

[INCH-POUND]  
A-A-59789/13A  
13 April 2013  
SUPERSEDING  
A-A-59789/13  
8 March 2008

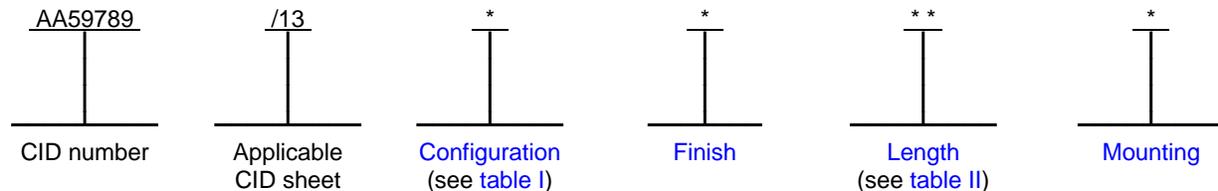
## COMMERCIAL ITEM DESCRIPTION SPECIFICATION SHEET

HOLDER, ELECTRICAL CARD, WEDGE RETAINERS, 5 PIECE, FOR COLD PLATE APPLICATIONS,  
.375 X .375 INCH BODY SIZE, WITH TWO MOUNTING HOLES AND SCREW RETENTION, 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: AA59789/13NR55R is the PIN for a clear chemical film finished, 5.5 inch (139.7 mm) long card holder with a retained actuating screw. The card holder also features two counterbored holes for use with rivets and a lockwasher and flat washer under the screw head for added resistance to loosening.

### 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.

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](#). Card holders shall also have a screw retention feature to prevent unintentional disassembly of the card holder.

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", "S" and "V" and .118 inch (3.0 mm) for mounting option "Y".

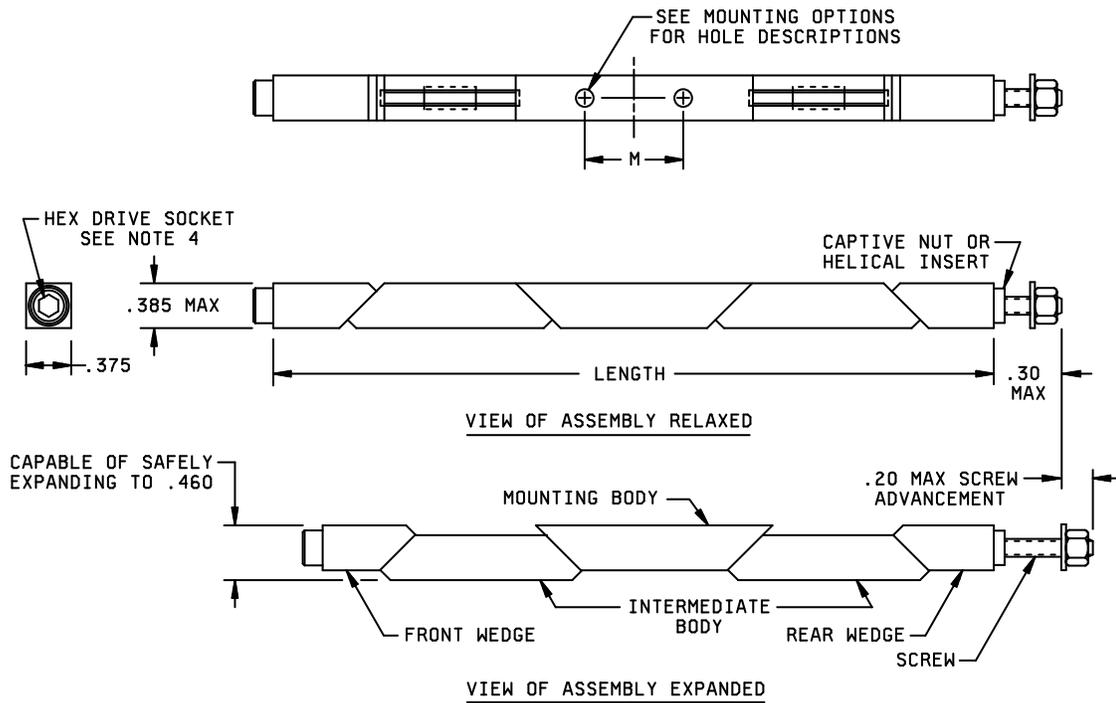
Cold plate slot width. The recommended cold plate slot width to accommodate the circuit card assembly with attached card holder is .425 inch (10.80 mm) plus the thickness of the printed board of the circuit card assembly (see [A-A-59789](#)).

