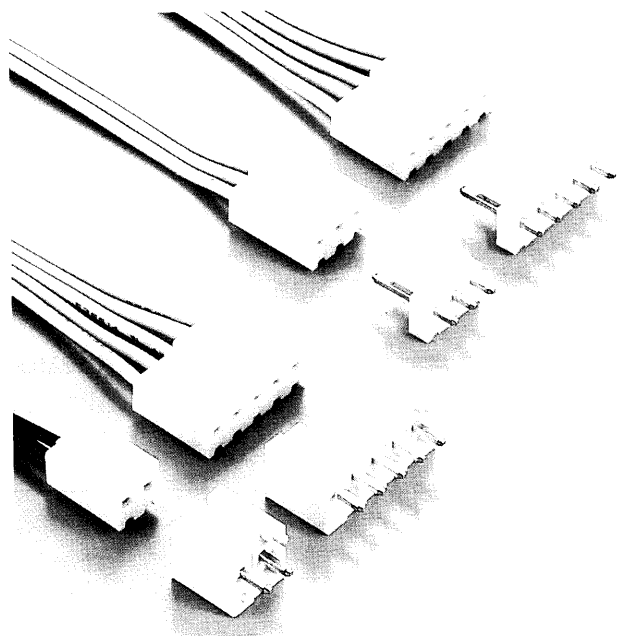
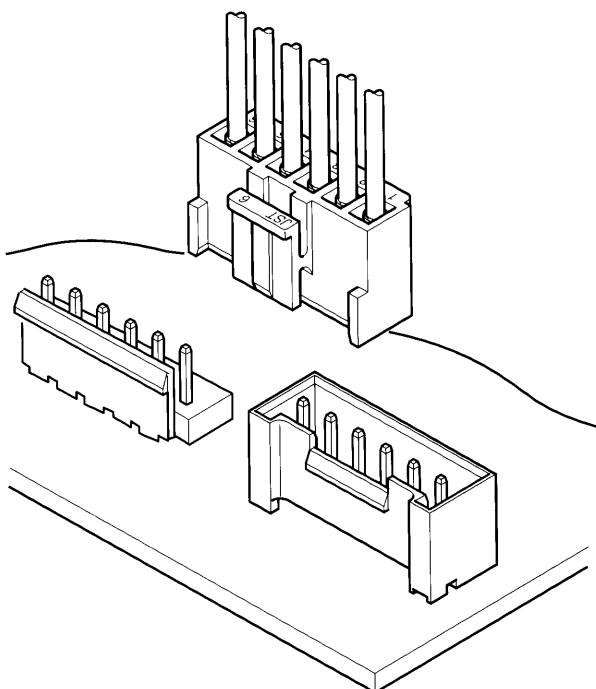


VH CONNECTOR

Disconnectable Crimp style connectors



This small, field-proven connector for printed circuit boards is reliable and has a large current carrying capacity. It can be used with a wide variety of signal, power supply, and output circuits that appear in consumer electronic products.



Features

- **Proven box contact**

This connector was developed with the same box-shaped contact design used successfully in the NH connectors. The reliable VH connector can be used in a wide variety of applications, from low-voltage, low-current signal circuits to power supply circuits having a relatively large capacity.

- **Compact connector with a large capacity**

Even though this connector has a large current carrying capacity (10A), it is compact, with a mounting height of 16.5mm (.650").

- **Secure contact and mounting**

The housing has a lock mechanism which prevents the connector from coming loose due to vibration. The mechanism also prevents misinsertion (misalignment or reverse insertion).

Specifications

- Current rating: 10A AC, DC (AWG#16)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #22 to #16
- Applicable PC board thickness: 1.6mm(.063")

Note:

Do not branch in parallel current which exceeds the rated current. If branched in parallel, current imbalance or other problems may develop. If it is absolutely necessary to branch such a large current in parallel, be sure to use contacts made of phosphor bronze. Design the circuits without causing imbalance and provide an extra margin for each circuit.

*Contact JST for details.

