

[INCH-POUND]
A-A-59789/16A
16 January 2013
Superseding
A-A-59789/16
10 May 2008

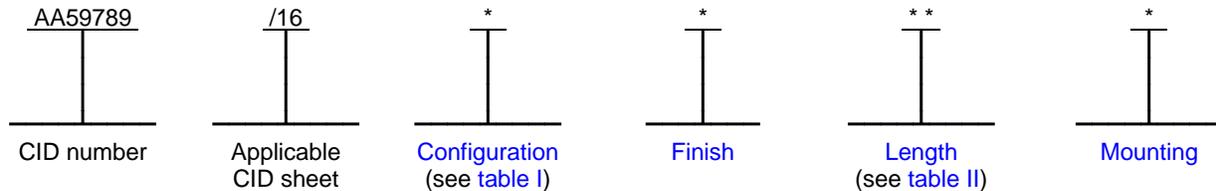
COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

HOLDER, ELECTRICAL CARD, WEDGE RETAINERS, 5 PIECE, FOR COLD PLATE APPLICATIONS,
.365 X .375 INCH BODY SIZE, WITH CAPTIVE REAR WEDGE AND
VISUAL LOCK INDICATION, SCREW ACTUATED

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

The complete requirements for procuring 5 piece card holders described herein shall consist of this document and the
latest issue in effect of [A-A-59789](#).

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: AA59789/16LE40R is the PIN for a nickel finished, 3.8 inch (97 mm) long card holder with a visual lock
indication feature. The card holder also features two counterbored holes for use with rivets and a screw self locking
element for added resistance to loosening.

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. The card holder shall also provide a thermal
transfer path from the circuit card assembly to the cold plate or heat sink surfaces. Card holders shall also have a
visual indicator to show when the assembly is in its relaxed (unlocked) and expanded (locked) state.

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-59789](#).

Material. Unless otherwise specified herein, the card holder materials shall be as specified in [A-A-59789](#).

Actuating screw hex drive socket. The across flats dimension for hex drive socket shall be .140 inch (3.60 mm) for
mounting options "R" and "V" and .118 inch (3.0 mm) for mounting option "Y".

Cold plate slot width. The recommend cold plate slot width to accommodate the circuit card assembly with attached
card holder is .425 inch (10.80 mm) plus the thickness of the printed board of the circuit card assembly (see
[A-A-59789](#)).

Installation torque. The recommended nominal installation torque is as follows: 20 inch-pounds (2.3 N-m) for
assemblies of configuration "C" and "E" and 23 inch-pounds (2.6 N-m) for assemblies of configurations "L" and "D".

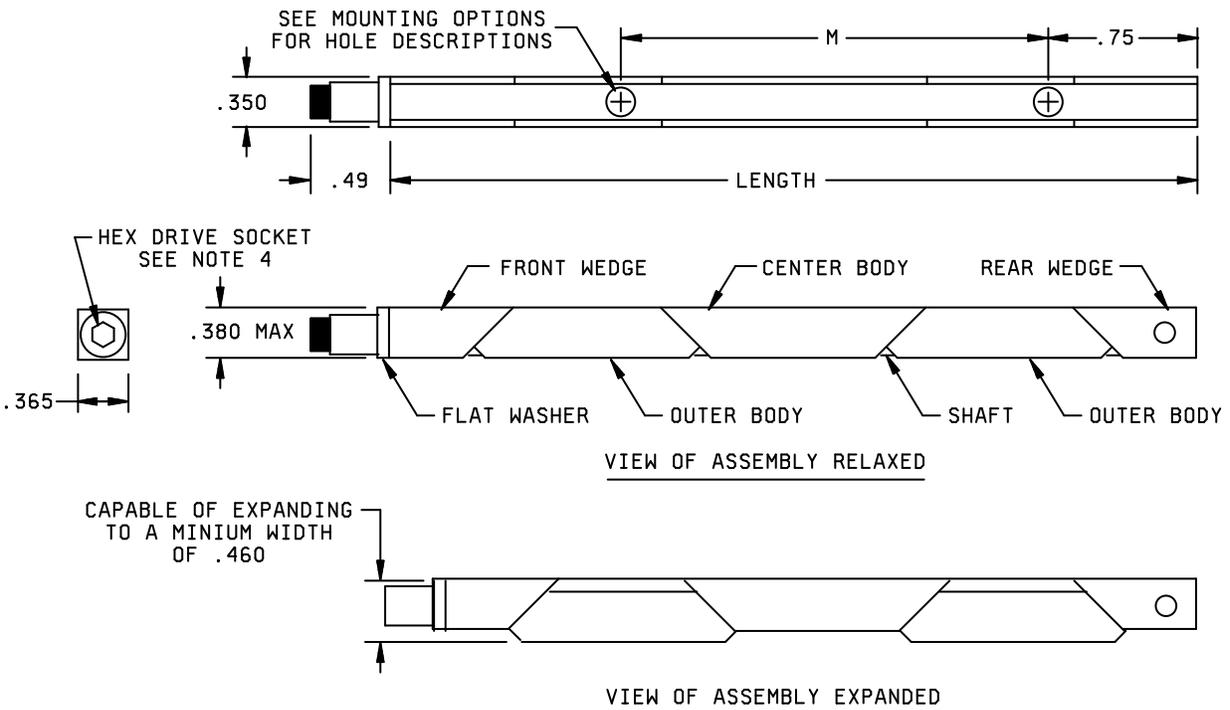
AMSC N/A

FSC 5998

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 mounting hole
D	1, 2, 3, and 4	Screw self-locking element and additional mounting hole



Inches	mm	Inches	mm	Inches	mm
$.350$	8.89	$.380$	9.65	$.49$	12.45
$.365$	9.27	$.460$	11.68	$.75$	19.05

FIGURE 1. Relaxed and expanded dimensions.

