

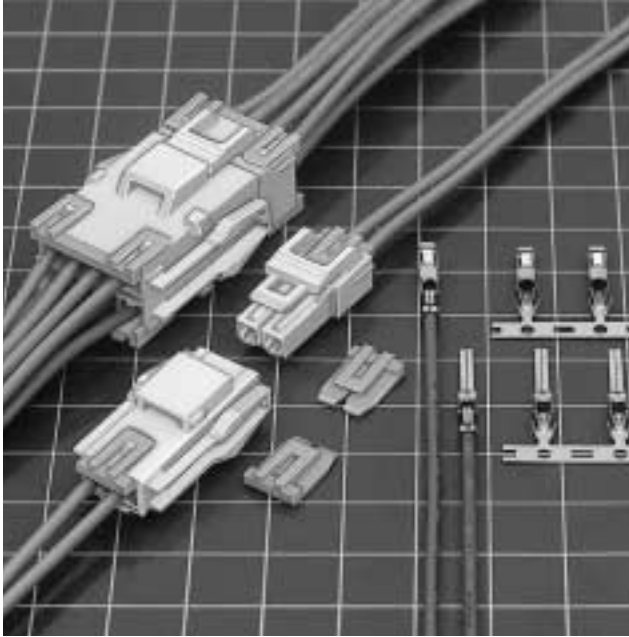
JST

Crimp

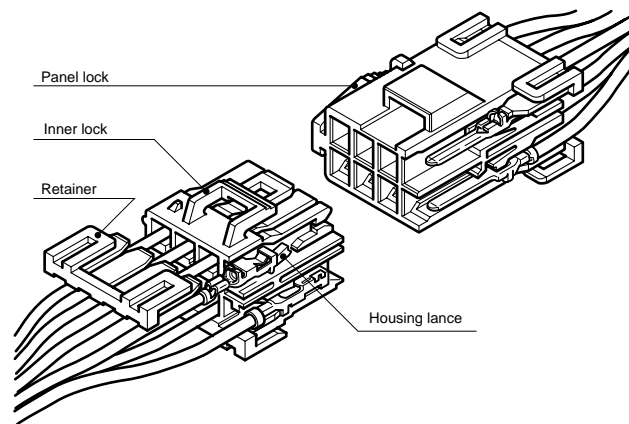
4.5mm
(.177") pitch

YL CONNECTOR

Disconnectable Crimp style Wire-to-wire connectors



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



Features

• Housing lance

The resilient plastic housing lances secure the contacts in the housing. Since the lances are in the housings rather than on the contacts, they are not affected by handling, and allow the contacts to be lightly inserted without undue force. This establishes a feeling of uniform insertion and a noticeable change in that feeling when insertion is completed.

• Secondary retainers

The secondary retainers enhance safety in case of partial insertion or accidental release of the contact. Even if a contact is inserted incompletely, the retainer guides the contact to the proper position and securely locks it in place (except for connectors with three row construction and when AWG #16 wire is used.)

• Inter-housing lock

This inter-housing lock secures the plug to the receptacle and prevents accidental disconnection. The lock is protected and is not affected by external forces that might result from the routing of wires.

• Panel lock construction

Our unique compact panel lock is designed to prevent tangling with wires and accidental breakage because of handling.

Specifications

- Current rating: 10A AC, DC max. (7.0A 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 1.25mm²
 - Applicable panel thickness: 0.7 to 2.0mm (.028" to .079")
- * 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

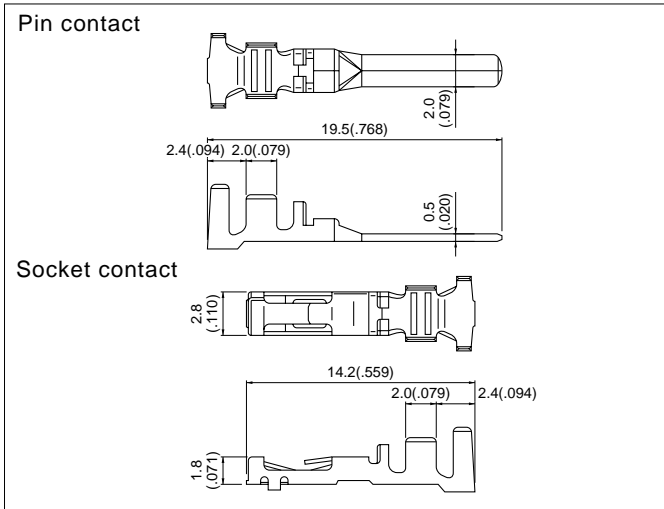
Circuits	Wire size (AWG)					
	#16	#18	#20	#22	#24	#26
1	10	7	5	4	3	2
2	10	7	5	4	3	2
3	9	6	4	4	3	2
4	9	6	4	4	3	2
6	8	5	3	3	2	2
8	6	4	3	3	2	2
9	6	4	3	3	2	2
12	6	3	2	2	2	2
15	5	3	2	2	2	1
16	5	3	2	2	2	1
21	4	3	2	2	2	1