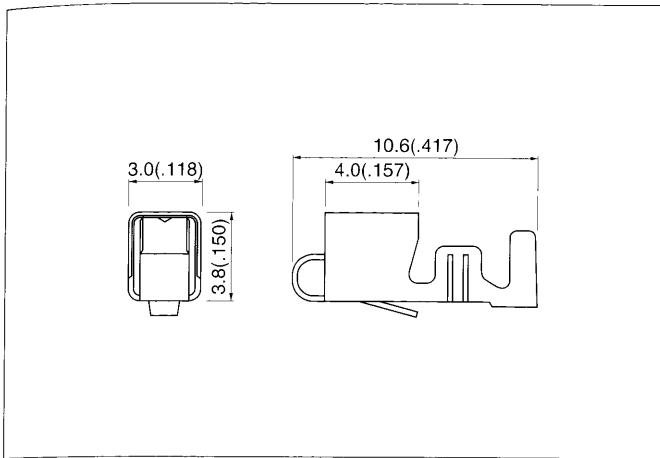
Standards

Recognized E60389

Certified LR20812

R75122

Contact



Model No.	Applicable wire			Q'ty / reel
	mm ²	AWG #	Insulation O.D. mm(in.)	
SVH-21T-P1.1	0.33 to 0.83	22 to 18	1.7 to 3.0 (.067 to .118)	4,500
SVH-41T-P1.1	0.5 to 1.25	20 to 16	1.7 to 3.0 (.067 to .118)	3,500

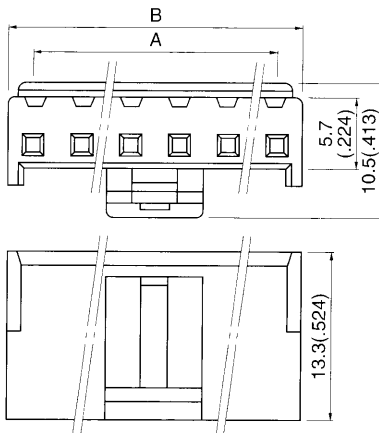
Material and Finish

Phosphor bronze, tin-plated

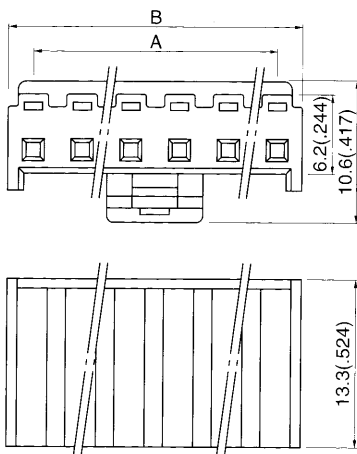
Note: When using retainer mountable type housing, applicable wire's insulation O. D. shall be 1.7 to 2.2mm(.067" to .087").

Housing

N type



M type



Cir-uits	Model No.			Dimensions mm(in.)		Q'ty / bag
	N type	M type	Retainer mountable type	A	B	
2	VHR-2N	—	VHRR-2N	3.96(.156)	7.86(.309)	1,000
3	VHR-3N	VHR-3M	VHRR-3N	7.92(.312)	11.82(.465)	1,000
4	VHR-4N	VHR-4M	—	11.88(.468)	15.78(.621)	1,000
5	VHR-5N	VHR-5M	VHRR-5N	15.84(.624)	19.74(.777)	1,000
6	VHR-6N	VHR-6M	—	19.80(.780)	23.70(.933)	500
7	VHR-7N	VHR-7M	—	23.76(.935)	27.66(1.089)	500
8	VHR-8N	—	VHRR-8N	27.72(1.091)	31.62(1.245)	500
9	VHR-9N	VHR-9M	VHRR-9N	31.68(1.247)	35.58(1.401)	500
10	VHR-10N	—	—	35.64(1.403)	39.54(1.557)	500

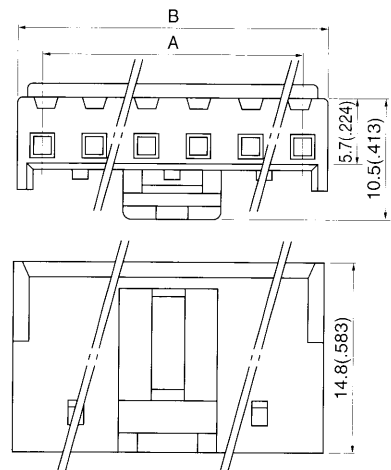
Material

Nylon 6, UL94V-0, natural (white)

Note: 1. Models identified as VHR-() M incorporate measures to prevent electric shock and are thus safer in regard to high voltages.