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 .140 inch (3.60 mm) or .118 inch (3.0 mm) for the corresponding mounting option (see [hex drive socket](#) details).
5. Configuration shown uses captive nut on rear wedge. Alternate design using threaded insert shall be acceptable.

FIGURE 1. Relaxed and expanded dimensions – Continued.

Visual lock indicator (see figure 2). Card holders shall have a visual indicator to show when the card holder is in its relaxed state (unlocked). When the card holder is in the relaxed state (unlocked), 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 so that the assembly is in the expanded state (locked), this red band shall be concealed.

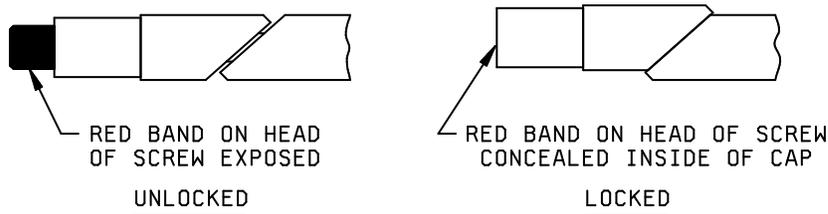


FIGURE 2. Visual lock indicator.

Finish. The wedge body finish designator shall be as specified in [A-A-59789](#). The finishes available for this CID specification sheet are as follows: "B" (black anodize), "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-59789](#). 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" ± 0.02 (0.5 mm)	Dimension "M" ± 0.005 (0.13 mm)	Dimension "M/2" ± 0.005 (0.13 mm)
28	2.8 (71 mm)	.65 (16.5 mm)	.325 (8.26 mm)
38	3.8 (97 mm)	1.65 (41.9 mm)	.825 (20.96 mm)
48	4.8 (122 mm)	2.65 (67.3 mm)	1.325 (33.66 mm)

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

Mounting. The mounting designators shall be as specified in [A-A-59789](#). The mounting options available for this CID specification sheet are as follows: "R" (rivet mount holes with counterbore and countersink), "V" (tapped 4-40 holes), or "M" (tapped metric M3 x 0.5 holes). See [figure 1](#) and [table I](#) for mounting hole spacing requirements.

Rivet mount holes. The holes used for rivet mounting shall be .134 to .139 inch (3.40 to 3.53 mm) diameter through holes, countersunk 100 degrees by .150 inch (3.81 mm) deep.

Rivets. This card holder uses rivet style B as specified in [A-A-59789](#) 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 hole. 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-59789](#). Card holders requiring a screw self-locking element shall include configuration identifier "L" in the PIN (see [table I](#), [classification](#) and [notes](#) section herein).

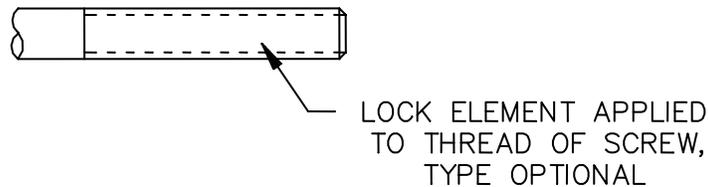


FIGURE 3. [Screw self-locking element details.](#)

Additional mounting hole (see figure 4). Card holders requiring an additional mounting hole shall include configuration identifier "E" in the PIN (see [table I](#), [classification](#) and [notes](#) section herein).

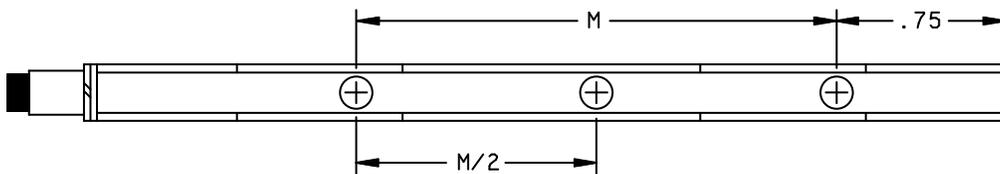


FIGURE 4. [Additional mounting hole details.](#)

Screw self-locking element and additional mounting hole. Card holders requiring a screw self-locking element and an additional mounting hole option 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-59789](#) – Holder, Electrical Card, Wedge Retainers, 5 Piece, For Cold Plate Applications, General Requirements For.

