

[INCH-POUND]  
A-A-59590/3A  
21 June 2002  
SUPERSEDING  
A-A-59590/3  
27 November 2000

COMMERCIAL ITEM DESCRIPTION  
SPECIFICATION SHEET

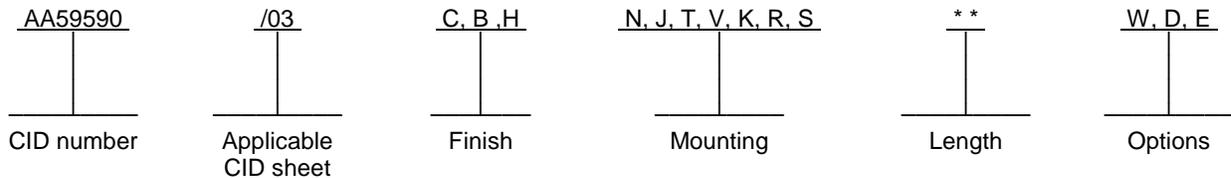
HOLDERS, ELECTRICAL CARD, WEDGE RETAINERS, 3 PIECE,  
SCREW ACTUATED DRIVE, .225 X .260 INCH BODY SIZE, WITH VISUAL LOCK INDICATION

The General Services Administration has authorized the use of this commercial item description (CID) for all federal agencies.

The complete requirements for procuring electrical card holders described herein shall consist of this document and the latest issue in effect of A-A-59590.

**SCOPE.** This CID specification sheet covers 3 piece card holders that use screw actuated wedges to hold circuit card assemblies into their installed positions in heat sinking devices (cold plates, heat exchanger) or other applications. Card holders covered by this CID are intended to provide 60g/6ms resistance to shock, withstand 25 G-rms of vibration and provide 2 to 4 degrees C/W/inch thermal resistance between the circuit card assemblies and the heat sink surfaces. Items covered by this CID specification sheet are intended for commercial/industrial applications.

**CLASSIFICATION.** This CID specification sheet uses a classification system which is included in the Part Identification Number (PIN) as shown in the following example (see notes).



**SALIENT CHARACTERISTICS.**

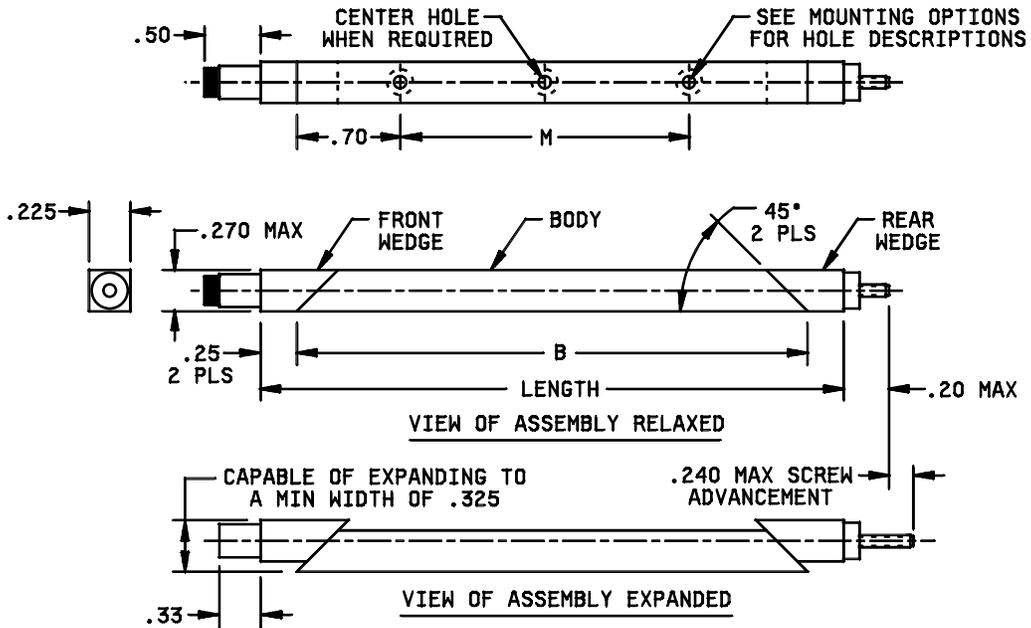
Performance. Card holders shall hold the circuit card firmly in place providing high resistance to shock and vibration while providing maximum thermal transfer.

