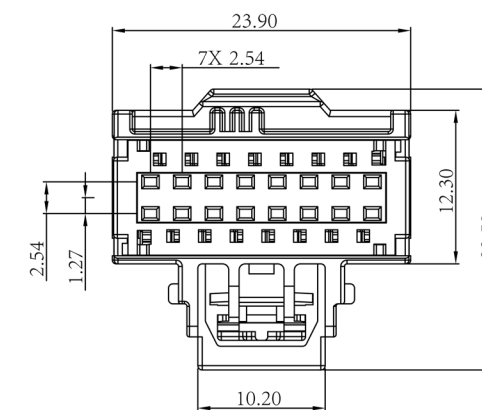
Board Side Header



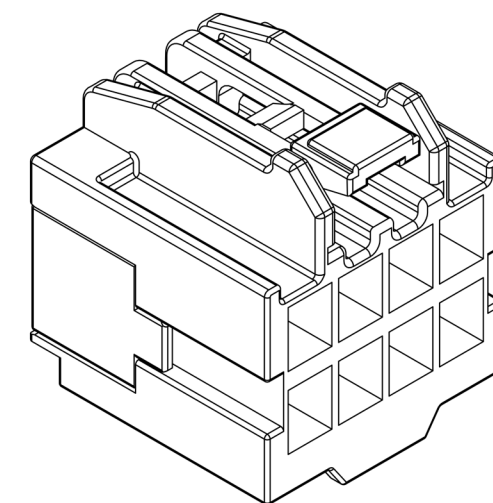
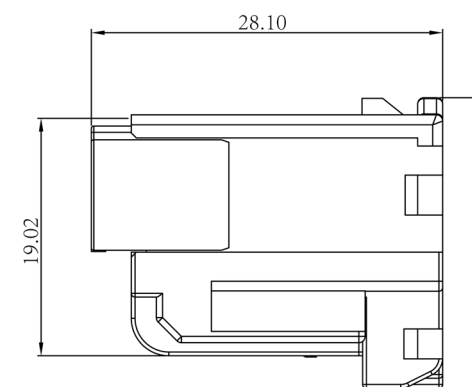
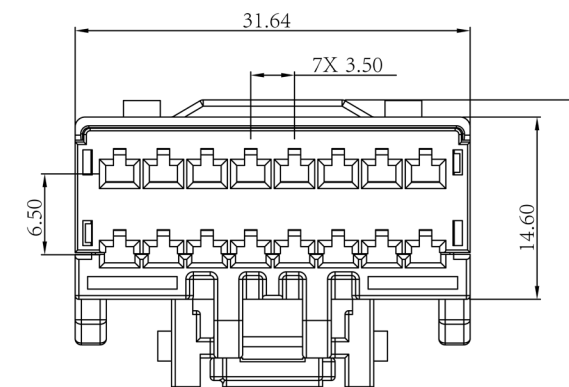
Wire Side Housing



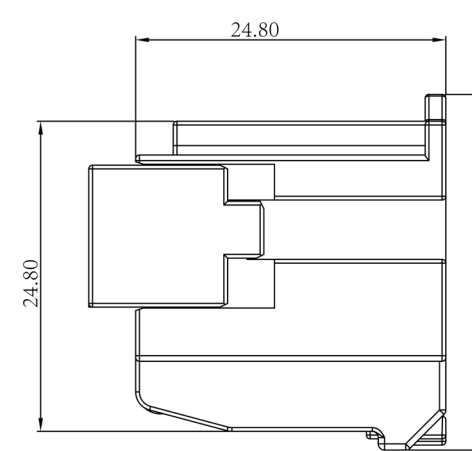
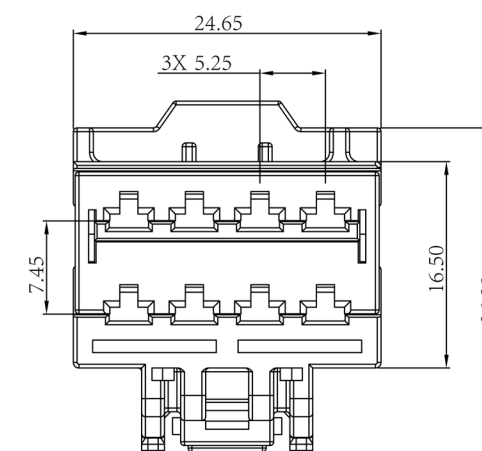
Plug 1



