

INCH-POUND

MIL-DTL-6749A

23 August 2002

SUPERSEDING

MIL-R-6749

6 July 1950

DETAIL SPECIFICATION

RESISTOR, VARIABLE, WIRE WOUND,
NONPRECISION, AIRCRAFT POWER

This specification is inactive for new design after 31 January 1998.

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers the general requirements for linear and taper wire wound resistors of the nominal wattage and resistance ratings as specified herein.

1.2 Classification.

1.2.1 Part or Identifying Number (PIN). The PIN is in the following form and as specified in table I herein.

AN3155	-25	-10
—	—	—
Style	Power rating (see 3.4 & table I)	Resistance (see 3.5 & table I)

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Defense Supply Center, Columbus, ATTN: DSCC-VAT, P.O. 3990, Columbus, Ohio, 43216-5000, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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2.2 Government documents.

2.2.1 Specifications standards and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

DEPARTMENT OF DEFENSE

MS25166 - Knob, Pointer, Illuminated
AN508 - Screw, Round Head Machine

STANDARDS

DEPARTMENT OF DEFENSE

MIL-STD-202 - Test Method Standard, Electronic and Electrical Component Parts.
FED-STD-H28 - Screw-Thread Standard for Federal Service.

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Document Automation and Production Service (DAPS), (DPM-DODSSP), 700 Robbins Avenue, Philadelphia PA 19111-5094.)

2.3 Non-government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents that are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

AEROSPACE INDUSTRIES ASSOCIATION of AMERICA (AIAA)

NASM35333 - Washer, Lock, Flat-Internal Tooth (DoD adopted)
NASM35338 - Washer, Lock-Spring, Helical, Regular (Medium) Series (DoD adopted)

(Application for copies should be addressed to the Aerospace Industries Association of America, 1250 Eye St., N.W., Suite 1200, Washington, DC 20005-3924)

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI/NCSL Z540-1 - Calibration Laboratory and Measuring and Test Equipment, General Requirements for.
ANSI C39.3-1976 - Shock Testing for Electrical Indicating Instruments

INTERNATIONAL ORGANIZATION for STANDARDS (ISO)

ISO 10012-1 - Quality Assurance Requirements for Measuring Equipment, Part 1: Meteorological Confirmation System for Measuring Equipment.

(Application for copies should be addressed to the American National Standards Institute, 11 West 42nd St., New York, NY 10036-8002)

2.4 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein (except for associated detail specifications, specification sheets, or MS standards), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

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3. REQUIREMENTS

3.1 Qualification. Resistors furnished under this specification shall be a product which has been tested, and has passed the qualification tests as specified in 4.4, and has been listed on or approved for listing on the applicable Qualified Products List (QPL) (see 6.3).

3.2 Materials. Materials shall be used which will enable the resistors to meet the performance requirements of this specification. Acceptance or approval of any constituent material shall not be construed as a guaranty of the acceptance of the finished product.

3.3 Interface and physical dimension requirements. Resistors shall meet the interface and physical dimension requirements as specified (see figure 1).

3.3.1 Resistor winding. The resistor winding shall be resistance wire, wound on a form which shall not char or break down as a result of the tests specified herein. The element shall be a continuous unbroken length of conductor without joints, bonds, or welds, except at the junction of resistor element and the winding terminals.

3.3.2 Protective housing or enclosure. The resistor shall be totally enclosed for protection against dust and mechanical or electrical damage.

3.3.2.1 Non-turn device. A non-turn device on the panel mounting surface of the resistor shall be located in the plane passing through the center line of the shaft and midpoint of the winding core. The device shall be on the same side of the shaft as the midpoint of the winding core and at a distance as specified (see figure 1).

3.3.3 Operating shaft. The operating shaft shall be provided with a flat side located directly opposite of the contactor.

3.3.4 Contact arm. Uniform contact pressure on the resistor element shall be maintained by positive pressure and shall permit smooth electrical and mechanical control of the resistor over the entire range. The contact shall have continuous electrical contact with its terminal throughout the entire mechanical travel.

3.3.5 Electrical connectors. Two terminals, tapped for and equipped with screws and washers are as specified herein (see figure 1). Terminals and current carrying parts shall be of corrosion resistant material.

