

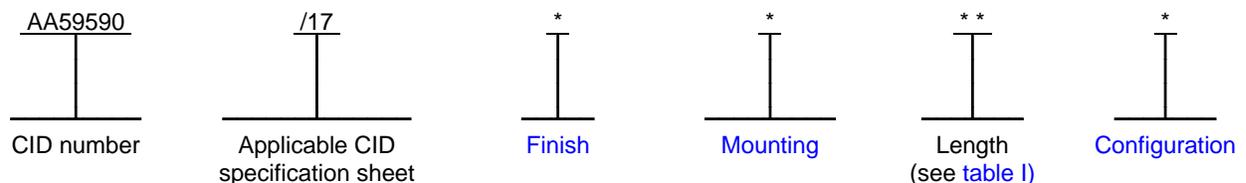
COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

HOLDER, ELECTRICAL CARD, WEDGE RETAINERS, 3 PIECE,
SCREW ACTUATED DRIVE, .260 X .260 INCH BODY SIZE

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-59590](#).

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: AA59590/17EV38D is the PIN for a nickel plated, 2.8 inches (97 mm) long card holder with a flat washer, lockwasher, and screw self-locking element. The card holder also features two tapped mounting holes for use with metric M2.5 x 0.45 fasteners.

SALIENT CHARACTERISTICS.

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

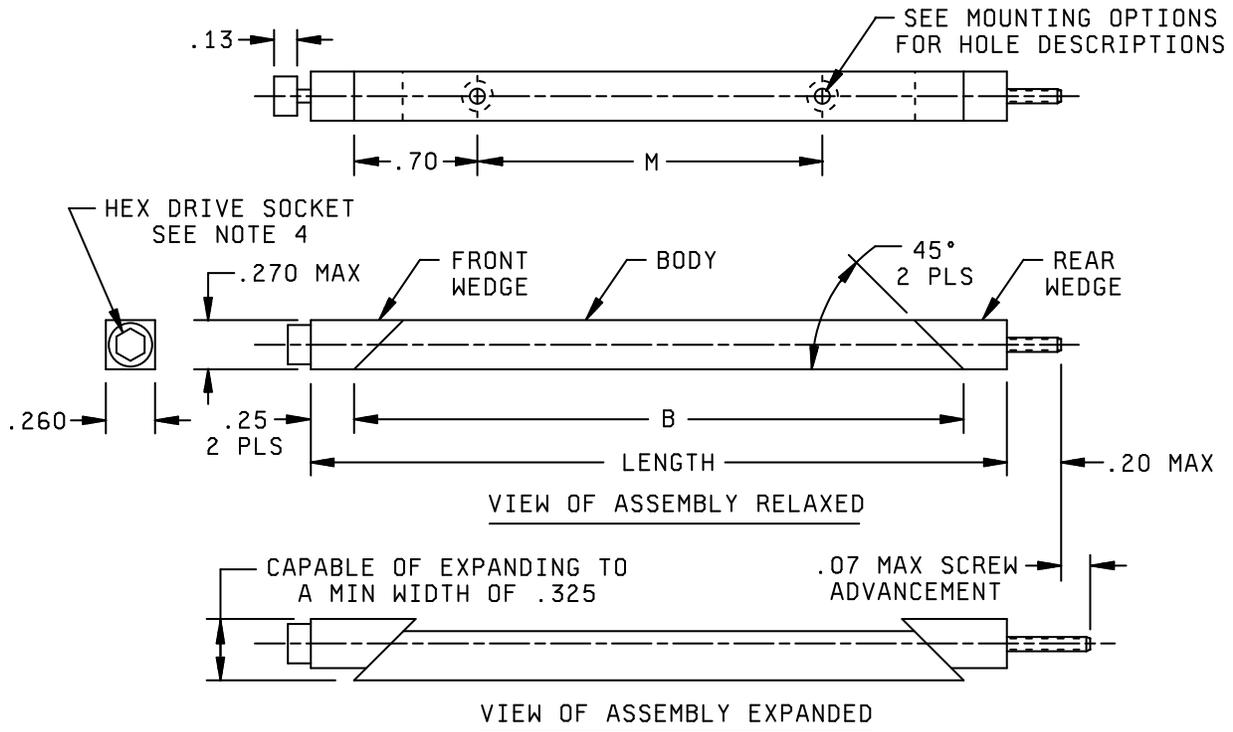
Interface and physical dimensions. The card holders supplied to this CID specification sheet shall be as specified herein (see [figures 1, 2, 3, and table I](#)) and meet the general requirements of CID [A-A-59590](#).

