

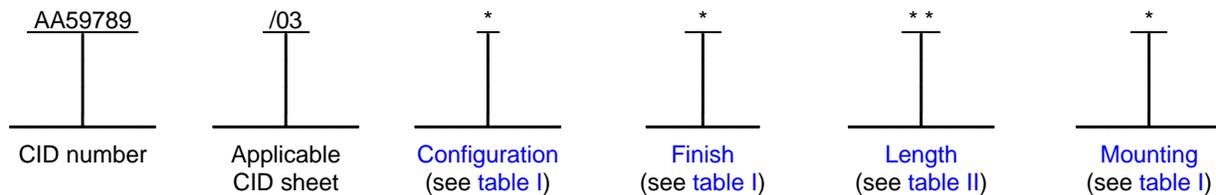
COMMERCIAL ITEM DESCRIPTION  
SPECIFICATION SHEET

HOLDER, ELECTRICAL CARD, WEDGE RETAINERS, 5 PIECE, FOR COLD PLATE APPLICATIONS,  
.225 X .225 INCH BODY SIZE, WITH TWO MOUNTING HOLES,  
WITH SCREW ACTUATION AND RETENTION

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

The complete requirements for procuring electrical 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](#)).



Example: AA59789/03NH60T is the PIN for a hard black anodize finished, 5.8 inch (147.3 mm) long card holder with a retained actuating screw. The card holder also feature two tapped mounting holes for use with 0-80 UNF 2B fasteners 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 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 dimension for hex drive socket shall be .094 inch (2.38 mm) across flats for mounting options "S", "R", "P", "U", and "T".

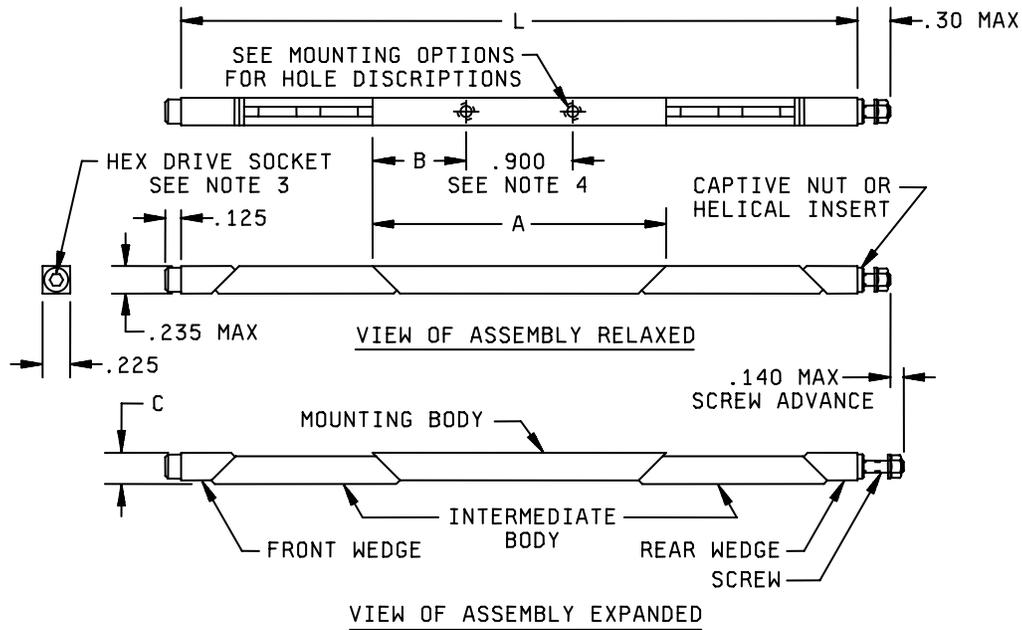
Cold plate slot width. The recommend cold plate slot width to accommodate the circuit card assembly with attached card holder is .250 inch (6.35 mm) plus the thickness of the printed board of the circuit card assembly (see [A-A-59789](#)).

Installation torque. The recommended nominal installation torque is as follows: 6 inch-pounds (0.68 N-m) for assemblies of configuration "A", "C", "F", or "W" and 7.2 inch-pounds (0.81 N-m) for assemblies of configurations "D", "J", "L", or "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 and 4.

TABLE I. Configurations.

