



MX19 Series

Robust Waterproof Cable-to-Cable Connector

Product Information Module

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JAE MX19 Series

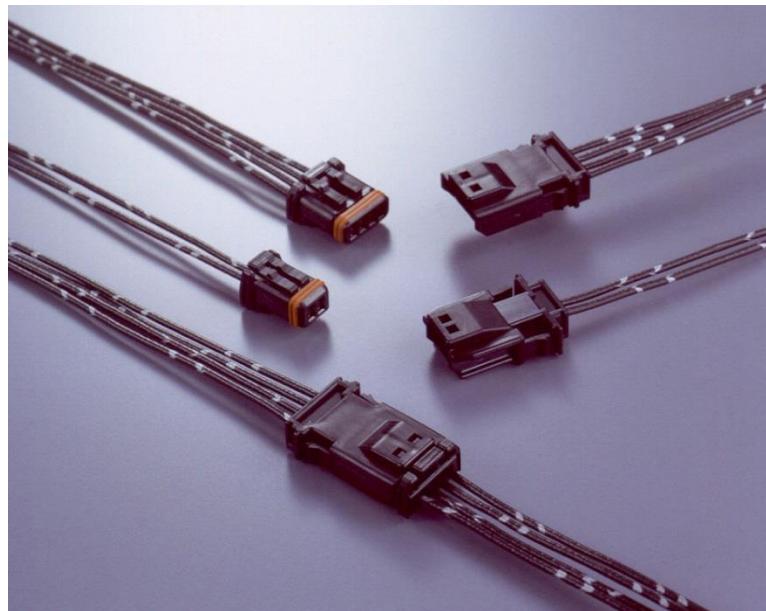
Robust Waterproof Cable-to-Cable Connector

Application Examples

- Automotive waterproof sensor unit
- Compact waterproof unit
- Industrial applications
- Other waterproof devices

MX19 Series Overview

The MX19 series compact robust waterproof connector is designed mainly for automotive and industrial applications. These relay connectors are designed for harsh environments. The grommet with a rear cover provides an effective harness assembling process. The compact two-plate spring mechanism improves contact reliability. It is great for places such as the door mirror, as it requires small and waterproof specification.



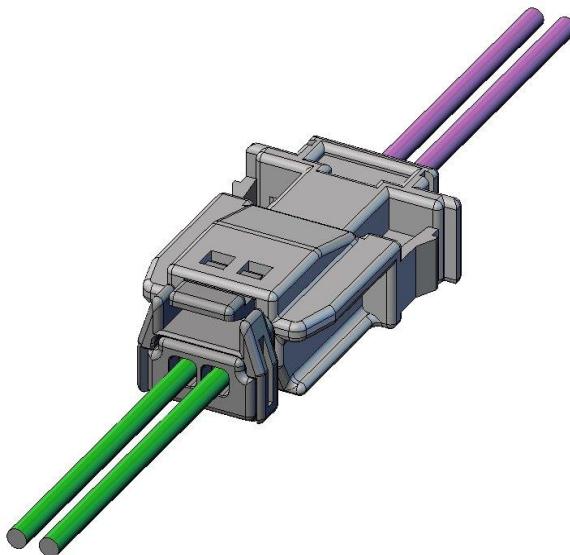
MX19 Series Features

Easy insertion and extraction

- Robust design ideal for rugged and heavy-duty applications
- Mechanical lock mechanism prevents incomplete mating with a clear click feeling
- Easy insertion and extraction.
- Tolerant to harsh environments.
 - Sealing ring prevents water, grease, dust etc. from getting inside.
- Rear cover protects the grommet from damage during terminal insertion.
 - Withstands cable flaps and has good waterproof reliability.
- Terminals have a two-plate spring mechanism with long beam size, which enables low force insertion and stress dispersion.
- The high reliable contact mechanism can withstand the vibration of automobiles.

