



## Achieve fail-safe connections in critical vehicle safety-restraint-systems with Molex's robust Squib right-angle AK-2 cable assemblies

### Features and Benefits

AK-2 interface with unique CPA design

Ensures scoop-proof (Kojiri-safe) mating operations, including in blind-mate conditions

Blocked-active CPA (Connector Position Assurance) design with travel distance over 3.00mm

Ensures connector is properly seated and locked into the receptacle (CPA will not lock prior to mating) Provides easy and reliable one-step connector mating without the need for tools

Robust, welded-cable connection design

Maintains low, stable contact resistance under severe temperature and vibration conditions for the vehicle's life span

Large ferrite core

Superior EMI (Electro Magnetic Interference) filtering from 300 to 1500 MHz

Plug holes in cover

Allow multiple testing of connector without any damage to the active area of the terminal prior to final connection on OEM assembly line

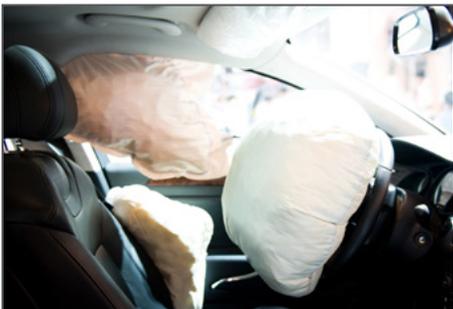
Fully compatible with two-way interface Code 1, 2 and 3, as defined by the global industry specifications including ISO-TS 19072-4 and USCAR 999-U-002-1-Z03 (Rev C)

Meets global industry specifications and all major OEM requirements

### Applications

Automotive and Commercial Vehicle:

- Airbags (Internal: driver, passenger and side)
- Seatbelt Pretensioners
- Active Hood Lift Systems
- Pedestrian Protection Airbags

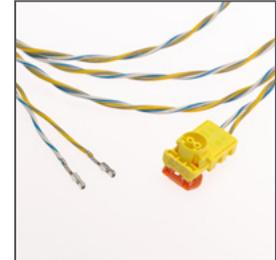


Internal Vehicle Airbags: Driver, Passenger and Side



**Squib Right-Angle AK-2 Cable Assemblies**

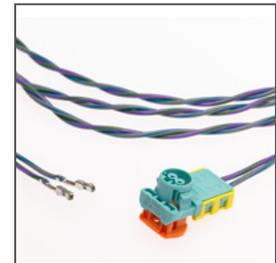
98853 Right-Angle AK-2 Cable Assemblies



Squib Connector, Code 3, Terminated to Twisted-Pair Cable



Molex Squib and MXP120™ Sealed Connector Harness for Safety Restraint Systems



Squib Connector, Code 2, Terminated to Twisted-Pair Cable



Seatbelt Pretensioners

## Specifications

### REFERENCE INFORMATION

Packaging: Bag  
 Mates With: AK-2 Standard Retainers  
 Designed In: Millimeters  
 RoHS: Yes  
 Halogen Free: Yes

### PHYSICAL

Housing: PBT, 20% Glass Filled  
 Contact: High conductivity Copper (Cu) alloy  
 Contact Resistance: 10mOhms max. (before and after aging)  
 Cable Connection Method: Welding  
 Contact Overlap: 1.20mm (.047") min.  
 Plating: Contact Area — 0.5µm Gold (Au) plated over 0.5 to 1.5µm Nickel (Ni) layer  
 Solder Tail Area — Blank Copper (Cu) Alloy  
 Overall dimensions: 14.20mm (.559") Width by 24.40mm (.961") Length by 6.50 (.256") mated height or 15.70mm (.618") not mated height  
 Operating Temperature: -40 to +100°C  
 Vibrations Class: V1 (Up to 3g)  
 Flammability Class: HB

### ELECTRICAL

Voltage (max.): Up to 14V  
 Current (max.): 6.7A (Include 10% reduction of 7.5A for a temperature increase limited to +55°C )  
 Insulation Resistance: 100MOhms at 500V DC

### MECHANICAL

Contact Insertion Force: Internal (Automatic insertion)  
 Mating Force: One-step pushing on CPA: < 40N (10.12 lbf)  
 Two-steps pushing on CPA: < 40N (8.99 lbf)  
 Un-mating Force:  
 With CPA engaged: 135N (30.35 lbf) min.  
 With CPA dis-engaged: 40N (16.86 lbf) max.  
 CPA Blocking Force (Prior mating): > 125N (28.10 lbf)

## Squib Right-Angle AK-2 Cable Assemblies



Squib Steering Assembly



Squib Steering Assembly



Connector code 1 (Black coding)



Connector code 2 (Light green coding)



Connector code 3 (Yellow coding)

## Ordering Information

Order No.*	AK-2 Standard Code	Cable Length
98853-3163	3	1.00m
98853-3062	2	
98853-2961	1	

\*Please note part numbers shown above are for validation samples. Custom part numbers will be generated for your specific application requirements