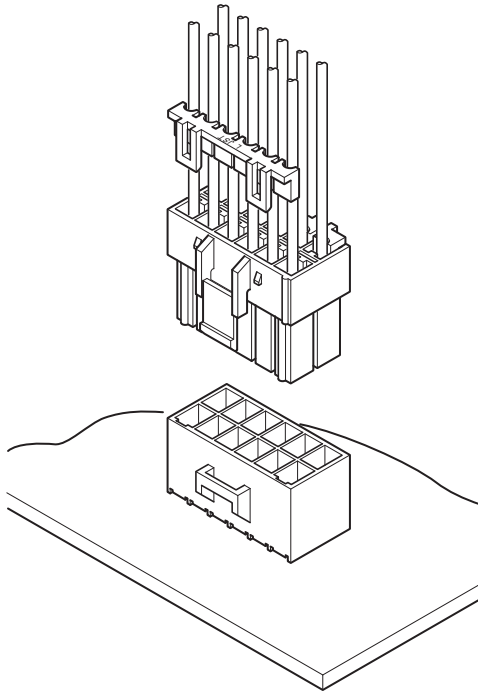


# HL CONNECTOR

3.96 mm pitch/Disconnectable crimp style connectors

(Combined use for both wire-to-board and wire-to-wire connections)



This is a multipurpose product that can also be used for wire-to-board and wire-to-wire connections. A contact with a free spring structure that reduces the stress at the contact part and has excellent creep deformation property and reliability is adopted. In addition, safety design prevents reverse insertion with the boss.

- Housing lances for contact retention
- Inner-housing lock
- Secondary retainer
- Free spring structure

## Specifications

- Current rating: 7A AC, DC (Refer to the table below.)
- Voltage rating: 300V AC, DC
- Temperature range: -25°C to +90°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/7mΩ max.  
After environmental testing/10mΩ max.
- Insulation resistance: 1,000MΩ min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #22 to #18
- Applicable PC board thickness: 1.5 to 2.2mm

Note:

The current rating differs depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

Current unit:A

No. of circuits	Wire size(AWG)		
	#18	#20	#22
4	7	5	4
8	6	4	3
12	5	3	3

Note:

Do not branch in parallel current which exceeds the rated current (eg. more than 7A in the case of 4 circuits with AWG #18). If branched in parallel, current imbalance or other problems may develop.

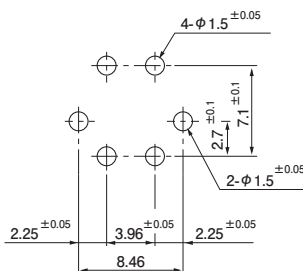
- \* Compliant with RoHS.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

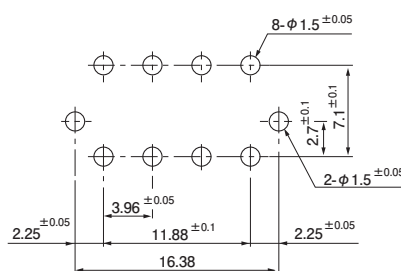
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- Ⓛ R50171609

## PC board layout (viewed from component side)

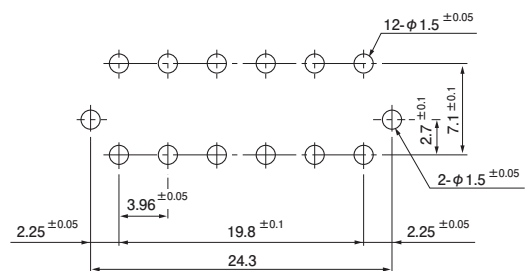
(4 circuits)



(8 circuits)



(12 circuits)

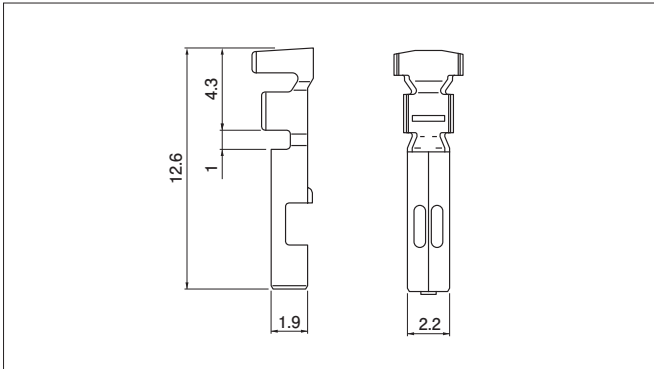


Note: 1. Tolerances are non-cumulative: ± 0.05mm for all centers.

