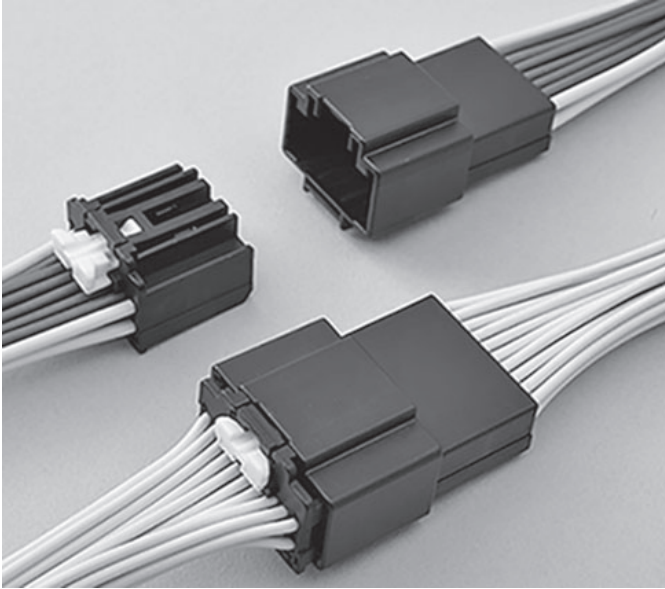


# MSA CONNECTOR

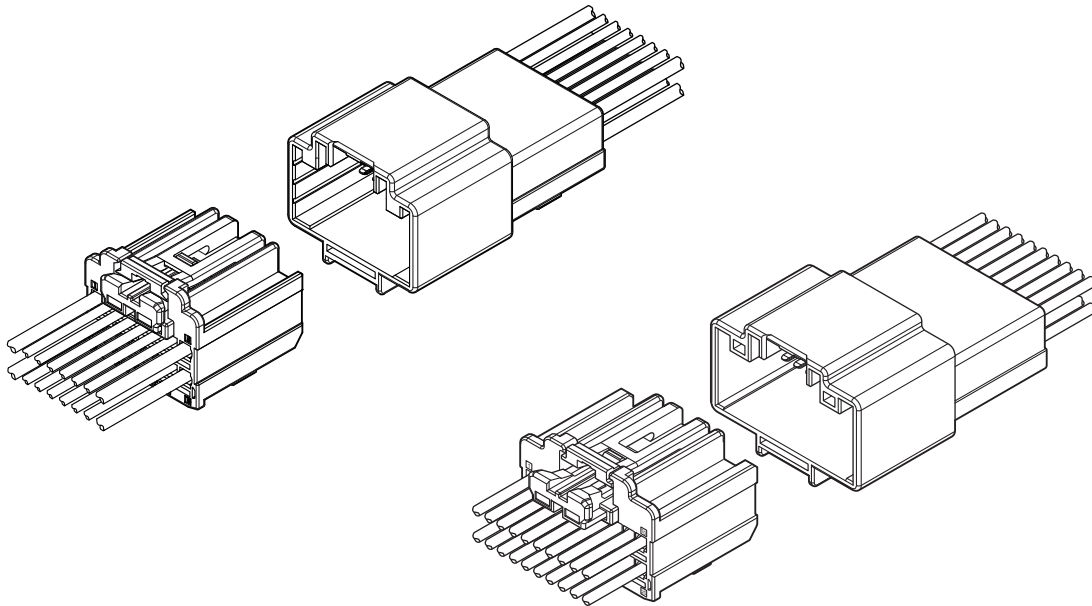
Wire-to-wire



1.2 mm unsealed wire-to-wire connector system for automotive applications.