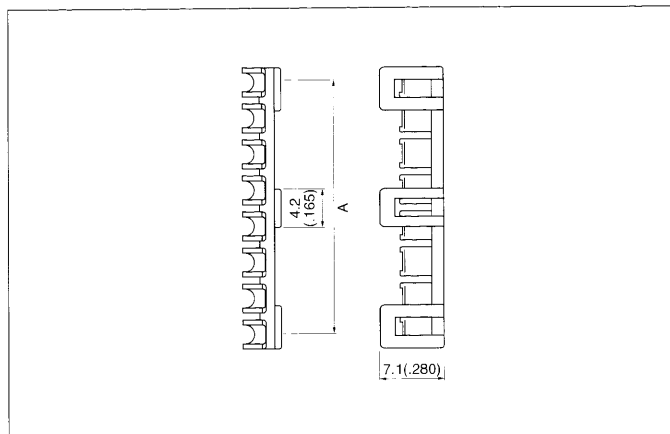
2. Models VHRR-() N are not TÜV approved.

Retainer mountable type



VH CONNECTOR

Retainer



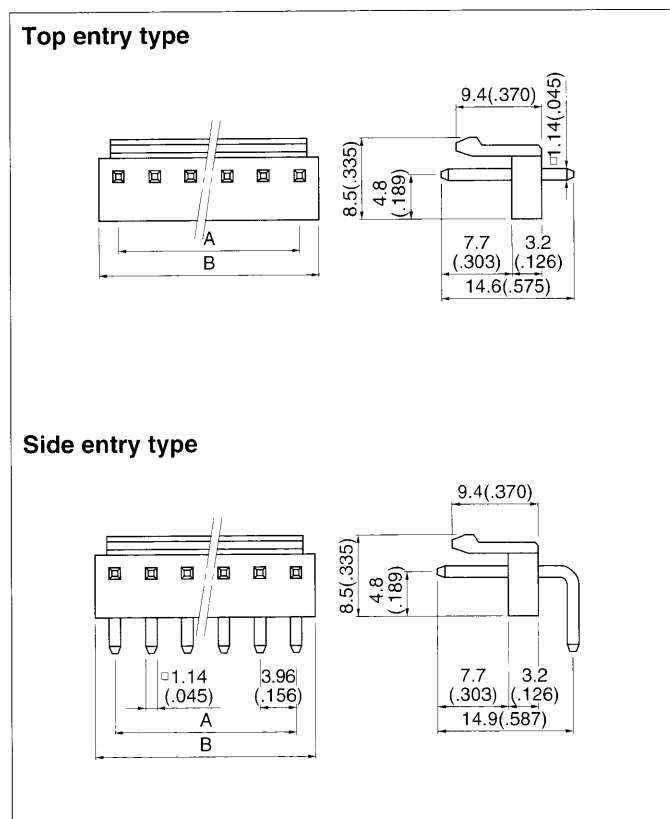
Circuits	Model No.	A	Q'ty / bag
2	VHS-2V	3.96(.156)	1,000
3	VHS-3V	7.52(.296)	1,000
5	VHS-5V	15.44(.608)	1,000
8	VHS-8V	27.32(1.076)	1,000
9	VHS-9V	31.28(1.231)	1,000

Material

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

Note: Not CSA/TÜV approved.

