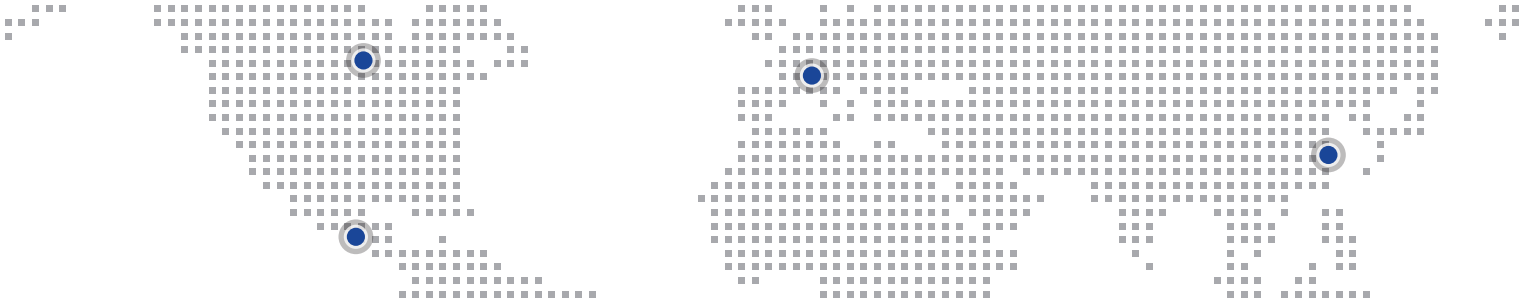
AUTOMOTIVE **CONNECTORS** SOLUTIONS

RAYDIALL AUTOMOTIVE

Cable Connectors – PCB connectors – Electric Vehicle Solutions

www.raydiall.com

RAYDIALL **WORLDWIDE**



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RAYDIALL AUTOMOTIVE

OUR VALUES

Agility
Creativity
Team spirit
Commitment

Raydiall is a joint venture between ARaymond, **a world leader in the automotive fastening industry,** and Radiall, **a world leader in interconnection solutions.**

We combine **our strengths and experience to give better**, more reliable connectivity solutions to our automotive customers.

High-speed data connectors, lightweight PCB connectors, low-insertion force power contacts and one step crimp RF cable connectors are a few examples of product innovations recently developed.

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OUR **FUNDAMENTALS**

Collaboration

We work closely with your engineers to understand your applications, your technical needs, and your budgetary issues.

Wide Product Range

We manage our product lines through the entire lifecycle in order to offer you a wide selection of standard products at an affordable cost.

Custom Products

We can taylor products to specific equipments and applications.

Global Presence

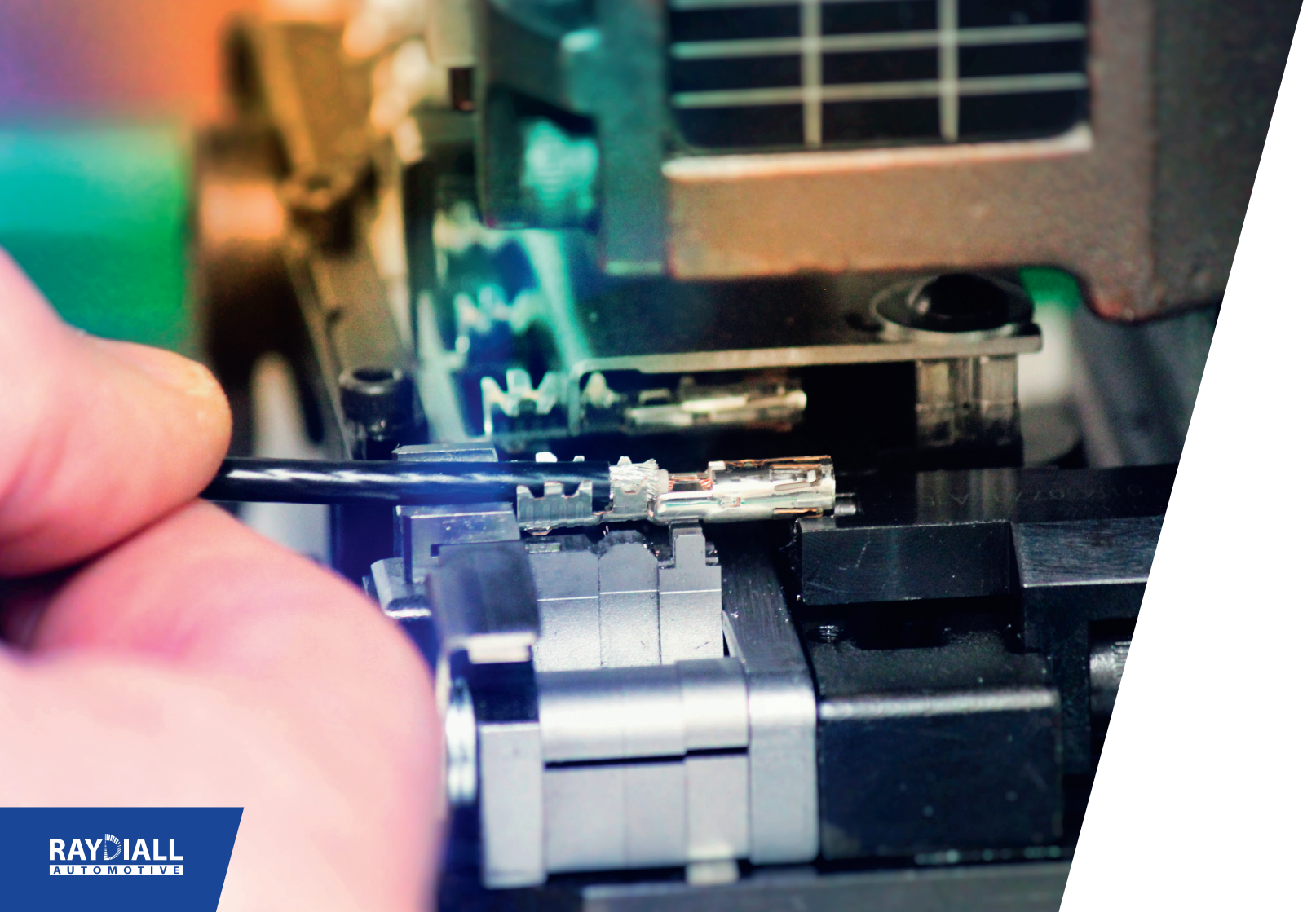
We're everywhere you need us, with worldwide sales, manufacturing and engineering support.

Responsive Support and Service

From the design stage to planning and post-installation support, we're with you at every step, whether you need sales support or engineering expertise.

Warranty

We proudly stand behind our products.
ISO 14001 certified
ISO 16949 : 2009 certified



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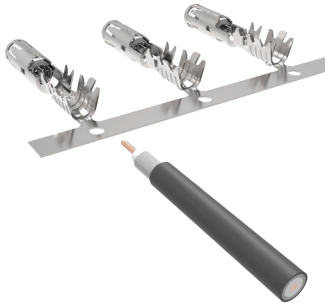
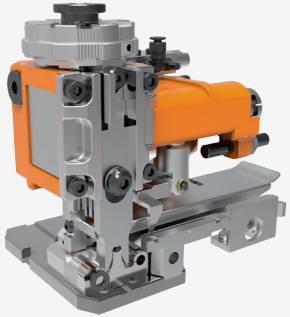
UNIQUE 1 STEP **CRIMPING PROCESS**

A solution that requires low investment, and that is compatible with all kind of processes: Manual, Semi-automatic and Full-automatic processes.