## Features

- 16 and 20 circuits, Wire-to-Wire Connection
- Connector Position Assurance (CPA) Design
- Unsealed Inline Connector
- 1.2 mm Terminal Compliant with USCAR Standards



## Specifications

- Current rating: 14 A AC, DC max. (0.75 mm<sup>2</sup>, Single circuit)  
19 A AC, DC max. (1.5 mm<sup>2</sup>, Single circuit)
- Withstanding voltage: 1,000 VAC/minute
- Temperature range: -40°C to +105°C (Sn plating)  
-40°C to +125°C (Ag plating)  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 8 mΩ max.  
After environmental tests/ 8 mΩ max.
- Insulation resistance: 100 MΩ min.
- Applicable wire:

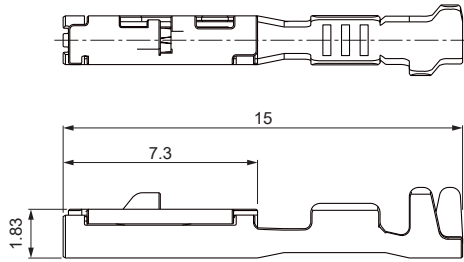
FLRY-A	0.35 to 1.5 mm <sup>2</sup>
FLRY-B	0.75 mm <sup>2</sup>
FLR2X-A	0.35 to 1.5 mm <sup>2</sup>

\* Compliant with ELV/RoHS2.

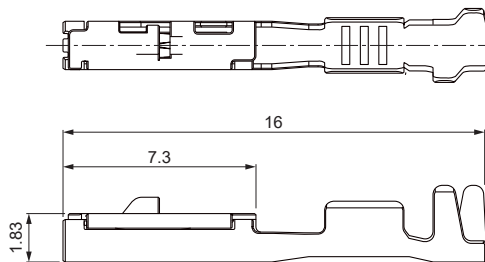
\* Contact JST for details.

## Female terminal

### SSS/SS barrel

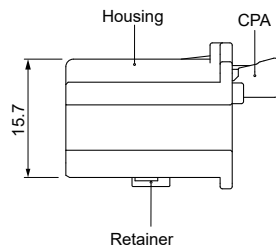
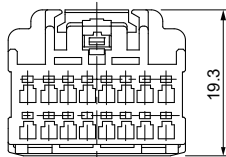
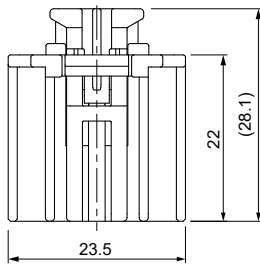


### S/M barrel

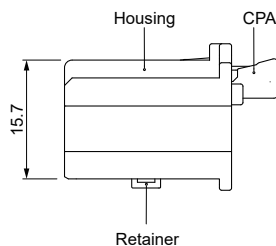
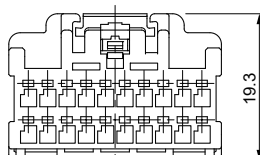
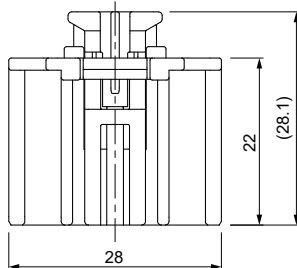


## Female connector

### ●16 circuits



### ●20 circuits



Size	Model No.	Applicable wire range		Q'ty/reel
		Conductor (mm <sup>2</sup> )	Insulation O.D. (mm)	
SSS	①SMSA-A001T-M1.2	0.13	0.95 to 1.05	9,000
SS	①SMSA-A011T-M1.2	0.35	1.2 to 1.4	9,000
S	①SMSA-A031T-M1.2	0.5 to 0.75	1.6 to 1.9	8,500
M	①SMSA-A041T-M1.2	1.0 to 1.5	2.1 to 2.4	6,000
SSS	②SMSA-A001A-M1.2	0.13	0.95 to 1.05	9,000
SS	②SMSA-A011A-M1.2	0.35	1.2 to 1.4	9,000
S	②SMSA-A031A-M1.2	0.5 to 0.75	1.6 to 1.9	8,500
M	②SMSA-A041A-M1.2	1.0 to 1.5	2.1 to 2.4	6,000