Locking header



Circuits	Model No.		Dimensions mm(in.)		Q'ty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	B 2P-VH	B 2PS-VH	3.96(.156)	7.86(.309)	1,000	1,000
3	B 3P-VH	B 3PS-VH	7.92(.312)	11.82(.465)	1,000	500
4	B 4P-VH	B 4PS-VH	11.88(.468)	15.78(.621)	500	500
5	B 5P-VH	B 5PS-VH	15.84(.624)	19.74(.777)	500	250
6	B 6P-VH	B 6PS-VH	19.80(.780)	23.70(.933)	250	250
7	B 7P-VH	B 7PS-VH	23.76(.935)	27.66(1.089)	250	250
8	B 8P-VH	B 8PS-VH	27.72(1.091)	31.62(1.245)	200	200
9	B 9P-VH	B 9PS-VH	31.68(1.247)	35.58(1.401)	200	200
10	B10P-VH	B10PS-VH	35.64(1.403)	39.54(1.557)	200	200

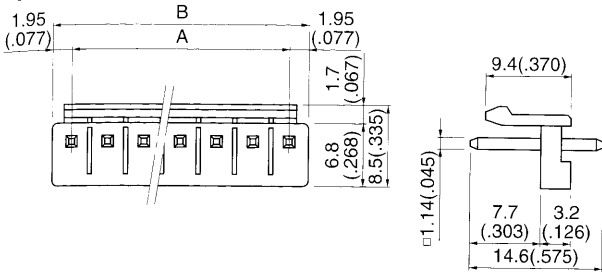
Material and Finish

Post: Brass, copper-undercoated, tin/lead-plated
Wafer: Nylon 66, UL94V-0, natural (white)

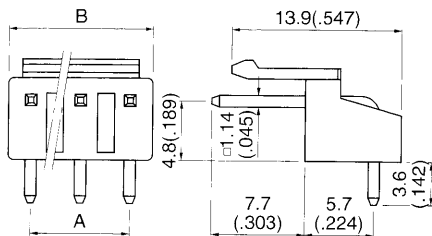
Note: Headers with a reduced number of posts are also available.
Contact JST for details.

Locking header

Top entry type of PBT



Side entry type with PCB stabilizer



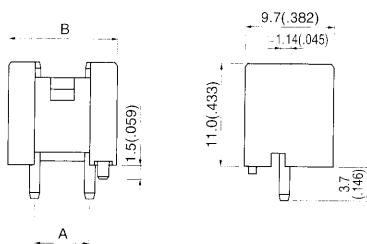
Circuits	Model No.		Dimensions mm(in.)		Q'ty / box	
	Top entry type of PBT	Side entry type with PCB stabilizer	A	B	Top entry type	Side entry type
2	B 2P-VH-B	S2P-VH	3.96(.156)	7.86(.309)	1,000	1,000
3	B 3P-VH-B	S3P-VH	7.92(.312)	11.82(.465)	500	500
4	B 4P-VH-B	S4P-VH	11.88(.468)	15.78(.621)	500	500
5	B 5P-VH-B	—	15.84(.624)	19.74(.777)	250	—
6	B 6P-VH-B	—	19.80(.780)	23.70(.933)	250	—
7	B 7P-VH-B	—	23.76(.935)	27.66(1.089)	250	—
8	B 8P-VH-B	—	27.72(1.091)	31.62(1.245)	200	—
9	B 9P-VH-B	—	31.68(1.247)	35.58(1.401)	200	—
10	B10P-VH-B	—	35.64(1.403)	39.54(1.557)	200	—

Material and Finish

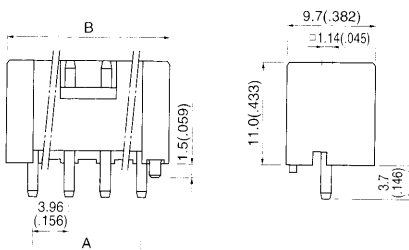
Post: Brass, copper-undercoated, tin/lead-plated natural
 Wafer: Top entry type of PBT: Glass-filled PBT, UL94V-0, natural (ivory)
 Side entry type with PCB stabilizer: Nylon 66, UL94V-0, natural (white)

Shrouded header

(2, 3 circuits)



(4 to 10 circuits)



Circuits	Model No.	Dimensions mm(in.)		Q'ty / box
		A	B	
2	B 2P-VH-FB-B	3.96(.156)	9.80(.386)	250
3	B 3P-VH-FB-B	7.92(.312)	13.76(.542)	200
4	B 4P-VH-FB-B	11.88(.468)	17.72(.698)	—
5	B 5P-VH-FB-B	15.84(.624)	21.68(.854)	—
6	B 6P-VH-FB-B	19.80(.780)	25.64(1.009)	—
7	B 7P-VH-FB-B	23.76(.935)	29.60(1.165)	—
8	B 8P-VH-FB-B	27.72(1.091)	33.56(1.321)	—
9	B 9P-VH-FB-B	31.66(1.246)	37.52(1.477)	—
10	B10P-VH-FB-B	35.64(1.403)	41.48(1.633)	—