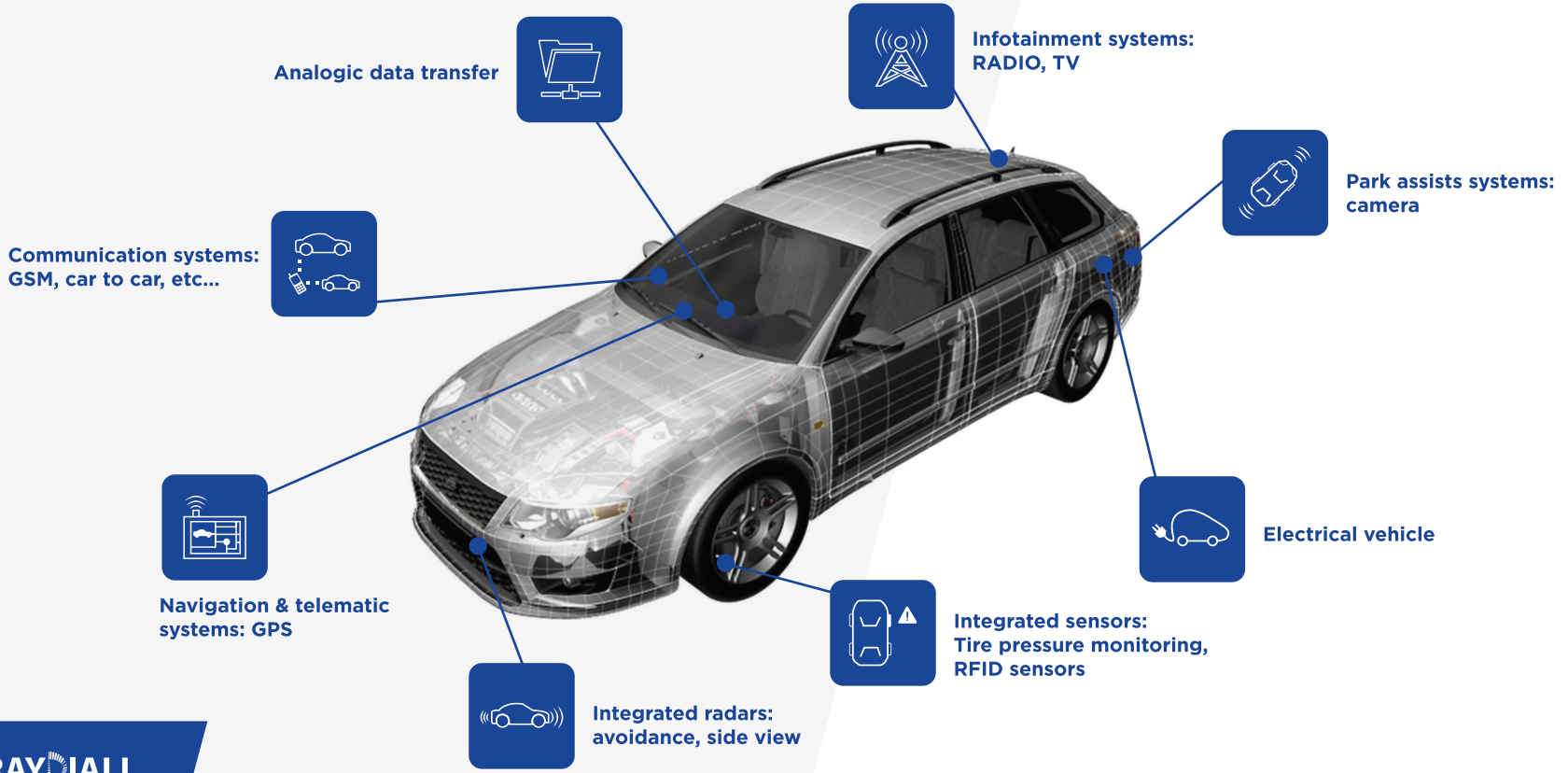
Terminal are delivered pre-assembled: The center contact is already assembled



1 step crimping with mini applicator

Cable, braid and center contact are crimped at once.

APPLICATIONS



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HSD FOR PCB

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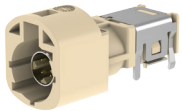
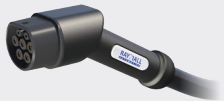


p34 HSD PCB 90°

ELECTRIC VEHICLE



p38 POWER PLUG

p40 ADAPTOR

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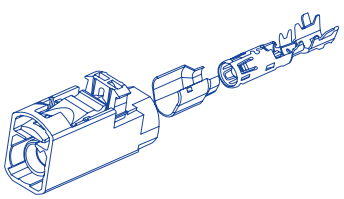
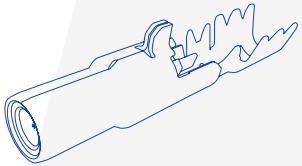
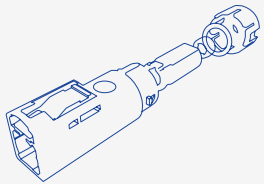
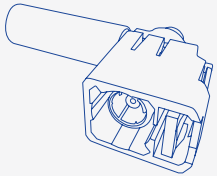
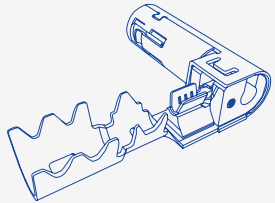
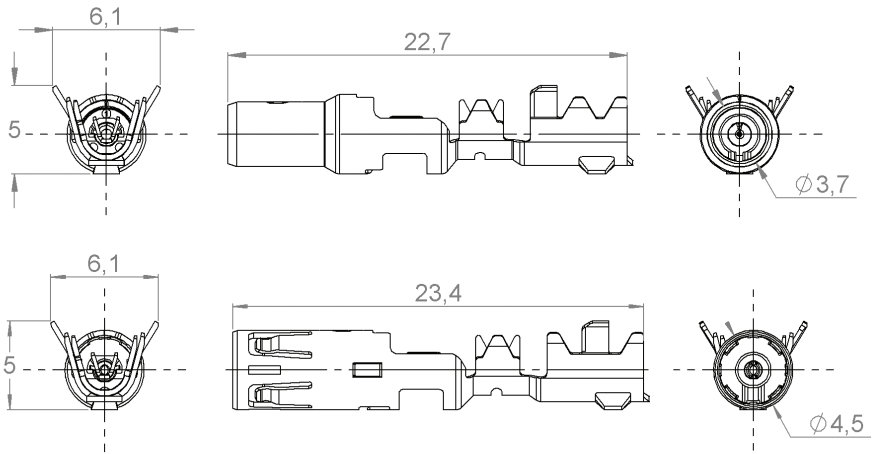
FAKRA CABLE CONNECTORS

