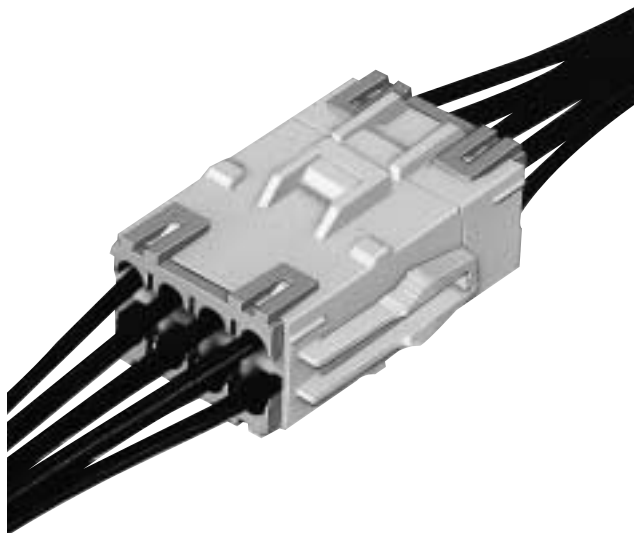
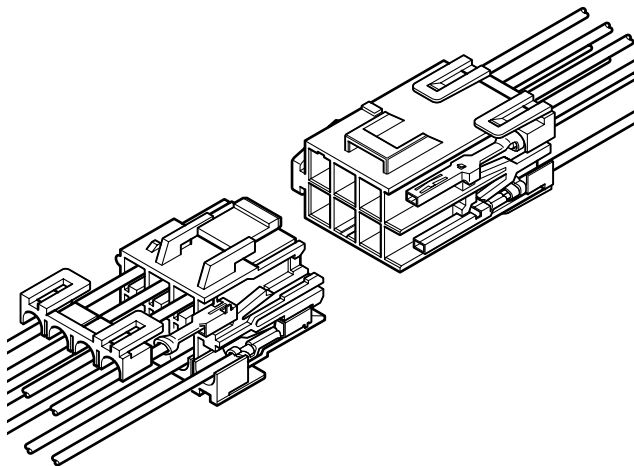


VL CONNECTOR

Disconnectable Crimp style Wire-to-wire connectors



The VL connector is a 6.2mm (.244") pitch wire-to-wire connector designed for circuits requiring up to 20A (1 or 2-circuit with AWG #12 wire).



Features

• Housing lances for contact retention

Since the contact retention lances are part of the housing rather than protruding from the contact, they cannot be damaged by handling. They allow the contact to be easily inserted and securely locked into the housing.

• Secondary retainer

The secondary retainer is optionally available. This retainer ensures that the contacts are fully seated and locked in the housing and prevents their accidental release. Installed after the contacts are inserted, it locks and secures the contact.

• Suited for circuits with high power requirements

Since these contacts have large cross-sectional areas and high contact pressure, they can accommodate circuits requiring high power.

• Panel lock construction

Our unique space-saving panel lock is designed to prevent tangling with wires or breaking in cold or dry weather.

Specifications

- Current rating: 20A AC, DC max.
 - Voltage rating: 600V AC, DC max. (300V in accordance with the Electrical Appliance and Material Control Law in Japan)
 - 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: 2,000V AC/minute
 - Applicable wire: AWG #22 to #12 0.3 to 3.5mm²
 - Applicable panel thickness: 0.5 to 2.0mm (.020" 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)				
	#12	#14	#16	#18	#20
1	20	15	10	8	6
2	20	15	10	8	6
3	19	14	9	8	6
4	18	13	9	7	6
6	16	12	8	7	5
8	16	11	7	6	5
12	15	10	7	6	4

Standards

Recognized E60389

Certified LR20812

R9351103

VL CONNECTOR

Contact

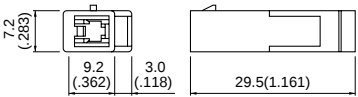
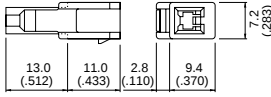
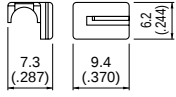
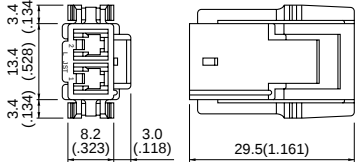
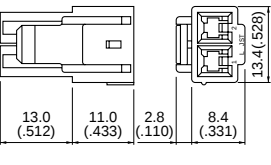
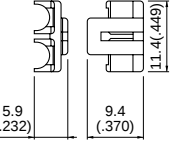
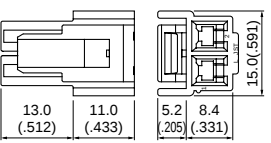