Material. Unless otherwise specified herein, the card holder materials shall be as specified in [A-A-59590](#).

Actuating screw hex drive socket. The dimension for hex drive socket shall be .094 inch (2.39 mm) for mounting options "J", "N", "T" and "V". The dimension for hex drive socket shall be a metric dimension of 2.5 mm (.098 inch) across flats for mounting option "G".

Cold plate dimensions. 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-59590](#)).

Nominal installation torque. When card holders are used in cold plate applications, the nominal installation torque of each card holder shall be as follows: 10 inch-pounds (1.1 N-m) for assemblies using no options or option "W" and 12 inch-pounds (1.4 N-m) for assemblies using options "D" or "E".



| Inches | mm | Inches | mm | Inches | mm | Inches | mm |
|--------|-----|--------|-----|--------|------|--------|------|
| .07 | 1.8 | .20 | 5.1 | .260 | 6.6 | .325 | 8.26 |
| .13 | 3.3 | .25 | 6.4 | .270 | 6.86 | .70 | 17.8 |

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. The tolerance for the mounting hole spacing is ± 0.005 inches (0.13 mm).
4. The across flats dimension for hex drive socket shall be .094 inch (2.39 mm) for mounting options "J", "N", "T" and "V". The across flats dimension for hex drive socket shall be a metric dimension of 2.5 mm (.098 inch) across flats for mounting option "G".

FIGURE 1. Relaxed and expanded dimensions, basic configuration.

Finish. The finish designator shall be as specified in [A-A-59590](#). The finishes available for this CID specification sheet are as follows: "B" (black anodize), "C" (gold chemical film), "E" (electroless nickel), "H" (hard black anodize), or "R" (clear chemical film).

Mounting. The mounting designators shall be as specified in [A-A-59590](#). Except when using mounting option "N", two mounting holes are required on the card holders. The mounting options available for this CID specification sheet are as follows: "J" (rivet mounting holes), "N" (no mounting holes), "T" (tapped 0-80 UNF 2B holes), "V" (tapped 2-56 UNC 2B holes), or "G" (tapped M2.5 x.45 metric holes). See [figure 1](#) and table I for mounting hole spacing requirements. Card holders using mounting option "J" may be shipped unassembled.

Counterbore holes (for rivet mounting). The holes used for rivet mounting shall be .068/.073 inch (1.73/1.85 mm) diameter, countersunk 100 degrees by .140 inch (3.56 mm) diameter through holes with an access/clearance counterbore of .156 inch (3.96 mm) diameter by .200 inch (5.08 mm) deep.

Rivets. This card holder uses rivet type A as specified in [A-A-59590](#) when rivet mounting is used.

Length, expanded, and relaxed dimensions. The length designator shall be as specified in [A-A-59590](#) and the lengths available for this CID specification sheet are listed in table I. The length, expanded, and relaxed dimensions shall be as specified on [figure 1](#).

TABLE I. Assembly dimensions (see [figure 1](#)). 1/

| PIN length designator | Dimension "LENGTH" ±.02 (0.5 mm) | Dimension "B" ±.03 (0.8 mm) | Dimension "M" ±.005 (0.13 mm) |
|-----------------------|-------------------------------------|--------------------------------|----------------------------------|
| 28 | 2.8 (71 mm) | 2.30 (58.4 mm) | .90 (22.9 mm) |
| 38 | 3.8 (97 mm) | 3.30 (83.8 mm) | 1.90 (48.3 mm) |
| 48 | 4.8 (122 mm) | 4.30 (109.2 mm) | 2.90 (73.7 mm) |
| 58 | 5.8 (147 mm) | 5.30 (134.6 mm) | 3.90 (99.1 mm) |

1/ Dimensions are in inches. Millimeters, in parenthesis, are given for general information only.

