

# AMD, AMK, AND Series

## Wire Wrap and Round Tail Dip Solder Terminations

### SPECIFICATIONS

#### ELECTRICAL

**Operating Voltage:** 1800 Vdc (sea level)  
**Current Rating:** 3 amp max.  
**Dielectric Withstanding Voltage:** 1800 Vrms min.  
**Insulation Resistance:** 5000 megohms min.  
**Voltage Drop:** 30 mV max.

#### TEMPERATURE RANGE

**Diallyl Phthalate & Phenolic:**  
 -65°C to +125°C (-85°F to +257°F)  
**Polyester:**  
 -65°C to +105°C (-85°F to +221°F)

#### MECHANICAL

**Contact Retention:** Wire Wrap® 8 lbs. min.; Dip Solder 3 lbs min.  
**Insertion Force:** 2 to 10 oz. per opposing contact pair when using .062 (1.57) steel test blade  
**Withdrawal Force:** 1 oz. min. per opposing contact pair when using .054 (1.37) steel test blade

#### MATERIALS

##### INSULATOR:

**Diallyl Phthalate**, per MIL-M-14, U.L. 94V-0 approved, color green

**Phenolic**, glass reinforced per MIL-M-14, type MFH, U.L. 94V-0 approved, color black  
**Thermoplastic Polyester**, glass reinforced, U.L. 94V-0 approved, color black

##### CONTACTS:

Copper alloy, gold plated per MIL-G-45204, Type II, Grade C, over nickel

##### INSERTS:

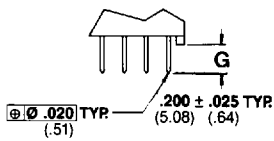
Stainless steel, passivated

##### NOTE:

All tests are in accordance with requirements of MIL-C-21097.

### CONTACT TERMINATIONS

#### DIP SOLDER

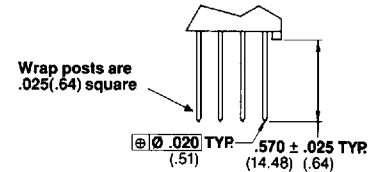


CODE MK

"G" DIMENSIONS	
Std.	.200 ± .025 (5.08) (.64)
Mod Code [081]	.165 ± .025 (4.19) (.64)

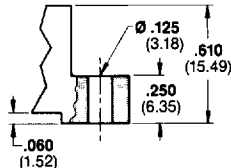
Dip Solder Terminations are .026(.66) ± .002(.05) diameter and fit .035(.89) min. diameter board hole.

#### WRAP POST

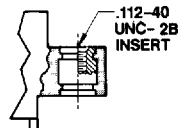


WITH STANDOFF: CODE MD  
 WITHOUT STANDOFF: CODE ND

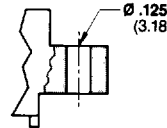
### MOUNTING STYLES



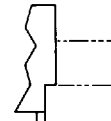
FLUSH MOUNT  
CODE 1



THREADED INSERT  
CODE 3



THRU HOLE  
CODE 5



NO EARS  
CODE 12

### ORDERING INFORMATION

2	KT	43	/2	A	MK	12	[ ]
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#### POLARIZATION

**2:** Between-Contacts

#### CONTACT PLATING

**KH:** .000010 gold engagement and termination area  
**KT:** .000010 gold engagement area; .000100 min. tin lead termination area  
**VH:** .000030 gold engagement area and termination area  
**VN:** .000030 gold engagement area; .000010 gold termination area  
**VT:** .000030 gold engagement area; .000100 min. tin lead termination area

#### NUMBER OF CONTACT PAIRS

**22, 28, 36, 43**

#### INSULATOR MATERIAL

**1:** Diallyl Phthalate (green);  
*Standard with VH, VN, and VT platings*  
 Not available with KT plating  
**2:** Polyester (black);  
*Standard with KH, KT, VN, and VT platings*  
 Not available with VH plating  
**9:** Phenolic (black); Not available with KT plating