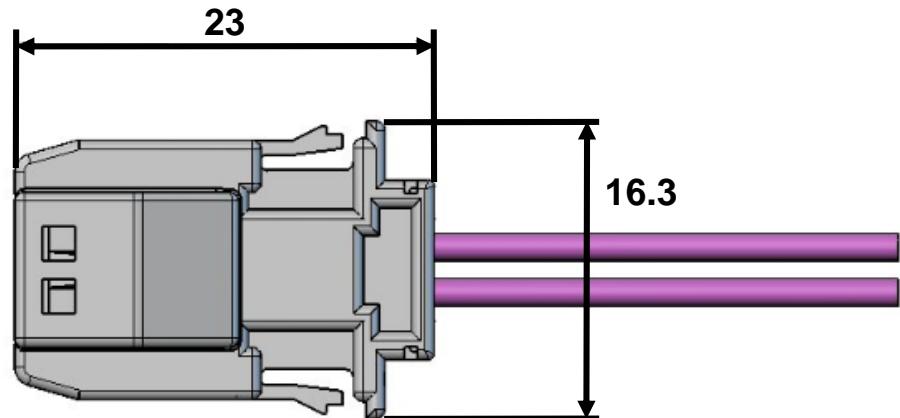
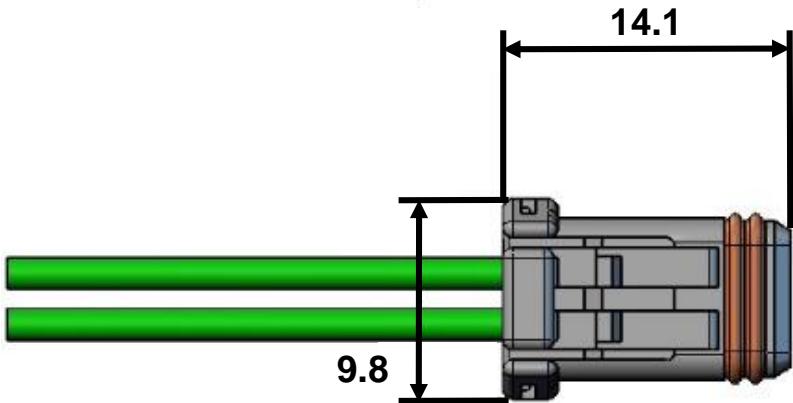
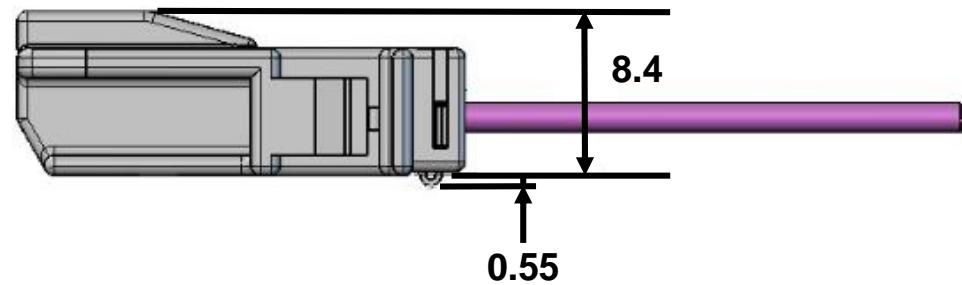
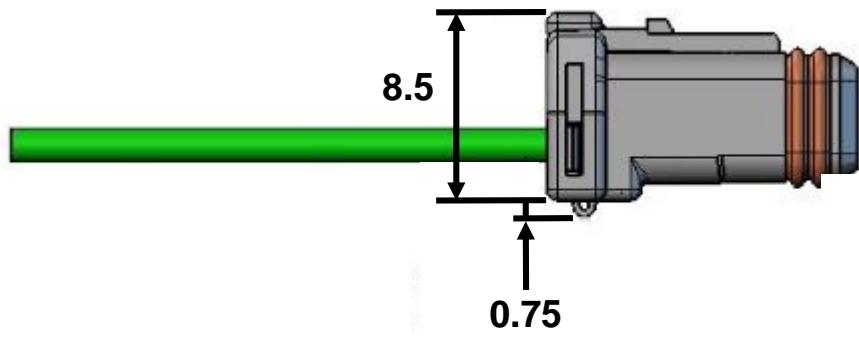
General Specifications

Number of Positions	2,4
Pitch	2.5mm
Contact resistance	10m Ω max. (initial) 20m Ω max (after test)
Insulation Resistance	100m Ω min
Operating Temperature Range	-40 to +85°C
Waterproof Performance	JIS D 0203 S1
Rated Current	5A