HFR3C

- **Qualification**.....ISO 20860
- **Frequency**.....Up to 6 GHz*
- **Technology**.....Stamped & rolled
- **Cable types**.....RG174, RTK
- **Packaging**
  - *Terminal: reel*
  - *Housing: bulk*
- **Product alternative**
  - *Machined Fakra II*

*Performance according to OEM specific requirements and cable types



FEATURES :

- 2 step crimping terminal: terminal + crimp sleeve
- Monolithic TPA / Housing
- Closed entry: robust & protected interface design

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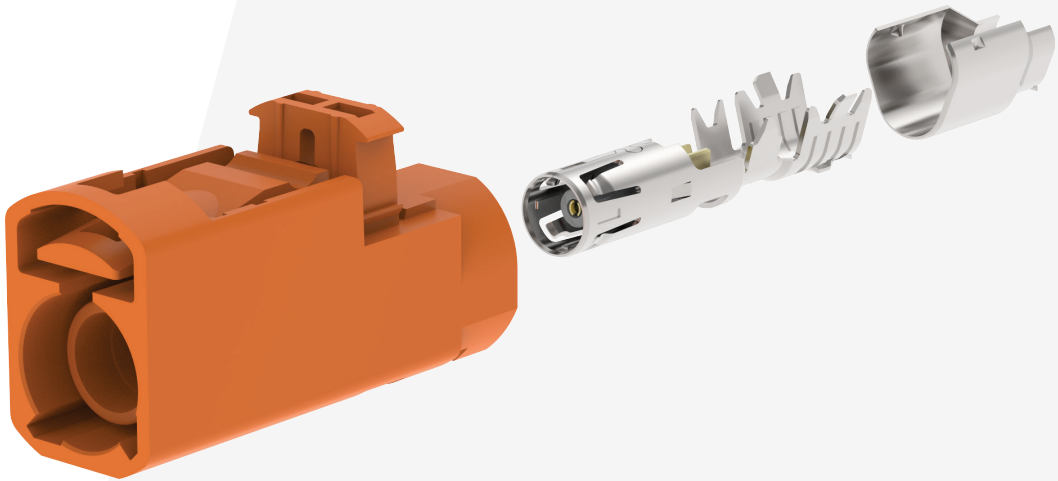
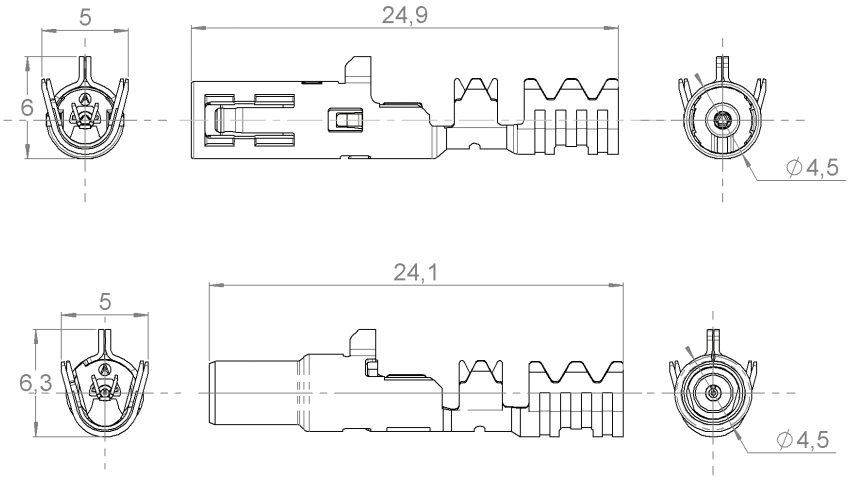


	Cable type	Terminal + Crimp sleeve	Simplex housing	Duplex housing
Female	RG174	R299.197.300 + R280.197.100	R197.116._80	R197.216._80
	RTK	R299.197.310 + R280.197.100		
Male	RG174	R299.197.100 + R280.197.100	R197.136._80	R197.236._80
	RTK	R299.197.110 + R280.197.100		

R3C

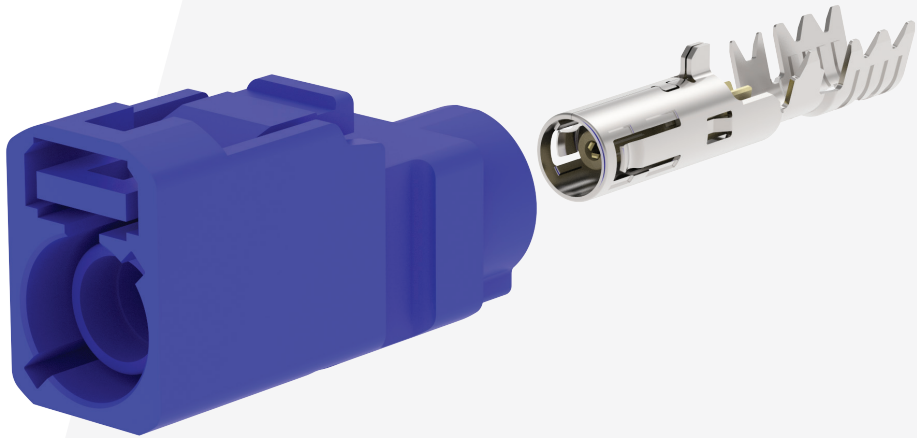
- **Qualification**.....USCAR
- **Frequency**.....Up to 3 GHz
- **Technology**.....Stamped & rolled
- **Cable types**.....RG174, RTK, RG58, RG59
- **Packaging**
  - *Terminal: reel*
  - *Housing: bulk*
  - *Crimp sleeve: reel*
- **Comment**
  - *USCAR: Terminal + Crimp sleeve**
  - *USCAR Interoperable: Terminal*
- **Product alternative**
  - *Machined Fakra II*



FEATURES :

- 1 step crimping terminal
- Closed entry: robust & protected interface design
- Positioning guaranteed design
- Automation friendly

RAYDIALL AUTOMOTIVE

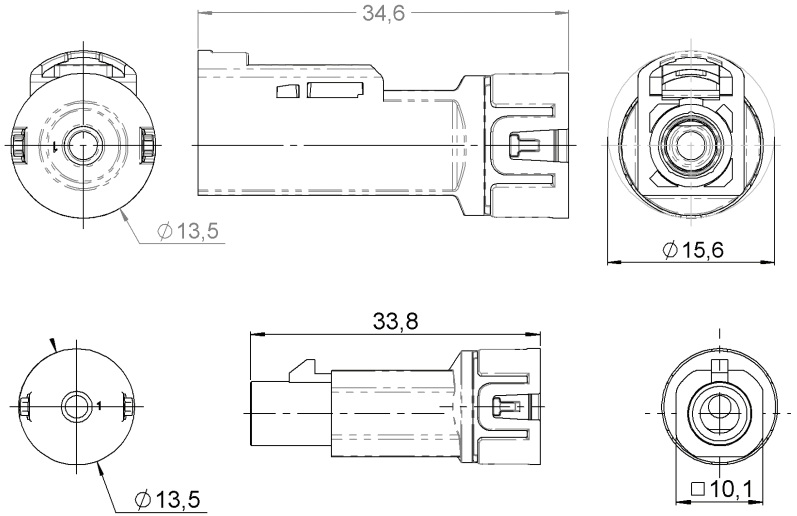


	Cable type	Terminal	Simplex housing	Duplex housing
Female	RG174	R299.197.200	R197.115._80	R197.215._80
	RTK	R299.197.210		
	RG59	R299.197.260	R197.115._81	---
	RG58	R299.197.230		
Male	RG174	R299.197.000	R197.135._80	R197.235._80
	RTK	R299.197.010		
	RG59	R299.197.060	R197.135._81	---
	RG158	R299.197.030		

*Contact us for crimp sleeve option.

