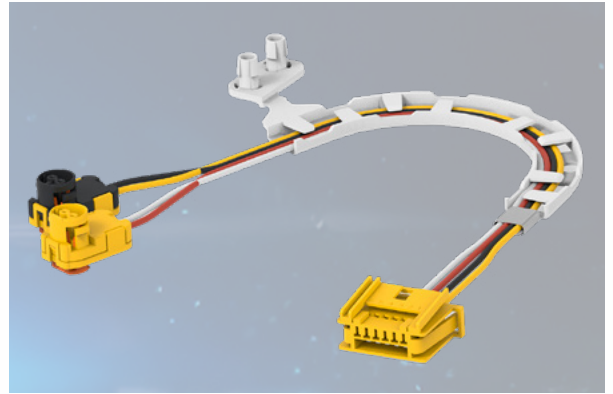


# SQUIB CONNECTION SYSTEM AUTOMOTIVE SAFETY APPLICATIONS

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### MARKETING AND PRODUCT OVERVIEW

To confirm that airbags and other pyrotechnical devices protect lives every day, TE Connectivity (TE) leverages its system expertise and cutting-edge technology to deliver top-tier SRS interconnect solutions. These products are designed for environments that demand the highest standards of reliability and performance.

Squib connectors are engineered with compact packaging to optimize space within vehicle assemblies, without compromising safety. With a focus on demanding safety requirements, exceptional reliability, and long-lasting durability, these solutions perform under the most rigorous conditions.

In airbag systems, squib connectors support critical functions such as circuit filtering, tight form factor for space optimization, and seamless compatibility with onboard diagnostic systems.

This provides stable resistance and reliable connection monitoring, contributing to safety and performance in every situation.

As one of the world's leading developers, manufacturers, and suppliers of high-quality, advanced connectors, retainers, and cable assemblies, TE offers cost-effective and stable solutions across major vehicle platforms. TE's squib connector system is proven through extensive market use and is trusted to endure challenging automotive conditions, including vibration, heat, and assembly stress. Our products also excel in harsh environments, ensuring high durability.

### PRODUCT BENEFITS

- High-quality products warranted by fully automated production process
- Reliable availability supported by a global manufacturing footprint
- One-stop-shop solution offering tailored products, from components and pigtails to complete cable assemblies
- Extensive portfolio covering all industry interfaces, mating preferences, and features, providing customers with a wide range of options

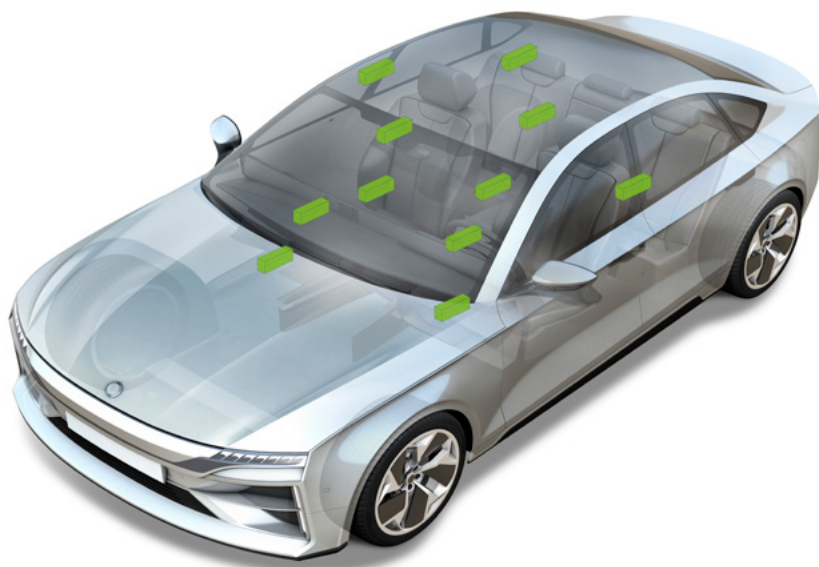
### PRODUCT FEATURES

- Scoop-proof design, Kojiri-safe, and optimized for remarkable blind mating performance
- Ferrite core for effective EMI (Electromagnetic Interference) protection
- Gold-plated terminals with a three-contact point design for enhanced connection stability
- Available in various colors and with customizable coding options
- Designed to accommodate various wire gauges
- Compact and miniaturized design for space-saving and flexibility

