

[INCH-POUND]
A-A-59590/27A
21 July 2026
SUPERSEDING
A-A-59590/27
27 April 2021

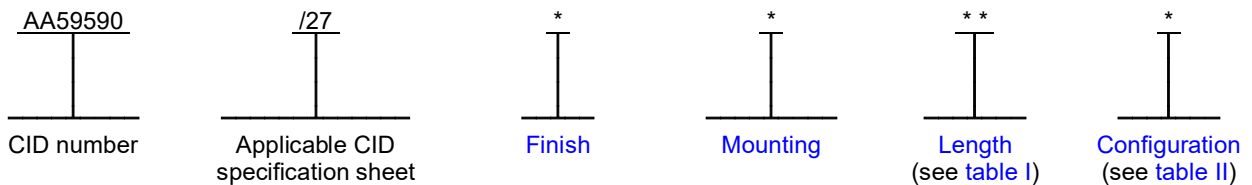
COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

HOLDERS, ELECTRICAL CARD, WEDGE RETAINERS, 3 PIECE,
.250 X .260 INCH BODY SIZE, SHAFT MOUNTING BODY,
WITH 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 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 PIN as shown in the following example (see [NOTES](#)).



Example: AA59590/27BT38E is the PIN for a black anodized, 3.8 inches (97 mm) long card holder that uses screw
actuation to lock the card holder into its installed position. The card holder also features visual lock indication and
three tapped 0-80 UNF mounting holes for use with fasteners.

SALIENT CHARACTERISTICS.

Performance. Card holders shall hold the circuit card it is attached to firmly in its installed position and prevent
loosening or movement as a result of shock and vibration. The card holder shall also provide a thermal transfer path
from the circuit card assembly to the cold plate or heat sink surfaces. Card holders shall also have a visual indicator
to show when the assembly is in its relaxed (unlocked) and expanded (locked) state.

Interface and physical dimensions. The card holders supplied to this CID specification sheet shall be as specified
herein (see [figures 1, 2, 3 and 4](#)) and meet the general requirements specified in CID [A-A-59590](#).

Actuating screw hex drive socket. The across flats dimension for the actuating screw hex drive socket shall be as
specified on [figure 1](#).

Nominal installation torque. When card holders are used in cold plate applications, the nominal installation torque of
card holders shall be as follows: 6 inch-pounds (0.68 N-m) for assemblies using option "C" or "E" and 8 inch-pounds
(0.94 N-m) for assemblies using option "D" or "L".

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

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.

AMSC N/A

DISTRIBUTION STATEMENT A. Approved for public release. Distribution is unlimited.

FSC 5998



Visual lock indicator (see [figure 2](#)). Card holders shall have a visual indicator to show when the card holder is in its relaxed state (unlocked). When the card holder is in the relaxed state (unlocked), 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 state (locked), this red band shall be concealed.

Finish. The wedge body 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), "H" (hard black anodize), or "R" (clear chemical film).

Mounting. The mounting designators shall be as specified in [A-A-59590](#). The mounting options available for this CID specification sheet are as follows: "J" (rivet mounting holes), "T" or "R" (tapped 0–80 UNF 2B holes), "V" or "S" (tapped 2–56 UNC 2B holes), "F" or "L" (tapped M2.0 x 0.4 metric holes), or "G" or "M" (tapped M2.5 x 0.45 metric holes). Card holders using mounting option "J" may be shipped unassembled. See [figures 1, 4](#) and [table I](#) for mounting hole spacing requirements.

Rivet mounting holes. The holes used for rivet mounting shall be .066/.073 inch (1.68/1.85 mm) diameter through holes, countersunk 100 degrees by .060 inch (1.53 mm) deep.

Rivets. This card holder uses rivet style 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](#). 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](#). The length designator shall be included in the PIN.

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

PIN length designator	Dimension "Length" ±.030 (0.76)	Dimension "M" ±.01 (0.3)	Dimension "M/2" ±.02 (0.5)
28	2.80 (71.1)	.90 (22.9)	.45 (11.4)
38	3.80 (96.5)	1.90 (48.3)	.95 (24.1)
48	4.80 (121.9)	2.90 (73.7)	1.45 (36.8)

^{1/} Dimensions are in inches. Millimeters are given for general information only.