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

Standards

Recognized E60389 Certified LR20812 R9351052

Contact



Model No.		Applicable wire			Q'ty/ reel
Pin contact	Socket contact	mm ²	AWG #	Insulation O.D. mm(in.)	
SYM-01T-P0.5A	SYF-01T-P0.5A	0.13 to 0.5	26 to 20	1.3 to 2.5 (.051 to .098)	Pin contact: 5,000 Socket contact: 4,000
SYM-41T-P0.5A	SYF-41T-P0.5A	0.5 to 1.25	20 to 16	2.0 to 3.4 (.079 to .134)	4,000
		0.3+0.3 to 0.5+0.5	22+22 to 20+20	1.7+1.7 to 2.0+2.0 (.067+.067 to .079+.079)	

Material and Finish

Phosphor bronze, tin-plated

Note:

- Contact JST for special products.
- Retainers cannot be used with electric wire whose insulation O.D. exceeds 2.7mm(.106") and AWG #16.

Housing

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

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Plug housing(for socket contact)	Retainer
1	300A	7.0A (10.0A)	YLR-01VF 	YLP-01V 	YLS-01V
2	300A	7.0A (10.0A)	YLR-02V 	YLP-02V 	YLS-02V
			YLR-02VF 		
3	300V	6.0A (9.0A)	YLR-03V 	YLP-03V 	YLS-03V (commonly used for 3-circuit housing and 6-circuit housing)
			YLR-03VF 		

Note:

- Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)
- YLR-01VF, YLP-01V, YLS-01V, YLR-02VF and YLR-03VF are not TÜV approved.

YL CONNECTOR

Housing

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

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Plug housing(for socket contact)	Retainer
4	300V	6.0A (9.0A)	YLR-04V 	YLP-04V 	YLS-02V
			YLR-04VF 		
6	300V	5.0A (8.0A)	YLR-06V 	YLP-06V 	YLS-03V (commonly used and 3-circuit housing and +circuit housing)
			YLR-06VF 		
8	300V	4.0A (6.0A)	YLR-08V 	YLP-08V 	YLS-08V
Q'ty / bag 250	Q'ty / bag 250	Q'ty / bag 500	Q'ty / bag 1,000		
9	300V	4.0A (6.0A)	YLR-09V 	YLP-09V 	—
Q'ty / bag 250	Q'ty / bag 250	Q'ty / bag 500	Q'ty / bag —		

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

Housing

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

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Plug housing(for socket contact)	Retainer
12	300V	3.0A (6.0A)	YLR-12VA 	YLP-12VA 	YLS-12V
		3.0A (6.0A)	YLR-12V 	YLP-12V 	—
15	300V	3.0A (5.0A)	YLR-15V 	YLP-15V 	—
16	300V	3.0A (5.0A)	YLR-16V 	YLP-16V 	YLS-16V

Note:

1. Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)
2. YLR-12VA and YLP-12VA are not UL/CSA/TÜV approved.