#### TERMINATION MODIFIER

(081): Dip Solder .165 tail length

#### MOUNTING STYLES

**1:** Flush Mount;  
*Standard with MK termination only*  
**3:** Threaded Insert  
**5:** Thru Hole  
**12:** No Ears;  
*Standard with MK termination, 43 position only*

#### CONTACT TERMINATIONS

MD: Wrap Post (Standoff)

ND: Wrap Post

MK: Dip solder

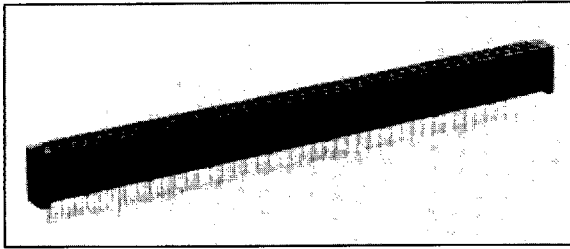
#### SERIES IDENTIFIER

**A:** .156 (3.96) Contact Centers  
 .062 (1.57) P.C. Board.

Standard options are indicated by **bold italic type**.  
 Nonstandard items require a factory quotation for price and delivery.

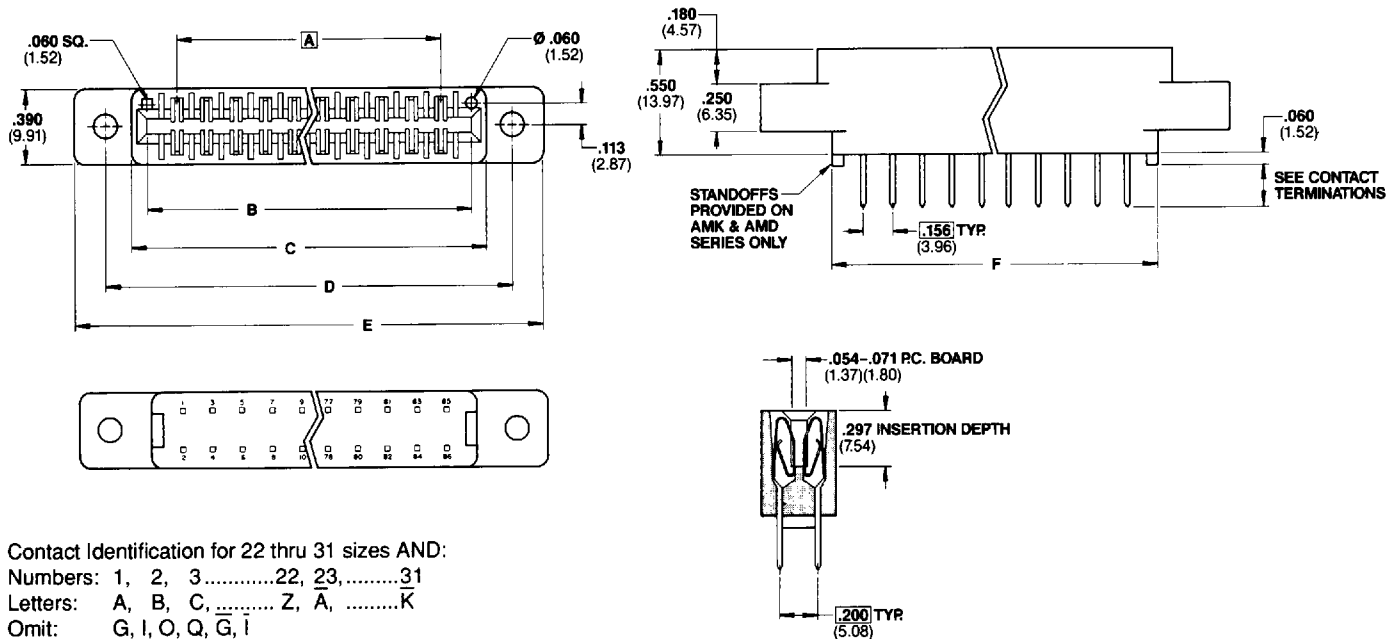
# .156 Contact Centers (3.96 mm)

.156 x .200 grid



The popular 43 position connector used in Intel Multibus® I systems is included in the AMK Series. This round tail dip solder connector has the reliable and cost effective semi-bellows contact. The insulator body includes standoffs to facilitate cleaning after soldering. A 3 level Wire Wrap® termination is also available in the AMD Series. The AND Series is of identical design and construction with the exceptions that there are no standoffs and the card slot is smaller by .018".

