

FEDERAL SUPPLY CLASS  
6145

**REV.  
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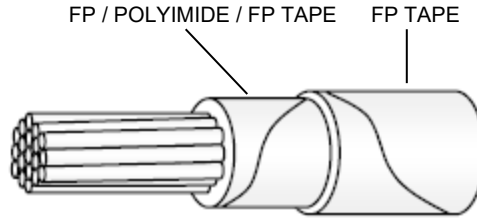
**AS22759™/82**

**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 NICKEL COATED HIGH STRENGTH OR ULTRA HIGH STRENGTH COPPER ALLOY

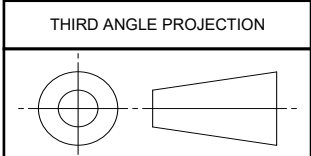
**FIGURE 1 - AS22759/82 CONFIGURATION**

**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
M22759/82-26-*	26	19 X 38	.0175	.0204	58.4	.030	.034	1.20	1.33	1.45
M22759/82-24-*	24	19 X 36	.0225	.0254	30.1	.034	.038	1.70	1.85	2.00
M22759/82-22-*	22	19 X 34	.0285	.0314	18.6	.040	.043	2.55	2.75	2.95
M22759/82-20-*	20	19 X 32	.0365	.0404	11.4	.048	.051	4.05	4.25	4.45

- 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: M22759/82-20-93 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 NCA SMALL DIAMETER NICKEL COATED HIGH STRENGTH COPPER ALLOY CONDUCTOR FOR WIRE SIZES 24 THROUGH 20 AND TYPE NCU SMALL DIAMETER NICKEL COATED ULTRA HIGH STRENGTH COPPER ALLOY CONDUCTOR FOR WIRE SIZE 26.

**For more information on this standard, visit**  
<https://www.sae.org/standards/content/AS22759/82D/>



CUSTODIAN: AE-8D

PROCUREMENT SPECIFICATION:



**AEROSPACE STANDARD**

WIRE, ELECTRICAL, POLYTETRAFLUOROETHYLENE/  
POLYIMIDE INSULATED, LIGHT WEIGHT, NICKEL COATED,  
HIGH STRENGTH OR ULTRA HIGH STRENGTH  
COPPER ALLOY, 260 °C, 600 VOLT, ROHS

**AS22759™/82**  
SHEET 1 OF 3

**REV.  
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