[INCH-POUND]
A–A–59789/14A
14 April 2013
SUPERSEDING
A–A–59789/14
8 March 2008

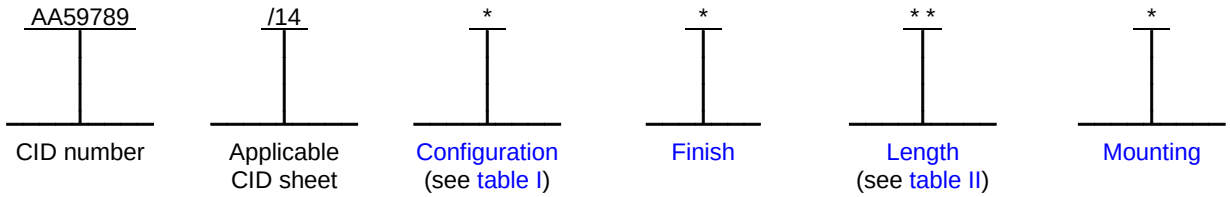
COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

HOLDER, ELECTRICAL CARD, WEDGE RETAINERS, 5 PIECE, FOR COLD PLATE APPLICATIONS, .375 X .375 INCH BODY SIZE, WITH TWO MOUNTING HOLES, VISUAL LOCK INDICATION, 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: AA59789/14JH65V is the PIN for a hard black anodized finished, 6.5 inch (165.1 mm) long card holder with visual lock indication and a retained actuating screw. The card holder also features two tapped mounting holes for use with 4-40 UNC 2B fasteners, a lockwasher and flat washer under the screw head, and a screw self-locking element for added resistance to loosening from shock vibration.

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. The card holders shall have both a visual indicator to show when the assembly is in its relaxed (unlocked) and expanded (locked) state and 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".

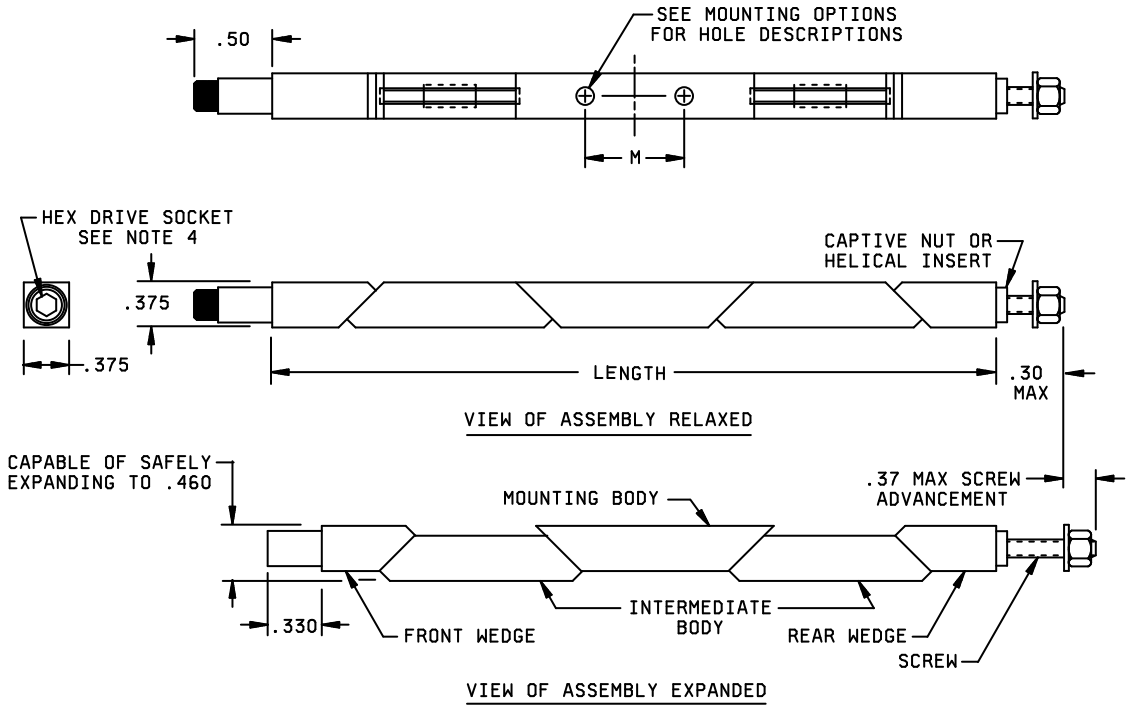
Cold plate slot width. The recommend cold plate slot width to accommodate the circuit card assembly with attached card holder is .425 inch (10.80 mm) plus the thickness of the printed board of the circuit card assembly (see A–A–59789).