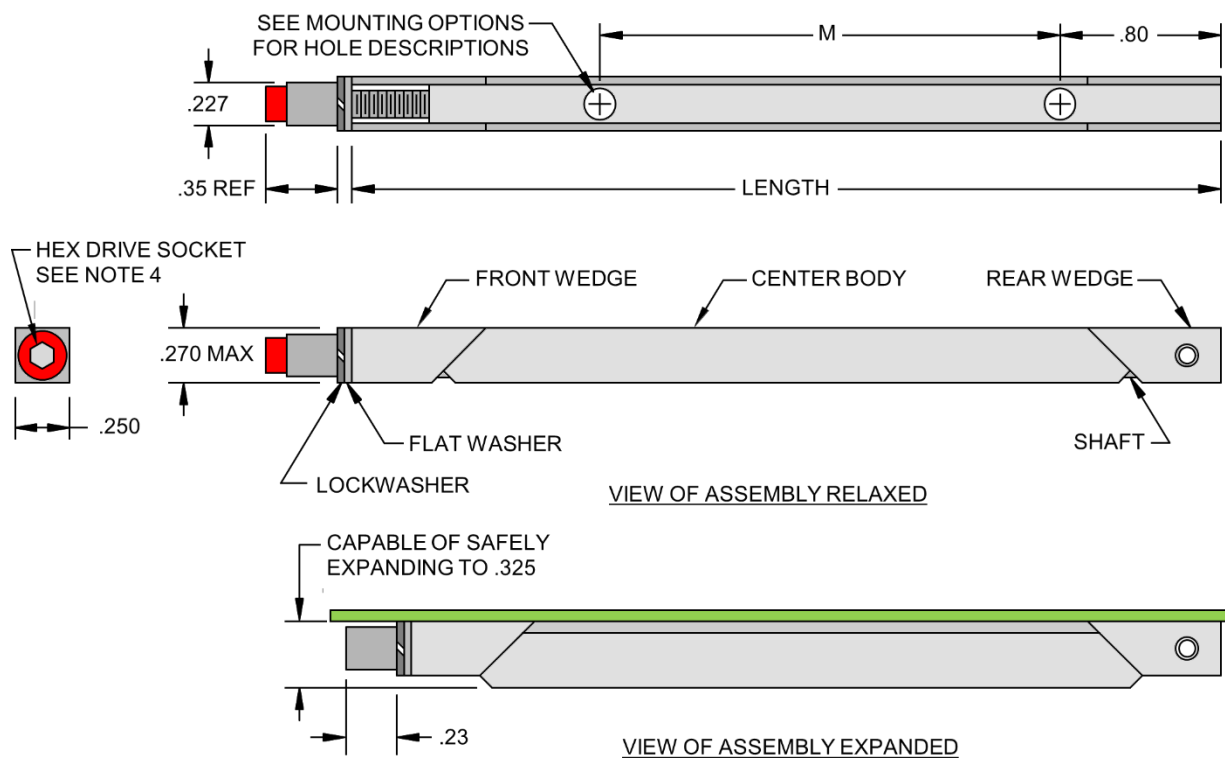
Configuration. The configuration of a card holder shall be as specified in [table II](#). The details of a particular configuration consist of those on [figures 1 and 2](#) and may include those on [figures 3 and 4](#). The configuration designator shall be included in the PIN.

TABLE II. Configurations.

Configuration	Applicable figures	Hardware options
C	1 and 2	No added hardware
L	1 , 2 and 3	Screw self locking element
E	1 , 2 and 4	Additional mounting hole
D	1 , 2 , 3 and 4	Screw self-locking element and additional mounting hole

No added hardware. The base configuration of the card holder is as depicted on [figures 1 and 2](#). Card holders requiring no added hardware options include a configuration identifier "C" in the PIN (see classification, [table II](#) and [notes](#) section herein).

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. The screw self-locking element shall be as specified in [A-A-59590](#). Card holders requiring a screw self-locking element shall include configuration identifier "L" in the PIN (see classification, [table II](#) and [notes](#) herein).



Inches	mm	Inches	mm	Inches	mm	Inches	mm
.227	5.76	.250	6.35	.325	8.26	.80	20.32
.23	5.84	.270	6.86	.35	8.89		

NOTES:

1. Dimensions are in inches. Millimeters are given for general information only.
2. Unless otherwise specified, tolerances are for ± 0.02 inch (0.51 mm) for two place decimals and ± 0.010 inch (0.25 mm) for three place decimals.
3. Tolerance for the hole spacing is ± 0.005 inch (0.13 mm).
4. The across flats dimension for the actuating screw hex drive socket shall be as follows: .094 inch (2.38 mm) for the standard 3/32 screw head or 2.5 mm (.098 inch) for the metric screw head.

