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REV. B
AS81044™/5

FEDERAL SUPPLY CLASS
6145

RATIONALE

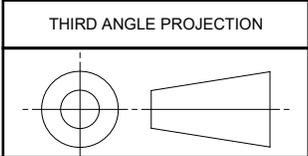
AS81044/5 IS BEING STABILIZED, BECAUSE THE COMMITTEE DOES NOT ANTICIPATE FUTURE TECHNICAL CHANGES. AS81044/5 WIRES ARE CONSIDERED WELL-ESTABLISHED PRODUCTS. QUALIFIED SUPPLIERS ARE STILL MAINTAINED. REFERENCE CHANGES NOTED BY THE SUPPLIERS WHICH RESULTS IN A PRODUCT CHANGE WILL BE ADDRESSED BY A NEW REVISION.

STABILIZED NOTICE

THIS DOCUMENT HAS BEEN DECLARED "STABILIZED" BY THE SAE AE-8D WIRE AND CABLE COMMITTEE AND WILL NO LONGER BE SUBJECTED TO PERIODIC REVIEWS FOR CURRENCY. USERS ARE RESPONSIBLE FOR VERIFYING REFERENCES AND CONTINUED SUITABILITY OF TECHNICAL REQUIREMENTS. NEWER TECHNOLOGY MAY EXIST.

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<https://www.sae.org/standards/content/AS81044/5B/>



CUSTODIAN: AE-8/AE-8D		PROCUREMENT SPECIFICATION: AS85485	
	AEROSPACE STANDARD		AS81044™/5
	WIRE, ELECTRIC, CROSSLINKED POLYLALKENE INSULATED, SILVER-COATED COPPER, NORMAL WEIGHT, 600-VOLT, 150 °C		

ISSUED 2000-04 REVISED 2007-11 REAFFIRMED 2016-05 STABILIZED 2021-07

NOTICE

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

INACTIVE FOR NEW DESIGN IN AIRCRAFT APPLICATIONS AFTER DATE OF ISSUE. USE AS81044/6.

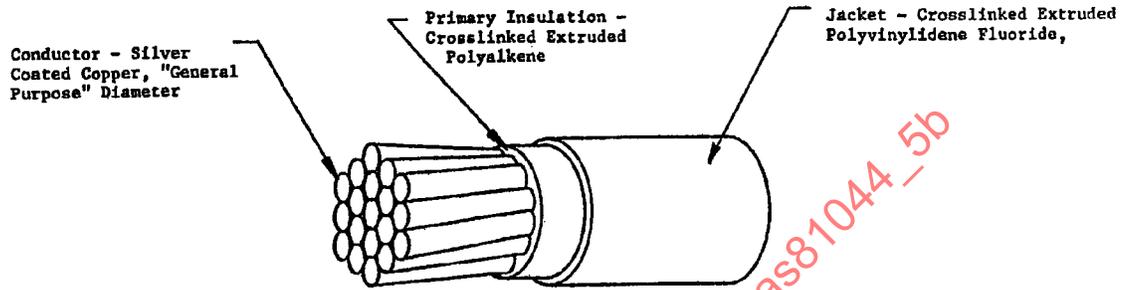


FIGURE 1 - AS81044/5 CONSTRUCTION

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	AEROSPACE STANDARD	AS81044™/5 SHEET 1 OF 3	REV. B
	WIRE, ELECTRIC, CROSSLINKED POLYLALKENE INSULATED, SILVER-COATED COPPER, NORMAL 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)	
M81044/5-24-*	24	19 X 36	.023	.025	24.3	.057 ± .002	2.8	3.0	.005 ± .001
M81044/5-22-*	22	19 X 34	.029	.032	15.1	.069 ± .003	4.1	4.3	.005 ± .001
M81044/5-20-*	20	19 X 32	.037	.040	9.19	.078 ± .003	5.8	6.1	.005 ± .001
M81044/5-18-*	18	19 X 30	.046	.050	5.79	.088 ± .003	8.3	8.7	.005 ± .001
M81044/5-16-*	16	19 X 29	.052	.057	4.52	.097 ± .004	10.3	10.9	.005 ± .001
M81044/5-14-*	14	19 X 27	.065	.072	2.88	.115 ± .004	15.5	16.2	.005 ± .001
M81044/5-12-*	12	37 X 28	.084	.089	1.90	.131 ± .004	23.0	24.2	.005 ± .001
M81044/5-10-*	10	37 X 26	.106	.112	1.19	.161 ± .005	35.3	36.5	.005 ± .001
M81044/5-8-*	8	133 X 29	.158	.169	.658	.219 ± .006	64.8	68.3	.005 ± .001
M81044/5-6-*	6	133 X 27	.198	.213	.418	.269 ± .007	99.2	108.	.005 ± .001
M81044/5-4-*	4	133 X 25	.250	.268	.264	.325 ± .008	158.	166.	.005 ± .001
M81044/5-2-*	2	665 X 30	.320	.340	.170	.404 ± .012	244.	265.	.010 ± .002
M81044/5-0-*	0	1045 X 30	.405	.425	.108	.494 ± .016	370.	399.	.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 – M81044/5-20-9; WHITE WITH ORANGE STRIPE – M81044/5-20-93

^{2/} NOMINAL VALUES ARE FOR INFORMATION ONLY. NOMINAL VALUES ARE NOT REQUIREMENTS.

TABLE 2 – PERFORMANCE DETAILS

PART NO.	ABRASION RESISTANCE (PROCEDURE I)				BEND TESTING				
					MANDREL DIAMETER (INCHES) (±3%)			TEST LOAD (LBS) (±3%)	
	RESISTANCE (INCHES OF TAPE) (MIN) (INITIAL AND AFTER IMMERSION)	WEIGHT SUPPORT BRACKET	WEIGHT (LBS)	TENSION LOAD (LBS)	LIFE CYCLE TEST AND ACCELERATED AGING TEST ^{1/}	COLD BEND TEST	WRAP TEST	LIFE CYCLE TEST AND ACCELERATED AGING TEST ^{1/}	COLD BEND TEST
M81044/5-24-*	12	A	1.0	1.0	.50	1.0	.250	1.0	3.0
M81044/5-22-*	22	A	1.0	1.0	.75	1.0	.250	3.0	3.0
M81044/5-20-*	22	A	1.0	1.0	.75	1.0	.250	4.0	4.0
M81044/5-18-*	22	A	1.0	1.0	1.00	1.5	.375	4.0	4.0
M81044/5-16-*	30	A	1.0	2.0	1.00	1.5	.375	5.0	5.0
M81044/5-14-*	13	B	3.0	2.0	1.50	2.0	.500	5.0	5.0
M81044/5-12-*	17	B	3.0	2.0	2.0	2.0	.500	5.0	5.0
M81044/5-10-*	20	B	3.0	3.0	3.0	3.0	.750	5.0	5.0
M81044/5-8-*	25	B	3.0	3.0	3.0	4.0	.750	6.0	6.0
M81044/5-6-*	25	C	3.0	4.0	4.0	5.0	1.00	6.0	10.0
M81044/5-4-*	33	C	4.25	4.0	5.0	6.0	1.25	6.0	10.0
M81044/5-2-*	34	C	4.25	5.0	6.0	8.0	3.00	6.0	15.0
M81044/5-0-*	48	C	4.25	5.0	8.0	10.0	4.00	7.0	15.0

^{1/} ALSO FOR BEND TESTS AFTER IMMERSION.

	AEROSPACE STANDARD	AS81044™/5 SHEET 2 OF 3	REV. B
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