Configuration. The configuration of a card holder shall be as specified in table II. The details of a particular configuration consist of those on [figure 1](#) and may include those on [figures 2](#) and [3](#). The correct PIN configuration identifier for each option is listed in table II. Card holders not requiring the options described by table II shall leave the configuration position in the PIN blank.

TABLE II. Configuration.

| Configuration | Applicable figures | Hardware added to basic configuration |
|---------------|---|---|
| | 1 | No changes from basic configuration |
| W | 1 and 2 | Lockwasher and flat washer |
| E | 1 and 3 | Screw self-locking element |
| D | 1 , 2 , and 3 | Lockwasher, flat washer, and screw self-locking element |

Lockwasher and flat washer (see figure 2). The use of a lockwasher and flat washer located under the screw head will provide for additional resistance to loosening of the card holder assembly from shock and vibration. Card holders requiring a lockwasher and flat washer shall include a suffix "W" in the PIN (see [classification](#) and [notes](#)).

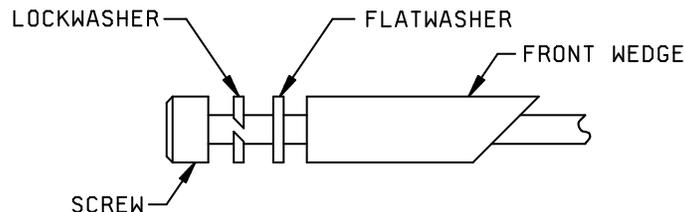


FIGURE 2. Lockwasher and flat washer details.

Screw self-locking element (see figure 3). The use of a screw self-locking element on the screw will provide a prevailing-torque for increased resistance to loosening of the card holder assembly from shock and vibration. Card holders requiring a screw self-locking element shall include a suffix "E" in the PIN (see [classification](#) and [notes](#)).

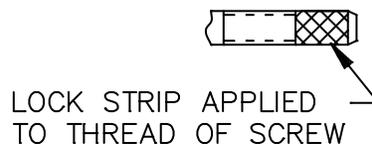


FIGURE 3. Screw self-locking element details.

Lockwasher, flat washer, and screw self-locking element. Card holders requiring a lockwasher, flat washer, and screw self-locking element option shall include a suffix "D" in the PIN (see [classification](#) and [notes](#)).

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-59590 – Holder, Electrical Card, Wedge Retainers, 3 Piece, Screw Actuated Drive, 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-59590](#).

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> |
|--------------------------|---|--|
| 61081 | Calmark – 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) 740-2430 E-mail: sales@calmark.com URL: www.calmark.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 supersedes the following manufacturer's part numbers as shown in table III. The CID PINs listed in table III are only for length designator "28". See [table IV](#) for CID PIN construction using other available lengths for this 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 AA59590/17 | Vendor similar designator or type part number <u>1/</u> <u>2/</u> | |
|------------------------------|---|--------------------|
| | CAGE 61081 | CAGE 5BG68 |
| BJ28 | A245-2.80H | 3245BA-2.80H |
| BN28 | A245-2.80 | 3245BA-2.80 |
| BT28 | A245-2.80T0 | 3245BA-2.80T0 |
| BV28 | A245-2.80T2 | 3245BA-2.80T2 |
| BG28 | MA245-2.80TM2.5 | 3245MBA-2.80TM2.5 |
| BJ28W | WA245-2.80H | 3245WBA-2.80H |
| BN28W | WA245-2.80 | 3245WBA-2.80 |
| BT28W | WA245-2.80T0 | 3245WBA-2.80T0 |
| BV28W | WA245-2.80T2 | 3245WBA-2.80T2 |
| BG28W | MWA245-2.80TM2.5 | 3245MWBA-2.80TM2.5 |

