

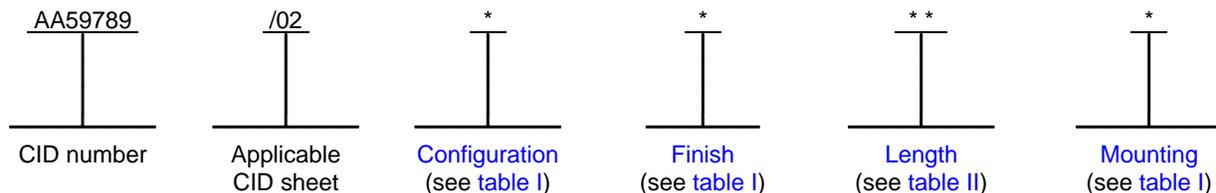
COMMERCIAL ITEM DESCRIPTION  
SPECIFICATION SHEET

HOLDER, ELECTRICAL CARD, WEDGE RETAINERS, 5 PIECE, FOR COLD PLATE APPLICATIONS,  
.225 X .260 INCH BODY SIZE, WITH TWO MOUNTING HOLES AND VISUAL LOCK INDICATION,  
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: AA59789/02WB55R is the PIN for a black anodize finished, 5.3 inch (134.6 mm) long card holder with  
visual lock indication and a retained actuating screw. The card holder also features two mounting holes for rivet  
fastening.

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

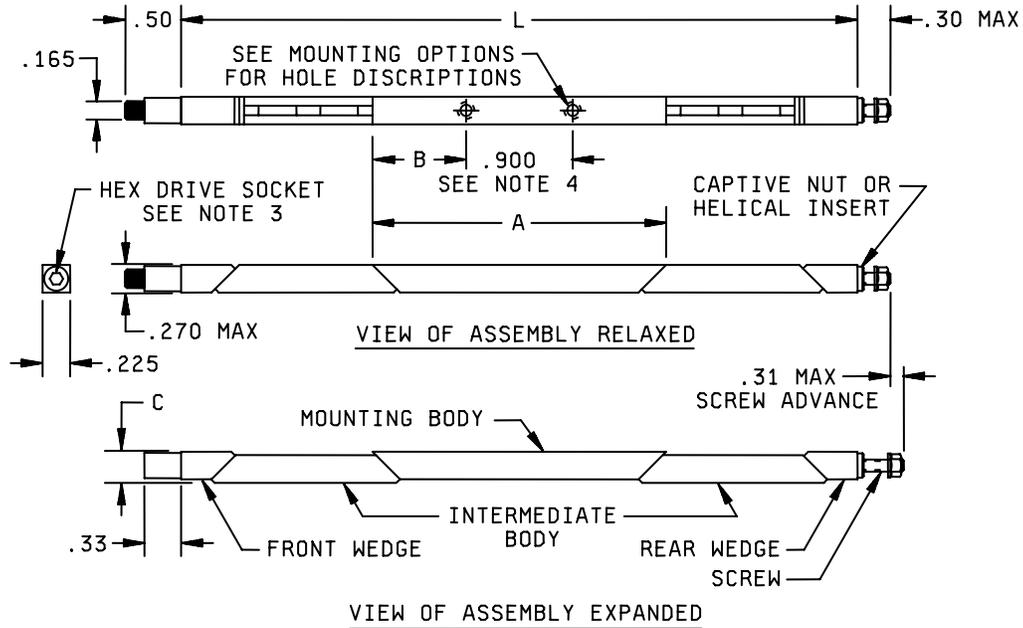
**Cold plate slot width.** The recommended slot width for cold plates used with this card holder is .300 inch (7.62 mm)  
plus the thickness of the circuit card assembly printed board (see [A-A-59789](#)).

**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, 2, and 3](#), and may include those on [figures 4 and 5](#).

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, 2, and 3	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, 3, and 4	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, 3, and 5	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, 4, and 5	Lockwasher, flat washer, and screw self-lock element
D	C	B, C, E, H	S, R, T, U		



Inches	mm	Inches	mm	Inches	mm	Inches	mm
.165	4.19	.270	6.86	.31	7.9	.50	12.7
.225	5.72	.30	7.6	.33	8.4	.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.

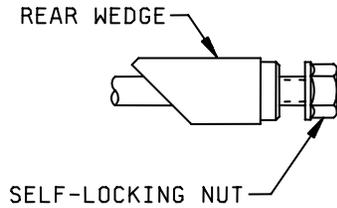


FIGURE 2. Screw retaining self-locking nut (corrosion resistant) details.

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)	.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.

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.