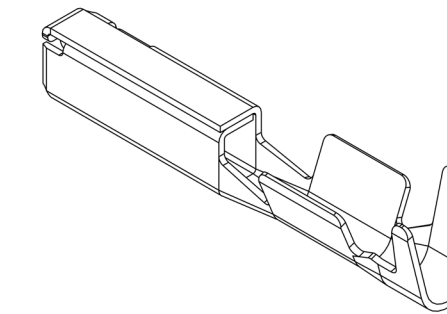
Plug 2



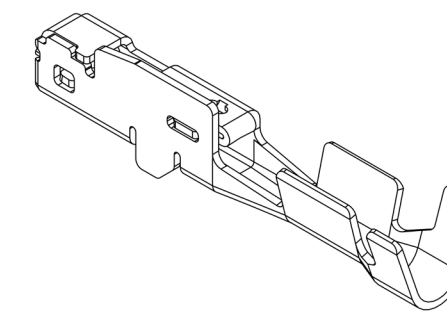
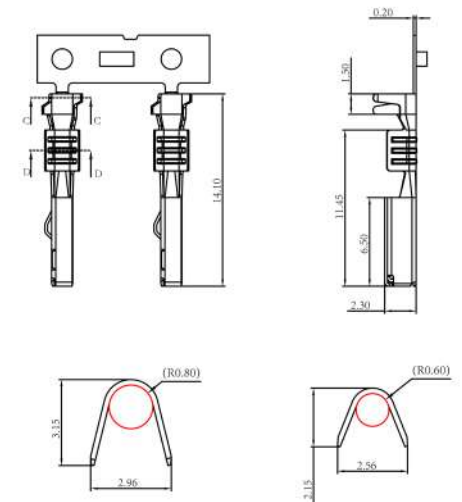
Plug 3



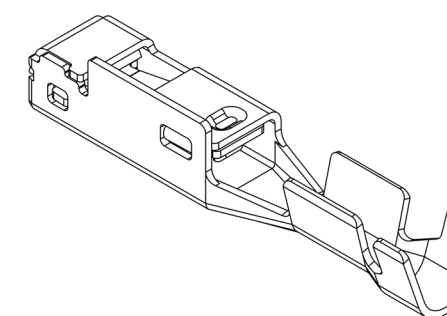
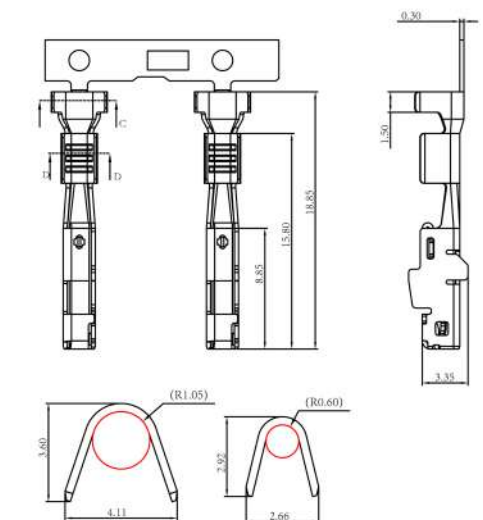
Wire Side Terminal



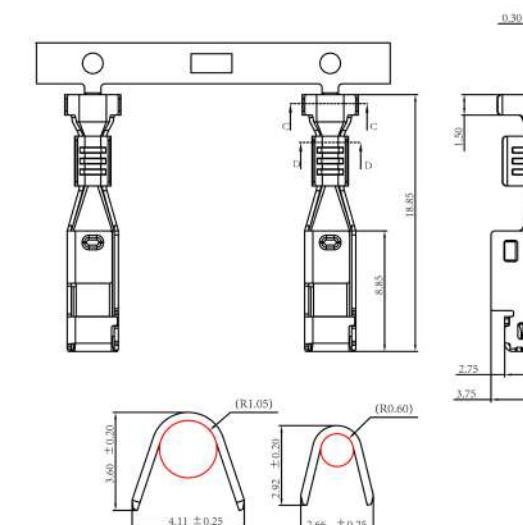
Plug 1



Plug 2



Plug 3



Singapore (HQ)

1 Fusionopolis Place
Unit 320 Level 03
Galaxis West Lobby
Singapore 138522

Hong Kong Office

RM409, Tower One
Silvercord Centre
30 Canton Road, TST, Kowloon
Hong Kong

Germany Operation Office

45731 Waltrop
Richtstrecke 13
Germany

China Operation Office

Unit1106-1108,
International Science Building
Hongshan Road, Xiangzhou, Zhuhai
Guangdong, China

Phone: +49 2309 647 9030

Phone: +86 756 2605001

Email: info@rts-connect.com