R3C WATERPROOF

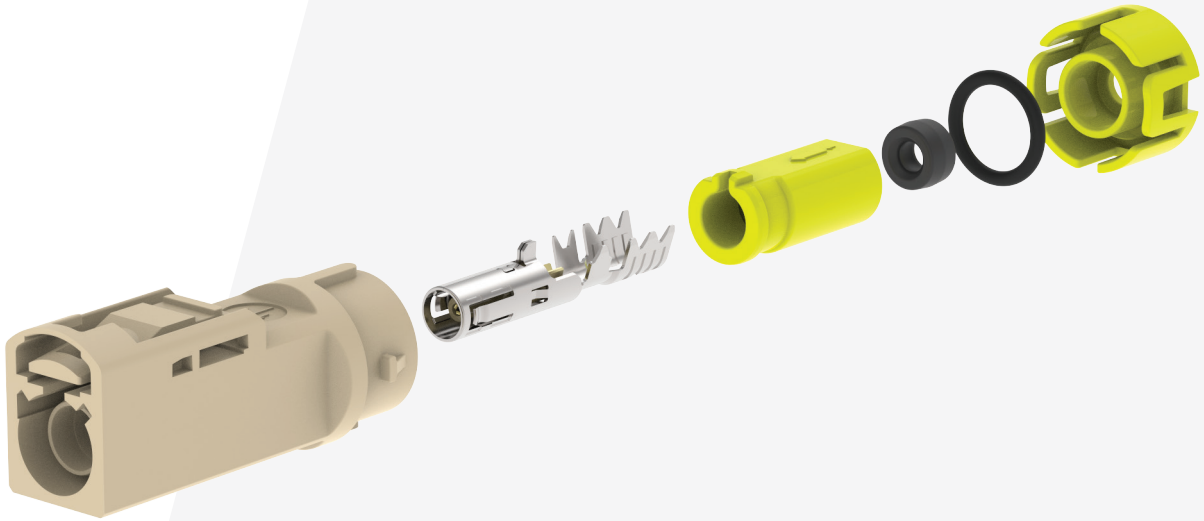
- **Qualification**.....USCAR + IP67
- **Frequency**.....Up to 3 GHz
- **Technology**.....Stamped & rolled
- **Cable types**.....RG174, RTK
- **Packaging**
  - *Terminal: reel*
  - *Housing kit: bulk*
    - *Waterproof housing*
    - *External joint*
    - *Cable joint*
    - *Cap*
    - *Sleeve*



FEATURES :

- 1 step crimping terminal
- Waterproof IP67
- Interoperable with USCAR / FAKRA PCB components
- Automation friendly

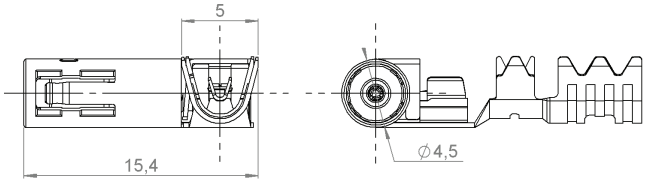
RAYDIALL AUTOMOTIVE

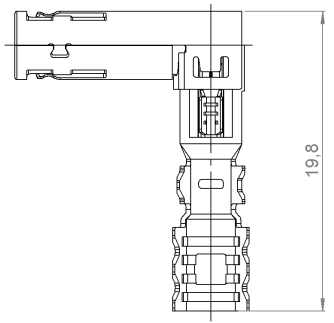


	Cable type	Terminal	Simplex housing waterproof kit
Female	RG174	R299.197.200	R197.115._11
	RTK	R299.197.210	R197.115._12
Male	RG174	R299.197.000	R197.135._11
	RTK	R299.197.010	R197.135._12

R3C 90°

- **Qualification**.....USCAR validated
- **Frequency**.....Up to 3 GHz
- **Technology**.....Stamped & rolled
- **Cable types**.....RG174, RTK, RG58, RG59
- **Packaging**
  - *Terminal: reel*
  - *Housing: bulk*
- **Product alternative**
  - *Machined version*

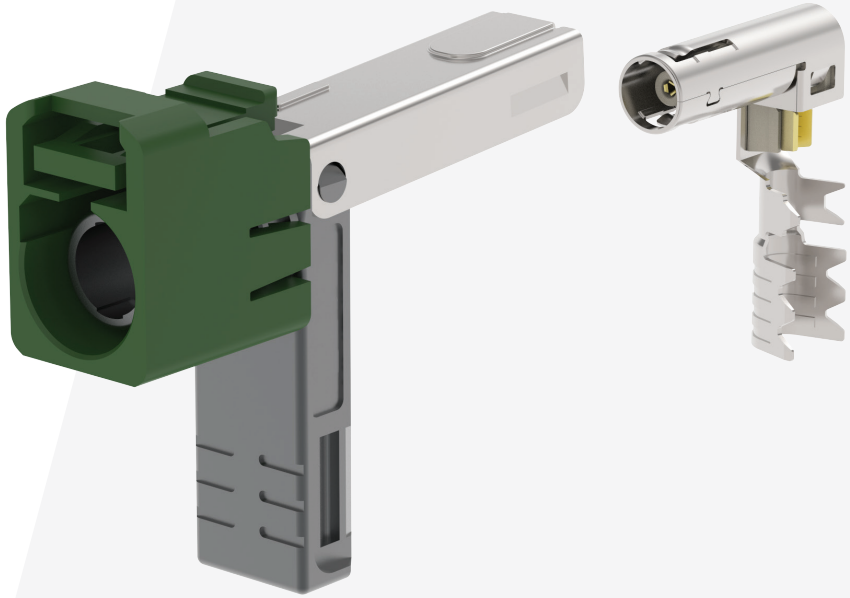




FEATURES :

- 1 step crimping terminal
- Turnable or fixed housing version
- Closed entry: robust & protected interface design
- Automation friendly

RAYDIALL AUTOMOTIVE



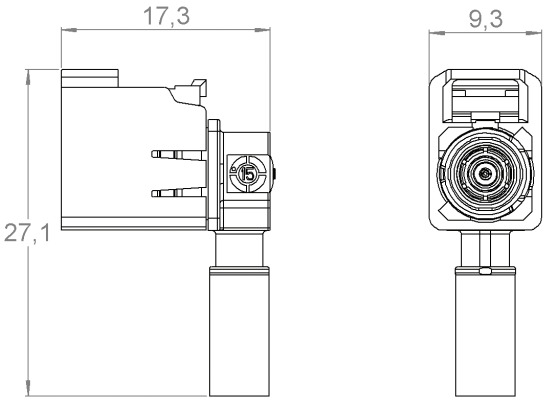
Cable type	Terminal	Turnable simplex housing
RG174	R299.197.600	R197.125._80
RTK	R299.197.610	
RG59	R299.197.660	R197.125._81
RG58	R299.197.630	