3.3.6 Mounting hardware. Resistors shall be furnished with corrosion resistant mounting hardware as specified herein (see figure 1).

3.3.6.1 Knob. The knob shall conform to MS25166 or equivalent as specified herein (see figure 1).

3.3.7 Rotation. Unless otherwise specified the arrangement of the resistor assembly shall be such that when the operator faces the resistor mounted on the panel, a clockwise rotation of the knob shall decrease the resistance.

3.3.7.1 Angular rotation. The resistor shall be designed to provide an angular rotation of 260 degrees to 310 degrees (including the "OFF" position).

3.3.7.2 Off-position. Unless otherwise specified, the resistor shall be provided with an "OFF" position. The construction of the "OFF" position shall be such that the operator will know without question when the contact is turned from the winding. This construction shall be approved by the Qualifying Agency.

3.3.7.3 On position. Unless otherwise specified, when the resistor is turned on (from the "OFF" position), the brush contact shall be in the position to provide maximum resistance.

3.4 Power rating. The power rating in watts for each PIN shall be as specified herein (see 1.2.1 & table I).

3.5 DC resistance (see 1.2.1 & table I).

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3.5.1 Minimum resistance. When measured as specified in 4.7.2.1, the minimum resistance shall not exceed 0.2 ohm.

3.5.2 Maximum resistance. When resistors are tested as specified in 4.7.2.2, the maximum resistance in ohms shall not exceed +15 percent, -5 percent of the rated resistance.

3.6 Dielectric withstanding voltage. When resistors are tested as specified in 4.7.3, there shall be no evidence of insulation breakdown.

3.7 Torque.

3.7.1 Starting. When resistors are tested as specified in 4.7.4.1, the torque required to affect rotation shall not exceed 2.5 pound-inches.

3.7.2 Stop. When resistors are tested as specified in 4.7.4.2, there shall be no evidence of mechanical damage.

3.8 Shock. When resistors are tested as specified in 4.7.5, there shall be no electrical discontinuity or evidence of mechanical damage.

3.9 Vibration. When resistors are tested as specified in 4.7.6, there shall be no electrical discontinuity or evidence of mechanical damage.

3.10 Salt atmosphere (corrosion). When resistors are tested as specified in 4.7.7 resistors shall show no corrosion and shall remain mechanically operative.

3.11 Life. When resistors are tested as specified in 4.7.8, there shall be no evidence of mechanical failure and the change in maximum resistance shall not exceed five percent.

3.12 Low temperature exposure. When resistors are tested as specified in 4.7.9, there shall be no electrical discontinuity or evidence of mechanical damage.

3.13 High temperature exposure. When resistors are tested as specified in 4.7.10, there shall be no electrical discontinuity or evidence of mechanical damage.

3.14 Terminal strength. When resistors are tested as specified in 4.7.11, there shall be no electrical discontinuity or evidence of mechanical damage.

