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REV.
E

AS22759™/86

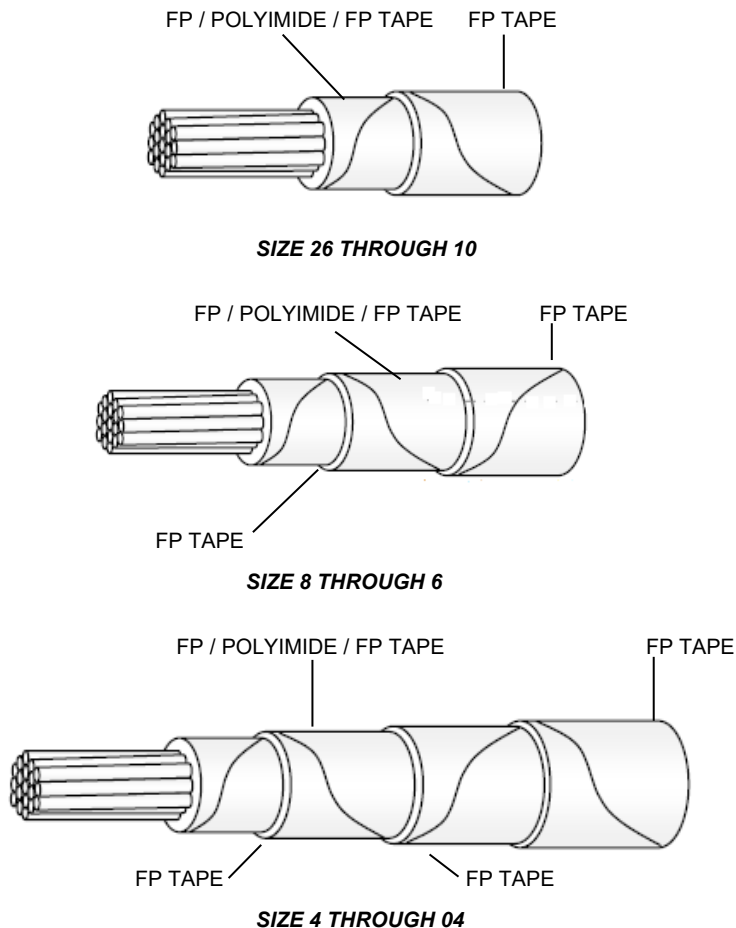
FEDERAL SUPPLY CLASS
6145

RATIONALE

REMOVAL OF THE INTENDED USE LIMITATION FOR NAVAL AIRCRAFT AND NAVAL AIR SYSTEMS APPLICATION IS REQUIRED TO SYNCHRONIZE THIS DOCUMENT WITH THE REQUIREMENT OF AS50881.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS22759.



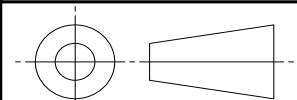
FP - FLUOROCARBON POLYMER MODIFIED POLYTETRAFLUOROETHYLENE (PTFE)
CONDUCTOR - STRANDED SILVER COATED COPPER

FIGURE 1 - AS22759/86 CONFIGURATION

For more information on this standard, visit

<https://www.sae.org/standards/content/AS22759/86E/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8D

PROCUREMENT SPECIFICATION: AS22759



AEROSPACE STANDARD

WIRE, ELECTRICAL, POLYTETRAFLUOROETHYLENE/
POLYIMIDE INSULATED, NORMAL WEIGHT, SILVER COATED,
COPPER CONDUCTOR, 200 °C, 600 VOLT, ROHS