### MARKET COMPATIBILITY

- Fully compatible with the market AK-2 and AK-2 ESD interface
- Fully compatible with the market USCAR interface

### APPLICATIONS



- Driver Airbag
- Passenger Airbag
- Hood Lifter
- Battery-Cut or Close
- Belt Pretensioner Rear
- Side Airbag Rear
- Side Airbag Front
- Belt Pretensioner Front
- Knee Airbag
- Center Airbag
- Curtain Airbag

### PORTFOLIO HIGHLIGHTS

#### SHORTING BAR REMOVAL

Advancements in airbag modules' robustness paved the way for a new interface design, eliminating the need for a shorting bar.

This led to the development of the USCAR interface and connector family, offering increased robustness and system cost savings.



#### SQUIBLOK MATING

TE's Squiblok products offer a go/no-go feature, that enhances the connector design with self-rejection, providing a mechanical and audible feedback to confirm proper mating. Additionally, the electrical connection automatically disengages if the connector is not fully mated.



#### ESD AND GROUNDING SOLUTIONS

Squib connectors with a built-in grounding lead, addressing the need for airbag grounding.

TE's ESD system removes the complexity and expense of using metal brackets or grounding straps, making the process more efficient and cost-effective.



#### ELECTRICAL MONITORING

All TE products offer a CPA-controlled electrical monitoring function, regardless of the interface type.

Mating monitoring warranted with TE squib connectors.



### PORTFOLIO INTRODUCTION

#### Retainer

The retainer, inserted into the igniter pocket, serves as the interface between the airbag module and the squib connector. The retainer integrates key features for a reliable connection like indexing, pin protection and for some parts of the portfolio a shorting clip.



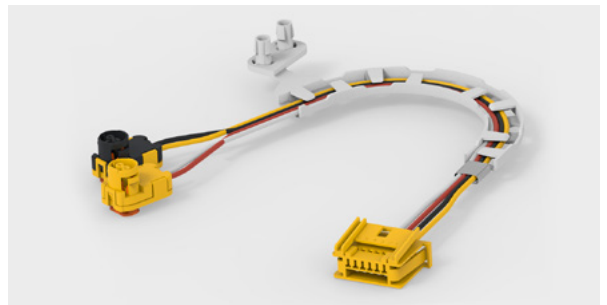
#### Pigtail

A pigtail features a reattached wire. Customers are specifying the connector type, wire type, length and color. TE's high-quality fully automated manufacturing process provides reliable, efficient production while meeting the safety standards required for airbag and safety circuits. Pigtails are available with or without section side terminal.









#### Cable Assembly




In applications like the driver airbag, smaller cable assemblies are used to confirm the proper connections. TE supports those applications with customizable cable assemblies, delivered to the device manufacturer fully ready for connection. Whether you supply the airbag, vehicle wiring, or related modules, we collaborate with you to create a suitable solution tailored to your needs.





## PORTFOLIO SUMMARY

INTERFACE	PRODUCT NAME	CODINGS	CROSS SECTION	PICTURE	MAIN FEATURES
AK-2	AK-2 CPA 90	I II III	0,35 mm <sup>2</sup> 0,5 mm <sup>2</sup>		CPA-controlled electrical monitoring
	AK-2 CPA 180				Enhanced connection and monitoring with Squiblok mating
	AK-2 SQUIBLOK 90				CPA-controlled electrical monitoring as option
	AK-2 SQUIBLOK 180				Enhanced connection and monitoring with Squiblok mating
USCAR	USCAR CPA 90	W X Y Z			CPA-controlled electrical monitoring as option
	USCAR CPA 180				Enhanced connection and monitoring with Squiblok mating
	USCAR SQUIBLOK 90				CPA-controlled electrical monitoring as option
	USCAR SQUIBLOK 180				Enhanced connection and monitoring with Squiblok mating
AK-2 ESD	AK-2 ESD CPA 90	IV V		Integrated grounding	

INTERFACE	PRODUCT NAME	CODINGS	PICTURE	MAIN FEATURES
AK-2	Retainer AK-2	I II III		Available with and w/o shorting bar
USCAR	Retainer USCAR	W X Y Z		Interface without shorting bar
AK-1	Retainer AK-1	A B C		Available with and w/o shorting bar

Note: For the specific component part no. please contact with TE's representative



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