YL CONNECTOR

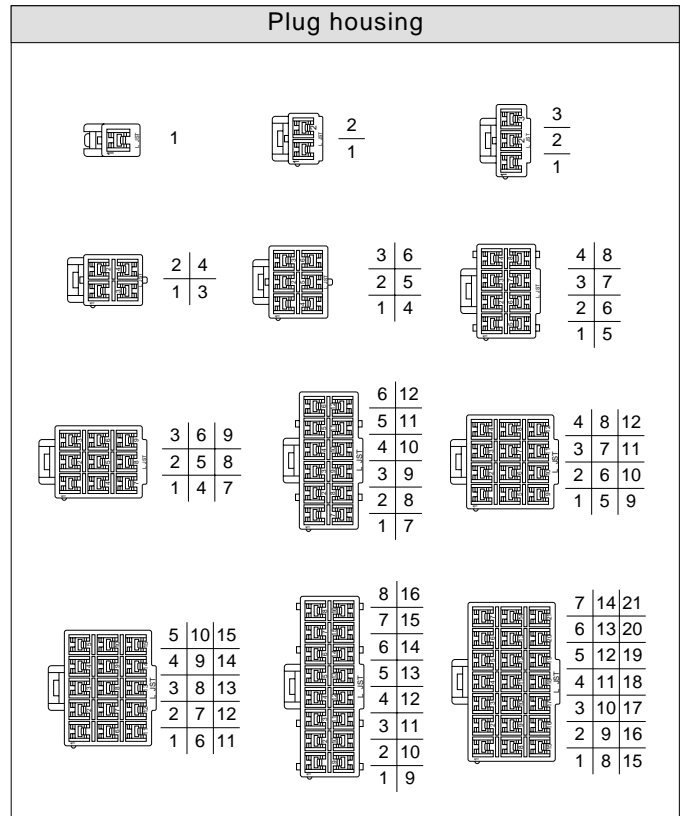
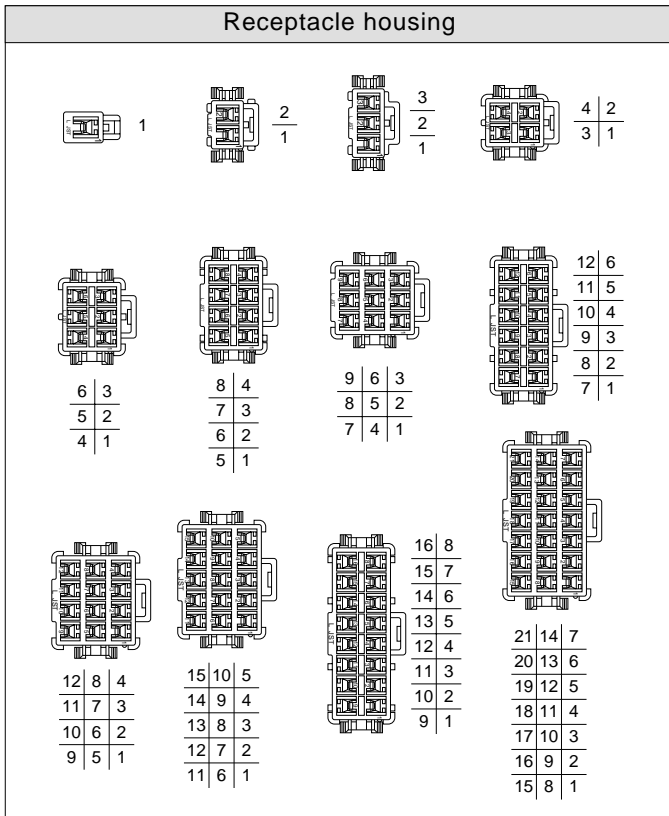
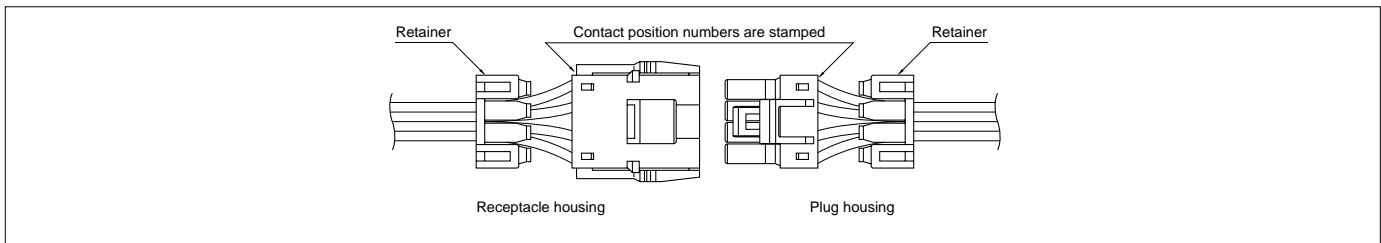
Housing

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

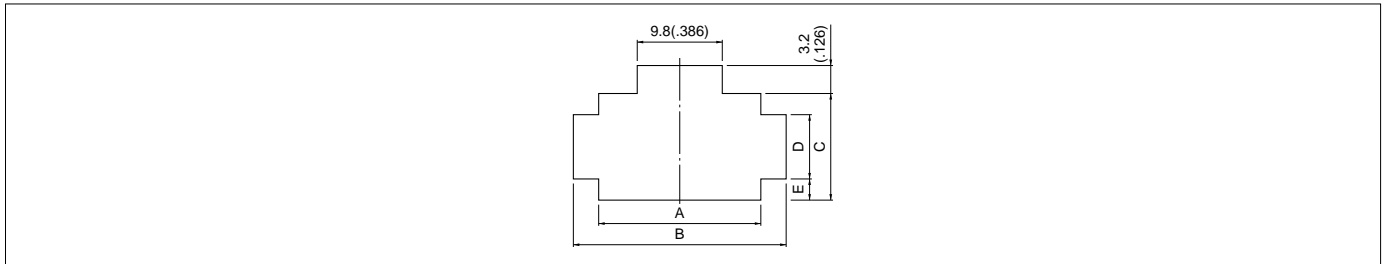
Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)		Retainer	
			YLR-21V	Q'ty / bag	YLP-21V	Q'ty / bag		Q'ty / bag
21	300V	3.0A (4.0A)		200		200	—	—