Model No.		Applicable wire			Q'ty / reel
Pin contact	Socket contact	mm²	AWG #	Insulation O.D. mm(in.)	
SVM-42T-P2.0	SVF-42T-P2.0	0.3 to 1.25	22 to 16	1.7 to 3.2(.067+.126)	2,000
		0.3+0.3 to 0.5+0.75	22+22 to 20+18	1.7+1.7 to 2.5+2.7 (.067+.067 to .098+.106)	
BVM-61T-P2.0	BVF-61T-P2.0	0.5 to 2.0	20 to 14	1.9 to 3.4(0.75 to 1.34)	
		0.5+0.5 to 0.75+1.25	20+20 to 18+16	1.9+1.9 to 2.1+2.7 (0.75+0.75 to .083+.106)	
BVM-81T-P2.0	BVF-81T-P2.0	3.5	12	4.1(.161)	
Material and Finish					
Phosphor bronze, Tin-plated					

Note: 1. Contact JST for special products.
2. SVM-42T-P2.0 and SVF-42T-P2.0 are not TÜV approved.

Housing

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

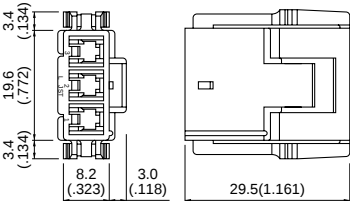
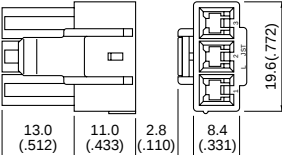
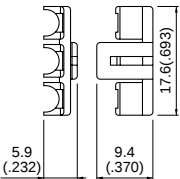
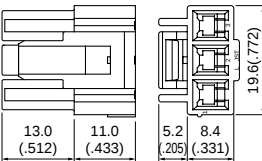
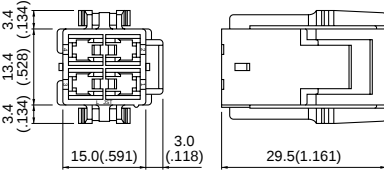
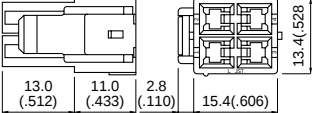
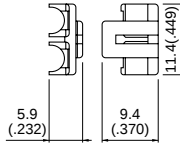
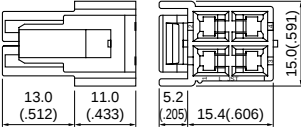
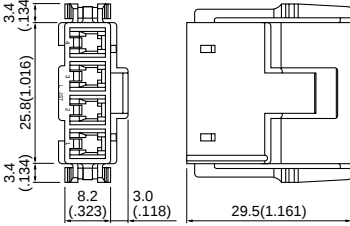
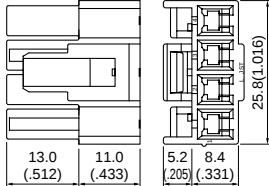
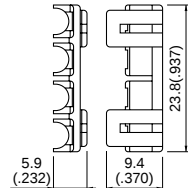
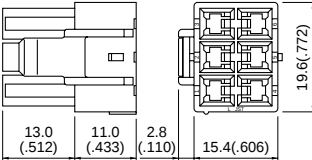
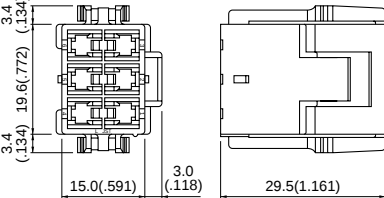
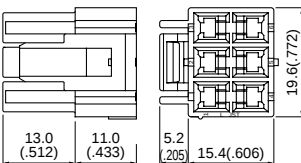
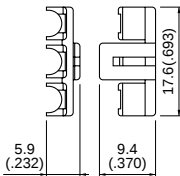
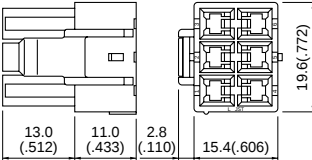
Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)		Retainer	
1	600V	20.0A	VLR-01VF 	Q'ty / bag 500	VLP-01V 	Q'ty / bag 500	VLS-01V 	Q'ty / bag 1,000
2	600V	20.0A	VLR-02V 	Q'ty / bag 500	VLP-02V 	Q'ty / bag 500	VLS-02V (commonly used for 2-circuit housing and 4-circuit housing) 	Q'ty / bag 1,000
					VLP-02V-1 			