2. Hole dimensions differ according to the type of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# HL CONNECTOR

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
SSF-21T-P1.4	0.3 to 0.75	22 to 18	1.5 to 2.2	6,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

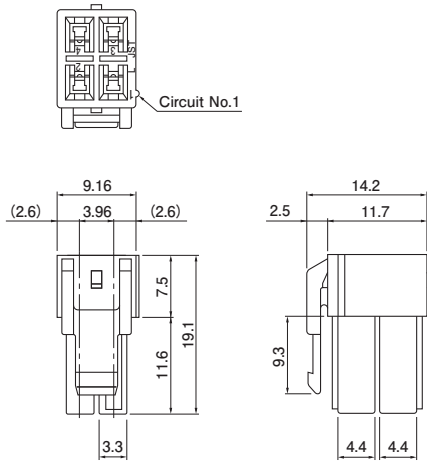
### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SSF-21T-P1.4	AP-K2N	MKS-L	MK/SSF/M-21-14	APLMK SSF/M21-14
		—	—	—

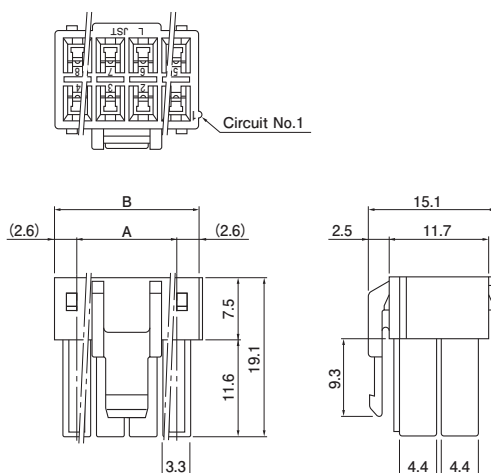
Note: Contact JST for fully automatic crimping applicator.

## Housing

### (4 circuits)



### (8, 12 circuits)



No. of circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
4	HLP-04V	—	—	500
8	HLP-08V	11.88	17.08	500
12	HLP-12V	19.8	25.0	500

### Material

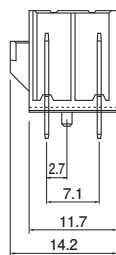
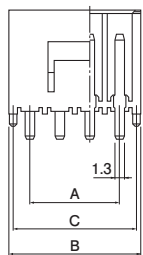
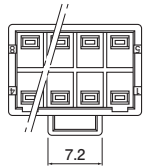
PA 66, UL94V-0, natural (white)

### RoHS compliance

# HL CONNECTOR

## Header

(4, 8, 12 circuits)



No. of circuits	Model No.	Dimensions (mm)			Q'ty / box
		A	B	C	
4	B04P-HL-A	3.96	9.56	8.46	200
8	B08P-HL-A	11.88	17.48	16.38	100
12	B12P-HL-A	19.80	25.40	24.30	50

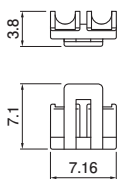
### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

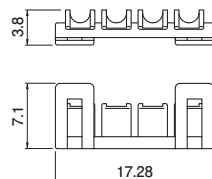
RoHS compliance This product displays (LF)(SN) on a label.

## Retainer

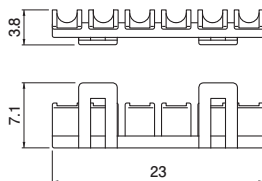
HLS-02V



HLS-08V



HLS-12V



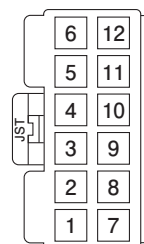
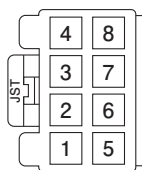
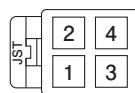
Applicable Housing Model No.	Retainer Model No.	Q'ty / bag
HLP-04V	HLS-02V	1,000
HLP-08V	HLS-08V	1,000
HLP-12V	HLS-12V	1,000

### Material

Glass-filled PA 66, UL94V-0, natural (ivory)

RoHS compliance

## Contact position location numbers



## Model number allocation

### Contact

**S SF - 21 T - P 1.4**

Form: S··Strip form, B··Loose piece

Series name

Applicable wire range: AWG #22 to AWG #18

Surface finish: T··Tin-plated (reflow treatment)

Material: P··Phosphor bronze

Terminal size

### Housing

**HL P - 04 V - ■**

Series name

Part name: Plug

No. of circuits: 4, 8, 12

Flammability: V··UL94V-0

Color: None··Natural (White), E··Blue

### Header

**B 04 P - HL - A - ■**

Shape of assembled product: Top entry type

No. of circuits: 4, 8, 12

Part name: Post

Series name

Shape: A··With boss

Color: None··Natural (White), E··Blue

### Retainer

**HLS - 02 V**

Series name

Part name: Retainer

No. of circuits: 2, 8, 12

Flammability: V··UL94V-0