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

Contact position location numbers



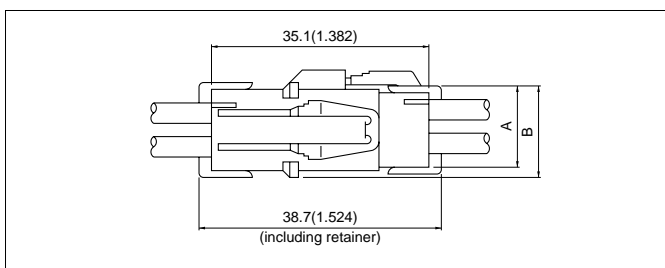
Panel Layout



General tolerance: $\pm 0.13 (\pm .005)$

Circuits	Receptacle housing Model No.	Panel thickness mm(in.)	0.7 to 2.0 (.028 to .079)			0.7 to 0.8 (.028 to .031)		0.9 to 1.3 (.035 to .051)		1.4 to 2.0 (.055 to .079)	
			Dimensions mm(in.)	A	B	C	D ± 0.1 ($\pm .004$)	E ± 0.1 ($\pm .004$)	D ± 0.1 ($\pm .004$)	E ± 0.1 ($\pm .004$)	D ± 0.1 ($\pm .004$)
2	YLR-02V		10.7 (.421)	16.8 (.661)	7.1 (.280)	4.4 (.173)	1.3 (.051)	5.0 (.197)	1.0 (.039)	5.6 (.220)	0.7 (.028)
3	YLR-03V		15.3 (.602)	21.3 (.839)	7.1 (.280)	4.4 (.173)	1.3 (.051)	5.0 (.197)	1.0 (.039)	5.6 (.220)	0.7 (.028)
4	YLR-04V		10.7 (.421)	16.8 (.661)	12.9 (.508)	7.1 (.280)	2.85 (.112)	7.7 (.303)	2.55 (.100)	8.3 (.327)	2.25 (.089)
6	YLR-06V		15.3 (.602)	21.3 (.839)	12.9 (.508)	7.1 (.280)	2.85 (.112)	7.7 (.303)	2.55 (.100)	8.3 (.327)	2.25 (.089)
8	YLR-08V		19.8 (.780)	25.8 (1.016)	12.9 (.508)	7.1 (.280)	2.85 (.112)	7.7 (.303)	2.55 (.100)	8.3 (.327)	2.25 (.089)
9	YLR-09V		15.3 (.602)	21.3 (.839)	18.2 (.717)	7.1 (.280)	5.55 (.216)	7.7 (.303)	5.25 (.207)	8.3 (.327)	4.95 (.195)
12	YLR-12V		19.8 (.780)	25.8 (1.016)	18.2 (.717)	7.1 (.280)	5.55 (.216)	7.7 (.303)	5.25 (.207)	8.3 (.327)	4.95 (.195)
	YLR-12VA		28.9 (1.138)	34.8 (1.370)	12.9 (.508)	7.1 (.280)	2.85 (.112)	7.7 (.303)	2.55 (.100)	8.3 (.327)	2.25 (.089)
15	YLR-15V		24.4 (.961)	30.3 (1.193)	18.2 (.717)	7.1 (.280)	5.55 (.216)	7.7 (.303)	5.25 (.207)	8.3 (.327)	4.95 (.195)
16	YLR-16V		37.9 (1.492)	43.8 (1.724)	12.9 (.508)	7.1 (.280)	2.85 (.112)	7.7 (.303)	2.55 (.100)	8.3 (.327)	2.25 (.089)
21	YLR-21V		33.5 (1.319)	39.3 (1.547)	18.2 (.717)	7.1 (.280)	5.55 (.216)	7.7 (.303)	5.25 (.207)	8.3 (.327)	4.95 (.195)

Assembly layout



Type	Circuits	Dimensions mm(in.)	
		A	B
Single row	2, 3	9.5 (.374)	10.8 (.425)
2-row	4, 6, 8, 12, 16	15.3 (.602)	16.6 (.654)
3-row	9, 12, 15, 21	20.5 (.807)	21.8 (.858)

Applicator for the semi-automatic press AP-K2N

Contact	Crimp applicator MKS-L		Compact crimp applicator MKS-LS		Strip-crimp applicator MKS-SC
	with safety cover	without safety cover	with safety cover	without safety cover	with safety cover
SYF-01T-P0.5A	APLMK SYF/M01-05	APLNC SYF/M01-05	-	-	APLSC SYF/M01-05
SYM-01T-P0.5A	APLMK SYF/M01-05	APLNC SYF/M01-05	-	-	APLSC SYF/M01-05
SYF-41T-P0.5A	APLMK SYF/M41-05	APLNC SYF/M41-05	-	-	APLSC SYF/M41-05
SYM-41T-P0.5A	APLMK SYF/M41-05	APLNC SYF/M41-05	-	-	APLSC SYF/M41-05