Interface and physical dimensions. The card holders supplied to this CID specification sheet shall be as specified herein and the general CID.

Expanded and relaxed dimensions. Expanded and relaxed dimensions shall be as specified in figure 1.

Mounting options. The mounting options shall be as specified in A-A-59590.

Mounting holes (when required). Two mounting holes are required on card holders less than 6.00 inches (152.4 mm) in length. Three mounting holes are required on card holders 6.00 inches or greater in length. The third mounting hole shall be centered on the mounting body. See table I and figure 1 for mounting hole spacing requirements.



Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.20	5.1	.240	6.1	.270	6.9	.33	8.4	.70	17.8
.225	5.7	.250	6.4	.325	8.3	.50	12.7		

NOTES:

1. Dimensions are in inches. Metric equivalents are given for information only.
2. Unless otherwise specified, tolerances are  $\pm .02$  (0.5 mm), for 2 places and  $\pm .010$  (0.25 mm), for 3 places.

FIGURE 1. Relaxed and expanded dimensions.

TABLE I. Assembly dimensions.

PIN length designator	Dimension "LENGTH" $\pm .02$ ( $\pm 0.5$ )	Dimension "B" $\pm .03$ ( $\pm 0.8$ )	Dimension "M" $\pm .005$ ( $\pm 0.13$ )
28	2.8 (71.1)	2.30 (58.4)	.90 (22.9)
30	3.0 (76.2)	2.50 (63.5)	1.10 (27.9)
35	3.5 (88.9)	3.00 (76.2)	1.60 (40.6)
38	3.8 (96.5)	3.30 (83.8)	1.90 (48.3)
48	4.8 (121.9)	4.30 (109.2)	2.90 (73.7)
53	5.3 (134.6)	4.80 (121.9)	3.40 (86.4)
55	5.5 (139.7)	5.00 (127.0)	3.60 (91.4)
58	5.8 (147.3)	5.30 (134.6)	3.90 (99.1)
61	6.1 (154.9)	5.60 (142.2)	4.20 (106.7)
67	6.7 (170.2)	6.20 (157.5)	4.80 (121.9)

Visual lock indicator (see figure 2). When the card holder is in the unlocked (relaxed) state, the end of the actuating screw shall display a red band on the side of the screw. When the actuating screw on the card holder has been tightened (assembly expanded) so that the assembly is in the locked position, this red band shall be concealed.

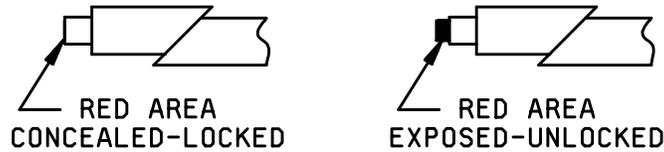


FIGURE 2. Visual lock indicator.

Options. Card holders can have the following options. Card holders not requiring one of the following options shall leave the options position in the PIN blank.

Lockwasher and flat washer (see figure 3). A lockwasher and flat washer located under the screw head will provide for additional resistance to loosening from shock and vibration. Card holders requiring a lockwasher and flat washer option shall include a suffix "W" in the PIN (see classification and notes).

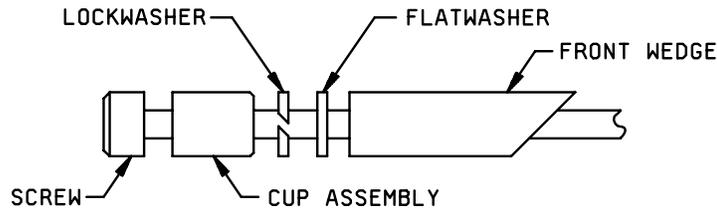


FIGURE 3. Lockwasher and flat washer details.

