

COMMERCIAL ITEM DESCRIPTION  
SPECIFICATION SHEET

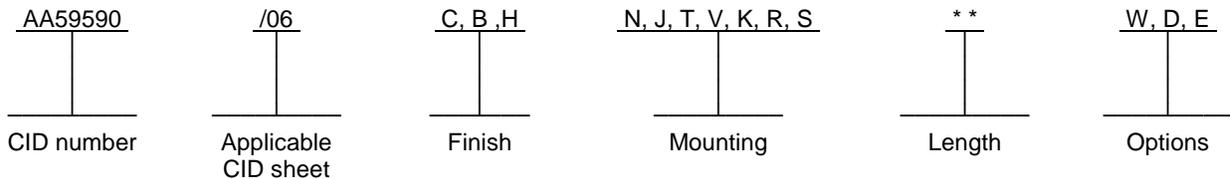
HOLDERS, ELECTRICAL CARD, WEDGE RETAINERS, 3 PIECE, SCREW ACTUATED DRIVE,  
.225 X .260 INCH BODY SIZE, WITH VISUAL LOCK INDICATION AND SCREW RETENTION

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 CID A-A-59590.

**SCOPE.** This CID specification sheet covers three piece card holders with a visual locking indicator feature 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. The screw retention feature is intended to prevent unintentional disassembly of the card holder. 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. Card holders shall have a visual indicator to show when the assembly is in its relaxed (unlocked) state.

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.

Screw retention (locknut). The screw retention feature intended to prevent unintentional disassembly of the card holder shall be as specified in figure 2. The locknut shall be fabricated for corrosion resistance.

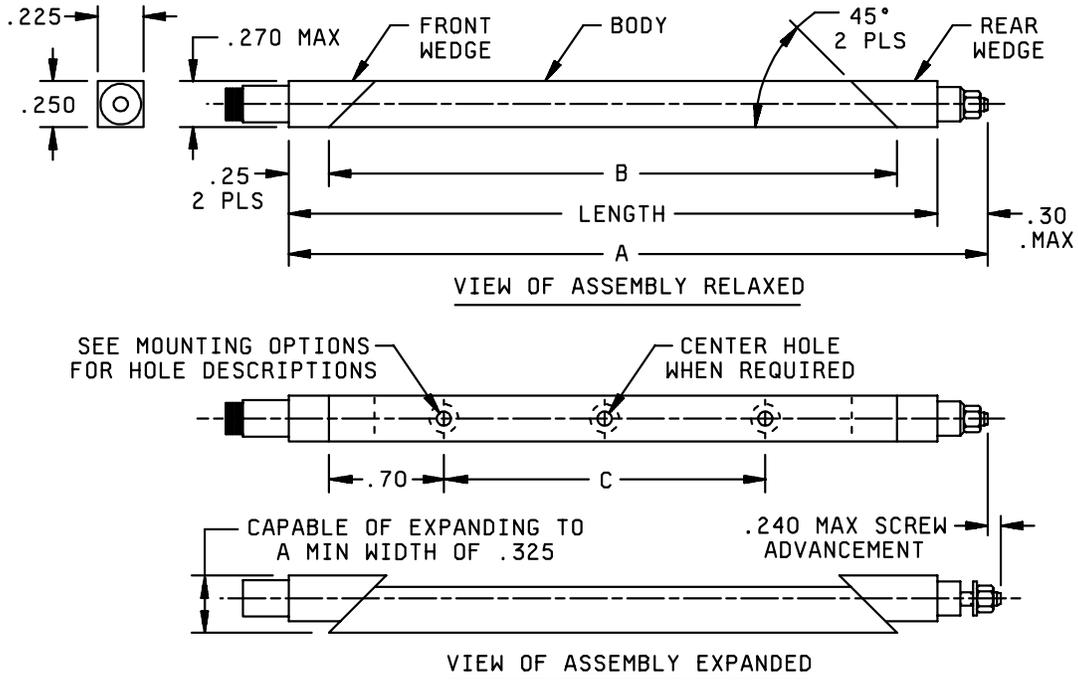


FIGURE 1. Relaxed and expanded dimensions.

TABLE I. Assembly dimensions.

PIN length designator	Dimension "LENGTH" ± .02	Dimension "A" + .02 / — .09		Dimension "B" ± .03	Dimension "C" ± .005
		Without options W or D	With options W or D		
28	2.8 (71.1)	3.30 (83.8)	3.40 (86.4)	2.30 (58.4)	.90 (22.9)
30	3.0 (76.2)	3.50 (88.9)	3.60 (91.4)	2.50 (63.5)	1.10 (27.9)
35	3.5 (88.9)	4.00 (101.6)	4.10 (104.1)	3.00 (76.2)	1.60 (40.6)
38	3.8 (96.5)	4.30 (109.2)	4.40 (111.8)	3.30 (83.8)	1.90 (48.3)
48	4.8 (121.9)	5.30 (134.6)	5.40 (137.2)	4.30 (109.2)	2.90 (73.7)
53	5.3 (134.6)	5.80 (147.3)	5.90 (149.9)	4.80 (121.9)	3.40 (86.4)
55	5.5 (139.7)	6.00 (152.4)	6.10 (154.9)	5.00 (127.0)	3.60 (91.4)
58	5.8 (147.3)	6.30 (160.0)	6.40 (162.6)	5.30 (134.6)	3.90 (99.1)
61	6.1 (154.9)	6.60 (167.6)	6.70 (170.2)	5.60 (142.2)	4.20 (106.7)
67	6.7 (170.2)	7.20 (182.9)	7.30 (185.4)	6.20 (157.5)	4.80 (121.9)

