

[INCH-POUND]
A-A-59789/12A
12 June 2012
SUPERSEDING
A-A-59789/12
4 May 2007

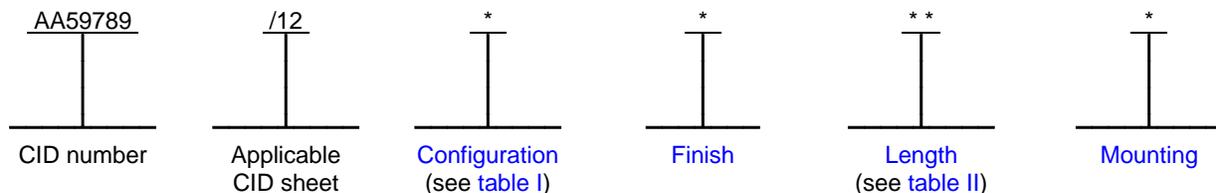
COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

HOLDER, ELECTRICAL CARD, WEDGE RETAINERS, 5 PIECE, FOR COLD PLATE APPLICATIONS,
.375 X .375 INCH BODY SIZE, WITH TWO MOUNTING HOLES AND 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: AA59789/12AB60S is the PIN for a black anodized with dry film lubricant finished, 6.0 inches (121.9 mm) long card holder. The card holder also features two tapped mounting holes for use with 2-56 UNC 2B fasteners and has visual lock indication.

SALIENT CHARACTERISTICS.

Performance. Card holders shall hold the circuit card firmly in its installed position and prevent loosening or movement as a result of shock and vibration. It shall also provide a thermal transfer path from the circuit card assembly to the cold plate.

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 a visual indicator to show when the assembly is in its relaxed (unlocked) and expanded (locked) state.

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".

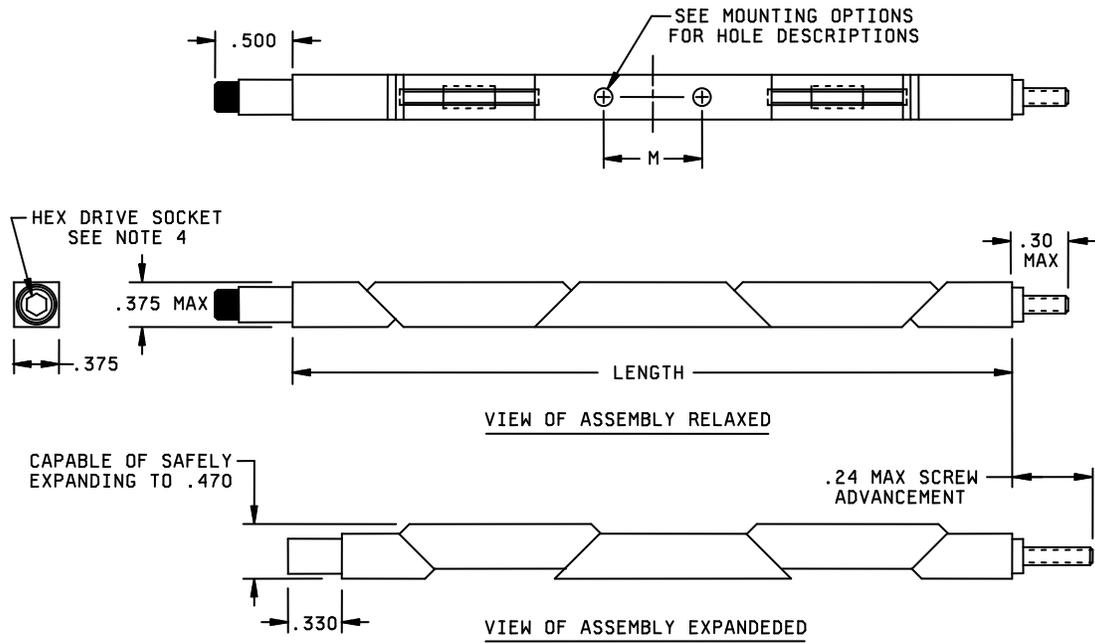
Cold plate slot width. The recommend cold plate slot width to accommodate the circuit card assembly with attached card holder is .425 inch (10.80 mm) plus the thickness of the printed board of the circuit card assembly (see [A-A-59789](#)).

