

OUTER JACKET  
POLYESTER FIBER IMPREGNATED  
WITH HIGH TEMPERATURE FINISHER

INNER BRAID GLASS FIBERS OR COMBINATION OF GLASS  
FIBERS AND POLYESTER FIBERS IMPREGNATED  
WITH HIGH TEMPERATURE FINISHER

PRIMARY INSULATION  
SILICONE RUBBER

STRAND SILVER-COATED  
COPPER CONDUCTOR

FED. SUP CLASS  
6145

CHARACTERISTIC		REQUIREMENT
TENSILE STRENGTH (MIN)	BEFORE AGING	800 PSI
	AFTER AGING	600 PSI
ELONGATION (MIN)	BEFORE AND AFTER AGING	
	1-1/2 INCHES (2-INCH SPECIMEN STRETCHED TO	
	3-1/2 INCHES)	

WIRE SIZE	PERFORMANCE DETAILS											
	ABRASION TESTS				FLAW TESTS		INSULATION AND SURFACE RESISTANCE			LIFE CYCLE AND COLD BEND		
	RESISTANCE INCHES OF TAPE	TENSION LOAD (LBS)	WEIGHT SUPPORT BRACKET	WEIGHT (LBS)	MIN AC VOLTAGE 60 CYCLE RMS	FINISHED WIRE	HUMIDITY RESISTANCE MEGOHMS PER 200 FT (MIN)	INSULATION RESISTANCE MEGOHMS PER 50 FT (MIN)	SURFACE RESISTANCE MEGOHMS INCHES (MIN)	MANDREL DIA INCHES (MAX)	TEST LOAD LIFE CYCLE COLD BEND (LBS)	
22	22	1	A	1	2,000	5,000	500	100	5.0	4.5	3	.75
20	22	1	A	1	2,000	5,000	500	100	5.0	4.5	3	.75
18	22	1	A	1	2,000	5,000	500	100	5.0	4.5	3	1.0
16	30	2	A	1	2,000	5,000	500	100	5.0	6.5	3	1.0
14	13	2	B	3	2,000	5,000	500	100	5.0	6.5	6	1.0
12	17	2	B	3	2,000	5,000	500	100	5.0	6.5	6	3.0
10	20	2	B	3	3,000	5,000				10	6	3.0
8	25	2	B	3	3,000	5,000				10	6	3.0
6	25	2	C	3	4,000	5,000				10	10	6.0
4	33	2	C	4.25	4,000	5,000				10	10	6.0
2	34	2	C	4.25	4,000	5,000				10	10	6.0
1	35	2	C	4.25	4,000	5,000				10	18	6.0
0	48	2	C	4.25	4,000	5,000				10	18	10.0
00	48	2	C	4.25	4,000	5,000				10	18	10.0

DASH NO	WIRE SIZE	NUMBER OF STRANDS	FINISHED WIRE CONSTRUCTION				
			MAX DIA OF STRANDED CONDUCTOR	MAX RESISTANCE AT 20° C (68° F) OHMS/1000 FT	DIAMETER		MAX WEIGHT LBS/1000 FT
-22	22	19	.033	15.2	.085	±.005	5.8
-20	20	19	.041	2.42	.095	±.005	7.8
-18	18	19	.052	6.03	.110	±.005	10.8
-16	16	19	.060	4.76	.125	±.005	13.5
-14	14	19	.074	2.92	.143	±.007	20.0
-12	12	19	.093	1.88	.163	±.007	29.0
-10	10	49	.128	1.16	.193	±.007	45.0
-8	8	133	.176	.70	.248	±.007	72.0
-6	6	133	.218	.436	.303	±.007	107.0
-4	4	133	.272	.274	.360	±.010	165.0
-2	2	665	.345	.179	.425	±.010	262.0
-1	1	817	.384	.144	.460	±.010	317.0
-01	0	1,045	.432	.114	.535	±.015	390.0
-02	00	1,330	.490	.090	.585	±.015	500.0

(C) REQUIREMENT: DURING AND FOLLOWING THE THERMAL SHOCK OR FLASH TEST, THE PRIMARY INSULATION SHALL NOT SHRINK GREATER THAN .060 FOR ALL SIZES.

(C) INTERNATIONAL INTEREST: CERTAIN PROVISIONS OF THIS STANDARD ARE THE SUBJECT OF INTERNATIONAL STANDARDIZATION AGREEMENT (ASCC AIR STD 12/5) (NATO STANAG 3317). WHEN REVISION OR CANCELLATION OF THIS STANDARD IS PROPOSED, THE DEPARTMENTAL CUSTODIAN WILL INFORM THEIR RESPECTIVE DEPARTMENTAL STANDARDIZATION OFFICE SO THAT APPROPRIATE ACTION MAY BE TAKEN RESPECTING THE INTERNATIONAL AGREEMENT CONCERNED.

DIMENSION IN INCHES.

FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

P.A. USAF-11 Other Cust ARMY -RL NAVY -AS	INTERNATIONAL INTEREST  SEE NOTE	TITLE  WIRE, ELECTRICAL - SILICONE - INSULATED, COPPER, 600 VOLT, 200° C, POLYESTER JACKET	<b>MILITARY STANDARD</b> <b>MS25471</b>
PROCUREMENT SPECIFICATION MIL-W-8777		SUPERSEDES:	SHEET 1 OF 1

User activities:

Review activities:

ARMY-AV  
NAVY-AS  
USAF-11

This military standard is approved by the Department of Defense and is mandatory on all activities. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

APPROVED 1 Aug 60 REVISED (A) 4 Nov 63 (B) 7 Mar 66 (C) 6 Jan 69