#### Material and Finish

- ①Copper alloy, tin-plated (reflow treatment)
- ②Copper alloy, nickel-undercoated, Contact area: silver-plated  
Barrel area: tin-plated

Circuits	Model No.	Housing Color	Q'ty/box
16	<b>16MSA-RBC-1A-A-K</b>	Black	441
	<b>16MSA-RBC-1A-B-H</b>	Gray	441
20	<b>20MSA-RBC-1A-A-K</b>	Black	378

#### Material and Finish

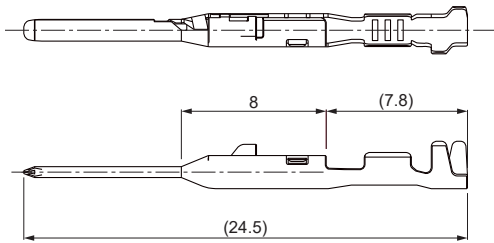
- Housing: PBT
- Retainer: Glass-filled PBT, Natural (White)
- CPA: Glass-filled PBT, Natural (White)

Note: Color/Key codes other than above-mentioned housing are also available. Contact JST for details.

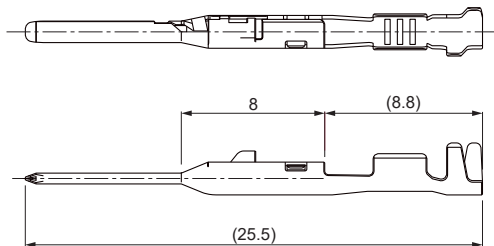
# MSA CONNECTOR

## Male terminal

### SSS/SS barrel

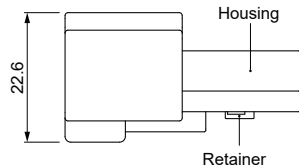
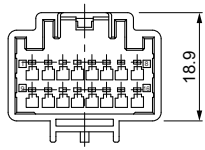
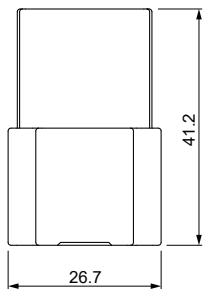


### S/M barrel

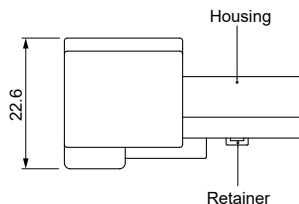
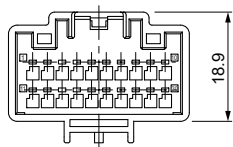
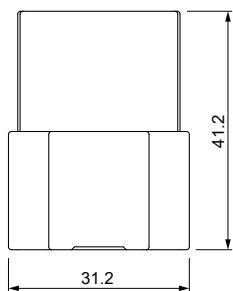


## Male connector

### ● 16 circuits



### ● 20 circuits



Size	Model No.	Applicable wire range		Q'ty/reel
		Conductor (mm <sup>2</sup> )	Insulation O.D. (mm)	
SSS	①SMSAW-A001T-M1.2	0.13	0.95 to 1.05	10,000
SS	①SMSAW-A011T-M1.2	0.35	1.2 to 1.4	9,000
S	①SMSAW-A031T-M1.2	0.5 to 0.75	1.6 to 1.9	9,000
M	①SMSAW-A041T-M1.2	1.0 to 1.5	2.1 to 2.4	6,500
SSS	②SMSAW-A001A-M1.2	0.13	0.95 to 1.05	10,000
SS	②SMSAW-A011A-M1.2	0.35	1.2 to 1.4	9,000
S	②SMSAW-A031A-M1.2	0.5 to 0.75	1.6 to 1.9	9,000
M	②SMSAW-A041A-M1.2	1.0 to 1.5	2.1 to 2.4	6,500