Note: 1. VLR-01VF is exclusively for free hanging. The other circuits can be used either for panel mounted or free hanging.
2. Contact JST for special products.
3. VLP-02V-1 is not TÜV approved.

VL 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	
3	600V	19.0A	VLR-03V 	Q'ty / bag 500	VLP-03V 	Q'ty / bag 500	VLS-03V (commonly used for 3-circuit housing and 6-circuit housing) 	Q'ty / bag 1,000
					VLP-03V-1 			
4	600V	18.0A	VLR-04V 	Q'ty / bag 500	VLP-04V 	Q'ty / bag 500	VLS-02V 	Q'ty / bag 1,000
					VLP-04V-1 			
		16.0A	VLR-04VN 	Q'ty / bag 500	VLP-04VN-1 	Q'ty / bag 500	VLS-08V (commonly used for 4-circuit housing and 8-circuit housing) 	Q'ty / bag 1,000
					VLP-06V 			
6	600V	16.0A	VLR-06V 	Q'ty / bag 500	VLP-06V-1 	Q'ty / bag 500	VLS-03V (commonly used for 3-circuit housing and 6-circuit housing) 	Q'ty / bag 1,000
					VLP-06V 			

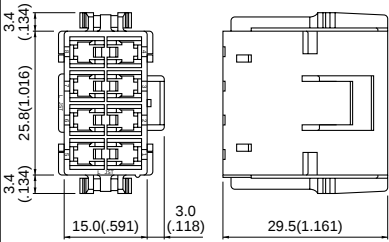
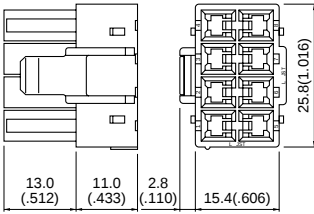
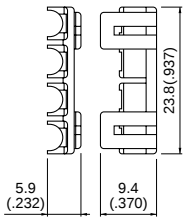
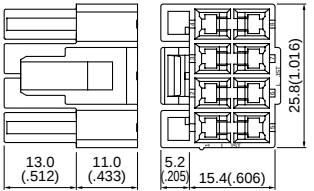
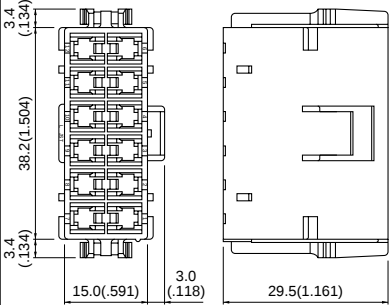
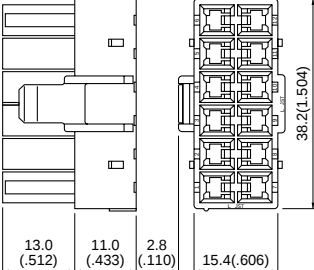
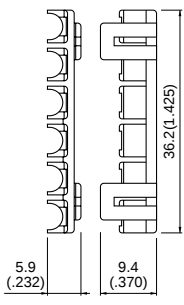
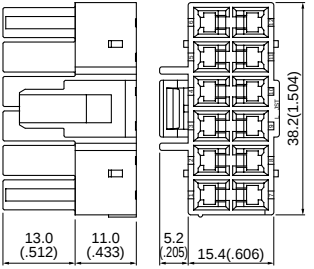
Note: 1. Contact JST for special products.

