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REV.
B

AS5756™/1

FEDERAL SUPPLY CLASS
6145

RATIONALE

LIMITED SCOPE UPDATE TO ESTABLISH CABLE TEMPERATURE RATING.

NOTICE

THE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE LATEST ISSUE OF AS5756.

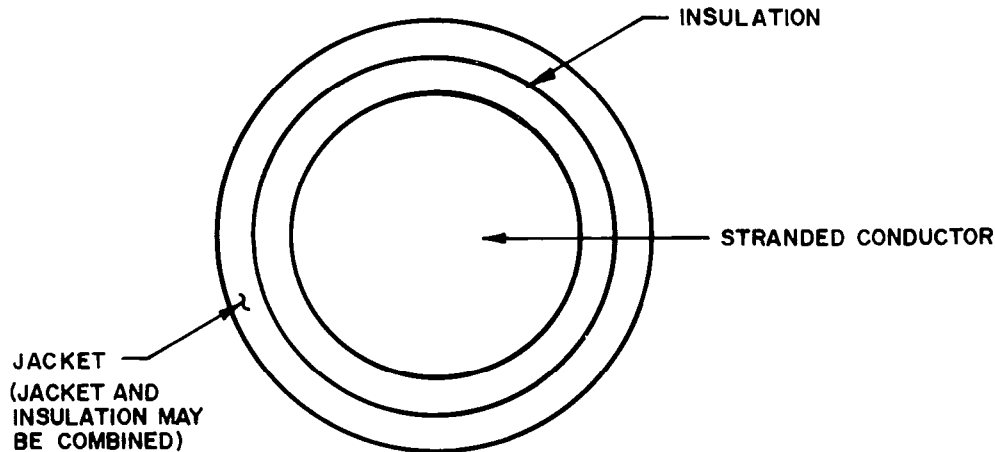


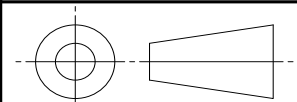
FIGURE 1 - CONDUCTOR EXAMPLE

REQUIREMENTS (REFER TO AS5756 AND TABLE 1):

1. CONSTRUCTION:
 - a. FIRST: COPPER CONDUCTOR (REFER TO TABLE 1 OF AS5756 FOR REQUIREMENTS). SIZES 10 AWG AND SMALLER SHALL BE TIN-COATED, SIZES 8 AWG AND LARGER SHALL BE UNCOATED.
 - b. SECOND: SEPARATOR, REQUIRED WHERE UNCOATED CONDUCTORS ARE USED, OPTIONAL WHERE TIN-COATED CONDUCTORS ARE USED.
 - c. THIRD: INSULATION OF SYNTHETIC OR NATURAL RUBBER (SEE TABLE 1 FOR THICKNESS), COLORED BLACK.
 - d. FOURTH: JACKET OF SYNTHETIC OR NATURAL RUBBER (SEE TABLE 1 FOR THICKNESS), COLORED BLACK. CABLE SURFACE MARKING REQUIRED.
 - e. INSULATION AND JACKET MAY BE COMBINED AT MANUFACTURER'S OPTION.
2. OZONE RESISTANCE: NOT REQUIRED.
3. CABLE TEMPERATURE RATING: -54 TO +90 °C (-65 TO +194 °F).

For more information on this standard, visit
<https://www.sae.org/standards/content/AS5756/1B/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8D

PROCUREMENT SPECIFICATION: AS5756



AEROSPACE STANDARD

CABLE, POWER, ELECTRICAL, 600 VOLTS,
PORTABLE, SINGLE CONDUCTOR,
NON-OZONE RESISTANT

AS5756™/1
SHEET 1 OF 2

REV.
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Documents

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TABLE 1 - DETAILS OF CONSTRUCTION

PART NO. M5756/1	CONDUCTOR SIZE	NOMINAL INSULATION THICKNESS (INCHES) 1/	NOMINAL JACKET THICKNESS (INCHES) 2/	OVERALL DIAMETER OF JACKETED CABLE		CONDUCTOR RESISTANCE PER 1000 FEET (MAX) AT 20 °C (OHMS)	NOMINAL WEIGHT PER 1000 FEET (POUNDS) 3/
				MIN (INCHES)	MAX (INCHES)		
-001	18	.031	.0625	.214	.265	7.13	30.7
-002	16	.031	.0625	.225	.277	4.48	35.9
-003	14	.047	.0625	.271	.327	2.82	53.1
-004	12	.047	.0625	.292	.350	1.77	66.3
-005	10	.047	.0625	.317	.375	1.14	88.2
-006	8	.063	.0625	.379	.443	.666	124.5
-007	6	.063	.078	.429	.527	.423	183.1
-008	4	.063	.078	.509	.581	.266	248.2
-009	2	.063	.094	.603	.681	.169	364.7
-010	1	.078	.094	.667	.750	.134	454.5
-011	1/0	.078	.109	.738	.837	.106	562.0
-012	2/0	.078	.125	.819	.954	.0850	710.9
-013	3/0	.078	.125	.913	1.030	.0674	858.3
-014	4/0	.078	.141	1.010	1.130	.0535	1056.3
-015	250	.094	.156	1.080	1.250	.0453	1283.2

1/ THE MINIMUM INSULATION THICKNESS SHALL BE AT LEAST 90% OF THE NOMINAL.

2/ THE MINIMUM JACKET THICKNESS SHALL BE AT LEAST 90% OF THE NOMINAL.

3/ THE NOMINAL WEIGHT IS FOR INFORMATION ONLY.

APPLICATIONS:

1. THE CABLES SPECIFIED UNDER THIS DETAIL SPECIFICATION MAY BE INSULATED WITH ANY NUMBER OF INSULATING MATERIALS THAT WILL MEET THE LIMITED PERFORMANCE REQUIREMENTS OF THIS PARTICULAR DETAIL SPECIFICATION.
2. THERE ARE NO PERFORMANCE REQUIREMENTS FOR WEATHERING OR OZONE RESISTANCE ON WIRE COVERED BY THIS DETAIL SPECIFICATION. THIS CABLE IS NOT RECOMMENDED FOR USE WHERE IT WILL BE EXPOSED TO THESE CONDITIONS.
3. THE CABLES SPECIFIED IN THIS DETAIL SPECIFICATION ARE FOR REPLACEMENT ONLY AND IS NO LONGER AUTHORIZED FOR USE IN AS7974 CABLE ASSEMBLIES (REFER TO AS5756/2).
4. THIS INSULATION SYSTEM HAS BEEN USED IN AEROSPACE GROUND POWER APPLICATIONS USING 115/200 VOLTS (PHASE TO NEUTRAL) AT 400 HERTZ AC. VERIFICATION OF THE SUITABILITY OF THIS PRODUCT FOR USE IN OTHER ELECTRICAL SYSTEM CONFIGURATIONS IS THE RESPONSIBILITY OF THE USER.

SPECIFICATION NOTES:

1. REVISION INDICATOR: A CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS, NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

	AEROSPACE STANDARD	AS5756™/1 SHEET 2 OF 2	REV. B
	CABLE, POWER, ELECTRICAL, 600 VOLTS, PORTABLE, SINGLE CONDUCTOR, NON-OZONE RESISTANT		



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