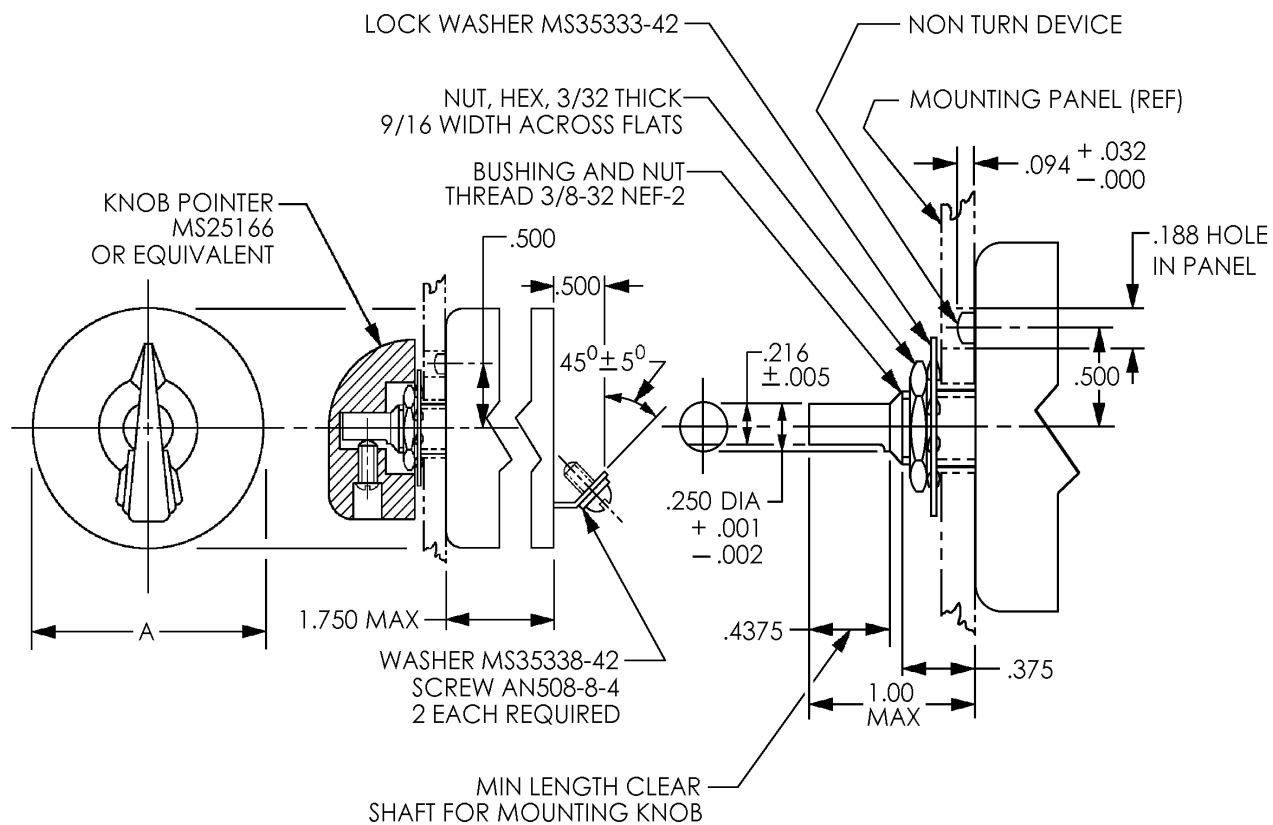
3.15 Marking. Resistors shall be marked on the back or periphery with the following minimum information:

- a. PIN (see 1.2.1)
- b. Resistance value
- c. Amps Max (applicable to linear wound resistors)
- c. Amps Max @ Min resistance (applicable to taper wound resistors)
- d. Amps Max @ Max resistance (applicable to taper wound resistors)
- e. Power rating
- f. Manufacturer's name, Commercial and Government Entity (CAGE) code, or trademark.

3.16 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs.

3.17 Workmanship. Resistors shall be processed in such a manner as to be uniform in quality and shall be free from other defects that will affect life, serviceability, or appearance.

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Inches	mm	Inches	mm
0.001	0.03	0.250	6.35
0.002	0.05	0.375	9.52
0.005	0.13	0.4375	11.12
0.032	0.81	0.500	12.70
0.094	2.39	1.000	25.40
0.188	4.78	1.750	44.45
0.216	5.49		

NOTES:

1. Dimensions are in inches
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are ± 0.005 for decimals and $\pm 3/64$ for fractions.
4. For dimension "A" see table I.
5. MS35333 and MS35338 have been cancelled and replaced by NASM35333 and NASM35338, respectfully. The existing PIN's have been retained in the NASM document.

FIGURE 1. Style AN3155 resistors.

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TABLE I. Resistor characteristics.

