

INCH-POUND

A-A-55524/1B  
22 February 2012  
SUPERSEDING  
A-A-55524/1A  
31 January 2003

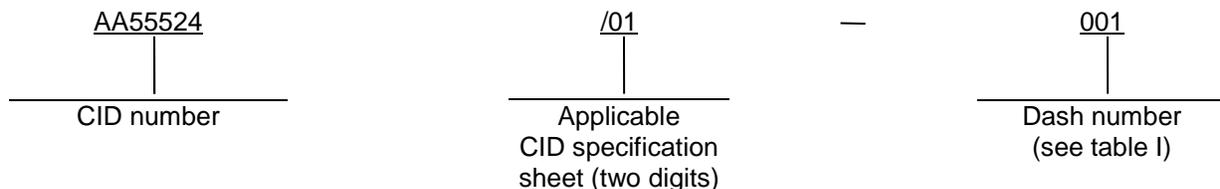
## COMMERCIAL ITEM DESCRIPTION

SHUNT, INSTRUMENT  
(EXTERNAL, 50 MILLIVOLT, 10 THROUGH 150 AMPERES (A) LIGHTWEIGHT TYPE)

The General Services Administration has authorized the use of this commercial item description for all federal agencies.

The complete requirements for procuring the instrument shunts described herein shall consist of this document and the issue in effect of A-A-55524.

CLASSIFICATION/PART OR 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).



### SALIENT CHARACTERISTICS.

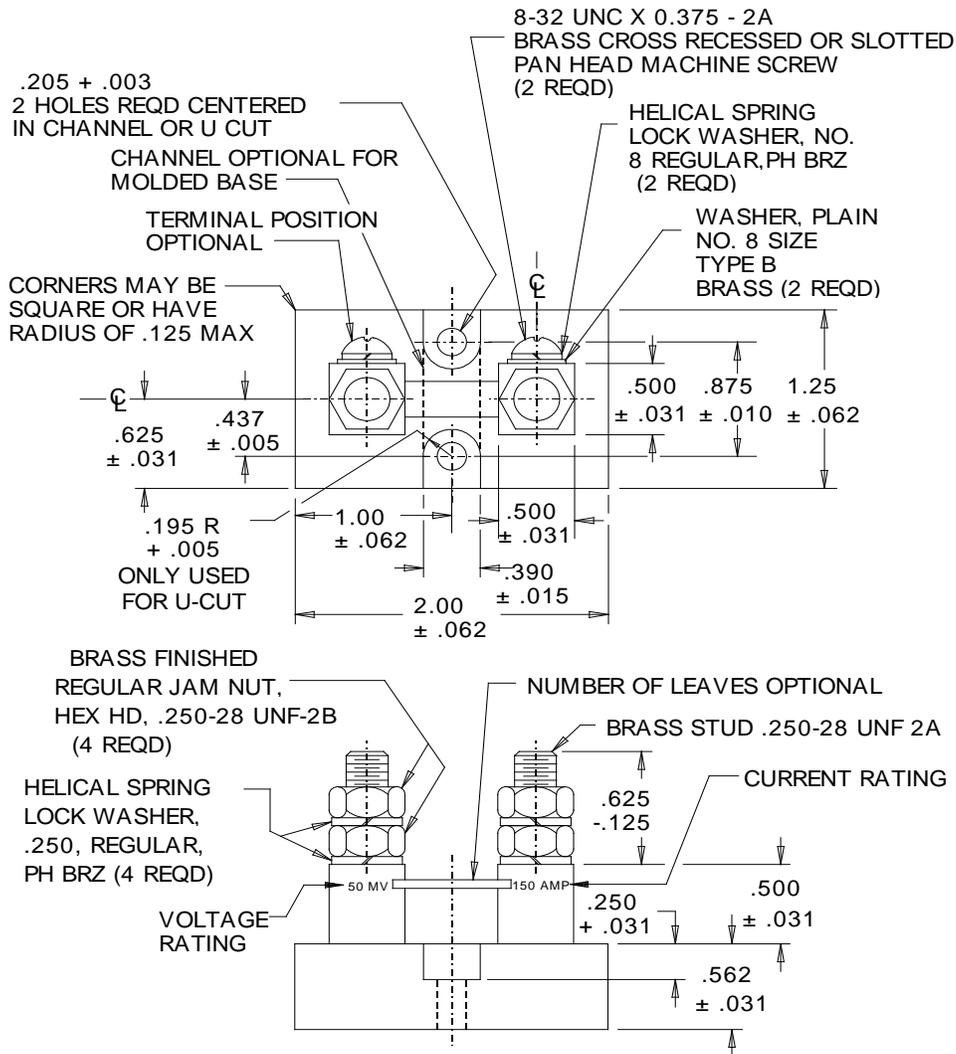
Interface and physical dimensions. The instrument shunts supplied to this CID specification sheet shall be as specified herein (see figure 1).

