

NOTICE

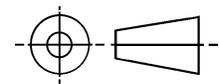
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THIRD ANGLE PROJECTION



ISSUED 1998-07 REAFFIRMED 2004-06

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AS81822/3

PREPARED BY SUBCOMMITTEE AE-8D



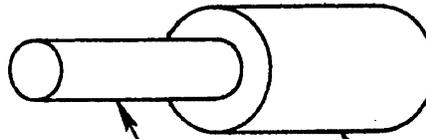
AEROSPACE STANDARD

WIRE, ELECTRICAL, SOLDERLESS WRAP, EXTRUDED POLYVINYLIDENE FLUORIDE (PVDF) INSULATION, SILVER COATED SOLID CONDUCTOR

AS81822/3
SHEET 1 OF 3

THE COMPLETE REQUIREMENTS FOR ACQUIRING THE WIRE DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE ISSUE IN EFFECT OF SPECIFICATION MIL-W-81822.

AS81822/3



Silver coated solid conductor

Extruded polyvinylidene fluoride (PVDF)

TABLE I. Construction and performance details.

Part no. ^{1/}	Wire size (AWG)	Finished wire diameter (inches)	Finished weight (lb/1,000 ft) (max)	Cut-through load (grams)	Bend testing			Insulation pull-off (lbs)
					Mandrel diameter (ins.)		Tension load (lbs)	
					Heat resistance	Cold bend	Cold bend	
M81822/3-X30-*	30	0.0195 ± .0010	0.53	700	1/16	1.0	0.25	0.4 to 2.5
M81822/3-X28-*	28	0.0265 ± .0015	0.91	900	5/64	1.0	0.50	0.5 to 2.5
M81822/3-X28V*	28	0.0230 ± .0015	0.79	720	5/64	1.0	0.50	0.5 to 2.5
M81822/3-X26-*	26	0.0295 ± .0015	1.26	950	3/32	1.0	0.50	1 to 4
M81822/3-X26V*	26	0.0260 ± .0015	1.13	760	3/32	1.0	0.50	1 to 4
M81822/3-X24-*	24	0.0340 ± .0015	1.84	1000	7/64	1.0	0.50	1 to 4
M81822/3-X24V*	24	0.0300 ± .0015	1.67	800	7/64	1.0	0.50	1 to 4
M81822/3-X22-*	22	0.0390 ± .0020	2.71	1100	1/8	1.0	0.75	1 to 6
M81822/3-X20-*	20	0.0460 ± .0020	4.09	1200	9/64	1.0	0.75	1 to 6
M81822/3-X18-*	18	0.0540 ± .0030	6.21	1300	11/64	1.0	1.00	1 to 6

^{1/} PART NO.: The "X" in the generalized part numbers of table I shall be replaced by the designator for the conductor type and the asterisk shall be replaced by the code designator for the insulation color. Example: Size 22 wire with type A (soft annealed copper) conductor and white insulation - M81822/3-A22-9.

WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 135°C (275°F) MAX CONDUCTOR TEMPERATURE.

VOLTAGE RATING: 300 VOLTS (RMS).

INSULATION TENSILE STRENGTH: 2,500 PSI (MIN).

INSULATION ELONGATION: WIRE SIZES 30 AND 28 - 35 PERCENT (MIN).
WIRE SIZES 26 THROUGH 18 - 50 PERCENT (MIN).

COLOR: COLORS LISTED IN MIL-STD-104, AS SPECIFIED IN CONTRACT OR ORDER. HOWEVER, COLOR LIMITS OF MIL-STD-104 ARE NOT APPLICABLE TO WIRE OF THIS SPECIFICATION SHEET.

SPARK TEST: 2,000 VOLTS (RMS).

INSULATION RESISTANCE: 300 MEGOHMS-1,000 FT (MIN).

WET DIELECTRIC TEST: 1,000 VOLTS (RMS), 60 Hz.

COLD BEND CONDITIONING: 4 HRS AT -65° ± 2°C (-85° ± 3.6°F).

DIELECTRIC TEST FOR CUT-THROUGH: 500 VOLTS (RMS), 60 Hz.