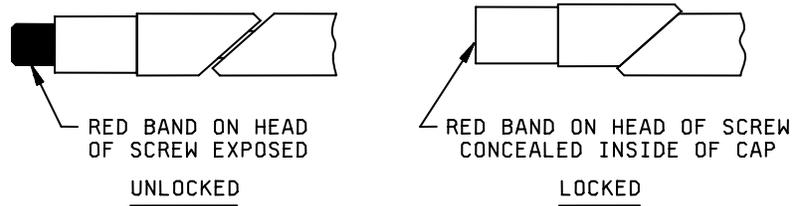


FIGURE 3. Visual lock indicator.

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

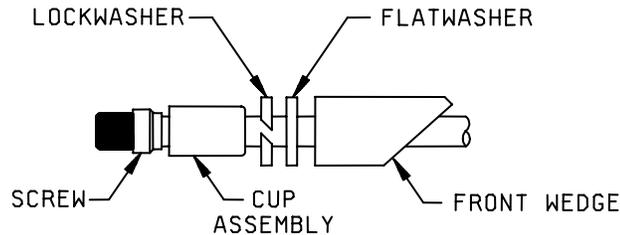


FIGURE 4. Lockwasher and flat washer details.

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

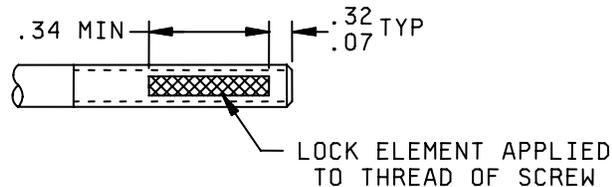


FIGURE 5. Screw self-locking element details.

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 "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. These 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.

<u>PIN designator</u> AA59789/02	<u>Vendor similar designator</u> or type part number <u>1/</u> CAGE 18915	<u>PIN designator</u> AA59789/02	<u>Vendor similar designator</u> or type part number <u>1/</u> CAGE 52094
AB60S	40-5VI-11-B-LN	CB60S	VA226CR5.80T2R
AB60R	40-5VI-11-B-LN-R	CB60R	VA226CR5.80HR
AB60T	40-5VI-11-B-LN-T	CB60T	VA226CR5.80T0R
AB60P	40-5VI-11-B-LN-P	CB60U	VA226CR5.80TM2R

See footnote at end of table.

TABLE III. Commercial part number supersession data.

PIN designator AA59789/02	Vendor similar designator or type part number <sup>1/</sup> CAGE 18915	PIN designator AA59789/02	Vendor similar designator or type part number <sup>1/</sup> CAGE 52094
FB60S	40-5VI-11-B-LF-LN	WB60S	WVA226CR5.80T2R
FB60R	40-5VI-11-B-LFLNR	WB60R	WVA226CR5.80HR
FB60T	40-5VI-11-B-LFLNT	WB60T	WVA226CR5.80T0R
FB60P	40-5VI-11-B-LFLNP	WB60U	WVA226CR5.80TM2R
NB60S	40-5VI-12-B-LNL	LB60S	VA226CR5.80T2LR
NB60R	40-5VI-12-BLNR	LB60R	VA226CR5.80HLR
NB60T	40-5VI-12-BLNTL	LB60T	VA226CR5.80T0LR
NB60P	40-5VI-12-BLNPL	LB60U	VA226CR5.80TM2LR
JB60S	40-5VI-12BLFLNL	DB60S	WVA226CR5.80T2LR
JB60R	40-5VI12BLFLNR	DB60R	WVA226CR5.80HLR
JB60T	40-5VI12BLFLNTL	DB60T	WVA226CR5.80T0LR
JB60P	40-5VI12BLFLNP	DB60U	WVA226CR5.80TM2LR
AC60S	40-5VI-12-LN	CC60S	V226CR5.80T2R
AC60R	40-5VI-12-LN-R	CC60R	V226CR5.80HR
AC60T	40-5VI-12-LN-T	CC60T	V226CR5.80T0R
AC60P	40-5VI-12-LN-P	CC60U	V226CR5.80TM2R
FC60S	40-5VI-12-LF-LN	WC60S	WV226CR5.80T2R
FC60R	40-5VI-12-LFLNR	WC60R	WV226CR5.80HR
FC60T	40-5VI-12-LFLNT	WC60T	WV226CR5.80T0R
FC60P	40-5VI-12-LFLNP	WC60U	WV226CR5.80TM2R
NC60S	40-5VI-12-LN-L	LC60S	V226CR5.80T2LR
NC60R	40-5VI-12-LN-RL	LC60R	V226CR5.80HLR
NC60T	40-5VI-12-LN-TL	LC60T	V226CR5.80T0LR
NC60P	40-5VI-12-LN-PL	LC60U	V226CR5.80TM2LR
JC60S	40-5VI-12-LFLNL	DC60S	WV226CR5.80T2LR
JC60R	40-5VI-12LFLNR	DC60R	WV226CR5.80HLR
JC60T	40-5VI-12LFLNTL	DC60T	WV226CR5.80T0LR
JC60P	40-5VI-12LFLNP	DC60U	WV226CR5.80TM2LR