FIGURE 1. Relaxed and expanded dimensions.

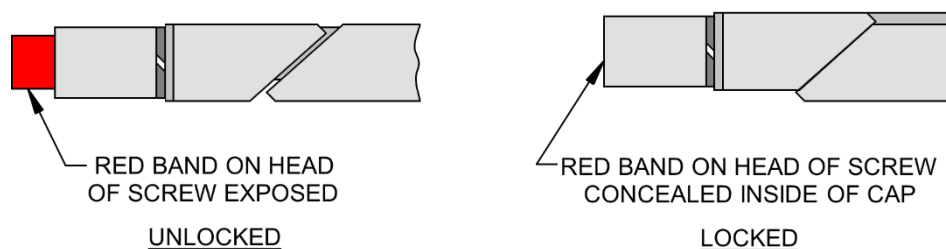


FIGURE 2. Visual indication of card holders in locked position.

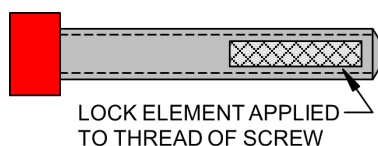


FIGURE 3. Screw self-locking element details.

Additional mounting hole (see figure 4). Card holders requiring an additional mounting hole shall include configuration identifier "E" in the PIN (see classification, [table II](#) and notes herein).

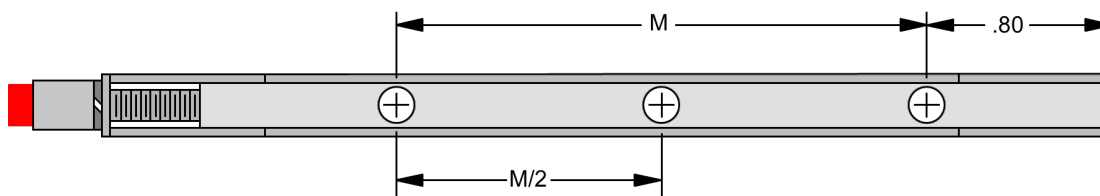


FIGURE 4. Additional mounting hole details.

Screw self-locking element and additional mounting hole. Card holders requiring a screw self-locking element and an additional mounting hole shall include a suffix "D" in the PIN (see classification, [table II](#) and notes 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-59590](#) - Holder, Electrical Card, Wedge Retainers, 3 Piece, For Cold Plate Applications, General Requirements For.

(Copies of these documents are available online at <https://quicksearch.dla.mil>.)

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</u> <u>CAGE</u>	<u>Manufacturer name and address</u>	<u>Manufacturer contact information</u>
------------------------------------	--------------------------------------	---

61081	Schroff, Inc. 7328 Trade Street San Diego, CA 92121-3410
-------	--

Telephone: (858) 740-2400 Facsimile: (858) 740-2430 E-mail: askschroff@nVent.com URL: https://www.nvent.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 "28". 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 AA59590/27	Vendor similar designator or type part number <u>1/</u> CAGE 61081	Vendor similar designator or type part number <u>1/</u> CAGE	Vendor similar designator or type part number <u>1/</u> CAGE
BJ28C	VA261-2.80H		
BT28C	VA261-2.80T0		
BV28C	VA261-2.80T2		
BF28C	MVA261-2.80TM2		
BG28C	MVA261-2.80TM2.5		
BJ28L	VA261-2.80HL		
BT28L	VA261-2.80T0L		
BV28L	VA261-2.80T2L		
BF28L	MVA261-2.80TM2L		
BG28L	MVA261-2.80TM2.5L		
BJ28E	VA261-2.80EH		
BR28E	VA261-2.80ET0		
BS28E	VA261-2.80ET2		
BL28E	MVA261-2.80ETM2		
BM28E	MVA261-2.80ETM2.5		