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

| PIN designator AA59590/17 | Vendor similar designator or type part number <u>1/</u> <u>2/</u> | |
|------------------------------|---|---------------------|
| | CAGE 61081 | CAGE 5BG68 |
| BJ28E | A245-2.80HL | 3245BA-2.80HL |
| BN28E | A245-2.80L | 3245BA-2.80L |
| BT28E | A245-2.80T0L | 3245BA-2.80T0L |
| BV28E | A245-2.80T2L | 3245BA-2.80T2L |
| BG28E | MA245-2.80TM2.5L | 3245MBA-2.80TM2.5L |
| BJ28D | WA245-2.80HL | 3245WBA-2.80HL |
| BN28D | WA245-2.80L | 3245WBA-2.80L |
| BT28D | WA245-2.80T0L | 3245WBA-2.80T0L |
| BV28D | WA245-2.80T2L | 3245WBA-2.80T2L |
| BG28D | MWA245-2.80TM2.5L | 3245MWBA-2.80TM2.5L |
| CJ28 | 245-2.80H | 3245CG-2.80H |
| CN28 | 245-2.80 | 3245CG-2.80 |
| CT28 | 245-2.80T0 | 3245CG-2.80T0 |
| CV28 | 245-2.80T2 | 3245CG-2.80T2 |
| CG28 | M245-2.80TM2.5 | 3245MCG-2.80TM2.5 |
| CJ28W | W245-2.80H | 3245WCG-2.80H |
| CN28W | W245-2.80 | 3245WCG-2.80 |
| CT28W | W245-2.80T0 | 3245WCG-2.80T0 |
| CV28W | W245-2.80T2 | 3245WCG-2.80T2 |
| CG28W | MW245-2.80TM2.5 | 3245MWCG-2.80TM2.5 |
| CJ28E | 245-2.80HL | 3245CG-2.80HL |
| CN28E | 245-2.80L | 3245CG-2.80L |
| CT28E | 245-2.80T0L | 3245CG-2.80T0L |
| CV28E | 245-2.80T2L | 3245CG-2.80T2L |
| CG28E | M245-2.80TM2.5L | 3245MCG-2.80TM2.5L |
| CJ28D | W245-2.80HL | 3245WCG-2.80HL |
| CN28D | W245-2.80L | 3245WCG-2.80L |
| CT28D | W245-2.80T0L | 3245WCG-2.80T0L |
| CV28D | W245-2.80T2L | 3245WCG-2.80T2L |
| CG28D | MW245-2.80TM2.5L | 3245MWCG-2.80TM2.5L |

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

| PIN designator AA59590/17 | Vendor similar designator or type part number <u>1/ 2/</u> | |
|------------------------------|--|---------------------|
| | CAGE 61081 | CAGE 5BG68 |
| EJ28 | EN245-2.80H | 3245EN-2.80H |
| EN28 | EN245-2.80 | 3245EN-2.80 |
| ET28 | EN245-2.80T0 | 3245EN-2.80T0 |
| EV28 | EN245-2.80T2 | 3245EN-2.80T2 |
| EG28 | MEN245-2.80TM2.5L | 3245MEN-2.80TM2.5 |
| EJ28W | WEN245-2.80H | 3245WEN-2.80H |
| EN28W | WEN245-2.80 | 3245WEN-2.80 |
| ET28W | WEN245-2.80T0 | 3245WEN-2.80T0 |
| EV28W | WEN245-2.80T2 | 3245WEN-2.80T2 |
| EG28W | MWEN245-2.80TM2.5 | 3245MWEN-2.80TM2.5 |
| EJ28E | EN245-2.80HL | 3245EN-2.80HL |
| EN28E | EN245-2.80L | 3245EN-2.80L |
| ET28E | EN245-2.80T0L | 3245EN-2.80T0L |
| EV28E | EN245-2.80T2L | 3245EN-2.80T2L |
| EG28E | MEN245-2.80TM2.5L | 3245MEN-2.80TM2.5L |
| EJ28D | WEN245-2.80HL | 3245WEN-2.80HL |
| EN28D | WEN245-2.80L | 3245WEN-2.80L |
| ET28D | WEN245-2.80T0L | 3245WEN-2.80T0L |
| EV28D | WEN245-2.80T2L | 3245WEN-2.80T2L |
| EG28D | MWEN245-2.80TM2.5L | 3245MWEN-2.80TM2.5L |
| HJ28 | HA245-2.80H | 3245BH-2.80H |
| HN28 | HA245-2.80 | 3245BH-2.80 |
| HT28 | HA245-2.80T0 | 3245BH-2.80T0 |
| HV28 | HA245-2.80T2 | 3245BH-2.80T2 |
| HG28 | MHA245-2.80TM2.5L | 3245MBH-2.80TM2.5 |
| HJ28W | WHA245-2.80H | 3245WBH-2.80H |
| HN28W | WHA245-2.80 | 3245WBH-2.80 |
| HT28W | WHA245-2.80T0 | 3245WBH-2.80T0 |
| HV28W | WHA245-2.80T2 | 3245WBH-2.80T2 |
| HG28W | MWHA245-2.80TM2.5L | 3245MWBH-2.80TM2.5 |

