

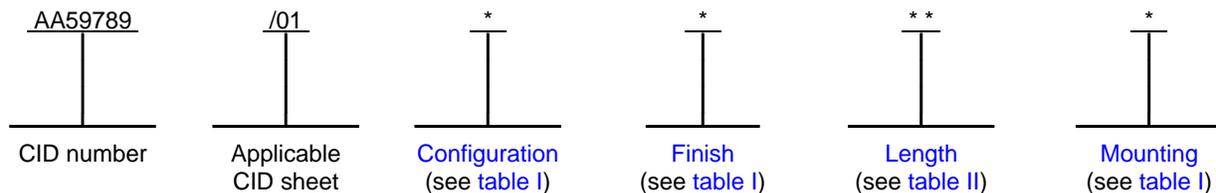
COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

HOLDER, ELECTRICAL CARD, WEDGE RETAINERS, 5 PIECE, FOR COLD PLATE APPLICATIONS,
.225 X .260 INCH BODY SIZE, WITH TWO MOUNTING HOLES, 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: AA59789/01AB50S is the PIN for a black anodized finished, 4.8 inch (121.9 mm) long card holder with a
retained actuating screw. The card holder also features two tapped mounting holes for use with 2-56 UNC 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 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 dimension for hex drive socket shall be .094 inch (2.38 mm) across flats for
mounting options "S", "R", "P", "U", and "T".

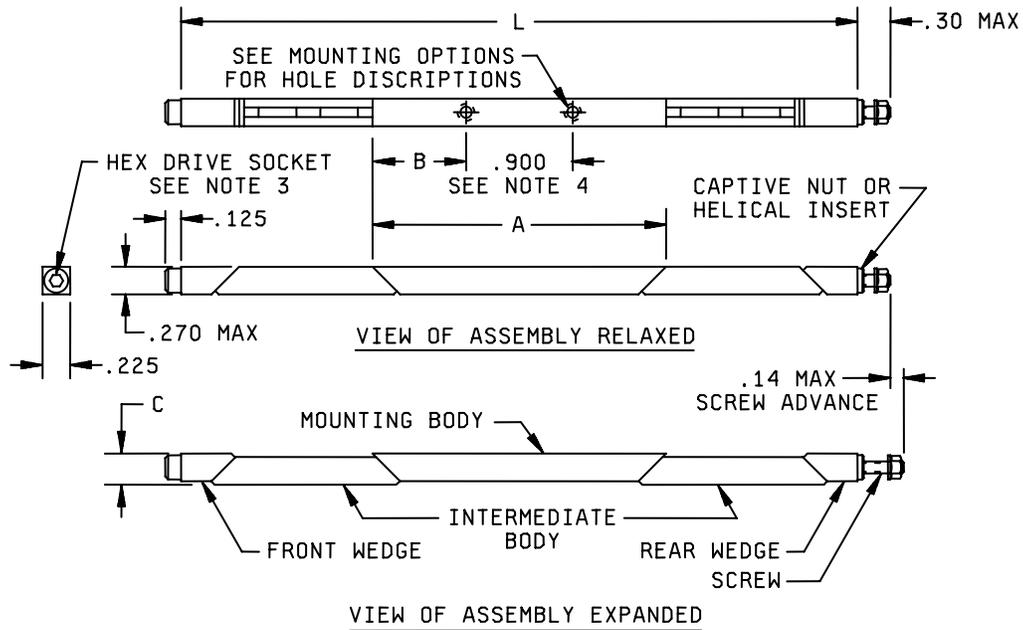
Cold plate slot width. The recommend cold plate slot width to accommodate the circuit card assembly with attached
card holder is .300 inch (7.62 mm) plus the thickness of the printed board of the circuit card assembly (see
[A-A-59789](#)).

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 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. 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	.270	6.86	.900	22.86

NOTES:

1. Dimensions are in inches. Millimeters 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.

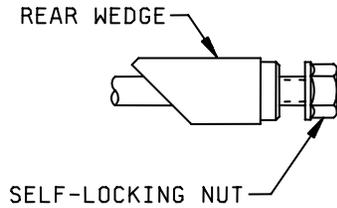


FIGURE 2. Screw retaining self-locking nut (corrosion resistant) details.