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

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
A	1 and 2	No added hardware
F	1, 2, and 3	Lockwasher and flat washer
N	1, 2, and 4	Screw self-locking element
J	1, 2, 3 and 4	Lockwasher, flat washer, and screw self-locking element



Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.140	3.56	.30	7.6	.375	9.53	.380	9.65	.470	11.94

NOTES:

1. Dimensions are in inches. Millimeters are given for general information only.
2. Unless otherwise specified, tolerances are  $\pm 0.02$  inch (0.51 mm) for two place decimals and  $\pm 0.010$  inch (0.25 mm) for three place decimals.
3. Tolerance for the mounting hole spacing is  $\pm 0.005$  inch (0.13 mm).
4. The across flats dimension for actuating screw hex drive socket shall be .140 inch (3.60 mm) or .118 (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.

Screw retention locknut (see figure 2). Card holders shall have a screw retention locknut intended to prevent unintentional disassembly of the card holder. The locknut shall be fabricated of a corrosion resistant material.

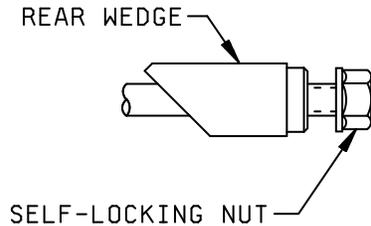


FIGURE 2. Screw retaining self-locking nut (corrosion resistant) details.

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). When present, flat washers, lockwashers, and retention nuts shall be compatible with the specified finish.

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" ±.02 (0.5)	Dimension "M" ±.01 (0.3)
50	4.80 (121.9)	1.00 (25.4)
55	5.30 (134.6)	1.00 (25.4)
60	5.80 (147.3)	1.00 (25.4)
65	6.30 (160.0)	1.00 (25.4)

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), "S" (tapped 2–56 holes), "V" (tapped 4–40 holes), or "Y" (tapped metric M3 x 0.5 holes) shall be as specified in [A-A-59789](#). See [figure 1](#) and [table I](#) for mounting hole spacing requirements. Card holders using mounting option "R" may be shipped unassembled.

Indexing pins. The two pins supplied for indexing pin mounting shall be Ø.062 x .040 inch (1.57 x 1.01 mm).

Rivet mount holes. The holes used for rivet mounting shall be .134/.139 inch (3.40/3.53 mm) diameter, countersunk 100 degrees by .190/.200 inch (4.83/5.08 mm) diameter through holes with an access/clearance counterbore of .190/.200 inch (4.83/5.08 mm) diameter by .300 inch (7.62 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, lockwasher and flat washer, screw self-locking element, or a combination of both lockwasher and flat washer and screw self-locking element. See [table I](#) for the correct PIN configuration identifier. Card holders requiring no added hardware options shall include configuration identifier "A" in the PIN (see [table I](#), [classification](#) and [notes](#) section herein).

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 shall include configuration identifier "F" in the PIN (see [table I](#), [classification](#) and [notes](#) section herein).