Screw self-locking element (see figure 4). The use of a screw self-locking element will provide prevailing torque for resistance to loosening from shock vibration. Card holders requiring a screw self-locking element shall include a suffix "E" in the PIN (see classification and notes).

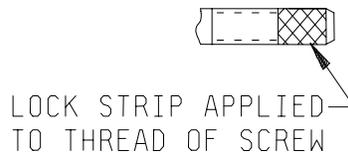


FIGURE 4. Screw self-locking element details.

Lockwasher, flat washer, and screw self-locking element. Card holders requiring a lockwasher, flat washer, and screw self-locking element option shall include a suffix "D" in the PIN (see classification and notes).  
NOTES.

PIN. The PIN should be used for government purposes to buy commercial products to this CID specification sheet. See the classification section for PIN format example.

Commercial products. As part of the market analysis and research effort, this CID specification sheet was coordinated with the following manufacturers of commercial products. At the time of CID specification sheet preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID specification sheet. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

<u>Manufacturer CAGE</u>	<u>Manufacturer name and address</u>	<u>Manufacturer contact information</u>
18915	APW Electronic Solutions 14100 Danielson Street Poway, CA 92064-6898	Tel: (858) 679-4550 Toll Free: (800) 854-7086 Fax: (858) 679-4555 E-mail: sales.electronicsolutions@apw.com URL: www.apw.com
52094	Calmark Corporation 4915 Walnut Grove Avenue San Gabriel, CA 91776-2099	Tel: (626) 287-0451 Fax: (626) 287-7350 E-mail: sales@calmark.com URL: www.calmark.com

Part number supersession data. This CID specification sheet supersedes the following manufacturer's part numbers as shown. This information is being provided to assist in reducing proliferation in the government inventory system.

TABLE II. Commercial part number supersession data. 1/

PIN designator AA59590/03	Vendor similar designator or type part number 2/	Vendor similar designator or type part number 2/
	CAGE 18915	CAGE 52094
CJ28	40VI-6	V225CR2.80H
CN28	40VI-6-A	V225CR2.80
CT28	40VI-6-T	V225CR2.80T0
CV28	40VI-6-S	V225CR2.80T2
CJ28E	40VI-6-L	V225CR2.80HL
CN28E	40VI-6-A-L	V225CR2.80L
CT28E	40VI-6-T-L	V225CR2.80T0L
CV28E	40VI-6-S-L	V225CR2.80T2L
CJ28W	40VI-6-LF	WV225CR2.80H
CN28W	40VI-6-LF-A	WV225CR2.80
CT28W	40VI-6-LF-T	WV225CR2.80T0
CV28W	40VI-6-LF-S	WV225CR2.80T2
CJ28D	40VI-6-LF-L	WV225CR2.80HL
CN28D	40VI-6-LF-A-L	WV225CR2.80L
CT28D	40VI-6-LF-T-L	WV225CR2.80T0L
CV28D	40VI-6-LF-S-L	WV225CR2.80T2L

See footnotes at end of table.

TABLE II. Commercial part number supersession data. 1/ – Continued.

