

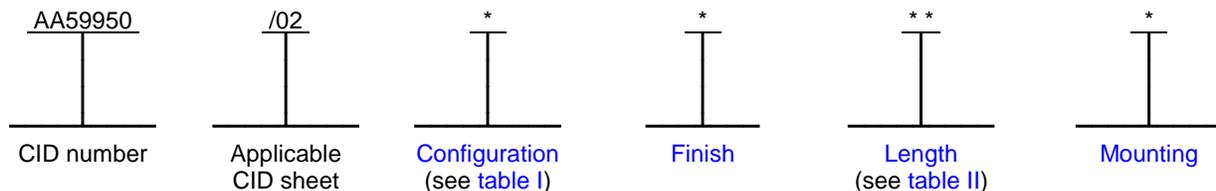
COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

HOLDER, ELECTRICAL CARD, WEDGE RETAINERS, 7 PIECE, FOR COLD PLATE APPLICATIONS,
.225 X .225 INCH (5.72 x 5.72 mm) BODY SIZE, SCREW ACTUATED SHAFT, WITH VISUAL LOCK INDICATION

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

The complete requirements for procuring shaft mounted 7 wedge card holders described herein shall consist of this document and the latest issue in effect of [A-A-59950](#).

CLASSIFICATION/PART IDENTIFICATION NUMBER (PIN). This commercial item description (CID) specification sheet uses a classification system which is included in the Part Identification Number (PIN) as shown in the following example (see [notes](#) herein).



Example: AA59950/02LC58R is the PIN for a gold chemical film, 5.8 inch (147 mm) long card holder with a visual lock indicator. The card holder also features a self-locking element on the actuation screw and two counterbore and countersink holes for rivet mounting.

SALIENT CHARACTERISTICS.

Performance. Card holders shall hold the circuit card assembly it is attached to firmly in its installed position and prevent loosening or movement as a result of shock and vibration. Card holders shall have a visual indicator to show when the assembly is in its relaxed (unlocked) and expanded (locked) state. The card holder shall also provide a thermal transfer path from the circuit card assembly to the cold plate or heat sink surfaces.

Interface and physical dimensions. The card holders supplied to this CID specification sheet shall be as specified herein and meet the general requirements specified in CID [A-A-59950](#).

Material. Unless otherwise specified herein, the card holder materials shall be as specified in [A-A-59950](#).

Actuating screw hex drive socket. The across flats dimension for hex drive socket shall be .098 inch (2.38 mm) for mounting options "R" and "S" and .098 inch (2.5 mm) for mounting option "M".

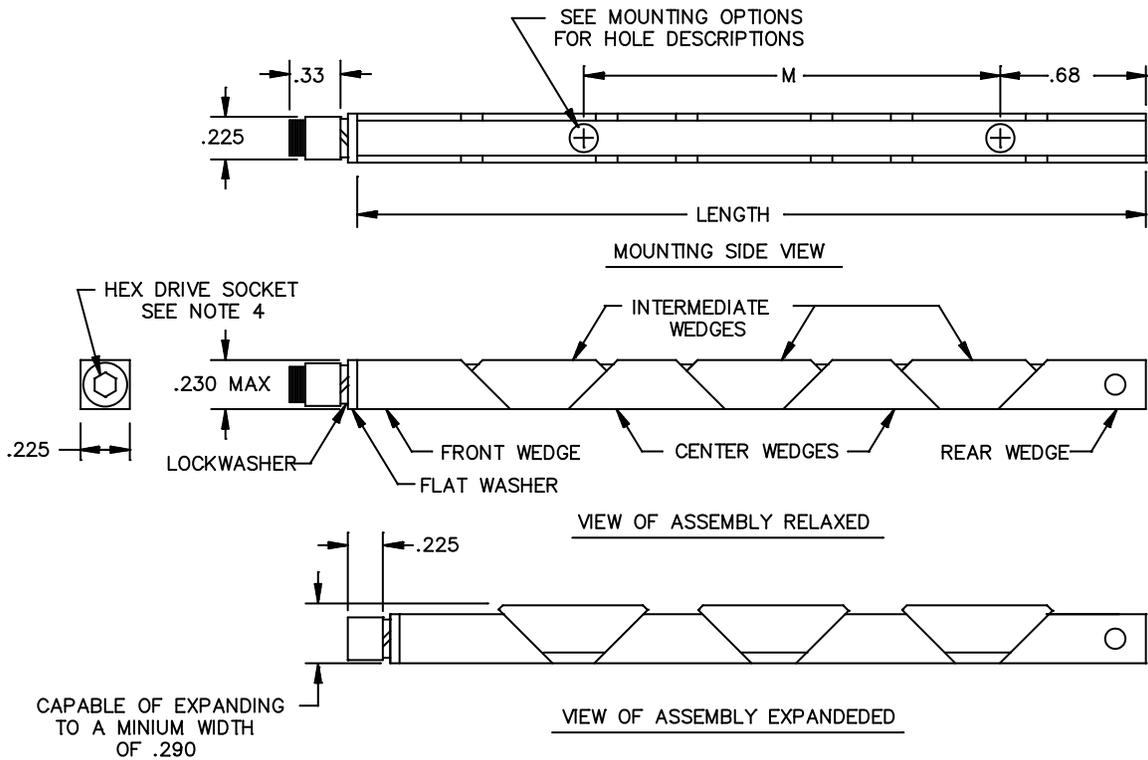
Cold plate slot width. The recommended cold plate slot width to accommodate the circuit card assembly with attached card holder is .250 inch (mm) plus the thickness of the printed board of the circuit card assembly (see [A-A-59950](#)).

