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**REV.
B**

AS22759™/4

FEDERAL SUPPLY CLASS
6145

RATIONALE

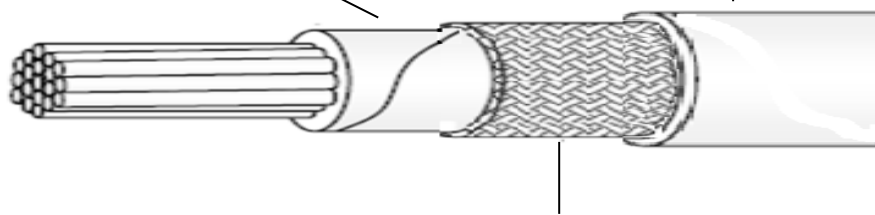
FIVE-YEAR REVIEW UPDATE. ADD PROCUREMENT SPECIFICATION NUMBER TO THE TITLE BLOCK AND EDITORIAL UPDATE.

NOTICE

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

PTFE SKIVED TAPES OR PTFE-COATED GLASS
TAPES OR COMBINATION THEREOF

EXTRUDED CLEAR FEP JACKET (A WRAPPED JACKET OF
FEP IS OPTIONAL ON SIZES 4 AND LARGER. TAPE JACKETS
SHALL BE FUSED SO THAT LAYERS CANNOT BE
SEPARATED.)



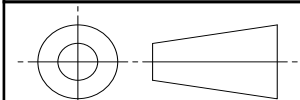
PTFE COATED GLASS BRAID AND PTFE FINISHER

PTFE – POLYTETRAFLUOROETHYLENE
FEP – FLUORINATED ETHYLENE PROPYLENE
CONDUCTOR – STRANDED SILVER COATED COPPER

FIGURE 1 - AS22759/4 CONFIGURATION

For more information on this standard, visit
<https://www.sae.org/standards/content/AS22759/4B/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8D

PROCUREMENT SPECIFICATION: AS22759



AEROSPACE STANDARD

WIRE, ELECTRIC, FLUOROPOLYMER-INSULATED,
TFE-GLASS-FEP, MEDIUM WEIGHT, SILVER-COATED
COPPER CONDUCTOR, 600-VOLT

AS22759™/4
SHEET 1 OF 4

**REV.
B**

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TABLE 1 - CONSTRUCTION DETAILS FOR FINISHED WIRE

PART NO. 1/	WIRE SIZE	STRANDING (NUMBER OF STRANDS X SIZE GAUGE OF STRANDS) 2/	DIAMETER OF STRANDED CONDUCTOR (INCHES) 2/		FINISHED WIRE			
			(MIN)	(MAX)	RESISTANCE AT 20 °C (68 °F) (OHMS/1000 FEET) MAX	THICKNESS OF TFE JACKET (INCHES)	DIAMETER (INCHES)	WEIGHT (LB/1000 FEET) (MAX)
M22759/4-22-*	22	19 X 34	.0285	.0324	15.1	.009 ± .002	.074 ± .004	5.90
M22759/4-20-*	20	19 X 32	.0365	.0404	9.19	.009 ± .002	.082 ± .004	7.50
M22759/4-18-*	18	19 X 30	.0455	.0504	5.79	.010 ± .002	.095 ± .005	11.0
M22759/4-16-*	16	19 X 29	.0515	.0574	4.52	.010 ± .002	.103 ± .005	13.6
M22759/4-14-*	14	19 X 27	.0645	.0724	2.88	.010 ± .002	.116 ± .005	18.5
M22759/4-12-*	12	37 X 28	.0835	.0894	1.90	.010 ± .002	.133 ± .005	26.6
M22759/4-10-*	10	37 X 26	.106	.114	1.19	.010 ± .002	.164 ± .005	41.5
M22759/4-8-*	8	133 X 29	.158	.173	.658	.010 ± .002	.235 ± .007	81.3
M22759/4-6 -*	6	133 X 27	.198	.217	.418	.010 ± .002	.282 ± .007	121
M22759/4-4-*	4	133 X 25	.250	.274	.264	.012 ± .003	.351 ± .010	193
M22759/4-2-*	2	665 X 30	.320	.340	.170	.012 ± .003	.420 ± .015	295
M22759/4-1-*	1	817 X 30	.360	.380	.139	.014 ± .004	.480 ± .015	376
M22759/4-01-*	0	1045 X 30	.395	.425	.108	.014 ± .004	.525 ± .020	458
M22759/4-02-*	00	1330 X 30	.440	.475	.085	.014 ± .004	.585 ± .020	582

1/ PART NUMBER: 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 – M22759/4-20-9, WHITE WITH ORANGE STRIPE – M22759/4-20-93.

2/ CONDUCTOR SHALL CONFORM TO AS29606 TYPE SCC GENERAL PURPOSE SILVER PLATED COPPER CONDUCTOR.

REQUIREMENTS: 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.

2. WIRE PERFORMANCE RATING:

WIRE SHALL PERFORM AT THE TEMPERATURE OF 200 °C (392 °F) MAXIMUM CONDUCTOR CONTINUOUSLY.

VOLTAGE RATING SHALL BE 600 VOLTS (RMS) AT SEA LEVEL.

NOTE: THIS INSULATION SYSTEM HAS BEEN USED IN AEROSPACE APPLICATIONS USING 115 VOLTS (PHASE TO NEUTRAL), 400 HERTZ AC, AND 28 VOLTS DC. VERIFICATION OF THE SUITABILITY OF THIS PRODUCT FOR USE IN OTHER ELECTRICAL SYSTEM CONFIGURATIONS IS THE RESPONSIBILITY OF THE USER.

3. MATERIALS AND PHYSICAL PROPERTIES:

REFER TO AS22759 FOR MATERIAL REQUIREMENT. MATERIALS USED IN THE MANUFACTURE OF THESE PRODUCTS SHALL COMPLY WITH THE RESTRICTION OF HAZARDOUS SUBSTANCES DIRECTIVE 2002/95/EC.

4. FINISHED WIRE INSULATION PROPERTIES:

FINISHED WIRE INSULATION PROPERTIES SHALL BE IN ACCORDANCE WITH TABLE 2.

	AEROSPACE STANDARD	AS22759™/4	REV.
	WIRE, ELECTRIC, FLUOROPOLYMER-INSULATED, TFE-GLASS-FEP, MEDIUM WEIGHT, SILVER-COATED COPPER CONDUCTOR, 600-VOLT	SHEET 2 OF 4	B



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