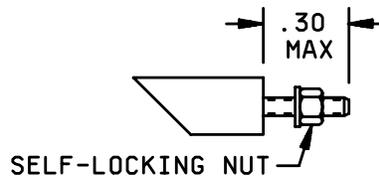


FIGURE 3. Screw retaining self-locking nut (corrosion resistance) details.

Visual lock indicator (see figure 3). 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.

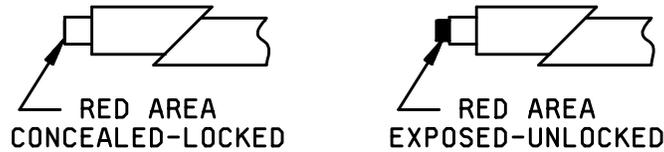


FIGURE 3. Visual lock indicator.

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 flatwasher (see figure 4). A lockwasher and flatwasher located under the screw head will provide for additional resistance to loosening from shock and vibration. Card holders requiring a lockwasher and flatwasher option shall include a suffix "W" in the PIN (see classification and notes).

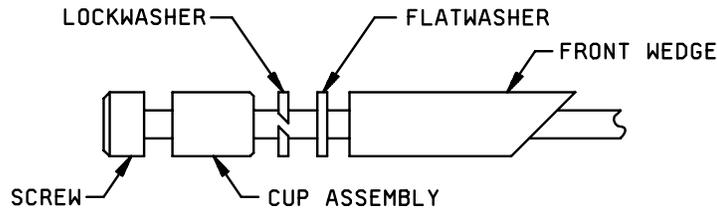


FIGURE 4. Lockwasher and flatwasher details.

Screw self-locking element (see figure 5). 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 5. Screw self-locking element details.

Lockwasher, flatwasher, and screw self-locking element. Card holders requiring a lockwasher, flatwasher, 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 information 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>MFGRs CAGE</u>	<u>MFGRs Name and Address</u>	<u>MGFRs 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 91776-2021	Tel: (626) 287-0451 Fax: (626) 287-7350 E-mail: sales@calmark.com URL: www.calmark.com
71286	Fairchild Fasteners Camloc/Ram Products Division 3000 W. Lomita Blvd. Torrance, CA 90505-5103	Tel: (310) 784-2662 Fax: (310) 784-2628 E-mail: altedesco@fairchildfasteners.com URL: www.fairchildfasteners.com

Part number (P/N) supersession data. These CID specification sheet part numbers supersede the following manufacturer's P/Ns as shown. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE II. Commercial P/N supersession data. 1/

PIN designator AA59590/06	Vendor similar designator or type part number 2/ CAGE 18915	PIN designator AA59590/06	Vendor similar designator or type part number 2/ CAGE 52094
CJ28	40VI-6-LN	CJ28	V225CR2.80HR
CN28	40VI-6-LN-A	CN28	V225CR2.80R
CT28	40VI-6-LN-T	CT28	V225CR2.80T0R
CV28	40VI-6-LN-S	CV28	V225CR2.80T2R
CJ28E	40VI-6-LN-L	CJ28E	V225CR2.80HLR
CN28E	40VI-6-LN-A-L	CN28E	V225CR2.80LR
CT28E	40VI-6-LN-T-L	CT28E	V225CR2.80T0LR
CV28E	40VI-6-LN-S-L	CV28E	V225CR2.80T2LR
CJ28W	40VI-6-LF-LN	CJ28W	WV225CR2.80HR
CN28W	40VI-6-LF-LN-A	CN28W	WV225CR2.80R
CT28W	40VI-6-LF-LN-T	CT28W	WV225CR2.80T0R
CV28W	40VI-6-LF-LN-S	CV28W	WV225CR2.80T2R
CJ28D	40VI-6-LF-LN-L	CJ28D	WV225CR2.80HLR
CN28D	40VI-6-LF-LN-AL	CN28D	WV225CR2.80LR
CT28D	40VI-6-LF-LN-TL	CT28D	WV225CR2.80T0LR
CV28D	40VI-6-LF-LN-SL	CV28D	WV225CR2.80T2LR

See footnotes at end of table.

TABLE II. Commercial P/N supersession data - Continued.