Installation torque. The recommended nominal installation torque is as follows: 16 inch-pounds (1.8 N-m) for assemblies of configuration "A" and "F" and 20 inch-pounds (2.3 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, 2, and 3; and may include those on figures 4 or 5.

TABLE I. Configurations.

Configuration	Applicable figures	Hardware options
A	1, 2, and 3	No added hardware
F	1, 2, 3, and 4	Lockwasher and flat washer
N	1, 2, 3, and 5	Screw self-locking element
J	1, 2, 3, 4, and 5	Lockwasher, flat washer, and screw self-locking element



Inches	mm	Inches	mm	Inches	mm
.24	6.1	.330	8.38	.470	11.94
.30	7.6	.375	9.26	.500	12.7

NOTES:

1. Dimensions are in inches. Millimeters are given for general information only.
2. Unless otherwise specified, tolerances are ±.02 inch (0.51 mm) for two place decimals and ±.010 inch (0.25 mm) for three place decimals.
3. Tolerance for the mounting hole spacing is ±.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.

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.

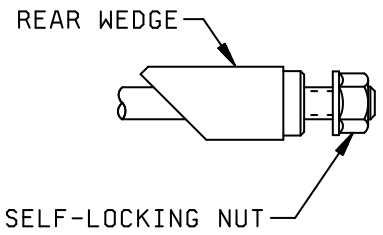


FIGURE 2. Screw retaining self-locking nut (corrosion resistant) details.

Visual lock indicator (see figure 3). 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.

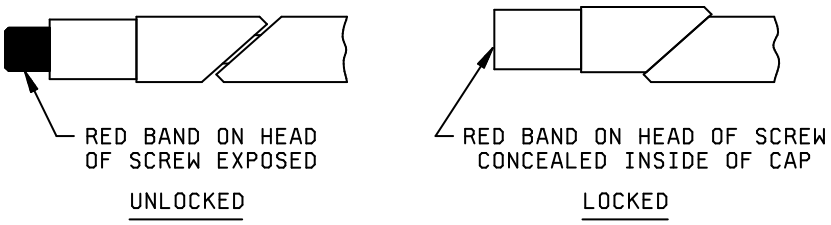


FIGURE 3. Visual lock indicator.

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). 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" ±.005 (0.13)
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 "P" and "R" may be shipped unassembled.

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 classification and notes section herein).

Lockwasher and flat washer (see figure 4). 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).

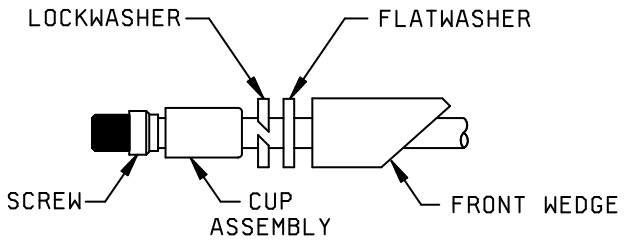


FIGURE 4. Lockwasher and flat washer details.

Screw self-locking element (see figure 5). 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).

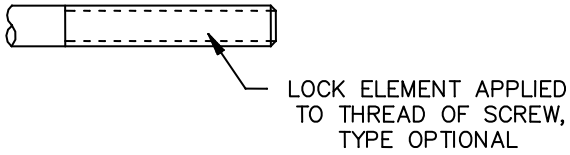


FIGURE 5. Screw self-locking element details.

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.)

Manufacturer CAGE	Manufacturer name and address	Manufacturer contact information
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: www.birtcherproducts.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 AA59789/14	Vendor similar designator or type part number 1/	
	CAGE 18915	CAGE 5BG68
AB50V	44–5VI–10–B–LN	5370VBA–4.80T4R
AB50R	44–5VI–10–B–LN–R	5370VBA–4.80HR
AB50S	44–5VI–10–B–LN–S	5370VBA–4.80T2R
AB50Y	44–5VI–10–B–LNM3	5370VBA–4.80TM3R
FB50V	44–5VI–10–B–LF–LN	5370VWBA–4.80T4R
FB50R	44–5VI–10–B–LFLNR	5370VWBA–4.80HR
FB50S	44–5VI–10–B–LFLNS	5370VWBA–4.80T2R
FB50Y	44–5VI–10BLFLNM3	5370VWBA–4.80TM3R
NB50V	44–5VI–10–B–LNL	5370VBA–4.80T4LR
NB50R	44–5VI–10–BLNRL	5370VBA–4.80HLR
NB50S	44–5VI–10–BLNSL	5370VBA–4.80T2LR
NB50Y	44–5VI10BLNM3L	5370VBA–4.80TM3LR
JB50V	44–5VI–10BLFLNL	5370VWBA–4.80T4LR
JB50R	44–5VI10BLFLNRL	5370VWBA–4.80HLR
JB50S	44–5VI10BLFLNSL	5370VWBA–4.80T2LR
JB50Y	44–5V10BLFLNM3L	5370VWBA–4.80TM3LR
AE50V	44–5VI–10–ENLN	5370VEN–4.80T4R
AE50R	44–5VI–10–ENLNR	5370VEN–4.80HR
AE50S	44–5VI–10–ENLNS	5370VEN–4.80T2R
AE50Y	44–5VI–10ENLNM3	5370VEN–4.80TM3R
FE50V	44–5VI–10ENLFLN	5370VWEN–4.80T4R
FE50R	44–5VI10ENLFLNR	5370VWEN–4.80HR
FE50S	44–5VI10ENLFLNS	5370VWEN–4.80T2R
FE50Y	445VI10ENLFLNM3	5370VWEN–4.80TM3R
NE50V	44–5VI–10–ENLNL	5370VEN–4.80T4LR
NE50R	44–5VI–10ENLNRL	5370VEN–4.80HLR
NE50S	44–5VI–10ENLNSL	5370VEN–4.80T2LR
NE50Y	44–5VI10ENLNM3L	5370VEN–4.80TM3LR
JE50V	44–5VI10ENLFLNL	5370VWEN–4.80T4LR
JE50R	445VI10ENLFLNRL	5370VWEN–4.80HLR
JE50S	445VI10ENLFLNSL	5370VWEN–4.80T2LR
JE50Y	445V10ENLFLNM3L	5370VWEN–4.80TM3LR

