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**REV.
B**

AS81044™/8

FEDERAL SUPPLY CLASS
6145

RATIONALE

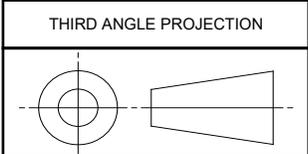
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CUSTODIAN: AE-8D

PROCUREMENT SPECIFICATION: AS81044



AEROSPACE STANDARD

WIRE, ELECTRIC, CROSSLINKED POLYALKENE INSULATED, SILVER-COATED COPPER, MEDIUM WEIGHT, 600-VOLT, 150 °C

AS81044™/8

**REV.
B**

ISSUED 2000-04 REVISED 2011-10 REAFFIRMED 2017-03 STABILIZED 2022-09

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NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE WIRE DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE ISSUE IN EFFECT OF SPECIFICATION AS81044.

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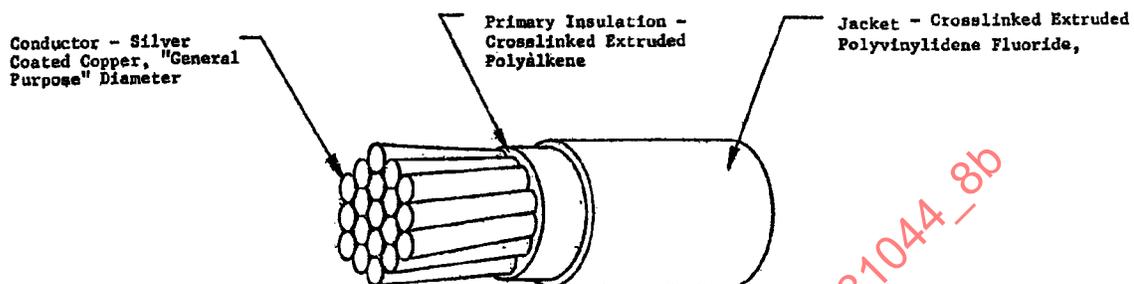


FIGURE 1 - AS81044/8 CONSTRUCTION

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	AEROSPACE STANDARD	AS81044™/8 SHEET 1 OF 3	REV. B
	WIRE, ELECTRIC, CROSSLINKED POLYALKENE INSULATED, SILVER-COATED COPPER, MEDIUM WEIGHT, 600-VOLT, 150 °C		

TABLE 1 – CONSTRUCTION DETAILS

PART NO. 1/	WIRE SIZE	STRANDING (NUMBER OF STRANDS X AWG GAGE OF STRANDS)	DIAMETER OF STRANDED CONDUCTOR (INCHES)		FINISHED WIRE				JACKET THICKNESS INCHES
			(MIN)	(MAX)	RESISTANCE AT 20 °C (68 °F) (OHMS/1000 FT.) (MAX)	DIAMETER (INCHES)	WEIGHT (LBS/1000 FT)		
							(NOM) 2/	(MAX)	
M81044/8-24-*	24	19 X 36	.023	.025	24.3	.054 ± .002	2.5	2.7	.005 ± .001
M81044/8-22-*	22	19 X 34	.029	.032	15.1	.062 ± .003	3.7	3.9	.005 ± .001
M81044/8-20-*	20	19 X 32	.037	.040	9.19	.070 ± .003	5.3	5.5	.005 ± .001
M81044/8-18*	18	19 X 30	.046	.050	5.79	.080 ± .003	7.7	8.0	.005 ± .001
M81044/8-16*	16	19 X 29	.052	.057	4.52	.089 ± .004	9.6	10.1	.005 ± .001
M81044/8-14-*	14	19 X 27	.065	.072	2.88	.108 ± .004	14.8	15.5	.005 ± .001
M81044/8-12-*	12	37 X 28	.084	.089	1.90	.126 ± .004	21.6	23.0	.005 ± .001
M81044/8-10-*	10	37 X 26	.106	.112	1.15	.155 ± .005	34.0	35.7	.005 ± .001
M81044/8-8-*	8	133 X 29	.158	.169	.658	.214 ± .006	62.7	65.9	.005 ± .001
M81044/8-6-*	6	133 X 27	.198	.213	.418	.264 ± .007	96.0	104.0	.005 ± .001
M81044/8-4-*	4	133 X 25	.250	.268	.264	.320 ± .008	152.0	161.0	.005 ± .001
M81044/8-2-*	2	665 X 30	.320	.340	.170	.400 ± .012	238.0	259.0	.010 ± .002
M81044/8-0-*	0	1045 X 30	.405	.425	.108	.490 ± .016	364.0	396.0	.010 ± .002

1/ PART NO.: THE ASTERISKS IN THE PART NUMBER COLUMN, TABLES 1 AND 2, SHALL BE REPLACED BY COLOR CODE DESIGNATORS IN ACCORDANCE WITH MIL-STD-681. EXAMPLES: SIZE 20 WHITE – M81044/7-20-9; WHITE WITH ORANGE STRIPE – M81044/8-20-93

2/ NOMINAL VALUES ARE FOR INFORMATION ONLY. NOMINAL VALUES ARE NOT REQUIREMENTS.

TABLE 2 – PERFORMANCE DETAILS

PART NO.	ABRASION RESISTANCE (PROCEDURE I)				BEND TESTING				
	RESISTANCE (INCHES OF TAPE) (MIN) (INITIAL AND AFTER IMMERSION)	WEIGHT SUPPORT BRACKET	WEIGHT (LBS)	TENSION LOAD (LBS)	MANDREL DIAMETER (INCHES) (±3%)			TEST LOAD (LBS) (±3%)	
					LIFE CYCLE TEST AND ACCELERATED AGING TEST 1/	COLD BEND TEST	WRAP TEST	LIFE CYCLE TEST AND ACCELERATED AGING TEST 1/	COLD BEND TEST
M81044/8-24-*	12	A	1.0	1.0	.50	1.0	.250	0.5	3.0
M81044/8-22-*	22	A	1.0	1.0	.75	1.0	.250	1.5	3.0
M81044/8-20-*	22	A	1.0	1.0	.75	1.0	.250	2.0	4.0
M81044/8-18-*	22	A	1.0	1.0	1.00	1.5	.375	2.0	4.0
M81044/8-16-	30	A	1.0	2.0	1.00	1.5	.375	2.0	5.0
M81044/8-14-*	13	B	3.0	2.0	1.50	2.0	.500	2.0	5.0
M81044/8-12-*	17	B	3.0	2.0	2.0	2.0	.500	2.0	5.0
M81044/8-10-*	20	B	3.0	3.0	3.0	3.0	.750	2.0	5.0
M81044/8-8-*	25	B	3.0	3.0	3.0	4.0	.750	3.0	6.0
M81044/8-6-*	25	C	3.0	4.0	4.0	5.0	1.00	3.0	10.0
M81044/8-4-*	33	C	4.25	4.0	5.0	6.0	1.25	3.0	10.0
M81044/8-2-*	34	C	4.25	5.0	6.0	8.0	3.00	4.0	15.0
M81044/8-0-*	48	C	4.25	5.0	8.0	10.0	4.00	4.0	15.0

1/ ALSO FOR BEND TESTS AFTER IMMERSION.

	AEROSPACE STANDARD	AS81044™/8 SHEET 2 OF 3	REV. B
	WIRE, ELECTRIC, CROSSLINKED POLYALKENE INSULATED, SILVER-COATED COPPER, MEDIUM WEIGHT, 600-VOLT, 150 °C		