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 a card holder 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 options
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
.24	6.1	.330	8.38	.470	11.94
.30	7.6	.375	9.26	.500	12.7

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. Configuration shown uses captive nut on rear wedge. Alternate design using threaded insert shall be acceptable.
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](#)).

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 (unlocked) state. When the card holder is in the relaxed (unlocked) 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 so that the assembly is in the expanded (locked) position, this red band shall be concealed.

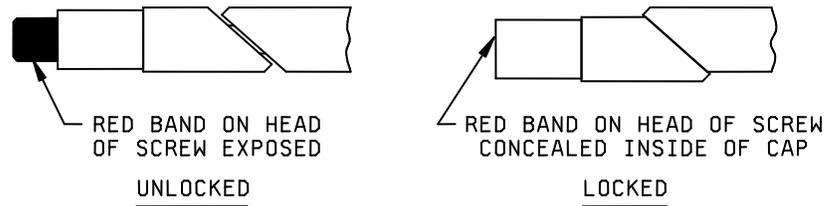


FIGURE 2. Visual lock indicator.

Finish. The 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](#) and 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)	Dimension "M" ± 0.01 (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 using countersunk holes), "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.

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 a 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).

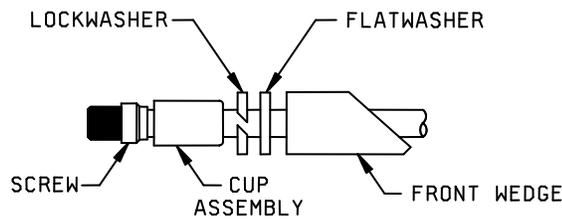


FIGURE 3. Lockwasher and flat washer details.

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. The screw self-locking element shall be in accordance with [A-A-59789](#). Card holders requiring a screw self-locking element shall include configuration identifier "N" in the PIN (see [table I](#), [classification](#), and [notes](#) section herein).

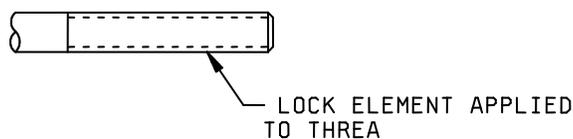


FIGURE 4. Screw self-locking element details.

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.daps.dla.mil/quicksearch/> or <https://assist.daps.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: www.birtcherproducts.com
5BG68	Card Locks Unlimited, Inc. 2310 E. Orangethorpe Avenue Anaheim, CA 92806-1231	Telephone: (714) 738-6194 Facsimile: (714) 446-0119 E-mail: sales@clumfg.com URL: www.clumfg.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 AA59789/12	Vendor similar designator or type part number 1/	
	CAGE 18915	CAGE 5BG68
AB50V	44-5VI-10-B	5251VBA-4.80T4
AB50R	44-5VI-10-B-R	5251VBA-4.80H
AB50S	44-5VI-10-B-S	5251VBA-4.80T2
AB50Y	44-5VI-10-B-M3	5251MVBA-4.80TM3
FB50V	44-5VI-10-B-LF	5251VWBA-4.80T4
FB50R	44-5VI-10-B-LFR	5251VWBA-4.80H
FB50S	44-5VI-10-B-LFS	5251VWBA-4.80T2
FB50Y	44-5VI-10-BLFM3	5251MVWBA-4.80TM3
NB50V	44-5VI-10-B-L	5251VBA-4.80T4L
NB50R	44-5VI-10-B-R-L	5251VBA-4.80HL
NB50S	44-5VI-10-B-S-L	5251VBA-4.80T2L
NB50Y	44-5VI-10-B-M3L	5251MVBA-4.80TM3L
JB50V	44-5VI-10-B-LFL	5251VWBA-4.80T4L
JB50R	44-5VI-10-BLFRL	5251VWBA-4.80HL
JB50S	44-5VI-10-BLFSL	5251VWBA-4.80T2L
JB50Y	44-5VI-10-BLFM3L	5251MVWBA-4.80TM3L
AE50V	44-5VI-10-EN	5251VEN-4.80T4
AE50R	44-5VI-10-ENR	5251VEN-4.80H
AE50S	44-5VI-10-ENS	5251VEN-4.80T2
AE50Y	44-5VI-10-ENM3	5251MVEN-4.80TM3
FE50V	44-5VI-10-ENLF	5251VWEN-4.80T4
FE50R	44-5VI-10-ENLFR	5251VWEN-4.80H
FE50S	44-5VI-10-ENLFS	5251VWEN-4.80T2
FE50Y	44-5VI-10-ENLFM3	5251MVWEN-4.80TM3
NE50V	44-5VI-10-EN-L	5251VEN-4.80T4L
NE50R	44-5VI-10-EN-RL	5251VEN-4.80HL
NE50S	44-5VI-10-EN-SL	5251VEN-4.80T2L
NE50Y	44-5VI-10-ENM3L	5251MVEN-4.80TM3L

