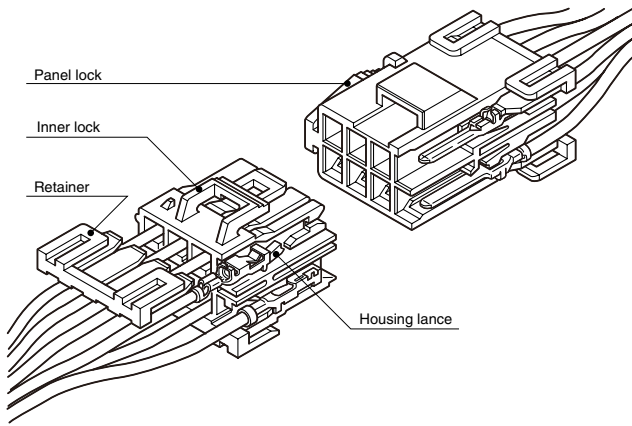


# YL CONNECTOR

4.5mm pitch/Disconnectable Crimp style Wire-to-wire connectors



**The retainer features added protection against non-insertion or disconnection.**

- Housing lance
- Secondary retainers
- Inner-housing lock
- Panel lock construction

## Standards

- Recognized E60389
- Certified LR20812
- R9351052

## Specifications

- Current rating: 10A AC, DC max. (7A when retainers are mounted)
- Voltage rating: 300V AC, DC max.
- Temperature range: -25°C to +90°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max.  
After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #26 to #16  
0.13 to 1.25mm<sup>2</sup>
- Applicable panel thickness: 0.7 to 2.0mm
- \* Compliant with RoHS.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

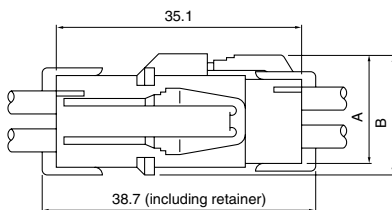
Note: The current rating varies depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

Current unit: A

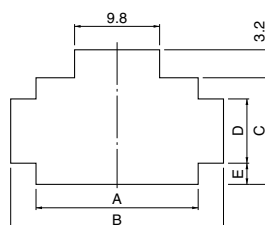
Circuits	Wire size (AWG)					
	#16	#18	#20	#22	#24	#26
1	10	7	5	4	3	2
2	10	7	5	4	3	2
3	9	6	4	4	3	2
4	9	6	4	4	3	2
6	8	5	3	3	2	2
8	7	4	3	3	2	2
9	6	4	3	3	2	2
12	6	3	2	2	2	2
15	5	3	2	2	2	1
16	5	3	2	2	2	1
21	5	3	2	2	2	1

Note: Secondary retainers cannot be used with AWG #16 wires.

## Panel Layout and Assembly layout



Type	Circuits	Dimensions (mm)	
		A	B
Single row	2 · 3	9.5	10.8
2-row	4 · 6 · 8 · 12 · 16	15.3	16.6
3-row	9 · 12 · 15 · 21	20.5	21.8



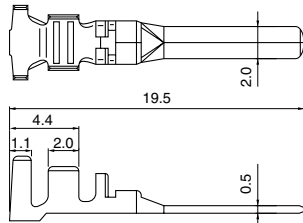
Circuits	Receptacle housing Model No.	Panel thickness (mm)	0.7 to 2.0		0.7 to 0.8		0.9 to 1.3		1.4 to 2.0	
			A	B	C	D <sup>±0.1</sup>	E <sup>±0.1</sup>	D <sup>±0.1</sup>	E <sup>±0.1</sup>	D <sup>±0.1</sup>
2	YLR-02V	10.7	16.8	7.1	4.4	1.35	5.0	1.05	5.6	0.75
3	YLR-03V	15.3	21.3	7.1	4.4	1.35	5.0	1.05	5.6	0.75
4	YLR-04V	10.7	16.8	12.9	7.1	2.9	7.7	2.6	8.3	2.3
6	YLR-06V	15.3	21.3	12.9	7.1	2.9	7.7	2.6	8.3	2.3
8	YLR-08V	19.8	25.8	12.9	7.1	2.9	7.7	2.6	8.3	2.3
9	YLR-09V	15.3	21.3	18.2	7.1	5.55	7.7	5.25	8.3	4.95
12	YLR-12V	19.8	25.8	18.2	7.1	5.55	7.7	5.25	8.3	4.95
	YLR-12VA	28.9	34.8	12.9	7.1	2.9	7.7	2.6	8.3	2.3
15	YLR-15V	24.4	30.3	18.2	7.1	5.55	7.7	5.25	8.3	4.95
16	YLR-16V	37.9	43.8	12.9	7.1	2.9	7.7	2.6	8.3	2.3
21	YLR-21V	33.5	39.3	18.2	7.1	5.55	7.7	5.25	8.3	4.95

- Note: 1. Punch holes in the panel according to the figures and table shown above. Burrs must be removed.
- Note: 2. The strength of the panel must be considered when punching two or more holes.
- Note: 3. The connector must be inserted from the same side as the hole is punched.

