

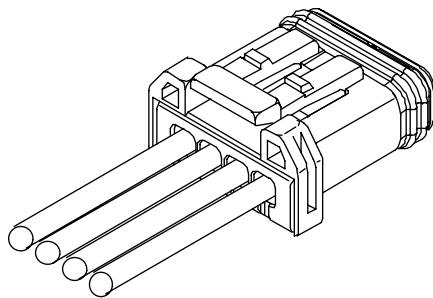


Small waterproof relay connector  
MX19 Series

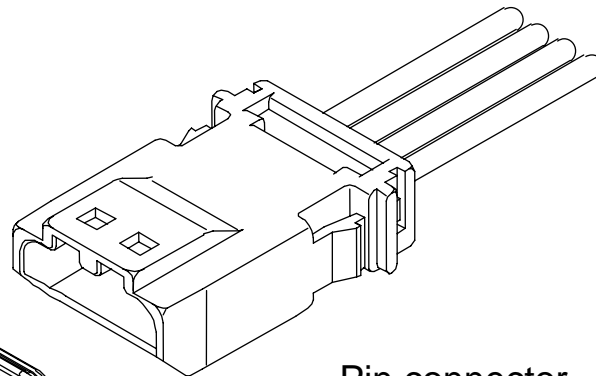
CONNECTOR

MB-0049-1  
2000/9

Socket connector



Pin connector



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)), gray)
- Contact resistance: Less than 10mΩ
- 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

- Rated current: 5A
- Insulation resistance: Greater than 100MΩ
- 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 0.5mm<sup>2</sup> is available for AVSS.

Materials/Finishes

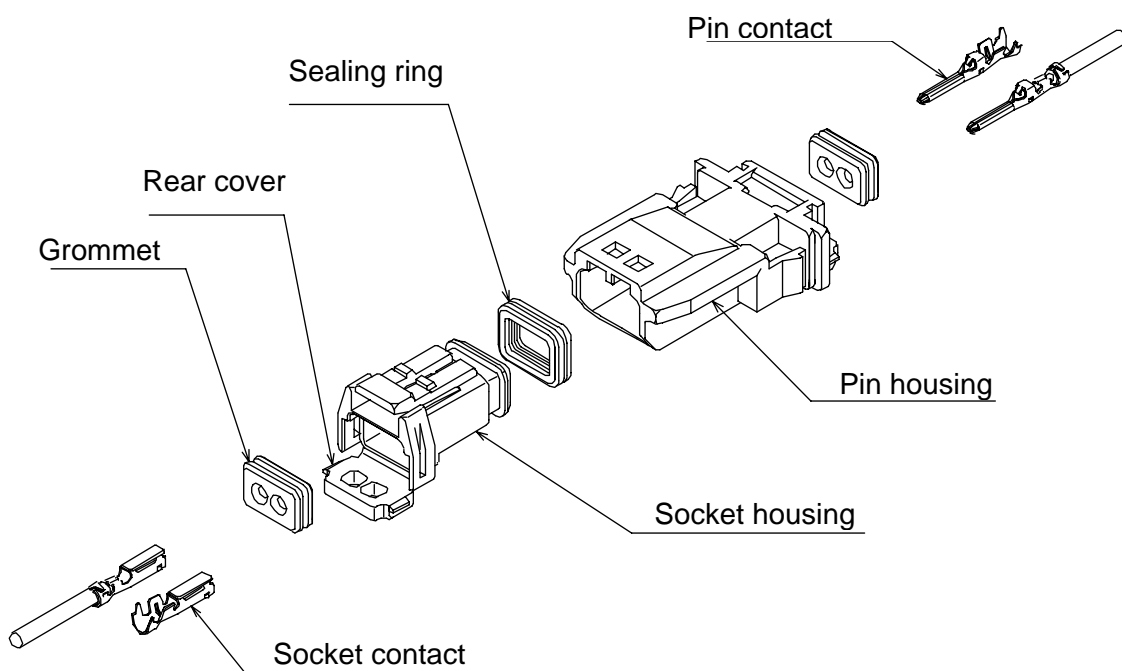
Pin connector

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

Socket connector

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.)