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. 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)	.330 (8.38)
		C	1.60 (40.6)	.35 (8.9)	.325 (8.26)
55	5.3 (134.6)	A	2.00 (50.8)	.55 (14.0)	.330 (8.38)
		C	1.60 (40.6)	.35 (8.9)	.325 (8.26)
60	5.8 (147.3)	A	2.50 (63.5)	.80 (20.3)	.330 (8.38)
		C	1.60 (40.6)	.35 (8.9)	.325 (8.26)
65	6.3 (160.0)	A	3.00 (71.2)	1.05 (26.7)	.330 (8.38)
		C	1.60 (40.6)	.35 (8.9)	.325 (8.26)

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 mount 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 by .200 inch (5.08 mm) deep.

Rivets. This card holder uses rivet style 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](#)).

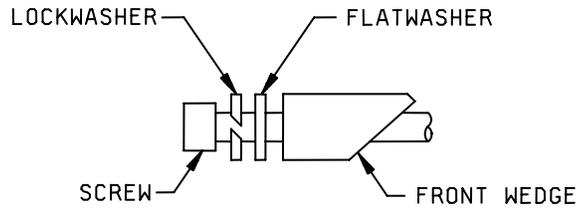


FIGURE 3. Lockwasher and flat washer details.

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](#)).

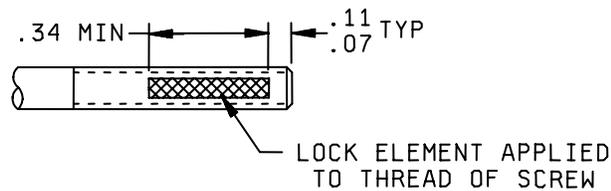


FIGURE 4. Screw self-locking element details.

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: infobirtcher@pentair-ep.com URL: www.birtcherproducts.com
52094	Calmark Corporation 4915 Walnut Grove Avenue San Gabriel, CA 91776-2099	Telephone: (626) 287-0451 Facsimile: (626) 287-7350 E-mail: sales@calmark.com URL: www.calmark.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 AA59789/01	Vendor similar designator or type part number ^{1/} CAGE 18915	PIN designator AA59789/01	Vendor similar designator or type part number ^{1/} CAGE 52094
AB50S	40-5-10-B-LN	CB50S	A226CR4.80T2R
AB50R	40-5-10-B-LN-R	CB50R	A226CR4.80HR
AB50T	40-5-10-B-LN-T	CB50T	A226CR4.80T0R
AB50P	40-5-10-B-LN-P	CB50U	A226CR4.80TM2R
FB50S	40-5-10-B-LF-LN	WB50S	WA226CR4.80T2R
FB50R	40-5-10-B-LFLNR	WB50R	WA226CR4.80HR
FB50T	40-5-10-B-LFLNT	WB50T	WA226CR4.80T0R
FB50P	40-5-10-B-LFLNP	WB50U	WA226CR4.80TM2R
NB50S	40-5-10-B-LN-L	LB50S	A226CR4.80T2LR
NB50R	40-5-10-B-LN-RL	LB50R	A226CR4.80HLR
NB50T	40-5-10-B-LN-TL	LB50T	A226CR4.80T0LR
NB50P	40-5-10-B-LN-PL	LB50U	A226CR4.80TM2LR
JB50S	40-5-10-B-LFLNL	DB50S	WA226CR4.80T2LR
JB50R	40-5-10-BLFLNRL	DB50R	WA226CR4.80HLR
JB50T	40-5-10-BLFLNTL	DB50T	WA226CR4.80T0LR
JB50P	40-5-10-BLFLNPL	DB50U	WA226CR4.80TM2LR

See footnote at end of table.

TABLE III. Commercial part number supersession data. – Continued.