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59590/27	Vendor similar designator or type part number 1/ CAGE 61081	Vendor similar designator or type part number 1/ CAGE	Vendor similar designator or type part number 1/ CAGE
BJ28D	VA261-2.80EHL		
BR28D	VA261-2.80ET0L		
BS28D	VA261-2.80ET2L		
BL28D	MVA261-2.80ETM2L		
BM28D	MVA261-2.80ETM2.5L		
CJ28C	V261-2.80H		
CT28C	V261-2.80T0		
CV28C	V261-2.80T2		
CF28C	MV261-2.80TM2		
CG28C	MV261-2.80TM2.5		
CJ28L	V261-2.80HL		
CT28L	V261-2.80T0L		
CV28L	V261-2.80T2L		
CF28L	MV261-2.80TM2L		
CG28L	MV261-2.80TM2.5L		
CJ28E	V261-2.80EH		
CR28E	V261-2.80ET0		
CS28E	V261-2.80ET2		
CL28E	MV261-2.80ETM2		
CM28E	MV261-2.80ETM2.5		
CJ28D	V261-2.80EHL		
CR28D	V261-2.80ET0L		
CS28D	V261-2.80ET2L		
CL28D	MV261-2.80ETM2L		
CM28D	MV261-2.80ETM2.5L		
HJ28C	VHA261-2.80H		
HT28C	VHA261-2.80T0		
HV28C	VHA261-2.80T2		
HF28C	MVHA261-2.80TM2		
HG28C	MVHA261-2.80TM2.5		

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59590/27	Vendor similar designator or type part number <u>1/</u> CAGE 61081	Vendor similar designator or type part number <u>1/</u> CAGE	Vendor similar designator or type part number <u>1/</u> CAGE
HJ28L	VHA261-2.80HL		
HT28L	VHA261-2.80T0L		
HV28L	VHA261-2.80T2L		
HF28L	MVHA261-2.80TM2L		
HG28L	MVHA261-2.80TM2.5L		
HJ28E	VHA261-2.80EH		
HR28E	VHA261-2.80ET0		
HS28E	VHA261-2.80ET2		
HL28E	MVHA261-2.80ETM2		
HM28E	MVHA261-2.80ETM2.5		
HJ28D	VHA261-2.80EHL		
HR28D	VHA261-2.80ET0L		
HS28D	VHA261-2.80ET2L		
HL28D	MVHA261-2.80ETM2L		
HM28D	MVHA261-2.80ETM2.5L		
RJ28C	VR261-2.80H		
RT28C	VR261-2.80T0		
RV28C	VR261-2.80T2		
RF28C	MVR261-2.80TM2		
RG28C	MVR261-2.80TM2.5		
RJ28L	VRA261-2.80HL		
RT28L	VRA261-2.80T0L		
RV28L	VR261-2.80T2L		
RF28L	MVR261-2.80TM2L		
RG28L	MVR261-2.80TM2.5L		
RJ28E	VR261-2.80EH		
RR28E	VR261-2.80ET0		
RS28E	VR261-2.80ET2		
RL28E	MVR261-2.80ETM2		
RM28E	MVR261-2.80ETM2.5		

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59590/27	Vendor similar designator or type part number <u>1/</u> CAGE 61081	Vendor similar designator or type part number <u>1/</u> CAGE	Vendor similar designator or type part number <u>1/</u> CAGE
RJ28D	VR261-2.80EHL		
RR28D	VR261-2.80ET0L		
RS28D	VR261-2.80ET2L		
RL28D	MVR261-2.80ETM2L		
RM28D	MVR261-2.80ETM2.5L		

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](#).

PIN length examples. The CID PINs listed in table IV are for all available standard card holder lengths for this specification sheet. However, only one specific finish, mounting and configuration are listed (see PIN example for a break-down of the codes).

TABLE IV. Example of PIN with available length designators.

PIN designator AA59590/27	Vendor similar designator or type part number <u>1/</u> CAGE 61081	Vendor similar designator or type part number <u>1/</u> CAGE	Vendor similar designator or type part number <u>1/</u> CAGE
RM28D	MVR261-2.80ETM2.5L		
RM38D	MVR261-3.80ETM2.5L		
RM48D	MVR261-4.80ETM2.5L		

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 of [A-A-59590](#).

Changes from previous issue. The margins of this CID specification are marked with bars to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

CONCLUDING MATERIAL

MILITARY INTERESTS:

Custodians:
Army – CR
Navy – EC
Air Force – 85
DLA – CC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA – FAS
Preparing Activity:
DLA – CC
Project 5998-2026-007

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.dla.mil>.