2. Models VLP-03V-1, VLP-04V-1, VLP-04VN-1 and VLP-06V-1 are not TÜV approved.

VL CONNECTOR

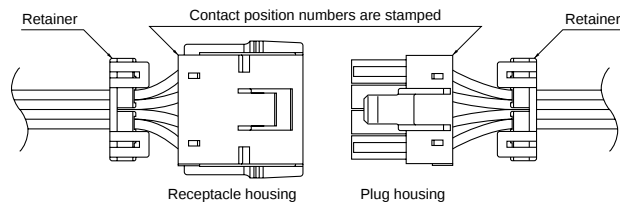
Housing

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

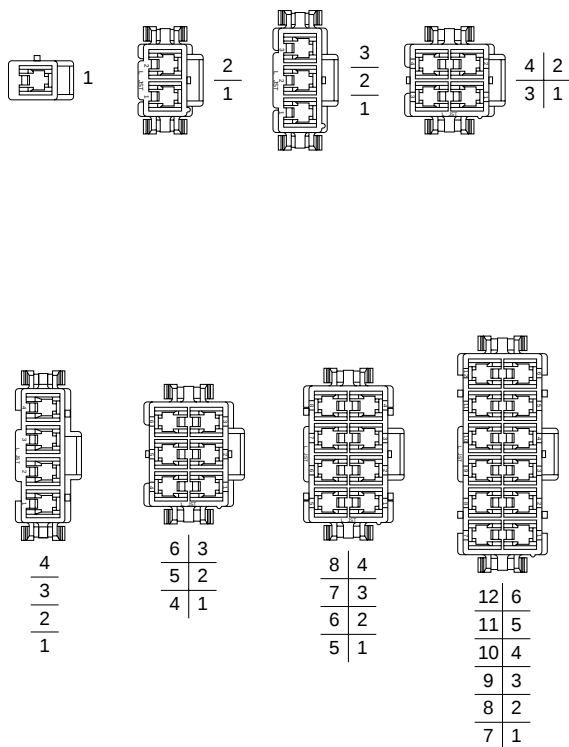
Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Q'ty / bag	Plug housing(for socket contact)	Q'ty / bag	Retainer	Q'ty / bag
8	600V	16.0A	VLR-08V 	500	VLP-08V 	500	VLS-08V (commonly used for 4-circuit housing and 8-circuit housing) 	1,000
					VLP-08V-1 			
12	600V	15.0A	VLR-12V 	100	VLP-12V 	100	VLS-12V 	1,000
					VLP-12V-1 			

Note: 1. Contact JST for special products.
2. Models VLP-08V-1 and VLP-12V-1 are not TÜV approved.

