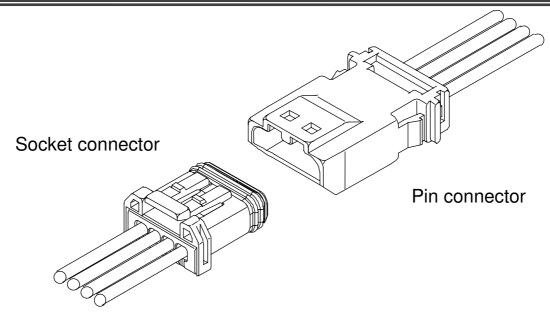


# Small waterproof relay connector MX19 Series

CONNECTOR MB-0049-1 2000/9



These small waterproof relay connectors are designed for use in automobiles. The connectors are designed to withstand harsh environments, and provide an improved harness assembly process thanks to a grommet with a rear cover. The small, proven two-plate spring mechanism improves contact reliability.

#### **Features**

- Mechanical lock mechanism prevents incomplete mating, and improved insertion and removal.
- Improved harness assembly and insertion of terminals into housing thanks to a grommet with rear cover.
- Rear cover protects the grommet from damage on terminal insertion, withstands cable flaps, and improves waterproof reliability.
- Terminals have a two-plate spring mechanism with long beam length, which results in a low force insertion and stress dispersion. The highly reliable contact mechanism can withstand the particular types of vibration caused by an automobile.

## General specifications

- No. of contacts: 2, 4 (Color: Black (standard)), Rated current: 5A gray)
- Contact resistance: Less than  $10m\Omega$
- Withstand voltage: AC1000C (for 1 minute)
- Operating temperature: -40°C to +105°C (including temperature rise due to applied current)
- Waterproofing: Compliant with JIS D0203 S1

- Insulation resistance: Greater than  $100M\Omega$
- Applicable cable:

Cable type	CAVS, AVSS
Cross section of conductor	0.3 to 0.5mm <sup>2</sup>
A.W.G No.	#22 to #20
Outer diameter of cable	φ1.4 to φ1.7

(Note) Only 0.5mm2 is available for AVSS.

## Materials/Finishes

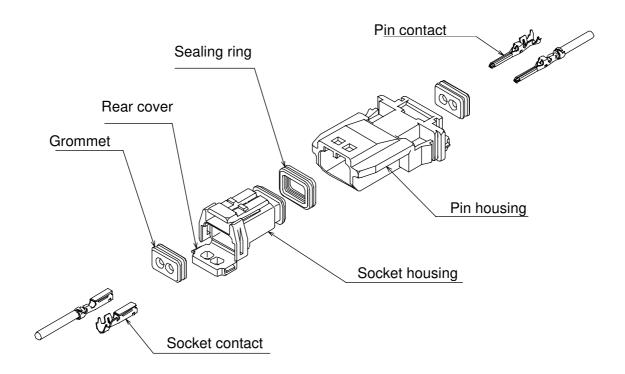
### Pin connector

### Socket connector

Components	Material/Finishes	
Insulator	PBT(black(standard) or gray)	
Contact	Copper alloy	
Grommet	Silicon rubber (brown)	

Components	Material/Finishes	
Insulator	PBT(black(standard) or gray)	
Contact	Copper alloy	
Grommet	Silicon rubber (brown)	
Sealing ring	Silicon rubber (brown)	

# Part configuration (2 pos.)



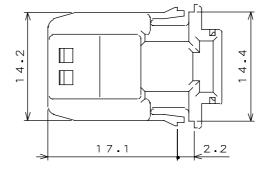
# Crimping tool/Extraction tool

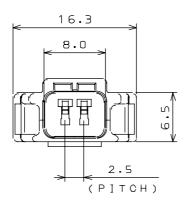
Туре	Part Number
Semi automatic applicator	350-MX19-2
Automatic applicator	350-MX19-3B
Extraction tool	ET-MX19

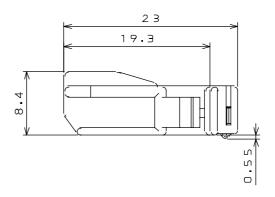
Note) Pin and socket can be used in common

## Major diameter

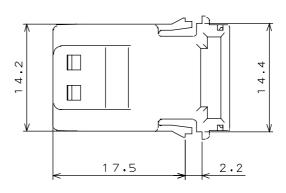
2 pos. Pin housing (MX19002P51, MX19002P52)

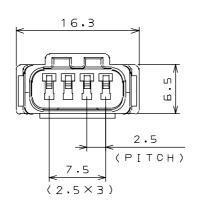


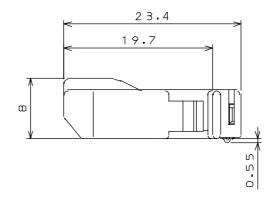




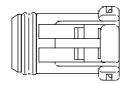
4 pos. Pin housing (MX19004P51, MX19004P2)

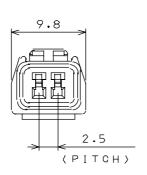


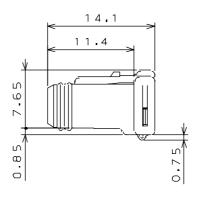




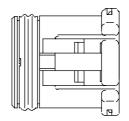
2 pos. Socket housing (MX19002S51, MX19002S52)

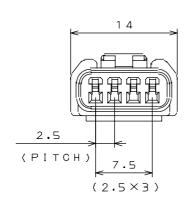


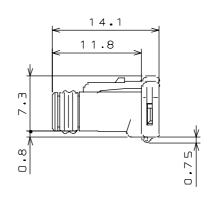




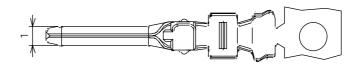
4 pos. Socket housing (MX19004S51, MX19004S52)

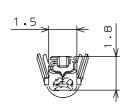


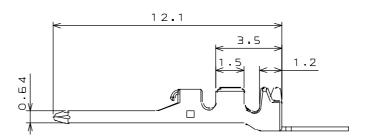




# Pin contact (MX19P10K451)

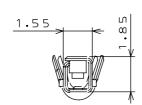


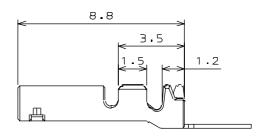




# Socket contact (MX19S10K451)







### Drawing No.

Part Number (color)	Drawing No.
MX19P10K451	SJ033541
MX19S10K451	SJ033542
MX19002P51	SJ033539
MX19002P52(gray)	SJ034952
MX19004P51	SJ034386
MX19004P52(gray)	SJ034954
MX19002S51	SJ033540
MX19002S52(gray)	SJ034953
MX19004S51	SJ034387
MX19004S52(gray)	SJ034955

## Japan Aviation Electronics Industry, Limited

**Product Marketing Division** 

Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539 Phone: +81-3-3780-2787 FAX: +81-3-3780-2946 **Notice:** Products shown in this leaflet are made for the applications listed below. However, if the above-mentioned products are to be used in aerospace devices, marine cable-connection devices, atomic power control systems, medical equipment for life-support systems, or any other specific application requiring extremely high reliability, please contact JAE for further information.

Recommended applications: Computers, Office machines, Measuring devices, Telecommunication devices (Terminals, Mobile devices), AV devices,