

Compact 1,000V Automotive Connector

CONNECTOR

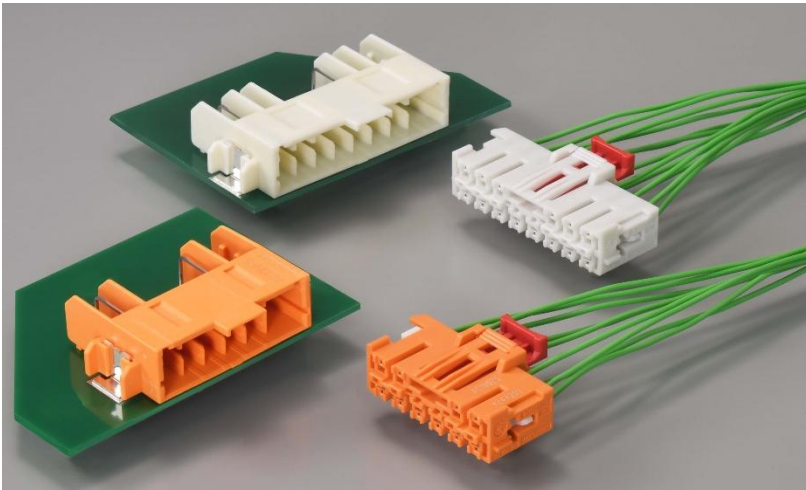
MB-0406-2E

Nov. 2025

MY05 Series

RoHS Compliant

**Halogen & PFAS
Free**



Overview

The MY05 Series is a family of high voltage, low current connectors which can support up to 1,000V DC. They are designed to meet creepage and clearance distance requirements based on the IEC 60664-1 specification.

The connectors are ideally suited for sensing or control of high voltage contactors or relays. The connectors are designed to maintain a compact form factor while meeting the IEC specification and 4,800V DC withstanding voltage requirements.

Application

BMS on various battery pack (electric vehicles, battery energy storage units), high voltage industrial equipment and automotive applications.

Features

- Rated Voltage: 1,000V DC, Withstanding Voltage: 4,800V DC
- Voltage rating based on IEC 60664-1
- Plastic material: UL94 V-0, Halogen free, PFAS free, CTI600
- Tab size: 0.63 mm EU standard
- USCAR-2, USCAR-37, LV214, LV215 Tested
- Socket Connector :
 - 2 Socket connectors options available:
 - Waterproof MX80 terminal type or EU standard terminal type
 - CPA available in both CPA and Non-CPA types
 - Pre-set side retainer for TPA (Terminal Positioning Assurance)
- Common pin header connector for both types of socket connectors.
- 4 key codes possible (Please contact us for various key code availability)

General Specifications

Number of Contacts	10, 14 positions
Terminal Size	0.63mm Tab size
Applicable terminal	MX80 terminal type, EU standard terminal type
Operating Temperature range	-40 deg C to +125 deg C (Note1) , USCAR2 T3
Rated Voltage	1,000V DC
Rated Current	3A
Withstanding Voltage	4,800V DC (for 1 minute)
Insulation Resistance	100MΩ minimum (1,000V DC for 1 minute)
PCB Soldering	Through hole reflow (Pin-in-Paste)
CPA	Available in both CPA and Non-CPA types
TPA	Side retainer (Pre-set type)
Polarization	4 key codes possible (Please contact us for various key code availability)
Terminal Finish	Sn/Tin plating
Terminal Creepage and Clearance	IEC60664-1 (Pollution degree 2, Altitude 6,000m)
CTI	600
Test Specification	USCAR-2, USCAR-37, LV214, LV215
Vibration Classification	USCAR-2 V1 Chassis Profile
Plastic Material	UL94 V0, Halogen free, PFAS free
Applicable Wire Conductor size	0.13 to 1.0mm ²

Note 1. This range includes temperature rise from current load.