Configuration	Mounting body style	Finish options	Mounting options	Applicable figures	Hardware options
A	A	B, C, P, H	S, R, T, P	1 and 2	No hardware options added
C	C	B, C, E, H	S, R, T, U		
F	A	B, C, P, H	S, R, T, P	1, 2, and 3	Lockwasher and flat washer
W	C	B, C, E, H	S, R, T, U		
N	A	B, C, P, H	S, R, T, P	1, 2, and 4	Screw self-lock element
L	C	B, C, E, H	S, R, T, U		
J	A	B, C, P, H	S, R, T, P	1, 2, 3, and 4	Lockwasher, flat washer, and screw self-lock element
D	C	B, C, E, H	S, R, T, U		



Inches	mm	Inches	mm	Inches	mm
.125	3.18	.225	5.72	.30	7.6
.140	3.56	.235	5.97	.900	22.86

NOTES:

1. Dimensions are in inches. Millimeter equivalents are given for information only.
2. Unless otherwise specified, tolerances are for  $\pm .02$  inch (0.51 mm) for two place decimals and  $\pm .010$  (0.25 mm) for three place decimals.
3. The across flats dimension for hex drive socket shall be .094 inch (2.38 mm).
4. Tolerance for the hole spacing is  $\pm .010$  inch (0.25 mm) for mounting body style A and  $\pm .005$  inch (0.51 mm) for mounting body style C.

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.

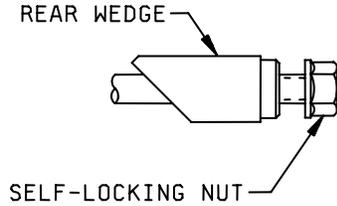


FIGURE 2. Screw retaining self-locking nut (corrosion resistant) details.

Finish. The finish designator shall be as specified in A-A-59789. The finishes available for this CID specification sheet are as follows: “B” (black anodize), “C” (chemical film), “E” (electroless nickel), “P” (electrodeposited nickel), or “H” (hard black anodize).

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 “L” ± .02 (0.5)	Mounting body style	Dimension “A” ± .01 (0.3)	Dimension “B” ± .02 (0.5)	Dimension “C” minimum
50	4.8 (121.9)	A	1.50 (38.1)	.30 (7.6)	.275 (6.99)
		C	1.50 (38.1)	.30 (7.6)	.275 (6.99)
55	5.3 (134.6)	A	2.00 (50.8)	.55 (14.0)	.275 (6.99)
		C	1.50 (38.1)	.30 (7.6)	.275 (6.99)
60	5.8 (147.3)	A	2.50 (63.5)	.80 (20.3)	.275 (6.99)
		C	1.50 (38.1)	.30 (7.6)	.275 (6.99)
65	6.3 (160.0)	A	3.00 (71.2)	1.05 (26.7)	.275 (6.99)
		C	1.50 (38.1)	.30 (7.6)	.275 (6.99)

1/ Dimensions are in inches. Millimeters are given for 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: “S” (tapped 2-56 holes), “R” (rivet mount holes with counterbore and countersink), “T” (tapped 0-80 holes), “P” (Ø.062 x .040 index pins), or “U” (tapped metric M2 x 0.4 holes). See figure 1 for mounting hole spacing requirements. Card holders using mounting option “P” and “R” may be shipped unassembled.

Rivet mounting holes. The holes used for rivet mounting shall be .066/.073 inch (1.68/1.85 mm) diameter, countersunk 100 degrees by .140 inch (3.56 mm) diameter through holes with a counterbore of .156 inch (3.96 mm) diameter with a depth of .165 inch (4.19 mm) for style C mounting bodies and .175 inch (4.45 mm) for style A mounting bodies.

Rivets. This card holder uses rivet type A as specified in A-A-59789 when rivet mounting is used.

Configuration hardware options. Card holders can have the following options. See [table I](#) for the correct PIN configuration identifier.

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" or "W" in the PIN (see [table I](#)).

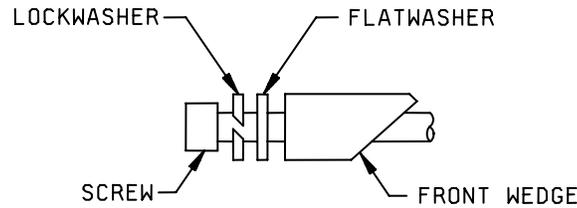


FIGURE 3. Lockwasher and flat washer details.