PIN (see 1.2.1)	Amperes at		D m "A" Max	Wt Lb Max	Des gn Operat ng Load of Taper Wound Res stors
	M n ohms	Max ohms			
AN3155-25-10	1.95	0.30	1-7/8	0.40	10 EACH 3 V 0.195 AMP INSTRUMENT LAMPS OPERATION AT 3 V
AN3155-25-11 1/	1.25	1.25	1-7/8	0.40	
AN3155-25-15	1.30	1.30	1-7/8	0.40	
AN3155-25-25	1.00	1.00	1-7/8	0.40	
AN3155-25-50	0.71	0.71	1-7/8	0.40	
AN3155-25-75	0.58	0.58	1-7/8	0.40	
AN3155-25-100	0.85	0.16	1-7/8	0.40	3 EACH 2 CP., 12-16 VOLT LAMPS OPERATING AT 14.25 VOLTS.
AN3155-25-200	0.35	0.35	1-7/8	0.40	
AN3155-50-5	5.50	1.82	2-3/4	0.60	1 EACH 100 CP., 12-16 VOLT LAMP OPERATING AT 14.25 VOLTS.
AN3155-50-8 2/	2.50	2.50	2-3/4	0.60	
AN3155-50-10	2.50	1.60	2-3/4	0.60	1 EACH 100 CP., 28 VOLT LAMP OPERATING AT 28.5 VOLTS.
AN3155-50-25	2.70	0.70	2-3/4	0.60	1 EACH 21/21 CP., 12-16 VOLT LAMP WITH TWO FILAMENTS OPERATING AT 14.25 VOLTS.
AN3155-50-30 2/	1.70	0.90	2-3/4	0.60	1 EACH 24 VOLT SERIES MOTOR THAT REQUIRES 1.70 AMPS. MAX
AN3155-50-50	1.00	1.00	2-3/4	0.60	
AN3155-50-75	0.82	0.82	2-3/4	0.60	
AN3155-50-100	1.35	0.25	2-3/4	0.60	1 EACH 21/21 CP., 28 VOLT LAMP WITH TWO FILAMENTS OPERATING AT 28.5 VOLTS.
AN3155-50-150	0.69	0.17	2-3/4	0.60	1 EACH 21/21 CP., 28 VOLT LAMP WITH ONLY ONE FILAMENT OPERATING.
AN3155-50-200	1.35	0.15	2-3/4	0.60	1 EACH 21/21 CP., 28 VOLT LAMP WITH TWO FILAMENTS OPERATING AT 28.5 VOLTS.

1/ Rotation clockwise increases resistance. No "OFF" position. Ninety steps minimum.

2/ Rotation clockwise increases resistance. Minimum resistance obtained when the resistor is turned on from the "OFF" position.

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4. VERIFICATION

4.1 Classification of inspections. The inspection requirements specified herein are classified as follows:

- a. Qualification inspection (see 4.4).
- b. Conformance inspection (see 4.6).

4.2 Test equipment and inspection facilities. The manufacturer shall establish and maintain a calibration system in accordance with ANSI/NCSL Z540-1, ISO 10012-1, or equivalent system as approved by the qualifying activity.

4.3 Inspection conditions and precautions.

4.3.1 Inspection conditions. Unless otherwise specified herein, all inspections shall be in accordance with the test conditions specified in the "GENERAL REQUIREMENTS" of MIL-STD-202.

4.3.2 Precautions. Adequate precautions shall be taken during inspection to prevent condensation of moisture on resistors. Precautions shall also be taken to prevent damage by heat when soldering resistor leads to terminals.

4.4 Qualification. Qualification inspection shall be performed at a laboratory acceptable to the Government (see 6.3) on sample units produced with equipment and procedures normally used in production.

4.4.1 Sample size. Three sample units shall be subjected for qualification inspection.

4.4.2 Inspection routine. Three sample units shall be subjected to the qualification inspection specified in table II.

Table II. Qualification inspection.

Inspection	Requirements Paragraph	Method paragraph	Number of samples	Number of defectives
Visual and mechanical examination	3.2 to 3.3.7.3 inc., 3.15, & 3.17	4.7.1	3	0
Minimum resistance	3.5.1	4.7.2.1		
Maximum resistance	3.5.2	4.7.2.2		
Dielectric withstanding voltage	3.6	4.7.3		
Torque	3.7	4.7.4		
Shock	3.8	4.7.5		
Vibration	3.9	4.7.6		
Salt atmosphere	3.10	4.7.7		
Life	3.11	4.7.8		
Low Temperature exposure	3.12	4.7.9		
High temperature exposure	3.13	4.7.10		
Terminal strength	3.14	4.7.11		

4.4.3 Defects. Resistors that have been rejected may be replaced or repaired to correct the defects and resubmitted for all the specified tests. Before resubmitting, full particulars concerning previous rejection and the action taken to correct the original defects shall be furnished to the qualifying activity. Units rejected after retest shall not be resubmitted without the specific approval of the Procuring Agency.