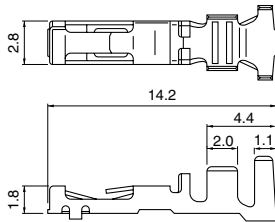
# YL CONNECTOR

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty / reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
<b>SYM-01T-P0.5A</b>	<b>SYF-01T-P0.5A</b>	0.13~0.5	26~20	1.3~2.5	4,000 (SYM-01T-P0.5A) 5,000
<b>SYM-41T-P0.5A</b>	<b>SYF-41T-P0.5A</b>	0.5 ~1.25	20~16	2.0~3.4	
		*0.3+0.3~ 0.5+0.5	*22+22~ 20+20	*1.5+1.5~ 2.0+2.0	

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

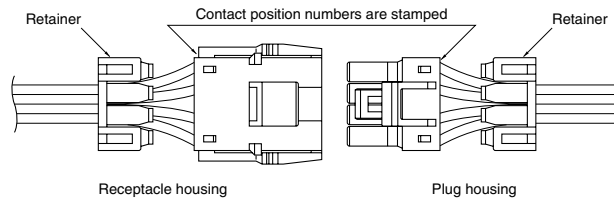
### RoHS compliance

- Note: 1. Contact JST for special products.  
 2. Retainers cannot be used with electric wire whose insulation O.D. exceeds 2.7mm and AWG #16.  
 3. \*Marked products are not TÜV approved.

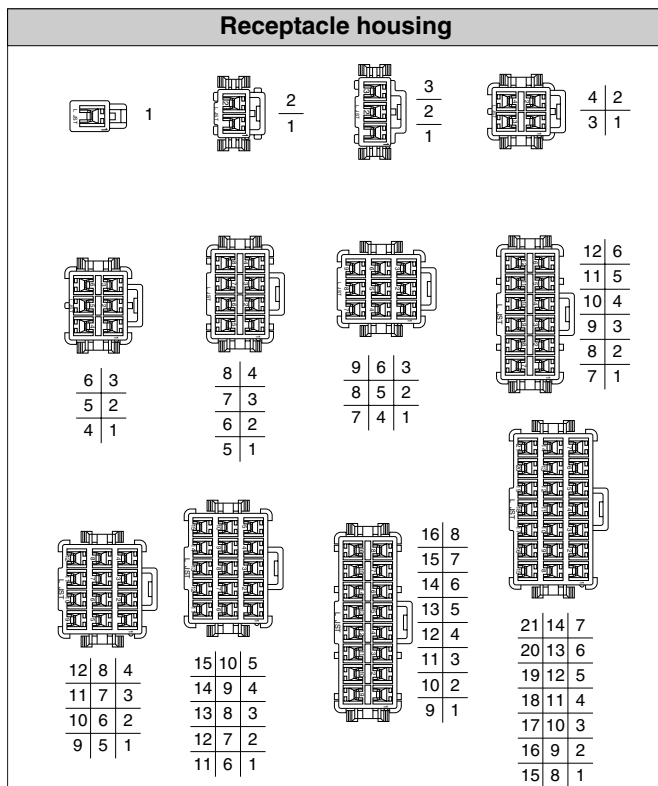
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SYM-01T-P0.5A</b>	AP-K2N	MKS-L	MK/SYF/M-01-05	APLMK SYF/M01-05
<b>SYF-01T-P0.5A</b>		*MKS-SC-YL	SC/SYF/M-01-05	APLSC SYF/M01-05
<b>SYM-41T-P0.5A</b>		MKS-L	MK/SYF/M-41-05	APLMK SYF/M41-05
<b>SYF-41T-P0.5A</b>		*MKS-SC-YL	SC/SYF/M-41-05	APLSC SYF/M41-05