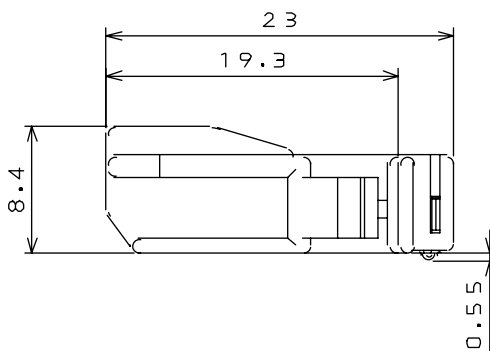
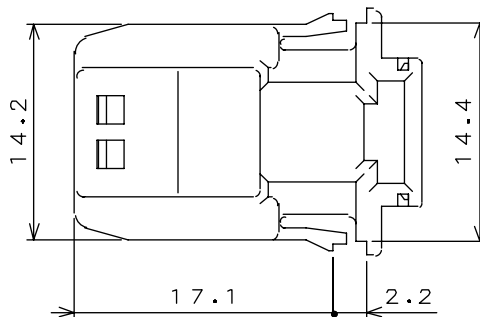
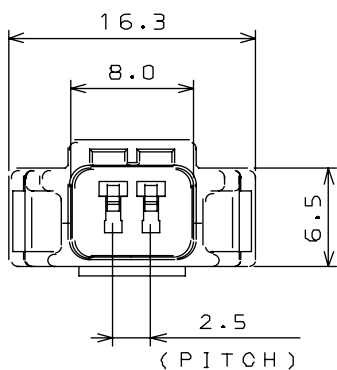
Crimping tool/Extraction tool

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

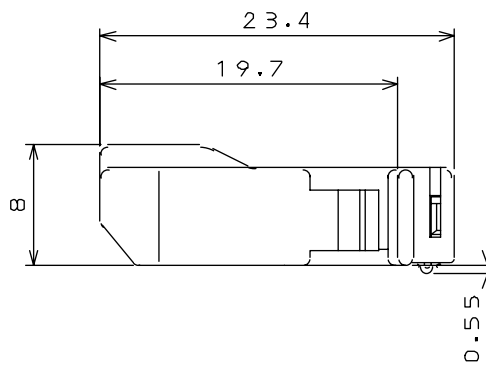
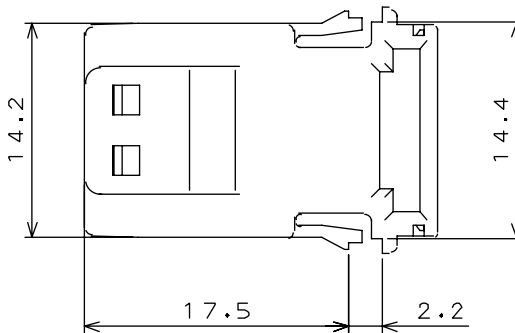
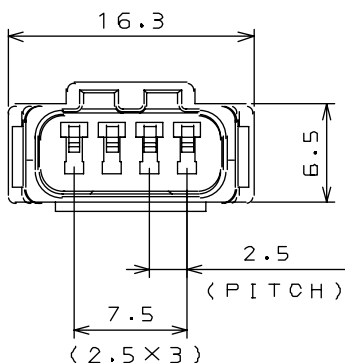
Note) Pin and socket can be used in common

Major diameter

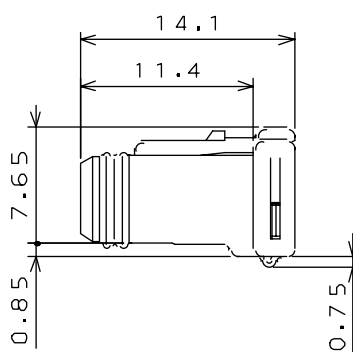
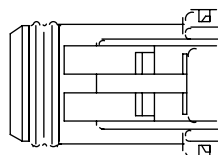
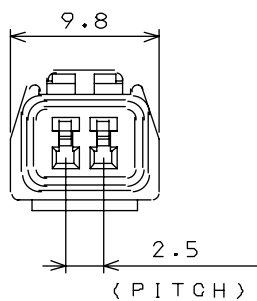
**2 pos. Pin housing  
(MX19002P51,  
MX19002P52)**