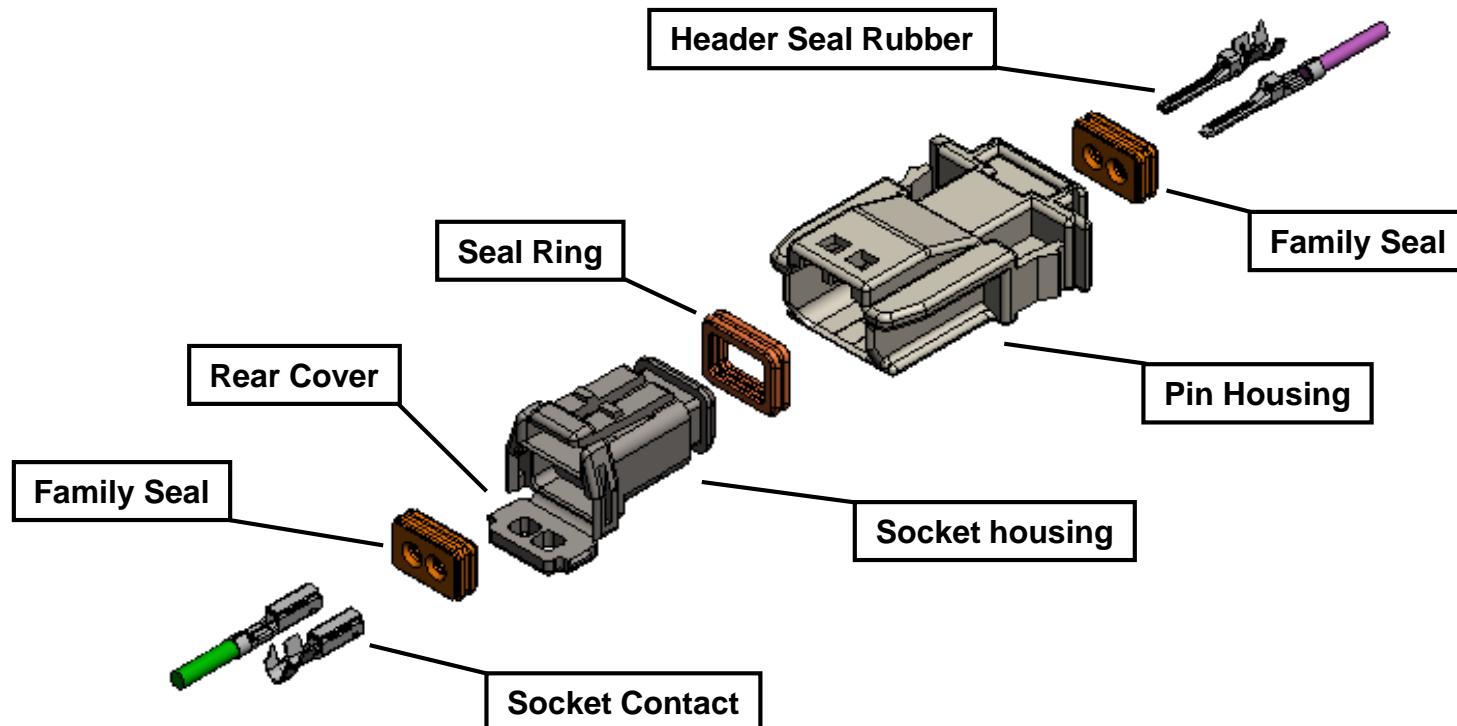
Basic Dimensions

*All units in mm



Materials and Finishes

Component	Material / Finish
Housing	PBT (Black (standard) or gray)
Contacts	Pin: Copper alloy Socket: Copper alloy
Grommet	Silicon rubber (brown)
Sealing Ring	Silicon rubber (brown)



Technical Documents and Drawings

Component	Part Number (color)	Drawing No.	Specifications	Handling Instructions
Pin Housing	MX19002P51(Black)	SJ033539	JACS-1594	JAHL-1594
	MX19002P52 (Gray)	SJ034952		
	MX19004P51(Black)	SJ034386		
	MX19004P52 (Gray)	SJ034954		
Socket Housing	MX19002S51(Black)	SJ033540	JACS-1594	JAHL-1594
	MX19002S52 (Gray)	SJ034953		
	MX19004S51(Black)	SJ034387		
	MX19004S52 (Gray)	SJ034955		
Pin Contact	MX19P10K451	SJ033541	3502-MX19-2B	ET-MX19
Socket Contact	MX19S10K451	SJ033542		

Component	Part Number	Applicable Wire				Applicable Tool	
		Type	AWG no.	Cross Section Diameter	Diameter	Semi-auto Applicator	Exaction Tool
Pin	MX19P10K451	CAVS	#22~#20	0.3 ~ 0.5mm ²	1.4 ~ 1.7mm	3502-MX19-2B	ET-MX19
		AVSS	#20	0.5mm ²	1.6 ~ 1.7mm		
Socket	MX19S10K451	CAVS	#22~#20	0.3 ~ 0.5mm ²	1.4 ~ 1.7mm	3502-MX19-2B	ET-MX19
		AVSS	#20	0.5mm ²	1.6 ~ 1.7mm		

Summary

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- Mechanical lock mechanism prevents incomplete mating with a clear click feeling.
- Easy insertion and extraction.
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