Material and Finish

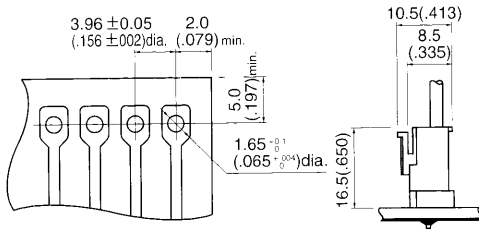
Post: Brass, copper-undercoated, tin/lead-plated
 Wafer: Glass-filled PBT, UL94V-0, natural (white)

Note: Not CSA/TÜV approved.

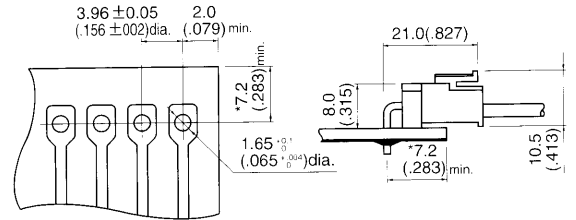
VH CONNECTOR

PC board layout (viewed from soldering side) and Assembly layout

**Locking header
Top entry type**

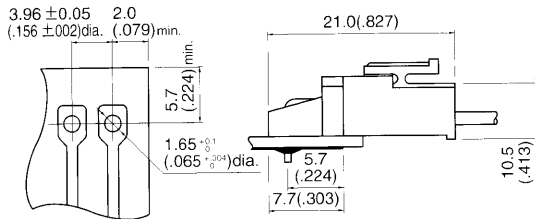


**Locking header
Side entry type**

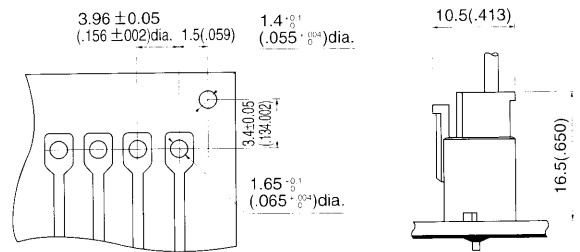


*11.0(.433) max. when used with the VR connector receptacle.

**Locking header
Side entry type with PCB stabilizer**



Shrouded header



Note:

1. Tolerances are non-cumulative: ±0.05mm(±.002) for all centers.
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

Crimping tools and machines

Terminals and parts model number in alphabetical order	Semi-automatic press: AP-K2N, AP-K4				
	Standard (crimp applicator)				
	Applicator type	MK-L/MKS-L/MKF-L applicator with dies		MKS-LS applicator with dies	
with safety cover		without safety cover	with safety cover	without safety cover	
SSF/M-21T-P1.4	MKS-L	APLMK SSF/M21-14	APLNC SSF/M21-14	-	-
SSH-003GA-P0.2	MKS-L-10-3	APLMK SSH/L003-02	APLNC SSH/L003-02	-	-
SSH-003T-P0.2	MKS-L-10-3	APLMK SSH/L003-02	APLNC SSH/L003-02	-	-
SSHL-003T-P0.2	MKS-L-10-3	APLMK SSH/L003-02	APLNC SSH/L003-02	-	-
STI-1.0(T)-250D	MK-L	APLMK STI1.0-250D/N	APLNC STI1.0-250D/N	-	-
STI-1.0(T)-250N	MK-L	APLMK STI1.0-250D/N	APLNC STI1.0-250D/N	-	-
STI-2.5(T)-250D	MK-L	APLMK STI2.5-250D/N	APLNC STI2.5-250D/N	-	-
STI-2.5(T)-250N	MK-L	APLMK STI2.5-250D/N	APLNC STI2.5-250D/N	-	-
STI-01(T)-110N	MK-L	APLMK STI01-110N	APLNC STI01-110N	-	-
STI-41(T)-110N	MK-L	APLMK STI41-110N	APLNC STI41-110N	-	-
STI-51(T)-250N	MK-L	APLMK STI51-250N	APLNC STI51-250N	-	-
STO-0.25(T)-110N-5	MK-L	APLMK STO025-110N	APLNC STO025-110N	-	-
STO-0.25(T)-110N-8	MK-L	APLMK STO025-110N	APLNC STO025-110N	-	-
STO-0.5(T)-110N-5	MK-L	APLMK STO05-110N	APLNC STO05-110N	-	-
STO-0.5(T)-110N-8	MK-L	APLMK STO05-110N	APLNC STO05-110N	-	-
STO-1.0(T)-110N-5	MK-L	APLMK STO10-110N	APLNC STO10-110N	-	-
STO-1.0(T)-110N-8	MK-L	APLMK STO10-110N	APLNC STO10-110N	-	-
STO-1.0(T)-187N-5	MK-L	APLMK STO10-187N	APLNC STO10-187N	-	-
STO-1.0(T)-187N-8	MK-L	APLMK STO10-187N	APLNC STO10-187N	-	-
STO-1.0(T)-250N	MK-L	APLMK STO10-250N	APLNC STO10-250N	-	-
STO-2.5(T)-250N	MK-L	APLMK STO25-250N	APLNC STO25-250N	-	-
STO-6.0(T)-250N	MK-L	APLMK STO60-250N	APLNC STO60-250N	-	-
STO-01(T)-110N(-8)	MK-L	APLMK STO01-110N	APLNC STO01-110N	-	-
STO-01(T)-187N(-8)	MK-L	APLMK STO01-187N	APLNC STO01-187N	-	-
STO-21(T)-205N(-5)	MK-L	APLMK STO21-205N	APLNC STO21-205N	-	-
STO-21(T)-250N	MK-L	APLMK STO21-250N	APLNC STO21-250N	-	-
STO-41(T)-110N(-8)	MK-L	APLMK STO41-110N	APLNC STO41-110N	-	-
STO-41(T)-187N(-8)	MK-L	APLMK STO41-187N	APLNC STO41-187N	-	-
STO-41T-187S	MK-L	APLMK STO41-187S	APLNC STO41-187S	-	-
STO-61(T)-250N	MK-L	APLMK STO61-250N	APLNC STO61-250N	-	-
STO-62T-187N	MK-L	APLMK STO62-187N	APLNC STO62-187N	-	-
STO-62T-250N	MK-L	APLMK STO62-250N	APLNC STO62-250N	-	-
STO-81(T)-250N	MK-L	APLMK STO81-250N	APLNC STO81-250N	-	-
STO-82T-187N	MK-L	APLMK STO82-187N	APLNC STO82-187N	-	-
SVA-41T-P1.1	MKS-L	APLMK SVA41-11	APLNC SVA41-11	-	-
SVF-01T-1.5A	MK-L	APLMK SVF01-15A	APLNC SVF01-15A	-	-
SVF-01T-1.5N	MKS-L	APLMK SVF01-15N	APLNC SVF01-15N	-	-
SVF-01T-1.5S	MKS-L	APLMK SVF01-15S	APLNC SVF01-15S	-	-
SVF-01T-2.36LN	MKS-L	APLMK SVF01-236LN	APLNC SVF01-236LN	-	-
SVF-01T-2.36N	MK-L	APLMK SVF01-236N	APLNC SVF01-236N	-	-
SVF-42T-P2.0	MKS-L	APLMK SVF/M42-20	APLNC SVF/M42-20	-	-
SVF/M-61T-P2.0	MKS-L	APLMK SVF/M61-20	APLNC SVF/M61-20	-	-
SVF/M-81T-P2.0	MKS-L	APLMK SVF/M81-20	APLNC SVF/M81-20	-	-
SVH-21T-P1.1	MKS-L	APLMK SVH21-11	APLNC SVH21-11	-	-
SVT-41T-P1.1	MKS-L	APLMK SVT41-11	APLNC SVT41-11	-	-
SXA-001T-P0.6	MKS-L	APLMK SXA/M001-06	APLNC SXA/M001-06	-	-
SXA-01T-P0.6	MKS-L	APLMK SXA01-06	APLNC SXA01-06	-	-