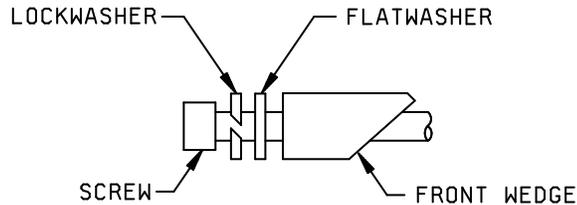


FIGURE 3. Lockwasher and flat washer details.

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 configuration identifier "N" in the PIN (see [table I](#), [classification](#) and [notes](#) section herein).

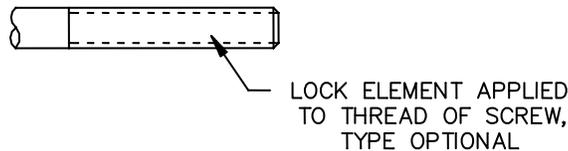


FIGURE 4. Screw self-locking element details.

Lockwasher, flat washer, and screw self-locking element. Card holders requiring a lockwasher, flat washer, and screw self-locking element option shall include configuration identifier "J" 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>
18915	Birtcher – A Division of Pentair Technical Products 7328 Trade Street San Diego, CA 92121-3410	Telephone: (858) 740-2400 Toll Free: (800) 854-7086 Facsimile: (858) 679-4555 URL: <a href="http://www.birtcherproducts.com">www.birtcherproducts.com</a>
5BG68	American Circuit Card Retainers, Inc. 2310 E. Orangethorpe Avenue Anaheim, CA 92806-1231	Telephone: (714) 738-6194 Facsimile: (714) 446-0119 E-mail: <a href="mailto:sales@accrmfg.com">sales@accrmfg.com</a> URL: <a href="http://www.accrmfg.com">http://www.accrmfg.com</a>

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 AA59789/13	Vendor similar designator or type part number <a href="#">1/</a>	
	CAGE 18915	CAGE 5BG68
AB50V	44-5-10-B-LN	5370BA-4.80T4R
AB50R	44-5-10-B-LN-R	5370BA-4.80HR
AB50S	44-5-10-B-LN-S	5370BA-4.80T2R
AB50Y	44-5-10-B-LN-M3	5370BA-4.80TM3R
FB50V	44-5-10-B-LF-LN	5370WBA-4.80T4R
FB50R	44-5-10-B-LFLNR	5370WBA-4.80HR
FB50S	44-5-10-B-LFLNS	5370WBA-4.80T2R
FB50Y	44-5-10-BLFLNM3	5370WBA-4.80TM3R
NB50V	44-5-10-B-LN-L	5370BA-4.80T4LR
NB50R	44-5-10-B-LN-RL	5370BA-4.80HLR
NB50S	44-5-10-B-LN-SL	5370BA-4.80T2LR
NB50Y	44-5-10-B-LNM3L	5370BA-4.80TM3LR
JB50V	44-5-10-B-LFLNL	5370WBA-4.80T4LR
JB50R	44-5-10-BLFLNRL	5370WBA-4.80HLR
JB50S	44-5-10-BLFLNSL	5370WBA-4.80T2LR
JB50Y	44-5-10BLFLNM3L	5370WBA-4.80TM3LR