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 "L" or "N" in the PIN (see [table I](#)).

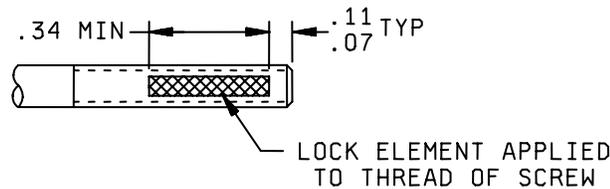


FIGURE 4. Screw self-locking element details.

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 "D" or "J" in the PIN (see [table I](#)).

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 <http://assist.daps.dla.mil/quicksearch/> or <http://assist.daps.dla.mil/> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

Ordering data. Ordering data is 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 Pentair Electronic Packaging 14100 Danielson Street Poway, CA 92064-6898	Telephone: (858) 679-4550 Facsimile: (858) 679-4555 Electronic mail: <a href="mailto:infobirtcher@pentair-ep.com">infobirtcher@pentair-ep.com</a> URL: <a href="http://www.birtcherproducts.com">www.birtcherproducts.com</a>
52094	Calmark Corporation 4915 Walnut Grove Avenue San Gabriel, CA 91776-2099	Telephone: (626) 287-0451 Facsimile: (626) 287-7350 E-mail: <a href="mailto:sales@calmark.com">sales@calmark.com</a> URL: <a href="http://www.calmark.com">www.calmark.com</a>

Part number supersession data. This CID specification sheet PINs supersedes the following manufacturer's part numbers as shown in table III. The CID PINs listed in table III are only for length designator "60". 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 AA59789/03	Vendor similar designator or type part number <sup>1/</sup> CAGE 18915	PIN designator AA59789/03	Vendor similar designator or type part number <sup>1/</sup> CAGE 52094
AC60S	42-5-12-LN	CC60R	231CR5.80T2R
AC60R	42-5-12-LN-R	CC60S	231CR5.80HR
AC60T	42-5-12-LN-T	CC60T	231CR5.80T0R
AC60P	42-5-12-LN-P	CC60U	231CR5.80TM2R
FC60S	42-5-12-LF-LN	WC60S	W231CR5.80T2R
FC60R	42-5-12-LF-LN-R	WC60R	W231CR5.80HR
FC60T	42-5-12-LF-LN-T	WC60T	W231CR5.80T0R
FC60P	42-5-12-LF-LN-P	WC60U	W231CR5.80TM2R
NC60S	42-5-12-LN-L	LC60S	231CR5.80T2LR
NC60R	42-5-12-LN-R-L	LC60R	231CR5.80HLR
NC60T	42-5-12-LN-T-L	LC60T	231CR5.80T0LR
NC60P	42-5-12-LN-P-L	LC60U	231CR5.80TM2.5LR
JC60S	42-5-12-LF-LN-L	DC60S	W231CR5.80T2LR
JC60R	42-5-12-LF-LNRL	DC60R	W231CR5.80HLR
JC60T	42-5-12-LF-LNTL	DC60T	W231CR5.80T0LR
JC60P	42-5-12-LF-LNPL	DC60U	W231CR5.80TM2.5LR

