

[INCH-POUND]
 A-A-59497/1B
 25 August 2016
 SUPERSEDING
 A-A-59497/1A
 17 June 2010

COMMERCIAL ITEM DESCRIPTION
 SPECIFICATION SHEET

RESISTOR, VARIABLE, NONWIREWOUND,
 NONPRECISION, 1 WATT

The General Services Administration has authorized the use of this
 Commercial Item Description (CID), for all federal agencies.

The complete requirements for procuring a nonwirewound, nonprecision, 1 watt, variable resistor described herein shall consist of this document and the issue in effect of CID A-A-59497.

CLASSIFICATION/PART OR IDENTIFICATION NUMBER (PIN). This CID specification sheet uses a classification system which is included in the PIN as shown in the following example (see NOTES).

<u>A59497</u>	<u>01</u>	<u>***</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>
CID number	Applicable CID sheet (two digits)	Resistance	Resistance tolerance	Physical parameters	Operating shaft	Electrical rotation and linearity

SALIENT CHARACTERISTICS

Interface and physical dimensions. Resistors supplied to this CID specification sheet shall be as specified herein (see figure 1).

Resistance. The nominal resistance value expressed in ohms is identified by a three-digit number; the first two digits represent significant figures and the last digit specifies the number of zeros to follow. Resistance values for specific resistors are in accordance with table I.

NOTE: The available resistance values in table I, are based on electrical rotation, see table IV.

TABLE I. Nominal resistance value.

Resistance value designation	Nominal resistance value (Ohms)	Resistance value designation	Nominal resistance value (Ohms)
501	500	103	10,000
102	1,000	203	20,000
202	2,000	503	50,000
502	5,000		

Resistance tolerance. The resistance tolerance available is K (± 10 percent).

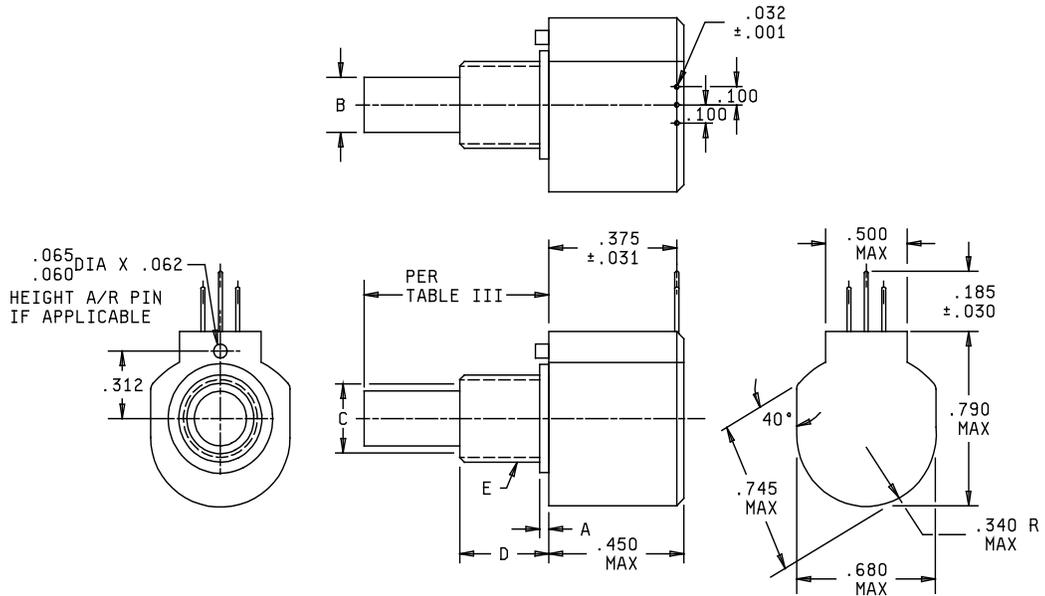
Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data that may improve this document should be sent to: DLA Land and Maritime, ATTN: VAT, Post Office Box 3990, Columbus, OH 43218-3990, or emailed to resistor@dla.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at <https://assist.dla.mil>.