PIN Designator AA59590/06	Vendor similar designator or type part number <sup>2/</sup> CAGE 18915	PIN Designator AA59590/06	Vendor similar designator or type part number <sup>2/</sup> CAGE 52094
BJ28	40VI-6-B-LN	BJ28	VA225CR2.80HR
BN28	40VI-6-B-LN-A	BN28	VA225CR2.80R
BT28	40VI-6-B-LN-T	BT28	VA225CR2.80T0R
BV28	40VI-6-B-LN-S	BV28	VA225CR2.80T2R
BJ28E	40VI-6-B-LN-L	BJ28E	VA225CR2.80HLR
BN28E	40VI-6-B-LN-A-L	BN28E	VA225CR2.80LR
BT28E	40VI-6-B-LN-T-L	BT28E	VA225CR2.80T0LR
BV28E	40VI-6-B-LN-S-L	BV28E	VA225CR2.80T2LR
BJ28W	40VI-6-B-LF-LN	BJ28W	WVA225CR2.80HR
BN28W	40VI-6-B-LF-LNA	BN28W	WVA225CR2.80R
BT28W	40VI-6-B-LF-LNT	BT28W	WVA225CR2.80T0R
BV28W	40VI-6-B-LF-LNS	BV28W	WVA225CR2.80T2R
BJ28D	40VI-6-B-LF-LNL	BJ28D	WVA225CR2.80HLR
BN28D	40VI-6-B-LFLNAL	BN28D	WVA225CR2.80LR
BT28D	40VI-6-B-LFLNLT	BT28D	WVA225CR2.80T0LR
BV28D	40VI-6-B-LFLNSL	BV28D	WVA225CR2.80T2LR
HJ28	40VI-6-B3-LN	HJ28	VHA225CR2.80HR
HN28	40VI-6-B3-LN-A	HN28	VHA225CR28.0R
HT28	40VI-6-B3-LN-T	HT28	VHA225CR2.80T0R
HV28	40VI-6-B3-LN-S	HV28	VHA225CR2.80T2R
HJ28E	40VI-6-B3-LN-L	HJ28E	VHA225CR2.80HLR
HN28E	40VI-6-B3-LN-AL	HN28E	VHA225CR2.80LR
HT28E	40VI-6-B3-LN-TL	HT28E	VHA225CR2.80T0LR
HV28E	40VI-6-B3-LN-SL	HV28E	VHA225CR2.80T2LR
HJ28W	40VI-6-B3-LF-LN	HJ28W	WVHA225CR2.80HR
HN28W	40VI-6-B3-LFLNA	HN28W	WVHA225CR2.80R
HT28W	40VI-6-B3-LFLNT	HT28W	WVHA225CR2.80T0R
HV28W	40VI-6-B3-LFLNS	HV28W	WVHA225CR2.80T2R
HJ28D	40VI-6-B3-LFLNL	HJ28D	WVHA225CR2.80HLR
HN28D	40VI-6-B3LFLNAL	HN28D	WVHA225CR2.80LR
HT28D	40VI-6-B3LFLNLT	HT28D	WVHA225CR2.80T0LR
HV28D	40VI-6-B3LFLNSL	HV28D	WVHA225CR2.80T2LR

1/ CID PINs listed only with length designator "28".  
 2/ The manufacturer's P/N 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 AA59590/06	Vendor similar designator or type part number <sup>1/</sup> CAGE 18915	PIN Designator AA59590/06	Vendor similar designator or type part number <sup>1/</sup> CAGE 52094
CJ28	40VI-6-LN	CJ28	V225CR2.80HR
CJ30	40-5012-3.00	CJ30	V225CR3.00HR
CJ35	40-5012-3.50	CJ35	V225CR3.50HR
CJ38	40VI-8-LN	CJ38	V225CR3.80HR
CJ48	40VI-10-LN	CJ48	V225CR4.80HR
CK53	40VI-11-LN	CJ53	V225CR5.30HR
CJ55	40-5012-5.50	CJ55	V225CR5.50HR
CK58	40VI-12-LN	CJ58	V225CR5.80HR
CK61	40-5012-6.10-S	CJ61	V225CR6.10EHR
CK67	40-5012-6.70-S	CJ67	V225CR6.70EHR

<sup>1/</sup> The manufacturer's P/N 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	AA59590/06BJ28	84103-08C	AA59590/06CJ28
84103-09B	AA59590/06BJ30	84103-09C	AA59590/06CJ30
84103-10B	AA59590/06BJ35	84103-10C	AA59590/06CJ35
84103-11B	AA59590/06BJ38	84103-11C	AA59590/06CJ38
84103-12B	AA59590/06BJ48	84103-12C	AA59590/06CJ48
84103-13B	AA59590/06BJ53	84103-13C	AA59590/06CJ53
84103-14B	AA59590/06BJ58	84103-14C	AA59590/06CJ58

MILITARY INTERESTS:

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

Review activity:  
 Army – MI

CIVIL AGENCY COORDINATING ACTIVITY:

GSA – 7FXE  
 Preparing Activity  
 DLA – CC  
 Project 5998-0101