Contact position location numbers

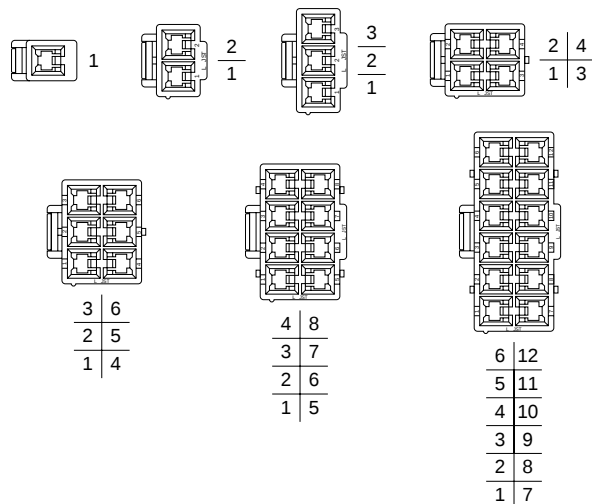


Receptacle housing

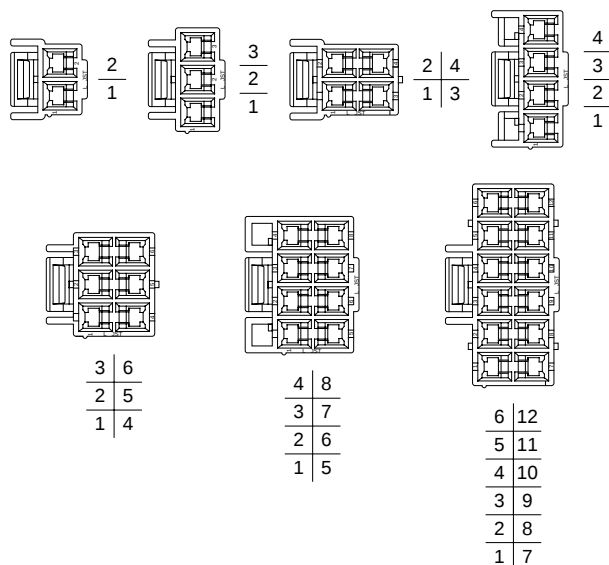


Plug housing

<Inter-housing lock>



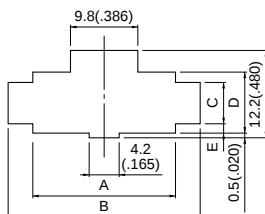
<Outer-housing lock>



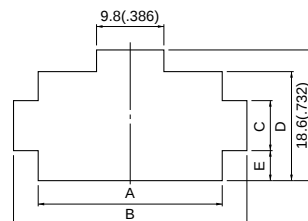
VL CONNECTOR

Panel layout

Shape I



Shape II



Circuits	Receptacle housing Model No.	Panel hole shape	Panel hole dimensions mm(in.)		General tolerance	A, B, D: ± 0.13 (± 0.005)		C, E: ± 0.1 (± 0.004)	Applicable panel thickness mm(in.)
			A	B		C	D	E	
2	VLR-02V	I	13.8(.543)	20.6(.811)	5.7(.224)		8.5(.335)	1.4(.055)	0.5 to 2.0 (.020 to .079)
3	VLR-03V	I	20.0(.787)	26.8(1.055)	5.7(.224)		8.5(.335)	1.4(.055)	
4	VLR-04V	II	13.8(.543)	20.6(.811)	7.0(.276)		15.4(.606)	4.2(.165)	
4 (Single-row)	VLR-04VN	I	26.2(1.031)	33.0(1.299)	5.7(.224)		8.5(.335)	1.4(.055)	
6	VLR-06V	II	20.0(.787)	26.8(1.055)	7.0(.276)		15.4(.606)	4.2(.165)	
8	VLR-08V	II	26.2(1.031)	33.0(1.299)	7.0(.276)		15.4(.606)	4.2(.165)	
12	VLR-12V	II	38.9(1.531)	45.4(1.787)	7.0(.276)		15.4(.606)	4.2(.165)	

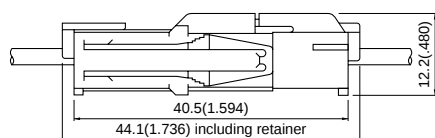
Note:

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

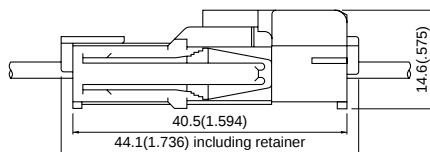
Assembly layout

(2, 3 and single-row 4 circuits)

<Inter-housing lock>

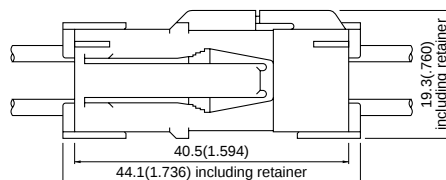


<Outer-housing lock>

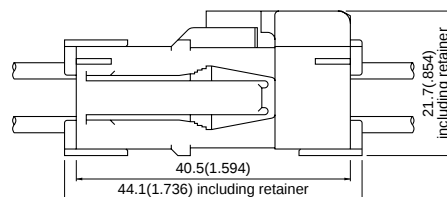


(4, 6, 8 and 12 circuits)

<Inter-housing lock>



<Outer-housing lock>



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
SVF-42T-P2.0	APLMK SVF/M42-20	APLNC SVF/M42-20	—	—	—
SVF-61T-P2.0	APLMK SVF/M61-20	APLNC SVF/M61-20	—	—	—
SVM-61T-P2.0	APLMK SVF/M61-20	APLNC SVF/M61-20	—	—	—
SVF-81T-P2.0	APLMK SVF/M81-20	APLNC SVF/M81-20	—	—	—
SVM-81T-P2.0	APLMK SVF/M81-20	APLNC SVF/M81-20	—	—	—