PIN designator AA59590/03	Vendor similar designator or type part number 2/ CAGE 18915	Vendor similar designator or type part number 2/ CAGE 52094
BJ28	40VI-6-B	VA225CR2.80H
BN28	40VI-6-B-A	VA225CR2.80
BT28	40VI-6-B-T	VA225CR2.80T0
BV28	40VI-6-B-S	VA225CR2.80T2
BJ28E	40VI-6-B-L	VA225CR2.80HL
BN28E	40VI-6-B-A-L	VA225CR2.80L
BT28E	40VI-6-B-T-L	VA225CR2.80T0L
BV28E	40VI-6-B-S-L	VA225CR2.80T2L
BJ28W	40VI-6-B-LF	WVA225CR2.80H
BN28W	40VI-6-B-LF-A	WVA225CR2.80
BT28W	40VI-6-B-LF-T	WVA225CR2.80T0
BV28W	40VI-6-B-LF-S	WVA225CR2.80T2
BJ28D	40VI-6-B-LF-L	WVA225CR2.80HL
BN28D	40VI-6-B-LF-A-L	WVA225CR2.80L
BT28D	40VI-6-B-LF-T-L	WVA225CR2.80T0L
BV28D	40VI-6-B-LF-S-L	WVA225CR2.80T2L
HJ28	40VI-6-B3	VHA225CR2.80H
HN28	40VI-6-B3-A	VHA225CR2.80
HT28	40VI-6-B3-T	VHA225CR2.80T0
HV28	40VI-6-B3-S	VHA225CR2.80T2
HJ28E	40VI-6-B3-L	VHA225CR2.80HL
HN28E	40VI-6-B3-A-L	VHA225CR2.80L
HT28E	40VI-6-B3-T-L	VHA225CR2.80T0L
HV28E	40VI-6-B3-S-L	VHA225CR2.80T2L
HJ28W	40VI-6-B3-LF	WVHA225CR2.80H
HN28W	40VI-6-B3-LF-A	WVHA225CR2.80
HT28W	40VI-6-B3-LF-T	WVHA225CR2.80T0
HV28W	40VI-6-B3-LF-S	WVHA225CR2.80T2
HJ28D	40VI-6-B3-LF-L	WVHA225CR2.80HL
HN28D	40VI-6-B3-LF-AL	WVHA225CR2.80L
HT28D	40VI-6-B3-LF-TL	WVHA225CR2.80T0L
HV28D	40VI-6-B3-LF-SL	WVHA225CR2.80T2L

1/ CID PINs listed only with length designator "28".

2/ The manufacturer's part number shall not be used for procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown. For actual part marking requirements, see the marking paragraph of the basic CID.

TABLE III. Example of PIN with available length designators.

PIN designator AA59590/03	Vendor similar designator or type part number <sup>1/</sup> CAGE 18915	PIN designator AA59590/03	Vendor similar designator or type part number <sup>1/</sup> CAGE 52094
CJ28	40VI-6	CJ28	V225CR2.80H
CJ30	40-5010-3.00	CJ30	V225CR3.00H
CJ35	40-5010-3.50	CJ35	V225CR3.50H
CJ38	40VI-8	CJ38	V225CR3.80H
CJ48	40VI-10	CJ48	V225CR4.80H
CK53	40VI-11	CJ50	V225CR5.00H
CJ55	40-5010-5.50	CJ55	V225CR5.50H
CK58	40VI-12	CJ58	V225CR5.80H
CK61	40-5010-6.10	CK61	V225CR6.10EH
CK67	40-5010-6.70	CK67	V225CR6.70EH

<sup>1/</sup> The manufacturer's part number shall not be used for procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown. For actual part marking requirements, see the marking paragraph of the basic CID.

TABLE IV. Supersession information.

Superseded (old) PIN in accordance with DSCC Drawing 84103	Superseding (new) CID PIN	Superseded (old) PIN in accordance with DSCC Drawing 84103	Superseding (new) CID PIN
84103-08B	AA59590/03BJ28	84103-08C	AA59590/03CJ28
84103-09B	AA59590/03BJ30	84103-09C	AA59590/03CJ30
84103-10B	AA59590/03BJ35	84103-10C	AA59590/03CJ35
84103-11B	AA59590/03BJ38	84103-11C	AA59590/03CJ38
84103-12B	AA59590/03BJ48	84103-12C	AA59590/03CJ48
84103-13B	AA59590/03BJ53	84103-13C	AA59590/03CJ53
84103-14B	AA59590/03BJ58	84103-14C	AA59590/03CJ58

MILITARY INTERESTS:

Custodians:  
 Army – CR  
 Navy – EC  
 Air Force – 11  
 DLA – CC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA – 7FXE  
 Preparing Activity  
 DLA – CC  
 Project 5998-0112