See footnote at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/03	Vendor similar designator or type part number <sup>1/</sup> CAGE 18915	PIN designator AA59789/03	Vendor similar designator or type part number <sup>1/</sup> CAGE 52094
AB60S	42-5-12-B-LN	CB60S	A231CR5.80T2R
AB60R	42-5-12-B-LN-R	CB60R	A231CR5.80HR
AB60T	42-5-12-B-LN-T	CB60T	A231CR5.80T0R
AB60P	42-5-12-B-LN-P	CB60U	A231CR5.80TM2R
FB60S	42-5-12-B-LF-LN	WB60S	WA231CR5.80T2R
FB60R	42-5-12-B-LFLNR	WB60R	WA231CR5.80HR
FB60T	42-5-12-B-LFLNT	WB60T	WA231CR5.80T0R
FB60P	42-5-12-B-LFLNP	WB60U	WA231CR5.80TM2R
NB60S	42-5-12-B-LN-L	LB60S	A231CR5.80T2LR
NB60R	42-5-12-B-LN-RL	LB60R	A231CR5.80HLR
NB60T	42-5-12-B-LN-TL	LB60T	A231CR5.80T0LR
NB60P	42-5-12-B-LN-PL	LB60U	A231CR5.80TM2LR
JB60S	42-5-12-B-LFLNL	DB60S	WA231CR5.80T2LR
JB60R	42-5-12-BLFLNR	DB60R	WA231CR5.80HLR
JB60T	42-5-12-BLFLNTL	DB60T	WA231CR5.80T0LR
JB60P	42-5-12-BLFLNPL	DB60U	WA231CR5.80TM2LR
AP60S	42-5-12-N-LN	CE60S	EN231CR5.80T2R
AP60R	42-5-12-N-LN-R	CE60R	EN231CR5.80HR
AP60T	42-5-12-N-LN-T	CE60T	EN231CR5.80T0R
AP60P	42-5-12-N-LN-P	CE60U	EN231CR5.80TM2R
FP60S	42-5-12-N-LF-LN	WE60S	WEN231CR5.80T2R
FP60R	42-5-12-N-LFLNR	WE60R	WEN231CR5.80HR
FP60T	42-5-12-N-LFLNT	WE60T	WEN231CR5.80T0R
FP60P	42-5-12-N-LFLNP	WE60U	WEN231CR5.80TM2R
NP60S	42-5-12-N-LN-L	LE60S	EN231CR5.80T2LR
NP60R	42-5-12-N-LN-RL	LE60R	EN231CR5.80HLR
NP60T	42-5-12-N-LN-TL	LE60T	EN231CR5.80T0LR
NP60P	42-5-12-N-LN-PL	LE60U	EN231CR5.80TM2LR

See footnote at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/03	Vendor similar designator or type part number <sup>1/</sup> CAGE 18915	PIN designator AA59789/03	Vendor similar designator or type part number <sup>1/</sup> CAGE 52094
JP60S	42-5-12-N-LFLNL	DH60S	WEN231CR5.80T2LR
JP60R	42-5-12-NLFLNRL	DH60R	WEN231CR5.80HLR
JP60T	42-5-12-NLFLNTL	DH60T	WEN231CR5.80T0LR
JP60P	42-5-12-NLFLNPL	DH60U	WEN231CR5.80TM2LR
AH60S	42-5-12-B3-LN	CH60S	HA231CR5.80T2R
AH60R	42-5-12-B3-LN-R	CH60R	HA231CR5.80HR
AH60T	42-5-12-B3-LN-T	CH60T	HA231CR5.80T0R
AH60P	42-5-12-B3-LN-P	CH60U	HA231CR5.80TM2R
FH60S	42-5-12-B3-LFLN	WH60S	WHA231CR5.80T2R
FH60R	42-5-12-B3LFLNR	WH60R	WHA231CR5.80HR
FH60T	42-5-12-B3LFLNT	WH60T	WHA231CR5.80T0R
FH60P	42-5-12-B3LFLNP	WH60U	WHA231CR5.80TM2R
NH60S	42-5-12-B3-LN-L	LH60S	HA231CR5.80T2LR
NH60R	42-5-12-B3-LNRL	LH60R	HA231CR5.80HLR
NH60T	42-5-12-B3-LNTL	LH60T	HA231CR5.80T0LR
NH60P	42-5-12-B3-LNPL	LH60U	HA231CR5.80TM2LR
JH60S	42-5-12-B3LFLNL	DH60S	WHA231CR5.80T2LR
JH60R	42-5-12B3LFLNRL	DH60R	WHA231CR5.80HLR
JH60T	42-5-12B3LFLNTL	DH60T	WHA231CR5.80T0LR
JH60P	42-5-12B3LFLNPL	DH60U	WHA231CR5.80TM2LR

<sup>1/</sup> 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 AA59789/03	Vendor similar designator or type part number <u>1/</u> <u>2/</u> CAGE 18915	PIN designator AA59789/03	Vendor similar designator or type part number <u>1/</u> <u>2/</u> CAGE 52094
NH50T	42-5-10-B3-LNTL	LH50T	HA231CR4.80T0LR
NH55T	42-5-11-B3-LNTL	LH55T	HA231CR5.30T0LR
NH60T	42-5-12-B3-LNTL	LH60T	HA231CR5.80T0LR
NH65T	42-5-13-B3-LNTL	LH65T	HA231CR6.30T0LR

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 – 11  
 DLA – CC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA – FSS  
 Preparing Activity:  
 DLA – CC  
 Project 5998-2006-010

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 <http://assist.daps.dla.mil>.