4.5 Retention of qualification. Every 12 months, the manufacturer shall verify the retention of qualification to the qualifying activity. In addition, the manufacturer shall immediately notify the qualifying activity whenever the group B inspection results indicate failures of the qualified product to meet the requirements of this specification. Verification shall be based on meeting the following requirements:

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- a. The manufacturer has not modified the design of the item.
- b. The specification requirements for the item have not been amended so far as to affect the character of the item.
- c. Lot rejection for group A inspection does not exceed the group A sampling plan.
- d. The requirements for group B inspection are met.

When group B requirements were not met and the manufacturer has taken corrective action satisfactory to the Government, group B inspection retesting shall be instituted.

4.6 Conformance inspection.

4.6.1 Inspection of product for delivery. Inspection of packaging shall consist of groups A and B inspections.

4.6.1.1 Inspection lot. An inspection lot, as far as practicable, shall consist of all resistors produced under essentially the same conditions, and offered for inspection at one time.

4.6.1.2 Group A inspection. Group A inspection shall consist of the examination and tests specified in table III and shall be made on the same set of sample units.

Table III. Group A inspection.

Inspection	Requirements paragraph	Method paragraph	Sampling plan
Visual and mechanical examination	3.2 to 3.3.7.3 inc., 3.15, & 3.17	4.7.1	4.6.1.2.1
Minimum resistance	3.5.1	4.7.2.1	
Maximum resistance	3.5.2	4.7.2.2	

4.6.1.2.1 Sampling plan. A sample of parts from each inspection lot shall be randomly selected in accordance with table IV. If one or more defects are found, the lot shall be screened and defectives removed. After screening and removal of defectives a new sample of parts shall be randomly selected in accordance with table IV. If one or more defects are in the second sample, the lot shall be rejected and shall not be supplied to this specification.

TABLE IV. Group A sampling plan.

Lot size	Sample size
1 to 13	100 percent
14 to 150	13
151 to 280	20
281 to 500	29
501 to 1,200	34
1,201 to 3,200	42
3,201 to 10,000	50
10,001 to 35,000	60
35,001 to 150,000	74
150,001 to 500,000	90
500,001 and over	102

4.6.1.3 Group B inspection. Group B inspection shall consist of the tests specified in table V, in the order shown, and the sample shall be selected from inspection lots that have passed group A inspection.

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TABLE V Group B inspection. 1/

Inspection 2/	Requirements paragraph	Method paragraph	Sampling plan
Dielectric withstanding voltage	3.6	4.7.3	4.6.1.3.1
Torque	3.7	4.7.4	
Shock	3.8	4.7.5	
Vibration	3.9	4.7.6	
Salt atmosphere	3.10	4.7.7	
Life	3.11	4.7.8	
Low temperature exposure	3.12	4.7.9	
High temperature exposure	3.13	4.7.10	
Terminal strength	3.14	4.7.11	

1/ If the manufacturer can demonstrate that this test has been performed 5 consecutive times with zero failures, the frequency of this test, with approval of the qualifying activity, can be performed on an annual basis. If the design, material, construction or processing of the part is changed, or if there are any quality problems or failure, the qualifying activity may require resumption of the original test.

2/ Failure of a resistor in one or more tests shall be charged as a single defective.

4.6.1.3.1 Sampling plan. A sample of parts shall be randomly selected in accordance with table VI. If one or more defects are found, the lot shall be screened and defectives replaced or repaired. After screening and replace or repair of defectives, a new sample of parts shall be randomly selected in accordance with table VI. If one or more defects are found in the second sample, the lot shall not be supplied to this specification.

Table VI. Group B sampling plan.

Lot size		Sample size
1 to	25	3
26 to	50	5
51 to	90	6
91 to	150	7
151 to	280	10
281 to	500	11
501 to	1,200	15
1,201 to	3,200	18

4.6.1.4 Certification. The acquiring activity, at its discretion, may accept a certificate of compliance with group B requirements from a qualified manufacturer in lieu of performing group B tests (see 6.2.d).