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

| PIN designator AA59590/17 | Vendor similar designator or type part number <u>1/ 2/</u> | |
|------------------------------|--|---------------------|
| | CAGE 61081 | CAGE 5BG68 |
| HJ28E | HA245-2.80HL | 3245BH-2.80HL |
| HN28E | HA245-2.80L | 3245BH-2.80L |
| HT28E | HA245-2.80T0L | 3245BH-2.80T0L |
| HV28E | HA245-2.80T2L | 3245BH-2.80T2L |
| HG28E | MHA245-2.80TM2.5L | 3245MBH-2.80TM2.5L |
| HJ28D | WHA245-2.80HL | 3245WBH-2.80HL |
| HN28D | WHA245-2.80L | 3245WBH-2.80L |
| HT28D | WHA245-2.80T0L | 3245WBH-2.80T0L |
| HV28D | WHA245-2.80T2L | 3245WBH-2.80T2L |
| HG28D | MWHA245-2.80TM2.5L | 3245MWBH-2.80TM2.5L |
| RJ28 | R245-2.80HL | 3245CC-2.80HL |
| RN28 | R245-2.80L | 3245CC-2.80L |
| RT28 | R245-2.80T0L | 3245CC-2.80T0L |
| RV28 | R245-2.80T2L | 3245CC-2.80T2L |
| RG28 | MR245-2.80TM2.5L | 3245MCC-2.80TM2.5L |
| RJ28W | WR245-2.80H | 3245WCC-2.80H |
| RN28W | WR245-2.80 | 3245WCC-2.80 |
| RT28W | WR245-2.80T0 | 3245WCC-2.80T0 |
| RV28W | WR245-2.80T2 | 3245WCC-2.80T2 |
| RG28W | MWR245-2.80TM2.5 | 3245MWCC-2.80TM2.5 |
| RJ28E | WR245-2.80H | 3245CC-2.80HL |
| RN28E | WR245-2.80 | 3245CC-2.80L |
| RT28E | WR245-2.80T0 | 3245CC-2.80T0L |
| RV28E | WR245-2.80T2 | 3245CC-2.80T2L |
| RG28E | MWR245-2.80TM2.5 | 3245MCC-2.80TM2.5L |
| RJ28D | WR245-2.80HL | 3245WCC-2.80HL |
| RN28D | WR245-2.80L | 3245WCC-2.80L |
| RT28D | WR245-2.80T0L | 3245WCC-2.80T0L |
| RV28D | WR245-2.80T2L | 3245WCC-2.80T2L |
| RG28D | MWR245-2.80TM2.5L | 3245MWCC-2.80TM2.5L |

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

- 1/ The CID PINs listed are only for length designator "28".
- 2/ 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-59590](#).

TABLE IV. Example of PIN with available length designators.

| PIN designator AA59590/17 | Vendor similar designator or type part number <u>1/</u> <u>2/</u> | |
|------------------------------|---|-----------------|
| | CAGE 61081 | CAGE 5BG68 |
| EV28D | WEN245-2.80T2L | 3245WEN-2.80T2L |
| EV38D | WEN245-3.80T2L | 3245WEN-3.80T2L |
| EV48D | WEN245-4.80T2L | 3245WEN-4.80T2L |
| EV58D | WEN245-5.80T2L | 3245WEN-5.80T2L |

- 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-59590](#).
- 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 5998-2012-027

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/>.