## OUTLINE AND DIMENSIONS



Contact Identification for 22 thru 31 sizes AND:  
 Numbers: 1, 2, 3.....22, 23.....31  
 Letters: A, B, C,.....Z, A,.....K  
 Omit: G, I, O, Q, G, I

Contact Identification for 36 thru 43 size AND:  
 Letters: A, B, C,.....Z, A,.....Y  
 Numbers: 1, 2, 3,.....22, 23.....43  
 Omit: G, I, O, Q, G, I, O, Q

Contact Identification for 22 thru 43 size AMD, AMK:  
 Numbers: 1, 3, 5,.....85  
 2, 4, 6,.....86

## POLARIZATION

Between-Contacts  
 Polarizing Key  
 Part No. 091-0024-000  
 See page 34 for further information.

### AMD, AMK SERIES

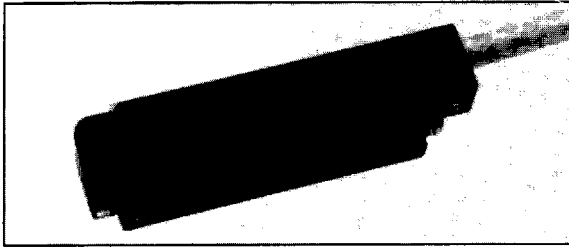
CONTACT POSITIONS	A BSC	B ±.007 (±.18)	C ±.015 (±.38)	D ±.010 (±.25)	E ±.015 (±.38)	F ±.015 (±.38)
22/44	3.276 (83.21)	3.596 (91.34)	3.748 (95.20)	4.030 (102.36)	4.348 (110.44)	3.488 (88.60)
28/56	4.212 (106.98)	4.532 (115.11)	4.684 (118.97)	4.966 (126.14)	5.284 (134.21)	4.424 (112.37)
36/72	5.460 (138.68)	5.780 (146.81)	5.932 (150.67)	6.214 (157.84)	6.532 (165.91)	5.672 (144.07)
43/86	6.552 (166.42)	6.872 (174.55)	7.024 (178.41)	7.306 (185.57)	7.624 (193.65)	6.764 (171.81)

### AND SERIES

CONTACT POSITIONS	A BSC	B ±.007 (±.18)	C ±.015 (±.38)	D ±.010 (±.25)	E ±.015 (±.38)	F ±.015 (±.38)
22/44	3.276 (83.21)	3.578 (90.88)	3.717 (94.41)	4.030 (102.36)	4.280 (108.71)	3.526 (89.56)
28/56	4.212 (106.98)	4.514 (114.66)	4.653 (118.19)	4.966 (126.14)	5.216 (132.49)	4.462 (113.33)
36/72	5.460 (138.68)	5.762 (146.35)	5.901 (149.89)	6.214 (157.84)	6.464 (164.19)	5.710 (145.03)
43/86	6.552 (166.42)	6.854 (174.09)	6.993 (177.62)	7.306 (185.57)	7.556 (191.92)	6.802 (172.77)

Note: Dimensions are in inches and (millimeters). Tolerance ±.010(.25) unless otherwise specified.