Ordering Information

MY05 A C 14 S Z 1

Series Name

Connector Type

Socket **A**: MX80 terminal type
 B: EU standard terminal type
Pin Header **A**: Standard type

CPA type

Socket **C** : with CPA
 N : No CPA
Pin Header **0** : N/A

1 ~ 4 :Housing Color Natural /Key Code
4 :Housing Color Orange

Terminal Finish

Socket **Z** : Non-Terminal
 (Terminal is sold separately)
Pin Header **F** : Sn/Tin Plating

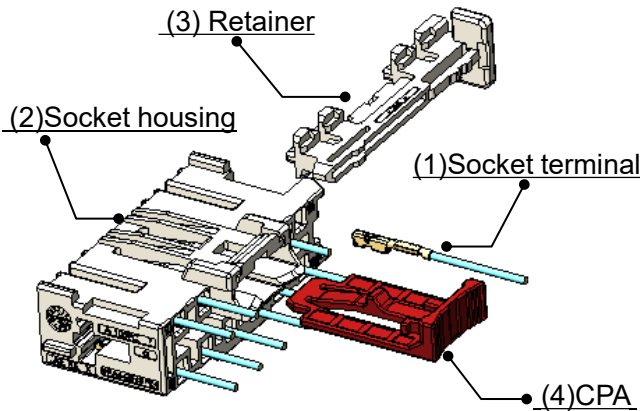
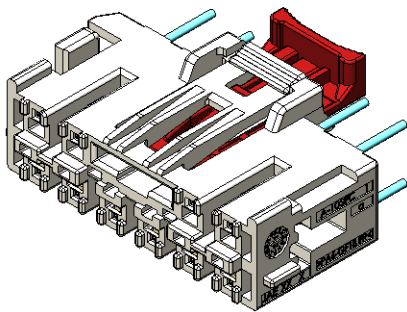
Mating style

Socket **S** : Socket housing
Pin Header **N** : Angled type
 U : Straight type

Number of Contacts: **10, 14**

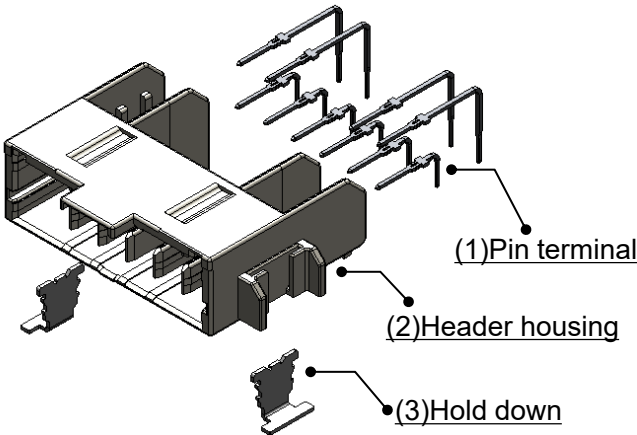
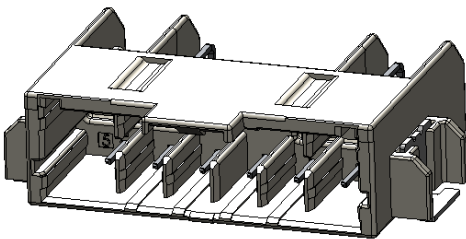
Configuration / Material and Finish

Socket Connector



Component	Material/Finish
(1)Socket terminal (Note2)	Copper alloy / Tin plating
(2)Socket housing	PA6-GF18
(3)Retainer	PA6-GF18
(4)CPA	PA6-GF18

Pin Header Connector



Component	Material/Finish
(1)Pin terminal	Copper alloy / Tin plating
(2)Header housing	PA9T-GF30
(3)Hold down	Copper alloy / Tin plating

Note 2. Contacts are sold separately and are not integrated into connector at the time of delivery.

Part Numbers and Drawing Numbers

■ Socket Connector / Pin header connector

Number of Contacts	Socket Connector					Pin Header Connector		
						Angle Type		
	Part Number	Terminal Type	Housing Color	Drawing Number		Part Number	Housing Color	Drawing Number
10	MY05AC10SZ1	MX80	Natural	SJ126435	⇔	MY05A010NF1	Natural	SJ126432
	MY05AN10SZ1*	MX80	Natural	SJ127398				
	MY05BC10SZ1	EU Standard	Natural	SJ127388				
	MY05AC10SZ5	MX80	Orange	SJ130978		MY05A010NF5	Orange	SJ130977
14	MY05AC14SZ1	MX80	Natural	SJ126436	⇔	MY05A014NF1	Natural	SJ126434

* Without CPA

■ Socket terminal

	Part Number	Drawing Number	Individual Drawing No.	Applicable Wire Conductor size
Socket Terminal	MX80S08K3F1	SJ121646	SJ121371	0.75 to 1.0mm ² wire
	MX80S08K4F1		SJ121372	0.3 to 0.5mm ² wire

EU standard terminals are not part of our product offering.
For information regarding EU standard terminals, please contact us.

