

COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

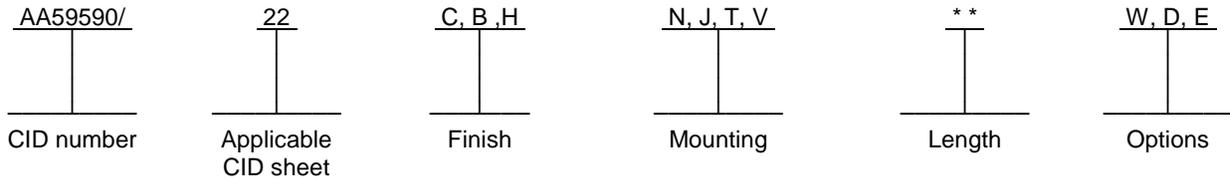
HOLDERS, ELECTRICAL CARD, WEDGE RETAINERS, 3 PIECE, SCREW
ACTUATED DRIVE, .500 X .450 INCH BODY SIZE, WITH VISUAL LOCK INDICATION

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 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 1 to 2 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.

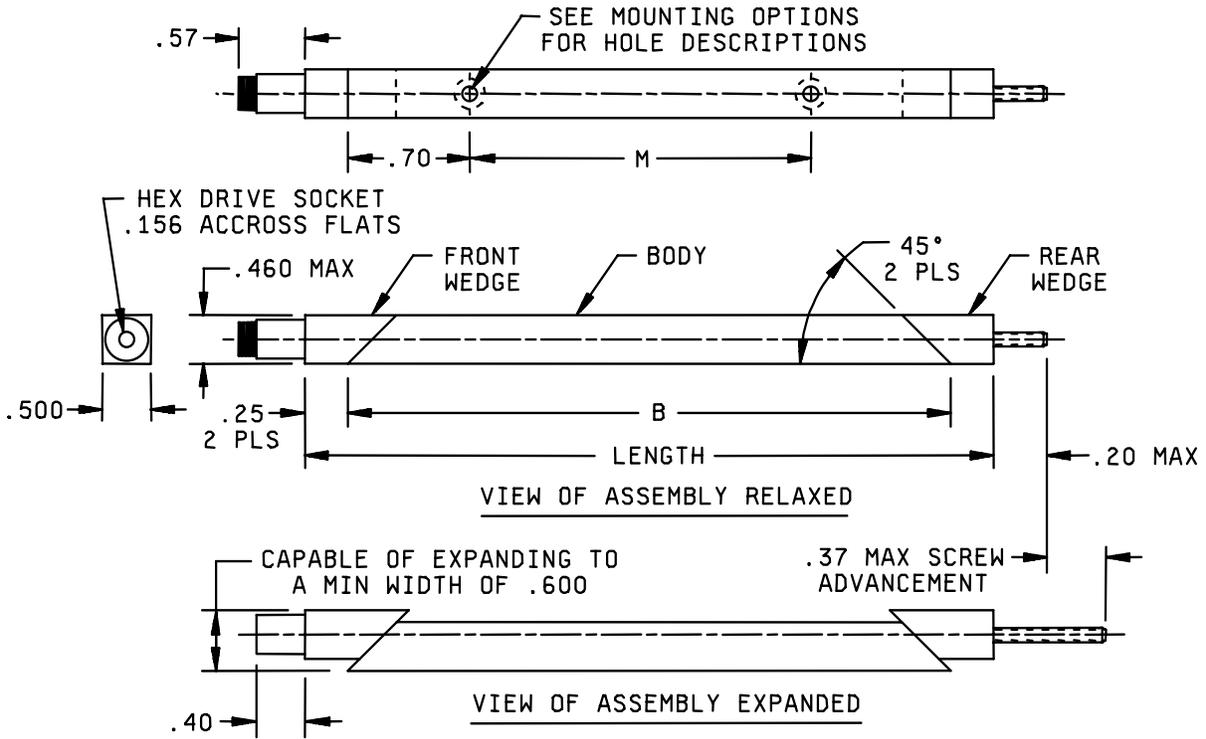
Performance. Card holders shall hold the circuit card firmly in place providing high resistance to shock and vibration while providing maximum thermal transfer when properly installed. The recommended installation torque for the card holder is 31 inch-pounds (3.5 N-m) for the standard screw and 35 inch-pounds (4.0 N-m) for screws with self-locking element. 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.

Finish options. The finish options C, B or H, shall be as specified in A-A-59590.

Mounting options. The mounting options N, J, T or V shall be as specified in A-A-59590. When specified, two mounting holes are required on card holders less than 6.00 inches (152.4 mm) in length. See table I and figure 1 for mounting hole spacing requirements.

Length, expanded and relaxed dimensions. The length, expanded and relaxed dimensions shall be as specified in figure 1. The length designator shall be as specified in A-A-59590 and the available lengths are listed in table I.



Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.156	3.96	.25	6.4	.40	10.2	.500	12.70	.600	15.24
.20	5.1	.37	9.4	.460	11.68	.57	14.5	.70	17.8

NOTES:

1. Dimensions are in inches. Metric equivalents are given for information only.
2. Unless otherwise specified, tolerances are ± 0.02 (0.5 mm), for 2 places and ± 0.010 (0.25 mm), for 3 places.

FIGURE 1. Assembly configuration and dimensions.

TABLE I. Additional assembly dimensions (see figure 1).

PIN length designator	Dimension "LENGTH" $\pm .02$	Dimension "B" $\pm .03$	Dimension "M" $\pm .005$
28	2.8 (71)	2.30 (58.4)	.90 (22.9)
38	3.8 (97)	3.30 (76.2)	1.90 (48.3)
48	4.8 (122)	4.30 (101.7)	2.90 (73.7)
58	5.8 (147)	5.30 (127.0)	3.90 (99.1)

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.

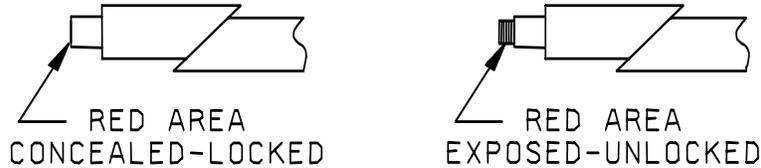


FIGURE 2 Visual lock indicator.

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).

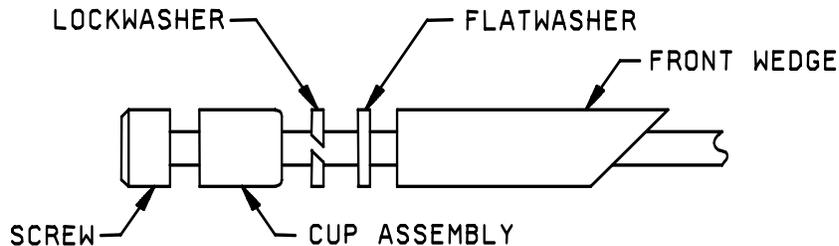


FIGURE 3. Lockwasher and flat washer details.

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>
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 part numbers 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/

<u>PIN designator</u> AA59590/22	<u>Vendor similar designator or type part number 2/</u> CAGE 52094	<u>PIN designator</u> AA59590/22	<u>Vendor similar designator or type part number 2/</u> CAGE 52094
CJ28	V255-2.80H	CJ28W	WV255-2.80H
CN28	V255-2.80	CN28W	WV255-2.80
CT28	V255-2.80T0	CT28W	WV255-2.80T0
CV28	V255-2.80T2	CV28W	WV255-2.80T2
CJ28E	V255-2.80HL	CJ28D	WV255-2.80HL
CN28E	V255-2.80L	CN28D	WV255-2.80L
CT28E	V255-2.80T0L	CT28D	WV255-2.80T0L
CV28E	V255-2.80T2L	CV28D	WV255-2.80T2L
BJ28	VA255-2.80H	BJ28W	WVA255-2.80H
BN28	VA255-2.80	BN28W	WVA255-2.80
BT28	VA255-2.80T0	BT28W	WVA255-2.80T0
BV28	VA255-2.80T2	BV28W	WVA255-2.80T2
BJ28E	VA255-2.80HL	BJ28D	WVA255-2.80HL
BN28E	VA255-2.80L	BN28D	WVA255-2.80L
BT28E	VA255-2.80T0L	BT28D	WVA255-2.80T0L
BV28E	VA255-2.80T2L	BV28D	WVA255-2.80T2L

See footnotes at end of table.

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

PIN designator AA59590/22	Vendor similar designator or type part number <u>2/</u> CAGE 52094	PIN designator AA59590/22	Vendor similar designator or type part number <u>2/</u> CAGE 52094
HJ28	VHA255-2.80H	HJ28W	WVHA255-2.80H
HN28	VHA255-2.80	HN28W	WVHA255-2.80
HT28	VHA255-2.80T0	HT28W	WVHA255-2.80T0
HV28	VHA255-2.80T2	HV28W	WVHA255-2.80T2
HJ28E	VHA255-2.80HL	HJ28D	WVHA255-2.80HL
HN28E	VHA255-2.80L	HN28D	WVHA255-2.80L
HT28E	VHA255-2.80T0L	HT28D	WVHA255-2.80T0L
HV28E	VHA255-2.80T2L	HV28D	WVHA255-2.80T2L

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 AA59590/22	Vendor similar designator or type part number <u>1/</u> CAGE 52094
CJ28	255-2.80H
CJ38	255-3.80H
CJ48	255-4.80H
CJ58	255-5.80H

1/ 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.

MILITARY INTERESTS:

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

CIVIL AGENCY COORDINATING ACTIVITY:

GSA – 7FXE
 Preparing Activity
 DLA – CC
 Project 5998-0122