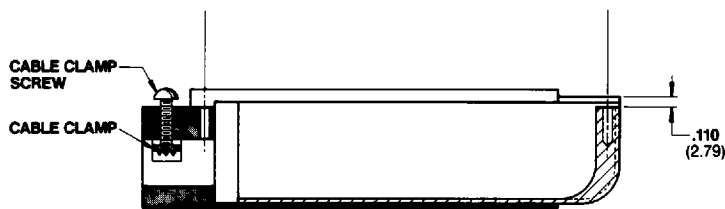
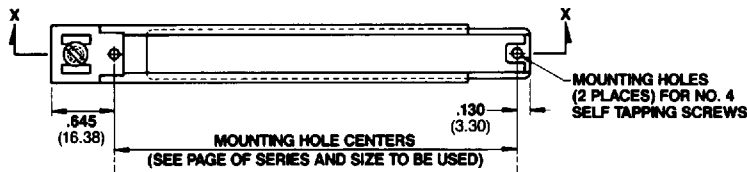
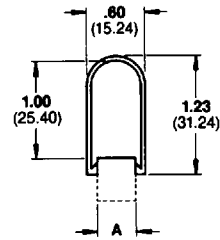
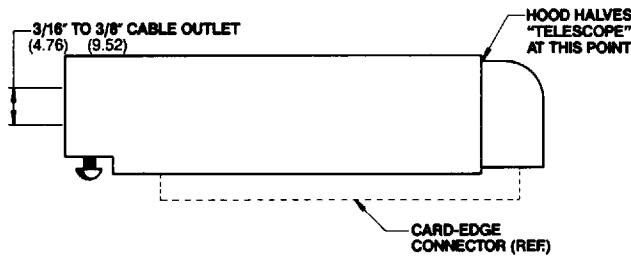
# Hoods with Cable Clamp



Hoods are available for most Viking card-edge connectors with style 5 mounts and suitable contact termination lengths. They are molded in thermoplastic and feature an integral cable clamp for a right-angle cable outlet. The cable clamp has a screw adjustment and accommodates cable sizes from 3/16" (4.76) diameter to 3/8" (9.52) diameter.

A hood assembly consists of two main parts, one of which "telescopes" into the other, thus fitting various lengths of connectors. Three different widths (Dim. "A") are available to suit the various connector series. The hood is secured with two self-tapping screws which are provided. Consult the table to find the correct hood part number for your connector series and size.

## OUTLINE AND DIMENSIONS



### SECTION X-X

Connector Series	Dim. A	Contacts Per Row	Hood Assembly Part No.	Contacts Per Row	Hood Assembly Part No.	Contacts Per Row	Hood Assembly Part No.	Contacts Per Row	Hood Assembly Part No.
LV, LZ	.330	25-30	036-0097-004	40	036-0097-003	64	036-0097-002		
JDD, JE, JN, JV	.330	10	036-0097-004	15-25	036-0097-003	28-35	036-0097-002	36-50	036-0097-001
JND, JNK	.375	15-25	036-0098-003	28-36	036-0098-002	40-50	036-0098-001		
CDD, CE, CN, CV	.330	10-18	036-0097-003	22-28	036-0097-002	31-50	036-0097-001		
CND, CNK	.375	10-18	036-0098-003	22-30	036-0098-002	31-50	036-0098-001		
HNG	.400	18	036-0099-002	28-31	036-0099-001				
AB, ADD, AE, AK, AN, AV	.330	6	036-0097-004	10-15	036-0097-003	18-22	036-0097-002		
AMD, AMK, AND	.400	22	036-0099-002	28-43	036-0099-001				

Note: Dimensions are in inches and (millimeters). Tolerance  $\pm 0.010(.25)$  unless otherwise specified.

Most Viking card-edge connectors have the option of "between-contacts" polarization or "in-contact" polarization.

Connectors with part number prefix "2" or "3" have grooves or slots between contacts into which the polarizing key is pressed. The appropriate "between-contacts" polarizing key is referenced on the data pages for each series. A Viking part number which

does not have a prefix of "2" or "3" does not have the "between-contacts" polarizing option.

If "in-contact" polarizing is desired, a pair of contacts must be removed and replaced by a key as detailed below. Therefore, two circuits are removed in the case of dual "readout" connectors and one circuit is removed in the case of single row connectors.

## BETWEEN-CONTACTS

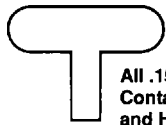


All .100", .125"  
Contact Centers

Part Number: 091-0071-000  
Material: Polyester  
Key is pressed into grooves between contacts.