Applicable Tools

Tool Type	Tool Part Number	Applicable Contact and Connector	Tool Handling Manual
Hand Crimp Tool	CT150-19C-MX80	Contact for 0.75 to 1.0mm ² wire	T700459
	CT150-19D-MX80	Contact for 0.3 to 0.5mm ² wire	T700460
Semi-automated Applicator	3502-MX80-2	All MX80 Contacts	T703574
Contact Extraction Tool	ET-MX80S	All Socket Connectors	T711250

For details on how to use each tool, please refer to the tool handling manual and connector handling manual.

Specification and Handling Manual

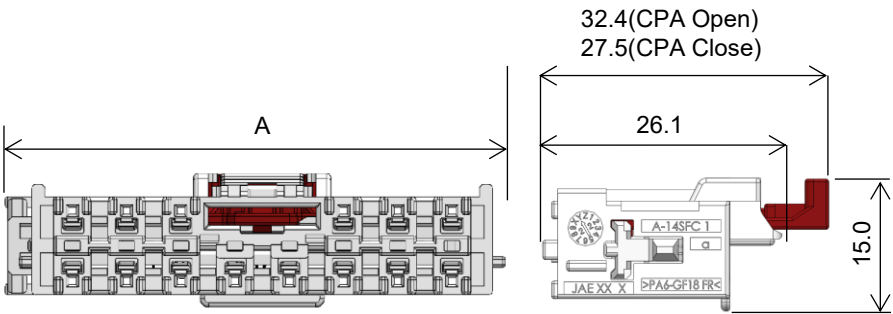
Part	Connector Specification	Connector Handling Manual	Contact Crimping Manual
MY05A	JACS-10016 (USCAR2/37)	JAHL-10016	JAHL-11280-1
MY05B	JACS-11545	JAHL-11545	JAHL-11545

Outer Dimension

■ Socket Connector with CPA (Image is 14 positions)

Unit : mm

No. of contacts	A
10	44.1
14	56.3

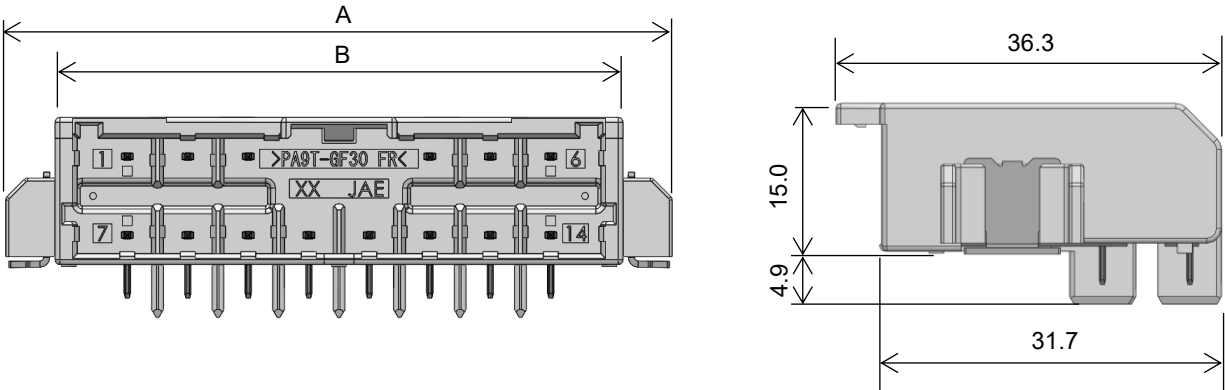


10-way dimensions: common to MY05A and MY05B

■ Pin Header Connector (Image is 14 positions)

Unit : mm

No. of contacts	A	B
10	55.0	45.1
14	67.2	57.3



Notice:

1. The specifications provided in this brochure are for reference purposes only. The products and their specifications are subject to change without notice. Please contact our sales representatives for further information before considering or placing an order.
A formal product specification must be agreed upon prior to purchase.
2. Users are responsible for implementing appropriate protection and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.
3. The products presented in this brochure are designed for the uses recommended below.
We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.
(1) Applications that require consultation:
(i) Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:
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(ii) We may provide separate support based on your specified quality assurance program, when you think of a use such as :
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(2) Recommended applications include:
Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

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