AMSC N/A

FSC 5905



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Dimension symbol	Physical parameters ^{1/}			
	inches	mm	inches	mm
A	0.040	1.016	0.062	1.57
B	0.1242/0.1248	3.15/3.17	0.2487/0.2493	6.32/6.33
C	0.312	7.92	0.402/0.406	10.21/10.31
D	0.290	7.37	0.375	9.53
E ^{2/}	0.250	6.35	0.375	9.53

^{1/} see table II.

^{2/} Bushing thread pitch is 32-2B UNEF.

<u>Inches</u>	<u>mm</u>	<u>Inches</u>	<u>mm</u>	<u>Inches</u>	<u>mm</u>	<u>Inches</u>	<u>mm</u>
.001	0.025	.060	1.524	.185	4.699	.500	12.700
.010	0.254	.062	1.575	.312	7.925	.680	17.272
.030	0.762	.065	1.651	.340	8.636	.745	18.923
.031	0.813	.100	2.540	.450	11.430	.790	20.066

NOTES:

1. Dimensions are in Inches.
2. Metric equivalents are given for general information only.

FIGURE 1. Resistor, Variable.

Physical parameters. The physical parameters shall be identified by a single letter in accordance with table II.

TABLE II. Physical parameters.

Symbol	Bushing diameter
A	0.250
B	0.375

Operating shaft. The operating shaft length and style shall be identified by a single letter in accordance with table III.

TABLE III. Operating shaft.

Symbol	Shaft length	Shaft style
A	.875	Plain
B	.875	Flatted
C	.875	Slotted
D	.750	Plain
E	.750	Flatted
F	.750	Slotted

Electrical rotation and linearity. The electrical rotation and linearity shall be identified by a single letter in accordance with table IV.

TABLE IV. Electrical rotation and linearity.

Symbol	Angle	Resistance								Linearity
		---	---	---	5,000	10,000	20,000	50,000		
A	300	---	---	---	5,000	10,000	20,000	50,000	2%	
B	270	---	---	2,000	5,000	10,000	20,000	50,000		
C	240	---	1,000	2,000	5,000	10,000	20,000	50,000		
D	180	500	1,000	2,000	5,000	10,000	20,000	---		
E	120	500	1,000	2,000	5,000	10,000	---	---		

Power rating. The power rating shall be 1 watt at 70°C, derated to zero at 125°C.

Operating ambient temperature. The operating ambient temperature shall be -55°C to +125°C.

Marking. Resistors supplied to this CID specification sheet shall be marked as specified in A-A-59497.

NOTES

PIN. The PIN should be used for Government purposes to buy commercial products to this CID specification sheet. See CLASSIFICATION for PIN format example.

Source of documents.

COMMERCIAL ITEM DESCRIPTION

A-A-59497 - Resistor, Variable, Nonwirewound, Wirewound, Nonprecision, Precision, General Requirement for.

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

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>MFR's CAGE</u>	<u>MFR's name and address</u>
	Honeywell Sensing and Controls 245 Railroad Street Woonsocket, RI 02895
08815	<u>Formerly known as</u> New England Instruments Phone: 1-800-537-6945 Fax: 815-235-6545 Email: info.sc@honeywell.com Website: www.honeywell.com

Part number (P/N) supersession data. This CID specification sheet PINs supersedes the following manufacturers P/N as shown in table V. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE V. P/N supersession data.

CID coded number	MFR's CAGE	MFR's P/N <u>1/</u>
AA5949701*****	08815	SC***** or MC*****

1/ The manufacturers P/N 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 paragraph 3.9 of A-A-59497.

Government users. To acquire information on obtaining these resistors from the Government inventory system, contact DLA Land and Maritime, ATTN: DLA Land and Maritime-FMX, Post Office Box 3990, Columbus, OH 43218-3990, or telephone (614) 692-3677.

National Stock Number. This section is not applicable to this CID specification sheet.

Changes from previous issue. The margins of this CID are marked with vertical lines 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.

MILITARY INTERESTS:

Custodians:
NAVY - EC
DLA - CC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE
Preparing Activity:
DLA - CC
Project 5905-2016-060

NOTE: The activities listed above were interested in this document as 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>.