Installation torque. The recommended nominal installation torque is as follows: 6 inch-pounds (0.68 N-m) for assemblies of configuration "C" and "E" and 7 to 8 inch-pounds (0.79 to 0.90 N-m) for assemblies of configurations "L" and "D".

Configuration. The configuration of card holders shall be as specified in [table I](#). The details of a particular configuration consist of those on [figures 1](#) and [2](#) and may include those on [figures 3](#) or [4](#).

TABLE I. Configuration.

Configuration	Applicable figures	Hardware options
C	1 and 2	No added hardware
L	1, 2 and 3	Screw self-locking element
E	1, 2 and 4	Additional mouning hole
D	1, 2, 3 and 4	Screw self-locking element and additional mounting hole



Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.20	5.1	.225	5.72	.230	5.84	.290	7.37	.33	8.38	.68	17.3

NOTES:

1. Dimensions are in inches. Millimeters are given for general information only.
2. Unless otherwise specified, tolerances are ± 0.02 inch (0.51 mm) for two place decimals and ± 0.010 inch (0.25 mm) for three place decimals.
3. Tolerance for the mounting hole spacing is ± 0.005 inch (0.13 mm).
4. The across flats dimension for actuating screw hex drive socket shall be .094 inch (2.38 mm) or .098 inch (2.5 mm) for the corresponding mounting option (see [hex drive socket details](#)).

FIGURE 1. Relaxed and expanded dimensions.

Finish. The wedge body finish designator shall be as specified in [A-A-59950](#). The finishes available for this CID specification sheet are as follows: "B" (black anodize), "C" (gold chemical film), "E" (electroless nickel), "H" (hard black anodize), or "R" (clear chemical film).

Length, expanded, and relaxed dimensions. The length designator shall be as specified in [A-A-59950](#). The lengths available for this CID specification sheet are listed in table II. The length, expanded, and relaxed dimensions shall be as specified on [figure 1](#).

TABLE II. Additional assembly dimensions (see [figure 1](#)). 1/

PIN length designator	Dimension "LENGTH" ±.02 (0.5 mm)	Dimension "M" ±.005 (0.13 mm)	Dimension "M/2" ±.005 (0.13 mm)
48	4.8 (122 mm)	2.900 (73.66 mm)	1.450 (36.83 mm)
53	5.3 (135 mm)	3.400 (86.36 mm)	1.700 (43.18 mm)
58	5.8 (147 mm)	3.900 (99.06 mm)	1.950 (49.53 mm)
63	6.3 (160 mm)	4.400 (111.76 mm)	2.200 (55.88 mm)
68	6.8 (173 mm)	4.900 (124.46 mm)	2.450 (62.23 mm)
73	7.3 (185 mm)	5.400 (137.16 mm)	2.700 (68.58 mm)
78	7.8 (198 mm)	5.900 (149.86 mm)	2.950 (74.93 mm)

1/ Dimensions are in inches. Millimeters, in parenthesis, are given for general information only.

Visual lock indicator (see figure 2). Card holders shall have a visual indicator to show when the card holder is in its relaxed (unlocked) state. 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.