(Copies of these documents are available online at <https://assist.dla.mil/quicksearch> or <https://assist.dla.mil> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

Ordering data. Ordering data shall be as specified in [A-A-59789](#).

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>
61081	Calmark – A Division of Pentair Electronic Packaging 7328 Trade Street San Diego, CA 92121-3410	Telephone: (858) 740-2400 Toll Free: (800) 854-7086 Facsimile: (858) 740-2430 E-mail: sales@calmark.com URL: www.calmark.com
5BG68	American Circuit Card Retainers, Inc. 2310 E. Orangethorpe Avenue Anaheim, CA 92806-1231	Telephone: (714) 738-6194 Facsimile: (714) 446-0119 E-mail: sales@accrmfg.com URL: http://www.accrmfg.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 "50". 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 AA59789/16	Vendor similar designator or type part number <u>1/</u> <u>2/</u>	
	CAGE 61081	CAGE 5BG68
CB50M	VA280-4.80TM3	5280VBA-4.80TM3
CB50R	VA280-4.80H	5280VBA-4.80H
CB50V	VA280-4.80T4	5280VBA-4.80T4
LB50M	VA280-4.80TM3L	5280VBA-4.80TM3L
LB50R	VA280-4.80HL	5280VBA-4.80HL
LB50V	VA280-4.80T4L	5280VBA-4.80T4L
EB50M	VA280-4.80ETM3	5280VBA-4.80ETM3
EB50R	VA280-4.80EH	5280VBA-4.80EH
EB50V	VA280-4.80ET4	5280VBA-4.80ET4
DB50M	VA280-4.80ETM3L	5280VBA-4.80ETM3L
DB50R	VA280-4.80EHL	5280VBA-4.80EHL
DB50V	VA280-4.80ET4L	5280VBA-4.80ET4L
CE50M	VEN280-4.80TM3	5280VEN-4.80TM3
CE50R	VEN280-4.80H	5280VEN-4.80H
CE50V	VEN280-4.80T4	5280VEN-4.80T4
LE50M	VEN280-4.80TM3L	5280VEN-4.80TM3L
LE50R	VEN280-4.80HL	5280VEN-4.80HL
LE50V	VEN280-4.80T4L	5280VEN-4.80T4L
EE50M	VEN280-4.80ETM3	5280VEN-4.80ETM3
EE50R	VEN280-4.80EH	5280VEN-4.80EH
EE50V	VEN280-4.80ET4	5280VEN-4.80ET4
DE50M	VEN280-4.80ETM3L	5280VEN-4.80ETM3L
DE50R	VEN280-4.80EHL	5280VEN-4.80EHL
DE50V	VEN280-4.80ET4L	5280VEN-4.80ET4L

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/16	Vendor similar designator or type part number <u>1/</u> <u>2/</u>	
	CAGE 61081	CAGE 5BG68
CH50M	VHA280-4.80TM3	5280VBH-4.80TM3
CH50R	VHA280-4.80H	5280VBH-4.80H
CH50V	VHA280-4.80T4	5280VBH-4.80T4
LH50M	VHA280-4.80TM3L	5280VBH-4.80TM3L
LH50R	VHA280-4.80HL	5280VBH-4.80HL
LH50V	VHA280-4.80T4L	5280VBH-4.80T4L
EH50M	VHA280-4.80ETM3	5280VBH-4.80ETM3
EH50R	VHA280-4.80EH	5280VBH-4.80EH
EH50V	VHA280-4.80ET4	5280VBH-4.80ET4
DH50M	VHA280-4.80ETM3L	5280VBH-4.80ETM3L
DH50R	VHA280-4.80EHL	5280VBH-4.80EHL
DH50V	VHA280-4.80ET4L	5280VBH-4.80ET4L
CR50M	VR280-4.80TM3	5280VCC-4.80TM3
CR50R	VR280-4.80H	5280VCC-4.80H
CR50V	VR280-4.80T4	5280VCC-4.80T4
LR50M	VR280-4.80TM3L	5280VCC-4.80TM3L
LR50R	VR280-4.80HL	5280VCC-4.80HL
LR50V	VR280-4.80T4L	5280VCC-4.80T4L
ER50M	VR280-4.80ETM3	5280VCC-4.80ETM3
ER50R	VR280-4.80EH	5280VCC-4.80EH
ER50V	VR280-4.80ET4	5280VCC-4.80ET4
DR50M	VR280-4.80ETM3L	5280VCC-4.80ETM3L
DR50R	VR280-4.80EHL	5280VCC-4.80EHL
DR50V	VR280-4.80ET4L	5280VCC-4.80ET4L

1/ The CID PINs listed are only for length designator "50".

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-59789](#).

TABLE IV. Example of PIN with available length designators.

PIN designator	Vendor similar designator or type part number <u>1/</u> <u>2/</u>	
	AA59789/16	CAGE 61081
EH30V	VHA280-2.80ET4	5280VBH-2.80ET4
EH40V	VHA280-3.80ET4	5280VBH-3.80ET4
EH50V	VHA280-4.80ET4	5280VBH-4.80ET4

- 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-59789](#).
- 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 5998-2012-006

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>.