### Material and Finish

- ①Copper alloy, tin-plated (reflow treatment)
- ②Copper alloy, nickel-undercoated, Contact area: silver-plated  
Barrel area: tin-plated

Circuits	Model No.	Housing Color	Q'ty/box
16	16MSA-PB-1A-A-K	Black	252
	16MSA-PB-1A-B-H	Gray	252
20	20MSA-PB-1A-A-K	Black	216

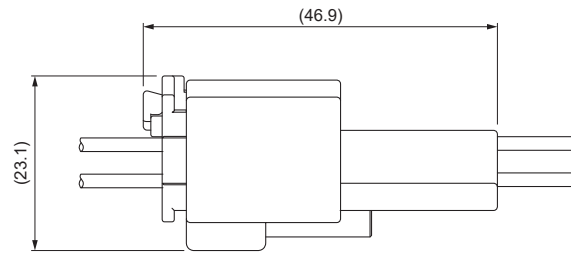
### Material and Finish

- Housing: PBT
- Retainer: Glass-filled PBT, Natural (White)

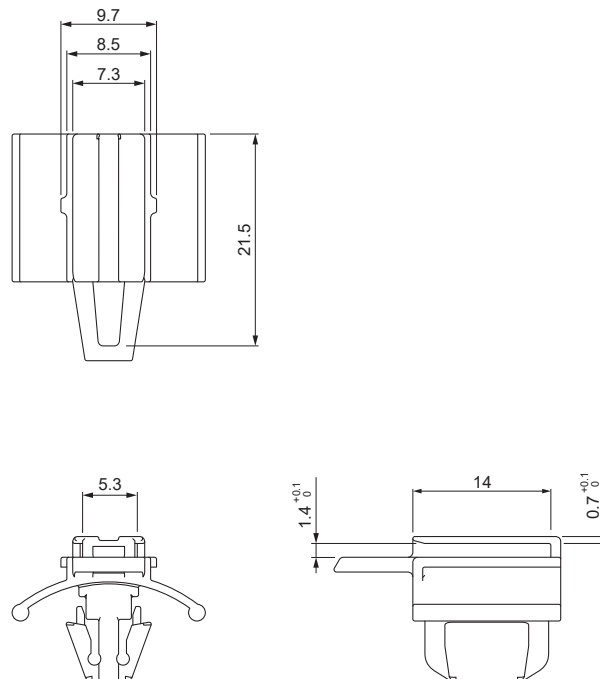
Note: Color/Key codes other than above-mentioned housing are also available. Contact JST for details.

## Assembly layout

● 16, 20 circuits



## Clip layout



### Recommended clip layout

Note: Contact JST for details.

## Crimping machine, Applicator

Strip terminal	Crimping machine	Crimp applicator MKS-L	
		Dies	Crimp applicator with dies
SMSA-A001( )-M1.2	AP-K2N	MK/SMSA-A001-12	APLMK SMSA-A001-12
SMSA-A011( )-M1.2		MK/SMSA-A011-12	APLMK SMSA-A011-12
SMSA-A031( )-M1.2		MK/SMSA-A031-12	APLMK SMSA-A031-12
SMSA-A041( )-M1.2		MK/SMSA-A041-12	APLMK SMSA-A041-12
SMSAW-A001( )-M1.2		MK/SMSAW-A001-12	APLMK SMSAW-A001-12
SMSAW-A011( )-M1.2		MK/SMSAW-A011-12	APLMK SMSAW-A011-12
SMSAW-A031( )-M1.2		MK/SMSAW-A031-12	APLMK SMSAW-A031-12
SMSAW-A041( )-M1.2		MK/SMSAW-A041-12	APLMK SMSAW-A041-12

Note: 1. Contact JST for details.

2. When crimping operation is conducted using an applicator and die set other than the above, JST cannot guarantee the performance of the terminal.