Contact us for fixed housing

WATERPROOF 90°

- **Qualification**.....USCAR + IP67
- **Frequency**.....Up to 6 GHz*
- **Technology**.....Die cast
- **Cable types**.....RG174, RTK
- **Packaging**.....Bulk

*Performance according to OEM specific requirements and cable types



FEATURES :

- Turnable housing
- Waterproof IP67
- Compact and robust

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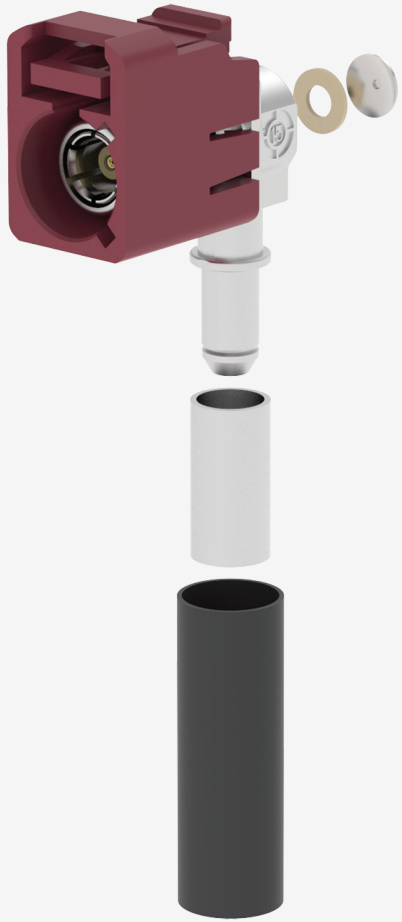
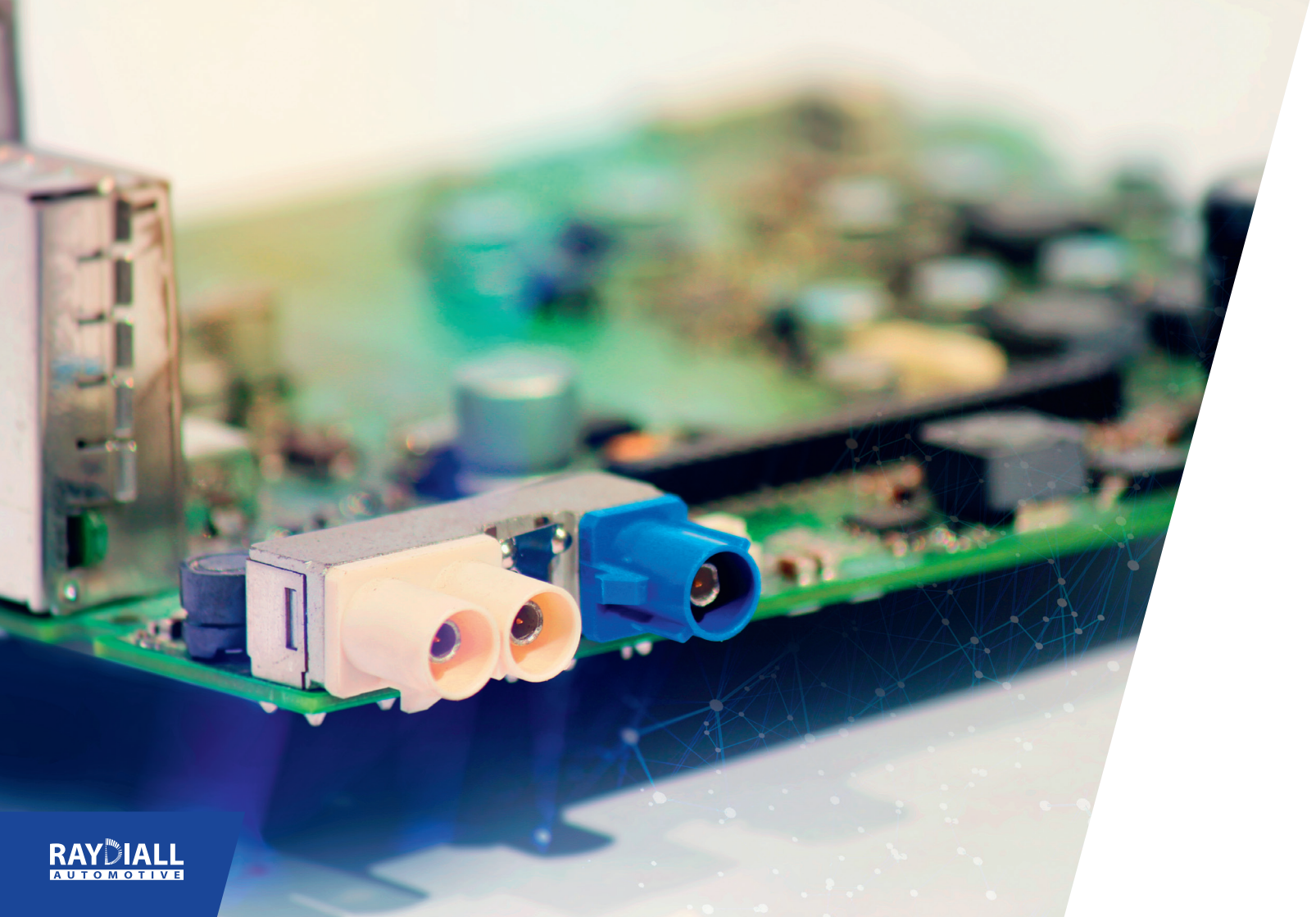


Cable type	Plug with housing
RG174	R197.126._21
RTK	R197.126._22



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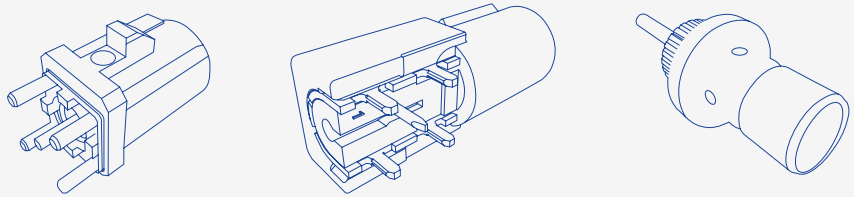
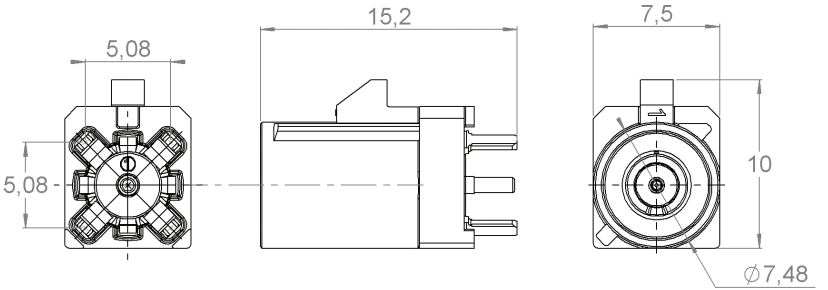
FAKRA PCB CONNECTORS