Note: \*Strip-crimp applicator

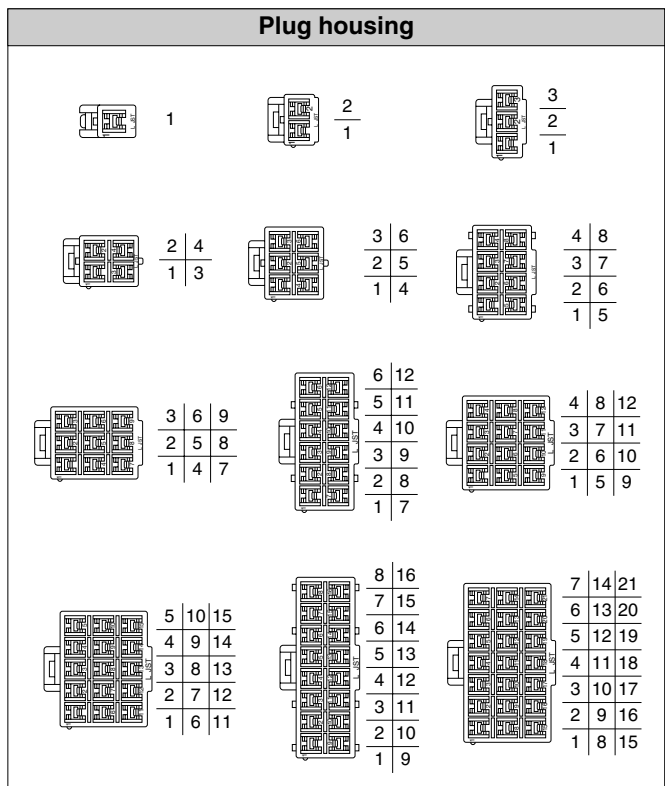
## Contact position location numbers



### Receptacle housing



### Plug housing



# YL CONNECTOR

## Housing

Material: Housing...PA 66, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Plug housing(for socket contact)	Retainer
1	300V	7A (10A)	<b>YLR-01VF</b> 	<b>YLP-01V</b> 	<b>YLS-01V</b> 
2	300V	7A (10A)	<b>YLR-02V</b> 	<b>YLP-02V</b> 	<b>YLS-02V</b> 
			<b>YLR-02VF</b> 		
3	300V	6A (9A)	<b>YLR-03V</b> 	<b>YLP-03V</b> 	<b>YLS-03V</b> (commonly used for 3-circuit housing and 6-circuit housing) 
			<b>YLR-03VF</b> 		

### RoHS compliance

Note: Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)

# YL CONNECTOR

## Housing

Material: Housing...PA 66, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Plug housing(for socket contact)	Retainer
4	300V	6A (9A)	<b>YLR-04V</b> 	<b>YLP-04V</b> 	<b>YLS-02V</b> 
			<b>YLR-04VF</b> 		
6	300V	5A (8A)	<b>YLR-06V</b> 	<b>YLP-06V</b> 	<b>YLS-03V</b> (commonly used for 3-circuit housing and 6-circuit housing) 
			<b>YLR-06VF</b> 		
8	300V	4A (7A)	<b>YLR-08V</b> 	<b>YLP-08V</b> 	<b>YLS-08V</b> 
			<b>YLR-08VF</b> 		
9	300V	4A (6A)	<b>YLR-09V</b> 	<b>YLP-09V</b> 	Q'ty / bag 500
			Q'ty / bag 250	Q'ty / bag 500	Q'ty / bag —

RoHS compliance

Note: Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)

# YL CONNECTOR

## Housing

Material: Housing...PA 66, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)		Retainer	
			Model	Q'ty / bag	Model	Q'ty / bag	Model	Q'ty / bag
12	300V	3A (6A)	<b>YLR-12VA</b> 	200	<b>YLP-12VA</b> 	200	<b>YLS-12V</b> 	1,000
			<b>YLR-12V</b> 	200	<b>YLP-12V</b> 	200	—	—
15	300V	3A (5A)	<b>YLR-15V</b> 	200	<b>YLP-15V</b> 	200	—	—
			<b>YLR-16V</b> 	100	<b>YLP-16V</b> 	200	<b>YLS-16V</b> 	1,000

### RoHS compliance

Note: Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)

# YL CONNECTOR

## Housing

Material: Housing...PA 66, UL94V-0, white

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)		Retainer	
			YLR-21V	Q'ty / bag	YLP-21V	Q'ty / bag		Q'ty / bag
21	300V	3A (5A)		100		200	—	—

**RoHS compliance**

Note: Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)