See footnote at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/14	Vendor similar designator or type part number 1/	
	CAGE 18915	CAGE 5BG68
AH50V	44–5VI–10–B3–LN	5370VBH–4.80T4R
AH50R	44–5VI–10–B3LNR	5370VBH–4.80HR
AH50S	44–5VI–10–B3LNS	5370VBH–4.80T2R
AH50Y	44–5VI–10B3LNM3	5370MVBH–4.80TM3R
FH50V	44–5VI–10B3LFLN	5370VWBH–4.80T4R
FH50R	44–5VI10B3LFLNR	5370VWBH–4.80HR
FH50S	44–5VI10B3LFLNS	5370VWBH–4.80T2R
FH50Y	445VI10B3LFLNM3	5370MVWBH–4.80TM3R
NH50V	44–5VI–10–B3LNL	5370VBH–4.80T4LR
NH50R	44–5VI–10–B3LNRL	5370VBH–4.80HLR
NH50S	44–5VI–10–B3LNSL	5370VBH–4.80T2LR
NH50Y	44–5VI–10B3LNM3L	5370MVBH–4.80TM3LR
JH50V	44–5VI–10B3LFLNL	5370VWBH–4.80T4LR
JH50R	445VI10B3LFLNRL	5370VWBH–4.80HLR
JH50S	445VI10B3LFLNSL	5370VWBH–4.80T2LR
JH50Y	445V10B3LFLNM3L	5370MVWBH–4.80TM3LR
AR50V	44–5VI–10–CC–LN	5370VCC–4.80T4R
AR50R	44–5VI–10–CCLNR	5370VCC–4.80HR
AR50S	44–5VI–10–CLNS	5370VCC–4.80T2R
AR50Y	44–5VI–10CCLNM3	5370MVCC–4.80TM3R
FR50V	44–5VI–10–CCLFLN	5370VWCC–4.80T4R
FR50R	44–5VI–10CCLFLNR	5370VWCC–4.80HR
FR50S	44–5VI–10CCLFLNS	5370VWCC–4.80T2R
FR50Y	44–5VI–10CCLFLNM3	5370MVWCC–4.80TM3R
NR50V	44–5VI–10–CCLNL	5370VCC–4.80T4LR
NR50R	44–5VI–10–CCLNRL	5370VCC–4.80HLR
NR50S	44–5VI–10–CCLNSL	5370VCC–4.80T2LR
NR50Y	44–5VI–10CCLNM3L	551MVCC–4.80TM3LR
JR50V	44–5VI–10CCLFLNL	5370VWCC–4.80T4LR
JR50R	445VI10CCLFLNRL	5370VWCC–4.80HLR
JR50S	445VI10CCLFLNSL	5370VWCC–4.80T2LR
JR50Y	445V10CCLFLNM3L	5370MVWCC–4.80TM3LR

See footnote at end of table.

TABLE III. Commercial part number supersession data – Continued.

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 AA59789/12	Vendor similar designator or type part number 1/ 2/	
	CAGE 18915	CAGE 5BG68
JH50V	44–5VI–10B3LFLNL	5370VWBH–4.80T4LR
JH55V	44–5VI–11B3LFLNL	5370VWBH–5.30T4LR
JH60V	44–5VI–12B3LFLNL	5370VWBH–5.80T4LR
JH65V	44–5VI–13B3LFLNL	5370VWBH–6.30T4LR

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 5998–2012–014

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.