FAKRA PCB 180°

- **Process**.....Reflow soldering
- **Qualification**.....USCAR
- **Frequency**.....Up to 4 GHz
- **Technology**.....Stamped & rolled
- **Packaging**.....Tape & reel
- **Product alternative**
  - *Machined version*



FEATURES :

- Lightweight
- Compliant with pick and place process
- 350 units per reel
- Customization friendly

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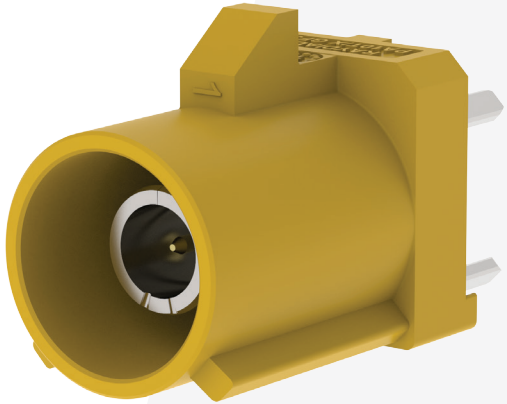
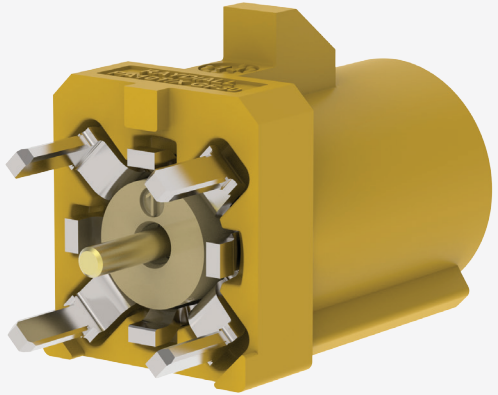
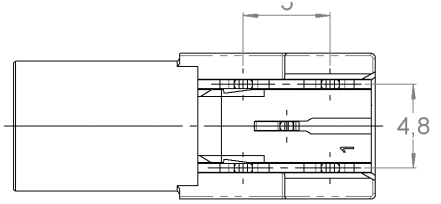


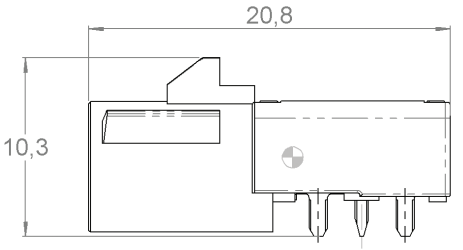


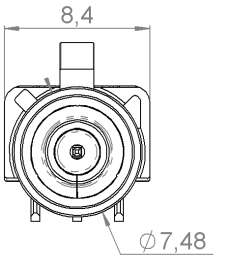
Reference
R197.156._28

FAKRA PCB 90°

- **Process**.....Reflow or Wave soldering
- **Qualification**.....USCAR
- **Frequency**.....Up to 4 GHz
- **Technology**.....Stamped & rolled
- **Packaging**.....Tape & reel
- **Product alternative**
  - *Die cast version*
    - *5 mm pitch*
    - *6 mm pitch*
    - *7 mm pitch*







FEATURES :

- Nose orientations: 3h, 6h, 9h, 12h
- Compliant with pick and place process
- 450 units per reel
- Customization friendly

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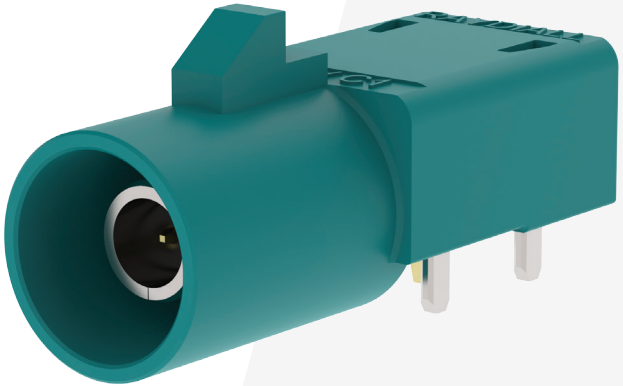
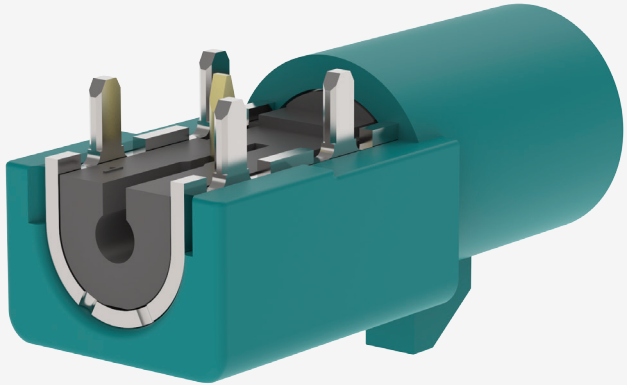
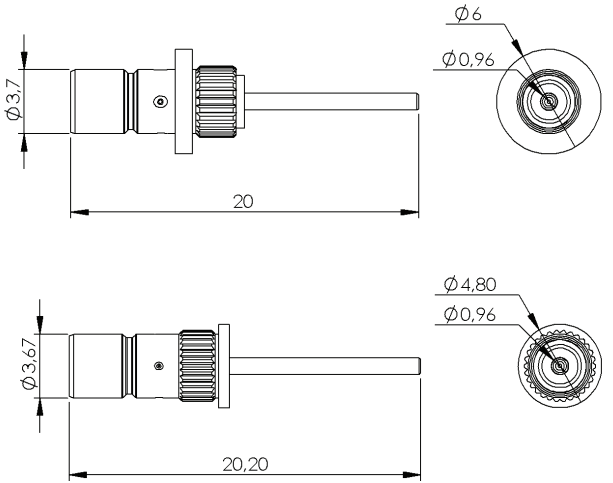




Reference
R197.166._XX

PRESS IN CONTACT

- **Process**.....Pressed in die cast chassis
- **Qualification**.....USCAR
- **Frequency**.....Up to 4 GHz
- **Technology**.....Machined
- **Packaging**.....Bulk



FEATURES :

- 0,8 µ or 0,15 µ gold plating on center contact
- 6mm, 8mm, 10mm or 11mm center contact length (other on demand)
- Straight or bended center contact
- Rear and front mount version
- Direct grounding with die cast chassis

