

COMMERCIAL ITEM DESCRIPTION  
SPECIFICATION SHEET

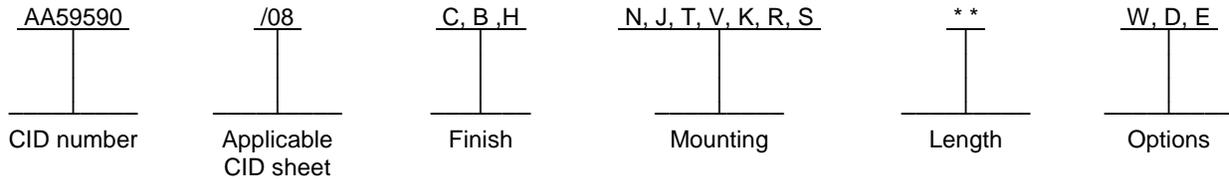
HOLDERS, ELECTRICAL CARD, WEDGE RETAINERS, 3 PIECE, SCREW ACTUATED DRIVE,  
.220 X .220 INCH BODY SIZE, WITH VISUAL LOCK INDICATION

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 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. 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.

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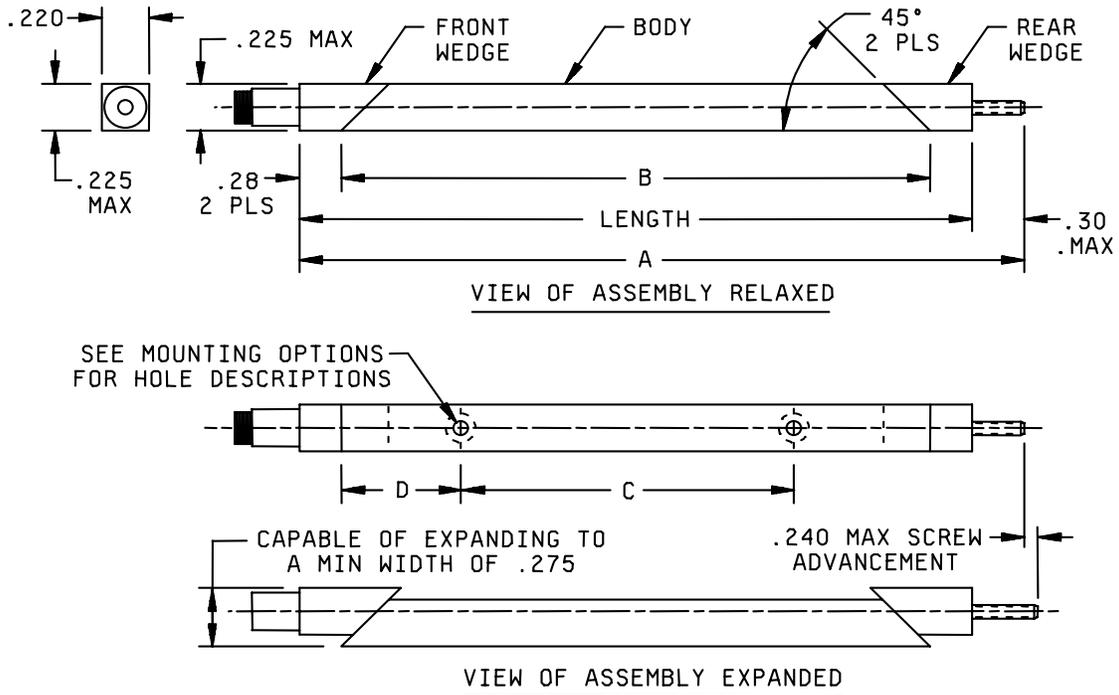


FIGURE 1. Relaxed and expanded dimensions.

TABLE I. Assembly dimensions.

PIN length designator	Dimension "LENGTH" ± 02	Dimension "A" + .02 / — .09	Dimension "B" ± .03	Dimension "C" ± .005	Dimension "D"
28	2.8 (71.1)	3.10 (78.7)	2.24 (56.9)	.90 (22.9)	.70 (17.8)
30	3.0 (76.2)	3.30 (83.8)	2.44 (62.0)	1.10 (27.9)	.70 (17.8)
35	3.5 (88.9)	3.80 (96.5)	2.94 (74.7)	1.60 (40.6)	.70 (17.8)
38	3.8 (96.5)	4.10 (104.1)	3.24 (82.3)	1.90 (48.3)	.70 (17.8)
48	4.8 (121.9)	5.10 (129.5)	4.24 (107.7)	2.90 (73.7)	.70 (17.8)
53	5.3 (134.6)	5.60 (142.2)	4.74 (120.4)	3.40 (86.4)	.70 (17.8)
58	5.8 (147.3)	6.10 (154.9)	5.24 (133.1)	3.90 (99.1)	.70 (17.8)

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.

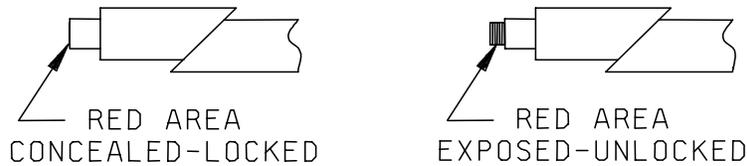


FIGURE 2. Visual lock indicator.

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 flatwasher (see figure 3). 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).

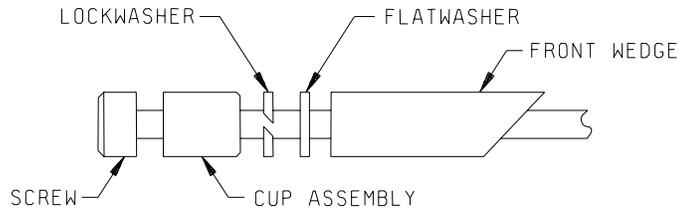


FIGURE 3. Lockwasher and flatwasher details.