See footnote at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/13	Vendor similar designator or type part number <a href="#">1/</a>	
	CAGE 18915	CAGE 5BG68
AE50V	44-5-10-EN-LN	5370EN-4.80T4R
AE50R	44-5-10-EN-LN-R	5370EN-4.80HR
AE50S	44-5-10-EN-LN-S	5370EN-4.80T2R
AE50Y	44-5-10-EN-LNM3	5370EN-4.80TM3R
FE50V	44-5-10-EN-LFLN	5370WEN-4.80T4R
FE50R	44-5-10-ENLFLNR	5370WEN-4.80HR
FE50S	44-5-10-ENLFLNS	5370WEN-4.80T2R
FE50Y	44-5-10ENLFLNM3	5370WEN-4.80TM3R
NE50V	44-5-10-EN-LN-L	5370EN-4.80T4LR
NE50R	44-5-10-EN-LNRL	5370EN-4.80HLR
NE50S	44-5-10-EN-LNSL	5370EN-4.80T2LR
NE50Y	44-5-10-ENLNM3L	5370EN-4.80TM3LR
JE50V	44-5-10-ENLFLNL	5370WEN-4.80T4LR
JE50R	44-5-10ENLFLNRL	5370WEN-4.80HLR
JE50S	44-5-10ENLFLNSL	5370WEN-4.80T2LR
JE50Y	44-510ENLFLNM3L	5370WEN-4.80TM3LR
AH50V	44-5-10-B3-LN	5370BH-4.80T4R
AH50R	44-5-10-B3-LN-R	5370BH-4.80HR
AH50S	44-5-10-B3-LN-S	5370BH-4.80T2R
AH50Y	44-5-10-B3-LNM3	5370BH-4.80TM3R
FH50V	44-5-10-B3-LFLN	5370WBH-4.80T4R
FH50R	44-5-10-B3LFLNR	5370WBH-4.80HR
FH50S	44-5-10-B3LFLNS	5370WBH-4.80T2R
FH50Y	44-5-10B3LFLNM3	5370WBH-4.80TM3R
NH50V	44-5-10-B3-LN-L	5370BH-4.80T4LR
NH50R	44-5-10-B3-LNRL	5370BH-4.80HLR
NH50S	44-5-10-B3-LNSL	5370BH-4.80T2LR
NH50Y	44-5-10-B3LNM3L	5370BH-4.80TM3LR

See footnote at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/13	Vendor similar designator or type part number <u>1/</u>	
	CAGE 18915	CAGE 5BG68
JH50V	44-5-10-B3LFLNL	5370WBH-4.80T4LR
JH50R	44-5-10B3LFLNRL	5370WBH-4.80HLR
JH50S	44-5-10B3LFLNSL	5370WBH-4.80T2LR
JH50Y	44-510B3LFLNM3L	5370WBH-4.80TM3LR
AR50V	44-5-10-CC-LN	5370CC-4.80T4R
AR50R	44-5-10-CC-LN-R	5370CC-4.80HR
AR50S	44-5-10-CC-LN-S	5370CC-4.80T2R
AR50Y	44-5-10-CC-LNM3	5370CC-4.80TM3R
FR50V	44-5-10-CC-LFLN	5370WCC-4.80T4R
FR50R	44-5-10-CCLFLNR	5370WCC-4.80HR
FR50S	44-5-10-CCLFLNS	5370WCC-4.80T2R
FR50Y	44-5-10CCLFLNM3	5370WCC-4.80TM3R
NR50V	44-5-10-CC-LN-L	5370CC-4.80T4LR
NR50R	44-5-10-CC-LNRL	5370CC-4.80HLR
NR50S	44-5-10-CC-LNSL	5370CC-4.80T2LR
NR50Y	44-5-10-CCLNM3L	5370CC-4.80TM3LR
JR50V	44-5-10-CCLFLNL	5370WCC-4.80T4LR
JR50R	44-5-10CCLFLNRL	5370WCC-4.80HLR
JR50S	44-5-10CCLFLNSL	5370WCC-4.80T2LR
JR50Y	44-510CCLFLNM3L	5370WCC-4.80TM3LR

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](#).

TABLE IV. Example of PIN with available length designators.

PIN designator AA59789/13	Vendor similar designator or type part number <u>1/</u> <u>2/</u>	
	CAGE 18915	CAGE 5BG68
NR50R	44-5-10-CC-LNRL	5370CC-4.80HLR
NR55R	44-5-11-CC-LNRL	5370CC-5.30HLR
NR60R	44-5-12-CC-LNRL	5370CC-5.80HLR
NR65R	44-5-13-CC-LNRL	5370CC-6.30HLR

- 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.

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

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 5998-2012-013

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>.