### SLOT DIMENSIONS

A = .050(1.27)  
B = .350(8.89)



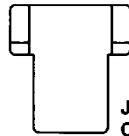
All .156"  
Contact Centers  
and HNG Series

Part Number: 091-0024-000  
Material: GF Polyester  
Key is pressed into slots between contacts.

### SLOT DIMENSIONS

A = .050(1.27)  
B = .350(8.89)

## IN-CONTACT

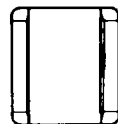


JDD, JE, JN, JV Series  
CDD, CE, CN, CV Series

Part Number: 091-0025-000  
Material: GF Nylon  
Key replaces two opposing contacts.  
Key is pressed into empty contact cavities.

### SLOT DIMENSIONS

A = .070(1.77)  
B = .350(8.89)



JND, JNK Series  
CND, CNK Series  
AMD, AMK, AND Series

Part Number: 091-0051-000  
Material: GF Nylon  
Key replaces two opposing contacts.  
Key is pressed into empty contact cavities.

### SLOT DIMENSIONS

A = .070(1.77)  
B = .350(8.89)



JDD, JE, JN, JV Series  
CDD, CE, CN, CV Series

Part Number: 091-0114-012  
Material: Copper, Gold Plated  
Key replaces two opposing contacts.  
Tail is bent 90° after installation.

### SLOT DIMENSIONS

A = .070(1.77)  
B = .350(8.89)

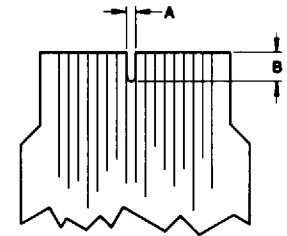


ADD, AE, AKC,  
AN, AV Series  
HN, HV Series

Part Number: 091-0020-012  
Material: Copper, Gold Plated  
Key replaces two opposing contacts.  
Tail is bent 90° after installation.

### SLOT DIMENSIONS

A = .100(2.54)  
B = .350(8.89)



RECOMMENDED SLOT SIZE

# Contact Replacement Tools

## How To Replace Damaged Contacts

### Wire Wrap, Round Tail Dip Solder and Pierced Eyelet Contacts Only

If a contact should become damaged and require replacement, special tools and replacement contacts are available. The technique and necessary tools are detailed below.

### Wire Wrap and Round Tail Dip Solder Series AMD, AMK, AND, CND, CNK, HNG, JND, JNK

Viking's square wrap terminals and round tail dip solder terminals are retained in the insulator body by means of a press fit.

1. The use of an impact tool is suggested in removing the contact but other means can be used. Select the impact tool according to the chart. The impact tool slips over the tail of the damaged contact and is pushed firmly until the tool trips and drives the contact out.
2. Insert a replacement contact into the empty cavity from the front of the connector until the tail protrudes on the termination side.
3. Pull the tail using a pair of pliers until the contact is correctly seated and the tail is of equal length to the other contacts.

W/W Series	Replacement Contact	D/S Series	Replacement Contact	Impact Tool
AMD, AND	018-1140-002	AMK	018-1149-002	000407-0085
CND	018-1141-002	CNK	018-1151-002	000407-0085
HNG	018-0526-002			000407-0093
JND	018-1140-002	JNK	018-1149-002	000407-0085

### Pierced Eyelet Series AN, CN, HN, JN

Viking's pierced eyelet terminals are retained in the insulator body by a dimple at the point where the tail enters the insulator.

1. Using the cut-off tool, cut off the tail at the "dimpled" area and remove the damaged contact.
2. Insert a replacement contact into the empty cavity from the front of the connector until it is completely seated.
3. While holding the contact in the seated position, place the dimple tool over the tail and squeeze to form a dimple on the flat metal at the base of the insulator. The dimple should preferably face out from the center of the connector. The dimple retains the contact in the insulator.

Pierced Series	Replacement Contact	Cut-Off Tool	Dimple Tool
AN	018-0906-002	115-0109-000	115-0108-000
CN	018-0905-002	115-0531-000	115-0532-000
HN	018-0028-002	115-0109-000	115-0108-000
JN	018-0905-002	115-0533-000	115-0534-000