PIN designator AA59789/01	Vendor similar designator or type part number ^{1/} CAGE 18915	PIN designator AA59789/01	Vendor similar designator or type part number ^{1/} CAGE 52094
AC50S	40-5-10-LN	CC50S	226CR4.80T2R
AC50R	40-5-10-LN-R	CC50R	226CR4.80HR
AC50T	40-5-10-LN-T	CC50T	226CR4.80T0R
AC50P	40-5-10-LN-P	CC50U	226CR4.80TM2R
FC50S	40-5-10-LF-LN	WC50S	W226CR4.80T2R
FC50R	40-5-10-LF-LN-R	WC50R	W226CR4.80HR
FC50T	40-5-10-LF-LN-T	WC50T	W226CR4.80T0R
FC50P	40-5-10-LF-LN-P	WC50U	W226CR4.80TM2R
NC50S	40-5-10-LN-L	LC50S	226CR4.80T2LR
NC50R	40-5-10-LN-R-L	LC50R	226CR4.80HLR
NC50T	40-5-10-LN-T-L	LC50T	226CR4.80T0LR
NC50P	40-5-10-LN-P-L	LC50U	226CR4.80TM2LR
JC50S	40-5-10-LF-LN-L	DC50S	W226CR4.80T2LR
JC50R	40-5-10-LF-LNRL	DC50R	W226CR4.80HLR
JC50T	40-5-10-LF-LNTL	DC50T	W226CR4.80T0LR
JC50P	40-5-10-LF-LNPL	DC50U	W226CR4.80TM2LR
AP50S	40-5-10-N-LN	CE50S	EN226CR4.80T2R
AP50R	40-5-10-N-LN-R	CE50R	EN226CR4.80HR
AP50T	40-5-10-N-LN-T	CE50T	EN226CR4.80T0R
AP50P	40-5-10-N-LN-P	CE50U	EN226CR4.80TM2R
FP50S	40-5-10-N-LFLN	WE50S	WEN226CR4.80T2R
FP50R	40-5-10-N-LFLNR	WE50R	WEN226CR4.80HR
FP50T	40-5-10-N-LFLNT	WE50T	WEN226CR4.80T0R
FP50P	40-5-10-N-LFLNP	WE50U	WEN226CR4.80TM2R
NP50S	40-5-10-N-LN-L	LE50S	EN226CR4.80T2LR
NP50R	40-5-10-N-LN-RL	LE50R	EN226CR4.80HLR
NP50T	40-5-10-N-LN-TL	LE50T	EN226CR4.80T0LR
NP50P	40-5-10-N-LN-PL	LE50U	EN226CR4.80TM2LR

See footnote at end of table.

TABLE III. Commercial part number supersession data. – Continued.

PIN designator AA59789/01	Vendor similar designator or type part number ^{1/} CAGE 18915	PIN designator AA59789/01	Vendor similar designator or type part number ^{1/} CAGE 52094
JP50S	40-5-10-N-LFLNL	DE50S	WEN226CR4.80T2LR
JP50R	40-5-10-NLFLNRL	DE50R	WEN226CR4.80HLR
JP50T	40-5-10-NLFLNLT	DE50T	WEN226CR4.80T0LR
JP50P	40-5-10-NLFLNPL	DE50U	WEN226CR4.80TM2LR
AH50S	40-5-10-B3-LN	CH50S	HA226CR4.80T2R
AH50R	40-5-10-B3-LN-R	CH50R	HA226CR4.80HR
AH50T	40-5-10-B3-LN-T	CH50T	HA226CR4.80T0R
AH50P	40-5-10-B3-LN-P	CH50U	HA226CR4.80TM2R
FH50S	40-5-10-B3-LFLN	WH50S	WHA226CR4.80T2R
FH50R	40-5-10-B3LFLNR	WH50R	WHA226CR4.80HR
FH50T	40-5-10-B3LFLNT	WH50T	WHA226CR4.80T0R
FH50P	40-5-10-B3LFLNP	WH50U	WHA226CR4.80TM2R
NH50S	40-5-10-B3-LN-L	LH50S	HA226CR4.80T2LR
NH50R	40-5-10-B3-LNRL	LH50R	HA226CR4.80HLR
NH50T	40-5-10-B3-LNLT	LH50T	HA226CR4.80T0LR
NH50P	40-5-10-B3-LNPL	LH50U	HA226CR4.80TM2LR
JH50S	40-5-10-B3LFLNL	DH50S	WHA226CR4.80T2LR
JH50R	40-5-10B3LFLNRL	DH50R	WHA226CR4.80HLR
JH50T	40-5-10B3LFLNLT	DH50T	WHA226CR4.80T0LR
JH50P	40-5-10B3LFLNPL	DH50U	WHA226CR4.80TM2LR

^{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 AA59789/01	Vendor similar designator or type part number <u>1/</u> <u>2/</u> CAGE 18915	PIN designator AA59789/01	Vendor similar designator or type part number <u>1/</u> <u>2/</u> CAGE 52094
AB50S	40-5-10-B-LN	CB50S	A226CR4.80T2R
AB55S	40-5-11-B-LN	CB55S	A226CR5.30T2R
AB60S	40-5-12-B-LN	CB60S	A226CR5.80T2R
AB65S	40-5-13-B-LN	CB65S	A226CR6.30T2R

- 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 5998-2006-008

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>.