See footnote at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/02	Vendor similar designator or type part number <sup>1/</sup> CAGE 18915	PIN designator AA59789/02	Vendor similar designator or type part number <sup>1/</sup> CAGE 52094
AP60S	40-5VI-12-N-LN	CE60S	VEN226CR5.80T2R
AP60R	40-5VI-12-N-LNR	CE60R	VEN226CR5.80HR
AP60T	40-5VI-12-N-LNT	CE60T	VEN226CR5.80T0R
AP60P	40-5VI-12-N-LNP	CE60U	VEN226CR5.80TM2R
FP60S	40-5VI-12-NLFLN	WE60S	WVEN226CR5.80T2R
FP60R	40-5VI-12NLFLNR	WE60R	WVEN226CR5.80HR
FP60T	40-5VI-12NLFLNT	WE60T	WVEN226CR5.80T0R
FP60P	40-5VI-12NLFLNP	WE60U	WVEN226CR5.80TM2R
NP60S	40-5VI-12-N-LNL	LE60S	VEN226CR5.80T2LR
NP60R	40-5VI-12-NLNRL	LE60R	VEN226CR5.80HLR
NP60T	40-5VI-12-NLNTL	LE60T	VEN226CR5.80T0LR
NP60P	40-5VI-12-NLNPL	LE60U	VEN226CR5.80TM2LR
JP60S	40-5VI-12NLFLNL	DE60S	WVEN226CR5.80T2LR
JP60R	40-5VI12NLFLNRL	DE60R	WVEN226CR5.80HLR
JP60T	40-5VI12NLFLNTL	DE60T	WVEN226CR5.80T0LR
JP60P	40-5VI12NLFLNP	DE60U	WVEN226CR5.80TM2LR
AH60S	40-5VI-12-B3-LN	CH60S	VHA226CR5.80T2R
AH60R	40-5VI-12-B3LNR	CH60R	VHA226CR5.80HR
AH60T	40-5VI-12-B3LNT	CH60T	VHA226CR5.80T0R
AH60P	40-5VI-12-B3LNP	CH60U	VHA226CR5.80TM2R
FH60S	40-5VI-12B3LFLN	WH60S	WVHA226CR5.80T2R
FH60R	40-5VI12B3LFLNR	WH60R	WVHA226CR5.80HR
FH60T	40-5VI12B3LFLNT	WH60T	WVHA226CR5.80T0R
FH60P	40-5VI12B3LFLNP	WH60U	WVHA226CR5.80TM2R
NH60S	40-5VI-12-B3LNL	LH60S	VHA226CR5.80T2LR
NH60R	40-5VI-12B3LNRL	LH60R	VHA226CR5.80HLR
NH60T	40-5VI-12B3LNTL	LH60T	VHA226CR5.80T0LR
NH60P	40-5VI-12B3LNPL	LH60U	VHA226CR5.80TM2LR

See footnote at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/02	Vendor similar designator or type part number <u>1/</u> CAGE 18915	PIN designator AA59789/02	Vendor similar designator or type part number <u>1/</u> CAGE 52094
JH60S	40-5VI-12B3LFLNLL	DH60S	WVHA226CR5.80T2LR
JH60R	405V112B3LFLNRL	DH60R	WVHA226CR5.80HLR
JH60T	405V112B3LFLNTRL	DH60T	WVHA226CR5.80T0LR
JH60P	405V112B3LFLNPL	DH60U	WVHA226CR5.80TM2LR

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 AA59789/02	Vendor similar designator or type part number <u>1/</u> <u>2/</u> CAGE 18915	PIN designator AA59789/02	Vendor similar designator or type part number <u>1/</u> <u>2/</u> CAGE 52094
FB50R	40-5VI-10BLFLNR	WB50R	WVA226CR4.80HR
FB55R	40-5VI-11BLFLNR	WB55R	WVA226CR5.30HR
FB60R	40-5VI-12BLFLNR	WB60R	WVA226CR5.80HR
FB65R	40-5VI-13BLFLNR	WB65R	WVA226CR6.30HR

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

Review activity:

CIVIL AGENCY COORDINATING ACTIVITY:

GSA – FSS  
 Preparing Activity:  
 DLA – CC  
 Project 5998-2006-009

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>.