AS22759™/86
SHEET 1 OF 5

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TABLE 1 - CONSTRUCTION DETAILS FOR FINISHED WIRE

PART NO. 1/	WIRE SIZE	CONDUCTOR 3/				FINISHED WIRE				
		STRANDING (NUMBER OF STRANDS X SIZE GAUGE OF STRANDS)	DIAMETER (INCH)		RESISTANCE AT 20 °C (68 °F) (OHMS/1000 FEET MAX)	DIAMETER (INCH)		WEIGHT (LB/1000 FEET) 2/		
			MIN	MAX		MIN	MAX	MIN	TARGET	MAX
M22759/86-26-*	26	19 X 38	.0175	.0194	38.4	.033	.037	1.29	1.42	1.55
M22759/86-24-*	24	19 X 36	.0225	.0244	24.3	.038	.042	1.87	2.04	2.20
M22759/86-22-*	22	19 X 34	.0285	.0304	15.1	.043	.047	2.70	2.90	3.10
M22759/86-20-*	20	19 X 32	.0365	.0384	9.19	.051	.055	4.25	4.48	4.70
M22759/86-18-*	18	19 X 30	.0455	.0484	5.79	.061	.065	6.40	6.65	6.90
M22759/86-16-*	16	19 X 29	.0515	.0544	4.52	.068	.073	8.20	8.50	8.80
M22759/86-14-*	14	19 X 27	.0645	.0684	2.88	.081	.086	12.4	12.9	13.4
M22759/86-12-*	12	37 X 28	.0835	.0874	1.90	.100	.105	18.9	19.7	20.4
M22759/86-10-*	10	37 X 26	.106	.110	1.19	.122	.127	29.3	30.8	31.6
M22759/86-8-*	8	133 X 29	.158	.166	.658	.180	.188	55.9	57.8	59.7
M22759/86-6-*	6	133 X 27	.198	.208	.418	.219	.229	86.9	89.4	91.9
M22759/86-4-*	4	133 X 25	.250	.263	.264	.276	.288	141	145	149
M22759/86-2-*	2	665 X 30	.320	.340	.170	.344	.364	217	225	233
M22759/86-1-*	1	817 X 30	.360	.380	.139	.388	.408	265	274	283
M22759/86-01-*	0	1045 X 30	.395	.425	.108	.420	.450	335	349	363
M22759/86-02-*	00	1330 X 30	.440	.475	.085	.475	.505	419	438	457
M22759/86-03-*	000	1665 X 30	.500	.540	.068	.530	.560	528	548	568
M22759/86-04-*	0000	2109 X 30	.565	.605	.054	.590	.630	676	698	720

- 1/ PART NUMBER: THE ASTERISKS IN THE PART NUMBER COLUMN OF TABLE 1 SHALL BE REPLACED BY COLOR CODE DESIGNATORS IN ACCORDANCE WITH MIL-STD-681. EXAMPLES: M22759/86-20-93 IS A 20 AWG WHITE WITH ORANGE STRIPE.
- 2/ THE ACCEPTABLE VALUE FOR THE CPK FOR THE FINISHED WIRE WEIGHT LISTED SHALL BE 1.3, USING A NORMAL (GAUSSIAN) DISTRIBUTION TO OBTAIN THOSE CPK VALUES.
- 3/ CONDUCTOR SHALL CONFORM TO AS29606 TYPE SCC SMALL DIAMETER SILVER COATED COPPER CONDUCTOR FOR WIRE SIZES 26 THROUGH 4 AND GENERAL PURPOSE FOR WIRE SIZES 2 THROUGH 0000.

REQUIREMENT: ALL REQUIREMENTS SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS22759.

1. WIRE CONSTRUCTION:

WIRE CONSTRUCTION SHALL BE IN ACCORDANCE WITH FIGURE 1 AND TABLES 1, 2, 3, AND 4.

TABLE 2 - WIRE INSULATION MATERIALS

TAPE CODE	THICKNESS (NOM)	MATERIAL
1	.0020	.0005 (FP)/.0010 (POLYIMIDE)/.0005 (FP)
2	.0010	FP (SKIVED)
3	.0020	FP (SKIVED)
4	.0020	FP (UNSINTERED)
5	.0025	FP (UNSINTERED)
6	.0030	FP (UNSINTERED)

	AEROSPACE STANDARD	AS22759™/86	REV.
	WIRE, ELECTRICAL, POLYTETRAFLUOROETHYLENE/ POLYIMIDE INSULATED, NORMAL WEIGHT, SILVER COATED, COPPER CONDUCTOR, 200 °C, 600 VOLT, ROHS	SHEET 2 OF 5 	



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