4.6.2 Noncompliance. If a sample fails to pass group B inspection, the supplier shall take corrective action on the materials or processes, or both, as warranted, and on all units of product which can be corrected and which were manufactured under essentially the same conditions, with essentially the same materials, processes, etc., and which are considered subject to the same failure. Acceptance of the product shall be discontinued until corrective action, acceptable to the Government, has been taken. After the corrective action has been taken, group B inspection shall be repeated on additional sample units (all inspection, or the inspection which the original sample failed, at the option of the Government). Group A inspections may be reinstituted; however, final acceptance shall be withheld until group B reinspection has shown that the corrective action was successful. In the event of failure after reinspection, information concerning the failure and corrective action taken shall be furnished to cognizant inspection activity and the qualifying activity.

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4.7 Methods of examination and test.

4.7.1 Visual and mechanical examination. Resistors shall be examined to verify that the materials, interface and physical dimensions, marking, and workmanship are in accordance with the applicable requirements (see 3.2 to 3.3.7.3 inclusive, 3.15, and 3.17).

4.7.2 DC resistance (see 3.5).

4.7.2.1 Minimum resistance (see 3.5.1). The resistance shall be measured with the contact in the minimum resistance position by any method satisfactory to the inspector that causes negligible heating of the resistor winding. The resistance shall not exceed 0.2 ohm. This test determines the resistance of the lug, contact arm, and center lead assembly.

4.7.2.2 Maximum resistance (see 3.5.2). The resistance shall be measured with the contact in the maximum resistance position by any method satisfactory to the inspector that causes negligible heating of the resistor winding. The resistance shall not vary more than +15 percent, -5 percent of the rated resistance.

4.7.3 Dielectric withstanding voltage (see 3.6).

4.7.3.1 At atmospheric pressure. An approximate sine-wave test potential of 1000 volts rms from an ac supply at commercial line frequency shall be applied between the terminals and then between each terminal with resistor in the off position and the mounting bushing or shaft, as applicable, for one minute. There shall be no breakdown of insulation.

4.7.3.2 At reduced pressure. A sine-wave test potential of 550 volts rms from an ac supply at commercial line frequency shall be applied as specified for atmospheric pressure except that the pressure shall be 3.4 inches of mercury. There shall be no breakdown of insulation.

4.7.4 Torque (see 3.7).

4.7.4.1 Starting. The torque required to rotate the contact on the resistance winding shall be determined throughout the entire range by any method satisfactory to the Government, except at the full "OFF" position.

4.7.4.2 Stopping. The contact arm shall be rotated to both extremes and a torque of not less than 30 pound-inches shall be applied to the control shaft.

4.7.5 Shock (see 3.8). The resistor shall be subjected to a transient decelerating force produced by securing the resistor in each one of its rectangular positions in turn, to sufficient mass, and dropping the assembly through such a height that when decelerated by resilient impact, a deceleration of 25 gravity units shall be obtained. There shall be no mechanical or electrical failure or movement of the contact arm. ANSI C39.3-1976 revised for resistor mounting is a satisfactory device for this test.

4.7.6 Vibration (see 3.9). Resistors shall be tested as specified in Method 201 of MIL-STD-202. The following details and exceptions shall apply:

- a. Frequency range: 600 to 1300 Hz.
- b. Period of test: 5 hours.
- c. Position of contact arm: The contact arm shall be set at approximately 50 percent rotation position at start of test.
- d. Examination after test: There shall be no evidence of mechanical or electrical failure and vibration has not caused the contact arm to change position.

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4.7.7 Salt atmosphere (corrosion) (see 3.10). Resistors shall be tested as specified in Method 101 of MIL-STD-202. The following details and exceptions shall apply:

- a. Length of test: Test condition A.
- b. Examination after test: Parts shall be washed, air-dried, and examined for corrosion.
- c. Measurements after test: The maximum resistance and torque test shall again be conducted. The maximum resistance shall not have changed by more than 5 percent. The torque required to operate the resistor shall not exceed 2-1/2 pound-inches.