See footnote at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/12	Vendor similar designator or type part number 1/	
	CAGE 18915	CAGE 5BG68
JE50V	44-5VI-10-ENLFL	5251VWEN-4.80T4L
JE50R	44-5VI-10ENLFRL	5251VWEN-4.80HL
JE50S	44-5VI-10ENLFSL	5251VWEN-4.80T2L
JE50Y	44-5VI10ENLFM3L	5251MVWEN-4.80TM3L
AH50V	44-5VI-10-B3	5251VBH-4.80T4
AH50R	44-5VI-10-B3-R	5251VBH-4.80H
AH50S	44-5VI-10-B3-S	5251VBH-4.80T2
AH50Y	44-5VI-10-B3-M3	5251MVBH-4.80TM3
FH50V	44-5VI-10-B3-LF	5251VWBH-4.80T4
FH50R	44-5VI-10-B3LFR	5251VWBH-4.80H
FH50S	44-5VI-10-B3LFS	5251VWBH-4.80T2
FH50Y	44-5VI-10B3LFM3	5251MVWBH-4.80TM3
NH50V	44-5VI-10-B3-L	5251VBH-4.80T4L
NH50R	44-5VI-10-B3-RL	5251VBH-4.80HL
NH50S	44-5VI-10-B3-SL	5251VBH-4.80T2L
NH50Y	44-5VI-10-B3M3L	5251MVBH-4.80TM3L
JH50V	44-5VI-10-B3LFL	5251VWBH-4.80T4L
JH50R	44-5VI-10B3LFRL	5251VWBH-4.80HL
JH50S	44-5VI-10B3LFSL	5251VWBH-4.80T2L
JH50Y	44-5V-10B3LFM3L	5251MVWBH-4.80TM3L
AR50V	44-5VI-10-CC	5251VCC-4.80T4
AR50R	44-5VI-10-CC-R	5251VCC-4.80H
AR50S	44-5VI-10-C-S	5251VCC-4.80T2
AR50Y	44-5VI-10-CC-M3	5251MVCC-4.80TM3
FR50V	44-5VI-10-CC-LF	5251VWCC-4.80T4
FR50R	44-5VI-10-CCLFR	5251VWCC-4.80H
FR50S	44-5VI-10-CCLFS	5251VWCC-4.80T2
FR50Y	44-5V-10-CCLFM3	5251MVWCC-4.80TM3

See footnote at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/12	Vendor similar designator or type part number <u>1/</u>	
	CAGE 18915	CAGE 5BG68
NR50V	44-5VI-10-CC-L	5251VCC-4.80T4L
NR50R	44-5VI-10-CC-RL	5251VCC-4.80HL
NR50S	44-5VI-10-CC-SL	5251VCC-4.80T2L
NR50Y	44-5VI-10-CCM3L	551MVCC-4.80TM3L
JR50V	44-5VI-10-CCLFL	5251VWCC-4.80T4L
JR50R	44-5VI10-CCLFRL	5251VWCC-4.80HL
JR50S	44-5VI10-CCLFSL	5251VWCC-4.80T2L
JR50Y	44-5VI10CCLFM3L	5251MVWCC-4.80TM3L

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 <u>1/</u> <u>2/</u>	
	CAGE 18915	CAGE 5BG68
AB50S	44-5VI-10-B-S	VA251-4.80T2
AB55S	44-5VI-11-B-S	VA251-5.30T2
AB60S	44-5VI-12-B-S	VA251-5.80T2
AB65S	44-5VI-13-B-S	VA251-6.30T2

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 5998-2012-012

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.daps.dla.mil/>.