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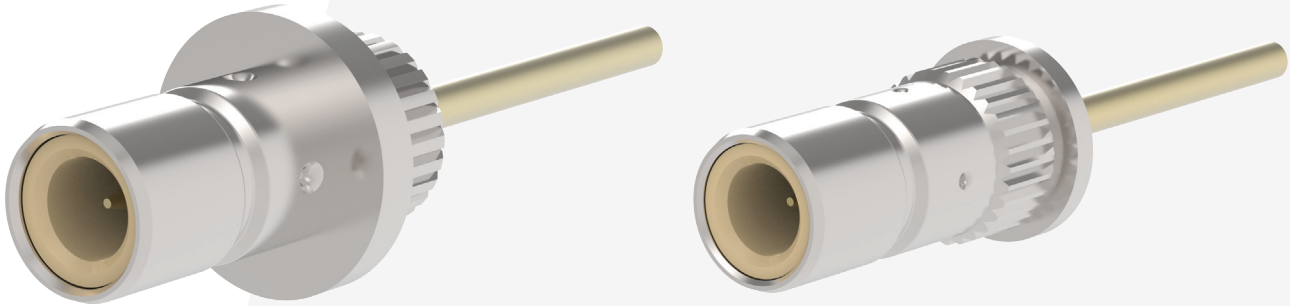
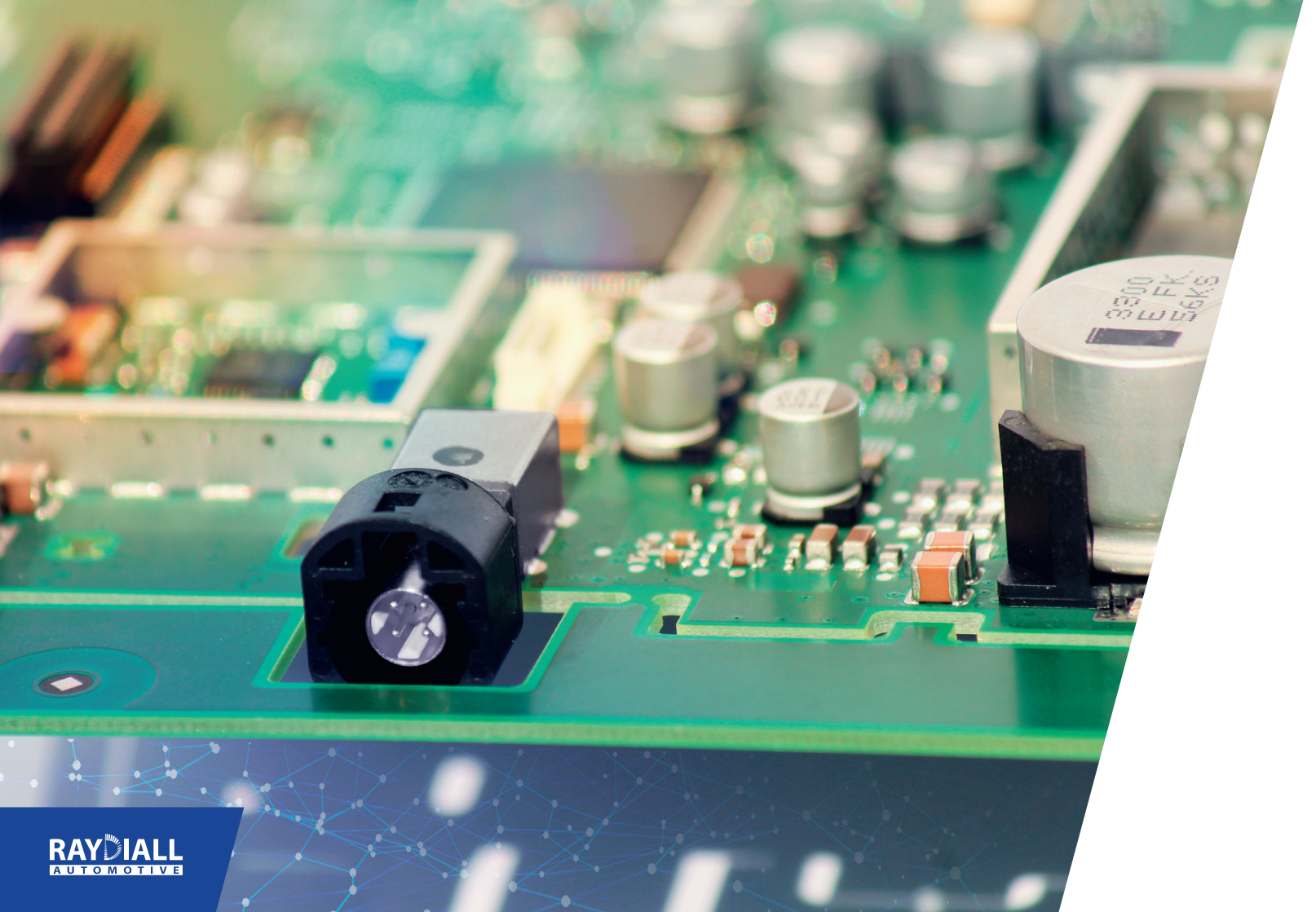


	Center contact lengh (mm)	Gold thickness (µm)	Press in
Front Mount	6mm	0,15	R114.504.205
	8mm	0,15	R114.504.225
	10mm	0,15	R114.504.230
	10mm	0,80	R114.504.235
Rear Mount	9,3mm	0,15	R114.505.220
	11mm	0,15	R114.505.235
	11mm	0,80	R114.505.230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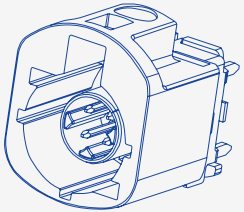
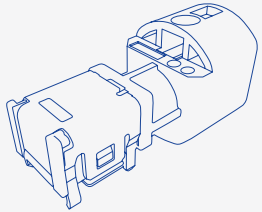
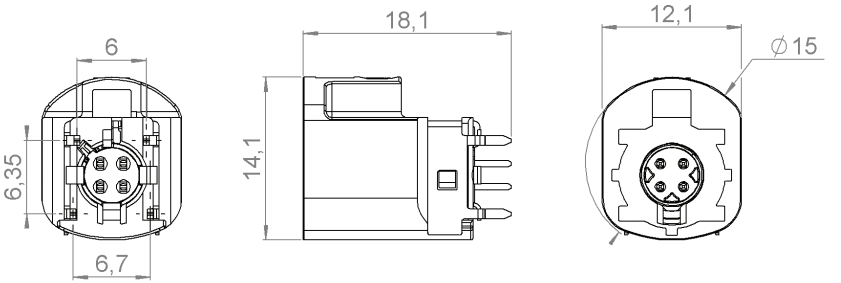
HSD PCB CONNECTORS





HSD PCB 180°

- **Process**.....Reflow soldering
- **Qualification**.....Tiers specifications
- **Frequency**.....Up to 2 GHz
- **Technology**.....Stamped & rolled
- **Packaging**.....Tape and reel



FEATURES :