4.7.8 Life (see 3.11). The resistor shall be inserted in a 28.5 volts constant voltage circuit providing maximum rated current at minimum resistance of the resistor. The resistor shall then be subjected to 10,000 cycles of operation, at the rate of approximately 20 cycles per minute. A cycle shall consist of rotating the resistor from the "OFF" position to the full "ON" position and back to the "OFF" position. A suitable ammeter shall be connected in series with the resistor to determine if proper contact is being made. At the completion of the operating cycles the resistor shall be gradually rotated throughout its entire range and the effect on the ammeter needle noted. The resistor shall again be subjected to the maximum resistance test. The change in maximum resistance shall not exceed 5 percent. There shall be no mechanical failure of any kind. At the completion of the test there shall be no abrupt fluctuation of the ammeter needle when the resistor is rotated gradually from full "OFF" to "ON" except at the full "OFF" position.

4.7.9 Low temperature exposure (see 3.12). The resistor shall be subjected to a temperature of -65°C (-85°F) for 48 hours. It shall then be carefully examined for damage. There shall be no evidence of electrical or mechanical damage. At the option of the inspector, any or all of the tests shall be conducted after this test.

4.7.10 High temperature exposure (see 3.13). Resistors shall be exposed to an ambient temperature of 150°C \pm 3°C for a period of 1000 hours \pm 12 hours. At least 2 hours after the end of the exposure period, the resistors shall be examined for evidence of mechanical damage, and the maximum resistance shall be measured as specified in 4.7.2 at room temperature.

4.7.11 Terminal strength (see 3.14). A tensile load of 25 pounds shall be applied to each terminal, normal to the mounting plane of the resistor for one minute. The resistor shall then be operated several times and shall be checked for short circuiting while the terminals are loaded. Ability to operate mechanically and electrically after this test shall be considered a suitable indication of conformance with this requirement.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of materiel is to be performed by DoD personnel these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Departments or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory).

6.1 Intended use. The resistors covered by this specification are military unique due to the fact that these devices must be able to operate satisfactorily in military systems under the following demanding conditions: Subjected to and obtain a deceleration of 25 gravity units (shock), an harmonic motion having an amplitude of 0.03 inches over a frequency range of 600 to 1300 hertz (vibration), and resistant to salt corrosion. In addition, these military requirements are verified under a qualification system. Commercial components are not designed to withstand these military environmental conditions.

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6.2 Acquisition documents. Acquisition documents should specify the following:

- a. Title, number, and date of the specification.
- b. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.2).
- c. Packaging requirements (see 5.1).
- d. Whether the manufacturer performs group B tests or provides certificate of compliance with group B requirements.

6.3 Qualification. With respect to products requiring qualification, awards will be made only for products that are, at the time of award of contract, qualified for inclusion in QPL whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from Defense Supply Center, Columbus, ATTN: DSCC-VQP, P.O. Box 3990, Columbus, OH 43216-5000.

6.4 Subject term (key word) listing.

Terminal Post
Knob
Non turn device

6.5 PIN. This specification requires a PIN that describes technology and appropriate references to associated documents (see 1.2.1).

6.6 Changes from the previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians:
Army - CR
Navy - AS
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5905-1660)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL**INSTRUCTIONS**

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7, and send to preparing activity.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:

1. DOCUMENT NUMBER
MIL-DTL-6749A

2. DOCUMENT DATE
(02/08/23)

3. DOCUMENT TITLE

RESISTOR, VARIABLE, WIRE WOUND, NONPRECISION, AIRCRAFT POWER

4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME (Last, First, Middle initial)

b. ORGANIZATION

c. ADDRESS (Include Zip Code)

d. TELEPHONE (Include Area Code)
(1) Commercial

(2) DSN
(if applicable)

7. DATE SUBMITTED
(YYMMDD)

8. PREPARING ACTIVITY

a. NAME

DSCC-VAT

Resistor Group

b. TELEPHONE (Include Area Code)

(1) Commercial

614-692-0553

(2) DSN

850-0553

a. ADDRESS (Include Zip Code)
Defense Supply Center, Columbus
ATTN: DSCC-VAT
Columbus, OH 43216-5000

IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:
Defense Standardization Program Office (DLSC-LM)
8725 John J. Kingman Road, Suite 2533
Fort Belvoir, Virginia 22060-6221
Telephone (703) 767-6888 DSN 427-6888