Configurations and dimensions. Configurations and dimensions shall be as specified on figure 1.

Mounting hardware. Mounting hardware, screws and washers, shall be as specified by ANSI/ASME or equivalent.

Since Navy-EC is the Navy custodian for this document, all Navy review activities should forward their comments directly to DLA Land and Maritime. Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data that may improve this document should be sent to: DLA-CC, DLA Land and Maritime, ATTN: VAI, P.O. Box 3990, Columbus, Ohio, 43218-3990 or emailed to [sound@dsc.dla.mil](mailto:sound@dsc.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.daps.dla.mil>.

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Inches	mm	Inches	mm
0.125	3.18	0.562	14.27
0.195	4.95	0.625	15.88
0.205	5.21	0.875	22.23
0.250	6.35	1.000	25.40
0.390	9.91	1.250	31.75
0.437	11.10	2.000	50.80
0.500	12.70		

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is  $\pm 0.005$  inch (0.13mm).
3. The US Government preferred system of measurement is the metric SI system. However, since this item was originally designed using inch-pound units of measurement, in the event of conflict between the metric and inch-pound units, the inch-pound units shall take precedence.

FIGURE 1. Configuration and dimensions.

Ampere rating. The ampere rating shall be as specified in table I.

Voltage rating. The voltage rating shall be 50 mV ± 0.3 mV.

Terminal block material. The terminal block material shall be brass.

Shunt resistance blade material. The resistance blade strip material shall be Manganin shunt metal or an alloy having an equivalent low temperature coefficient of resistance at any temperature, long term stability, and strength, within the working range of the shunt.

Shunt base mounting. The shunt-terminal blocks shall be mounted securely with screws of adequate size, and shall be made resistant to loosening. The heads of the screws shall be recessed in the base and properly protected with a good grade of insulating compound, which shall not flow, crack, chip, pulverize, or otherwise deteriorate substantially.

Shunt base material. The shunt base material shall be molded or laminated plastic or equivalent.

Marking. Shunts supplied to this CID sheet shall be marked with the manufacturer's standard commercial PIN, mV rating, and current rating, as specified on figure 1 and in tables I and II.

Style and type designation cross-reference. Table I is for cross-reference only. Ordering is identified in A-A-55524 (see note titled "Supersession data").

TABLE I. Style and type designation cross-reference.

CID AA55524/01	Current rating (Amperes)	MS91586	MIL-S-61 Type & style	AN3200
-001	10	-8	MSA100	***
-002	15	-9	MSA150	***
-003	20	-10	MSA200	***
-004	30	-1	MSA300	***
-005	50	-2	MSA500	-50
-006	75	-3	MSA750	***
-007	80	-4	MSA800	***
-008	85	-5	MSA850	-85
-009	100	-6	MSA101	***
-010	150	-7	MSA151	-150

**QUALITY ASSURANCE PROVISIONS.** Quality assurance provisions shall be as specified in A-A-55524.

**PACKAGING.** Packaging shall be as specified in A-A-55524.

**Preservation, packing, and marking.** Preservation, packing, and marking shall be as specified in the contract or order (see Marking in A-A-55524).

NOTES.

PIN. The PIN should be used for Government purposes to buy commercial products to this CID. See the classification section, for PIN format example.

Commercial and Government Entity (CAGE) code. For ordering purposes, inventory control, and submission of these shunts to the DLA Land and Maritime under the Parts Management Advisory Team evaluation program, CAGE code 58536 should be used.

Source of documents.

Commercial Item Description

A-A-55524 - Shunts, Instrument (External, 50 Millivolt, Lightweight Type).

(Copies of these documents are available online at <https://assist.daps.dla.mil/quicksearch/> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

Institute of Electrical and Electronics Engineers (IEEE) Operations Center

IEEE Standard 316 - Direct Current Instrument Shunts

(Copies of these documents are available online at <http://www.ieee.org> or from the IEEE Operations Center, 445 Hoes Lane, Piscataway, New Jersey 08854-1331.)

Ordering data. Ordering data shall be as specified in A-A-55524.

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 nor be used to restrict procurement to only the manufacturers shown.)