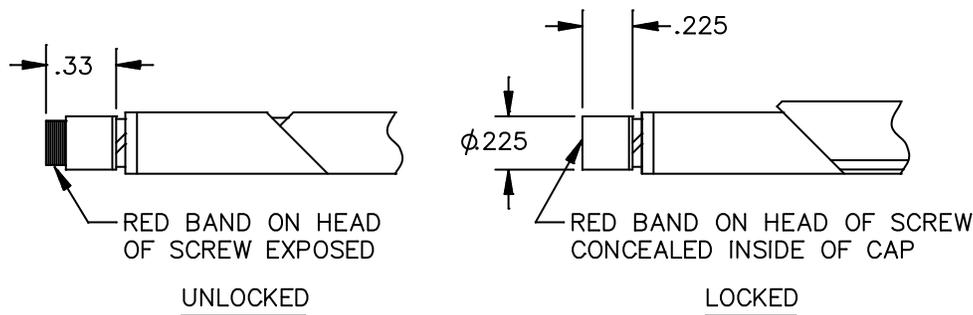


FIGURE 2. Visual lock indicator.

Mounting. The mounting designators shall be as specified in [A-A-59950](#). The mounting options available for this CID specification sheet are as follows: "R" (rivet mount holes with counterbore and countersink), "S" (tapped 2-56 threads), or "M" (tapped metric M2.5 X 0.45 tolerance class 6H threads). See [figure 1](#) and [table I](#) for mounting hole spacing requirements.

Rivet mount holes. The holes used for rivet mounting shall be .068 to .073 inch (1.68 to 1.85 mm) diameter through holes, countersunk 100 degrees by .060 inch (1.52 mm) deep.

Rivets. This card holder uses rivet style A as specified in A-A-59950 when rivet mounting is used.

Configuration hardware options. Card holders can have the following hardware options: no added hardware, screw self-locking element, an additional mounting hole, or a combination of both screw self-locking element and third mounting. See table I for the correct PIN configuration identifier. Card holders requiring no added hardware options shall include configuration identifier "C" in the PIN (see classification and notes section herein).

Screw self-locking element (see figure 3). The use of a screw self-locking element on the screw will provide a prevailing-torque for increased resistance to loosening of the card holder assembly from shock and vibration. The screw self-locking element shall be as specified in A-A-59950. Card holders requiring a screw self-locking element shall include configuration identifier "L" in the PIN (see table I, classification and notes section herein).

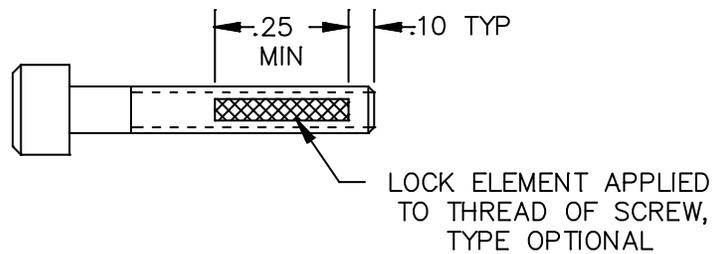


FIGURE 3. Screw self-locking element details.

Additional mounting holes (see figure 4). Card holders requiring an additional mounting hole shall include configuration identifier "E" in the PIN (see table I).

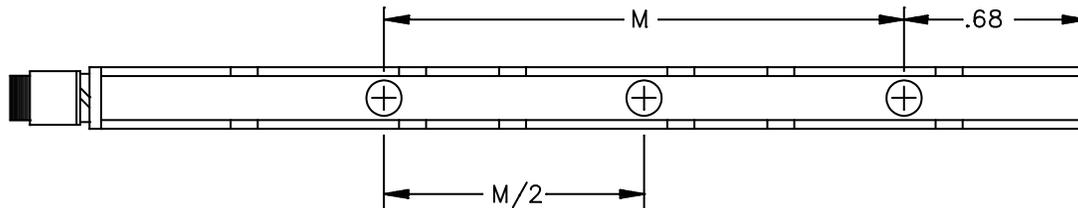


FIGURE 4. Additional mounting hole details.

Screw self-locking element and additional mounting hole. Card holders requiring a screw self-locking element and additional mounting hole options shall include configuration identifier "D" in the PIN (see table I, classification and notes section herein).

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.

Source of documents.

Commercial Item Description

[A-A-59950](#) – Holder, Electrical Card, Wedge Retainers, 7 Piece, For Cold Plate Applications, General Requirements For.

(Copies of these documents are available online at <http://quicksearch.dla.mil>.)

Ordering data. Ordering data shall be as specified in A-A-59950.

