

REV.
B

AS5756™/4

FEDERAL SUPPLY CLASS
6145

RATIONALE

REVISION REQUIRED TO ADDRESS THE OUTER CABLE DIAMETERS.

NOTICE

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

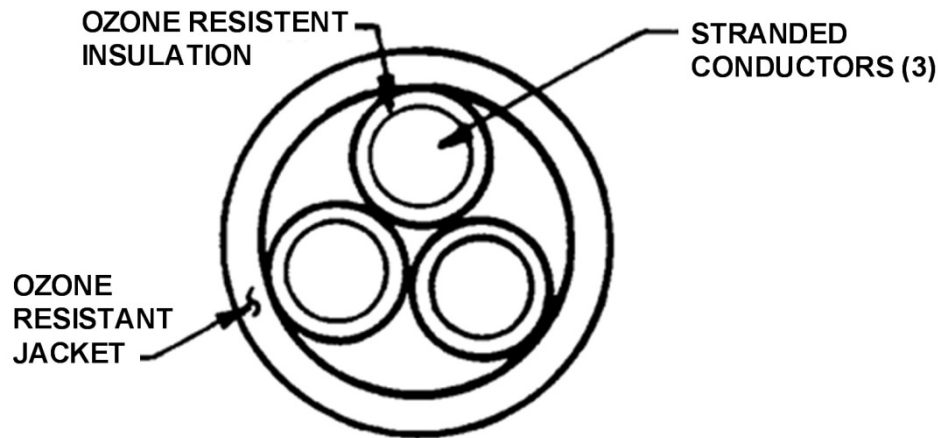


FIGURE 1 – EXAMPLE OF 3 CONDUCTOR CABLE

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF A5756.

QUALIFICATION: REQUIRED.

CONSTRUCTION: (SEE TABLE 1)

FIRST - COPPER CONDUCTOR, SEE TABLE 1 OF AS5756 FOR REQUIREMENTS, SIZES 10 AWG AND SMALLER SHALL BE TIN-COATED, SIZES 8 AWG AND LARGER SHALL BE UNCOATED.

SECOND - SEPARATOR, REQUIRED WHERE UNCOATED CONDUCTORS ARE USED, OPTIONAL WHERE TIN-COATED CONDUCTORS ARE USED.

THIRD - INSULATION OF OZONE RESISTANT SYNTHETIC RUBBER (SEE TABLE 1 FOR THICKNESS), COLOR CODED PER 3.4.6 OF AS5756.

FOURTH - THE REQUIRED NUMBER OF CONDUCTORS CABLED TOGETHER WITH A LEFT-HAND LAY NOT GREATER THAN 16 TIMES THE DIAMETER UNDER THE JACKET. WHEN NEEDED, FILLERS SHALL BE EMPLOYED TO OBTAIN A FIRM, WELL-ROUNDED ASSEMBLY.

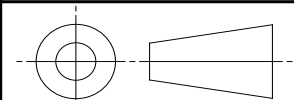
FIFTH - BINDER TAPE APPLIED HELICALLY WITH OVERLAP.

SIXTH - JACKET OF OZONE RESISTANT SYNTHETIC RUBBER (SEE TABLE 1 FOR THICKNESS), COLORED BLACK. CABLE SURFACE MARKING REQUIRED.

OZONE RESISTANCE: REQUIRED.

SAE values your input. To provide feedback on this Technical Report, please visit <http://standards.sae.org/AS5756/4B>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8D

PROCUREMENT SPECIFICATION: AS5756



AEROSPACE STANDARD

CABLE, ELECTRICAL,
600 VOLTS, PORTABLE,
MULTICONDUCTOR, OZONE RESISTANT

AS5756™/4
SHEET 1 OF 4

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TABLE 1 - DETAILS OF CONSTRUCTION

MILITARY PART NO. M5756/4	CONDUCTOR SIZE	NUMBER OF CONDUCTORS	NOMINAL INSULATION THICKNESS (INCH) <u>1/</u>	NOMINAL JACKET THICKNESS (INCH) <u>2/</u>	OVERALL DIAMETER OF JACKETED CABLE		CONDUCTOR RESISTANCE PER 1000 FEET (MAX) @ 20 °C (OHMS)	NOMINAL WEIGHT PER 1000 FEET (POUNDS) <u>3/</u>
					MIN (INCHES)	MAX (INCHES)		
-001	18	2	.031	.0625	.316	.395	7.49	60.9
-002	16	2	.031	.0625	.338	.419	4.70	72.5
-003	14	2	.047	.078	.429	.530	2.96	127.9
-004	12	2	.047	.078	.523	.600	1.86	159.3
-005	10	2	.047	.094	.549	.648	1.20	217.7
-006	8	2	.063	.109	.705	.824	.699	335.0
-007	6	2	.063	.125	.831	.962	.444	487.2
-008	4	2	.063	.141	.965	1.100	.279	676.9
-009	2	2	.063	.156	1.150	1.270	.177	945.1
-010	1	2	.078	.156	1.270	1.410	.141	1173.1
-011	1/0	2	.078	.172	1.360	1.540	.111	1422.5
-012	2/0	2	.078	.187	1.560	1.740	.0893	1780.0
-013	3/0	2	.078	.187	1.710	1.890	.0708	2131.3
-014	4/0	2	.078	.203	1.840	2.050	.0562	2586.6
-015	250	2	.094	.203	2.010	2.220	.0476	3045.2
-016	18	3	.031	.0625	.331	.412	7.49	71.9
-017	16	3	.031	.0625	.356	.438	4.70	87.2
-018	14	3	.047	.078	.482	.557	2.96	154.0
-019	12	3	.047	.094	.587	.656	1.86	213.9
-020	10	3	.047	.094	.611	.692	1.20	268.9
-021	8	3	.063	.109	.772	.869	.699	429.9
-022	6	3	.063	.141	.910	1.100	.444	639.5
-023	4	3	.063	.156	1.050	1.190	.279	888.4
-024	2	3	.063	.172	1.270	1.370	.177	1252.9
-025	1	3	.078	.172	1.350	1.520	.141	1556.6
-026	1/0	3	.078	.172	1.480	1.630	.111	1837.1
-027	2/0	3	.078	.187	1.680	1.840	.0893	2295.1
-028	3/0	3	.078	.203	1.820	2.030	.0708	2832.2
-029	4/0	3	.078	.203	1.990	2.180	.0562	3369.2
-030	250	3	.094	.203	2.140	2.360	.0476	3995.8
-031	18	4	.031	.0625	.358	.441	7.49	85.2
-032	16	4	.031	.0625	.385	.470	4.70	104.8
-033	14	4	.047	.078	.523	.601	2.96	185.6
-034	12	4	.047	.094	.633	.719	1.86	258.4
-035	10	4	.047	.109	.688	.773	1.20	349.2

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.



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