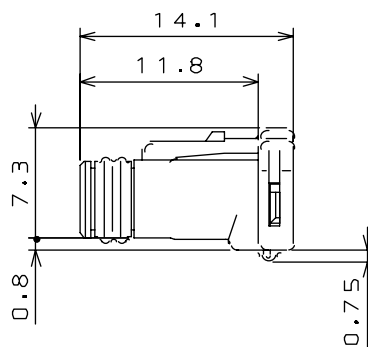
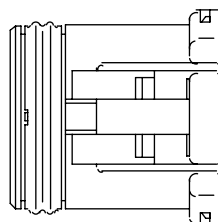
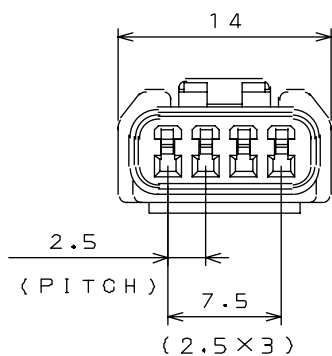
**4 pos. Pin housing  
(MX19004P51,  
MX19004P2)**



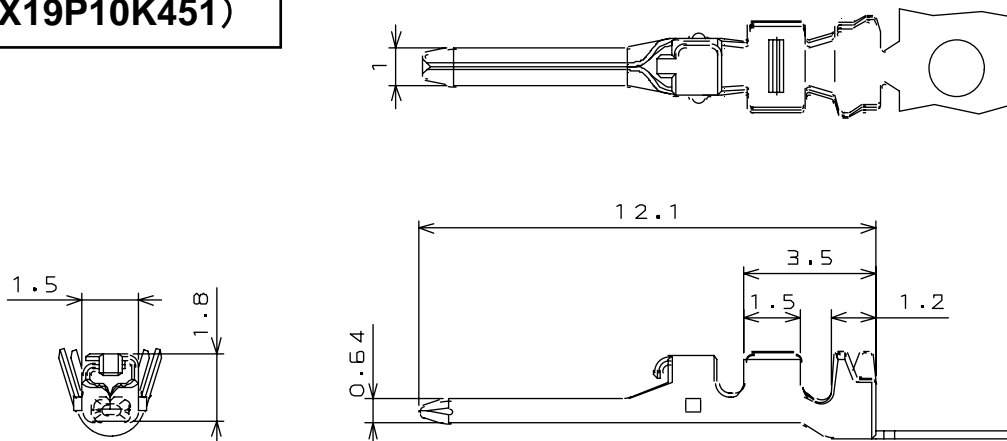
**2 pos. Socket housing  
(MX19002S51,  
MX19002S52)**



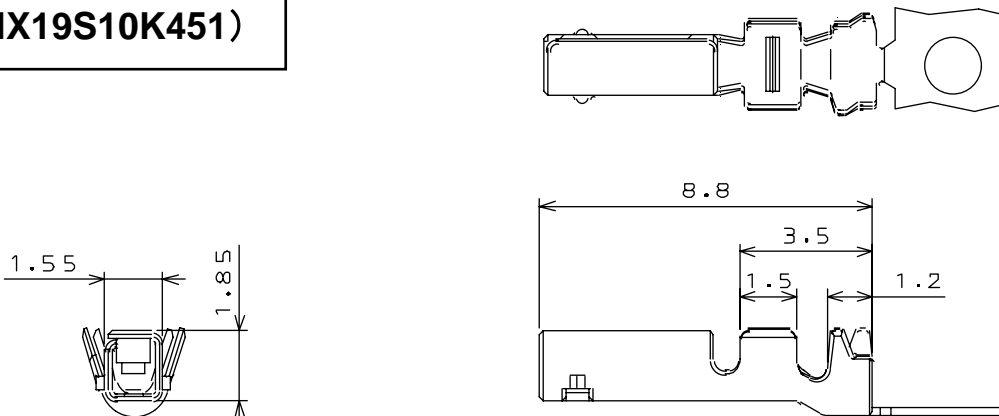
**4 pos. Socket housing  
(MX19004S51,  
MX19004S52)**



**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

**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,

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