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>
3E7U8	Wakefield Solutions 200 Towerview Court Cary, NC 27513	Telephone: (919) 469-2004 Facsimile: (919) 469-2827 E-mail: wedgelocks@wakefield.com URL: www.wakefield-vette.com

Part number supersession data. These CID specification sheet PINs supersede the following manufacturer's part numbers as shown in [table III](#). The CID PINs listed in [table III](#) are only for length designator "48". See [table IV](#) for CID PIN construction using other available lengths for this CID specification sheet. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE III. Commercial part number supersession data.

PIN designator AA59950/02	Vendor similar designator or type part number 1/ 2/		
	CAGE 3E7U8	CAGE	CAGE
CB48M	422C7-480MMB-V		
CB48R	422C7-480RSB-V		
CB48S	422C7-480SSB-V		
LB48M	422C7-480MMB-PV		
LB48R	422C7-480RSB-PV		
LB48S	422C7-480SSB-PV		
EB48M	422C7-480MMB-CV		
EB48R	422C7-480RSB-CV		
EB48S	422C7-480SSB-CV		
DB48M	422C7-480MMB-CPV		
DB48R	422C7-480RSB-CPV		
DB48S	422C7-480SSB-CPV		
CC48M	422C7-480MMG-V		
CC48R	422C7-480RSG-V		
CC48S	422C7-480SSG-V		
LC48M	422C7-480MMG-PV		
LC48R	422C7-480RSG-PV		
LC48S	422C7-480SSG-PV		
EC48M	422C7-480MMG-CV		
EC48R	422C7-480RSG-CV		
EC48S	422C7-480SSG-CV		
DC48M	422C7-480MMG-CPV		
DC48R	422C7-480RSG-CPV		
DC48S	422C7-480SSG-CPV		

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59950/02	Vendor similar designator or type part number 1/ 2/		
	CAGE 3E7U8	CAGE	CAGE
CE48M	422C7-480MME-V		
CE48R	422C7-480RSE-V		
CE48S	422C7-480SSE-V		
LE48M	422C7-480MME-PV		
LE48R	422C7-480RSE-PV		
LE48S	422C7-480SSE-PV		
EE48M	422C7-480MME-CV		
EE48R	422C7-480RSE-CV		
EE48S	422C7-480SSE-CV		
DE48M	422C7-480MME-CPV		
DE48R	422C7-480RSE-CPV		
DE48S	422C7-480SSE-CPV		
CH48M	422C7-480MMH-V		
CH48R	422C7-480RSH-V		
CH48S	422C7-480SSH-V		
LH48M	422C7-480MMH-PV		
LH48R	422C7-480RSH-PV		
LH48S	422C7-480SSH-PV		
EH48M	422C7-480MMH-CV		
EH48R	422C7-480RSH-CV		
EH48S	422C7-480SSH-CV		
DH48M	422C7-480MMH-CPV		
DH48R	422C7-480RSH-CPV		
DH48S	422C7-480SSH-CPV		
CR48M	422C7-480MMT-V		
CR48R	422C7-480RST-V		
CR48S	422C7-480SST-V		
LR48M	422C7-480MMT-PV		
LR48R	422C7-480RST-PV		
LR48S	422C7-480SST-PV		

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59950/02	Vendor similar designator or type part number <u>1/</u> <u>2/</u>		
	CAGE 3E7U8	CAGE	CAGE
ER48M	422C7-480MMT-CV		
ER48R	422C7-480RST-CV		
ER48S	422C7-480SST-CV		
DR48M	422C7-480MMT-CPV		
DR48R	422C7-480RST-CPV		
DR48S	422C7-480SST-CPV		

1/ The CID PINs listed are only for length designator "48".

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 in [A-A-59950](#).

TABLE IV. Example of PIN with available length designators.

PIN designator AA59950/02	Vendor similar designator or type part number <u>1/</u> <u>2/</u>		
	CAGE 3E7U8	CAGE	CAGE
LC48R	422C7-480RSG-PV		
LC53R	422C7-530RSG-PV		
LC58R	422C7-580RSG-PV		
LC63R	422C7-630RSG-PV		
LC68R	422C7-680RSG-PV		
LC73R	422C7-730RSG-PV		
LC78R	422C7-780RSG-PV		

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 in [A-A-59950](#).

2/ Other lengths are available on request.

MILITARY INTERESTS:

Custodians:

Army – CR
Navy – EC
Air Force – 85
DLA – CC

Review activity:

Air Force – 99

CIVIL AGENCY COORDINATING ACTIVITY:

GSA – FAS

Preparing activity:
DLA – CC

Project 5998–2014–002

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.