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).

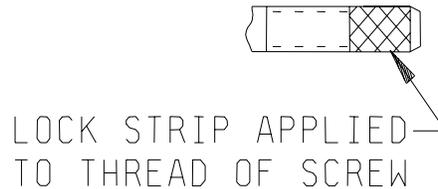


FIGURE 4. Screw self-locking element details.

Lockwasher, 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.electronicssolutions@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
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 AA59590/08	Vendor similar Designator or type part number 2/ CAGE 18915	PIN designator AA59590/08	Vendor similar Designator or type part number 2/ CAGE 52094
CJ28	42VI-6	CJ28	V230-2.80H
CN28	42VI-6-A	CN28	V230-2.80
CT28	42VI-6-T	CT28	V230-2.80T0
CV28	42VI-6-S	CV28	V230-2.80T2
CJ28E	42VI-6-L	CJ28E	V230-2.80HL
CN28E	42VI-6-A-L	CN28E	V230-2.80L
CT28E	42VI-6-T-L	CT28E	V230-2.80T0L
CV28E	42VI-6-S-L	CV28E	V230-2.80T2L
CJ28W	42VI-6-LF	CJ28W	WV230-2.80H
CN28W	42VI-6-LF-A	CN28W	WV230-2.80
CT28W	42VI-6-LF-T	CT28W	WV230-2.80T0
CV28W	42VI-6-LF-S	CV28W	WV230-2.80T2
CJ28D	42VI-6-LF-L	CJ28D	WV230-2.80HL
CN28D	42VI-6-LF-A-L	CN28D	WV230-2.80L
CT28D	42VI-6-LF-T-L	CT28D	WV230-2.80T0L
CV28D	42VI-6-LF-S-L	CV28D	WV230-2.80T2L

See footnotes at end of table.

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

PIN designator AA59590/08	Vendor similar Designator or type part number <sup>2/</sup> CAGE 18915	PIN designator AA59590/08	Vendor similar designator or type part number <sup>2/</sup> CAGE 52094
BJ28	42VI-6-B	BJ28	VA230-2.80H
BN28	42VI-6-B-A	BN28	VA230-2.80
BT28	42VI-6-B-T	BT28	VA230-2.80T0
BV28	42VI-6-B-S	BV28	VA230-2.80T2
BJ28E	42VI-6-B-L	BJ28E	VA230-2.80HL
BN28E	42VI-6-B-A-L	BN28E	VA230-2.80L
BT28E	42VI-6-B-T-L	BT28E	VA230-2.80T0L
BV28E	42VI-6-B-S-L	BV28E	VA230-2.80T2L
BJ28W	42VI-6-B-LF	BJ28W	WVA230-2.80H
BN28W	42VI-6-B-LF-A	BN28W	WVA230-2.80
BT28W	42VI-6-B-LF-T	BT28W	WVA230-2.80T0
BV28W	42VI-6-B-LF-S	BV28W	WVA230-2.80T2
BJ28D	42VI-6-B-LF-L	BJ28D	WVA230-2.80HL
BN28D	42VI-6-B-LF-A-L	BN28D	WVA230-2.80L
BT28D	42VI-6-B-LF-T-L	BT28D	WVA230-2.80T0L
BV28D	42VI-6-B-LF-S-L	BV28D	WVA230-2.80T2L
HJ28	42VI-6-B3	HJ28	VHA230-2.80H
HN28	42VI-6-B3-A	HN28	VHA230-2.80
HT28	42VI-6-B3-T	HT28	VHA230-2.80T0
HV28	42VI-6-B3-S	HV28	VHA230-2.80T2
HJ28E	42VI-6-B3-L	HJ28E	VHA230-2.80HL
HN28E	42VI-6-B3-A-L-	HN28E	VHA230-2.80L
HT28E	42VI-6-B3-T-L-	HT28E	VHA230-2.80T0L
HV28E	42VI-6-B3-S-L-	HV28E	VHA230-2.80T2L
HJ28W	42VI-6-B3-LF	HJ28W	WVHA230-2.80H
HN28W	42VI-6-B3-LF-A	HN28W	WVHA230-2.80
HT28W	42VI-6-B3-LF-T	HT28W	WVHA230-2.80T0
HV28W	42VI-6-B3-LF-S	HV28W	WVHA230-2.80T2
HJ28D	42VI-6-B3-LF-L	HJ28D	WVHA230-2.80HL
HN28D	42VI-6-B3-LF-A-L	HN28D	WVHA230-2.80L
HT28D	42VI-6-B3-LF-T-L	HT28D	WVHA230-2.80T0L
HV28D	42VI-6-B3-LF-S-L	HV28D	WVHA230-2.80T2L

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

<sup>2/</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 III. Example of PIN with available length designators.

PIN designator AA59590/08	Vendor similar designator or type part number <u>1/</u> CAGE 18915	PIN designator AA59590/08	Vendor similar designator or type part number <u>1/</u> CAGE 52094
CJ28	42VI-6	CJ28	V230-2.80H
CJ30	42VI-1084-3.00	CJ30	V230-3.00H
CJ35	42VI-1084-3.50	CJ35	V230-3.50H
CJ38	42VI-8	CJ38	V230-3.80H
CJ48	42VI-10	CJ48	V230-4.80H
CK53	42VI-11	CJ53	V230-5.30H
CK58	42VI-12	CJ58	V230-5.80H

1/ 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.

MILITARY INTERESTS:

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

Review activities:  
 Army – MI

CIVIL AGENCY COORDINATING ACTIVITY:

GSA – 7FXE  
 Preparing Activity  
 DLA – CC

Project 5998-0104