- Lightweight
- 250 units per reel
- Customization friendly

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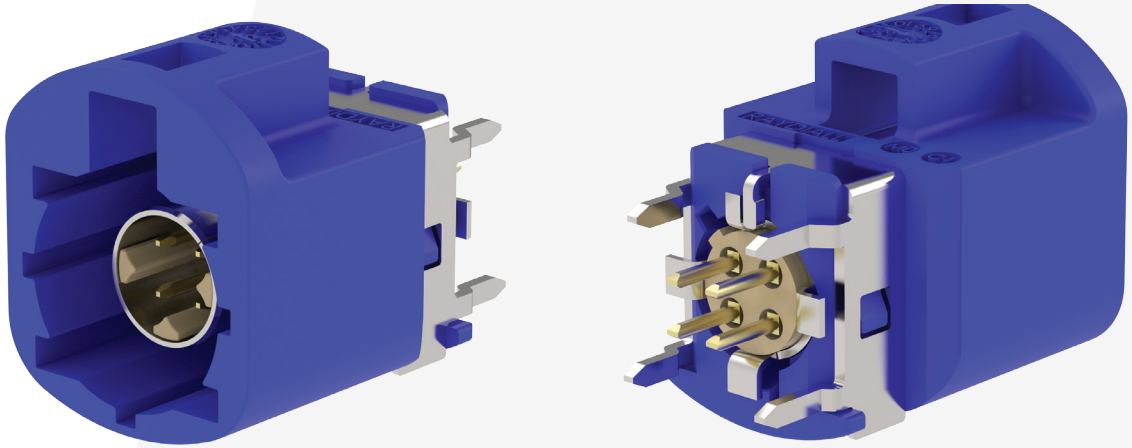
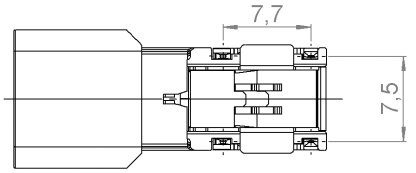
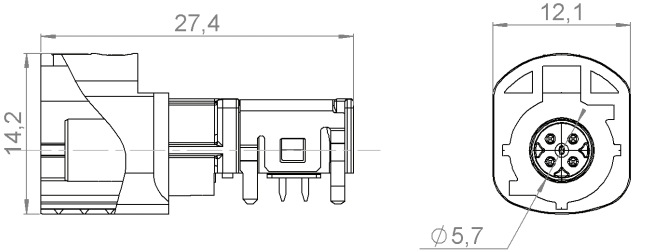


Reference
R197.197._09

HSD PCB 90°

- **Process**.....Reflow soldering
- **Qualification**.....Tiers specifications
- **Frequency**.....Up to 2 GHz
- **Technology**.....Stamped & rolled
- **Packaging**.....Tape and reel

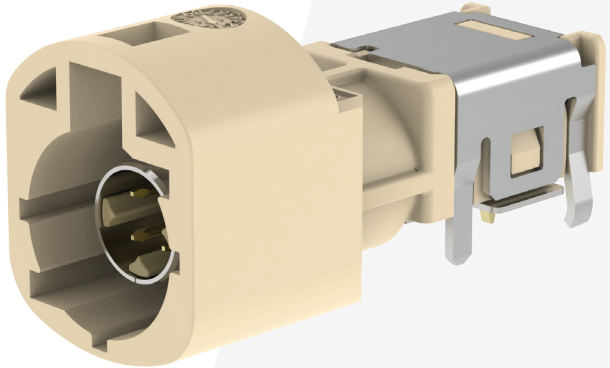


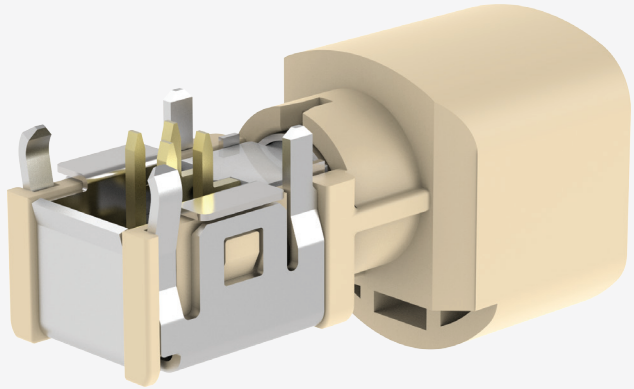


FEATURES :

- Lightweight
- 250 units per reel
- Customization friendly

RAYDIALL AUTOMOTIVE





Reference
R299.197._28

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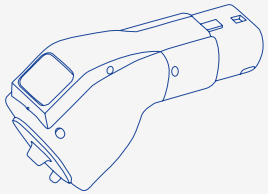
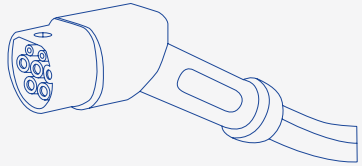
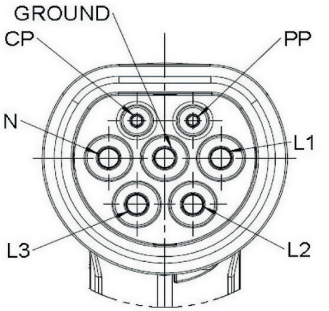
ELECTRIC **VEHICLE** SOLUTIONS

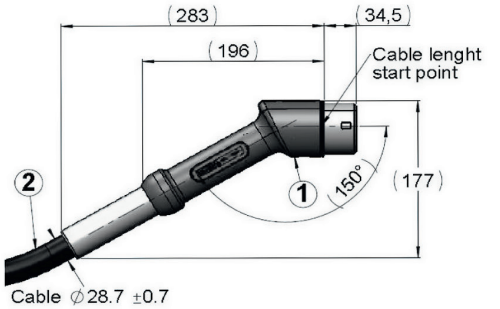




POWER PLUG

- **Power**.....43 kW AC
- **Operating current**.....63 A
- **3 Phases + Neutral + Ground**
- **Interface**.....IEC 62196
- **Certification**.....CE certified





FEATURES :

- Silver plated contacts
- Custom cable length
- High reliability (tested until 100 k matings)
- Low insertion force

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	References
5 meters cable	R297CAZ10500
6 meters cable	R297CAZ10600
7 meters cable	R297CAZ10700

Other cable lenghts available upon request

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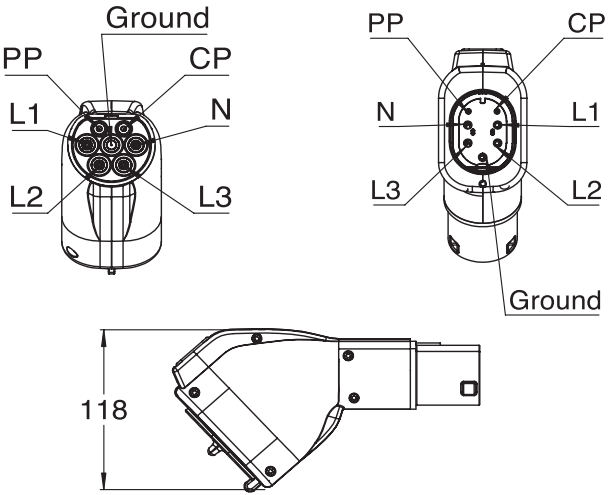
ADAPTOR

- **Power**.....22 kW AC
- **Operating current**.....32 A
- **3 Phases + Neutral + Ground**
- **Interface**.....IEC 62196
- **Certification**.....CE certified



FEATURES :

- Adaptor T3c to T2b interface
- Integrated safety switch
- Locking sequence
- Reliable and selected by OEMs
- Silver plated contacts

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Reference
R297CFD2.00-00
R297CFD2.00-10

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