<u>Manufacturer's CAGE</u>	<u>Manufacturer's name and address</u>
03030	Empro Manufacturing Co., Inc. PO. Box 26060 10920 East 59 <sup>th</sup> Street Indianapolis, IN 46236-8337 Phone Number: 317-823-4478
0DRX0	DELTEC 13065 Tom White Way, Unit G Norwalk, CA 90650-8936 Phone Number: 562-926-2304, (Spectrum, 978-532-4400)
K6197	TYCO Electronics UK LTD Freebournes Road Witham, Essex CM8 3AH Phone Number: 01376 509509 Fax Phone Number: 01376 509512 CONUS: TE Energy: 1-847-841-8233
3AB55	Canadian Shunt Industries LTD 50 Bullock Drive, Unit 1 Markham, Ontario L3P 3P2 Phone Number: 905-294-5274
91812	Esterline Mason 13955 Balboa Blvd Sylmar, CA 91342-1084 Phone Number: 818-361-3366
09179	ELECTRICAL RESEARCH CORPORATION 1903 Barrett DR Troy, MI 48084-5372 Phone Number: 248-362-6135

Manufacturer's part number (P/N) supersession data. These superseding CID specification sheet PIN's, as shown in table II, are used only within the Government to buy, store, and distribute commercial products and supersede the following manufacturers' P/N's, as shown. This information is being provided, to assist in reducing proliferation of part numbers within the Government inventory system.

TABLE II. Part number (P/N) supersession data.

Superseding CID PIN (see table I) AA55524/01-	Superseded manufacturers' CAGE codes and P/N's <sup>1/</sup>					
	03030	0DRX0	K6197	3AB55	91812	09179
001	MLA-10-50	MKA-10-50	TM-10-50	LA-10-50	8300-10	20M10A50
002	MLA-15-50	MKA-15-50	TM-15-50	LA-15-50	8300-15	20M15A50
003	MLA-20-50	MKA-20-50	TM-20-50	LA-20-50	8300-20	20M20A50
004	MLA-30-50	MKA-30-50	TM-30-50	LA-30-50	8300-30	20M30A50
005	MLA-50-50	MKA-50-50	TM-50-50	LA-50-50	8300-50	20M50A50
006	MLA-75-50	MKA-75-50	TM-75-50	LA-75-50	8300-75	20M75A50
007	MLA-80-50	MKA-80-50	TM-80-50	LA-80-50	8300-80	20M80A50
008	MLA-85-50	MKA-85-50	TM-85-50	LA-85-50	8300-85	20M85A50
009	MLA-100-50	MKA-100-50	TM-100-50	LA-100-50	8300-100	20M100A50
010	MLA-150-50	MKA-150-50	TM-150-50	LA-150-50	8300-150	20M150A50

<sup>1/</sup> The manufacturers' P/N's shall be used for actual part marking and shall not be used during procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial product part numbers were reviewed and replaced by the CID specification sheet PIN shown. For actual part marking requirements, see figure 1, table I, and table II.

Government users. To acquire information on obtaining these instrument shunts from the Government inventory system, contact DLA Land and Maritime, ATTN: FMX, Post Office Box 3990, Columbus, OH 43218-3990, or telephone (614) 692-7790. Division Chief email: [MaritimeSupplierOps.FMX@dla.mil](mailto:MaritimeSupplierOps.FMX@dla.mil), phone: DSN 850-3490 or COMM (614) 692-3490.

Standard requirements for testing. Recommended testing requirements can be found in Institute of Electrical and Electronics Engineers (IEEE) Standard 316.

National Stock Numbers (NSN's). Table III is a list of NSN's assigned, which correspond to this CID specification sheet. The list is for information only and may not be indicative of all possible NSN's associated with the CID specification sheet. For up to date information on assigned NSN's, please contact DLA Land and Maritime, ATTN: FMX, Post Office Box 3990, Columbus, OH 43218-3990, or telephone (614) 692-7790. Division Chief email: [MaritimeSupplierOps.FMX@dla.mil](mailto:MaritimeSupplierOps.FMX@dla.mil), phone: DSN 850-3490 or COMM (614) 692-3490.

TABLE III. National stock numbers (NSN's).

Dash number (see table II) AA55524/01-	Current Rating (Amperes)	NSN
001	10	6625-00-542-0606
002	15	6625-00-060-1213
003	20	6625-00-892-4342
004	30	6625-00-684-8095
005	50	6625-00-539-9638
006	75	6625-00-834-8954
007	80	6625-00-197-2365
008	85	<u>1/</u> XXXX-XX-XXX-XXXX
009	100	6625-00-539-9637
010	150	6625-00-166-1002

1/ There is no NSN assigned, as of this revision.

Changes from previous issue. The margins of this CID specification sheet 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:

Army - CR  
Navy - EC  
Air Force - 99  
DLA - CC

Review activities:

Army - AR, MI  
Air Force - 71

CIVIL AGENCY COORDINATING ACTIVITY:

GSA-7FXE

Preparing Activity:

DLA - CC

Project 6625-2008-002

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>.