Crimping tools and machines

Fully automatic machine: ATM-5		Hand tools			Extraction and Insertion tools	
Strip-crimp applicator	Crimp applicator	for chain terminal	for loose piece terminals		Extraction tool	Insertion tool
MKS-SC applicator with dies with safety cover	AMK applicator with dies	YRS series	YC series	Terminal model No.		
APLSC SSF/M21-14	APLAMK SSF/M21-14	-	YC-550	BSF/M-21T-P1.4	SLJ-1.4	-
APLSC SSH003-02	-	-	-	-	-	-
APLSC SSH003-02	-	-	-	-	-	-
-	-	-	-	-	-	-
-	APLAMK STI1.0-250D/N	<i>(Contact J.S.T. Europe N.V. Belgium for the applicable hand tools.)</i>			-	-
-	APLAMK STI1.0-250D/N				-	-
-	APLAMK STI2.5-250D/N				-	-
-	APLAMK STI2.5-250D/N				-	-
-	APLAMK STI01-110N	-	YC-041	LTI-01(T)-110N	-	-
-	APLAMK STI41-110N	-	YC-063	LTI-41(T)-110N	-	-
-	APLAMK STI51-250N	-	YC-322	LTI-51(T)-250N	-	-
-	APLAMK STO025-110N	<i>(Contact J.S.T. Europe N.V. Belgium for the applicable hand tools.)</i>			-	-
-	APLAMK STO025-110N				-	-
-	APLAMK STO05-110N				-	-
-	APLAMK STO05-110N				-	-
-	APLAMK STO10-110N				-	-
-	APLAMK STO10-110N				-	-
-	APLAMK STO10-187N				-	-
-	APLAMK STO10-187N				-	-
-	APLAMK STO10-250N				-	-
-	APLAMK STO25-250N				-	-
-	-				-	-
-	APLAMK STO01-110N				-	YC-041
-	APLAMK STO01-187N	-	YC-042	LTO-01(T)-187N(-8)	-	-
-	APLAMK STO21-205N	-	-	-	-	-
-	APLAMK STO21-250N	-	YC-102	LTO-21(T)-250N	-	-
-	APLAMK STO41-110N	-	YC-062	LTO-41(T)-110N(-8)	-	-
-	APLAMK STO41-187N	-	YC-051	LTO-41(T)-187N(-8)	-	-
-	APLAMK STO41-187S	-	YC-064	LTO-41T-187S	-	-
-	APLAMK STO61-250N	-	YC-047	LTO-61(T)-250N	-	-
-	-	-	-	-	-	-
-	-	-	<YRF-591>	-	-	-
-	APLAMK STO81-250N	-	YC-280	LTO-81(T)-250N	-	-
-	-	-	-	-	-	-
APLSC SVA41-11	APLAMK SVA41-11	-	YC-450	BVA-41T-P1.1	EJ-SMP	-
-	APLAMK SVF01-15A	-	YC-044	LVF-01T-1.5A	-	-
-	APLAMK SVF01-15N	-	YC-151	LVF-01T-1.5N	-	-
-	APLAMK SVF01-15S	-	-	-	-	-
-	APLAMK SVF01-236LN	-	-	-	EJ-LV	-
-	APLAMK SVF01-236N	-	YC-152	LVF-01T-2.36N	EJ-LV	-
-	APLAMK SVF/M42-20	-	YC-592	BVF-42T-P2.0	VLJ-20	-
-	APLAMK SVF/M61-20	-	YC-590	BVF/M-61T-P2.0	VLJ-20	-
-	APLAMK SVF/M81-20	-	<YRF-591>	BVF/M-81T-P2.0	VLJ-20	-
APLSC SVH21-11	APLAMK SVH21-11	-	YC-160R	BVH-21T-P1.1	EJ-NV	-
APLSC SVT41-11	APLAMK SVT41-11	-	YC-630	BVT-41T-P1.1	EJ-VT	-
APLSC SXA/M001-06	APLAMK SXA/M001-06	-	YC-690R	BXA-001T-P0.6	EJ-XMP	IT-XA
-	-	-	YC-700R	-	-	-